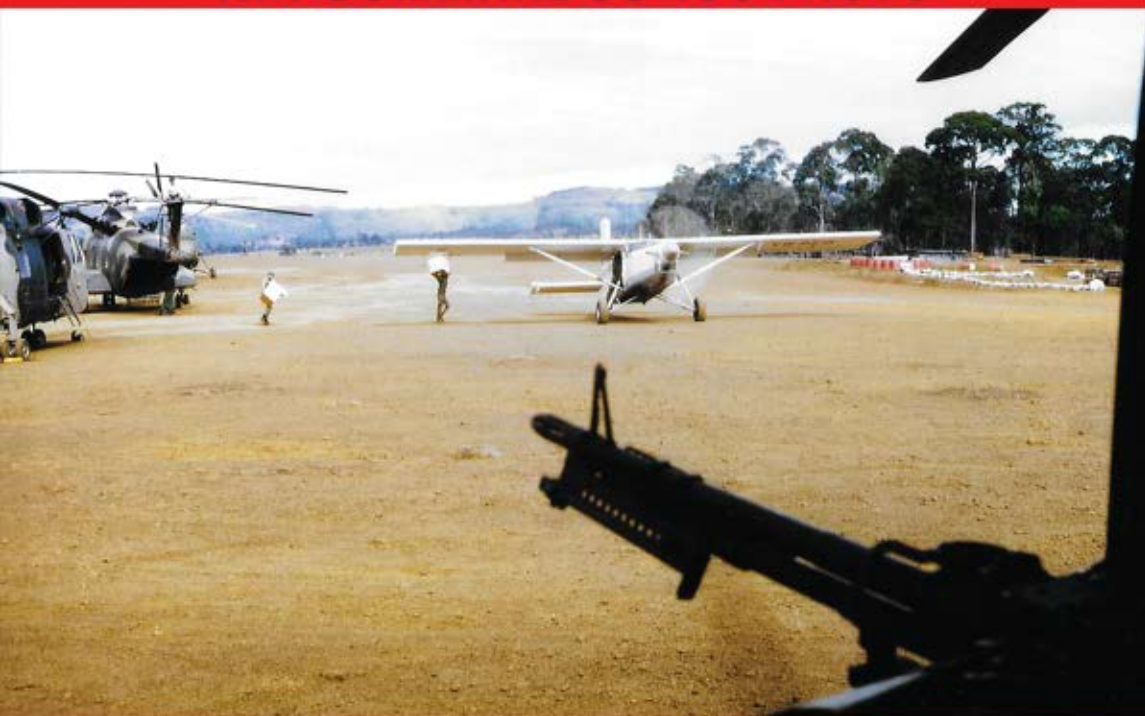
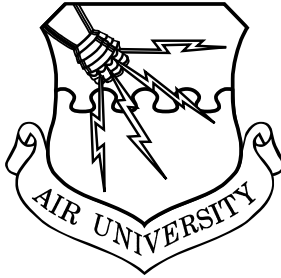


SPECIAL AIR WARFARE AND THE SECRET WAR IN LAOS

AIR COMMANDOS 1964-1975



COL JOSEPH D. CELESKI, US ARMY, RETIRED



Special Air Warfare and the Secret War in Laos

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COLONEL, US ARMY, RETIRED

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*Dedicated to
the Air Commandos who served in the secret war in
Laos and who fought and gave their lives in that
conflict to prevent the communist takeover of the Royal
Kingdom of Laos. It was through their efforts, vision,
and bold leadership that Special Air Warfare was
successful in that theater of operations. It is also
dedicated to those who flew and fought alongside them
in this struggle—the special operators of the Central
Intelligence Agency, pilots of Air America, Bird and
Sons, and Continental Air Services, Inc., as well as the
efforts of the airmen and pilots of the Royal Laotian
Air Force, the Thai volunteers, and the Hmong airmen
and aircrews.*



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Preface

During retirement, I was intrigued by the lack of comprehensive historical research devoted to one of the “long wars” fought by the USAF Air Commandos, the Secret War in Laos—a gap in written Special Operation Forces’ (SOF) history. It is a story of the growth of the Air Commandos from a detachment-level operation sent to Thailand to the later establishment of the 56th Special Operations Wing. The lack of coverage can in part be attributed to the secrecy surrounding the war and classification restrictions on relevant documentation. Further, many special operators remain reluctant to discuss the details of their involvement in classified operations. Although peeling back the cloak of secrecy can be difficult, it is important to the special operations’ profession to capture the legacy of the Air Commandos involvement in the Secret War in Laos and provide an open-source history for the Air Commando community. Much of the motivation and desire to complete this work is in their honor and sacrifice in this endeavor.

Work on this project began with a two-year research plan to develop an irregular warfare course for use in military schools focused on the dynamics of strategic and operational art in a war, conducted vis-a-vis a covert interagency environment. The preliminary preparation for the course consisted of gathering as many books on the war in Laos as possible (over sixty at the time) as well as what could be uncovered through online research. Museums with a primary focus on USAF Special Operations and offices of SOF historians provided material and sound advice about how to contact Air Commando veterans who served in Laos.

Although research material was gathered from national to local archives as well as major universities and air museums, the two definitive sources for a book of this kind were the Air Force Historical Research Agency, at Maxwell AFB, Alabama and the command history office of the Air Force Special Operations Command at Hurlburt Field, Florida. That being said, the most invaluable source for military history research is access to the veterans themselves. Nothing was more motivational than to actually meet the Air Commando veterans. Every veteran participating in this project was more than willing to spend time and provide information in order to capture their story. In cases where the search did not lead to any archival

PREFACE

material, the veterans' accounts remain the only source of historical information on the subject.

The Air Commando Association was essential to gaining contact with veterans who flew and fought in the Laotian air campaign. Through phone and personal interviews, along with interview transcripts, a more complete story was then possible. With patience and support, the veterans described the uniqueness of their experiences and shared their collections of documents and pictures, which enabled the corroboration of events in Laos. What became clear was the Air Commandos were highly professional, extremely adaptable, innovative, and proud of their service. Their innovative tactics have been studied to keep today's Air Commandos one of the most professional special operations air units in the world. The story of the Air Commandos in Laos contributes to the legacy and lineage of an accomplished organization and fills in some of the gaps of their unknown contributions. It also highlights the leadership challenges they faced to prove their worthiness and relevance to war-fighting.

In light of the prevalence of irregular styles of warfare in the twenty-first century, the lessons of the Air Commandos in Laos and their application as a form of airpower will be important to future generations of Air Commandos and SOF air strategists pondering solutions to complex and challenging problems when facing America's future irregular warfare adversaries.

Joseph D. Celeski
February 2019

About the Author

Col Joseph D. Celeski, US Army, retired, completed a 30-year career with the Army in September 2004 after commanding the 3rd Special Forces Group (Airborne), Fort Bragg, North Carolina. He assumed command of the group in May 2002 in Afghanistan, where he also served as the commander of the Combined and Joint Special Operations Task Force for two tours in Operation Enduring Freedom. Colonel Celeski volunteered for Special Forces (SF) in 1984.

His published works include articles on US Army SF in Somalia, the use of SF in joint urban combat, Special Operations Forces' strategic application, and three monographs on counterinsurgency in the twenty-first century. The colonel is also a graduate of the US Army Command and General Staff College and the Army War College. He holds a master's degree in public administration from Shippensburg University, Pennsylvania, and a master's degree in strategic studies from the Army War College, Carlisle, Pennsylvania. Colonel Celeski was among one of the first recipients of the Saint Philip Neri Awards (Bronze) for his active service in SF.

Acknowledgments

Much of the activities of the Secret War in Laos still remain to be declassified or are being lost as the veterans and participants of the war fade away. First and foremost, this publication would have not been possible without the help and assistance of the remaining Air Commando veterans who served in the Laotian theater of war. A large contribution was the veteran's organizations, which provided great support throughout this project. I am grateful for the support I received from the editor in chief of the Air Commandos Association, Col Dennis Barnett, USAF, retired and Ms. Shannon Presley (secretary), the staff of the Air America Association, the Skyraider Association, Helen Murphy at the T-28 Association, Pat Hanavan from the C7-A Caribou Association, and the Ravens (Edgar Allen Poe Society). A special thanks goes to Clyde Sincere from the Special Operations Association and Maj Gen Richard Secord, USAF, retired for their unceasing support to ensure all assistance was made in completing the project.

The various military and veteran's associations were more than gracious in hosting me during my travels for reunion gatherings and generously allowed me the opportunity to explain the project and use my time to connect with airmen who served in Laos. It is also important to recognize the patience and assistance from the staffs of museums and history archives that were prescient in collecting and storing a vast amount of archival material and pictures.

Also thanks to the staff at the Fairfield Research Information Center and the Air Force Historical Research Agency at Maxwell AFB in Alabama: Maranda Gilmore, Tammy Horton and Sylvester "Sly" Jackson for materials on the 56th Air Commando Wing and Project 404 Palace Dog reports, along with their assistance in the classified vault to view various Contemporary Historical Examination of Current Operations (CHECO) reports on the air war in Laos. Throughout the two-year project, an additional thanks to Dr. Forrest Marion for materials and assistance on the application of special air warfare during the Laotian war period (library and archives material).

I would also like to thank the director and staff of Air University Press for their patience and enthusiastic support to bring this work to fruition. Throughout this process, the AU Press team worked patiently to ensure the book was the best product possible. This

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Thanks to Nell Calloway, director of the Chennault Aviation and Military Museum in Monroe, Louisiana, along with the research staff, for access to many of the papers and personal items of Gen Claire Chennault, dealing with the formation of Civil Air Transport and Air America. At Pope AFB in Fayetteville, North Carolina, the CMSgt Benini Heritage Center (the Combat Control School), and Ron Brown, were generous with their time to walk me through and orient me to the artifacts and documents concerning the role of Combat Controllers in Laos.

I appreciate the hospitality and generous help of Mr. Paul A. Oelkrug, coordinator for special collections, the Air America Archives, at the University of Texas, Dallas, along with his research and archives staff: Dr. Thomas J. Allen, Ty Lovelady, and Ms. Patrizia Nava. All were patient and helpful during my search of the archives and perusal of photographs and maps to find the nexus of Air America in support of the Commandos air war over Laos. They also generously allowed me to photograph various artifacts on display donated from Air America Veterans.

The Vietnam Center and Archive at the Texas Tech University in Lubbock, Texas is a national treasure. Dr. Stephen F. Maxner (director), Dr. Kelly E. Crager (oral historian), and Ms. Sheon Montgomery (reference archivist) ensured my long drive to visit them was highly fruitful. My special appreciation for the opportunity provided me to visit the vast holdings in the archives and gain an appreciation of the works existing from veterans of Southeast Asian wars. Ms. Montgomery was of special assistance in maximizing my understanding of the virtual archive to find relevant materials for the research project.

In the Washington, DC, area, a special thanks to Ms. Tony L. Hiley, museum director for the CIA, Tom Ahern, the historian, and Dr. Clayton D. Laurie (intelligence historian) for a very hospitable visit and their time and patience to hear out the project and assist with any documents about the working relationship between the agency and special operations forces during the period of the war. At the National Archives in Maryland, Martin Gedra and Stanley Fanaras worked hard before, during and after my visit to scrub a vast amount of Vietnam-era documents to find materials on this subject.

ACKNOWLEDGMENTS

I would like to also thank the librarians and staff of the libraries who assisted in the research effort. These include the Marshall Library at the National Defense University, the Air War College Library at Maxwell AFB, the Library of Congress, and the Library of the University of Minneapolis (Daniel Necas, the archivist and Ms. Jamie L. Hoehn, research assistant).

Notably, it was the veterans of this war who contributed most to ensure a complete as possible story of this endeavor was told. Where veterans were deceased, the wives, sons, and daughters helpfully searched through their loved-one's materials to ensure capture of their story. Archival materials, books, historical facts, and figures provide the framework for military histories, but nothing can replace the actual experiences of those who participate and fight in war. This kind of resolution and context is only found by listening to the veterans themselves. The stories and pictures in the work serve as the testimony of this time in their lives.

However, some spent long hours and months during the project to ensure its completeness. Not all of the hundreds of veterans, historians, and archivists can be mentioned in this small space, but significant mention of those who spent inordinate amounts of personal time and effort to see the completion of the project, month after month, is warranted. A special thanks to Ray de Arrigunaga, Bob "Biebs" Bieber, Bob Farmer, Bill Keeler, Jerry Klingaman, Maj Gen Richard Secord, USAF, retired, Clyde Sincere, John Uhrig, Steve Wilson, William E. Platt and John Wiren. There were many others, who I hope understand my appreciation for their mentoring and help throughout the project, even if not mentioned.

A special thanks goes to my wife for her patience and understanding of the long hours to see the project through and her constant companionship to travel and visit with veterans.

I would also like to thank Dave Verell for his computer and IT skills to help with restoration of pictures, transferring slides to pictures, and extraction of stills from various (although few) films and video materials about the war in Laos.

A final thanks goes out to acknowledge the professional job of various editors and colleagues to correct the work and make it the best possible story on this long war engagement by Air Commandos. It is through their patience and diligence that the quality of the final work was ensured.

Introduction

My belief is that doctrine mainly serves to constrain the imaginative use of the flexibility of airpower. In every situation there are different circumstances and parameters.

—British Air Marshall John Kemball, 1998

Parts 1 and 2: Historical Context From the Philippines to Vietnam

Prior to World War II, airpower used in small wars was punitive to coerce rebelling tribes or revolutionary forces into acceding to government demands. Although called air control, particularly by the British, it was really the use of airpower to achieve ground control over adversaries. Since the ruling powers ensured no homegrown air forces would be a part of their military and security structure in their territorial and colonial holdings, national airpower alone was used to achieve their goals.¹

After World War II and with the onset of the Cold War, the great struggle between communist regimes bent on reshaping the world into a Marxist–Leninist authoritarian model and Western nations’ attempts to spread liberal democracy reshaped the role of airpower. Revolutionary wars became the predominant form of conflict (with the exception of the Korean War, considered an outlier to major, general conflict). There were an abundance of lessons on the use of airpower in the application of counterinsurgency (COIN) strategies to challenge insurgents, most notably the wars in Malaysia, French Indochina, and Algeria.

As in all applications of airpower, there are different ways to apply its force, dependent on the characteristics of the enemy, geography, and the objectives desired. At the strategic level, the application of airpower is generally for punishment and retribution (strategic bombing), focusing on attacks on enemy centers of gravity to coerce and compel them to accept war termination agreements. At the tactical level, airpower is used to counter enemy air forces and their air defenses and to support military maneuver on the ground. While both objectives are military, they are aimed toward achieving political and foreign policy objectives.

Counterinsurgency Air Warfare

In a revolutionary warfare environment, the application of airpower is controlled and limited, with the goal of assisting in the achievement of political objectives. One of the best treatises on application of airpower in small wars is Dr. James S. Corum's and Wray R. Johnson's *Airpower in Small Wars: Fighting Insurgents and Terrorists*.

By the early 1950s, the American military had become well-attuned to COIN as the way to challenge subversion and insurgencies growing around the globe. To that end, the Department of Defense strengthened its ability to conduct psychological operations, creating the 10th Special Forces Group (Airborne) and the Special Warfare Center at Fort Bragg, North Carolina. The newly formed Central Intelligence Agency (CIA)—successor to the Office of Strategic Services—had claimed the role in conducting paramilitary and covert operations through decrees from the National Security Council (NSC). Although the USAF maintained a capability to support the CIA, there were no special warfare units specifically designed as part of their force structure. The same was true for the US Navy and the Marine Corps.

The conventional, large-scale application of airpower in COIN environments is turned on its head, requiring more flexibility and adaptability in its application. In most cases, strategic targets are non-existent; insurgents do not require an industrial base or large supply facilities to operate. The adversary has no airpower to contest. The effects of air strikes on enemy forces are nullified by insurgents' ability to disperse, hide, and conceal themselves. Insurgents can respond to airpower through massive air defenses and anti-aircraft weapons employment (requiring friendly air forces to adopt evolving tactics to negate anti-aircraft fires), surface-to-air missiles, and attacks on government airfields to destroy friendly aircraft.

Thus, airpower becomes geographically limited in scope and physically limited by the constraint to minimize civilian population casualties and destruction of civilian infrastructure. Airpower, in many cases, becomes a supporting arm to ground maneuver—aimed toward controlling the spread of insurgent forces into government enclaves.

As stated earlier, airpower must achieve the political goals of the COIN campaign. Strategic and tactical goals are centered on some achievement of military objectives, such as defending troops in

contact, destruction of enemy forces, interdiction, denial, and suppression as well as the achievement of objectives in the political, social, and psychological realms (centers of gravity in COIN operations).

Airpower application is defined by lethal and nonlethal roles and direct and indirect uses in achieving attainment of military and political objectives. It is a form of air control, not to counter enemy air forces in the sky but to control the conditions on the ground to influence both government and enemy forces to achieve the government's political, military, social, and psychological objectives as part of the COIN campaign.

In terms of COIN operations, US airpower can be applied in various means. The first use in direct combat requires intervention by the USAF. However, airpower can be applied indirectly through military assistance and professionalization and modernization of a host nation's existing airpower. It could be a hybrid application, using a coalition where American and host nation forces both apply their respective forms of airpower to achieve campaign objectives.

A discussion on what comprises political objectives is warranted. A country under the threat of subversion and insurgency fights back with its legitimacy and creation of stability for its population. A primary task for any government to have an effective COIN strategy is the need to mobilize the populace in support of the war. The requirement to solve whatever grievances fomented the insurgency is inherent in the spread of government legitimacy. Eradicating the insurgents—the fish that swim in the sea of the population as stated by Mao Tse-tung—requires separating the insurgents from the population. The role of the government is to secure areas for pacification, in an ever-widening methodology, ensuring security and presence to prevent the return of the insurgents. This is combined with denying the insurgents their space (sanctuary, base camps, and so forth) and their freedom of movement. The task for COIN airpower is deciding the best uses of its capabilities in these arenas.

Through their analysis of small wars, Corum and Johnson identified tasks for COIN airpower that seemed to provide the best payoff (keeping in mind that each case of insurgency is unique and solutions must be tailored to the situation):

- airpower used to predominantly support ground forces (close air support to troops in contact) and to help the government achieve social and political objectives among the populace;

INTRODUCTION

- enhance mobility and maneuverability of ground forces (air transport, airlift, airborne operations);
- interdiction of insurgent space, destruction of enemy forces on the battlefield, presence;
- resupply, medical evacuation, liaison;
- reconnaissance and intelligence gathering;
- psychological operations and demoralization of the enemy;
- advisory assistance to host-nation air forces; and
- humanitarian relief and civic action to improve the lives of the populace.

Successful application of COIN airpower existed when there was close cooperation between the air and ground forces, various levels of decentralization on the part of air forces, the use of airpower to support ground operations, and the willingness of air forces to be creative, adapt to the situation, and remain highly flexible to continual changes on the battlefield (both military and social). A case could be made that aircraft platforms that can fly “low and slow” seemed to be the most effective platforms. The debate of whether this means propeller-driven or jet aircraft is left to others. What is important is the creativity of the air commander to adapt his platforms to the environment.

Lt Col David J. Dean captured the role of airpower in COIN, although he used the then-current doctrinal term of low intensity conflict (LIC) in his monograph. *The Air Force Role in Low-Intensity Conflict* was published by the Air University Press at Maxwell Air Force Base, Alabama, in October 1986. Colonel Dean was an action officer in the Plans and Policy Directorate, Joint Chiefs of Staff, when he developed his manuscript as a project for the Airpower Research Institute. He described the LIC environment as such: “A low-intensity conflict would likely be limited in geographic area, have few participants, and be of limited duration; any US military operations contemplated would be accomplished by small, specialized units. The most common type of low-intensity conflict would be a war of insurgency or a limited conventional conflict on a scale smaller than Vietnam.”²²

In this low end of the conflict spectrum, Colonel Dean posited uses of airpower in three ways; short-term military assistance and

military training teams, cadre for host-nation forces with longer-term teams, and as the conflict escalates, the introduction of USAF squadrons and, special operations units performing combat with host-nation forces. The last two measures demonstrated a form of integration with host-nation forces. Escalation beyond these levels would involve intervention or combat deployment by US forces.³

In a sense, Colonel Dean described a type of environment suitable for special air warfare (SAW), with the best condition defined by the conflict for management of the war under the control of the host nation. Ideally, to keep the conflict limited—with respect to American employment of its own airpower assets—the host nation hopefully possessed an air force of some means with which to work.

Special Air Warfare

The term *special air warfare* evolved from the doctrinal term for special warfare. In July 1962, the Joint Chiefs of Staff (JCS) defined special warfare in JCS Publication 1, chapters 1 and 2 as follows:

counterinsurgency—military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat subversive insurgency.

psychological warfare—planned use of propaganda and other psychological actions having the primary purpose of influencing the opinions, emotions, attitudes, and behavior of hostile foreign groups in such a way as to support the achievement of national objectives.

unconventional warfare—three interrelated fields of guerrilla warfare, evasion and escape, and subversion. Unconventional warfare operations are conducted within enemy or enemy-controlled territory by predominantly indigenous personnel, usually supported and directed in varying degrees by an external force.

Simply put, SAW was the contribution of airpower by specialized units of the USAF to support the three categories of special warfare. The roles of SAW units could be listed as follows:

- Leveraging existing host-nation airpower for combat (advisory assistance),

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- Building host-nation airpower, adapted to the circumstance and conditions (military assistance),
- Augment host nation with SAW assets and integration of assets (“through, with, and by”),
- Covert and clandestine operations,
- Support to guerrilla warfare,
- Operations behind enemy lines (strike, intelligence gathering, reconnaissance, and infiltration of special forces and clandestine units), and
- Other roles applicable to air support in COIN.

There were two initial attempts to codify SAW in USAF doctrine. The first was the development of Air Force Manual (AFM) 2-5, *Tactical Operations—Special Air Warfare*, Department of the Air Force, 22 June 1965. This was followed by a later revision, as the Air Force gained operational experience with SAW application in Laos and Vietnam; AFM 2-5, *Tactical Air Operations/Special Air Warfare* was published on 10 March 1967 by the Department of the Air Force. With the advent of the term *special operations* in doctrine, the manual using the term *special air warfare* was soon outmoded. The tasks and missions of SAW became special operations, performed by special operations squadrons and wings. (The Special Air Warfare Center was deactivated after the Vietnam War, and would not be resurrected until the standing up of the Air Force Special Operations Air Warfare Center at Duke Field, Florida, on 11 February, 2013.)

Conditions Creating Special Air Warfare

The deficiencies created by Pres. Dwight D. Eisenhower’s “new look” defense posture were the impetus for Pres. John F. Kennedy’s administration to expand military special operations capabilities. Under President Eisenhower, defense strategy hinged on strong nuclear forces as a main deterrent; conventional forces would fight limited war contingencies. CIA paramilitary operations would be the tool in the utility belt for unconventional warfare skills required to tackle outbreaks of communist-inspired revolutionary warfare. There was only one catch: the cost of transitioning to nuclear forces became expensive, forcing the military services to cut budgets and end-

strength in their conventional forces. Thus was born the strategy of limited wars (and LIC doctrine)—keep any military contingency effort small and prevent escalation to a nuclear incident.

Early lessons learned in the Cold War signaled that unconventional warfare and covert operations were more successful when a combination of CIA special operations and small, tailored military forces worked together. The Congo operation served as a good example. United Nations forces in and among themselves could not break the stalemate of a conflict—as assessed by military experts in the new Kennedy administration—but the CIA with military forces seemed to do well.

The Bay of Pigs debacle further put doubt in President Kennedy's mind that large, paramilitary operations, on their own merit, were the key to success in counterrevolutionary warfare. One more key factor contributed to success or failure: the ability of a threatened and targeted government to “bear the burden” for the fight against subversion and insurgency. All of these factors shaped the thinking of appropriate US COIN responses to the ever-widening brush wars erupting around the globe.⁴

In President Kennedy's 28 March 1961 special message to Congress on the defense budget, he explained his policy shift:

In the event of a major aggression that could not be repulsed by conventional forces, we must be prepared to take whatever action with whatever weapons are appropriate. But our objective now is to increase our ability to confine our response to non-nuclear weapons, and to lessen the incentive for any limited aggression by making clear what our response will accomplish. In most areas of the world, the main burden of local defense against overt attack, subversion, and guerrilla warfare must rest on local populations and forces. But given the great likelihood and seriousness of this threat, we must be prepared to make a substantial contribution in the form of strong, highly mobile forces trained in this type of warfare, some of which must be deployed in forward areas, with a substantial airlift and sealift capacity and pre-stocked overseas bases.⁵

A flurry of activity occurred within the NSC to develop policy positions on US capabilities to conduct counter guerrilla warfare and paramilitary operations. Within the services, position papers were developed to identify special warfare units and capabilities. President Kennedy, through National Security Action Memorandum 56, *Evaluation of Paramilitary Requirements*, further issued instructions to each of the services to examine their ability to contribute to a COIN capability.⁶

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The Army had the most robust capability, residing in its three Special Forces groups (even though not wholeheartedly supported by generals trying to preserve their ever-dwindling force structure). It was President Kennedy's support and respect for the Green Berets that allowed for their rapid expansion. A regionally aligned, global response force, with the capability to conduct guerrilla warfare or act as military trainers in a COIN environment, was just the fungible type of military unit the president found highly useful to confront communist revolutionary movement expansion.

Although the Air Force fielded the famous Air Commandos in World War II, operating in the China-Burma-India Theater and flying behind enemy lines in Burma (commanded by Col Philip Gerald Cochran and Col John Richardson "Johnny" Alison), like most special operations units, their demise was predictable as the war ended, and they were no longer needed. In the cost-cutting era of President Eisenhower's new plan strategy, even the successors to the Air Commandos—the Air Resupply and Communications Service—were cut after the Korean War and then downsized during the 1950s. Any remaining Air Force special operations capabilities were parsed out to the various Air Force commands. The Air Force soon took note of the deficiency, as stated in the Pentagon Papers, volume II: "As with the Army, Kennedy galvanized the air force. In March 1961, responding to instructions that each service examine how it could contribute to counterinsurgency, air force headquarters ordered the Tactical Air Command to create an experimental counterinsurgency unit along Air Commando lines."⁷

To some extent, the CIA relied on transport and airlift from the USAF. Requests for American military support of any kind were routed through the JCS, reviewed by the Office of Special Operations (OSO), and tasked to the appropriate service to render. Such was the case when the CIA requested a C-47, without a USAF crew, for a covert operation ostensibly in Southeast Asia. The request made it to the desk of the USAF chief of staff, Gen Curtis LeMay. Along with reviewing USAF existing COIN capability (as instructed by the president), the request to support agency paramilitary operations provided the spark for a more detailed staff study on developing an organization to fulfill future covert and special operations requirements.

After staffing, it was determined the Air Force could not continue to be nickel-and-dimed by agency short-order requests for aircraft, pilots, and supporting logistics and maintenance. General LeMay

and his staff determined it would be far better to have a standing unit to support covert and clandestine activities.

In his work *Air Commando Chronicles*, Col Robert L. Gleason, USAF, retired, relates the sequence of events leading up to General LeMay's decision as related by Brig Gen Jamie Goff, USAF, retired, who worked on the staffing project at the Pentagon. General Goff remembered,

When General LeMay returned from the 'Tank' (the name given to the room where the JCS met), he was boiling mad. There were several reasons for his anger and frustration. This was not the first time the CIA had dumped on him in that manner. LeMay stated in no uncertain terms that he was not going to get sand-bagged again by this type of short order request from the CIA. He then directed the Air Staff to prepare not just one plane for delivery to the CIA but rather a number of different types of World War II aircraft that would be held in ready storage. Then the next time he was tasked to provide an aircraft of this type he would be able to respond immediately and with a minimum of disruption of other activities.⁸

After the staff considered that not only aircraft would be asked for, but eventually also pilots and crews, along with trainers and maintenance personnel, the conclusion to create a new unit was proposed to General LeMay. General Goff continued by saying, "Therefore, we had best provide a complete combat unit that could operate as a self-contained fighting force in a foreign country's counterinsurgency environment. Additionally, the entire unit, and not only the aircraft, must be prepared to operate under a cover of 'plausible deniability.'"

Operation Jungle Jim was born. The Air Commandos of the USAF once again regained their heritage from World War II and returned as an organization to conduct COIN, unconventional warfare, and psychological operations, applying their capability in a specialized manner—SAW.

Notes

(All notes appear in shortened form. For full details, see the appropriate entry in the bibliography.)

1. Corum and Johnson, *Airpower in Small Wars*, 51–86. Chapter 2 outlines the techniques used to control rebelling tribal factions during the British colonial period.
2. Dean, *Low Intensity Conflict*, 7.
3. *Ibid.*, 6.
4. Prados, *Safe for Democracy*, 282–4.
5. Gray and Department of Defense, *Pentagon Papers*, 229.
6. *Ibid.*, 286–9.

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7. Ibid., 289.
8. Gleason, *Air Commando Chronicles*, 3–4.
9. Ibid., 4.

PART I
BACKGROUND

Chapter 1

Jungle Jim

The Rebirth of the Air Commandos

The commandos' mission is to provide close-in air support for U.S. and allied irregular forces behind enemy lines and, even more significantly, to show friendly underdeveloped countries how to cope with guerrilla uprisings or other violent threats.

—Napier J. Hawkins
“The Air Commandos in Vietnam”

With the urging of Pres. John F. Kennedy's administration and the subsequent decision of the Air Force to have a counterinsurgency (COIN) capability, Operation Jungle Jim was born. The name was a play on the popular Dell© book and film series about the adventures of its main character, Jungle Jim, and his exploits throughout Southeast Asia and Central Asia.

In response, Tactical Air Command (TAC) formed the 4400th Combat Crew Training Squadron (CCTS) on 14 April 1961. The whole program was shrouded in mystique and secrecy. Col Benjamin H. King was personally picked by Gen Curtis LeMay, who continued to be one of the advocates for the Air Commandos, to lead the unit, with headquarters established at Eglin Air Force Base (AFB), Florida. It was later named the Special Air Warfare Center (SAWC).

Colonel King, later to be General King, was an aggressive and innovative fighter pilot who served in World War II. He flew the P-38 Lightning in the Pacific theater and downed three Japanese aircraft. He was shot down once and conducted a successful escape and evasion before he was picked up by a Navy PBX Catalina flying boat. The colonel was assigned as a P-51 Mustang pilot in the European theater where he downed four German aircraft. During the Korean War, Colonel King commanded the 8th Fighter Squadron (FS) and flew the F-80 Shooting Star. In a variety of his peacetime assignments, he was known to get things done.

The unit table of authorization provided for the modified COIN aircraft of Jungle Jim, which would be based at Hurlburt Field (Eglin

Auxiliary Field No. 9), Florida, with an initial total of thirty-six aircraft. While C-47 Skytrains and B-26 Marauders were culled from depots and mothballed USAF stocks, the Navy version of the T-28 Trojan was procured for the unit when the Air Force model proved underpowered for the attack role. The organization would somewhat mirror the World War II functions of the Air Commandos—bombers, strike fighters, and transport aircraft. Later, the unit would add C-123 Providers, U-10 Helio Couriers, O-1 Bird Dogs, and A1-E Skyraiders to its growing fleet, eventually followed by helicopters.

Why were propeller-driven aircraft chosen in the era of jets? Propeller aircraft were found more useful in COIN environments where airfield operations were remote and primitive. They had easier maintenance in austere conditions compared to jet-powered aircraft. As a result of US military foreign equipment sales, many of the aircraft were similar to the types of aircraft found in other countries. (There were a lot of excess propeller aircraft left from World War II and Korean War stocks.) Propeller-driven aircraft had both long range and long loiter times, an advantage in COIN. They also had large cargo and ordnance carrying capacity.

In the 4400th CCTS's first year of operation, it was redesignated as the 1st Air Commando Squadron, then the 1st Air Commando Group (ACG), and in May 1963 it became the 1st Air Commando Wing (ACW). The selection of personnel for the highly classified program was one of the most bizarre recruiting ventures in military history. The USAF scoured its personnel files to initially find men with the skills, experience, and temperament to operate in such a unique organization.

The men of the unit needed a sense of adventure, an understanding of living and operating under austere conditions, and a high degree of comfort in unorthodox environments while working with native and host-nation personnel. Boldness, innovativeness, and adaptiveness were desired attributes. The men had to be volunteers, hopefully already skilled with propeller-driven aircraft experience based on the functions of the new COIN unit: bombing, attack, and transport. Propeller experience was not absolutely necessary, as some were only trained on jet aircraft.

If chosen, Airmen were invited to report to their base commander, sworn to secrecy, and then asked a preliminary battery of questions to ascertain their desire to serve in the unit. To pass, all the questions had to be answered in the affirmative. If any question received a “No” in response, the interview was terminated with the applicant sworn

to never talk about the procedure. Air Commandos talk endearingly of the “five questions.” In some cases, there may have been more. Col Robert L. Gleason, USAF, retired, remembers the thrust of those questions:

1. Would you volunteer to serve in a foreign country under extreme hardship conditions for extended periods?
2. Would you perform in an overt or covert status?
3. Would you serve out of the US uniform?
4. Would you serve under conditions where the US government may contend that you were a mercenary and denied that you were even associated with the US?
5. Would you forgo the protection of the Geneva Conventions?¹

If the applicant answered “Yes” to all the questions, he was now a candidate volunteer, pending further testing. All successful volunteers were reassured that in the event of unattributed loss of their lives, the Air Force would take care of their families.

Next came psychological profile testing using methodology from twelve psychological test instruments, performed by psychologists from the Air Force School of Medicine.² The Jungle Jim volunteers first performed a battery of written psychological tests, followed by personal interviews and questions by the psychologists. If passed, they soon received orders to report to the 4400th CCTS for duty. There was one caveat made clear to all—at any time the commander of the unit could dismiss them based on their desirability to his needs. Needless to say, attrition of invitees to the Jungle Jim program occurred at every stage of the process.

Maj Gen Richard Secord, USAF, retired, remembered his experiences through this process:

The creation of Jungle Jim was supposedly sparked by President Kennedy’s urging for the services to create COIN and UW [unconventional warfare] forces. Jungle Jim was not administered by OSO [the Office of Special Operations] in the Pentagon, but by the Air Force SOXP [Special Operations Plans and Programs] Focal Point Office. This was subordinate to the DCSOPS [Deputy Chief of Staff for Operations and Plans]. This was in 1961, right after the Bay of Pigs debacle.

It was a top secret project. Our records were screened. They were looking for certain ages of pilots, experience, and such. Headquarters USAF had a list of

names they had profiled and sent these to the various commands. The commands were directed to conduct interviews of the pilots and personnel on the list. The interview was to be conducted by a general officer or the highest rank at the installation (like a colonel); it was an “eyes only” list.

A teletype directive came out for those initially chosen for Jungle Jim. I went TDY to San Antonio, Lackland AFB, Texas, for psychological screening. There were about 150 officers and enlisted personnel who were on the directive, pared down from hundreds of potential applicants. We were there two or three days for testing. After that, I went on a further TDY for Special Survival School (like SERE [survival, evasion, resistance and escape]), in Reno, Nevada (Stead AFB), held up in the Sierra Mountains.

I then went TDY to Hurlburt to the 4400th Combat Crew Training Squadron—which was later to be the Air Commandos. My wife and I arrived the first week of January 1962. The headquarters was in an old WWII-type building, and the commander was Col Ben King. I went down to my squadron and met Col Chester Jack. There were two sections in the 4400th, airlift and strike. The strike section had B-26As and T-28 Trojans—the B model from the Navy with the up-gunned, radial engines. I was familiar with the Air Force version of the T-28 because this is what we flew in basic training.³

One of the most thorough descriptions of entering the Jungle Jim program was provided by SSgt David Harrington in an interview with oral historian Stephen Maxner, held at the Vietnam Veteran’s Archive Oral History Program at Texas Tech University in Lubbock, Texas. Sergeant Harrington joined the Air Force as a seventeen-year-old after the end of the Korean War. His first taste of the dark side of military operations was his involvement with Civil Air Transport during the First Taiwan Strait Crisis. He later served in a variety of assignments as a specialty engine maintainer. Sergeant Harrington described not only the process to be accepted into Jungle Jim but also the training required to further become an Air Commando:

I was one of two people on the base that were tapped and interviewed for it. Pardon me. I was the only one that made it in the interview. . . . Well, we were called in by the wing sergeant major and he said, “There’s a gentleman here that wants to interview you separately,” and he introduced us to this gentleman, no name, civilian clothes. He took Bob Doten first and interviewed him in a walk-in safe. Bob walked out, he was only in there for about five minutes, walked out and I said, “What’s it about, Bob?” and he said, “I can’t tell you.”

So, about ten minutes later, this gentleman walked out and said, “Sergeant Harrington, would you please come?” So, I walked in and he explained he was going to ask me ten questions; they wouldn’t be strictly yes or no answers. The interview can be terminated by himself at any time or by myself at any time. He couldn’t tell me what the interview was for. So just ride along with the

questions. So, I did. They were correctly answered, all of them as yes. Now that it's been declassified, they even told us at that time or asked us at that time if we would be willing to operate on foreign soil completely divorced from the Air Force and be put into a situation where if we were caught, the United States government would deny any knowledge of who we were or what we were doing . . . Well, I thought, "This sounds like a job right down my alley." So, I said, "Absolutely, sir." I said, "Yes."⁴

He also experienced some bizarre procedures during the psychological tests portion:

The psychological tests at Lackland was a real—it was interesting. You met three psychologists, psychiatrists over a period of three days, each one separately. When you pass the requisites, you met all three of them collectively. You'd walk into the room and they'd be sitting behind a table and they'd say, "Take off your boots and your socks." I'd say, "Beg your pardon?" They'd said, "Take off your boots and your socks and roll up your pants legs." So, I did. Then two guys brought in an ice wash tub full of ice cubes and they said, "Stand at attention there," and then they interviewed you standing at attention in a wash tub full of ice cubes. After about fifteen minutes, I want to tell you, you can't feel anything below the knees.⁵

In 1977 Col Eugene D. Rossel, a former Project 404 officer in Vientiane when serving in Laos, queried the Personnel Research Division of the USAF's Human Resources Laboratory at Brooks AFB, Texas, to retrieve his Jungle Jim test scores. In a reply, Leland D. Brokaw, the technical director for the division, regretted that the scores were no longer in existence or could not be found. He did, however, report on the purpose of the tests and the attritional factors used to select the best candidates:

In view of the unlimited number of personality differences that a participant could have and still be a highly effective and reliable counterinsurgent, a primary task was the screening out of the applicant group of those officers and Airmen with motivational or personality deficiencies that would cause them to be unreliable in hazard duty, high-risk situations. It was felt that it would be easier to identify those who would crack under pressure, had motivational problems, displayed neurotic or psychotic symptoms or tendencies, than to try and develop a pattern of psychological and mental characteristics representing the ideal counterinsurgent. A secondary problem was to ensure that only job-proficient volunteers had been made available for counterinsurgency duty by their commanders.

To meet the essential screening requirements, psychological screening teams composed of a psychiatrist, a clinical psychologist, and a personnel psychologist were formed (sometime varied). The results of these tests were as follows:

Test Group A—the original group starting in April 1961. 140 officers were tested and 25% eliminated.

Test Group B—(November 1961) the second group that included others and myself. 52 officers and 118 Airmen were tested and 22% eliminated.

Test Group C—(sometime around early 1962) had 30 officers and 150 Airmen tested and 22% eliminated.

Test Group D—(sometime in late 1962) had 17 Officers and 145 Airmen and had only 17% eliminated.

Apparently after testing a total of 239 officers and 413 Airmen, with 21% eliminated, the tests were stopped. It seemed about this time that Gen Walter C. Sweeney Jr., TAC Commander, upset with several suicides and some other things, decided that the tests were not living up to their objectivity of producing reliable and emotional candidates. There may be more to this but it isn't in the report. This was one of the elimination channels, which took a toll. First you were interviewed and about one out of 10 made it through. Next we had the selected group eliminated by the tests given by the Personnel Research Lab at Lackland AFB—the groups mentioned above. This was followed by more eliminations at Stead Survival School where people were eliminated by breaking down or went berserk in the black box they stuffed us in, etc. Then after this there was the self-imposed elimination once selected. There was a high elimination of personnel for the first four groups as we went through the testing process to get into this exciting new program.⁶

After this perplexing filtering-out procedure, the manning of the newly formed unit was approximately 350 personnel. The unit was up and running, with the immediate task to qualify pilots in their assigned aircraft types. Additional specialized training included night-flying operations, infiltration and exfiltration of agents, and airdrops to service clandestine airfields—run by Army Special Forces (SF) replicating guerrilla and resistance units. The capability to conduct leaflet drops as well as loudspeaker operations as part of the psychological operations (PSYOP) mission was also added. The unit formed its own unique version of combat control teams. Logisticians and maintainers learned how to perform their jobs under the type of austere conditions they might find in foreign countries.

The unit soon became affectionately called by Colonel King as “the motley crew.” Shortly after the unit's creation, the term *Jungle Jim* fell from the lexicon—the colonel directed the unit to not use the classified term; however, it continued informally as a nickname for the unit.

There was also a set of training requirements to become an Air Commando, to be completed in a six-month period, in preparation for the unit's operational readiness inspection (ORI).

Again, Sergeant Harrington described the unique training requirements. They included attending survival courses, completing hand-to-hand combat training, and reading a bevy of books relating to unconventional operations and irregular warfare,

counterinsurgency, guerrilla warfare, Ho Chi Minh's works, Laos works, mostly slanted towards the Orient and guerrilla warfare in counterinsurgency and a lot of books about the OSS (Office of Strategic Services) as it worked during World War II and about the clandestine affairs. . . .

The POW situation and the escape and evasion portion was a subsequent classified course at the same Air Force base. We had a fifteen-mile escape and evasion track from the bend in California and you carried a current rating with you and if you got caught in a certain period, certain point of time, you had to go back and you would start over with the next class or else, you had the prerogative anytime during the six-month period of saying, "I quit."

We took unarmed defense. I learned some ad hoc measures taught by a gentleman named Mr. O'Neal, who was the smallest Chinese person I've ever seen in my entire life and probably the most destructive, dangerous person I've ever run into in my entire life.⁷

Escape and evasion training took place at the USAF Survival School at Stead AFB. Later, the Air Commandos would take an additional course in prisoner of war and resistance training. Others participated in the Jungle Warfare School in Panama. Colonel King initiated a daily regimen of intensive physical fitness. Air commandos were also required to take language training in either French or Spanish, since these were the two predominant languages found in South America, Africa, and Southeast Asia, where most insurgencies were festering.

They also had special equipment issued; they were the first unit to receive AR-15 rifles and to use the single-sideband radio system. The C-47s were modified with additional self-sealing fuel tanks, installation of long-range radios, and modifications for a PSYOPs pod—in this configuration it was named the SC-47.

All special operations (SO) units needed a purpose to validate their existence, be funded, and serve the nation as an instrument of foreign policy because this type of capability could not be found in conventional units. There were several "talks around the table" by the early leadership to promulgate roles and missions used for the unit's

application. They knew the purpose of the unit had to move from an experimental project to one of being institutionalized into USAF SO doctrine. Lt Col David J. Dean essentially captured what the potential role of the 4400th CCTS would be in his article, “The USAF in Low-Intensity Conflict: The Special Air Warfare Center.” His premise centered on three tasks for airpower in low-intensity conflict: assistance, integration, and intervention. The successful application of special operations forces airpower is attained primarily in the first two tasks:

Assistance means providing noncombat training and support directly to a friendly air force. That support would include developing the infrastructure of a host nation’s air force—logistics, intelligence, planning—as well as training with that air force to develop flying skills appropriate to its threat. A USAF assistance effort could (and usually should) be part of a multidimensional (military-economic-political) or joint military effort. As Brig Gen John W. Doucette, USAF, retired, states:

The integration aspect of the framework for designing forces for low-intensity conflict means that a small, specialized USAF combat contingent would become part of a host nation’s forces for a limited time. The USAF contingent would fly aircraft with performance capabilities comparable to the aircraft of the host nation and, if necessary, would be authorized to fly combat missions with the host air force. Essentially, the U.S. force would serve as “stiffeners” for the local force. Again, this higher level of activity could be carried out as an air force-to-air force operation, part of a joint-military operation, or as part of a multi-dimensional effort.⁸

Such would be the role and mission sets for the 4400th CCTS. When deemed ready to operate about six months after their inception, they were tested and further passed their ORI and were now ready to deploy. Detachment 1 deployed to Mali under the code name Sandy Beach to train paratroopers in the use of the C-47 for airborne operations.

In November 1961 Detachment 2 deployed as part of Operation Farm Gate in South Vietnam. This was one of the first major deployments of the unit. Based at Bien Hoa, South Vietnam, they operated with the mission to serve as a COIN airpower to train the South Vietnam Air Force (VNAF), learn and develop better COIN air techniques, and conduct strike operations in support of the VNAF.⁹

Detachment 2, later designated 2A, deployed with four RB-26 Invaders eight T-28s, and four SC-47s. The designation “B” for bomber or “A” for attack was not used in fear of indicating the unit had an

offensive war capability, thus the “R” designation for reconnaissance was used as a ploy.¹⁰

In May 1962 Detachment 3 was established at Howard AFB in the Panama Canal Zone to provide COIN training and civic action programs throughout South America.

During the deployment, Air Commandos began to wear a rakish bush hat with the side turned up, called the “Air Commando hat.” Similar to the experience of SF trying to get approval from the Army for the wearing of the green beret, the USAF looked down on unauthorized headgear. Fortunately, the unit’s mentor, General LeMay, soon approved it for wear.

The United States now had two major unconventional warfare (UW) organizations: US Army SF (Green Berets) and the Air Force Commandos. President Kennedy’s initiatives and support guaranteed the continued need for US military special operations. If it needed to be said more clearly, the president outlined the need for these new types of units in his address to the graduation exercises of the US Military Academy in 1962:

This is another type of war, new in its intensity, ancient in its origin—war by guerrillas, subversives, insurgents, assassins, war by ambush instead of combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him. It is a form of warfare uniquely adapted to what has been strangely called ‘wars of liberation,’ to undermine the efforts of new and poor countries to maintain the freedom that they have finally achieved. It preys on economic unrest and ethnic conflicts. It requires in those situations where we must counter it, and these are the kinds of challenges that will be before us in the next decade if freedom is to be saved, a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training.¹¹

Jungle Jim had lived up to President Kennedy’s expectations and rose to the challenge. Colonel Gleason summed up the early days of Jungle Jim:

“Jungle Jim was a noble and glorious experiment whose progeny continues even today in the embodiment of the Air Force Special Operations Command (AFSOC). While we of the “old days of glory” continue to bask in the memories of our times, there has emerged a new group of commandos, eager to further our finest tradition and to proudly carry forward the legacy of Jungle Jim.”¹²

Establishment of the Special Air Warfare Center

In a perfect world, theorists, strategists, academics, and practitioners of military science identify the need for a capability based on a deficiency in a war-fighting domain. What should follow is some sort of operational design that addresses the deficiency and solves the problem. In strategic thinking, this would be the ways and ends of a strategic concept. There are established paths to develop a strategic concept: the study of prior historical application of a like capability, a study of contemporary application of the capability by others, and visionary brainstorming by innovators to conceptualize into the future and extrapolate from present trends. Once a strategic concept is developed, it then becomes important to identify the means to operationalize the concept. The means fall into two categories: (1) what existing resources can be optimized to create a military capability to solve the deficiency and, (2) if not available, what planning and research and development (R&D) are required to address the shortfalls.

This path to the conceptual development of a special air warfare (SAW) capability was shortened for the USAF, given the impatience of the Kennedy administration to insist the services develop a COIN capability within a short, reasonable time. In 1961 the National Security Agency developed policies to counter growing insurgencies throughout the world. By May 1961, the services were tasked to create SO units capable of conducting missions in the COIN environment. Without in-depth strategic study, and lacking a strategic concept, the Air Force quickly rose to the occasion and established a special warfare (or COIN) capability within one month.¹³

The Army established a special warfare capability in 1952, which first created the Psychological Warfare Center—later named the John F. Kennedy Special Warfare Center. They then added the means; a school, PSYOP units, and the 10th Special Forces Group (Airborne). However, the creation of the USAF SAWC occurred a decade later on 19 April 1962 at Eglin AFB, a full year after the 4400th CCTS was created and began deployments. The new center, similar to the Army's, consolidated its headquarters and tactical units into the new command.¹⁴

Without a strategic charter for its purpose, the SAWC was initially tasked with the training of foreign air forces in COIN and UW. This mission was primarily performed by the 1st ACG, deploying detachments

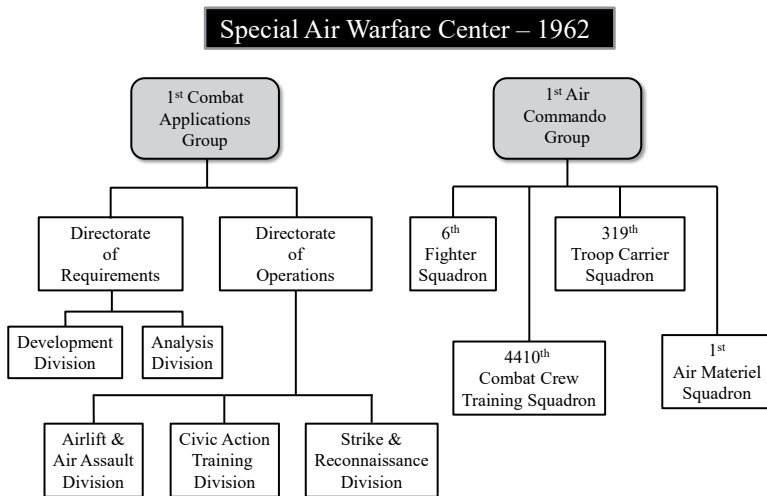


Figure 1.1. Special Air Warfare Center (SAWC) organizational chart, April 1962. (Adapted from Lt Col David J. Dean, USAF, retired, *The USAF in Low-Intensity Conflict* [Maxwell AFB, Montgomery, AL: Air University Press, October 1986], 90.)

and military training teams worldwide.¹⁵ Colonel Dean, in his article “The USAF in Low Intensity Conflict,” explained the function of the group:

SAWC’s primary mission—training aircrews in all aspects of unconventional warfare and counterinsurgency air operations and techniques—was the responsibility of the 1st Air Commando Group. Equipped with C-46, C-47, T-28, B-26, U-10, and later A-1E, C-119, C-123, and C-130 aircraft, the group provided training in low-level parachute resupply, close air support, use of flares for night operations, assault takeoffs and landings, psychological missions with leaflets and loudspeakers, and other counter-guerrilla techniques. Propeller driven aircraft were preferred for counterinsurgency operations due to their ability to operate from remote, primitive bases as well as their capabilities in terms of loiter time over target, firepower, range, and cargo capacity.¹⁶

To that purpose, in 1962, the 4410th CCTS was established. They remained at Hurlburt Field when the aircraft and crews of the 1st ACW deployed to England AFB, Louisiana to separate the operational and deployable assets of the SAWC from the strictly training-focused mission at Hurlburt. The 1st Combat Applications Group

was tasked with the development of doctrine; tactics, techniques and procedures (TTP); and short-term R&D for SAW requirements.¹⁷

In July 1962 Tactical Air Regulation 23-12 defined the “roles and missions” for the SAWC as thus: “USAF Special Air Warfare Center will command, organize, equip, train, and administer assigned or attached forces to participate in and conduct combat improvement projects for air actions in counterinsurgency and other special warfare operations.”¹⁸

However, Detachment 2 at Bien Hoa in South Vietnam was flying direct combat missions—albeit with the requirement to have South Vietnamese airmen aboard. The roles and missions needed clarification if SAWC assets not only advised and trained foreign air forces but also now became integrated into their combat operations. Shortly thereafter, Detachment 2 was assigned to Pacific Air Forces for combat operations. In 1963 the new TAC regulation in SAWC changed accordingly, defining new roles and missions as follows: “command, organize, equip, train, administer, and in special instances, operate assigned or attached forces for the purpose of conducting air actions in counterinsurgency, counter-guerrilla warfare, unconventional, and psychological warfare. In addition, the Special Air Warfare Center will conduct combat improvement projects designed to increase the effectiveness of all air operations associated with special warfare.”¹⁹

The change was significant, the SAWC was unilaterally allowed to employ SAW assets in COIN environments and conduct air-to-ground operations with local military or irregular forces—although with a preference for operating with other US military or government agencies.²⁰ As requirements from the major theater commanders for their SAW detachments and capabilities increased, the Air Force gained approval for personnel increases and the growth of the unit to six squadrons—approved November 1962 and to be in place by 1964.²¹

In April 1963 the SAWC was tasked to support the commander of the Military Assistance Command Vietnam’s request, made earlier in January, for additional aircraft assets to establish three tactical air support squadrons in South Vietnam. The goal was to improve forward air control and air surveillance capabilities in theater; the Joint Chiefs of Staff authorized two squadrons, one each from the Army and the USAF. Due to a shortage of U-10 aircraft, the O-1D (L-19) became the platform of choice. The SAWC began O-1 training at Hurlburt in June.²²

Also in 1963, the SAWC reorganized based on the six-squadron structure. Between April and November 1963, the 602nd, 603rd, and 604th FSs were added to the 1st ACG. In mid-November, the 605th Composite Squadron was established and assigned to the US Southern Command at Howard AFB. The 1st ACG was redesignated as the 1st ACW earlier in June 1963.²³

Between 1964 and 1969, the SAWC gave of its operational aircraft and Airmen to the Vietnam War, the war in Laos, and to support missions for theater commanders around the globe. The training mission became solely focused on training US pilots for duty in Vietnam and Laos, diminishing one of its core purposes—the training of foreign airmen. Although the center continued to play a superb role in R&D for COIN aircraft, along with developing TTP for air, it morphed into a touchstone for SAW, similar to a think tank. Even the efforts to develop SAW doctrine—instrumental in the publication of AFMAN 2-5 in 1967—were short-lived and superseded by new Air Force doctrine appearing in 1971, which eschewed SAW lexicon for one that outlined special operations. Following the end of direct US military involvement in the Vietnam War, the SAWC was disbanded on 30 June 1974; however, the history and lessons learned in that theater still permeate the Air Commando community in their employment of SAW in current conflicts.

Notes

(All notes appear in the shortened form. For full details, see the appropriate entry in the bibliography.)

1. Gleason, “Days of Jungle Jim.” This source is a firsthand account of retired Col Robert L. Gleason’s experiences. It was posted on the Air Commando Association website with his permission.

2. Leland to Rossel, “Tests for Jungle Jim Candidates.” In fall 1977, Col Eugene D. Rossel wrote the Human Resources Laboratory at Brooks AFB, Texas, to inquire about the results of his psychological testing scores for Jungle Jim. In a reply dated 7 September 1977, Leland D. Brokaw, the technical director for the Personnel Research Division, outlined the twelve psychological test instruments used, unfortunately indicating that the results of the test scores for Jungle Jim applicants could no longer be found on record. His full reply to Colonel Rossel can be found on the Air Commando Association website. The twelve test instruments were:

- i. Minnesota Multiphasic Personality Inventory (MMPI). The inventory was included because of its long-established use in clinical psychology for diagnosing neurotic tendencies.

- ii. Gordon Personal Profile (GPP). This test was selected because of the utility of the “Responsibility” score in predicting cadet performance at the USAF Academy.
 - iii. Gordon Personal Inventory (GPI). This test was selected because of the face validity of the names of the sub-scores when selecting for a special project, the nature of which was not clearly defined (Original Thinking, Personal Relations, Cautiousness, and Vigor).
 - iv. Officer Effectiveness Inventory (OEI). This test was selected primarily to obtain scores on the Risk and Officer Leadership scales.
 - v. Edwards Personal Preference Schedule (EPPS). It was selected because of the wide range of personality variables reflected by its various scales. It would permit the individual to give the interviewer a picture of his self-concept in a condensed form.
 - vi. Success Motivation Test. This test consists of having the subject hold his arms out parallel to the ground, then informing him that how long he holds them in this position is indicative of his desire to succeed on the project. The test was hypothesized to measure motivation and perseverance.
 - vii. Air Force Officer Qualifying Test (AFOQT). This test was selected to obtain an evaluation of the candidates as measured by the test.
 - viii. Air Force Preference Inventory (AFPI). Results of this inventory are interpreted as interest measures and have been found to correlate significantly with ratings of Air Force Academy cadets (Creager & Miller, 1).
 - ix. Holtzman Inkblot Technique. The new technique uses more inkblots than the traditional Rorschach, in addition to having simplified procedures for administration and scoring, while retaining the rich qualitative, projective materials of the Rorschach. It was included for experimental purposes.
 - x. Modified Pressure Test (Cold Water Test). The individuals are required to stand with their feet in ice water for a period of three minutes. It was felt that this test would measure the motivation of the participant.
 - xi. Mental Mechanisms Inventory (MMI). This experimental test was developed to measure the relative degree to which the individual made use of various mental mechanisms.
 - xii. Military Service Value Scale (MSVS). The scale measures the individual’s opinions on 10 different factors as they apply to the military service. It has been developed in accordance with Shartle’s theory of values and was used in the expectation that it would give some information pertaining to the individual’s value system.
3. Second, interview.
 4. Harrington, transcript, 15.
 5. *Ibid.*, 17.
 6. See note 2.
 7. Harrington, transcript, 18.
 8. Dean, “USAF in Low-Intensity Conflict,” 46.
 9. Van Staaveren, *USAF Plans and Policies in South Vietnam*, 18.
 10. Doucette, “Lessons in Counterinsurgency,” 18.
 11. Gravel and DOD, *Pentagon Papers*, vol. II, 813.

12. Gleason, "Days of Jungle Jim."
13. Dean, *Air Force Role in Low-Intensity Conflict*, 87–88.
14. *Ibid.*, 89–90.
15. *Ibid.* As a source for this material, Colonel Dean cited the USAF Special Warfare Center (TAC), *History*, 1 April–31 December 1962, 220.
16. Dean, "USAF in Low-Intensity Conflict," 50.
17. Dean, *Air Force Role in Low-Intensity Conflict*, 98.
18. USAF Special Air Warfare Center (TAC), *History*, 1 April–31 December 1962, vol. 2, 1, quoted in Dean, *Air Force Role in Low-Intensity Conflict*, 92.
19. USAF Special Air Warfare Center (TAC), *History*, 1 January–30 June 1966, "Foreword," quoted in Dean, *Air Force Role in Low-Intensity Conflict*, 94–95.
20. Dean, *Air Force Role in Low-Intensity Conflict*, 95.
21. Hildreth, *USAF Special Air Warfare Doctrines and Capabilities*, 4.
22. *Ibid.*, 30–31.
23. *Ibid.*, 29.

Chapter 2

Fighting in the Kingdom of the Million Elephants

*The Vietnamese plant rice, the Cambodians watch it grow, and
the Lao listen to it grow.*

—Colonial French saying on the culture of the Lao people

In ancient times the region of Laos was known as the kingdom of Lan Xang—kingdom of the Million Elephants. The kingdom was served ably by a succession of kings until around the mid-sixteenth century when political power struggles and regional wars resulted in the division of Laos into three governing areas—effectually turning Laos into a backwater. In the latter half of the 1800s, the French, seeking colonial expansion and economic opportunities, arrived to the region and ultimately conquered Laos. The country was subsequently used as a buffer zone between British interests in Thailand and Burma and French Vietnamese holdings. Through gunboat diplomacy, the French were able to reunify the three separated areas of Laos in the early 1900s.¹

During World War II, the Japanese successfully conquered Laos and evicted the French. After the Japanese surrender in 1945, they assisted separatist movements to officially declare Laotian independence from France. To support this effort, Prince Phetsarath Ratanavongsa of the Lao royal family formed an opposition movement to the reimposition of French control. Prince Phetsarath was helped by his two brothers, Prince Souvanna Phouma and Prince Souphanouvong.

However, the Western powers abetted France's attempt to reclaim Laos. This resulted in increased political opposition and the rise and formation of a resistance movement, the *Lao Issara* (Free Laos)—the same movement supported by the Office of Strategic Services to resist the Japanese.

By September 1946, the French once again controlled and dominated the country, forcing the three brothers into exile and taking with them their governmental philosophies to replace the French:

- Prince Phetsarath dictated a military clash with the French.

- Prince Souvanna Phouma wanted to retake Laos with a legitimate political process.
- Prince Souphanouvong aligned with the communist Viet Minh.

Souvanna Phouma eventually won the debate and, through the political process, became the prime minister.

Lead-Up to War

There were three main causes for the Secret War in Laos: (1) the disagreement among the three brothers on which style of government best suited the country, (2) communist expansion, and (3) superpower manipulation of the differing factions, to include sponsorship of proxy war inside the country.

In 1950 the French established Vietnam, Laos, and Cambodia as “associated” states within the French Union. As the communist threat grew within the French Union, the United States began military aid to the French to help stop its spread. The United States and France signed the Pentalateral Mutual Defense Assistance Act, and by 1952 the United States was paying for one-third of the French war costs.

Frustrated at the continuing presence of the French in Laos, Souphanouvong convened a revolutionary congress on the *Plaine des Jarres (PDJ)* and formed a resistance government. The new congress formed for war and established its political arm, the Lao Patriotic Front, and an action arm, later to be named the Pathet Lao.

The Pathet Lao communist resistance front (action arm) formed with the assistance of the Viet Minh to defeat the French and Royal Laotian Government’s (RLG) allies. It was headed by the Resistance Committee of Eastern Laos with Prince Soupannavong accepted as its nominal leader. The first twenty-five man guerrilla force was formed in January 1949—recruits were from the hill tribes, including the Tai and Hmong.

In 1950 over 150 members of the movement met with Ho Chi Minh, and the organization renamed itself the *Neo Lao Issara* (Free Lao Front) with its armed wing incorporating the Pathet Lao. They adopted a Maoist people’s revolutionary war strategy and began their guerrilla warfare phase. The Viet Minh conventional forces from North Vietnam as well as China and Russia militarily supplied and supported the Pathet Lao.²

In response, the French deployed one colonial battalion per province. With French training to raise a Lao military force, the first two 600-man battalions of the RLG—formed by the *Mission Militaire Francaise* (MMF; French Military Mission)—were formed and employed as *Bataillons d'Infanterie Laotienne* (1st and 2nd Lao Infantry Battalions). In 1951 with the addition of two infantry battalions and one parachute battalion, the Laotian government's total military manpower reached about 5,000. Owing to US military aid, the number of battalions increased and were provided with American arms and equipment; moreover, additional counterinsurgency (COIN) units were formed to expand the capabilities and number of government security forces. For example, the paramilitary forces known as *Garde Nationale*, consisting of 170-man companies of peasant militias, were formed. COIN light infantry battalions were also formed along with units known as *Groupeement de Commandos Mixtes Aéroportés* (Mixed Airborne Commando Groups).³

In 1953 four infantry divisions of the Viet Minh, along with 2,000 Pathet Lao forces led by Prince Souphanouvong, tried to capture Luang Prabang—a regional, historic governmental center and home for the king—and were successful in seizing the *PDJ* from the French/Laotian military forces. They were also successful in capturing the province of Sam Neua where they immediately established a rebel government. To assist in the fight to recapture this vital area, the Central Intelligence Agency's (CIA) Civil Air Transport (CAT) subsidiary asset assisted the French from May to June 1953 with C-119 paradrops. CAT was later to become "Air America."

In 1954 the Viet Minh defeated French forces at the Battle of Dien Bien Phu and the whole security dynamic in the region changed. The Geneva Conference of May 1954 split Vietnam into North and South, while Laos was declared independent and neutral. A ceasefire was implemented in Laos in August 1954 to remove foreign troops and to demobilize and integrate Pathet Lao forces into the government's military forces.

The Geneva Conference and Agreement of 1954 spelled out the new security arrangement for the country of Laos. Two of the key provisions were as follows:

- Prohibiting introduction into Laos of foreign or regular troops, or irregular troops, foreign paramilitaries, or foreign military personnel.

- Prohibiting introduction into Laos of armaments, munitions, and war material, except for conventional items necessary for the Royal Lao Government (RLG) to defend itself.

In response, US policy objectives, which began during the Eisenhower administration, were to (1) maintain a pro-US country (or at least a neutral government in Laos), (2) secure freedom from communism, (3) disrupt the flow of communist supplies, and (4) adhere to the spirit of the Geneva Accords. The US strategy consisted of a political warfare covert operation, using clandestine interagency assets and unconventional warfare (UW) with special operations forces as needed, combined with the conduct of foreign internal defense and security assistance programs. Pres. Dwight D. Eisenhower also acted to counteract subversive communist activities still ongoing throughout the region with increased aid to Thailand and South Vietnam. The diplomatic response to the threat created a new security organization, the Southeast Asia Treaty Organization (SEATO).

With the many restrictions of the Geneva Convention, the priority of effort was focused on Thailand as the bulwark against aggression, starting with foreign aid programs, followed by military aid programs. The US military established the Military Advisory Assistance Group (MAAG, Thailand) with a commensurate buildup of military bases in Thailand to support the US Air Force and combat advisors operations.

Even with reduced foreign military assistance, the Royal Lao Army (RLA)—called the *Armée Nationale Laotienne* (ANL, Lao National Army) until 1959—was able to continue building in strength with up to 25,000 troops. Laotians, now weakened by the Geneva restrictions, sought a compromise to reduce the threat and worked out agreements with the Pathet Lao to form a coalition government. The Pathet Lao was also affected by the Geneva restrictions and could not win without North Vietnamese support. As a result, in September 1954, a leftist government was formed with hopes of attracting the Pathet Lao to lay down its arms and participate in the political process.

There was still a small loophole for the United States to operate; however, the provision of military aid could continue due to the allowance in the Geneva Agreements, “except for conventional items necessary for the RLG to defend itself.” Consequently, US ambassador, Charles W. Yost, arrived in Laos to establish the United States Operations Mission (USOM) and started the process to provide “conventional” aid and military funding, along with continued French military support.

With the Geneva restrictions preventing additional foreign military forces operating in Laos, a program evaluation office (PEO) was established within the United States Agency for International Development (USAID) section of the embassy—instead of a MAAG-type organization—to work around the restrictions. Most of the PEO staff were retired military personnel who began to work through and with the *MMF*. John Prados described the PEO:

One special feature of the United States' operating mission in Laos was that military representation was not restricted to the attaché. There was a military advisory group in all but name, headed by a United States general officer. In deference to the Geneva Agreement, the advisory group was called a Program Evaluation Office and had the ostensible task of monitoring the effects of American Programs in the country. The PEO had its beginnings in December 1955, with the installation of a six-man staff at Vientiane. By early 1956, PEO was dispatching small teams of advisors to RLAF units, usually with Thai interpreters who translated English to Lao.⁴

After the national elections in 1958, the Pathet Lao gained enough political power to be included into the coalition government, alarming the United States, which subsequently halted US economic aid to the new government as a sign of its displeasure. This practice, known as coercive diplomacy, is a tool commonly used in political warfare. A minicoup by the Laotian congress and other influential leaders ousted Prime Minister Souvanna and the Pathet Lao, resulting in the formation of a new government, which was anticommunist and pro-West. The Pathet Lao was enraged, and resumed its attacks on the government. Souphanouvong and the ringleaders of the revolt were jailed but later escaped to conduct a civil war and resume armed action.

In 1958 Brig Gen John A. Heintges provided the US government a study and assessment on the security situation in Laos. His dire report resulted in an increased role for the PEO to add more military trainers and advisors to assist the Laotian government security forces. To circumvent the restrictions of the Geneva Convention the Eastern Construction Company in Laos was formed as a front company to increase combat advisors. It was manned by ex-Filipino military personnel trained in COIN by the United States as a result of Ed Lansdale's brilliant work to assist the Philippine government to contain the Hukbalahap insurgency. There were also uniformed officers of the US Army—majors and lieutenant colonels—who served in each military region (MR) as advisors from the PEO.

Additionally, Operation Hotfoot began in July 1959 when US Special Forces (SF) field training teams, which consisted of twelve, eight-man operational detachment alphas, began deployment to Laos. To circumvent the Geneva restrictions, the Green Berets carried US embassy identification cards and were placed on six-month temporary duty orders to not increase the number of US military personnel assigned in-country. The US Army Special Forces Advisory field training teams were also deployed secretly as unarmed civilian advisors, dressed in civilian mufti.

Geopolitical Situation

The geopolitical situation in Laos was framed by three competing interests, the first being the American foreign policy position to prevent the spread of communism in Southeast Asia. Three events shaped the American policy position: (1) the “loss” of China to communism under Mao Tse Tung, (2) the Korean War, and (3) the political election in Czechoslovakia whereby the communists slowly infiltrated the government through an electoral process, and once inside the government, took over power. President Eisenhower and later Pres. John F. Kennedy took measures to counteract any further spread of communism based on the prevailing foreign policy theory known as “falling dominos.” If Laos fell, then communism would spread further into Thailand, Cambodia, Burma, and so forth.

The second major geopolitical interest was China’s position to prevent foreign military forces and bases from being introduced into Laos. Although the Chinese never overtly intervened in Laotian affairs to any great extent, the threat of action by China dictated to some extent the level of American effort to assist Laos. What would be the trigger point to encourage a Chinese intervention? After all, the Americans had misjudged the introduction of Chinese forces into the Korean War. A good example of American temerity concerning reaction from China was to place the Chinese road being built through Laos off-limits from any military action.

The third competing interest was North Vietnamese attempts to conduct a war to reunify the two Vietnams—split as a result of the Geneva Agreements. This required securing their flank in Laos and establishing a logistical route to support communist forces in South Vietnam—the Ho Chi Minh Trail (HCMT). No country wants an enemy

at its border. It was inevitable the North Vietnamese would use the Pathet Lao as their proxy to ensure Laos would not become pro-Western and impede their first strategic goal; the defeat of the French in Indochina, and later the defeat of the South Vietnamese government. The North Vietnamese held a long historical belief that most of Laos was really part of Vietnam and in the long term would need to be reincorporated back into the fold of a Vietnamese nation.

Within this arena of competing interests, there were other diplomatic and international factors that shaped how the conflict evolved. From a communist viewpoint, the actions of the Americans to establish SEATO, emplace MAAGs in countries throughout Southeast Asia, and pick Thailand as the “bastion” and bulwark to stop the spread of communism looked like an aggressive and interventionist move.

Internationally, British and French interests never aligned with US foreign policy objectives concerning the fate of Laos. Even though the Americans guaranteed Thailand and Laos that SEATO would come to their defense in the event of a communist invasion—Laos was not a signatory to the treaty, being a neutral country—neither the French nor the British ever showed an inclination to commit to this level. Therefore, the fighting and dying in Laos would be Laotian, Hmong, Thai, and American. What the French interests in Laos were comprised of was never fully clear to the Americans; unfortunately, French diplomatic and military actions to limit American military aid and involvement early in the war ensured a difficult and complex task for US military trainers and advisors to professionalize and equip Laotian military forces. Out of wounded pride (the loss of Vietnam) or spite, the French diplomatic and military efforts in Laos stifled progress for at least the first three years of American involvement.

The Russian position on Laos was constantly misread. In the heady days of ideological warfare between communism and Western democracy, it was thought by the West worldwide communism was monolithic and under the control and direction of the Soviet Union. The Americans and the Soviets were very cautious to not trigger an event that could result in a superpower war, which was even more dangerous in the nuclear age, although they came close in Laos. This ensured the nature of the war in Laos would be a limited war as well as a secret war. Even though the Soviets supplied the North Vietnamese Army (NVA) and Pathet Lao (and later, after the Kong Le coup, support and aid to the neutralists), the Soviet Union gave clear signals to

the United States that Laos would not be the place of a superpower clash—there were bigger interests in Europe.

Thailand feared the spread of communism with respect to Laos. The country was already addressing a communist-inspired insurgency in its northern region. Along with the United States, Thailand would prove a staunch ally to the RLG by assisting with covert operations inside Laos and allowing the Americans to build and occupy military bases in its country. Later in the 1960s, as the situation became bleaker for the Laotian armed forces, Thailand sent battalions of infantry and artillery forces.

The overriding impact the Geneva Agreements had on the contending forces dictated the nature and style of the war in Laos. The United States—although not a signatory—always operated in Laos under the spirit and intent of the agreement. Therefore, many of the military decisions made by the ambassadors in Laos were in the shadow of potential opprobrium from the international community who was always looking for violations of the neutrality agreements and pressure to not widen the war or introduce foreign military forces into the region. It was a naïve position and completely lacking in reality—the North Vietnamese basically ignored any restrictions to operations in Laos. So the war was fought with a geopolitical “wink and a nod” by all the contenders. The key to this approach was the need to operate overtly and keep public those things which complied with the neutrality agreement; for example, the allowance for actions by the RLG to defend Laos. When forced to go beyond that, the war moved out of the public realm into the world of covertness, secrecy, and clandestine activities. It was labeled both the “secret war” and the “quiet war.”

Position, Geography, and Terrain

Laos is about the size of Great Britain (or the state of Utah). Its northern half is comprised of rolling hill masses, limestone karsts, and triple canopy forests. In the northeast sits the Tran Ninh Plateau or the *PDJ*, identified by its distinct features of rolling grasslands and woods. There are many tall, carved, clay stone jars spread throughout the plateau, from which its name is derived. The jars are believed to perhaps be burial urns from an ancient civilization.

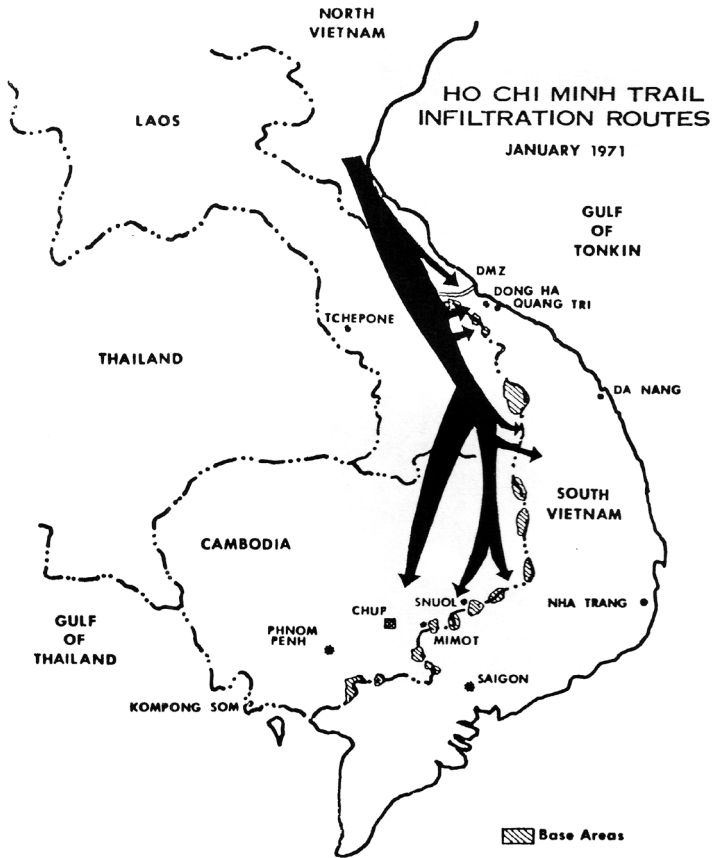


Figure 2.1. Ho Chi Minh Trail infiltration routes. The North Vietnamese established the trail in 1959 to provide a line of communication to communist forces fighting in South Vietnam and was one of Hanoi's highest strategic priorities. Oddly, the presence of NVA forces on the Trail in Laos was ignored by the Royal Lao Government ceding its sovereignty. No major Laotian military operations were conducted against this network. (Reprinted from Earl H. Tilford, Jr., *USAF in Southeast Asia: Search and Rescue in Southeast Asia* [Washington, DC: Center for Air Force History, 1992], 30.)

In the center is the Laotian panhandle that is bordered on its eastern edge by the Annamite Mountain chain, a physical barrier with Vietnam. The western edge of Laos holds the alluvial plains of the Mekong River and the border with Thailand. The base of Laos contains the Bolovens Plateau, where many ex-French coffee plantations were situated. The pictorial image of a map of Laos is one of a large tree, or mushroom shape, leaning to the left. It is also similar to Idaho, with its panhandle, if the image of Idaho is turned upside down.

Laos is a landlocked country dependent on the Mekong River as its major transit system to the south through Cambodia and on to the sea. There are few natural resources to sustain a robust economy.

Its borders to the north were shared by China; North Vietnam and South Vietnam were to the east. The Mekong River forms most of its western border with Burma and Thailand; Thailand and Cambodia lay to the south. During the time of the war, Laos was surrounded by the communist countries of China and Vietnam to the north and northwest, and by its ally, Thailand, to the south. Cambodia was a neutral country. Like most of Southeast Asia, Laos is situated in terms of latitude and longitude in a tropical climate. It is primarily flat along the Mekong, a rice growing basin, with the remainder of the country consisting of ever increasing mountain ranges as one travels north-east and east.

The Mekong River is the largest river system in Laos, flowing all the way from China, making up much of the western border of Laos, and down into Cambodia. Few bridges existed, and for that reason, ferries were used to cross the Mekong at key points, making chokepoints to maneuver. The Mekong has a series of natural falls, precluding using it in its entirety for security patrols; thus, the Royal Lao Navy was only a small part of the security forces and primarily patrolled the navigable stretches of the Mekong where possible. Barges and large boats used the Mekong to ship supplies, arms, and fuel to various points along the Mekong lowlands.

Some of the most noted features of Laos are the numerous karsts—tall, conical, limestone rock formations. These are formed by the constant leaching away of material from the rains. This also creates numerous caves throughout the mountainous regions, which were put to good use by the Pathet Lao and the NVA to shield their forces from artillery and airstrikes. Like rivers and mountaintops, they often served as navigation markers for Air America, the Air Commandos, Lao, and allied aircraft. On a bad day (or night), the karsts were

formidable barriers to flight, and many lives were lost when aircraft crashed into them.

The geography of Laos dictated where and when the two opposing forces would clash. The Lao Loum, or ethnic Lao, made up the bulk of the RLA. Regional commanders tended to husband and nurse these forces in geographic areas they were most comfortable—the lowlands and cities along the Mekong River. The Pathet Lao operated in the inaccessible areas of the rolling hills and mountains of Laos. NVA forces initially operated along the border regions to first provide a security zone free from the threat of government forces and then after 1959 to ensure the viability and security of the HCMT complex.

Much of the mountainous regions and triple-canopy areas of Laos were inaccessible to government forces, leading to deficiencies in air and ground transport capabilities and roads. For most of the war, Pathet Lao and NVA forces dominated these regions. A commander could simply draw a crude line bisecting Laos from its north to its south and place government forces to the west of the line and Pathet Lao and NVA forces to the east, with two exceptions: the *PDJ* plateau in the northwest and the Bolovens Plateau in the south. These two geographic terrain features would be contested by both sides. Where the few roads did exist, many crisscrossed both of these plateaus, a highly desirable feature for maneuverability and thus key terrain for control. The generally flat, rolling terrain, although open, allowed for the few places in Laos where motorized and armored operations could occur. Lines of operation ran along existing major roads, rivers like the Xe Bang Fai in the panhandle, and river valleys like Nam Bac. Other battles occurred on dominating terrain, generally mountaintops.

Where no roads existed in the jungle, or in hilly terrain, major trails and footpaths constituted the only means to move rapidly from one point to another. Unfortunately, hemmed in by the jungle, these spots became lucrative points to emplace ambushes.

The Lao People

In the 1950s, there were an estimated 2.5–3 million Laotians. About 50 percent of them were lowland dwellers of Thai extract, who were further divided into two branches: the Lao Loum (Chinese extract) and the Siamese (Thai). The Lao Loum populated the lowlands along the Mekong River and had cultural similarities to the Thai. They were

wet-rice growers and considered a peaceful and nonconfrontational ethnic group, which unfortunately would make up the bulk of the soldiers of the Laotian army.⁵

The Lao Thai preferred to live in upland river valleys and were tribal in nature. For ethnic percentage counts, they were grouped with the Lao Loum. They were agriculturalists who practiced *swidden* (slash and burn agriculture), mainly to grow both wet and dry rice. They were distinguished by tribal colors, such as Black Thai, Red Thai, White Thai, and so forth, as worn and woven into their dress. The Lao Thai worked both for the Pathet Lao and for the RLG, mostly as village militia and auto defense companies.⁶

Society in the Lao Loum was dictated by one's place in a social hierarchy. Elites and established aristocratic families held high places in government and society. Prominent family members were often the colonels and generals in the armed forces, often surrounded by other family members through a system of nepotism. This social structure prevented the growth of a professional and independent officer corps. It also created a cancerous elitism within the higher ranks of the officer corps. In some cases, the senior leadership in a MR resembled a form of "warlordism," fostering cronyism and corruption.

About 30 percent of the populace, known as the Lao Theung, were Mon-Khmer speakers living on mountain slopes. Most Lao Theung remained neutral during the war but could be organized into 100-man defense forces if incentivized by money, weapons, or food. In Operation Pincushion, the CIA, along with US Army SF teams, organized the Lao Theung in the Bolovens Plateau region for operations against the Pathet Lao from 1961 through 1962. These types of guerrilla forces were employed again during the late 1960s.

The next largest minority population was the northern Lao Sung (Sino-Tibetan extract), consisting of the Hmong (Meo) and Mien hill tribes, who made up about 20 percent of the population—of that, about 8 percent were Hmong. The Hmong had a warrior culture and preferred to live in high altitudes. It was the Hmong in the north who were organized in special guerrilla units (SGU), and then later in regiments under the *Groupement Mobile (GM)* system. Taking part in Project Momentum, they predominantly fought against NVA and Pathet Lao in the *PDJ* region. The Hmong also used a color system to distinguish tribal affiliations—Red Hmong, Black Hmong, White Hmong, and the Striped Hmong being the four largest groupings.⁷

Hmong culture differed from lowland culture; in the Mekong region and in the lowlands, the Laotians built their houses on stilts due to flooding during the monsoon season. In the highlands, mountain tribes preferred homes built at ground level. Highland tribes grew corn and dry rice versus the use of wet rice paddies. Opium was part of the social fabric of mountain tribes as it was used as part of the barter economy.

Chinese and Vietnamese ethnic groups made up the rest of the population. The two major languages in Laos were French and Lao—there were also numerous dialects among the hill tribes. The Lao language is an extract of the Thai language and is very similar. For this reason, special operations forces (SOF) were provided Thai interpreters to facilitate their mission. The Thai interpreters were from their intelligence forces, SF, and police forces.

Transportation Infrastructure

In the 1950s and 1960s, the road and transportation infrastructure in Laos was very rudimentary. Some paved roads existed in the major cities, but for the most part the road networks in Laos consisted of one lane, dirt, jeep trails and semi-improved roads constructed with crushed gravel or laterite. During heavy rains, most of the secondary road network in Laos was unusable. The original road network, the *Route Coloniales* (Colonial Road), was built with two concepts in mind. The first concept was to link the major cities along the Mekong River with a road that ran south to north beginning in Cambodia, through Pakse, Savannakhet, Thakhet, and Paksone, then to Vientiane and ending in the north at the royal capital of Luang Prabang. The second concept was to link the major south-north routes with routes to the east, into Vietnam. It was hoped this would facilitate commerce and the flow of resources from Laos into Vietnam; however, this never really transpired due to lack of major commerce in Laos.

Ironically, these major routes were incorporated as lines of communication into North Vietnam's HCMT. In the hinterlands, transportation was limited to foot traffic or elephant, horse, and oxen cart where passage was wide enough. The deficiency in roads impacted mobility for both government forces and the Pathet Lao and the NVA. There were no "mechanized" infantry battalions—armor being almost useless in the harsh terrain—with the exception of maneuver

on the plateaus. The location of major military operations was predictable enough: along the existing major routes or valleys along major rivers. Operations also took more time than normal to plan for the infiltration and placement of forces. Key terrain, during any battle, became that which held major intersections or overlooked well-traveled routes. Infantry forces were primarily foot bound, after being dropped off by truck. One of the key solutions for government forces to overcome this liability was the introduction of the helicopter, allowing for transport of major forces into an operational area; however, even this advantage was limited by the amount of helicopters available and weather conditions.

The regional *bataillon de parachutistes* (BP, parachute battalion) served as the only effective rapid reaction force as they could be transported to the battle and inserted via C-47 airborne drops.

Transport of forces by fixed-wing aircraft also helped to overcome limited maneuver. Laos had improved airports at Luang Prabang, Vientiane, Savannakhet, and Pakse capable of handling aircraft up to the size of C-46, C-47, C-123, and in some cases C-130. When the CIA base at Long Tieng (Lima Site 20A—the “alternate”) was built, the capability for large aircraft to use the airstrip was added but was limited to daylight operations only. The major airstrips in these locations were hard-surfaced or perforated steel planking. Minor airstrips for cargo aircraft use were located in Nam Tha, Ban Houi Sai, Vang Vieng, Pakson, Attopeu, and the French military base at Seno.

Monsoons and Other Weather Effects

Laos experiences two annual monsoon cycles. The first arrives from the southwest and drops its rain and winds beginning roughly in May and ending sometime in November. The second, the north-east monsoon, is a dry monsoon which lasts from November to May and bypasses Laos with its rains. It does, however, bring cooler temperatures to the country, lasting into February. From February to May, temperatures rise to bring the hot and humid weather known throughout the region.

The wet and dry monsoons would dictate the timing of major operations in the Laotian war. During the wet period, operations requiring the movement of vehicles and troops were hampered by the muddy conditions of roads and trails; ammunition became wet and unusable while uniforms and equipment were affected by mold and

deterioration. In some cases, depending on the location, the training of Laotian forces ceased due to extremely heavy rains.

Clouds, mist, and fog formed by the monsoon dictated the success or lack of airpower. With cloud cover, the Pathet Lao and NVA could conduct operations without fear of strafing and bombing from USAF and RLG aircraft.

The Laotian war became one of wet season and dry season offensives. The enemy took the opportunity to maneuver and conduct major offensives during the dry season and also used this period to build up forces and supplies as well as construct roads to extend their lines. This was also a period for major government offensives; however, the Laotian government troops were also adept at maneuvering for advantage during the wet season—due to support from aerial transport. Most of the major successes of the Laotian army were as a result of the timing of its operations and the availability of air support. In MR-II, Gen Vang Pao became quite successful at striking out at Pathet Lao and the NVA during the wet season using air transport to leapfrog his troops around enemy concentrations.

Based on the monsoonal patterns temperatures were at their peak around February and March, rising into the 90 degree range. Combined with the humidity, aircraft and helicopter loads were lightened to make the altitude required to deliver supplies and troops into mountainous regions. Ground fog covered the valleys, hampering visibility during combat operations. During the pre- and post-wet monsoon months (April, December) temperatures would reach their coolest, sometimes falling into the fifty and 60 degree range. Though not affecting operations, cooler temperatures at higher altitudes during the night required the use of sleeping bags and blankets to protect those acclimatized by the average higher temperature in Laos (roughly in the seventies and eighties). Varying temperatures from day to night affected the dew point, often creating mist and fog in the earlier part of the day.

Government and Politics

The Kingdom of Laos was a constitutional monarchy and a form of parliamentary government that inherited an administrative and bureaucratic system from the French. It was a governing system run by elites and powerful families who viewed their time in government as a means

to better themselves, their families, and their clans at the expense of the Laotian citizen. By its very design it fostered self-serving politicians without a sense of patriotism and nationalism required to address the internal security threat of the Pathet Lao. Like other facets of Laotian culture, society, and geography, Laotian politics were characterized by regionalism, favoritism, and nepotism. Corruption was an inevitable by-product of the system. This lack of unity hampered efforts to put the nation on a war footing and doomed the creation of a viable internal defense and development plan as a response to the insurgency. Bernard B. Fall noted during his time in Laos the effects of this “balkanization”:

What really counts in Laotian life is what happens to one's own clan in one's own valley. What happens elsewhere might just as well happen on the moon for all that it matters in the values of the local villagers. If the Laotian appears self-centered and un-interested in world events, it is certainly not of his own choosing; his country made him that way. Thus, “patriotism” in Laos is at best a furious regionalism.⁸

Lack of government services from Vientiane and the overtaking of clans and tribes in remote regions—combined with the corruption inherent in this system of governance—gave the Pathet Lao plenty of reasons to have grievances concerning the psychological operations and indoctrination techniques used with villagers.

To support Laos during the war, the American ambassadors used the USAID and Military Assistance Program (MAP) dollars to turn the spigot off or on, based on the direction of Laotian politics; money, aid, training, and assistance would only happen if the RLG prevented the Pathet Lao from gaining entry into a coalition government. Later, under the Kennedy administration, neutralism was also preferred. This facet of management of the war by American ambassadors would spark the Kong Le coup d'état in the fall of 1960, dramatically changing the role of US advisors and requiring them to become directly involved in combat (Operation Hotfoot to Operation White Star, April 1961).

Irregular warfare is ultimately about politics. An understanding of the political objectives of the contenders in the Laotian war was paramount to mounting a successful COIN campaign. It would rely on how the ambassadors applied their SOF to achieve these objectives and counter enemy political objectives.

Religion and Belief Systems

What soldiers and airmen do or refuse to do on the battlefield is also a product of their religious and moral upbringing. For Laotians, a belief in Buddhism on the part of lowland Lao and the worship of spirits and animism on the part of mountain tribes was a factor in their combat performance.

The ancient emperor Chao Fa Ngum (Fa Ngoun) ruled the Kingdom of the Million Elephants from Luang Prabang—originally named Muong Sawa. Chao Fa Ngum established Theravada Buddhism as the state religion and built a *wat* (religious temple) to house an image of Buddha in the city. Luang Prabang or “Golden Buddha” gets its name from this display of religious symbology. Theravada is an early form of Buddhism, differing from later concepts of the religion. Theravada Buddhism originated in India, and its tenets centered on the control of emotions and the notion of karma—what will be will be or the concept of fate. There was also a belief in reincarnation with its purpose as doing good and being a better person in society with each reincarnation.

Buddhism was practiced by the lowland Lao. The belief in karma manifested as either a lack of concern for long-term effects on life or a worry about what the future could bring. The majority of the royal armed forces and their leadership were Buddhists. It was extremely difficult to impart strategic planning within the high command and develop an effective COIN response that might take years to prove fruitful (based on this sense of fatalism).

The Buddhist religion was administered by *bonzes* (Buddhist monks) and was community centered on the religious edifice, the *wat* (Buddhist temple).

During their tours in Laos, many American advisors participated in Buddhist ceremonies and celebrations, including the Buddhist New Year and the end of a monsoon. Often celebrations consisted of Laotian troops firing their rockets and ammunition into the air, much to the chagrin of American advisors who viewed this as an extreme waste of precious ammunition.

Another ceremony in which the American advisors participated, the *bacci* or the ceremony of friendship, could be celebrated for any variety of reasons. A *bacci* is a ceremonial ritual consisting of tying thin white string or threads around one’s wrist, often after liberal consumption of fermented rice wine or a similar liquor. The ritual would be conducted to celebrate the graduation of soldiers or airmen from

a training course, the entrance of SOF to a training camp, or the arrival of an advisor to a Lao military unit or village. In tribal areas, the *bacci* was performed to keep the bodily spirits attached and present.

Spirit Worship

In the tribal world, and in the world of other non-Buddhists living in the mountains of Laos, spirit worship, animism, and ancestor cult-worship were practiced. The spirit world was dominated by *phi* (various spirits). *Phi* could be found in the body (thirty-two guardian spirits known as *Khwān*) that regulated the body to keep it in balance. There were also earth spirits, found in the trees, rocks, forests, streams, and other physical objects. Normally, each tribal village had a spirit house—a small replica house built on a pole—for the *phi* to reside. Within individual homes, *phi* served as house and family guardians.

French Military Training

Even though France granted independence to Laos and allowed it to form a new government within the French Union, the French desired to militarily protect its investment in Laos and moved to form and develop the RLA—primarily as a security hedge against the Viet Minh and the Pathet Lao. The RLA, called the *ANL* by the Laotians, would remain under the command and control of the French in order to ensure its organization, doctrine, and training conformed to the French Union Army's military standards. The French forces in Laos were called the *Forces Terrestres du Laos* (Land Forces of Laos) and were commanded by a French colonel.

In 1950 the government of France sent forty officers and sixty non-commissioned officers (NCO) to Vientiane to begin their advisory and training duties under the name of the *Mission Militaire Francaise pres le Gouvernement Royal Laos* (*MMF/GRL*, French Military Mission in the Royal Government of Laos). A separate set of advisors and trainers was sent shortly thereafter to perform the function of training the military police—the *Gendarmerie Royale*.⁹

The *MMF/GRL* reported to French Forces in Hanoi, not the Laotian minister of defense. Training of Laotian soldiers was conducted in the French language by the soldiers of the *MMF/GRL* and French military doctrine was thoroughly incorporated into all instruction.

The training consisted of basic soldier skills and technical training in such things as vehicle operations and maintenance. Officer and NCO schools were also established. Select members of the RLA with high motivation and education would be chosen by merit and sent to advanced military leadership, staff, and technical courses in France. In time, these types of schools would be established inside Laos with a wider array of technical courses added (communications, medical skills, and other subjects). In 1952 training courses were added for the fledgling Royal Laotian Air Force (RLAF) and the Laotian Navy's River Flotilla.¹⁰

Maj Gen Oudone Sananikone notes that the first units formed by the *MMF/GRL* were the 1st Infantry Battalion in Vientiane followed by the 2nd Infantry Battalion in Pakse. He served as the deputy commander of the 5th Company in the 1st Battalion. Soon thereafter, based on wartime requirements to relieve French Union Army forces for their battles against the Viet Minh in Vietnam, eight more battalions were created: six infantry and two light infantry battalions. In 1953 the *MMF/GRL* oversaw the creation of an armor branch for the RLA and the subsequent training, equipping, and deployment of two reconnaissance squadrons.

A hallmark of this evolutionary period for the RLA was the mistreatment, animosity, and downright contempt the French displayed towards the Laotians. The French military training mission appeared reluctant to conduct more than basic skills training and never trained the RLA how to plan and conduct higher-level military operations—reserving this role for themselves. There certainly was no introduction of the tactics and techniques required by the Lao security forces to confront the Pathet Lao through a proper COIN campaign. Lao military leaders and units were not given the skills training required to perform this function.

By 1954, with the defeat of the French at Dien Bien Phu, the leadership of the RLA began the transition from French control to Laotian control, incorporating the old French Union Army forces remaining inside Laos into the RLA, with a subsequent end strength of about 17,000 soldiers. Even with this new autonomy, due to lack of funding and the difficulty in translating French military terms into the Laotian language, the RLA could not divest themselves of French military manuals, staff papers in French, and French training techniques.¹¹

The Geneva Agreements of 1954 ensured the removal of the French from Vietnam yet curiously allowed for the continued French

military presence in Laos. Articles 6, 7, and 8 of the *Agreement on the Cessation of Hostilities in Laos*, 20 July 1954, spelled out the provisions for French military forces:¹²

Article 6. With effect from the proclamation of the ceasefire the introduction into Laos of any reinforcements of troops or military personnel from outside Laotian territory is prohibited.

Nevertheless, the French High Command may leave a specified number of French military personnel required for the training of the Laotian National Army in the territory of Laos; the strength of such personnel shall not exceed one thousand and five hundred (1,500) officers and non-commissioned officers.

Article 7. Upon the entry into force of the present Agreement, the establishment of new military bases is prohibited throughout the territory of Laos.

Article 8. The High Command of the French forces shall maintain in the territory of Laos the personnel required for the maintenance of two French military establishments, the first at Seno and the second in the Mekong valley, either in the province of Vientiane or downstream from Vientiane.

The effectives maintained in these military establishments shall not exceed a total of three thousand five hundred (3,500) men.

MMF/GRL contingents also continued their training mission in schools and technical centers. As the war in Algeria began to require increased French forces, the two French military contingents inside Laos were drawn down, resulting in a drop in French strength to about 300 men in the French training mission and about 700 men in the French Union Army.¹³ This was the status of French forces in Laos when US trainers in Hotfoot arrived in 1959.

American concerns with the effectiveness of the French to prepare the RLA and other Laotian military forces to do battle with the Pathet Lao insurgency, as well as French doctrinal lack of understanding on how to employ and maintain US-supplied military equipment and arms, led to the creation of the PEO inside the US embassy. The PEO was subordinated under the USOM. The USOM was created in the early 1950s to begin administering the MAP and American economic aid inside Laos.

The PEO was established in light of the adherence to the restrictions of the 1954 Geneva Agreement, which did not allow for the United States to place a MAAG in Laos. Under the USOM, US military equipment and funding had been channeled through French forces in Hanoi. With the French High Command gone from Vietnam,

and the Laotian army now running itself, the United States required a direct conduit (the PEO) to provide arms and equipment to the RLG. However, in this arrangement, the French *MMG/GRL* still maintained authority over Laotian army training matters.

Soon, the small PEO staff (mostly retired military servicemen operating in civilian clothes) began to deploy in small teams out to the MRs in order to monitor the disbursement and care of equipment from the MAP. At this point, how the equipment was to be used and incorporated still remained under French control.

As American aid and influence increased, French influence waned. French equipment and arms were no longer coming to Laos. Adapting to this situation, in 1960 the *MMF* was changed to become the *Mission Militaire Francaise d'Instruction Pres le Gouvernement Royal du Laos* (*MMFI/GRL*, French Military Training Mission in the Royal Government of Laos). Cooperation with US trainers ended in February 1961 when the agreement lapsed.¹⁴ This reduced French contingent would remain in Laos until the Communist takeover of Laos in 1975.¹⁵

Operational Assessment

All of these historic, geographic, cultural, religious, military, and political variables would dictate a war fought in remote and rugged terrain, where mobility was limited. Coalition interoperability between the French and the United States would strain military relations at the tactical level. Key roads and intersections would dictate terrain to be fought over and controlled. Lack of access to remote villages allowed the Pathet Lao and NVA to operate in some areas with impunity—these areas were ceded by the RLG to them.

The length of operations and battles was often dictated by air assets and the provisioning of forces to keep them extended out in the field. The fighting prowess of the individual soldier, based on his leadership, training, equipment, and belief system, often meant short firefights that were quickly broken off—much to the frustration of American advisors.

Command and control was limited, often to how far one could see into the jungle. And yet, American advisors, both Green Berets and Air Commandos, adapted and overcame difficulty to fight a limited war by using both guerrilla warfare techniques and COIN techniques.

Enemy Threat—the Pathet Lao (Land of the Lao)

The internal security threat in Laos emanated from the Pathet Lao, a communist movement that used both subversion and “armed struggle” with its military forces to contest the RLG throughout the country. Ho Chi Minh should rightly be considered as the grandfather, architect, and mentor of this revolutionary movement—beginning with his creation of the Indochinese Communist Party in 1930.

At its best, the Pathet Lao could be viewed as a nationalist independence organization dedicated to uniting the various factions in Laos to free it from the yokes of imperialism. The Pathet Lao campaigned on the notion of loyalty to the Kingdom of Laos, social justice, and respect for ethnic and religious factions throughout the country. On several occasions the Pathet Lao announced its willingness to participate in a coalition government. At its worst, which proved to be the case upon its negotiated political victory in 1975, it was exactly what communist movements in the Cold War transpired to be: a totalitarian movement; a proxy and surrogate for the North Vietnamese; and a ruling power infused with the ideology of Maoist and Leninist/Marxist principles.

Upon the defeat of Japan in World War II, the outgoing Japanese administration in Laos encouraged Lao nationalistic and independence movements to thwart French efforts to regain control of Laos and the wider Indochina region. The Lao intellectual elite readily prepared for this eventuality and formed an independence movement called the *Lao Issara*—Free Laos movement.

The future Pathet Lao began to form, choosing the path of communism as a model for the new Laotian state, which was no doubt influenced by the victory of Mao Tse Tung in China. The Viet Minh helped to organize, arm, and supply the polyglot of Lao resistance groups, primarily located along the Vietnam and Laos border regions. By the period 1948–49, military zones for resistance activities were established in southeastern and northeastern Laos. Resistance against the French erupted in Sam Neua, Xieng Khouang, Saravane, and Attopeu.

Prince Souphanouvong, one of the leaders of the movement, disagreed with exiled Lao leaders in Thailand as to the direction of the movement, ultimately breaking off from the main organization and forming his own faction. Realizing he would probably get no help from the Western powers, he turned to the only ally who might support

his idea for an independent Laos—the Viet Minh. Prince Souphanouvong admired the tenacity of the Viet Minh and their ongoing fight against the French for control over Vietnam.

A handful of Pathet Lao, trained and equipped by the Viet Minh, infiltrated back into northeastern Laos to establish a base of operations in Sam Neau province. The model for their operational style would be based on Mao's guerrilla warfare strategy. On 13 August 1950, Souphanouvong convened the First Resistance Conference of Laos, declaring unification of all the Lao resistance groups as the *Neo Lao Issara* (Free Laos Front) and assumed the mantle of its leadership. The first use of the term Pathet Lao appeared on one of the conference's documents. This was a political-military movement. The political front was named the *Neo Lao Hak Sat* (Lao Patriotic Front). The armed struggle would be carried out by the *Kongthap Potpoi Pasason Lao* (Lao People's Liberation Army, LPLA), formed in January of 1949, a year and a half before the resistance committee met.

The goals of the Pathet Lao resistance front were unification of the Lao people, social reform (*vis-à-vis* a communist model), and expulsion of imperialists (the French and later the United States). The movement claimed to be neutralist but relied on the Viet Minh and later North Vietnam for its external support.

Organization

The *Phak Pasason Lao* (Lao People's Party) provided the direction for all political and military operations of the Pathet Lao. The LPLA was subordinate to this body. Pathet Lao Supreme Headquarters was located in Sam Neua, where an abundance of caves among the limestone karsts provided concealment and protection from air bombardment and artillery fires. Kaysone Phomvihane, a resistance fighter since the 1940s, was the overall commander and principal leader at the central headquarters. Khamtay Siphandon was the commander in chief of the LPLA; Gen Phomma Douangmala was the commander of regional forces in South Laos.¹⁶

The LPLA was organized in a tiered structure. The regulars of its armed forces were formed into line battalions along with supporting structure for communications, logistics, medical, and transport. The battalions were organized into line companies, platoons, and squads. Although the exact structure of the battalions was not known, one

can surmise the battalions included units for reconnaissance and heavy weapons platoons among their companies. Regular line battalions were the best equipped and most proficient of the Pathet Lao fighting forces.

Regular line battalions were augmented by independent companies, called *ekalat*, which reinforced the regulars and the NVA when large operations occurred in their region.¹⁷

Initially, the Pathet Lao numbered its battalions in sequential order as created, such as the 1st and 2nd Battalions—who escaped to North Vietnam after attempts to consolidate them into the Lao army during a coalition government—up to the 6th Battalion, and so forth. As time progressed, the numbering system incorporated numbers in the “hundreds” in an apparent attempt to confuse the RLG as to their true strength and numbers. Thus, the 1st Battalion was later relabeled as the 205th Battalion; the 2nd Battalion became the 613th Battalion. In another example, the 408th Battalion operated in the Nam Tha region. The 409th Battalion fought with NVA forces in their attack on GM11 during the Nam Bac campaign in November 1967.

In 1969 RLG and US intelligence agencies estimated the strength of the Pathet Lao regulars at 110 battalions deployed across Laos. This would have given the Pathet Lao an effective fighting strength of 28,270 fighters and 16,400 command and support troops, for a total of 44,670 men.¹⁸

The second tier of the LPLA consisted of regional forces (district/canton). Regional forces fought at the district level. In some respects, these forces were more agile and adept than the regulars due to familiarity of their area of operations and ties to the supporting civilian populace for information, food, lodging, and medical care. The composition of these forces may have ranged from between twenty to eighty men in each unit. Exact estimates of their total number were never ascertained by intelligence sources.

The final tier level of fighters was the village militia. These were basically home guard-type forces, usually not very well equipped and clothed in local garb, similar to Viet Cong guerrillas in South Vietnam. Village level forces were headed by a canton military leader with supervision over a cluster of villages. They operated at the squad level, and if large enough, platoon level, with perhaps eight to ten men and women in a village unit. Again, it was neither possible for the government to ascertain the total number of these forces, nor was it possible to estimate the numbers of the populace who acted as auxil-

inary to support the Pathet Lao. Many served as part-time guides, scouts and lookouts who prepared booby traps and also performed other supporting tasks. The population also served as a means of financial and logistics support. The Pathet Lao levied taxes on villagers for both money and food (mainly rice quotas to feed the troops).

As are all guerrilla movements, the Pathet Lao was lightly armed at first with a variety of World War II arms, much of it captured from the French and the Lao territorial forces. As North Vietnam increased its support, the Pathet Lao became equipped with communist-bloc weaponry, primarily the SKS, AK-47, and Soviet pistols. Heavier weapons included the DShK 12.7 millimeter (mm) and 14.5 mm heavy machine guns (the 14.5 mm usually mounted), recoilless rifles, RPD light machine guns, Soviet submachine guns, and captured western-manufactured arms. The Pathet Lao had a capability to deliver indirect fires with light and medium mortars as well as training to employ snipers. A wide variety of Soviet and Chinese grenades and landmines were supplied by both the Chinese and the Vietnamese. In time, the Pathet Lao would be equipped with heavier weapons of more sophistication such as the 82 mm and 120 mm mortars, the 75 mm mountain gun, 105 mm artillery pieces (mostly captured), and the heavier and longer range 130 mm artillery. Antiaircraft weapons consisted of 12.7 mm, 14.5 mm, 23 mm, 37 mm, and 85 mm guns. The Pathet Lao was also equipped with armored vehicles.

Enemy Threat—the North Vietnamese Army

After the 1954 Geneva Agreement, the Viet Minh became the People's Army of Viet Nam: however, they were generally referred to as the NVA. Strategically, the leaders of North Vietnam did not desire to conquer and occupy Laos or establish a North Vietnamese-run government in Vientiane. North Vietnamese leaders may have feared a larger intervention by US forces and knew they could face international condemnation if the NVA moved to take major Laotian cities along the Mekong Valley (violations of the Geneva Agreements). This task would fall to the Pathet Lao and the Laotian communists, who were directed, controlled, and supported as proxy agents and surrogates for the North Vietnamese. This section covers the period of the NVA operations within Laos from the 1954 agreement onward and their effects on the efforts of special operators to conduct military advisory

assistance, UW, and COIN in the Kingdom of Laos. NVA major campaigns in Laos could be defined as follows:¹⁹

- (1954–1963) Support and advisory efforts to the Pathet Lao and consolidation of NVA and Pathet Lao base areas, along with the North Vietnamese development of the HCMT.
- (1964–1968) Attacks on RLG forces to seize and consolidate gains on the *PDJ*.
- (1967–1968) Territorial gains in both North and South Laos.
- (1970–1974) Defeat of Vang Pao's forces on the *PDJ* and takeover of the Bolovens Plateau region in Central and South Laos.

The NVA was employed in Laos to conduct three strategic tasks. The first was to maintain border security between Laos and both North and South Vietnam, and the second was to support the Pathet Lao in its fight against the RLG. The NVA ensured gains made by the Pathet Lao were not lost during the government's counteroffensives. The NVA worked hard to ensure a buffer area remained in communist control, allowing full advantage for its forces to cross from North Vietnam into Laos unhindered and to provide a base area for the Pathet Lao. In time, the NVA would take the primary role in this endeavor, using the Pathet Lao in a supporting effort. The third strategic task, considered the primary goal, was to establish logistic lines of control in what would become the HCMT.

The defeat of the South Vietnamese was paramount in the communist strategy for victory. This would require a long-term effort for building and protecting the HCMT as an infiltration pipeline for equipment, arms, and soldiers into South Vietnam, as well as serve as a cross-border sanctuary to Viet Cong and NVA forces. From the HCMT's initial creation to the end of the Laotian War in the mid-70s, NVA forces operated almost with impunity from any attempt by the RLG to interfere with this operation.

NVA offensives tended to follow the monsoonal wet and dry periods. The dry period in Laos, roughly from the fall to late spring, was more advantageous to NVA movement when roads were good, troops and equipment did not suffer the debilitating effects of rain, and attacking forces could maneuver and conduct fires with good visibility.

The Early Years—Advisory Assistance to the Pathet Lao

To assist the Pathet Lao after the Geneva Agreements, the NVA established a training and advisory command headquarters on the Lao Border, *Doan 100* (Group 100). This 300-man unit was commanded by Col Chu Huy Man. One hundred of the cadres were assigned as political advisors to the LPLA.²⁰

In this early period, the NVA did not directly interfere in the Pathet Lao efforts; rather, they maintained a posture to prepare for a political victory by the Pathet Lao in a coalition government. However, the NVA was prepared to militarily support the Pathet Lao if ever the RLG capitulated from communist military offenses.

Initially, beginning in 1955, the North Vietnamese High Command committed the 335th Division for military operations in Laos; however, the 335th Division was dissolved in November 1957 only to later be built back up to brigade strength. The purpose of this initial tactical commitment of forces was to help the Pathet Lao consolidate control of Sam Neua and Phong Saly Provinces. In time, the 335th spread its regiments countrywide: one regiment in the north, one in central Laos, and one for duty in southern Laos. In 1957 the regiments of the division were used in company-sized tactical formations to support Pathet Lao attacks on RLG forces in order to strengthen communist bargaining positions as the Laotians tried to form a coalition government.

In 1958 the NVA 316th Division was downsized to a brigade, and its three infantry regiments and one artillery regiment were sent into northern and central Laos to conduct harassing attacks on government forces.

In 1959 with the collapse of the Laotian efforts to form a coalition government, the NVA began integrating its forces among the Pathet Lao. To command and control this increased effort, *Doan 100* was replaced with *Doan 959*, which was now forward headquartered in Sam Neua Province. In July of that year, North Vietnam provided arms and equipment to the LPLA and Pathet Lao for their attacks on *Forces Armées Royales* (FAR, Royal Armed Forces) outposts in the two northern provinces.

NVA troops were respected in their fighting ability by both RLG and Pathet Lao forces. The Pathet Lao military arm, the LPLA, considered the NVA to be “well trained, unusually well disciplined, militarily competent, and possessed of high morale.”²¹

Widening War in South Vietnam and the Establishment of the Ho Chi Minh Trail

It was at this same time Hanoi understood the need to expand its war into South Vietnam. This would require securing the Laotian panhandle region in order to build an infiltration trail into South Vietnam—the HCMT. NVA operations began on the trail in 1959. The NVA High Command established *Doan 559* to command and control operations for the HCMT and for supporting operations in southern Laos. The *Doans* reported to two major NVA commands directing the war in Laos: the Northwest MR located at Son La in North Vietnam, responsible for the six northern provinces of Laos, and the Fourth MR Command in Vinh, responsible for the six central and southern provinces of Laos.²² Throughout the war, the NVA Command would establish additional *Doans* for specific purposes: tactical areas of responsibility, logistics, and other functions.

The Military Affairs section of the *Doan* Advisory Group consisted of two directorates: the Military Chief of Staff and the Political Bureau for Military Affairs. On the military side, the functions of the directorate consisted of training, plans, organization, liaison with the Lao, and supply and logistics. The functions of the Political Bureau for Military Affairs were propaganda, health, medical, and morale activities.²³

With the coup d'état by Capt Kong Le in 1960, Soviet aid flowed into Laos, infiltrated through North Vietnam. The North Vietnamese controlled the distribution of the aid, ensuring that the first use of this aid went into the hands of the NVA in Laos. Now supplied and reinforced, NVA advisors supported the Pathet Lao in its seizure of Sam Neua Province, the capture of Sam Neua city, and the town of Ban Ban at the Route 6 and Route 7 junction.²⁴

In 1960 the NVA established a series of border defense battalions. These units were under the command of provincial military commands with the mission to operate into Laos for up to 50 kilometers (km). Their primary role was to ensure RLG forces did not operate in this 50 km zone, thus ensuring a security buffer and flank protection of NVA and Pathet Lao forces. The border defense battalions were manned by 500–600 NVA. As time went on, the border defense battalions would assume main force battalion missions against RLG forces.²⁵

In time, the NVA began to operate in a more aggressive manner by employing divisional-level units in northern Laos. When Gen Phoumi Nosovan attacked Kong Le's Neutralist Forces located up Route 13 north from Vientiane (early 1961), the 925th NVA battalion moved to support Kong Le while the 325th NVA Division attacked south from the *PDJ* to counter Phoumist forces north of Paksane. This was a doctrinal shift from initially aiding the Pathet Lao with advice and supporting attacks to eventually spearheading attacks, with the Pathet Lao following suit. Additional frontline NVA units were deployed into Laos, and by mid-1962 there were an estimated 10,000 troops in country.²⁶

With the fall of Nam Tha in May 1962, resulting in the defeat and rout of General Phoumi's 5,000 man garrison, President Kennedy ordered a US Marine task force to Thailand. The NVA assessed this threat from the United States in the face of the ongoing negotiations for a cease-fire and decided the Pathet Lao could hold their own; the NVA reduced their profile in Laos and backed off to their base areas.²⁷ After the signing of the 1962 accord, *Doan 959* assumed overall control of NVA operations in Laos.

NVA Organization

There were three categories of NVA: military advisors, "volunteers," and main force, mobile units. Early in the war, the advisors and volunteers wore Pathet Lao military clothing in order to blend in, but by the late 1960s, this pretense was dropped and NVA forces wore regular NVA clothing.

The NVA worked to remain separate from the Pathet Lao and the local population. The NVA kept its activities low-key and concealed in order to ensure the Pathet Lao appeared as the defenders of the people. Although the NVA supported Pathet Lao offenses, rarely did any members of the US Special Forces Hotfoot and White Star teams confront NVA soldiers. This would change in the mid-60s when Project 404 SOF personnel experienced attacks on RLG forces they were advising on the *PDJ* by the NVA. During the Battle of Moung Soui, Project 404 personnel were hastily evacuated when RLG forces came under attack from NVA units of the 335th, 174th, and the 924th Independent Battalions.

The NVA was predominantly an infantry force, organized by divisions, brigades, regiments, and battalions. These units were backed up with regional and volunteer battalions.

North Vietnamese airpower for Laos was minimal. The North Vietnamese employed AN-2 Colts and MI-2 and MI-4 helicopters to conduct very limited liaison, medevac, and fire support. No North Vietnamese aircraft were stationed in Laos—sorties were flown from and returned to North Vietnam. In the late 1960s, when the US Air Force began interdiction operations along the HCMT and Air Commandos began flying in combat support for RLG forces, the North Vietnamese began to fly MiG jet aircraft over northern Laos.

In 1968 NVA forces were estimated at 40,000 troops, and by 1970 this had grown to an estimated 67,000 troops, with 25,000 of those employed on operations to support the HCMT.²⁸

North Vietnamese Army, 1970–73

By the 1970s, the NVA was capable of multidivisional offenses. In that year, NVA forces in the Bolovens Plateau were reinforced with the 9th Regiment of the 2nd NVA Division and then its 1st, 141st, and 155th Infantry Regiments. Increased placement of anti-aircraft weapons and the SA-2 ground-to-air missile reinforced the air defense capability.

NVA reinforcing operations were necessary due to the overthrow of Prince Norodom Sihanouk of Cambodia in early 1970. This act hindered NVA lines of communication into South Vietnam and threatened the southern Laos portion of the HCMT. Three fronts were designed to destroy or neutralize RLG forces: Front X at Attopeou (with the 2nd and 3rd Volunteer Battalions, the 8th Regiment, the 27th Infantry Regiment, and the 40th Artillery Group); Front Z at Saravane (with the 45th and 46th Provincial Battalions, and the 1st, 4th, and 5th Volunteer Battalions); and Front R at Dong Hene with the redirected 4th and 5th Volunteer Battalions and the 1st Infantry Battalion.²⁹

During the period 1970 through 1971, the NVA conducted division-sized attacks on the *PDJ*, brigade-sized operations in central Laos, and division-sized attacks in southern Laos in the Bolovens Plateau region. By 1971, the NVA had three line divisions in Laos: the 312th, the 316th (both assigned to the *PDJ* region), and the 968th for central Laos and the panhandle. An additional nine regiments of NVA were

assigned throughout the country. This total did not include NVA forces and labor battalions operating to run and defend the HCMT.

NVA operations in 1972 and 1973 were conducted in light of the ongoing Paris Peace Talks Conference and consisted of jockeying for advantageous positions before a cease-fire was forced on them.

Government Forces—*Forces Armées Royales*

In July 1959, the Laotian army was spread across five MRs and operated at the battalion level. First called the *Armée Nationale Laotienne* (ANL, Lao National Army), they were newly designated as the *Forces Armées Laotienne* (Lao Armed Forces). In September 1961, they would assume the title of *Forces Armées Royales* (Royal Armed Forces), which would last until their disbandment.

The MR commanders reported to the Ministry of Defense in Vientiane. A military regional commander exclusively controlled forces within his MR and had no responsibility for combat operations outside his territory. The *BP* performed this out of sector role, as mobile reserves.

Laotian army forces consisted of three elements: the 25,000 infantry and paratroopers in their line battalions (*bataillon d'infanterie* [*BI*, infantry battalion] and *BP*), about 40,000 in the *bataillon volontaire* (*BV*, volunteer battalion) and the home defense and village defense forces—*Auto-Défense de Choc* (*ADC*), also called the *maquis*.

The allotment to regional commanders for ground forces was one battalion of *BI* and one battalion of *BV* for each province within their military district. In 1959 there were twelve provinces in Laos. In some cases, the MR commander also had the use of a separate *bataillon regionale* (regional battalion). The amount of *ADC* units varied based on assets to recruit, train, and equip local defense forces.

The senior commander of each MR employed his forces around major towns, with a mix of outposts (influenced by the French “hedge-hog system” and the forts and camps within each region, left over from the French territorial and French Union forces' tactical deployments against the Viet Minh). Outposts and remote camps were reinforced with the *BV* units and *ADC* forces. *BV* units were responsible for the training of *ADC* forces in their MR.

If well led, adequately trained, and cared for, Laotian infantry battalions gave a good account of themselves against enemy forces. Unfortunately, in many units, the lack of quality leadership and

corruption lowered the morale and discipline. The political leaning of the unit and the makeup of its ethnicity also had a bearing on how well Lao army units performed.³⁰

Additionally, the RLA consisted of the 1st Field Artillery Group located in Savannakhet, with three batteries using M101A1 105 mm-towed field howitzers and 4.2 inch mortars; the mountain pack 75 mm was also used. From 1963 onward, the artillery regiment had approximately twenty-five 105 mm artillery pieces. In 1969 the artillery regiment was further equipped with the M114A1 155 mm-towed howitzer. Units of the group were distributed as needed in gun sections and firing batteries. There was very little combined arms training prior to an operation, so integrating artillery fires into an infantry battle lacked cohesiveness.

Armored forces were small, about a company in size. These forces were split between Pakse, Thakhek, and the camp at Chinaimo and used US made M8 armored cars, M3s, and M-24 tanks. Artillery and armor forces were under centralized control of the FAR and allocated as needed out to the MRs. Overall, the Laotian Army was a light infantry defensive force, stationed near major population centers and near critical infrastructure. In late 1960, a new organization came into being, the *Bataillon Spécial* (Special Battalion), which was loose, equivalent to a commando or SF-type unit.

The Laotian army was equipped with both US-supplied military equipment and French equipment. The lack of a good logistical and maintenance system for the variety of gear the Laotian army was issued plagued them throughout the entire war.

New Tactical Formation—the *Groupement Mobile*

When the Kong Le coup d'état occurred in Vientiane, Gen Phoumi Nosovan cobbled together the beginnings of the French *GM* system when he counterattacked with his task force in December of 1960. The *GM* resembled a regimental combat group, with three battalions along with armor and artillery attachments. Other elements of the Laotian army began to maneuver using this tactical grouping, and its use became a fixed structure by April 1961.³¹

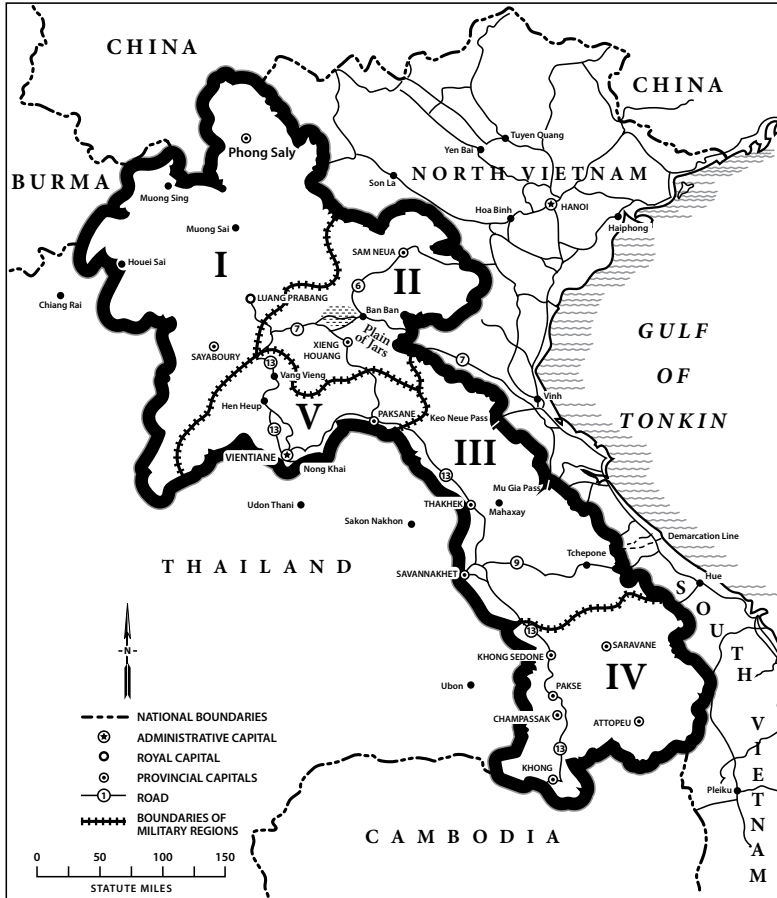


Figure 2.2. Map of Laotian military regions and principal roads. (Reprinted from Defense Technical Information Center, *Suitability and Effectiveness of Weapons and Equipment Used in US-Supported Operations with the Royal Laos Army* (U), Research Analysis Corporation, Staff Paper RAC-SP-1 (SEA) [Washington, DC: Defense Technical Information Center, September 1962.]

Neutralist Armed Forces—*Forces Armées Neutralistes*

Capt Kong Le defected with his 2nd Parachute Battalion to safety and established positions on the *PDJ*. Other elements of the RLA defected and joined the *Forces Armées Neutralistes* (*FAN*, Neutralist Armed Forces). This created a schism in the *FAR*; consequently, they were denied troops and equipment needed in their fight against the NVA and the Pathet Lao. In December of 1962 Captain Le, the self-appointed general of the *FAN*, had 4,500 troops in MR II, with another 5,500 troops in other MRs, such as along Route 13 in the vicinity of Vang Vieng and MR-III in the vicinity of Mahaxay.

In mid-1963, the NVA and Pathet Lao attacked the *FAN*. From that point forward there was a loose coalition between the *FAR* and the *FAN* against the enemy threat. The United States recognized the coalition and began supplying *FAN* forces. Soon thereafter, the *FAN* resembled the *FAR* in uniforms and equipment.

Irregular Forces

The Hmong guerrillas were initially considered like *ADCs*, and grouped into *GM-B* in MR-II. When Gen Vang Pao's Hmong forces began organizing as *SGUs* under the pay and control of the CIA (Project Momentum), the Hmong military units were dropped from the payrolls of the *FAR*. White Star teams assisted in the training and advising of the *SGUs*.

As the Hmong forces grew and became more involved in conventional style operations in 1963, the *SGUs* grew into battalion-sized units. By 1967, they were organized in a series of *GMs* beginning with the number two to designate forces in MR-II, thus *GM-21*, *GM-22* and so forth.

In the south, a similar program was initiated, the Kha Tribal Guerrilla Program, under the CIA's Operation Pincushion. White Star teams ran this program under the control of CIA assets. These forces were not considered as part of the force structure of the *FAR*. They were disbanded as a result of the Geneva Agreements in the summer of 1962. In the late 1960s, the irregular forces program was resurrected in the south and in other MRs. In 1970 the countrywide *SGUs* were renamed *Bataillons Gujerriers* (Guerrilla Battalions).

Reorganization

The *FAR* listed 45,000 effective troops on their rolls in 1963 although estimates place the force size as probably somewhere between 30,000 and 35,000 effectives. The regional battalions were abolished in 1965 and their troops absorbed into the *FAR BIs* and *BVs*. The *FAR* suffered a series of disasters, most notably their defeat at Nam Bac in January 1968, a multi-*GM* operation. This forced the *FAR* to cease large offensives and adopt a defensive strategy, although *FAR* forces fought some effective battles in the Bolovens Plateau operations.

The *GM* system was abolished, and the *FAR* reverted back to independent battalion-sized operations. Thai *BVs* and Gen Vang Pao's Hmong units virtually replaced the *FAR* for any offensive operations against the NVA and Pathet Lao in MR-II. The *FAR* was abolished with the takeover of the Pathet Lao in May 1975.

Other Government Military Services

Laos maintained a small navy, primarily equipped with patrol boats and old landing craft. Although too small and ineffective to contribute militarily to the wider war, the *Marine Royale Laotienne* (*MRL*, Royal Lao Navy) was used to patrol accessible areas of the Mekong. The *MRL* could have possibly developed a riverine warfare capability, given a robust security assistance program; however, the *MRL* was never considered by the military attachés in the US embassy for this role.

With military and combat advisory assistance from the Air Commandos, the RLAf started as a fledgling service under the control of the RLA and performed well until the government's collapse in 1975. The RLAf is discussed in further detail in chapter three.

Notes

1. Conboy and Morrison, *Shadow War*, vii–ix.
2. *Ibid.*, 12–15.
3. *Ibid.*, 37–38.
4. Prados, *Presidents' Secret Wars*, 265.
5. Cummings, *Laos*, 41.
6. *Ibid.*, 41–42.
7. *Ibid.*, 42–43.

8. Fall, *Anatomy of a Crisis*, 24.
9. Sananikone, "Royal Lao Army and US Army," 14.
10. *Ibid.*, 18.
11. *Ibid.*, 26.
12. Department of State, "The Situation in Laos," 4.
13. Sananikone, "Royal Lao Army and US Army," 31–32.
14. Castle, *At War in the Shadow of Vietnam*, 30.
15. *Ibid.*, 44.
16. Zasloff, *Pathet Lao*, Report WN 7248-ARPA, 76–77.
17. Langer and Zasloff, *North Vietnam and the Pathet Lao*, 114.
18. Dommen, *Conflict in Laos*, 310.
19. Langer and Zasloff, *North Vietnam and the Pathet Lao*, 161.
20. *Ibid.*, 63–64.
21. *Ibid.* This assessment came from prisoner and detainee interviews, 124.
22. *Ibid.*, 111.
23. *Ibid.*, 64.
24. *Ibid.*, 71.
25. McDonnell, "The NVA in Laos," 22–23. The border battalions consisted of the 922nd, 923rd, 925th, and 927th battalions.
26. Langer and Zasloff, *North Vietnam and the Pathet Lao*, 72–73. Langer and Zasloff cite American estimates of the growing strength of NVA forces in Laos as 3,200 in September 1961, 5,100 in January 1962, and 9,000 in July 1962.
27. McDonnell, "The NVA in Laos," 17.
28. Langer and Zasloff, *North Vietnam and the Pathet Lao*, 151.
29. McDonnell, "The NVA in Laos," 58–60.
30. Tiller, *Suitability and Effectiveness of Weapons*, 5–6.
31. Conboy, *The War in Laos*, 12–13.

Chapter 3

Nascent Counterinsurgent Airpower

The Royal Lao Air Force and Air America

Irrespective of the problems connected with US support and RLAF organization, nothing can detract from the performance for so many years of so many dedicated men, both United States and RLAF. The combat pilots of the Royal Laotian Air Force, however, who flew first T-28s, then AC-47s from primitive fields, in extremely bad weather and at night with only unreliable ADF approach aids, deserved the greatest recognition.

—Maj John C. Pratt, USAF
The Royal Laotian Air Force 1954–1970

The Royal Lao Air Force

In September 1954 the French created the beginnings of the Laotian air force by creating an aviation branch of the *Armée Nationale Laotienne* (ANL, Lao National Army) called the *Aviation Laotienne*. On 28 January 1955 the *Aviation Laotienne* became operational and was headquartered at Wattay Airfield, Vientiane. It began with a meager fleet of five Morane-Saulnier MS-500 Criquets, loaned from French Air Force control to be placed under Laotian control.¹ The MS-500 was not armed and could only be used for VIP transport, liaison, and light observation and reconnaissance, such as artillery spotting, thus, making it apparent the French did not intend for the *Aviation Laotienne* to be a credible airpower threat response to the North Vietnamese Army (NVA) or Pathet Lao. This first unit of MS-500s became the 1st Observation and Liaison Squadron and by the end of February 1955, the French fielded a total of ten Criquets to the ANL.²

The French remained in overall command and control of all aviation assets within Laos, mostly a small helicopter fleet of SE3120 Alouette IIs and SA316a Alouette IIIs, DHC L-20 Beavers, and all available military C-47 transport aircraft.

The airframe roundel featured the *Erawan*, the symbol of the royal government. It was a red circle with a thin, white border. The color

red symbolized the royal monarchy. Inside the red field, three white elephants, standing on a pedestal and beneath a parasol, symbolized the Hindu god *Erawan*. (The symbol of the elephant was a common royal symbol.) The three elephants also were symbolic of the three ancient kingdoms of Laos—Vientiane, Luang Prabang, and Champasak. The five-tiered pedestal represented the rules of law, and the nine-fold parasol represented Mount Meru, a royal symbol in Buddhist cosmology.

In 1955 the *Aviation Laotienne* pilot strength consisted of twenty-two trained pilots. Laotian pilots were trained at Wattay Airfield in Vientiane and at an airstrip on the *Plaine des Jarres (PDJ)*, while other pilots were sent to France and Morocco to receive training.³ For a short time, pilot training was conducted using L-19s based at Savannakhet but was suspended once Thailand began training Lao T-6 pilots. As Laotian air personnel increased, the French began to train pilots on the C-47 aircraft.

The *Aviation Laotienne* began combat operations in 1955, providing aerial resupply and transporting Laotian paratroopers to the *PDJ*. In 1956, as the aging MS-500s became operationally unavailable, the ANL received six L-19 Bird Dogs; in that same year, enough Laotian C-47 pilots and crews were trained to allow the release of French-loaned pilots from that duty.

In 1957 the French military command in Laos transferred ownership of the *Aviation Laotienne* to the Laotians. Lt Col Sourith Don Sasorith was selected as the first air component commander (from 1957 to 1959), followed by Col Thao Ma Manosith (from 1959 to 1966), a paratrooper at Dien Bien Phu and a well-qualified C-47 pilot. By 1959 the French had transferred C-47s, H-19 helicopters (initially four, followed by two more from Thailand), L-19s, and L-20s (Beaver) to increase the capability of the *Aviation Laotienne* to conduct liaisons, observation and armed reconnaissance, and for resupply and transport of the ANL. With the military situation deteriorating, in August 1959 the Program Evaluation Office (PEO) of the US embassy in Vientiane coordinated a transfer of two C-47s and four L-20s from Commander in Chief, Pacific Command. Unfortunately, due to lack of technical skill, little or no doctrine, corruption, and unreliability of *Aviation Laotienne* airmen and its leaders, the PEO found most of the aircraft defunct, even though eighty-five French air advisors were still serving in their ranks. A portion of these advisors continued to serve as pilots for the transport aircraft and helicopters until the

shortage of pilot inventory could be remedied. The total aircraft inventory for the ANL's aviation branch consisted of fourteen aircraft.⁴

The existing inventory amounted to about a squadron-sized force, spread out in detachments to Vientiane, Luang Prabang, the PDJ, the airbase at Seno, and south in Pakse. Any notion of proper employment of this minor form of airpower was hampered by the handful of aircraft falling under the control of the senior-ranking ground officer who dictated their role, rather than under control of senior officers.

In 1960 the *Aviation Laotienne* became the Royal Lao Air Force (RLAF) and began expansion under Colonel (later general) Thao Ma. The PEO planned an expansion to increase the capability of the *Aviation Laotienne* by the end of 1960 through a buildup in strength to eight C-47s, eight L-20s in (accomplished in 1959), and up to six T-28s.⁵ Until the implementation of training and the delivery of the T-28s, they were provided the T-6 Texan aircraft. The T-6s were converted trainers, armed with 2.75-inch rocket launchers and .30 caliber machine guns. The T-6 addition would give the Laotians their first strike and close air support capability; however, behind the scenes, the United States viewed the capability to shoot down Russian cargo aircraft supporting the NVA and the Pathet Lao on the PDJ as an added benefit. In a message from Amb. Winthrop Brown to the Department of State on 30 December 1960, this desire was outlined: "I told Phoumi that in addition to diplomatic measures against Soviet airlift, we are prepared, if proper political basis were established, to supply him with T-6 armed aircraft, and arrange for pilot training in Thailand."⁶

Unfortunately, Ambassador Brown also directed the aircraft would not be armed with bombs, sensing what he perceived would be viewed by the diplomatic community as an escalation in the war. Soon, twelve Lao pilots were being trained in Thailand in preparation for the introduction of the T-6 into the inventory. Said one of the trainee pilots, "I was a member of the second T-6 class in 1961–62. Thirteen entered my class, but only eight were graduated. The first class graduated 12 out of 13. I received eleven hours of L-19 time at Kokethiem. The instructors were all Thai. Then I went back to Korat for six months in the T-6, then back to Kokethiem for gunnery."⁷

Four modified T-6s were provided to the RLAF from the US inventory in January 1961, which were immediately ferried by Lao T-6 qualified pilots from Bangkok, through Savannakhet, on into Wattay Airfield. On 11 January 1961, they conducted their first close air support mission near Vang Vieng in support of Royal Lao Government

(RLG) forces battling neutralists forces of Kong Le, who was being assisted by the Pathet Lao. Thai volunteer pilots also flew combat missions into Laos as the size of the T-6 squadron increased (the Thai government had earlier made a commitment to keep the RLAFF equipped with ten aircraft; after the loss of two T-6s, the Thai government quickly replaced them). By the end of March, five of the ten aircraft had been lost, which highlighted the expanded necessity of providing close air support for ground forces in Laos.⁸ T-6s were in constant use; during the siege of Nam Tha in early 1962, T-6s flew combat missions from the airfield, until it was closed by artillery shelling, forcing them to transfer to Luang Prabang to continue operations.

In 1961 the PEO increased the fleet of RLAFF C-47s to thirteen aircraft and provided an additional ten T-6 aircraft. Under the Military Assistance Program (MAP), Philippine aircraft maintenance technicians filled in the gap made by the earlier removal of the French aviation advisors.

Even though the T-6 squadrons (six aircraft to a squadron) were holding their own, they were flying an obsolescent aircraft. The T-28 Trojan was selected as their replacement. In November and December 1961, after completing English language training, four RLAFF pilots were sent to the United States for T-28 training. In May 1962, three US T-28s—from South Vietnamese sources—were delivered to the Royal Thai Air Force at its base in Kokethiem for training and qualification of RLAFF pilots. In a very short time, five USAF instructor pilots had readied roughly twenty RLAFF T-28 pilots by the end of August. A concurrent training program ran at the airbase for mechanics.⁹

For some unknown reason, and perhaps in the face of the July agreement between the warring factions (the Neutrality Agreement), Ambassador Brown would not sponsor the use of T-28s in Laos for offensive operations involving interdiction of communist forces. The RLAFF would only be able to employ them in this fashion after the withdrawal of US forces in the fall of 1962.

Also in 1962, the RLAFF opened its first pilot training school in Savannakhet, using O-1s as their primary trainer. Organizationally, Colonel Thao Ma now commanded three subordinate RLAFF aviation units stationed at Vientiane, Luang Prabang, and Savannakhet. Although the helicopter fleet of the RLAFF also expanded, there was not much favor in the higher commands of the RLAFF for their place within the aviation structure.

The Enabler—Air America (Proxy Airpower)

With the Geneva Accord restrictions prohibiting foreign militaries in Laos, aviation support to the US MAP could not be rendered by US Air Force assets. At the time, the RLAF was in its fledgling state and could not handle the demands of the growing war among government forces, the Pathet Lao communists, and Viet Minh. The RLG certainly could not support the new contingent of US military trainers and advisors deploying into the country under Operation Hotfoot in 1959.

In August 1959 the United States Operations Mission (USOM) in Vientiane contracted Air America to support the military assistance mission. Additionally, Air America was contracted by the United States Agency for International Development (USAID) for refugee relief and delivery of humanitarian aid. The Pacific Corporation ran Bird and Sons (Bird Air), which would also fly in support of the Central Intelligence Agency (CIA), USAID, and USOM. (Bird and Sons would later be acquired by Continental Air Services, Incorporated.) Air America established its headquarters at Udorn, Thailand, with bases of operations in both Bangkok, Thailand, and Vientiane, Laos.

While many airfields existed throughout Laos, they were mostly located in major cities. The C-46s and C-47s were initially restricted to operating at these locations until additional airstrips could be constructed; however, much of the support required by their customers had to be flown into remote mountainous regions with no airstrips (airdrop only). Through a newly formed construction program, improvements were made to a number of airstrips in the region. Eventually, hundreds of these airstrips were established, but due to their primitive nature, they could only be used by light aircraft. Air America found its first short takeoff and landing (STOL) solution with the Helio Courier. Soon, Air America would also incorporate the Pilatus PC-6 Porter, Twin Otters, and the Dornier DO-28 as part of the STOL fleet. Its largest STOL aircraft was the de Havilland Caribou, also known as the C-7A.

As remote airstrips were improved and lengthened, Air America added C-123s and C-130s to their fleet. To augment the fixed-wing fleet, Air America flew H-34 helicopters, Bell UH-1s, and CH-47s for short-haul operations when only landing zones were available.

Initially, Air America's helicopter fleet assets consisted of four Sikorsky S-19s. Four ex-United States Marine Corps (USMC) H-34Ds were

added to the fleet between December 1960 and January 1961, after General Phoumi Nosavan retook Vientiane from the Neutralist, Capt Kong Le.¹⁰

Air America and the CIA were not organizationally structured to plan and run a pseudo-COIN and unconventional warfare air force. To aid them, the 1007th Air Intelligence Service Group in Washington, DC coordinated with the Agency for clandestine air operations. One of the US Air Force's tasks was to provide qualified special air warfare officers to the CIA's training base at Camp Perry, Ohio. The duties of these "detailed" special air warfare officers consisted of: training agents in covert and clandestine air infiltration and exfiltration; airdropping supplies; usage of foreign equipment and arms; and establishing landing fields and drop zones (DZ). (They did not train Agency pilots.)

One of the notable officers was Maj Harry C. "Heinie" Aderholt. Aderholt began his long Air Commando career supporting CIA clandestine operations in the Korean War, where his troop transport C-47s conducted airborne drops of agents behind enemy lines, the resupply of those agents, and psychological operations (PSYOP) with leaflet drops and loudspeaker missions. After the war, Aderholt served in the 1007th as an attachment to the CIA where he was instrumental in testing and developing light aircraft for clandestine missions, most notably, the introduction of the Helio Courier. Aderholt also served with distinction in supporting clandestine air operations for the CIA in support of its Cuba and Indonesia activities.

In 1960 the US Air Force provided air support to CIA operations in Tibet. Coordination for these activities was conducted through a support squadron in Okinawa, later to be named Detachment 2, Operational Evaluation Training Group. Under Air Force supervision, the unit only had a small number of officers vetted with the CIA. Major Aderholt was instrumental in getting the entire unit vetted and detached to the CIA.

It was in Okinawa where the unit supported Continental Air Transport (CAT), the precursor to Air America, with USAF aircraft flying Agency operations in Tibet. To make the operation run efficiently, Major Aderholt deployed a portion of the unit forward to Takhli Air Base in Thailand.

Major Aderholt and his unit became the experts for the Agency in all matters relating to the clandestine operations of CAT, and later Air America—he served under the pseudonym "Sakaffie" in this role. It

was while he was in Takhli he convinced the CIA and Air America to adopt the Helio Courier for use on the small, remote landing strips throughout Laos. He flew two of their representatives into what was considered the toughest landing strip in Laos—Phong Saly—and conducted numerous takeoffs and landings to prove the aircraft's STOL characteristics and worthiness. Aderholt and his unit ran survival training courses for Air America pilots and helped to implement an air control center for Air America at Vientiane's Wattay Airport as well as pushed to expand and build up the number of landing sites, even employing US Navy Seabees with a bulldozer to put in the airstrip at Sam Thong (Lima site [LS]-20).

While on the clandestine side, now as a lieutenant colonel, Aderholt coordinated the numerous requirements for airlift in support of Gen Vang Pao and the Hmong guerrillas; it was Aderholt's organization that put together the first drop of 1,000 weapons to Vang Pao. Aderholt also led the unit of B-26s stationed in Thailand under Project Mill Pond, which was the retaliatory bombing of Pathet Lao and NVA on the *PDJ*. After the disaster of the Bay of Pigs incident, Pres. John F. Kennedy cancelled this role for the B-26s; they were later used in a few reconnaissance missions. Aderholt's unit served as the liaison between the US Air Force and the CIA, most notably coordinating the transfer of C-123s and C-7As into Air America.¹¹

Meanwhile, in order to support expanded operations, Air America required more helicopter lift. One of the Kennedy initiatives was the transfer of sixteen UH-34s to Air America to increase their troop and cargo lift capabilities (the Air America fleet was set at twenty helicopters.) However, Air America had neither the maintenance capacity nor the pilots and crew chiefs to handle this influx of assets. USMC, Army, and Navy helicopter pilots and crews were sent to the theater and then "sheep dipped"—transferred from military control to the CIA—with further duty inside Air America.¹²

Over time, Air America procured additional H-34s and converted some of the earlier models to turbine engines. Air America also flew the twin-pack (twin-engine) S-58T, noticeable by the bulge in its nose.

In May 1961 the newly formed Military Assistance and Advisory Group (MAAG) Laos coordinated its first contract with Air America to support American forces in Laos. The secret contract was undertaken by the Air Materiel Force Pacific Area, a USAF procurement agency, providing the MAAG Laos with helicopters as required to support RLG operations (the Madriver contract). On 28 January

1962, the Madriver contract was modified to include provision of support to the MAAG with seven L-20 Beaver STOL aircraft to be used by the MAAG and White Star teams. The L-20s were loaned to Air America by the US Army. Of note, in May 1962, it was one of these contracted L-20s that successfully extracted a MAAG officer and a Laotian general during the evacuation of Nam Tha, when the city fell to Pathet Lao and NVA forces.¹³

Air America Operations

Air America grew to be one of the largest airlines in Southeast Asia, rivaling Pan American. Over fifteen different aircraft types were flown. Between operating as an airline, flying passengers and cargo, and supporting CIA and USAID efforts, Air America conducted a diverse range of missions.

As a commercial airline, Air America flew passenger service between Vientiane, Udorn, and Bangkok (known as “milk runs”). Air America employees wore the Air America logo on their hats and were dressed in light grey shirts and dark grey pants, the airline’s official uniform. Air America became one of the largest business employers inside Laos.

Other missions depended on the “customer”—a euphemism to cover the purpose of the flight—which was actually for the CIA, US military advisors, USAID, or fulfillment of a clause in their contract to provide “other government services.” Stated by the base manager at Vientiane, “Our mission is air support to US objectives set forth by the customer.”¹⁴ This included prisoner of war, VIP, and dignitary transport.

First and foremost, Air America flew in support of USAID’s refugee and humanitarian assistance and relief missions. This included delivery of rice, wheat, salt, and medical supplies wherever USAID indicated the need. Each day, pilots were tasked to support USAID deliveries and flew to a primary DZ; if weather prohibited delivery, three to four alternate DZs were annotated on the task sheet. Refugee transport, medical evacuation, and delivery of USAID construction materials rounded out this requirement.

As a proprietary airline for the CIA, Air America transported case officers to and from remote locations, secret bases, and back and forth from Thailand to Laos. Air America delivered supplies, equipment, and weapons to support Project Momentum, the Hmong guer-

rillas in the *Auto Defense du Choc* and Special Guerrilla Units; it also delivered arms and equipment in support of the Kha Tribal Guerrilla Program in Southern Laos (Operation Pincushion).

Openly, Air America assisted the Royal Lao Army with airborne operations and transport of its troops. On occasion, Air America supported PSYOP programs with leaflet drops.

US Army Special Forces (SF) teams in both Operation Hotfoot and in Operation White Star were supported by air, exclusively from Air America assets. As Hotfoot expanded its operations to work with the CIA and the Hmong guerrillas, it was an Air America C-46 that flew team Korchek into Khang Khay, Military Region (MR)-II, in November of 1959 to begin training and the construction of weapons ranges and facilities.¹⁵

Air America missions also included transporting military officers at the US embassy with the PEO and the MAAG Laos and later (in the 1960s and 1970s) with Project 404 personnel. Air America delivered food, ammunition, and mail and transported special operations forces (SOF) personnel throughout Laos. They were instrumental in the rescue and extraction of SOF under fire, saving countless lives, and during search and rescue (SAR) operations to save other allied pilots. Air America also performed visual air reconnaissance to support SOF during their ground operations. As a part of its contract, Air America performed maintenance assistance on the O-1s of the Ravens (USAF forward air controllers) located at Long Tieng.

An average flight into the war zone consisted of a preflight briefing on the mission and the threats in the area of flight operations—threats from both the weather and the enemy. Air American pilots had the most updated information on these threats and often shared their intelligence with military forces. Tactical missions into Laos were flown from Udorn. Due to the lack of weather stations and radar in Laos, flying at night was limited to urgent necessity; however, there were a few exceptions when pilots conducted *in extremis* extractions to save American lives.

C-46s, C-47s, and C-119s airdropped supplies if the destination had improved airstrips and the threat was negligent. For remote outpost deliveries, supplies were airdropped. Parachutes were used for “hard rice” deliveries—the code word for arms and ammunition. For rice, salt, and wheat or corn meal, double-wrapped 100 pound bags (to prevent splitting when they hit the ground) were dropped from a

pallet without a parachute, and the bags separated from the pallet while in the air.

Remote locations were serviced by STOL aircraft and helicopters. The Pilatus PC-6 Porter had a unique drop door in the floor of the aircraft to accomplish this if landing was not feasible. After departure from Udorn, H-34 helicopter missions typically lasted six days in-country. A pilot would typically start at a hub, which had prepositioned cargo and aviation gasoline, then work out from that location each day.

Pilots spent the night at the hub or in a nearby town. Most STOL and helicopter missions were performed by only one pilot and one maintenance crew chief aboard the aircraft. For tactical missions, pilots carried their own personal weapons (although prohibited by “company policy,” the practice was overlooked) and dressed in whatever was comfortable. The worst situation that could occur was either maintenance failure or battle damage, as the remote sites did not have maintenance facilities. If these incidents occurred, maintenance help or recovery was flown in from Udorn. Tactical missions required adaptive pilots, using special techniques and with a good understanding of the technical limits of their aircraft.

Before a pilot could fly solo, Air America conducted an extensive pretraining program of check rides, simulators, and orientation flights. The three primary hazards for Air America crews in the war zone were weather, geography, and enemy; these were not mitigated by Buddhist monks blessing the aircraft. A fourth hazard derived from engine or transmission malfunctions often due to unfiltered fuel, excessive flight hours, and other mechanical problems.

In the mountainous regions of Laos, the weather changed rapidly. One airstrip could be socked in with rain and fog, while just miles away, another airstrip stood in sunshine. Most of the remote airstrips were located on the top of ridgelines where gusts of wind and down-drafts were the primary dangers. Natural obstacles on remote airstrips consisted of overgrown brush, wet airfields, ruts and ridges from erosion, and cows or other animals walking on the dirt. In the period between the wet and dry season, mountain tribes used the “slash and burn” agricultural method, and the smoke created from several fires obscured vision. Operating in humidity and high altitudes made it imperative that crews understood their loads with respect to the power required from their engines for takeoffs, landings, and hovering.

In January 1965, Charles O. Davis, an ex-USMC H-34 pilot, joined Air America and experienced many of the hazards of flying in Laos. He relates the following from his memoirs: “I am constantly picking my way through squall-lines, and always heading for the lightest cloud cover. I head for the light and hope that when I get there, I can see another opening and another light showing on the other side with any sort of accepted visibility. In addition to keeping my helicopter right side up and not splattered on the side of a mountain, I have to keep in mind the planned general direction as well as be aware of where the Pathet Lao are located.”¹⁶

Pilots were kept up-to-date on locations of enemy units and anti-aircraft fire. Several Air America aircraft suffered small arms fire and damage and were shot down. All pilots were required to check in every thirty minutes to inform base control of their location and status. If a radio check was missed, other pilots in the area would attempt to contact the missing aircraft while simultaneously flying to that last known location if rescue was required. Until the USAF positioned rescue helicopters at Landing Site 36, north of the *PDJ*, Air America also performed the SAR mission for downed Air Force crewmen.

Landing Sites

When the USOM was established in Vientiane, a requirement existed for a system to provide both humanitarian and military support to various locations throughout Laos. The USOM contracted CAT to provide the airlift necessary to fly and deliver food, medical supplies, building materials, and military items to support the various programs of the PEO (later the MAAG) and the USAID programs. They also provided a system of personnel transport for military advisors, US embassy liaison personnel, and humanitarian workers. Initially, these missions were conducted by C-46 and C-47 transport aircraft owned by CAT. Most CAT flights originated out of Bangkok, Takhli, T-05 (a secret operation for CIA run out of its facilities at Korat, known as the “Ranch” or “Romeo”), or Udorn, where supplies and equipment were loaded for further transport into Laos.

In the 1950s most of these aircraft utilized existing airstrips within Laos; these were the most improved and were generally airports left-over from the French. The Japanese also constructed airfields in Laos during their occupation in WWII. The airfields were designated by

the letter “L” standing for “Laos” but termed “Lima” sites using military phonetic spelling convention. The numbering convention was based on the order the airfield or landing strips were constructed and put into operation. Initially, the first airports used by Air America were Wattay Airport in Vientiane (L-08), the airport at the Royal capital city of Luang Prabang (L-54), Savannakhet (L-39), and Seno (L-46), along with a DZ used to support Vang Pao’s Hmong forces near Padong.

A variety of dirt strips already existed, and additional dirt strips were established as Laotian military operations widened, along with the expansion of humanitarian programs. The dirt strips took on the designation of “LS,” originally meant as Laos Strips, but again called Lima sites in military jargon. The first strip, LS-01, was located at Muong Ngat. Improved dirt strips varied throughout Laos based on the materials used to build them and their locations, either valleys or mountaintops. Some of the LS landing sites could only be serviced by small aircraft or STOL aircraft due to their configuration. The small airstrips for STOL aircraft were originally constructed by the Public Works Division of the USAID to support delivery of humanitarian materials.

The CIA requirement to support the Hmong guerrillas created a new wave of landing strips that were predominantly located on remote mountain tops. These were initially called “Victor” sites but changed to conform to the already existing system of Lima sites.

Although formal construction units (including the Navy Seabees at Sam Thong) were used for improving dirt landing strips, most of the remote sites were built by village labor. After issuance of shovels and picks, diagrams were provided to the indigenous population on what the parameters for building the airstrip required. In many cases, this was not possible due to the rugged terrain atop the mountains and the amount of vegetation requiring clearing. Many of these landing sites were not straight, were often less than 600 feet in length, and had rolling dips or curves along the runway.

During Hotfoot and White Star, US Army Green Beret deployments (1959–1962) and the beginning of the Project Momentum period (1959–1961), about forty of these Lima sites were in use. By the end of American involvement in the Secret War in Laos, over 400 of these sites had been established. Not all of the sites built were used throughout the war; many sites were overrun by enemy forces and could no longer be accessed. Other sites were abandoned once

Hmong refugees evacuated an area or as Hmong and Laotian forces no longer needed the area for combat operations. Another reason for disuse of a site was bad weather eroding a landing site and making it unusable, either temporarily or permanently. Later in the war, military region (MR)-IV landing sites took on the descriptor of “PS,” to stand for Pakse site.

With a lack of decent roads in Laos and the monsoon weather creating mud, many of the operations throughout Laos depended on the delivery of supplies and military equipment, which could only be accomplished with air assets. The numbered Lima sites became the preferred way for pilots and commanders to navigate—in lieu of map coordinates—and to orient forces on the ground. Knowledge of landing site locations quickly allowed pilots to pinpoint the location of important activities and where the areas of special operations support and other government activities were required.

For instance, the initial proof of concept to use the Helio Courier STOL aircraft was conducted at what was to be considered the toughest and most difficult airstrip in Laos—Phong Saly (L-15). When the CIA first introduced the H-19 helicopter into Laos, they were based at Seno (L-46). The CIA’s main operating base was located at Long Tieng (LS-20A, the “A” for “Alternate”). When the USAF established a formal combat SAR capability within Laos, the HH-3 Jolly Green Giants were positioned daily at LS-36, Nha Khang, located north of the *PDJ*. The most often quoted Lima Sites for navigation were around the *PDJ* where the bulk of the fighting between Laotian forces occurred against the Pathet Lao and NVA. MR-IV was unique because it had a mixture of L sites, LS sites, and sites used by the CIA and Army advisors.

Air America closed its operations in Laos in June 1974. On the humanitarian side, Air America extended the goodwill of the United States in its support of USAID refugee programs. In their military and covert operations role, Air America was an essential enabler for not only the CIA, Army SF teams, and later Project 404 advisors but also for the RLG and its military forces.

James A. Howell was the Combat Control Team noncommissioned officer in charge at Nakhon Phanom from 1966 to 1967. In his oral interview conducted in 1995, he had high praise for the work of Air America:

I have the greatest respect for the job that Air America accomplished! When difficult war conditions exist—I had more respect for them than I did for our own Air Force. There were so many nonsensical restrictions placed on our

military forces; whereas, the civilian contractors had less restrictions. For example, going into some sites the military had to have a high and low air cover, which require a lot of planning and coordination. Air America had little of this. They just went ahead and did the job at hand; while the military was still standing around planning and coordinating.

Air America could always be counted on when the chips were down. It was an unusual war and constantly changing, and they had to be flexible to meet the situation. One only had to stop and observe Air America to see and feel the resolve, and the lengths they would go to get the job done under the most adverse conditions.

They shall never be repaid, or ever be repaid.¹⁷

Notes

1. Conboy, *The War in Laos*, 15.
2. Conboy and Morrison, *Shadow War*, 15.
3. Conboy, *The War in Laos*, 27.
4. *Ibid.*, 22–23.
5. *Ibid.*, 29.
6. Webb, *Secret War*, 61.
7. Pratt, “The Royal Laotian Air Force,” 4.
8. Webb, *Secret War*, 64.
9. *Ibid.*, 104.
10. Conboy, *Shadow War*, 47.
11. Trest, *Air Commando One*. Heinie Aderholt’s early career with the CIA and operations in Thailand and Laos are covered in chapters 1–5.
12. Love, *Wings of Air America*, 10.
13. Leeker, “Air America in Laos II,” 27–28.
14. *Air America Flying Men Flying Machines*. The quote is from James Cunningham, Jr., portrayed in the video.
15. Leeker, “Air America in Laos II,” 5.
16. Davis, *Across the Mekong*, 94–95.
17. Howell, “Recollections of Air America.”

Part I Photos



Above:The USAF initiated its COIN capability with the formation in April 1961 of the 4400th CCTS under the Jungle Jim program. With the addition of flying squadrons, the unit became the 1st ACG, then 1st ACW, stationed at Hurlburt Field, Florida. (Photo courtesy of Jim Ifland.)

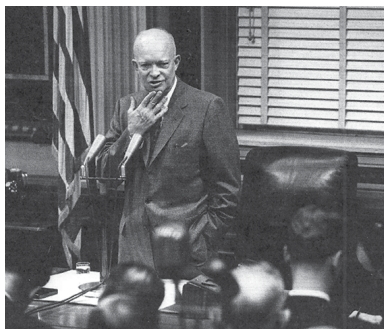


Above: Air Commandos adopted the jungle boonie hat as their trademark headgear.



Above: For strike capability, the 1st Air Commandos flew the B-26K, until replaced by the A-26. **Left:** Assorted aircraft of the 1st ACW on display at Hurlburt Field, circa late 1960's. (All photos courtesy of the Air Commando Association.)

Right: President Eisenhower (shown at right at a news conference in 1954) adopted a policy of containing the spread of communism throughout Southeast Asia through a robust foreign aid program. Thailand was chosen as the bulwark country to prevent the “Falling Dominos.” Although abiding by the Geneva Agreements on the neutrality of Laos, Eisenhower pushed an aggressive policy of introducing military aid and advisors into Laos. American support was contingent on the Laotian government remaining pro-Western with some form of democracy, and anti-communist. President Kennedy inherited the Laotian crisis as one of the first challenges of his new administration. (Photo courtesy of NARA.)



Above left: Members of the 112th Infantry Battalion (Laos), *Groupe Mobile 17*, fire American-supplied weapons on a range in Phong Hong. The RLA also had artillery battalions and armored forces. (Photo courtesy of the USAJFK Special Warfare Museum, Lt Col Keravouri collection). **Above right:** The Pathet Lao were the internal communist threat against the RLG. The Pathet Lao were assisted by the NVA and supplied from communist-bloc nations. (Photo courtesy of NARA.)



Left: Karsts, vertical limestone formations, were typical throughout the mountainous regions of Laos. These were used as landmarks by pilots, but could also be deadly obstacles during fog, mist, and low cloud conditions. The “Tom’s Thumb” karst formation was a unique landmark near Vang Vieng. (Photo courtesy of Dennis W. Lid, Project 404 ARMA.)



Left: Capt Robert Arnau flies his CH-3C from the 21st SOS into a Lima Site (Landing Strip) on the Bolovens Plateau. (Photo courtesy of Robert Arnau family.)
Below left: The PDJ situated in central, northwest Laos. It is not known the purpose of the stone jars carved by an ancient civilization, found across the plateau. (From the collection of William E. Platt, Raven 43 FAC.)



Above right: Mist, clouds, and haze confront 21st SOS helicopters en-route to evacuate the Thai survivors at Muong Soui, 1968. (Photo courtesy of Robert Arnau family.) **Below left:** Typical lowland Lao houses on stilts. (Photo courtesy of USAJFK Special Warfare Museum, Lt Col Keravouri collection.) **Below right:** An example of the “slash and burn” agricultural style of rural Laos. After burning the slashed materials to ash, nitrogen could be released into the soil upon the next rain. During burning season, the smoke of these fires created adverse flying conditions. (Photo courtesy of the USAJFK Special Warfare Museum, LTC Keravouri collection.)





Above left: The roundel insignia of the Royal Laotian Air Force. (Image Courtesy of Wikipedia.) **Above right:** In its first years of operation, the RLAf provided reconnaissance, artillery spotting, and liaison and transport using the MS-500 Criquet. (Photo courtesy of Albert Slugocki.) **Below:** A parachute battalion prepares to board a Lao Air Force C-47 to conduct an airborne operation. As there were few pilots early in the formation of the ANL, French pilots continued to augment the ranks. (Photo Courtesy of Albert Slugocki.)



Left: Helio Courier on the flight line at Udorn (a C-123 Provider sits behind it). The Helio Courier was one of the first STOL aircraft adopted for use by Air America, and became one of its most versatile aircraft. (Photo courtesy of Steve Wilson, Raven FAC.)



Above: Lao T-28s at Long Tieng. At its peak, the RLAf operated five squadrons of AT-28Ds, stationed throughout Laos. (Photo Courtesy of Mike Lampe, CCT.) **Below:** Wattay Airport in Vientiane (L-08) from the air. There were improved airports in major Laotian cities. (Photo courtesy of the USAJFK Special Warfare Museum, Lt Col Keravouri Collection.)





Above: Capt Rich Lori, U.S. Army Special Forces, stands before the RLA T-6 squadron at Wattay Airfield in early 1962 during his Whitestar mission. The attack T-6s (initially six fielded) were the first offensive airpower capability introduced into the RLA. (Photo courtesy of Richard A. Lori.) **Below:** An “improved” remote strip in northern Laos, made from widening the road running through the valley. Note: aircraft turning around at end of the runway. (Photo courtesy of AFHRA.)





Above: An Air America H-34 refuels in Pakse where aviation gasoline in 55-gallon drums, along with other petroleum-based lubricants, were prepositioned. As part of the cover story for US forces in Laos, metal slots were affixed on the tail of the helicopters to slide in Laotian or RLA markings. When conducting clandestine missions, no markings were used at all. Laotian lettering can be seen in this picture on the fuselage of the aircraft. (Photo courtesy of Gene M. Gavigan.) **Below:** Pilatus PC-6 Porters from Air America deliver supplies to Gen Vang Pao's guerrilla forces on the PDJ. (Photo courtesy of Ben Van Etten, Air America pilot.)



PART II

COMBAT AIR ADVISORS

AND MILITARY ASSISTANCE

Chapter 4

Enter the Air Commandos

Project Water Pump

This small group of aircraft and crews performed far beyond expectations and was a significant factor in stabilizing the tactical situation during this period.

—CINCPAC (referring to Detachment 6, Air Commandos)

One of the most successful Special Air Warfare (SAW) counter-insurgency (COIN) programs for the conduct of combat advisory operations—a form of foreign internal defense (FID)—during the secret war in Laos was Project Water Pump. (The terms *project* and *operation* have both been used in reference to Water Pump; this work uses the term *project* throughout.) From 1964 to 1973, Air Commandos deployed to Laos and Thailand to train the Royal Lao Air Force (RLAF) on the attack T-28 aircraft. This included instruction in maintaining the aircraft, flight operations, gunnery/bombing ranges, and accompaniment of RLAF students on initial combat missions. Project Water Pump was located at the Udorn Royal Thai Air Force Base (RTAFB) in order to circumvent the Geneva restrictions against stationing American forces in Laos.

The Declaration on the Neutrality of Laos (July 1962) left the Royal Lao Government (RLG) stripped of key aid to defend Laos if the tripartite plan for governing failed to work. It was President Kennedy's foreign policy position to abide by the neutrality agreement, even with the knowledge of duplicity on the part of the North Vietnamese, who, not surprisingly, did not evacuate their military forces from the country. Kennedy's foreign policy advisors convinced him that if the North Vietnamese Army (NVA) continued its aggression, the world would now be aware of its duplicity, thus giving the United States, regardless of Southeast Asia Treaty Organization (SEATO) stipulations, the cause célèbre to move troops into Laos in open intervention. Let the communists make the first move, so to speak. Although Soviet Union government leaders previously agreed to oversee the withdrawal of North Vietnamese assets from the country, they soon

washed their hands of involving themselves in a Southeast Asia quagmire. In 1962, as a last Soviet gesture upon the withdrawal of support to Laos, the decision was made to split its aviation assets evenly between the RLG, the Neutralists, and the communist forces of the Pathet Lao and NVA.

Over 7,000 NVA and roughly 19,000 Pathet Lao soldiers remained on the battlefield. They continued to expand their areas of control by attacking and pushing out the Hmong populace from villages and mountaintops in military region (MR)-II, hedging their bet that the tripartite government would not work.

America's foreign policy position was to respect the neutrality of Laos; however, the United States would take any and all measures to ensure Thailand was defended, even to the extent of assuring the Royal Thai government that America would come to its aid unilaterally, irrespective of the SEATO defense arrangement.¹

It was soon apparent only the United States was abiding with the agreement to withdraw military forces from Laos. Kennedy, not wanting to appear in violation of the agreement, adopted a covert, unconventional warfare approach to addressing the communist threat. When Amb. Leonard Unger arrived to Laos in July 1962—the ink not even dry on the agreement—plans were made to continue assistance to Gen Vang Pao and his Hmong army, with covert aid beginning that August. Soon, Air America was delivering aid and small amounts of arms to keep Vang Pao's forces in the fight against Pathet Lao and NVA transgressions. It was one area in the war where the expenditure of US dollars was effective. This initiative required a new contract between the embassy in Vientiane and Air America to extend flight operations to support Gen Vang Pao.

To run the Hmong program, Project Momentum, two Central Intelligence Agency (CIA) agents, along with their Thai Police Aerial Reinforcement Unit counterparts, covertly remained in country to work with Vang Pao. Immediately after the US withdrawal in October 1962, Gen Reuben Tucker and the ambassador (along with the commander in chief, Pacific Command [CINCPAC]) devised a measure to at least continue the Military Assistance Program (MAP) to the RLG. It was already a foregone conclusion the *Forces Armées Royales* (FAR, Royal Armed Forces) could become a professional army and could be modernized for the defense of Laos. At best, they could be equipped enough to serve as a trip wire to give SEATO and the United

States sufficient time to deploy military forces to prevent the impending collapse of the RLG.

In late 1962 the CIA created the 4802nd Joint Liaison Detachment (JLD) at Udorn RTAFB, staffing it with Agency assets withdrawn from Laos. In partnership, the Thais created their own covert Headquarters 333 and collocated with the 4802nd. The purpose of the two organizations was to carry on clandestine and covert activities against communist forces in Laos. Their activities in this phase of the war would be characterized as running the “quiet war.”²

Within a week of the last Special Forces (SF) soldier departing Laos, the bulk of the Military Assistance and Advisory Group (MAAG) Laos departed Vientiane and headed for Bangkok to set up an alternate MAAG for continuation of US military aid to the RLG. This new organization fell into the structure of the existing Joint United States Military Assistance Group, Thailand (JUSMAGTHAI) and was called Deputy Chief JUSMAGTHAI. Its task would be to procure, warehouse, and ship military aid from receiving ports in Thailand to the RLG. In essence, it would still serve as a pseudo MAAG Laos, but it operated from the Capital Hotel in Bangkok. Prohibited from posting military staff to oversee the US MAP in Vientiane, a Requirements Office (RO) was established and placed under the supervision of the United States Agency for International Development. Initially, the RO was staffed with about thirty retired military personnel, along with foreign technicians. The Air Force and Army attachés, however, were allowed to remain in Laos as part of the Embassy Country Team and would soon have their staffs expanded with “assistant” attachés to circumvent the Protocol to the Declaration on the Neutrality of Laos’ provision (Article 2) prohibiting foreign military forces in Laos. The role of the assistant attachés was to monitor and observe the use of military aid and its effectiveness within Laos.

In June 1963 Gen Oudone Sananikone was appointed by Gen Phoumi Nosovan as the assistant chief of staff for logistics for the Royal Lao Army. He soon began to understand the functions of the RO:

While in this office I observed how the U.S. Requirement[s] Office had replaced and assumed some of the functions of the departed MAAG. The Requirements Office received supplies for the ANL and for the Neutralists through Thailand and then redistributed them to the military regions in Laos. The distribution was usually made by land transport, but in some cases where the land routes

were not available, Air America made the deliveries. To coordinate the logistics effort, the Requirements Office stationed small teams in the regions.³

An additional task of the RO was the continuation of military training programs for the FAR, albeit just not in-country. Laotian military students were sent to the United States for military courses under a now expanded program. In the region, a series of infantry and artillery training courses—along with technical courses—were opened in Thailand with the support of the Thai government. Many of the programs were later facilitated using the 46th Special Forces Company (Independent), stationed in training areas throughout Thailand—the bulk of training was conducted at Lop Buri.

To solve the gap in air support, the RLAF began a program of expansion. Again from General Sananikone, “By this time, in view of the escalating war and the growth of the Lao Air Force, many of the student quotas were devoted to the training of aviators and Air Force technical specialists. . . . Aviators also received *training conducted by the USAF at the Thai air base at Udorn*” (emphasis added).⁴

The expansion of the airpower capability of the RLAF provided the opportunity to introduce the Air Force’s newest COIN unit into Laos—the Air Commandos—with the initiation of Project Water Pump.

To work around the Geneva Declaration prohibiting the introduction of additional foreign forces into Laos, the embassy expanded the size of the military attaché’s office in Vientiane, which was still authorized as part of the Embassy Country Team. In short order, additional assistant army attachés and assistant air attachés roamed freely throughout the country of Laos. Their duties included the following: observing and reporting on the status of the MAP; giving advice and intelligence assistance to Laotian military forces; and providing input on operational and logistics matters to the Lao commanders.

By 1963 the Pathet Lao began withdrawing their support for Kong Le’s *Forces Armées Neutralistes* (FAN, Neutralist Armed Forces). They sensed Phouma’s political maneuvering under the tripartite government to combine the forces of the Rightists with the FAN that would in essence cut out the Pathet Lao from receiving any more internal or foreign aid. This measure created open hostility between Kong Le’s forces and the Pathet Lao. As a response, the Pathet Lao began attacking FAN positions. Fearing the loss of government positions on the *Plaine des Jarres* (PDJ), Phouma immediately requested a resupply of arms and equipment from the United States for the Neutralists. The

request was honored and the resupply began. It was no surprise the United States was soon accused by communist diplomats of violating the Geneva Declaration. The actions of the Americans gave the communists the pretext for expanding NVA involvement into Laos.⁵

Throughout the first half of 1963, the NVA deployed 5,000 troops into Laos (eleven battalions) to conduct border security and to expand their operations along the Ho Chi Minh Trail (HCMT). Some fighting continued between the *FAR* and the *FAN*. Constant fighting broke out between the *FAN* and the Pathet Lao on the *PDJ*, forcing Kong Le to deploy his forces westward. In response, Phouma—as predicted—cut off all funding to the Pathet Lao. It was back to increased fighting in Laos. Phouma's attempts to arrange a cease-fire with Souphanouvong failed. There was no love lost for Pathet Lao representatives serving in Vientiane, who were constantly harassed by secret police. The three factions of the now fragile government reverted to the time-honored method of fighting for territory to improve their political positions.

In January 1964 the Pathet Lao launched offenses in both central Laos and on the *PDJ*, aided by the NVA command in Laos, which insisted the *PDJ* would remain out of the RLG's and the *FAN*'s hands. This was key and essential to supporting the NVA's network of trails and roads in MR-II, which was used to move equipment, men, and arms along the HCMT network.

Sensing weakness in Phouma's vacillation and making attempts at negotiating with Souphanouvong, Generals Kouprasith Abhay and Siho Lamphouthacoul conducted a coup on 19 April, arresting Prince Phouma and throwing him in jail. Ambassador Unger was incensed at this measure and immediately flew back to Laos from a conference he was attending in South Vietnam. He issued threats to both the generals to fix the problem. Facing what would certainly be a cut off of US military aid, the two generals soon restored Phouma as head of government on 22 April. Phoumi was removed from his position as minister of defense, allowing Phouma to try and merge both the *FAR* and the *FAN* into one national army. In June, Souphanouvong seeing this attempt and what appeared to be a growing ascendancy of Rightist elements, withdrew his support for any participation in Laotian government.⁶

The fate of Laos was now sealed. Only victory on the battlefield would determine the outcome. The war would continue for over a decade. The United States had two choices: get out now and strengthen

Thailand's ability to defend against the communist domino effect or stay in the game. In the face of the growing involvement by the United States in South Vietnam (priorities were already beginning to shift to that theater of war) and the danger of ignoring North Vietnamese efforts to support communist forces in South Vietnam via the HCMT, the game would become one of using Laos and its military and guerrilla forces to tie down a portion of the NVA. This new strategy was then combined with the interdiction of materials and supplies transiting the HCMT—a template for how the “quiet war” would be conducted.

Building Laotian Airpower

With the worsening combat situation in Laos and the restrictions of using direct US combat support, the MAP for Laos focused on measures to enhance and improve the capabilities of the Laotian armed forces. Bad performance on the part of Laotian ground troops could not be remedied without providing military advisors for “stiffening.” Since this option did not exist, another approach considered for military assistance was to increase the technological capabilities of Laotian forces. The RLAF—reliant on old T-6 modified trainers, initially six of them armed with only machine guns and rockets—required modernization to provide the close air support (CAS) needed by ground troops in contact. The T-28 aircraft was the preferred replacement for modernization, and the US Department of State approved the measure to enhance the RLAF.

There would be some stipulations to appease those who thought this would be seen as an escalation of the war. Even though the Thai government offered eight T-28s for transfer to the RLAF, there would only be a one-for-one exchange with the current fleet of T-6s; the RLAF only received six aircraft. The RLAF T-28s would remain based in Thailand and could only be used in a dire emergency in Laos; however, if they were on combat operations in Laos, they could certainly be used to interdict Soviet air resupply flights for the Pathet Lao and the NVA. The American ambassador restricted ordnance to machine guns and iron bombs only; the use of napalm had not been authorized.⁷

The United States began the upgrading of the RLAF with the transfer of the six Thai T-28s in August 1963. In July, a military training team (MTT) from the USAF deployed to Kokethiem, Thailand, to provide pilot and maintenance instruction on the T-28, graduating

twelve pilots and fifteen technicians. In addition, four pilots were in a year-long course in the United States.

Another USAF MTT deployed to Wattay Airport in Vientiane and helped establish an air operation center (AOC) to improve planning, targeting, and intelligence for the RLAF. Lack of ability to maintain airframes and Department of State restrictions on the use of T-28 ordnance, combined with US limitations on when and where Laotian pilots could provide air support, soon doomed any progress in the RLAFs modernization effort.⁸

The T-28s were not kept in Thailand as originally stipulated but operated out of Savannakhet at the RLAF headquarters. Two were soon lost: one destroyed in an air crash and one lost to North Vietnam when its pilot defected. To spread this nascent “airpower” around, the RLAF split the remaining four aircraft between Vientiane and Savannakhet to at least provide some air support countrywide. Of course, with this limited number of airframes and low operational rates, very little could be done. To solve the problem, the air attaché in Vientiane approached the MAAG in Thailand to seek assistance from the Thai government in replacing the lost aircraft; the Thai government balked at the proposal. Another solution was the introduction of an Air Commando MTT with T-28 aircraft, similar to the program Air Commandos were conducting in South Vietnam known as Operation Farm Gate. It was envisioned that whenever aircraft of the MTT were not being used for training they could be diverted to combat operations across the river into Laos. Adm. Harry D. Felt, CINCPAC, concurred.⁹

Project Water Pump

The goal of Water Pump was three-fold: (1) to inject native combat airpower into the Laotian theater of war to provide CAS to Laotian military forces, (2) to begin an interdiction capability against North Vietnamese and Pathet Lao lines of communication, and (3) to provide an armed search and rescue capability for the increasing US air sorties operating in Laotian airspace. Consequently, the American ambassador received a tangential benefit—his own, private air combat capability.

With US Army SF now absent on the ground in Laos, it was left to the services of Air America to substitute for USAF search and rescue

(SAR); it was already capable of rescuing its own pilots but now also needed to conduct SAR for US pilots flying armed reconnaissance missions over Laos. It was predictable that sooner or later a US military pilot would be shot down by the ever-increasing antiaircraft defenses of the NVA and Pathet Lao.

In March 1964 Detachment 6 of the 1st Air Commando Wing (ACW), under the command of Maj Drexel B. “Barney” Cochran, deployed on six-month temporary duty (TDY) orders to Udorn, Thailand, as a mobile training team to conduct the mission named Project Water Pump. Detachment 6’s mission was to train RLAFAF aircrews and mechanics, within the stipulations of the 1962 Geneva Declaration, and provide clandestine airpower for the ambassador’s use.

The following month, Detachment 6 began operations with four T-28 aircraft transferred from South Vietnam and modified as attack T-28s. The attack version of the T-28 was armed with two .50-caliber pods mounted under the wings and two pods outboard to carry fourteen 2.75-inch rockets. Doctrinally, the AT-28s would operate as a four-ship formation. From Udorn, the formation had about hour and a half flight time endurance for operations into Laos. Due to its low maintenance requirements and in-line seating for two pilots, the AT-28 was a good choice. Detachment 6 was also provided a U-10 Courier for their own use.¹⁰

The bulk of Detachment 6 consisted of instructor pilots (IP), but a handful of crew chiefs, mechanics, medics, and armament specialists rounded out the roster. Initially, Water Pump personnel performed their duties in civilian clothes. Detachment 6 worked under the direction of the embassy and air attaché in Vientiane; however, it reported to the deputy commander of the JUSMAGTHAI in Bangkok. Its USAF chain of command was the Seventh/Thirteenth Air Force, with its organizational chain of command back to the 1st ACW at Hurlburt Field, Florida, under the Air Force Tactical Air Command. Administrative coordination for base matters at Udorn was through the 2nd Air Division of the Air Force component commander in Thailand.¹¹

Liaison and coordination were also necessary with the 4802nd JLD to not only deconflict Air America traffic from the T-28s when conducting sorties into Laos but also provide air support for secret and clandestine operations.

The first priority of Project Water Pump was preparing a force for SAR, but faced with potential months of schooling before Lao pilots would be ready to fly, experienced Air America pilots were chosen to

initialize this capability. Air America attack T-28s would perform the role of armed escort for helicopters retrieving downed pilots and crews. Air America SAR AT-28 pilots were called the A-Team. The Air America T-28 cadre consisted of pilots within the organization who had combat flying time—all of them prior military—along with vast experience of flying in Laotian airspace.¹²

John Wiren, Air America A-Team, Water Pump Pilot

John Wiren was one of the five Air America pilots chosen for the T-28, A-Team training. The Air America director's staff in Vientiane screened the records of all the organization's pilots to determine which of them had previous experience as a pilot on the T-28 or the A-1 Douglas Skyraider. Four former US Marine Corps (USMC) pilots with the necessary prerequisites were identified; the fifth would be a USAF pilot with P-51 experience.

Wiren was hired by Air America as a propeller aircraft pilot. The organization was looking for pilots who had carrier landing and take-off experience, including short takeoffs and landings (STOL), as well as crop duster and spraying flight experience. (Wiren had experience as a crop duster early in his flying career in Texas.) They also wanted pilots with experience landing planes on short strips or dirt roads that matched the conditions in Laos, which required short strip and STOL capability.¹³

Wiren joined the US Navy and was accepted into the flight training program. He would have preferred to join the USMC; but there was no USMC flight training program at the time. He served as a Naval cadet and successfully graduated as a pilot. Upon graduation, a newly minted Navy ensign could opt to become a USMC pilot, which Wiren did. He began his Marine career flying the A-1D Skyraider on training missions from naval airfields near Corpus Christi, Texas, and flew the T-28 for his instrument training.

After his overseas tour in Japan—four and half years in the Marines—Wiren rejoined civilian life. After he heard about Air America from his friends and squadron mates, he called the Air America offices in Washington DC and scheduled an interview. He was hired shortly thereafter.

His first assignment was to Taipei, Taiwan, flying for the Civil Air Transport (CAT) where he got his introduction to Air America. Wiren

became qualified in several aircraft of the fleet. He said, “I started in the Helio Courier, then flew the Porter and the Dornier; later I flew the Caribou, the VC-4, and the VC-6.”¹⁴

In 1962 Wiren found himself flying cargo and transporting people around Laos. In May 1964, still serving with Air America, he volunteered for the attack T-28 program. The five Air America pilots initially chosen for the program were Ed Eckholt (a previous P-51 pilot), Joe Hazen, Tom Jenny, Rick Byrne, and Wiren.

The five pilots reported to the Air America offices in Vientiane as ordered and were put into a room with the “customer.” The mysterious man asked, “Do you guys want to get active with the T-28s? Have a chance to bring some lethal business to the Pathet Lao for a change?” They agreed, seeing it as a chance to get back at the enemy. The pilots would not only fly escort for search and rescue but also would provide the “immediate airpower” capability desired by the ambassador.¹⁵

The pilots reported to Udorn to begin their Water Pump T-28 training program. Wiren and the others spent only a few days in training, requiring minimal recurrency on the aircraft:

We were trained by IPs Joe Potter and Bill McShane [both of these gentlemen later left the Air Force and joined Air America]. We spent only two days at Water Pump. They were in a hurry to get attack T-28 capability into Laos! We spent a small amount of time getting recurrency on the T-28 and spent some time at the range doing some bombing runs. You have to remember we were all well-qualified prop aircraft pilots and knew flying conditions in Laos, and terrain in Laos.

After that brief training period, we took the aircraft back up to Vientiane, where Air Force ordnance folks hooked bombs up for us.

The rationale for all of this was that the NVA was getting ready for the rainy period of combat in Laos [May to October 1964] and were massing on the border with Laos for operations into northeast Laos. The intent was to gobble up territory.

After being loaded with ordnance, we had *carte blanche* to go out and strike targets, being told not to bring any ordnance back.¹⁶

On 25 May 1964, the A-Team flew to support Kong Le, whose forces were under pressure at Moung Soui. The A-Team conducted interdiction and strikes on Route 7. Upon return to Wattay Airfield in Vientiane, with two of their aircraft filled with bullet holes, Ambassador Unger immediately shut down combat sorties in Laos by American pilots. He also closed the AOC, yet after contemplation

and input from his air attaché, it was reopened.¹⁷ Their first mission was over Ban Ban to interdict a bridge:

All five of us flew—there was no type of air traffic control back then, and we did not need any based on our flying experiences in Laos. When we were doing the strikes around the *PDJ*, the “customer” sat on a ridge with a helo to rescue us if needed. The helo pilot told us, “I never saw so many tracers in my life!”

We flew at least two missions the first day of our operation. We got some trucks; hit the first and the last one, then did a turkey shoot on all those in between. I shot the second truck.

When we landed back at Wattay, all of the planes had bullet holes in them. General Ma met us there and told us he wanted our T-28s for his own use. We told him, “General, go get your own holes!”

We got our targets from our flight information control guys, Bill Sollen and Jim Mullens. Col [Robert L. F.] Tyrrell directed the A-team. We flew out in the morning from Udorn to Wattay. The USAF had some bomb loader personnel there, dressed in civilian clothes.¹⁸

The A-Team operation was phased out as more Thai and Lao T-28 pilots and crews were trained, and USAF SAR aircraft were added to air sorties for Laos. Wiren went back to Laos in 1967 and flew more missions in the T-28. He said, “A big thing was search and rescue. When USAF and Navy guys got shot down, they had no clue where they were, so we were used to go in and pick them up. I picked one Navy pilot up out of a tree. Most of the pilots were hanging sixty feet up in the trees. I remember one day flying search and rescue and having to redirect the air rescue force to where the pilot actually was, over twenty miles away.”¹⁹

About twenty to twenty-five Air America pilots in all were trained in Project Water Pump. One of these was former Navy pilot Anthony J. Durizzi, who entered the training in August 1964. His description about the course was captured by Col Michael E. Haas, USAF, retired, in his publication, *Apollo's Warriors: United States Air Force Special Operations during the Cold War*. Durizzi said, “I was in a class of eight, the usual size class for this training. The course had been expanded to three-weeks duration to include ground school, a flight checkout, formation flying, and a week on the gunnery range. After completion of training, we were allowed to maintain proficiency on the AT-28s anytime we were in Udorn and found the time to fly them.”²⁰

Durizzi admired the professionalism of the Air Commandos during this training. “Our two Air Commando instructors were particularly aggressive and determined to give us their best effort.”²¹

Thai B-Team

The second cohort of T-28 pilots was Thai. Thai pilots were “volunteers” released from official military service in the Royal Thai Air Force (RTAF) and “sheep-dipped” as civilian pilots for the duration of their combat tours flying into Laos. The Thai pilots were on contract, flew in sterile uniforms, and were required to serve six months and fly 100 sorties. They were called the B-Team with a code name Fireflies; however, most were often referred to as Thai “mercenary” pilots. They used the word *Eagle* as their call sign. The B-Team Thai pilots later changed their call sign to Tiger, giving the call sign Eagle to the Lao T-28 unit stationed in Savannakhet. The Fireflies would participate in some of the first RLAF attacks on the *PDJ*.²²

Lao C-Team

The third element of the program was the training of Lao pilots for duty in the RLAF; they comprised the C-Team. Later in the program, Gen Vang Pao pressed to have his own air assets for use, which resulted in the training of Hmong pilots as well. Given the Hmong’s lack of technical aptitude, their pilot training program would take the longest to complete, but eventually nineteen pilots were trained through five iterations of the course.

T-28 Pilot Training Program

Air America, Thai, and Laotian pilots were chosen for the program after careful screening of their technical aptitude and flying abilities. The T-28 pilot training program was a five-and-a-half to six-month course designed to graduate qualified combat pilots. Some modifications were made based on the pilot’s personal skills and qualifications prior to attending the course; for example, experienced Thai pilots attended an accelerated training program of only thirty hours. Air America pilots were qualified within days or weeks of their arrival.

The main course of instruction involved 200 hours of flying, to include a basic course first designed to orient pilots on the characteristics and use of the aircraft. Next, the pilots were required to successfully complete a solo flight, all followed by a weapons delivery phase. In the basic course, T-28 pilot candidates first attended a ground orientation phase (class instruction), learned how to preflight the aircraft, familiarized themselves with the instrumentation, and conducted engine start and runway procedures. Detachment 6 IPs then flew back seat with their students to train them in takeoff procedures, aircraft flying maneuvers, and formation flying.

Even though Gen Thao Ma instituted a program of English language instruction for the RLAF pilots, most of the students trained by Detachment 6 did not have proficient English language skills, requiring the use of interpreters during the training. Detachment 6 IPs reciprocated by learning key phrases in the Thai and Lao language, a necessity to transmit and give basic commands when flying with their students. In the weapons delivery phase, the student pilots learned the skills required to deliver ordnance (bombs and rockets) and the conduct of gunnery and strafing with machine guns.²³

While the IPs of Detachment 6 were training foreign pilots, the Water Pump crew chiefs, maintenance personnel, and armament personnel did their part to train RLAF noncommissioned officers (NCO) and enlisted support personnel (and to keep the aircraft running). Between 10 July 1965 and 20 May 1966, A1C Oscar O. Lima served in Detachment 6 as one of the maintenance instructors for the AT-28 and performed additional duties as the U-10 crew chief.

In 1966 Detachment 6 was commanded by Lt Col Benjamin M. Washburn. Airman Lima's immediate supervisor, TSgt Robert B. Epling, the line chief for Detachment 6, noted in Lima's official duty report the challenges faced during the training of foreign students, "Airman Lima graduated two classes of students, which prior to being assigned to this organization, had no previous experience in aircraft maintenance. Furthermore these students could not read, write, or speak the English language. Even with this language barrier, Airman Lima graduated his students with an 80% overall average grade. Only with an outstanding knowledge of the T-28 aircraft and his ability to instruct, could such an achievement be accomplished."²⁴

Like all small special operations forces (SOF) units working in small, dedicated detachments, members are often required to wear

more than one hat. Lima also heartily supported the Detachment 6 civic action program, assisting the medical personnel in the treatment of their assigned patients and pitching in to help with air resupply drops. He used his mechanical skills to help maintain the medical vehicles.

Training the Hmong

Gen Vang Pao was invited to the United States in 1963. One of his visits included a tour of the 1st ACW at Hurlburt. It was during this visit he expressed his desire to have Hmong as pilots for the T-28s. Not only would this contribute to the war effort in Laos, it would also be a source of pride for his people. The decision was made to support him, and soon Hmong pilot training was added to Project Water Pump's tasks. Detachment 6 would ultimately train nineteen Hmong pilots over a series of five class iterations. Their call sign became *Chaophakaow*, meaning "Lord White Buddha."²⁵

The Hmong pilots presented a host of challenges to Detachment 6. Very few had formal education, and they came from a culture with little or no understanding of technical issues. Another cultural factor was the adherence to the Buddhist philosophy of not taking another life, which had to be overcome. Local monks were used to bless aircraft before flight, and flight theory understanding was often just replaced by the IPs instructing the following: just do this action and Buddha will make it work. Training the Hmong required a pointee-talkie methodology and a repetitious series of "do as I do" forms of instruction (again, through interpreters).

The size and stature of the Hmong pilots became a problem—they were shorter than other pilots attending the course. Water Pump personnel ingeniously solved the problem with a local fix: 2 x 4 blocks of wood were attached to the aircraft pedals so the Hmong could reach them. To see out of the windows, Hmong-piloted aircraft were supplied with large pillows for them to sit on.²⁶

Since the reading of flight manuals could not be accomplished by many of the Hmong students, the IPs developed basic, crude checklists—in simple phrases—in order to get the student through preflight check-up and preparations for flight: engine start-up, taxiing, followed by takeoff. In flight, the IPs instructed their students through touch and feel of the control stick and the pedals, augmented with one- or two-word commands they had memorized to guide the student

pilot. Without a doubt, there was great relief among the Americans when student pilots conducted a successful solo flight. The process would be repeated for the weapons phase.

Capt Donald R. Moody was one of the IPs in Project Water Pump. He describes the experience of training the Hmong T-28 pilots as follows:

Each lesson was usually initiated with a demonstration and practice of the element to be learned for the day. One hoped the student remembers some of the things covered in the briefing. It was smart to have written down some very important phrases needed to get your student up and down; such as go straight, turn left, turn right, very good, very bad, and we go home now. Sometimes one wondered why, but it seemed to work. The pace was fast and the student pilots were eager to learn, and when a new pilot soloed it made the IP and the rest of the group very proud of this accomplishment. In the weapons delivery phase, one was never sure the student really knew what he was doing or how to use the gun sight. Somehow in all this effort, the airspeed, altitude, and all of the parameters miraculously crossed. I don't know how, but the bomb, rocket or .50 cal arrived in close proximity of the desired impact point. Six months passed away too quickly and one always wondered; is he ready for combat?²⁷

Captain Moody completed his duties as an IP on Detachment 6 and was ordered to the AOC at Luang Prabang as a Project 404 officer. Hmong pilots would go on to fly for the remainder of the war. Over 75 percent of these pilots would be killed in combat or through aircraft accidents.

Detachment 6 in Combat

Although later forbidden to fly combat sorties into Laos based on several incidents when American military pilots might have been downed and captured, some of the Air Commando pilots assigned to Project Water Pump surreptitiously flew ground attack missions into Laos. At first they were just restricted by the ambassador to ensure only one Air Commando pilot was in a T-28, vice two, to minimize loss.

As combat advisors, they understood the imperative of being able to operate alongside those they were training and advising. Additionally, they needed understanding of the environment and requirements of combat, thus ensuring the credibility of their training effort.

On 6 June 1964, Navy lieutenant Charles Klussman was flying his carrier-launched RF-8A on a reconnaissance flight and was shot down. Air America pilots immediately reacted and flew to the incident site with fixed-wing cargo aircraft, awaiting the arrival of an

H-34 helicopter to affect the rescue. Enemy ground fire was intense and armed escort aircraft were required—three AT-28s manned by Air Commandos launched and flew in support of the mission. Due to intense fires from the enemy, the SAR was cancelled, requiring an additional sortie the next day when Water Pump aircraft and pilots flew again. This action would be the impetus for the future positioning of USAF and Air Commando SAR assets within Laos.²⁸

On 19 July 1964, during Operation Triangle, Major Cochran, the Detachment 6 commander, flew as an aerial observer and on-scene air coordinator for his Thai T-28 Firefly pilots. They were bombing Pathet Lao forces and servicing targets ahead of the RLG advance south of Luang Prabang. (Cochran circled the front lines in a borrowed Aero Commander 560.)²⁹

Maj Gen Richard Secord, USAF, retired, was one of the Air Commandos who pushed the rule on Americans flying in combat. While commanding the 4802nd JLD as a major, Secord availed himself of Detachment 6's AT-28 assets to get in combat flying time:

When I could get a chance, I flew T-28s with Water Pump, flying combat missions into Laos. Spider Ramsey was there; I flew under call sign Tiger 96. I was the commander of the 4802nd JLD.

I left in the fall of '68, assigned back to SOF commanded by Brig Gen Robert L. Cardenas at Eglin Main Field. The Special Warfare Center had become SOF; I was the assistant director of operations under Heinie Aderholt (he was a lieutenant colonel and I was a major). Heinie had a technique of keeping a crowd of backroom operators, his own guys, around him. He got fired over the 1st public demonstration of the AC-130. Anyway, Heinie ordered me to replace Lt Col Howard Harley, the commander of 404 in Laos. I commanded that project for four or five months. Tyrrell was the air attaché at the time I was back in Laos. Don Moody was the AOC commander at Luang Prabang.

We had a great Agency case officer for contact up there—codenamed the "Mule". He was a super CO [case officer], the head of MR-II operations. I went up with a three-ship T-28 formation to fly CAS for them (which was prohibited!). I was left wing ship, a lieutenant was in the lead ship, and Don Moody was right ship in an arrow formation. We rolled in and were directed to attack, "Go, bomb the #*&! out of them, then strafe!" Tyrrell found out about it and raised the issue to higher.³⁰

Under pressure from the air attaché, who got his marching orders from the ambassador, Col Robert L. F. Tyrrell passed on the ambassador's intent on the matter: the practice of US military and sheep-dipped civilian pilots flying in combat was highly frowned upon. Detachment

6 pilots were told to knock it off. It was feared that a downed US pilot inside Laos would set off an international incident.

Effectiveness of Project Water Pump

The goal of Project Water Pump was to develop a Lao AT-28 strike capability and provide a form of offensive airpower for Laos. The results of the efforts of Detachment 6 were evident in the seasonal campaigns of the RLG against the Pathet Lao/NVA during 1964 and 1965. Both enemy offenses were blunted by the introduction of attack T-28 fighter aircraft conducting reconnaissance, interdiction, and CAS.

Prior to the implementation of Project Water Pump (April 1964), two-thirds of the seventy-six aircraft belonging to the RLAF (provided courtesy of the US MAP) consisted of transport and utility aircraft, and helicopters. There were only six T-28s available for combat operations; however, there were fourteen RLAF T-28 pilots. As identified by Capt Thomas R. Knox in his Corona Harvest report on “Water Pump, 1964–1965,” much of the additional capability afforded by the introduction of T-28 operations into the combat zone was inefficiently used. Lt Col Drexel B. Cochran, first commander of Water Pump, stated, “Up to this point the RLAF had been ineffective, averaging three combat sorties or less per assigned aircraft per month in the preceding six months. Most of the combat missions were armed reconnaissance sorties using machine guns and rockets only. There was no identifiable pattern of planned interdiction operations.”³¹

However, Lao and Thai T-28 pilots trained through Water Pump were available for a major RLG military offensive to defend Moung Soui, regain control of Route 13 between Luang Prabang and Vientiane, and defeat Pathet Lao forces at the intersection of Route 13 and Route 7, at Moung Kassy. The Thai pilots of the B-Team, the Fireflies, were the first contingent from Water Pump available for RLG use. Noted by one of the air attaché officers was the pressing need to also get them into combat: “You should have seen the way we trained them [the Lao pilots]. The WATERPUMP birds were a different model than the Lao had been flying, with a different cockpit configuration. We took four pilots and piled them into the airplane after giving them a basic ground briefing. Then we all flew to Vientiane, and that afternoon they dropped the first bombs on the PDJ.”³²

Operation Triangle began in May. This required ambassadorial release for use of 100 lb. and 500 lb. bombs, which occurred on 17 May. Five Water Pump personnel of Detachment 6 deployed to Wattay Airport to assist in the arming and loading of the 500 lb. bombs.³³ American air liaison officers (assistant attachés) and USAF communication teams supported the three-pronged ground thrust, serving as forward air guides (FAG)/air liaison officers. This required a secret buildup of USAF and Army personnel to provide eleven more advisors into the air attaché and Army attaché's offices. This addition in force strength remained secret. The added manpower would not be accredited against the total number of US personnel authorized to serve in Laos, counted in by the International Control Mission.³⁴

Through June and July 1964, RLAFF T-28s, along with Thai-piloted T-28s, flew more than 1700 sorties in support of the operation, keeping an average of twenty-five to thirty aircraft in flying status.³⁵

Operation Triangle was a huge success for the combined forces of the FAR and the Neutralists, as well as a significant accomplishment for the RLAFF. Lieutenant Colonel Cochran reflected on this in an interview given later in his career: "It was a tremendous effort and in something like two weeks from inception we had gained back a real sizeable chunk of real estate for the first time in the history of Laos operations. And again we were credited, of course, to the T-28 effort being 99% of it."³⁶

Ambassador Unger was very pleased with the 1964 stabilization of the military situation in Laos, crediting the RLAFF in achieving this effect: "T-28s have proved to be a decisive factor in recent military operations. They have carried out air operations to destroy Pathet Lao bases, interdict supply lines, provide close support for ground operations and provide visual and photo recce."³⁷

As further proof of the effectiveness of Project Water Pump's training program, T-28s successfully supported RLG offensive operations during the 1965 campaign season. The RLG conducted three large, geographically separated operations that year. The first occurred in MR-II to push the Pathet Lao off the PDJ and to conduct spoiling attacks into Sam Neua Province using the Hmong guerrillas; the second operation was conducted northwest of Dong Hene, in the panhandle region (MR-III). The final push was conducted southwest of Attopeu, in MR-IV. Although this appeared to be an ambitious goal for the FAR/FAN and Vang Pao's forces, any anxiety about the capability

to do damage to the enemy was dampened with the now successful understanding of how to apply RLAFF “airpower.”

In Sam Neua Province, interdiction and CAS exacted a heavy toll on NVA troops; T-28s operated in day-long operations. In the panhandle, T-28 strikes were responsible for destroying large formations of Pathet Lao and for saving Thakhek government forces from being cut off by the Pathet Lao. “On the basis of efforts such as this, US Ambassador William Sullivan described close air support as the single factor enabling the FAR to regain control of the situation.”³⁸

In Attapeu, six Pakse-based T-28s supported RLA operations conducted both north and south of the Sekong River, successfully pushing the Pathet Lao north of the Bolovens Plateau and east away from the city. The area remained quiet for the remainder of the year.

The largest effect from the addition of an offensive strike capability in the RLAFF (and with its Thai “mercenary” pilots flying in support) was to force the NVA and Pathet Lao to change their tactics, consuming more of their effort and time to organize for combat. The added effect of the T-28s on the battlefield forced the enemy to burrow underground, hide supplies in caves, and limit their truck and unit movements to nighttime. It also forced the enemy to employ more anti-aircraft assets into Laos, both good and bad. Enemy communist prisoners noted their forces were “terrorized” by T-28 strikes.³⁹

The work of Detachment 6 paid off in huge dividends. Although no one believed the introduction of offensive airpower alone would solve the conflict, it was impressive and allowed the RLAFF to achieve almost 4500 sorties in 1965. Captain Knox noted the achievements of Detachment 6 in his January 1970 Corona Harvest report on Project Water Pump: “In both the short- and the long-range view, this small group of dedicated USAF Special Air Warfare experts have contributed in large measure to maintaining the independence and neutrality of Laos.”⁴⁰

Water Pump was also noted for its civic action initiative. Detachment 6 medics—when not required to be on official duty time—began a small civic action program to administer medical aid to the local populace. This program would later expand to a much larger initiative involving other US civilians and military personnel from the surrounding community and began to cover a wider area of Thailand. One of its crowning achievements was the construction of the first RLAFF hospital in Savannakhet.⁴¹

In 1965 one captain and two NCOs from Detachment 6 were sent north and assigned to the airfield at Luang Prabang to conduct AOC

duties.⁴² As more AOCs opened up under Project 404 in 1966 (at Long Tieng Site 20-A and Savannakhet), officers and line personnel were removed from Water Pump to man those positions.

In 1966 the Butterfly forward air controllers (FAC) and then their replacement, the Raven FACs, were attached to Water Pump. The Air Commandos supported Project 404 with Water Pump assets till the end of the war. This included the introduction of combat control teams to the theater of war and the running of FAG/FAC programs for Thai and Lao personnel.

In June 1966 Detachment 6 was folded into the 606th Air Commando Squadron. Along with other added squadrons, the force eventually grew into the 56th ACW in 1967.⁴³ This was the same year the training of Air America civilian pilots was phased out. Under the 606th Special Operations Squadron, Detachment 6 became Detachment 1. On 15 September 1967, Detachment 1 was transferred from the 606th to the 56th ACW.

In January 1969 Detachment 1 increased Project Water Pump's student load from twelve to eighteen pilot trainees. By the summer, Water Pump IPs were authorized to conduct two live airstrikes into Laos with their students, flying on the weekends to accomplish this. In February of that year, Air Commandos stateside were attached TDY to Detachment 1 to conduct the RLAf C-47 MTT, which lasted through four iterations. The RLAf MTT at Udorn was modified to begin training of the RLAf AC-47 program, graduating its first class in August 1969 (pilots, crew, and gunners).

The program was expanded in 1970 to train RTAF T-28 pilots. Project Water Pump continued to train Lao and Thai pilots until 1974.

The Final Years

In February 1973, the cease-fire went into effect (as a result of the Paris Peace talks). On 1 April, Water Pump pilot training for the RLAf shifted from Udorn to Savannakhet, with the Lao using their own instructor pilots. Water Pump was renamed as the Training and Liaison Detachment in Thailand with the mission to conduct advanced training only.

When the MAAG Laos was reinstated in Vientiane under Maj Gen Richard Trefry, Project 404 and the Water Pump detachment moved under his control. As per the Geneva Agreement, the Ravens and the

Water Pump detachment closed operations in support of Laos. With the takeover of the Laotian government in 1975 by the communists, Water Pump received a new mission: under the aegis of the JUSMAGTHAI, Water Pump began a FID to train pilots for action against the Khmer regime in Cambodia.

Water Pump is remembered by the Air Commandos as one of the most successful FID programs conducted through the MAP.

Notes

1. Castle, *At War in the Shadow of Vietnam*, 50–54.
2. *Ibid.*, 60–61.
3. Sananikone, *Royal Lao Army and US Army*, 114.
4. *Ibid.*, 115.
5. *Ibid.*, 62–63.
6. *Ibid.*, 63–65.
7. Webb, *Secret War*, 129–30.
8. Castle, *At War in the Shadow of Vietnam*, 65–66.
9. Webb, *Secret War*, 134.
10. Haas, *Apollo's Warriors*, 181.
11. Webb, *Secret War*, 142.
12. Haas, *Air Commando*, 48–49.
13. Wiren, interview.
14. *Ibid.*
15. *Ibid.*
16. *Ibid.*
17. Webb, *Secret War*, 145.
18. Wiren, interview.
19. *Ibid.*
20. Haas, *Apollo's Warriors*, 180.
21. *Ibid.*, 181.
22. Conboy and Morrison, *Shadow War*, 110.
23. Webb, *Secret War*, 6.
24. Official Duty Report, Lima.
25. Haas, *Air Commando*, 50.
26. Haas, *Apollo's Warriors*, 182–83.
27. Webb, *Secret War*, 7.
28. *Ibid.*, 146–47. Lt Charles Klusmann was not rescued and became a prisoner of war of the Pathet Lao.
29. Conboy and Morrison, *Shadow War*, 112.
30. Secord, interview.
31. Knox, *Waterpump*, 6.
32. Pratt, *The Royal Laotian Air Force*, 17.
33. Conboy and Morrison, *Shadow War*, 109.
34. *Ibid.*, 111.

35. Knox, *Waterpump*, 15.
36. Ibid., 16.
37. Ibid., 20.
38. Ibid., 17.
39. Ibid., 19.
40. Ibid., 21.
41. Haas, *Apollo's Warriors*, 188.
42. Conboy and Morrison, *Shadow War*, 137.
43. Haas, *Air Commando*, 51.

Chapter 5

Controlling Airstrikes with Laotian Forces

The Butterfly Concept

An ill-defined group of US Air Force and Army personnel who happened to be on the ground in the vicinity of air strikes, had radio contact with strike aircraft, and were able to give some information concerning target location. The strike aircraft used during this early period were from the RLAF or Air America. As USAF interest and commitments in BARREL ROLL [and STEEL TIGER] increased, an improved system was gradually developed.

—Project CHECO report “Air Operations in Thailand 1966,” HQ PACAF, 10 August 1966

The Geneva Accords of 1962 on the neutrality of Laos effectively prohibited the use of American airpower inside Laos. Prior to the implementation of Operations Barrel Roll and Steel Tiger in 1964 and 1965, offensive airpower was first delivered by Royal Lao Air Force (RLAF) T-6 aircraft, followed by its T-28s and the Thai T-28s. Up to the fall of 1964, the use of American airpower was limited to armed reconnaissance and electronic surveillance missions. As necessary, US strike aircraft were allowed to target North Vietnamese Army (NVA) and Pathet Lao anti-aircraft assets if they threatened these operations.

For the most part, offensive air operations in Laos were directed to support ground operations when troops were in contact—troops-in-contact (TIC). There was neither an effective air control system nor a single air manager. The RLAF was subordinate to the *Armée Nationale Laotienne* (ANL, Lao National Army) through the regional ground commanders—the RLAF was not an independent command.

Offensive air has as its first priority the destruction and neutralization of an enemy's air force to allow for freedom of maneuver. Since the airspace over Laos was not contested by the North Vietnamese Air Force (the Pathet Lao had no offensive air capability), the most useful strategic role for RLAF airpower in a counterinsurgency

(COIN) environment should have been interdiction of enemy supplies and material and denial of sanctuary and base areas. However, the ambassador controlled the use of bombs needed by the RLAF through the Military Assistance Program. After 1962, the release for use of bombs by the RLAF occurred only in dire situations when the ANL faced imminent defeat during tactical battles. Although bombs were stored in Laos, the fuzes for the bombs were held in Thailand—only to be released upon permission of the American ambassador. By March 1966, Maj Bill Keeler, Air Operations Center (AOC) commander at Wattay, at least had control over the fuzes. The task at hand was in support to ground forces, using only machine guns and rockets on RLAF aircraft. T-6s were not normally configured to carry bombs, but with the introduction of T-28 aircraft, the capability now existed.

The air control system prior to 1964 was crude. TIC had two choices for deep fires beyond their front lines: organic artillery and the RLAF (aerial artillery, so to speak). For *Forces Armées Royales* (FAR, Royal Armed Forces) and Hmong artillery, forward observers (FO) who could see the target were used to radio back to the gun line and direct fires. The artillery FO also became an aerial FO with the availability of aircraft. This system was eventually performed through the use of O-1s assigned to the RLAF; however, in the early years of Laotian close air support (CAS) it was most often performed by civilian contract air—Air America and Continental Air Services, Incorporated (CASI). Flying in Helio Couriers (U-10s) or the Pilatus PC-6A Turbo-Porter (short takeoff and landing aircraft), agency-sponsored pilots flew Central Intelligence Agency (CIA) operatives and native forces over the battlefield to direct aerial-delivered ordnance (early T-6s and T-28s).

If the intended target could be seen, then a ground forward air guide (FAG) could direct strike aircraft. Per the ambassador's rules of engagement (ROE), Air America and CASI aircraft had been prohibited from carrying ordnance of any kind, keeping the pretension of their "civilian" role within Laos. This meant ground controllers had the responsibility of guiding the aircraft to the target respective to the location of friendly forces. Smoke signals marked friendly front lines, and strike aircraft were talked onto the target using directions from this visual reference. Unfortunately, this method also marked friendly positions for enemy fires. Target panels and large arrows, pointing out the direction of the enemy, were alternative methods. Many of the civilian pilots soon began to carry smoke grenades—not considered

in their minds as the use of “ordnance”—to mark enemy positions. Another method consisted of T-28 pilots talking amongst themselves and then conducting self-directed strikes when in the absence of FAGs and aerial observers.

Even within this method for delivering marking smoke, there were some imposing problems: (1) the forests and mountains of Laos often prevented line of sight between artillery FOs and FAGs; (2) CIA-controlled aircraft were not equipped with compatible ground radios (FM PRC-25s) required to communicate with maneuver forces; and (3) there were no radars or beacons to guide aircraft into the target area. Targeting was ad hoc, controlled by the commander of the RLAF, with directions also given by the US ambassadors and the air attachés (AIRA), preventing unity of command for offensive airpower. At its worst, ordnance disappeared in triple-canopy forest without any knowledge of whether the strike was effective or not. The use of battle damage assessment (BDA) to restrike or plan future missions was almost nonexistent. Reports of the effects of air-delivered ordnance were mostly anecdotal, inflated, or guesstimates.

The worst outcomes of badly applied offensive airpower, as well as artillery-delivered fires, were fratricide and collateral damage; both could delegitimize the political goals of the Royal Lao Government (RLG).

Need for an Air Ground Operations System

However effective or ineffective the air control system was in Laos, innovative and courageous people made it work as best they could. When American jet aircraft entered the war in Laos as early as December 1964 under Operation Barrel Roll, it was apparent something would have to change in the air control system. But how could this be solved without the introduction of a USAF air ground operations system? The ambassador had a dilemma and turned to the Air Commandos of the Water Pump detachment to solve the problem.

As noted previously, the Laotian application of airpower focused on CAS and armed reconnaissance (as a form of interdiction). Thus, air operations were in support of tactical targeting vice strategic targeting. What Laos needed was an effective air control system to gain the benefits of their growing COIN airpower capability. The “model” for RLAF operations would eventually be patterned on the Tactical

Air Control System, primarily developed by the USAF through trial and error during the Korean War.

Two philosophies on the application of airpower emerged from the conflict in Korea. For ground maneuvers, commanders preferred access to tactical air through the use of a Tactical Air Control Party (TACP), responsive to their needs within fifteen minutes. This required a decentralization of tactical air assets with control over their use by the ground maneuver commander. This was the position primarily of the US Marine Corps and the US Army.

Conversely, the USAF felt artillery should fill the immediate response role for ground forces because frittering away airpower was more expensive than an artillery round and detracted from the prevailing airpower theory—the use of air assets to destroy enemy air forces, strike strategic targets, and conduct battlefield interdiction to isolate enemy forces from close combat with United Nations allied forces. After all, why wait for the enemy to even get close with friendlies and engage in attritional, close combat when they could be halted prior to the engagement?

The coordination measure to control the separation of artillery effects and air-delivered ordnance was the designation of the bomblines. This control measure gave responsibility to the ground forces for artillery fires up to the bomblines, with the USAF responsible for deeper targets and interdiction missions. However, there was often a lack of artillery firepower; consequently, some CAS was required to service targets. For close control in Korea, the USAF used a ground forward air controller (FAC)—a rated, experienced party with air-to-ground communications capability. These elements were called TACPs. For effective use of airpower in support of the ground commander each major ground element was provided an air liaison officer (ALO) to provide advice.

Where enemy targets existed outside the range of vision for artillery FOs and TACPs, the USAF preferred to employ an airborne tactical air coordinator (A-TAC). Airborne artillery FOs could also function in any gaps.

The role of the A-TACs in Korea—soon to be named FACs—was initially filled by an innovative unit known as the “Mosquitoes,” operating in unarmed T-6 trainer aircraft. A system soon evolved whereby a ground commander could request support from an airborne FAC, who relayed the request through an airborne control aircraft. This request was in turn forwarded to a joint operational center,

which then allocated sorties. This model was soon codified into USAF doctrine.¹

The role of the airborne FAC was to conduct visual reconnaissance (VR), locate targets, coordinate air-ground strike operations, and match aircraft to interdiction missions. Additionally, the role of all controllers, whether ground or air, was to provide air traffic control, recommend use of various types of ordnance, provide for target marking, and conduct BDA. BDA was important to evaluate the level of destruction of the target in order to ascertain if any target required additional servicing—if not, aircraft could be utilized on other targets, increasing the efficiency of the air assets. In Laos, credible BDA was often hard to determine because much of the ordnance disappeared underneath the canopy of the jungle, limiting what could be seen. The most effective BDA was gleaned from actual reconnaissance of the target after an aerial strike, from both the aerial observer and the ground element requesting the strike on the target.² (The Studies and Observation Group—code name for elite special operations forces trained to operate behind enemy lines—would be later be used to reconnoiter and ascertain BDA results on the Ho Chi Minh Trail ([HCMT]) area following B-52 strikes.)

Airborne FACs were assigned to major maneuver elements and established working relationships to improve the application of airpower. They were also assigned to a specific region of the battlefield, allowing them over time to have familiarity with the terrain and navigation hazards, as well as a day-to-day understanding of the battle. Unfortunately, the airborne FAC capability deteriorated after the Korean War with the USAF advocating for the use of airpower to conduct strategic targeting, not wasted on the tactical battlefield. The airborne FAC concept was revived during the Vietnam War.

Tactical Air Control System

Procedures for an effective air control system were also developed and implemented during the Korean War and would form the template, although modified, for airpower application during insurgency and COIN. Several measures and procedures were used in the makeup of the system but implementation remained elusive during the war in Laos:

1. *A single air manager.* In Laos, the prime minister, the ambassador, the AIRA, and to some extent covert operatives on the ground all exercised the capability to direct airpower as needed. This also included the commander of the RLAF, Gen Thao Ma Manosith, who at times decentralized decision making to his regional commanders.
2. *Some form of joint, operational command to coordinate air activities amongst the various services—the Joint Operational Command.* Either because of politics or interservice rivalry, it was not until the late 1960s when the Air Commandos persuaded the Laotian Ministry of Defense to implement this system.
3. *Sufficient, positive control of air assets employed against enemy forces.* This system integrated procedures to control aircraft by FOs, ground FAGs, TACPs, FACs, and airborne controllers. In time, sufficient Lao and Thai FAGs and FACs were trained to perform this role when employing their respective national aircraft. There was great trepidation for indigenous forces to have any control over US air assets, but in time Air Commandos trained FAGs to control US aircraft during emergency situations, particularly in the use of AC-47 gunships.
4. *The use of air liaison officers, AOCs at key airfields, and the employment of direct air support centers (DASC) for regional control of air assets.* There would never be a DASC function prior to 1966; various assistant AIRAs and Air Commandos tried to improvise and fill this role.

Other elements of an effective air control system are as follows: (1) standardized procedures for air-ground operations, (2) effective communications, (3) a targeting and air allocation system, (4) navigation aids (radar and beacons), and (5) procedures to generate high sortie rates—given sufficient aircraft and pilots, along with mechanics and a good logistics capability.

In 1950, the US system was institutionalized with the opening of the Air Ground Operations School (AGOS) at Pope AFB, North Carolina. The school was later moved to the Highland Pines Inn in nearby Pinehurst, North Carolina, but when a fire destroyed the building, the Air Force moved the school to Keesler AFB, Mississippi. The AGOS permanently moved to the Special Air Warfare Center (SAWC) at Hurlburt Field, Florida in 1962.³

Due to political and diplomatic constraints, a fully capable air control system was impossible to implement in Laos. Given that the USAF could not move forces inside Laos—and the ambassador was, in effect, in charge of military operations throughout the country—something was needed to achieve a more effective use of airpower application internal to Laos. The ambassador turned to the only unit capable of solving the problem, the Air Commandos of Project Water Pump, Detachment 6.

Ground Control

In the absence of an airborne FAC, the ability to control strike air assets from the ground resides in the capabilities of service and paramilitary personnel trained specifically to perform that function. This requirement evolved from the need to improve the accuracy of large-scale airborne operations during World War II. Initially, airborne and glider-borne forces depended on pilots and navigators to calculate drop times. Hopefully, drop zones (DZ) and landing zones (LZ) were visually acquired, but if not, the signal to drop paratroopers or cut loose gliders was based on time-distance calculations of the flight and adjustments for wind and height. After the disastrous airborne operation in Italy where several planes were lost and paratroopers were scattered across the countryside, the US Army established pathfinder units to improve performance.

Select paratroopers were chosen as pathfinders and trained to drop ahead of the airborne or glider-borne armada into DZs and LZs and to mark the fields with signal lights, smoke, and visual devices. As the concept evolved, these units were also issued radios to talk with the lead aircraft. The US Army Air Corps also established units to go even further with the concept, known as air control teams (ACT). ACTs were capable of conducting air traffic control on airheads, establishing ground-to-air communications, and emplacing electronic navigational aids.

Both the pathfinders and the ACTs were assigned to troop carrier squadrons. Because the teams often found themselves deep in enemy territory, additional training was required in parachute techniques, communications training, and survival tactics. In time, the ACTs were renamed combat control teams, mirroring the name given to the ground combat team maneuver formations.

To avoid duplication, exactly who would perform the ground control function was debated between the US Army and the USAF. Initial agreements led to a decision to make this a USAF responsibility; however, when the Air Force delayed implementation, the US Army retained its pathfinder function. This issue was not resolved, and although slow to develop the capability, the USAF had great concern over allowing ground forces to control its aircraft. Thus, the first postwar USAF combat controller (CCT) team was created in 1953. CCTs were assigned to aerial port squadrons to support the troop carrier squadrons.

The primary purpose of the CCT team was to provide air-to-ground communications, followed by air traffic control. CCTs were airborne qualified, trained in air traffic control schools, conducted on-the-job training for operation of equipment—visual aids, beacons, and other marking and signaling techniques—and attended survival courses. Over time, CCTs would also train in additional infiltration methods such as high-altitude low-opening parachute insertion, small boat insertion, and SCUBA. CCT teams initially were manned with twelve operators; however, as additional airfield and DZ equipment was added to their function, the manning grew to a twenty-four man team.

Twenty-five percent of CCTs were Air Force specialty code P304X4, ground radio maintainers. In shorthand they were called “304s.” The 304s maintained the ultrahigh frequency (UHF)-AM, very high frequency (VHF)-AM, and high frequency–single sideband (HF-SSB) model radios, and were proficient in ground tactical radios such as the PRC-10 and PRC-25. For large airstrip operations, a combination of radios, including the MRC-94, was installed on jeeps and other vehicles.

The twenty-four man CCT team of the period consisted of: two P272XOD air traffic officers, six P304X4 ground radio maintainers, and sixteen P272X0 air traffic controllers. In Vietnam the ATC function was handled by the 272s, while the long-haul HF-SSB and ground tactical radios team communications were handled by the 304s. In Laos, it was a different story.⁴

With the establishment of the Jungle Jim program, conventional CCT teams transferred into the 1st Air Commando Wing (ACW) with an additional mission of performing ground control for COIN missions. In this role, the task to perform ground or air FAC duties

for Air Commando aircraft in unconventional warfare scenarios became evident.

The first use of CCT FACs was on Operation Farm Gate, when Detachment 2 (later 2A) of the 1st ACW supported Air Commando operations at Bien Hoa, in the Republic of Vietnam. Special operations CCT teams supported various US Army Special Forces (SF) teams as both ground and air FACs, utilizing U-10 Helio Couriers.⁵

Regardless of country, combat arms, or parent service, those who conducted ground control of strike aircraft were called FAGs. Although work on the *Forward Air Guide Pamphlet* initially began on 12 December 1963, it would not become an official Tactical Air Command publication until 7 September 1967; nevertheless, it was used in Laos prior to its official publication. The pamphlet institutionalized the ability of Air Commando CCT teams to control strike aircraft only engaged in Air Commando strike operations; however, conditions in Laos necessitated the requirement for CCTs to control any type of strike aircraft, regardless of origin.

The pamphlet describes a FAG as “a trained observer operating with ground or air operational units in counterinsurgency operations, who from his position can guide aircraft in delivering ordnance on targets while the aircraft are engaged in close air support of friendly forces.”⁶ MSgt Charles L. “Charlie” Jones and Capt John O. “Jack” Teague, who would both become “Butterflies” in Laos, were instrumental in its development and first use.⁷

Controlling Airstrikes in Laos, 1964–67

Prior to 1964, T-28 strikes in Laos were controlled by American civilians, CIA case officers, and self-FACed by the Laotian pilots. Laotian trained ground artillery observers served as FAGs. In November 1963 Amb. Leonard Unger requested the introduction of increased COIN airpower to address the Pathet Lao aggression. His request was approved by the secretary of state and led to the deployment of Water Pump in 1964. An additional initiative would be increased training for RLAH H-34 and C-47 pilots.⁸

In May 1964 open fighting between the Neutralists and the Pathet Lao broke out on the *Plaine des Jarres (PDJ)* forcing Kong Le’s Neutralists to retreat westward to Moung Soui. Alarmed by the progress of the communist offensive, Ambassador Unger approved the release of

fuzes for the 100- and 500-lb. bombs stored in Laos for use by Laotian T-28 pilots.⁹

During this period, the RLAf only had six serviceable aircraft, stationed at Wattay Airport. To boost needed airpower for the fight in Military Region (MR)-II the Water Pump commander was ordered to transfer four of his training aircraft to the RLAf. Those aircraft were soon replaced at Udorn by T-28s in stock in South Vietnam.

As Water Pump began to provide trained pilots, they were added to the units to increase capabilities for more strike operations in Laos. Initially, the Air America T-28 pilots of the A-team and the Thai pilots of the B-team were used first, since it only required a short training period to get them into the fight. Water Pump instructor pilots (IP) pilots also flew as FACs during this period, presumably to keep their proficiency current as strike-qualified pilots.

On 18 May 1964, Navy reconnaissance aircraft from the Yankee Team, along with USAF reconnaissance aircraft, began armed reconnaissance flights over Laos. They were authorized to target enemy antiaircraft artillery (AAA) systems in self-defense; if shot down, only Air America and the Water Pump assets were available to conduct search and rescue (SAR).

After a Navy RF-8 was shot down on 6 June, followed by the loss of another Navy F-8 the following day, F-100s conducted the first offensive strike by US aircraft on 9 June when they targeted enemy AAA positions at Xieng Khouang.

Shortly thereafter, American FAGs and FACs supported RLG forces during Operation Triangle in June. The operation was intended to retake the Route 7 and Route 13 junction at Sala Phou Koun that was currently held by Pathet Lao forces. The Laotian army maneuvered from three directions: one column pressing up Route 13 from south of the junction, one column driving south from Luang Prabang, and the Neutralists moving westward from Mounng Soui towards the junction. An Army SF officer serving as an assistant Army attaché was attached to the column south of the junction to serve as a FAG, along with an Air Commando radioman. Overhead, pilots from Water Pump served as airborne FACs. Water Pump personnel also operated as FACs flying along with RLAf U-6 Beavers and U-17 aircraft. This could have possibly been Air Commando Capt Jim Wright, an intelligence officer, who was deployed by the Water Pump commander, Maj Drexel B. "Barney" Cochran, to work with Kong Le's Neutralist forces. In addition, Capt Joe Potter, a T-28 pilot, flew the King's RLAf

Aero Commander 660 and also flew with Air America pilots to control T-28 air strikes. Cochran himself FACed during the battle using his T-28. Ground target marking was crude; the FAR used a large, wooden arrow pointed towards suspected enemy positions.¹⁰

By December of 1964, the air picture had improved with an increased capability to apply air assets. Airpower strike assets now consisted of the following: (1) forty T-28 strike aircraft and nineteen Laotian pilots, (2) twenty Thai-piloted T-28s, (3) Air America conducting SAR, and (4) the Water Pump IP and Air America A-Team pilots.

Due to the shortage of qualified FACs and the sole reliance on control of airstrikes by non-US personnel and ill-trained Laotian forces, Air Commandos filled the gap to replace civilians who previously controlled air strikes in MR-II with Vang Pao's forces. US military FACs now consisted of intelligence officers, enlisted personnel, and both nonrated and rated Air Commandos who were sent north on temporary duty (TDY) to control T-28s. They were taken out of hide from either the Water Pump detachment or the US Air Attaché Office.

Captains Robert T. "Bob" Schneidenbach (C-47 navigator), Gus Albrecht (T-28 pilot), Joe Potter (T-28 pilot), and Jim Wright (intelligence officer) did some FAC/FAG work from the air and ground on an available basis. Combat control technicians Sgt John A. "Spider" Webb and Sgt Wayne Hoke were assigned to Water Pump with Captain Schneidenbach as their officer in charge.¹¹

They had several things in common. They were, for the most part, Air Commandos (some were CCTs), airborne qualified, and air traffic control- and AGOS-trained. They were readily available and had the skills to perform FAG and FAC duties, thus the "Butterfly"—an airborne FAC concept—was born.

As communist forces continued to make gains throughout 1964, it would not take long for the introduction of US jets to conduct interdiction missions that would require strike aircraft escort in the event of a crash or SAR incident. Operation Barrel Roll interdiction and strikes in northern Laos began in December of 1964; by 1965 these operations had grown to large-scale strikes. US airstrikes in Laos were authorized by Prime Minister Souvanna Phouma with the caveat they would remain undisclosed to the public.

With only an ad-hoc air control system in place, it was inevitable that incidents of collateral damage would occur during a lack of FACs or FAGs to control the growing number of US operations. Even as early as

October 1964, F-100s, F-105s, and RF-101s were performing interdiction strikes as part of the armed reconnaissance mission. The primary thrust for interdiction was along Route 7 and Route 6 near the PDJ, and farther south against portions of the HCMT in southern Laos.



Figure 5.1. Map of Barrel Roll and Steel Tiger interdiction areas in Laos, April 1965. (Reprinted from Jacob VanStaaeveren, *Interdiction in Southern Laos: The United States Air Force in Southeast Asia 1960–1968*, [Washington, DC: Center for Air Force History, 1993], 60.)

In April 1965, as the air war widened, the Royal Thai Government approved the launching of US aircraft stationed in Thailand to conduct operations in Laos. To facilitate control of the ever-expanding air effort, Laos was divided into two air efforts: Operations Barrel Roll (December 1964) in the north and Steel Tiger (April 1965) in the south.

Without sufficient US air controllers who were knowledgeable about conditions in Laos, collateral damage incidents began to mount. The first was known as the “Sam Neua incident” during a Barrel Roll mission. US jets attacked enemy 105 millimeter gun positions and trucks near the town of Sam Neua and hit some portions of the town by mistake. Any further Barrel Roll missions near Sam Neua were prohibited by Phouma. In response, Amb. William Sullivan limited strikes into Barrel Roll to only those approved by the embassy in Vientiane, with further approval needed from Washington, DC.

The next incident occurred in May 1965 in the town of Moung Phalane, situated on Route 9 in southern Laos. US jets mistakenly hit a Laotian army gun position near the town, wounding both civilians and Laotian army soldiers. In reaction, with pressure from both the prime minister of Laos and the RLAFF headquarters and concern about the lack of future support from Phouma for continued US air strikes, the ambassador suspended all strikes into Steel Tiger.

Capt John O. “Jack” Teague and Sgt Stanley M. Monnie

The first dedicated, full-time FACs to serve Gen Vang Pao and the CIA in MR-II in June 1965 were Captain Teague, a nonrated Air Commando CCT officer, and Sergeant Monnie, an Air Commando paramedic (PJ). Newly promoted Captain Teague was a USAF CCT (parachutist) assigned to the 1st ACW, Hurlburt Field, Florida. In early 1965, he was invited by his squadron commander, Lt Col William C. “Bill” Thomas, to volunteer for a clandestine assignment in Southeast Asia, location/duty classified secret at that time. Teague said yes.

They both served a six-month tour at Lima Site (LS)-36 (Nha Khang), where they wore civilian clothes and were issued with embassy identification (ID) cards as a cover story to conceal their status. Both of the Air Commandos conducted aerial FAC and ground FAC duties throughout MR-II, selecting targets and recommending ordnance for their daily USAF-assigned sorties.

Captain Teague was probably the first military service member to use the famous/infamous Armalite-15 automatic rifle in Laos. He was also the first to employ the rifle grenade launcher. Other than these “modern” weapons of war, most of his gear was dated. His two pair of shoes were parachutist steel-plated boots, great for parachuting but not for the incessant rain, humidity, and constant wear in northern Laos. His communication equipment was even more outdated: separate gear for radio contact with VHF-equipped T-28s (Bayside 990), UHF-equipped jets (PRC-41), old-time FM walkies for ground, and a HF-SSB back at his “headquarters” in LS-36, Nha Khang. Native food and sterilized water were sufficient for minimal daily needs.¹² Captain Teague and Sergeant Monnie conducted FAC duties while flying in Air America aircraft (usually H-34 helicopters), with US Army artillery FOs or Thai observers in their L-19s. Their primary duties were servicing targets on the *PDJ*, but they operated afield as far as the Sam Neua Province and with CIA agent Tony Poe in northwest Laos.

At the time of the two men’s tour, the system for nominating airstrikes consisted of target recommendations from either the CIA or Gen Vang Pao. There were Thai B-team FACs flying in T-28s, yet USAF jet strikes were restricted to the control of US air control coordinators only. In this case, to ensure an American was in the loop, Captain Teague and Sergeant Monnie served as go-betweens for indigenous FACs and US assets. Captain Teague used the call sign Cherokee, ultimately racking up forty aerial FAC missions during his tour. One of his most notable missions occurred during an attack on a refugee village by the Pathet Lao; he was able to call in airstrikes on the enemy, saving the villagers.

Captain Teague described his duties during an interview with Jan Churchill, author of *Classified Secret: Controlling Airstrikes in the Clandestine War in Laos*: “When I was directing airstrikes, it was not a classroom type-situation where you do this one and that type of thing. I selected targets along with Vang Pao. These did not have to be approved by Ambassador Sullivan. In some cases, I selected them. We had a code that we used to get airplanes to rendezvous with us.”¹³

During his six-month tour of duty, Captain Teague participated in fourteen targeted missions, two in the *PDJ*. These were the only airborne (back seat of an Air America aircraft) missions he had; both were exciting, but routine. He watched a lone F-4 take on and destroy an enemy AAA gun and directed a flight of four T-28s in attacking a

gun position at Ban Ban. The flight leader was Capt Glenn Duke, an Air Commando making his “swan flight” out of Udorn, Thailand (Operation Water Pump).

Capt Ramon A. Horinek

Air Commando FACs also directed airstrikes from the ground when not flying. Captain Horinek served in MR-II after Captain Teague’s departure (along with 2nd Lt Ronald “Ron” Wishart). His primary duty was coordinating between the embassy and the Vientiane AOC, Maj Stede Svendsen, for the conduct of the air war over northern Laos. Captain Horinek flew to LS-36 (Nha Khang) with his Air America pilot on 17 February 1966 in response to a heavy attack on the site by enemy forces. The RLG defending forces had lost contact with other friendly forces during the battle, so Captain Horinek used his radio to call airstrikes through a Thai FAC named Eagle, who was flying above in his T-28 to direct F-105s onto enemy troop and gun positions. He returned to LS-48A (Muong Heim) that evening after the success of the air strikes but turned around the next day to once again go out and support LS-36. Another day of heavy battle ensued, forcing the evacuation of the FAR from the site. During this engagement, Captain Horinek was able to personally capture a private from the NVA. This engagement was the first time Ambassador Sullivan released authority for the use of napalm in northeast Laos.

In time, the site was retaken by government forces. Captain Horinek once again found himself directing airstrikes during a series of enemy attacks in January 1967. This time, he operated overhead as Butterfly 44, directing A-1E airstrikes against a large group of retreating enemy forces, decimating them.¹⁴

By the third incident of fratricide—again in Steel Tiger—the embassy shut down all missions into the area on 1 October 1965. When they were conducting a strike on a bridge US aircraft accidentally strafed some civilian fishermen. After the dust settled, again with renewed opprobrium from Phouma, operations resumed in November 1965.

The incidents continued, causing the 2nd Air Division in Thailand (the precursor to the Seventh/Thirteenth Air Force Headquarters in Thailand) to issue a stern warning and admonish the air crews: “Air operations in Laos are extremely sensitive. It is absolutely imperative that your aircrews do not expend munitions outside of approved areas. . . . Continued violations will jeopardize US authority to attack enemy

forces before they can engage our ground forces. . . . There is no excuse for an attack outside an approved area.”¹⁵

If the ambassador wanted to continue air strikes and air support to the Laotians, it was imperative the air control procedures improved. As noted by Ambassador Sullivan, “My concerns about the air in Laos, and one central thing ‘significant’ to a story about the *Butterflies* involve the enormous gap between the high-tech capabilities of the US Air Force and the primitive, bucolic life of the Lao. The danger that careless—almost casual—use of air power without proper control (*i.e.*, that FACs could kill and maim innocent Lao) was always a paramount worry to me. And, I think it should always have been a proper concern to all Americans. That’s why *Butterflies* were important.”¹⁶

The 2nd Air Division and Thirteenth Air Force proposed the introduction of four ALO/FAC teams consisting of an airborne qualified, AGOS trained officer accompanied by an enlisted radio operator, for duties in northern Laos. One other requirement was both members of the team had to be qualified as combat control technicians. As an obvious choice, the requirement was handed to personnel assigned to the SAWC at Hurlburt Field, who began sending Air Commando CCTs for 179-day duty into Laos in late 1965. (CCTs sent directly by the command in Hurlburt Field were shut off by 1967; from then on, CCTs came from Detachment 1, 606th Air Commando Squadron (ACS), 56th Special Operations Wing.)

Air Commando FAG/FACs were placed under the command and control of the AIRA in Vientiane. The Air Commando teams adopted the call sign of Butterfly. The 2nd Air Division and Thirteenth Air Force recognized this relationship in a 21 September 1966 memorandum. It stated, “Butterfly is a FAC aircraft under direct control of the Ambassador to Laos. This headquarters cannot ‘direct’ Butterfly. Dogpatch (Airborne Command and Control Center) can only make ‘requests’ to Butterfly.”¹⁷

Air Commandos assigned to Project Water Pump—temporarily employed in northern Laos to direct operations in the Barrel Roll engagement area—were soon able to return to their duties in Udorn. Using the 23rd Tactical Air Support Squadron (TASS)—regular USAF pilots and O-1 FAC aircraft stationed at Nakhon Phanom Royal Thai Air Base (NKP)—the Seventh/Thirteenth Air Force in Thailand assumed responsibilities for Steel Tiger. 1st ACW 179-day augmentees to Thailand, along with Lao army officers, would often fly with the 23rd TASS using the call sign Gombey.

The story on the origin of the call sign Butterfly is interesting. SSgt James J. “Jim” Stanford explained the origin of the call sign Butterfly:

Why Butterfly? Well, it was a sort of parody on the labeling of USAF airmen/CCT in Southeast Asia who would visit bars downtown outside an air base. The bar girls would ask in broken, hackneyed English, “Where you been?” or “Where you go?” For security purposes we would never divulge any itinerary so would reply in kind, “We been here and we been there.” Or, “We been there and we been here,” never stating any name. The bar girl would say, “You flit around like a butterfly. You butterfly boy.” Ergo, *Butterfly* call sign sounded good. It stuck. MAJ Keeler, AOC commander, who did all his work from a T-28 from Vientiane, was *Butterfly* (no number used).¹⁸

For the most part, FAG/FACs operating in northern Laos flew primarily in support of Gen Vang Pao in MR-II, utilizing civilian aircraft of Air America. There was one FAC aircraft outfitted by the US embassy for use by the assistant AIRA when they flew missions. Another source of FACs was temporary duty of a 23rd TASS FAC with his O-1 when the combat situation increased in the north.

The Air Commandos also utilized RLAf and Thai assets, flying with rated pilots in their O-1s or as backseaters in T-28 aircraft. The rated Air Commando pilots assigned as AOC advisors to the RLAf also flew in RLAf assets or flew their own O-1s, borrowed from the Water Pump detachment.

Regardless of military status—enlisted, officer, rated or nonrated—Air Commandos conducted their duties to support TIC, conducted VR (“trolling for targets,” as said by one Butterfly) and conducted strike control.

Selected Butterfly Forward Air Controllers

2nd Lt Ronald “Ron” Wishart.

Lieutenant Wishart joined the Air Commandos as a CCT. Already airborne-qualified, he went to Keesler AFB in Biloxi, Mississippi, and took the air traffic control course. There were six Hurlburt CCTs in the class; Captain Teague was one of them. In November 1963, Wishart was assigned to the twenty-man CCT team at Hurlburt Field #9, Eglin AFB, Florida. The wing commander at the time was then Col Aderholt (promoted to the grade of brigadier general 31 May 1974).

The CCTs were in the 319th ACS, which was equipped with C-123s, U-10s, and C-47s.

Most CCTs were often either at Fort Bliss, Texas; on a TDY deployment overseas; or on support detail for military exercises. They ran training missions for aircrews, teaching them how to drop supplies and conduct short airfield operations. During this time, Lieutenant Wishart mingled with others at the Officer's Club "Happy Hour" and began hearing about Water Pump (although the security surrounding the operation was tight), and he knew he wanted to go on the operation.

From September through October 1965, Lieutenant Wishart trained aircrews at Forbes AFB, Kansas. The training consisted of dropping supplies and short airfield operations (AGOS subjects). While there he received a message to report back to Hurlburt; he was informed he had orders to Water Pump. After a few days of additional training on how to conduct air strikes, he picked up his TDY orders and flew to Bangkok. He flew in civilian clothes and carried a personal weapon. When he arrived in Udorn, he was surprised to find out he was going up-country to replace Captain Teague, with one day to prepare for the mission. He left all his military gear at Water Pump because he thought he would come back through Udorn when the tour up-country tour was over. It did not happen.

I went on to Vientiane and met with Ken Alnwick (my supervisor). I saw Dean Purin. I may have gotten around by Air America. We met at the AIRA office in the embassy compound. There were a couple of houses there to live in. I was in AIRA house #2. That is where I left my stuff when I went up-country, and I met Jack Teague again.

I flew up-country with Jack Teague, either with Air America or Continental Air Services. We went up first to Moung Soui; there was an Army detachment there, in Army uniform. Phou Khet, on the western edge of the *PDJ*, was the battlefield at the time. I was OJT'ed by Jack Teague as we directed airstrikes on that. Half the time we were at Moung Soui and half the time I was at LS-36, Nha Khang. The Agency guys assumed "Hog" Daniels and Mike Lynch were at LS-36. I met Vang Pao, also. He often had welcoming and departing parties and was big on drinking. The very first night I was there we had a *bacci*, tying strings around our wrists. Whenever you got back to Vientiane, we always brought back some White Horse Scotch.¹⁹

The CCTs lived in a mud building at Moung Soui; amenities were scarce. They had a shower made out of a barrel, with one minor inconvenience—the water was cold, especially in the winter months. A parachute tent with tables served as the dining hall, and American food was available, including C-rations. To make the crew more

comfortable, one of the sergeants assumed the duties of cook for the team. Lieutenant Wishart also served at Nha Khang, LS-36.

At Nha Khang I used an HF PRC-47. If I was in the air, I used a PRC-41 UHF radio and a civilian VHF. We were also required to provide weather reports twice a day, to the Air Attaché's office. We had code books for communications that we mainly used for times and coordinates. The missions were sent by HF to people on the ground—the time, location, and activity. If you went back to Vientiane, you could also pick up intelligence for missions. I directed strikes more from the ground than air while at Moug Soui. One night we got mortared—that was the only time. I was not out on the front lines in direct combat—I found out about what was going on by hearing the results from others. We controlled T-28s, A-1s, Navy and Air Force aircraft. I was *Eagle Control*; Jack was *Cherokee*. Most of our strikes were on Phou Khet and the PDJ.

The Jolly Greens were at Nha Khang, prepositioned during the day. I was the only CCT there. I flew FAC missions. Most of the time the Thai PARU had L-19s available. A Thai pilot would fly me. We got our missions from Gen Vang Pao's men or by radio or by messenger. I dropped out smoke grenades to mark targets. I also flew pretty often with Air America in U-10s or in a Porter with CASI.²⁰

Living at LS-36 was a bit more austere than at Moug Soui. The buildings were constructed from either empty ammo cases or empty barrels that had been flattened out; Lieutenant Wishart's hootch was a luxurious fifty feet long. There was a building where Wishart ate with Gen Vang Pao's staff. He noticed local people were always just wandering in and out of the place.

I worked up-country in civilian clothes; I had a pistol and an M-16. Many times you did not know who was who, and you didn't ask. You wouldn't even know if the guy telling you his name gave you his real name. I assumed that I worked with the Agency up-country. At the time I was CCTing; Water Pump did not have any CCTs in their detachments, that I knew of.

I was usually given missions within a fifty-kilometer radius. We also did visual recce for targets. There was anti-aircraft threat around. The targets we found were not very large, maybe some roads and bridges to bomb. There never really were good or great targets, maybe once in a while some truck yards or fuel dumps, so when we hit them we got some secondary explosions. The enemy up there was never that close to us and never close to the site when troops were in contact. We came back from our flights before nighttime and would try to get the BDA results to report on. Often with bombing, two to four bombs on a run, the first would hit vicinity of the target and the rest would miss and walk off the target. We got some ground fire; my aircraft was hit three times from ground fire.

We were alerted to support SAR missions several times. We were always looking but were never right at the scene. I remember one on the *PDJ* and some others at Sam Neua.

I was under the C2 of the air attaché. One night while I was at LS-36, we got hit with mortars; some of the locals were wounded.

I saw a few PSYOP leaflets on the ground; somebody pointed them out to me.²¹

Lieutenant Wishart served his tour on the *PDJ* from November 1965 to January 1966 and was then assigned to work in Vientiane at the AIRA's office helping to coordinate operations on the *PDJ*, somewhat as a liaison officer. He returned to the *PDJ* in March for a short stint and then once again worked in Vientiane. During one of these stints, he was fortunate enough to see the Bob Hope Show during the Christmas holidays (December 1965). Lieutenant Wishart recounted, "Working in Vientiane, I again lived in the AIRA house. I worked for the air attaché to run air operations, day or night. Shifts were about twelve hours long. I was basically on call to serve the radios and pass stuff up to higher. A lot of stuff came via teletype. There were about ten folks in the air attaché's office. I think they brought in some regular USAF FACs to work up-country in February."²²

Lieutenant Wishart returned back to Hurlburt Field after his tour and then went to England AFB, Louisiana. This was during the time the 1st ACW moved to England AFB, but the training part of the wing remained at Hurlburt Field.

Capt Robert A. "Bob" Farmer, Sergeant Jones, and 2nd Lt Robert B. McCollough were sent over after Wishart; they were to become the first to use the Butterfly FAC call sign. All FACs airborne under the control of the AIRA at this time used the Butterfly call sign. In northern Laos, Butterfly 22 and Butterfly 44 were used; in southern Laos, call signs such as Butterfly 33 and Butterfly 39 were used. The US artillery officer at Moung Soui (when flying in his O-1 used Butterfly 99 as his call sign).

Capt Joe Holden

Although much of the focus for control of airstrikes was in MR-II with Gen Vang Pao's forces, Air Commando CCTs also served in southern Laos, along with three assistant Army attachés, who called in strikes around Thakhek as part of the artillery advisory function—one US Army captain and two US Army NCOs. Captain Holden was assigned to Water Pump in 1965, with further duty as an advisor

to Gen Thao Ma, the RLAFF commanding general, at the RLAFF headquarters in Savannakhet. His primary duty was as a Water Pump IP, continuing the training of Laotian pilots at Savannakhet. Captain Holden was an experienced FAC who had served in the Mosquito T-6 unit in Korea as an airborne controller. He also served with the Air Commandos in Vietnam in 1963. He found there was no forward air control system for the RLAFF, so he subsequently began to perform essential FAC duties for the T-28s operating in the region. Flying in a variety of aircraft such as L-20 de Havilland Beavers, U-17s, T-28s, O-1s, and even C-47s, he attempted to impart air control procedures to the Lao but was thwarted in his attempts to train them as FACs.

Captain Holden and his crew operated in civilian clothes and lived in a comfortable villa house, enjoying one of the few air-conditioned bedrooms. He related one of his “close-call” missions in an interview with Jan Churchill for her book, *Classified Secret: Controlling Airstrikes in the Clandestine War in Laos*:

I remember one time when we were working a target. General Ma was leading the flight. They had napalm, which was unusual. I don't remember how they got it, but I know the Ambassador didn't want napalm used. They probably got it clandestinely. Anyhow, the General knew the target and briefed me. He could have gone up there and done it himself but he wanted his pilots to get used to working with a FAC. So I flew to the target and marked it and then went off a little distance to watch the strike. All of a sudden, a T-28 came 15 to 20 feet over the top of my airplane and a can of napalm went underneath it. We never did figure out if the pilot was trying to get us. Some of those pilots came from the Neutralist section. Their flag was a three-headed elephant, which represented the right (the people in power), the left (the Pathet Lao), and the center being the neutralists who were originally led by Captain Kong Le. It was possible that some of them had Pathet Lao sympathies. I'll never know, but it was one of the closest calls I had.²³

He later served as the AOC at Vientiane, where he continued occasional FAC missions flying in a repaired U-17 that had mounted rockets. He eventually procured his own O-1 Bird Dog for FAC duties. In an unorthodox method to FAC, Captain Holden flew in a yellow-painted O-1, dropping smoke grenades to mark the targets.

The use of nonrated officers and enlisted personnel was in violation of USAF policy that airborne strike controllers controlling US jet aircraft had to be jet-aircraft-qualified pilots, additionally trained in FAC duties; however, the Air Commandos had to make whatever means they had work in their special air warfare environment. It was hoped that by keeping the Butterfly network under the radar of USAF

scrutiny, no harm would occur. When asked about the use of enlisted FACs during the Butterfly FAC program, retired Col Bill Keeler, who served as the AOC commander at Wattay in 1966 and later as the liaison officer to the RLAF, stated, “Yes, they [the enlisted FACs] were our combat controllers. That just sort of evolved because of a need. We just didn’t have enough people, enough officers, you know, qualified FACs to be there.”²⁴

Butterfly Forward Air Controller Procedures

The assigned Butterfly FACs lived in the field with their Laotian army counterparts, often colocated with the ground commander. On a daily basis, the Butterfly FACs coordinated with RLG ground forces to determine aerial strike requirements; if there were none, they would then go aloft and fly VR with available air assets. Maj John Garrity was a special air warfare intelligence officer, assigned as an AIRA to the embassy in Vientiane. In the first half of 1966, he flew Butterfly FAC missions to support General Vang Pao’s forces in MR-II. He describes target development as follows:

A big problem of the Butterfly days was that so many people were involved in those airstrikes. One evening, for example, Vang Pao might tell me or another FAC to go up to Lima Site 59 the following day, and help someone out with the air. I would go up the next morning, land, usually taking a Thai along as my interpreter. On the ground we would contact the local Meo [Hmong] commander. The Meo and the Thai would communicate (in Lao) about what was required. The Meo commander in turn would be getting his information from some local Meo chief.

So, all of us would pile up into one airplane and go out to find and strike the target. The people aboard included the Air America pilot, myself to talk to the USAF pilots, the village chief (maybe on his first time up in an airplane, getting sick and throwing up all over the plane) speaking Meo to the Guerrilla commander, who in turn was speaking broken Lao to the Thai. The Thai then tried to translate to me, and I told the strike pilots. This ended up with a whole squad of people in the airplane, trying to figure out where the target was, and make it clear to the next person. . . .

. . . To complicate matters, the Butterflies couldn’t use marker rounds, and had to do the whole job by radio. The process was a real Chinese fire drill.²⁵

As noted by Major Garrity, once a mission was a go, the nonrated Butterfly FAC then obtained available aircraft to perform the mission, sitting either in the right seat next to a pilot or in the rear of the pilot.

They carried an Army backpack radio, the FM PRC-25, and hung the antenna out of the window. They also flew in civilian clothes and carried their own personal weapons.

Once acquiring a target, the Butterfly FAC worked through his interpreter to speak with the ground forces while at the same time contacting indigenous aircraft (Thai or Lao T-28s) or contacting the Airborne Battlefield Command and Control Center (ABCCC) for US jet aircraft.²⁶

Marking the Targets

Along with the constraints of working through interpreters and acquiring a flight platform to operate out of for the day, the lack of capability to adequately mark targets constantly plagued the Butterfly FACs. Civilian aircraft—such as those used by Air America, CASI, and Bird & Sons—were prohibited from mounting ordnance on their planes. Initially, strikes were called in by using the “talk-on” method. A pilot would be asked if he could recognize a certain terrain feature—a lake, ridge, mountain top, stream, or karst formation—and then talked into that area. Each “talk,” or spoken instructions along with target description, would fine-tune locating the desired strike area until a pilot recognized the target.

In time the Air Commando FACs would use smoke grenades and smoke canisters dropped from civilian aircraft to use as a target vector marker, particularly in heavy-forested terrain. Although TIC could mark their positions with their own smoke, the lack of precise marking ordnance prevented any use of US air to conduct CAS mission for indigenous troops, for fear of fratricide. The US embassy outfitted its U-10 with smoke rocket canisters and FM radios and helped to alleviate some of the problem when this aircraft was used in MR-II by the AIRAs (also using call sign Butterfly) to direct strikes. Capt Henry S. Shields, while preparing his Contemporary Historical Examination of Current Operations (CHECO) report on controlling indigenous air strikes in Laos, interviewed now Lt Col John Garrity on 3 December 1971. He described the difficulty and risk in delivering strikes during the Butterfly period:

You can imagine the problems you have trying to direct high speed aircraft in a jungle environment without being able to mark the target. . . . The only way to get around this problem was to be very descriptive of the target. In fact, you have to be able to lead the pilot in, in the sense that you simply start out by

saying, “Okay, do you see the mountain?” and he says, “yes,” and then, “Now do you see the river on the right hand or the east side of it?” . . .

. . . And then after you get him to supposedly see the target area, you ask him to put down one bomb as a marker, and he’s five miles away from where you’re talking about. That’s why we never used TAC air in close support of ground troops. They were always quite a distance off, because it was just unsafe to try and work this type of operation in close to troops.²⁷

Another duty of the Butterfly FAC was to ascertain BDA. By late 1966, only one or two Butterflies were assigned as on-station FACs in MR-II—A1C Ronald W. Kosh and SSgt Don Carlyle. The Thais controlled their own T-28 aircraft (using FAGs like Tallman), but a Butterfly FAC often flew with them in unmarked Cessna O-1s in case an opportunity arose to direct US aircraft. It was not an issue for the Butterfly to FAC Lao T-28s. The Butterfly FAC could also control aircraft from the ground.

Capt Robert A. “Bob” Farmer and MSgt Charles L. Jones

As the amount of air activity grew, it was apparent a more permanent system of providing FACs to MR-II was required. Instead of using personnel pulled from duties at Water Pump, CCT FACs were assigned directly from the 1st ACW at England AFB, Louisiana, for duties in Laos. Captain Farmer and Sergeant Jones deployed in April 1966 under special orders assigning them to support Project Water Pump. They were authorized to carry weapons; Captain Farmer brought a .38-caliber pistol and a disassembled AR-16. Both he and Sergeant Jones shipped their rifles via commercial airlines.

They reported into Udorn to the Water Pump detachment and were immediately transferred to Vientiane, with further duties at LS-20A, helping Major Garrity, who was assigned to that location to control airstrikes. In Vientiane, they received in-country briefings and were issued their embassy ID cards and Laotian driving licenses. Captain Farmer was intrigued by the air control system at the embassy: “The entire air war was run out of the embassy in a little room full of radios. I was looking in there when I first got there, and coming over the radio was a call from a flight of F-4s coming back from bombing in North Vietnam, but I guess they were weathered out and still had ordnance to drop. They were requesting permission to hit a strike area, used for this purpose. A two-stripe enlisted airman was walking by the room at the time, picked up the radio, and authorized the strike!”²⁸ Captain Farmer describes the working environment as follows:

Air America/Continental guys did not like working with us initially, flying us to the site, or other sites, for us to do our job. They had to land and sometimes sit on the ground till we were done. They could not make money like that, not logging flying hours. So, I said, "Then let's do this by staying airborne."

We flew to the site, and then we would coordinate with one of Vang Pao's lieutenants. I also coordinated with ABCCC Hillsborough. We had a TACAN [tactical control and navigation system] on site, Site 22; we used it to coordinate in strikes from those aircraft coming back through Laos from North Vietnam. I used the call sign Butterfly 44.

Long Tieng was where we lived for duty. Sometimes, I had to go over to LS-36. I flew almost exclusively with Air America pilots flying Porters; maybe once in the DO-28. Bill Keeler was running the B-Team Thai T-28 program; I never flew with him or FACed with him. If the Thai pilots were flying, we had a Thai FAC that flew with us. Vang Pao also flew with us. We worked in civilian clothes. I had an embassy ID which stated I was an embassy employee, for cover story. But up-country everyone knew who we were.²⁹

Captain Farmer conducted his first aerial FAC mission on 16 May 1966, but it was not successful due to bad weather. Another hindrance was the lack of capability to mark targets. Butterfly FACs adapted and began throwing out smoke grenades and sometimes hand grenades to hit enemy forces. Most often, inbound strike aircraft had to be talked onto the target using visual references. The difficulty in this method also had another drawback. Captain Farmer stated, "It ain't easy. Teague said he almost got bombed twice by F4s! There were no ground FAGs of Lao or Thai origin that I remember."³⁰

Captain Farmer and Sergeant Jones not only conducted Butterfly duties but also participated in the psychological warfare campaign run by the agency. "The Agency had a warehouse up there. It had all kinds of propaganda material in it, like an enemy soldier lying out in the jungle, looking in bad shape, and pining to not be fighting but to be at home. Then there was a picture of a woman sitting on a porch missing her husband, stuff like that. If we had time during our flights, I would chuck them out the window."³¹

Their primary duty was support to Vang Pao and his forces. Captain Farmer thought of Gen Vang Pao as a great guy who treated the Butterfly FACs very well, almost like his sons. He remembers one of the missions flying with Vang Pao:

VP [Vang Pao] was with us; we were headed towards an area where the Hmong were trying to take back a landing site. He took us over a valley with rice paddies and a stream running through. There was a wooded hillside along the valley. He pointed out to us that the enemy was on the side of that hill. We

got a flight of F4s to make a pass and drop napalm; second pass I directed them in. Then the A-1s showed up. The Pathet Lao were running through the rice paddies. Vang Pao was yelling, "Shoot, Shoot! There they are!" But the A-1s could not identify targets. They shot the rice paddies up with 20 mm. I wanted to get BDA, because the pilots say they haven't seen any effect. I tried to tell this to VP, but I think he thought I was questioning his word or honor. Later, on another day, VP says, "Come with me." We go back to that scene, and we walked the ridge line. There was about a company of dead enemy.³²

In two months, at the behest of Maj Andy Peerson, an assistant AIRA officer, Captain Farmer was pulled back by Major Keeler to work in the embassy in Vientiane.³³

SSgt James J. "Jim" Stanford.

Stanford served as a Butterfly in northern Laos from 15 June 1966 until the end of his tour in August 1966. He deployed to NKP for a 179-day TDY as part of Project Lucky Tiger with the 606th ACS. Sergeant Stanford was part of the advanced party to prepare the base for the unit's main body deployment. Shortly after the arrival of the squadron, the 23rd TASS requested support for airborne FAGs as part of the FAC missions. Often, the mission required landing in the field to coordinate with Laotian troops. The 1st ACW provided temporary CCTs to NKP to support the deployment of the 606th ACS, in support of the Project Lucky Tiger. To gain training prior to the squadron's arrival, three of the CCTs volunteered to fulfill the support mission with the 23rd TASS: Sergeant Stanford, along with Second Lieutenant McCollough and A1C Andre R. "Andy" Guillet.

The three Air Commando CCTs flew as backseaters with the 23rd TASS FACs in O-1 Bird Dogs, during strike interdiction missions over Laos and North Vietnam. Sergeant Stanford recalled these mission profiles:

Most of the missions were flown at an altitude of less than 500 feet. The targets were signs of the enemy: roads, truck parks, POL (petrol, oil, & lubrication) storage areas, enemy emplacements and bivouac areas. The terrain is very mountainous. The very thick foliage makes it hard to follow roads or see activity on the ground. We would check known roadways that had been subject to previous air strikes for evidence of any rebuilding activity. One day while checking out a supply route coming from North Vietnam, our only engine just quit. We managed to restart it and head back to base. On the flight back we lost the engine two more times but landed without mishap. On these flights we were not often under ground fire because the people knew if they fired on us we would call in jet fighters, mark the position with smoke and

bombs and the jets would make bomb runs on our marked targets. However, an uneventful day, as far as being shot at, was not always the case.³⁴

Unfortunately, it was on one of these missions with the 23rd TASS FACs (call sign Nails) when Airman Guillet, serving as a Gombey backseater, was lost along with the pilot, Capt Lee D. Harley, on 18 May 1966. They were in a two-ship O-1 Bird Dog formation working targets in a VR mission. They discovered troop and truck movement and began to work strike operations when the second O-1 pilot observed Captain Harley and Airman Guillet's O-1 crashing in the jungle; there had been no transmissions from the pilot prior to the crash. It was presumed enemy gunfire brought down the FAC.

A SAR mission was launched, resulting in the downing of one F-4. The crew bailed out and were later rescued. After the F-4 incident, an A1-E was shot down with the loss of the crew. The SAR effort broke off due to heavy enemy antiaircraft fire. The SAR resumed the next day, but no trace of survivors or the wreckage of the O-1 could be found. Today, Senior Master Sergeant Guillet and Major Harley, who were both promoted during the time they were maintained missing in action, are honored with their names on the O-1 display in front of the USAF Combat Control School (CCS) at Pope AFB, North Carolina. (The CCS staff works in concert with the CMSgt Alcide S. "Bull" Benini Heritage Center staff to educate CCS students and preserve the history of the CCTs).

On 15 June 1966, Sergeant Stanford was assigned for duties in northern Laos operating as a Butterfly under Project 404. He replaced Sergeant Jones, who became hospitalized after contracting dengue fever, a mosquito-borne tropical disease. Like most Project 404 detailees, Stanford reported into Udorn, turned in his military uniforms and personal items, changed into civilian clothes, and flew to Vientiane on an Air America Pilatus PC-6A Turbo-Porter. Upon his arrival, he reported to Major Keeler, the AOC commander at Wattay, where he received inbriefings on his new mission. Major Keeler informed him that he would be working as a FAG/FAC in support of Laotian troops in northern Laos.

After receiving additional mandatory briefings on the situation in northern Laos, the rules of engagement for air strikes, and the enemy situation, he was issued an embassy ID card for cover and flown to LS-20A—Long Tieng—to work with the CIA and Gen Vang Pao's

Hmong forces. Primarily, he would conduct FAG/FAC air control for the Thai T-28 B-team.

Upon his arrival to Long Tieng, he conducted a check ride with Captain Farmer as part of his orientation to the operations on the *PDJ*. Farmer remembered the day:

When I was in Vientiane, I went up to give Stanford a check ride on 20 June 1966. I grabbed hand grenades from the hootch, taped and ready to go, to throw out of the aircraft. I sat with them in my lap. I threw them out. Suddenly here was a big bang, and the pilot and Stanford thought that perhaps the arming fuze had popped and went off in one of the grenades. It wasn't so, we went back around, and I shot my AR-16 out of the window during our several passes. They shot back! After landing, we found a bullet had passed through the cabin, missing me and where I had been sitting.³⁵

On 20 June Master Sergeant Jones returned to duty unexpectedly. While Stanford and Jones were kept on station, Captain Farmer returned to Vientiane for work in the AIRA offices for the remainder of his tour. If Jones or Stanford were in the air alone, Butterfly 44 was used; if both were in the air, Stanford adopted Butterfly 22. They both flew in either Air America aircraft, helicopters, or CASI aircraft. For targeting, Jones and Stanford received intelligence from a variety of sources: the CIA, Gen Vang Pao, Hmong villagers, road-watch teams, and other pilots conducting VR, including the embassy AIRA. Once targets were selected, FAC duties included control of, on average, about seventeen T-28 strikes a day. The Dogpatch RC-47 ABCCC provided the daily Bango/Whiplash alerts for F-105s from Thailand, A1-Es from the 606th ACS, or available aircraft. When controlling Thai T-28s, Stanford and Jones worked through the Thai FAC, Red Hat.

A daily routine for the Butterfly FAC during this period began with an early morning takeoff to conduct strikes on targets, or if no targets were available, the conduct of VR to find targets. If targets were available, they first landed at the closest Lao or Hmong troop location to consult with the ground commander to obtain situational awareness of the enemy. After grabbing a local soldier or any available officer (even Vang Pao) for interpreter purposes, they took off to reconnoiter the target area and to verify it was still a valid target.

They returned to the ground and radioed back to Major Keeler, who prepared the strike package with the ordnance requested to service the target. Upon learning the flight was inbound, they were back into the air to circle over the target area and talk the strike aircraft onto the

target. If available assets were nearby through Dogpatch ABCCC assets, they remained in the target area. This procedure was necessary to save fuel. Fueling was rudimentary; typically, 55-gallon drums were placed at available landing strips. The fueling required the labor-intensive method of transferring the fuel to the aircraft with a hand pump. A day's worth of strikes often involved landing and refueling two or three times. This occurred on one mission for Sergeant Stanford when US jet aircraft arrived into the target area while he and his Air America pilot were on the ground refueling. This did not deter Stanford from "controlling" the strike aircraft he could see in the distance based on his memory of what the target looked like.

As inbound strike aircraft approached, the Butterfly talked them into the area using the TACAN channel to direct the lead aircraft, until a visual on the target could be obtained. Marking targets was problematic; civilian aircraft were prohibited from carrying ordnance, so talking the aircraft onto the target was the most often used method. If possible, a Butterfly could drop a smoke grenade, but this exposed the aircraft to gunfire at low altitudes. At the end of the day, pilots, FAGs, and FACs met at Long Tieng to conduct debriefings, work out the target list for the next day, and then pass on the ordnance request list to Major Keeler. If immediate BDA could not be confirmed for the strike, the local Hmong troops were tasked to conduct a recon to the area to confirm the damage.

Sergeant Stanford described the overall experience as follows:

The rules of engagement sort of became OBE. Now, we didn't specifically work by any. We did whatever Vang Pao needed or wanted. As with all missions, the terrain could work for you sometimes or against you at other times. We knew our sites were surrounded by Pathet Lao and NVA, and there was always sudden intensified fighting at many of the outlying sites. Without strike aircraft, there wasn't much you could do other than make your presence known. At most of the targets, I encountered little or no opposition except for occasional small-arms fire or bursts of flak. I would try to disrupt any movement of supplies and troops around these sites. Night-time air support was nil, as none of the locations had lights or nav aids. Occasionally, we would transport wounded back to LS-20 if we were heading that way. I pretty much worked without control from the rear echelon but took instructions from Major Keeler, the AOC commander in Vientiane. My actions or reactions depended on what I encountered in the field. I had daily contact with field agents. We received intel briefings they obtained from Road Watch Teams and other operators in the field. Duty was seven days a week from dawn to dusk.³⁶

Sergeant Stanford flew several off-site missions away from LS-20A. One of Stanford's off-site missions was the support to Tony Poe, flying as Butterfly 22 out of LS-118A, Nam Lieu in northwestern Laos. In all, Sergeant Stanford flew missions out of over fourteen sites in north Laos, conducting 124 aerial FAC missions during his tour.

Sgt John A. “Spider” Webb and SSgt Don Carlyle

Sergeant Webb deployed on the first rotation of Water Pump in 1964 and after his arrival to Thailand was sent to Vientiane to support T-28 operations at Wattay Airport. While deploying for short stints out to the field, Sergeant Webb performed sixteen operations at Moung Soui as a ground and aerial FAC for GM16 forces in the area. He returned to NKP in 1966 with the 606th SOS CCTs. He was then sent with Sergeant Carlyle to Long Tieng to serve as Butterfly FACs on 12 October 1966. After receiving an orientation and check-out ride from Jones, Webb and Carlyle began alternating aerial FAC duties as call sign Butterfly 44. The two performed five to seven flights daily, seven days a week. FAC duties included CAS for TIC, interdiction, reconnaissance, and support to SAR operations. Their primary platform for FAC duties was the Pilatus PC-6A Turbo-Porter. Like all the previous FACs, targeting came from Vang Pao, agency assets, and the AIRA's office. Sergeants Webb and Carlyle worked with Lao and Thai interpreters as well as Thai FACs. Sergeant Webb's last mission as a Butterfly occurred on 9 December 1966.³⁷

Sergeant Carlyle continued to fly up into March 1967. An additional task during his tour was support to the Laotian road watch teams. He flew an impressive 211 combat missions, receiving a Distinguished Flying Cross for one of his missions. Afterwards, his Butterfly duties were taken over by the Ravens. He remained at LS-20A and worked in the Raven control radio room as part of the Project 404 mission. Sergeant Carlyle would be one of the lead instructors for the FAG school established by the Air Commando CCTs at LS-20A and LS-36, training Laotian and Thai students on FAG procedures.³⁸

A1C Ronald W. Kosh

Kosh was a CCT assigned to the 606th ACS's CCT section as it prepared to deploy to NKP for Project Lucky Tiger in 1966. He stated, “We took some extra training to get ready to go to Laos. E&E [escape and evasion], some SERE [survival, evasion, resistance and escape],

and some focus on COIN training. As Butterflies, there was only one of us in the air at a time—there were more than enough targets, but we just did not have available assets.”³⁹

In November 1966, he was tasked to serve as a Butterfly FAG/FAC at LS-20A, Long Tieng. At Long Tieng, two Air Commando CCTs were on-station to support the *FAR* and Vang Pao’s Hmong guerrilla units—Sergeants Webb and Carlyle. Webb was assigned to Long Tieng support in early 1966; Carlyle arrived in late August. Airman Kosh was being deployed to replace Sergeant Webb.

Leaving his military kit behind at Udorn, he reported in to the AIRA’s office in Vientiane, where he received his ROE and up-country situation awareness briefings. Wearing civilian clothes (dark shirt, Levi’s, boots) and with an embassy ID card, he flew up to Long Tieng to conduct an orientation to the operation and performed a transition with Sergeant Webb. For his initial check ride, Major Peerson, one of the AIRAs at the embassy, flew him in their USAF de Havilland U-6. Although not a preferred aircraft for operations on short landing strips, the U-6 did have an advantage civilian-contracted aircraft did not: it was equipped with wing-pods holding 2.75-inch folding fin aerial rockets to mark targets. (Major Peerson would often fly up to Long Tieng in the U-6 to perform as a FAC himself. Another AIRA, Capt John W. Lee, also performed AIRA FAC duties in September 1966, when Sergeant Jones served at Long Tieng as a Butterfly FAC.)

Airman Kosh began FAC duties, alternating for extended periods on and off with Sergeant Carlyle. When one of them were not in the air, the other either pulled duties to monitor the radios at Long Tieng or took advantage of Air America or CASI flights to spend some time in Vientiane or Udorn.

At this time, the mission of the Butterfly FAC was threefold:

- Provide CAS for *FAR* troops and Hmong guerrilla units in contact with the enemy.
- Interdict the NVA infiltrating along portions of the HCMT in northern Laos.
- Destroy or damage key infrastructure, roads, and bridges, and degrade passes and river and stream fords used by the NVA along the trail.

Air Commando Controllers & FACs 1965 – 1967*

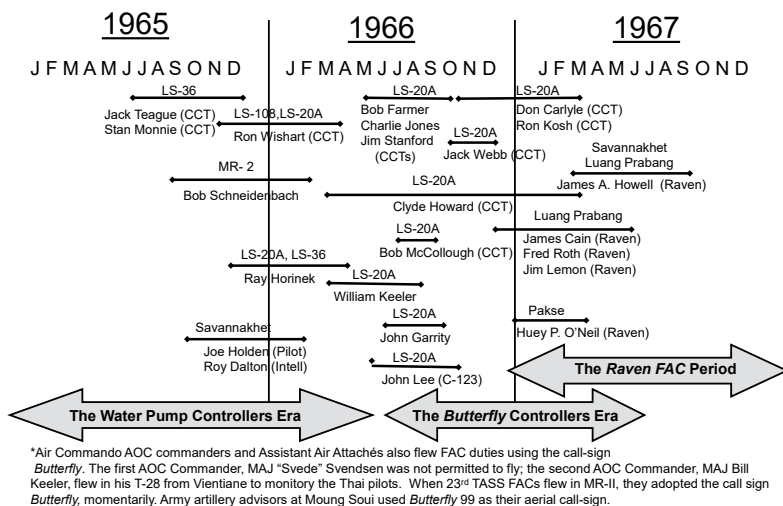


Figure 5.2. Selected and known Air Commando Controllers and FACs who served during the Water Pump and Butterfly Controllers Era and the Raven FAC period, 1965–1967.

Kosh added, “The Lao/Hmong had FAGs—they would fly with us sometimes. The Thais FAC’ed out of their T-28s. I never heard of the guy who was an artillery officer and flew as call sign *Butterfly* 99. We would stop and land at various sites that needed defending, pick up a local soldier. Our load was usually the pilot, me, a Lao, and a terp [interpreter]. FYI—there was a couple of guys on the ground doing control; one of them was Red Hat from the Thai ground FAGs/FACs. Occasionally we had communication with them to secure assets. We did not have codes; everything we did in voice radio was in the clear.”⁴⁰

A daily mission began with issuing targets by either agency operatives or Vang Pao, grabbing an interpreter, and flying with CASI pilots to a designated LZ where the targets required servicing. Airman Kosh also occasionally flew with Air America but preferred flying with the CASI PC-6A Porters. As a *Butterfly* FAC, he flew in the right seat, with a radio normally strapped between the seats, and with the interpreter or local ground unit representative seated on the floor in the back; this often included Vang Pao.

After receiving details on targets in the local area, the crew flew aloft. Fuel was a concern, and if the weather was good, the targets

were abundant and strike sorties sufficient, they would remain in orbit over the operational area. Often, without these advantages, the plane returned to the landing site to await confirmation of inbound strike aircraft and preserve fuel.

Again, the Achilles' heel of Butterfly FACs was the inability to mark ordnance for the aircraft. Airman Kosh's pilots would "pop and drop," flying down low where he could deliver smoke grenades thrown out of the window. A case of smoke grenades was always loaded on the aircraft prior to any mission. Between this and talking the strike aircraft onto the target, the mission was somehow accomplished. Their only protection was their personal weapons and some titanium plates, salvaged from a wrecked H-34 helicopter, they put beneath their seats.

Along with FAC missions for Laotian and Thai T-28s, Airman Kosh also FACed A1-Es from the 606th ACS, both Sandys returning from SAR escort missions, which were now available if they still had unused ordnance, and normally four-ship A1-Es from the Fireflies. There were also jets made available returning from bombing and interdiction missions from Operations Rolling Thunder and Barrel Roll. On occasion, Airman Kosh also provided FAC for Navy carrier-borne aircraft. He also flew with the AIRA in the U-6 when conducting VR along the HCMT.

The Butterfly FACs carried radios to talk to both ground forces and aerial assets. Kosh described the procedure thusly:

At 20A we used PRC-41s and PRC-47s. The PRC-41 was a UHF, air-to-air radio. The PRC-47 was VHF to HF/SSB. We flew on Continental aircraft (CASI). They had permanently installed a blade antennae device (UHF) with a coaxial cable we could plug into. I would strap the radio into the right back seat; the VHF radio sat in front between the pilot and passenger. For that, we ran a wire out along the wing strut, taped it down with 100 mile-an-hour tape (duct tape). It gave us a good, long-range capability.⁴¹

One of his memorable missions was performing as both a ground and aerial FAC in early January 1967, during NVA attacks on LS-36, Nha Khang. For several days he conducted missions for TIC:

Undoubtedly the most memorable event of my period in Laos was the attack of LS-36 by the NVA in early January 1967. It involved my being both on the ground there and in the air for many hours on successive days marking targets in its defense and afterwards as the NVA regulars retreated after being repelled by the RLA/Meo on the ground.

On the initial day of the attack it was my turn to fly. Weather at that time of year was typically thick overcast and often foggy at ground level until mid-morning with insufficient visibility to get off very early at 20A. I awoke about 0600 or so that day and turned up the Collins HF in our hootch—Mike Lynch was on the air with an unusually urgent “London, London, London (LS-36) to Paris (LS-20A), over . . .” as the attack had just started. They needed help.

It was an intense bit to get down to the 20A strip and we pushed the envelope considerably with urgency to get off as soon as possible. Once in the air though it was solid overcast above and almost nil ground visibility all the way to LS-36. The NVA had good weather people! We orbited overhead at L-36 with little hope of being able to get under the overcast and certainly not any fighters down through it. I don't recall who the Porter pilot was but we were eventually able to thread our way in to actually land.

At that point the ground attack had been mostly repelled from the immediate camp area but not until after the NVA had actually come across the entire open area across from the strip. At one point earlier they had been half way up the hill and well into the camp, almost to the 4.2-inch mortar that was in its center and the heaviest on-site defensive piece! We landed while still catching some sporadic small arms fire from the tree-line on the opposite side of the strip from the camp.

The two career Agency SOD guys were OK, but one American civilian, Don Sosrum—a USAID civilian as I recall, who was from Washington state and a big guy—had caught a single AK-47 round in the forehead. As a USAID employee, that was not his normal location, and he just had happened to spend the previous night there instead of returning to Sam Thong/L-20—across the mountain we referred to as “Skyline Ridge” from Long Tieng. I believe he had RON'd at LS-36 because of the weather—wrong place at the wrong time. I helped carry his body down to the strip.⁴²

Airman Kosh provided aerial FAC to over sixty strike missions during his tour, with a total of 179 missions accomplished.

Capt Robert T. “Bob” Schneidenbach

Captain Schneidenbach deployed to Udorn as part of the second detachment of Water Pump, commanded by Lieutenant Colonel Thomas—both would operate as FACs in MR-II. Captain Schneidenbach also served as an additional duty officer for administration, supply, and paymaster in Detachment 6. He flew with the Lao T-28 pilots to conduct missions up on the *PDJ*. When not working air-strikes from the aircraft or flying with Air America H-34s, Captain Schneidenbach operated out of Phou Kout with a Laotian FAC. RLA pilot, Captain Chai, accompanied him on L-19 flights. Some of these

flights were also in support of the US Army artillery advisor assigned to Vang Pao's units.

The Water Pump IPs flew with their Lao counterparts to Vientiane in the morning, placing a Lao air force roundel in the removable logo slots on the side of the aircraft. (Vientiane was code named *Victor*.) At Wattay Airport, they were briefed on the mission for the day, then uploaded ordnance and flew on to support missions in MR-II.

Captain Schneiderbach's most notable mission occurred during the rescue of a downed F-100 pilot. That day he was flying with an Air Commando pilot in an H-34. He and a Laotian Commando extricated the downed pilot from a tree under very dangerous conditions; for this action, Captain Schneiderbach was awarded the Silver Star.⁴³

His citation for the Silver Star reads:

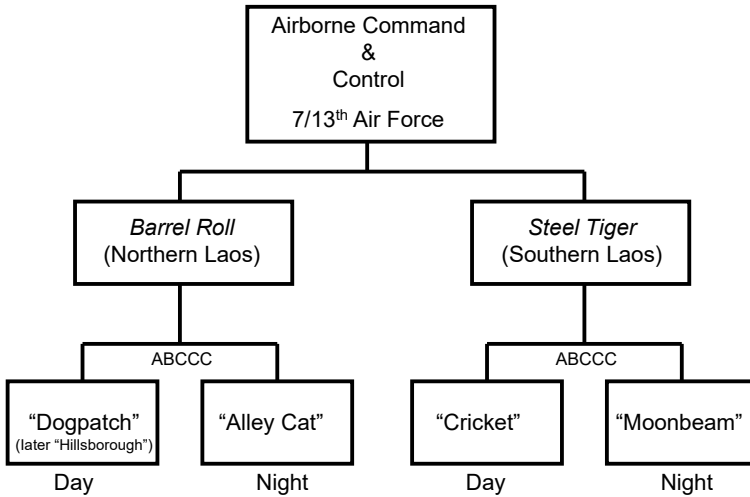
Captain Robert T. Schneiderbach distinguished himself by gallantry in connection with military operations against an opposing armed force in Southeast Asia on 21 November 1965. On that date, Captain Schniedenisbach volunteered to assist in the rescue of a pilot who was shot down by hostile ground fire. With complete disregard for his own personal safety, Captain Schneiderbach insisted that he be lowered to the downed man despite the high risk of ambush. Upon reaching the pilot, Captain Schneiderbach determined that he had suffered serious multiple injuries and probably would not survive if hoisted in the rescue sling. Ignoring the ever increasing risk of ground fire, Captain Schneiderbach assisted in moving the injured man to a rescue helicopter waiting in a nearby clearing. By his gallantry and devotion to duty, Captain Schneiderbach has reflected great credit upon himself and the United States Air Force.⁴⁴

Strike Assets

Along with US-piloted T-28s, Air America-piloted T-28s (the A-team), and Lao and Thai T-28s, US strike assets used in Barrel Roll came from a variety of sources. If bad weather aborted strike aircraft operating over North Vietnam in the Rolling Thunder campaign, these assets could be diverted to Barrel Roll use.

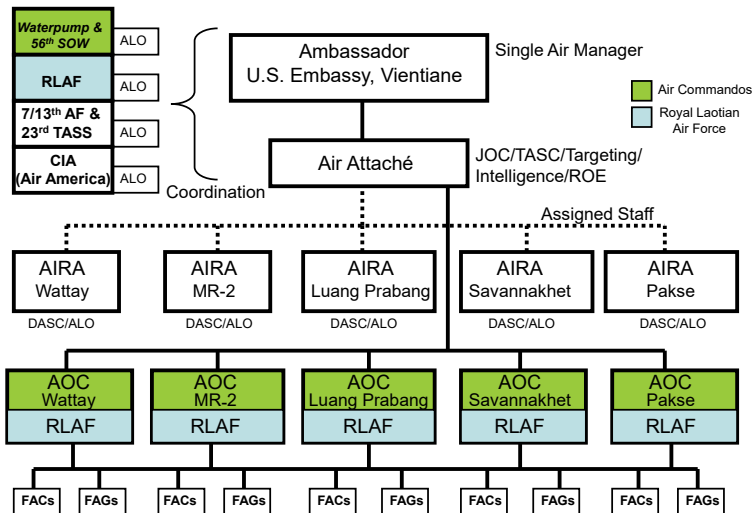
A Thai-based, USAF rapid response capability for strike aircraft in Laos began in July 1965. This operation was known as Bango/Whiplash. The Bangos were Thai-based USAF F-4s, operating as Bango Alpha in the morning and as Bango Bravo in the evening. The Thai-based USAF F-105s operated as Whiplash assets.

Aircraft from South Vietnam and from Yankee Station also continued to serve in Laos. In April 1966, a modified C-47 served as the first ABCCC under the call sign Dogpatch to assist in coordinating Barrel



Airborne control initially established in Laos for Barrel Roll area and controlled by modified C-47 with call sign "Dogpatch"; in late 1965, EC-130s performed the ABCCC role. ABCCCs carried Lao and Air Commando personnel as liaison.

ABCCC – Airborne Battlefield Command & Control Center



RLAF: Royal Laotian Air Force; TASS: Tactical Air Support Squadron (FACs); JOC: Joint Operations Center; TASC: Tactical Air Support Command; AIRA: Assistant Air Attaché; AOC: Air Operations Center; DASC: Direct Air Support Command (Regional); ALO: Air Liaison Officer; FAC: Forward Air Control; FAG: Forward Air Guide

Figure 5.3. The airborne command centers, flying in orbits, controlled the airstrikes throughout Laos. The ABCCC aircraft flew both day and night orbits.

Roll assets. To improve reaction time, Dogpatch would contact the Butterfly FAC using its SSB radio, alerting him to the fact that aircraft were inbound. The Butterfly FAC would then launch and meet the aircraft. This method saved precious minutes and fuel. As air operations increased in southern Laos, an EC-130 ABCCC began operations to control strikes in Steel Tiger, with the call sign Hillsborough.

End of the Butterfly Forward Air Controller Concept and the Birth of the Ravens

In the spring 1967, the Seventh Air Force commander, Lt Gen William W. “Spike” Momyer visited then Colonel Aderholt at his 56th SOW Headquarters in NKP. It was there General Momyer first found out about the use of enlisted and nonrated pilots serving as FACs in Laos. He was not happy. Aderholt recounted the following:

I wanted to make a point, that we needed more FACs in MR 2 [Military Region 2—northeast Laos] up in General Vang Pao’s area. He wanted to know about the FACs in Laos and where they came from. I told him that when they diverted the strikes from the north because of bad weather in North Vietnam, it saturated the system we had.

Momyer asked, “What system?”

I replied, “Well, the system is primarily non-rated (not pilots) FACs, a good majority are enlisted men, weather officers, communications officers, and Combat Controllers.”

I told Momyer we had to have more FACs.

He said, “That’s no problem, I’ll augment the 23rd TASS [Tactical Air Support Squadron].”

I replied, “General, you don’t understand.” I told him that the 23rd TASS, which flew the [Cessna] O-1 [Bird Dogs] at that time, did not have enough range to get from their base up there and back—that they didn’t have the range because the distance was too far.

Once again, Momyer asked, “Who’s FACing my airplanes?”

I said, “I’ve got a bunch of enlisted Commandos up there.”

Momyer hit the roof! He exclaimed, “*What?* Who is flying the airplanes?”

I said, “Air America pilots in their airplanes,” as Momyer jumped up and down.

He said, “That will cease. I’ll take care of that!”

So, he went and started the “*Steve Canyon*” [code word for FAC operations] program, which became the *Ravens* (the rated USAF officer pilots who were “sheep-dipped” to fly in Laos).”

Momyer told his Director of Operations, “These guys are up there FACing my airplanes, and they’re not qualified, and they’re not pilots, and I want that ceased.”

I remember the messages going back and forth. It took a little time to activate the *Steve Canyon* program. General Momyer didn’t want non-rated people and various Combat Controllers FACing his pilots. The USAF immediately asked for volunteers from the FACs who had been in-country at least six months to replace my enlisted people. We had a few officers, like weather and intelligence, but primarily my FAC force was enlisted and they were known as *Butterfly*. When they got the *Ravens*, they changed the call sign to *Raven*. Mostly, they got jet pilots, who came up to volunteer for a very difficult and dangerous mission. They were hand-selected. I told General Momyer, we didn’t hand select our Commandos. They did this as a matter of routine. That didn’t go over very well.⁴⁵

There would soon only be rated FACs working in Laos. This initiative was the basis of the *Steve Canyon* program and the birth of the *Raven* FACs.

The Air Commandos who performed the early FAG/FAC and *Butterfly* FAC missions were capable, innovative, and on hand to fulfill the requirements set by Ambassadors Unger and Sullivan for the situation at hand. They performed professionally in a clandestine environment and saved countless lives by their exploits. The CHECO Report, “USAF Control of Airstrikes in Support of Indigenous Lao Ground Forces,” clearly illustrates the effectiveness of the *Butterfly* FAC concept while it was in use, speaking to the requirement to address increasing NVA and Pathet Lao aggression in Laos that altered the combat situation during the timeframe between 1964 and 1967:

To offset the new enemy strength, RLG forces placed more reliance on air-power. While this need was partly satisfied by expanding the RLAF and increasing the number of USAF fighter sorties in BARREL ROLL, it was also necessary to move airstrikes closer to friendly troops and outposts in contact with the enemy. This could be effectively and safely accomplished only by employing accurate marking devices. Since this was not possible with civilian contract aircraft, major changes in the *Butterfly* program were inevitable. While the enlisted *Butterflies* performed useful service for a restricted, counter-insurgency, guerrilla-type war, the time was approaching when they would no longer be able to provide the necessary support for friendly forces in the expanding war in northern Laos.⁴⁶

Sergeant Carlyle and Airman Kosh were the last known enlisted Butterfly FACs, serving from May 1966 to April 1967.

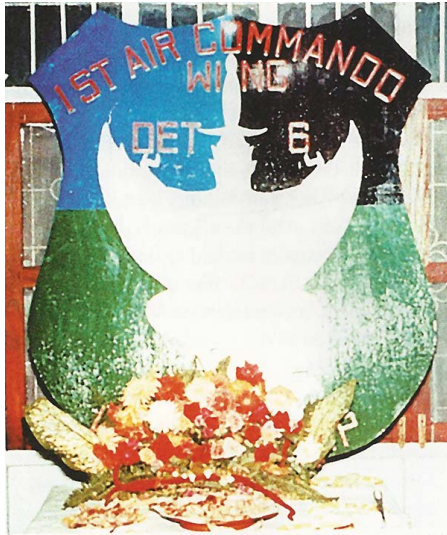
Capt James E. “Jim” Cain was serving as a Butterfly FAC during the transition period, flying out of Luang Prabang as Butterfly 70. He became the first Raven and flew as Raven 41. Frederick “Red” Roth, Jim F. Lemon, and Huey P. O’Neal were also included in the first group of Ravens.⁴⁷

Notes

1. Lester, *Mosquitoes to Wolves*, 34–39.
2. *Ibid.*, 53–55.
3. *Ibid.*, 60.
4. In June 2015, Gene Adcock provided additional details.
5. Adcock, *CCT: The Eye of the Storm*, 37–40.
6. *Forward Air Guide Pamphlet*, 1, quoted in Churchill, *Classified Secret*, 132. The pamphlet was originated by the 1st ACW, in conjunction with the US Army John F. Kennedy Special Warfare Center working with the SAWC at Eglin, in 1964. It was published by the 1st ACW for CCTs in 1964 (no reference has the month, including the pamphlet). It was not an official USAF pamphlet at the time, merely a localized print by the command (45 pages). Of note, this pamphlet was later incorporated into an official USAF document, called *Air Commando Combat Control Manual, Part 2*, TAC Sup 1 to AFM 54, September 1967. See appendix in Churchill, *Classified Secret*, for entire 45-page pamphlet.
7. Churchill, *Classified Secret*, 53–54.
8. Shields, *USAF Control of Airstrikes*, 8.
9. *Ibid.*
10. Churchill, *Classified Secret*, 28.
11. Bieber, “Air Commando/Butterfly FACs,” 4.
12. John O. Teague provided details to author via email 24 August 2017.
13. Churchill, *Classified Secret*, 28.
14. Shields, *USAF Control of Airstrikes*, 31–34.
15. *Ibid.*, 14.
16. Correspondence from Amb. William H. Sullivan to Butterfly FAC MSgt Charlie Jones on 18 September 1998, included in the Charlie Jones files, as quoted in Churchill, *Classified Secret*, 3.
17. Shields, *USAF Control of Airstrikes*, 20.
18. “Jim Stanford: Being an Air Commando Combat Controller Made All the Difference,” 6–7. Excerpts and quotes from this story were taken from an unfinished biography of Jim Stanford, prepared by his wife and daughter. Portions of the draft work were provided to the author by Bob “Beebs” Bieber, who was a CCT, and who has been working with the Stanford family to complete the publication.
19. Wishart, interview.
20. *Ibid.*
21. *Ibid.*

22. Ibid.
23. Churchill, *Classified Secret*, 51.
24. Keeler, USAF interview no. 651, 10.
25. Shields, *USAF Control of Airstrikes*, 27.
26. Ibid., 27.
27. Ibid., 28.
28. Farmer, interview.
29. Ibid.
30. Ibid.
31. Ibid.
32. Ibid.
33. See “The Great Adventures of Bob and Don” at <http://ravens.org/wp-content/uploads/2017/03/Bobmain.htm> for Capt Robert A. “Bob” Farmer’s story of his experiences in Laos.
34. See note no. 18. “Jim Stanford,” 2.
35. Farmer, interview.
36. See note no. 18. “Jim Stanford,” 15–16.
37. Churchill, *Classified Secret*, 108–10.
38. Ibid., 56.
39. Kosh, interview.
40. Ibid.
41. Ibid.
42. Ibid.
43. Churchill, *Classified Secret*, 29–30.
44. Edna Schneidenbach provided a copy of Capt Robert T. Schneidenbach’s citation to the author in a June 2015 email.
45. Churchill, *Classified Secret*, 2–3.
46. Shields, *USAF Control of Airstrikes*, 39.
47. Churchill, *Classified Secret*, 110.

Part II Photos



Above: Detachment 6 unit sign. The purpose of the three colors chosen is unknown: perhaps blue for Air Forces, green for ground forces, and black for Air America pilots. The white Buddha represents the Chaophakaow call sign, "Great White Buddha." (Photo courtesy of the Air Commando Association.)



Above: A Water Pump AT-28 takes off from Udorn with a Detachment 6 Instructor Pilot seated to the rear of a student. The inboard pod with .50 caliber machine guns and the outboard rail for rocket pods can be clearly seen. (Photo courtesy of the Air Commando Association.)



Above: The end product: an RLA AT-28 in mid-60's at Long Tieng airstrip—Lima Site 20A. (USAF photo.) **Below:** A Thai B-team AT-28 uploaded with ordnance, ready to take-off from Wattay Airfield. (Photo courtesy of Bill Keeler collection, AFHRA.)



Below left: Thai pilots of the B-Team attending Water Pump AT-28 training. (Photo courtesy of the Air Commando Association.) **Below right:** Buddhist Monk blesses a Water Pump AT-28 before its flight. (Photo courtesy of AFSOC History Office.)





Above: Air American pilot John Wiren posing on his Water Pump A-team AT-28. John flew with the A-Team Water Pump pilots to conduct interdiction and SAR in Laos. Note Laotian roundel on fuselage. (Photo courtesy of John Wiren, Air America pilot.) **Below left:** Original ACW Forward Air Guide Pamphlet at CCT Museum, Pope AFB, NC. The CCT 304's were essential to repair and maintain foreign forces' radios, which were often bad. The guidance in the pamphlet was designed to control airstrikes when radios did not work. (Author's collection.) **Below right:** A1C Oscar O. Lima trains Laotian airmen on aircraft servicing and maintenance. Training at all levels, whether officer pilots or foreign NCOs and enlisted airmen, required the use of interpreters. (Photo courtesy of Oscar O. Lima.)



Right: A group of Lao pilots during a Water Pump course. (Photo courtesy of AFSOC History Office via Jerome Klingaman.) **Below:** The USAF Combat Control Team in Vietnam. Conventional CCT teams were assigned to Aerial Port Squadrons. An Air Commando CCT team differed from Aerial Port Squadron CCT teams in that they were trained to also direct strike aircraft of the Air Commando squadrons, or FAC with Special Forces, in a COIN environment. (USAF photo.)



Below: Jack Teague was among the first of the Butterfly FACs. In 1965, Capt Teague directed airstrikes for Gen Vang Pao. He operated in sterile uniform and was among the first to carry the Armalite 15 rifle in combat. In his six months of combat, he participated in over fourteen targeted missions. Later, in 1968, he flew F-100s in Vietnam. (Photo courtesy of John O. Teague Sr.)





Above: Ambassador Sullivan and the AIRA, Colonel Pettigrew, enter embassy vehicle after meeting with leadership of the RLA. They both supported using the Butterflies as FACs as a measure to control airstrikes. (Photo courtesy of Robert A. Farmer, Lt Col USAF Retired, Butterfly FAC.)

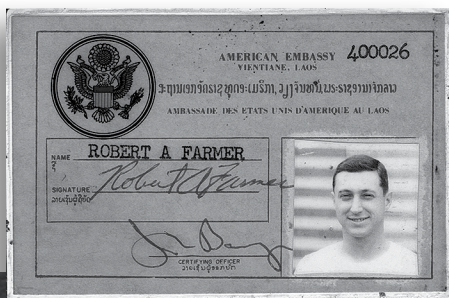


Right: Pilots from Project Water Pump flew FAC missions in their AT-28s; Water Pump AOC personnel utilized unmarked O-1s. (From the collection of William E. Platt, Raven 43.) **Below:** USAF pilots in the AIRA's office in Vientiane flew FAC missions in the U-10 Helio Courier assigned to the US Embassy. (USAF photo.)

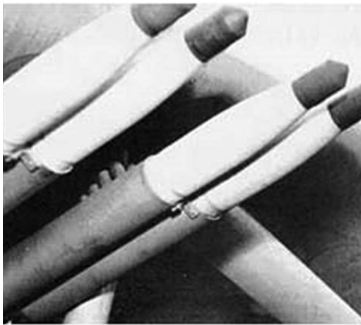
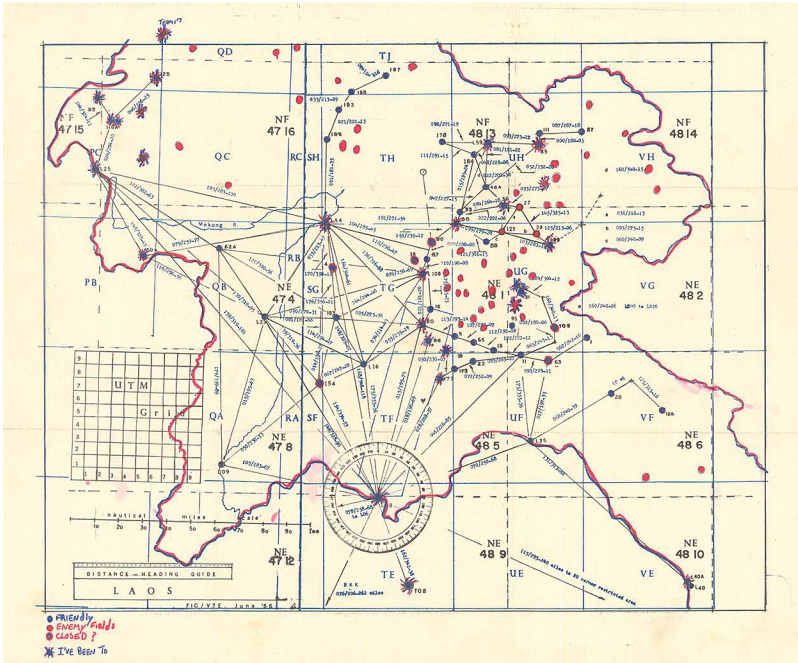




Above: The most preferred aircraft by the Butterfly FAC was the Air America Porter Pilatus, with its ability to operate over north Laos and get into short airfields. (From the collection of William E. Platt, Raven 43.)



Above: Capt Bob Farmer's embassy ID card issued to him in Vientiane, before moving up-country to MR-II to perform duties as a Butterfly FAC. (Photo courtesy of Robert A. Farmer, LTC, USAF Retired, Butterfly FAC.) **Left:** Capt Bob Farmer points to bullet hole from enemy ground fire when he was flying Butterfly FAC duties with an Air America asset. (Photo courtesy of Jim Stanford collection via Robert Bieber, CCT.)



Above: Jim Stanford's actual map used during his time as a Butterfly FAC. (Photo courtesy of the Jim Stanford collection via Robert Bieber, CCT.) **Left:** 2.75-inch marking rockets, mounted on a U-17. (Photo courtesy of Lt Col Robert A. Farmer, USAF, retired, Butterfly FAC and Lt Col Don Moody, USAF retired, Project 404 AOC Commander.) **Below:** RLAf O-1 FAC aircraft. (Photo courtesy of Steve Wilson, Raven FAC.)





Above: Combat Controllers of Project Lucky Tiger stand just left of center in berets: left to right, Jim Stanford, 2nd Lt Bob McCollough, and Andy Guillet. (Photo courtesy of Chief Gene Adcock, CCT.) **Below:** Sgt Maj Ron Brown, Army Special Forces, retired, and CCT Museum Curator, stands before the CMSgt Benini Heritage Center CCT School O-1 Bird Dog memorial displaying Captain Harley and A1C Guillet's names. The two airmen were recovered from their wreck in Laos in 2017 and returned home. (Author's collection.)



PART III

THE AIR WAR AND PROJECT 404

Chapter 6

Project 404

But 404 was an effort under the attaché office, either the Air Force attaché or the Army attaché forces or office, to assign individuals to the attaché office to act as advisors, so to speak, to the Lao military ground forces and air forces, but keeping the silhouette as low as possible. So we were all in civilian clothes. Our Lao counterparts knew exactly what our rank was and that type of thing. There was no mystery to them. But when you walked around the street you didn't see a bunch of GIs in uniform. So that the façade could be maintained.

—John Spey
AIRA AOC Commander,
Project 404, Pakse

In 1964, with complete disregard for compliance with the cease-fire agreement, both the Pathet Lao and the North Vietnamese Army (NVA) committed numerous violations, prompting Pres. Lyndon B. Johnson to gather a national security team to develop a set of initiatives in response. One of the initiatives chosen was to place additional US military advisors in all five of the Laotian military regional commands to improve the combat proficiency of Laotian forces.

Project 404 was the designated name for a variety of personnel programs to augment the military attaché offices in Vientiane and provide support for the administration of the US Military Assistance Program (MAP) and other advisory projects. Project 404 skirted the prohibition of American military personnel serving directly in Laos by attaching duty personnel as “assistant attachés” within the embassy’s manning structure.

Creation of Project 404

After the signing of the 23 July 1962 Geneva Accords, all US military personnel departed Laos, with the exception of the embassy’s military attaché offices. Gen Reuben Tucker took the Military Assistance and Advisory Group (MAAG) Laos to Thailand, establishing the

headquarters in the Capital Hotel located on Phahon Yothin Road in Bangkok—separate from the Joint United States Military Assistance and Advisory Group, Thailand on Satorn Road. To continue administration of the MAP inside Laos, a requirements office (RO) was created within the United States Agency for International Development in Vientiane and manned by retired military personnel.

For cover in Thailand, the MAAG Laos was renamed as the Deputy Chief Joint United States Military Assistance Group, Thailand (DEP-CHJUSMAGTHAI). The function of the DEPCHJUSMAGTHAI, as seen by the ambassador in Laos, was providing military assistance for end use in Laos—the “advisory” function was dropped in compliance with the Geneva agreement, changing the group’s name from MAAG to the Military Assistance Group. The deputy chief’s authority ended at the Mekong River border between Thailand and Laos.

Prior to Joint Chiefs of Staff (JCS) implementation of Project 404, the air and army attachés (ARMA) in Vientiane augmented their staff with personnel on temporary duty (TDY) assignment into the kingdom, attached to the attaché offices. The additional TDY personnel were a necessity based on the lack of sufficient personnel in the RO to administer the MAP, countrywide. (Behind the scenes, the Royal Lao Government [RLG] had also requested increased US support.)

The initial use of covert US personnel augmentation began in 1964, when Air Commandos from Detachment 6, Project Water Pump were made available to the ambassador to perform air and ground control for limited offensive air operations (the Butterfly forward air controller [FAC] concept) and technical advisory support to the Royal Lao Air Force (RLAF) at selected air operations centers (AOC). On the US Army side, personnel were sent into various military regions (MR) to observe end use of American-supplied equipment and to provide battlefield intelligence. By 1966 over fifty USAF personnel alone were working in this ad-hoc advisory capacity.

In the early operation of the program, the attachés offices agreed any personnel augmentation required permanent manning, not in-and-out six-month, TDY personnel. On 5 May 1966, the JCS approved Project 404 as a measure to provide the needed personnel support in a permanent change of station status to the attachés. The initial Project 404 package consisted of 117 military personnel and five civilians. Project 404 personnel were assigned to and administratively managed by the DEPCHJUSMAGTHAI, with operational

control to the air and ARMAs in Vientiane. Funding was provided by Commander in Chief, Pacific Command.¹

In October 1966, Project 404 was expanded to include the Steve Canyon program, which provided USAF pilots as FACs, called the Ravens. The Ravens replaced the enlisted and nonrated Butterfly FACs.

In St. Jean, McClain, and Hartwig's work, "Twenty-three Years of Military Assistance to Laos," the augmenting role of Project 404 was described as: "The functions of the augmentation group were primarily operationally oriented. Included were communicators, intelligence, and operation specialists in about a 70/30 army/air force mix. They were stationed at RLAf bases and Army Military Region Headquarters throughout Laos to advise, assist in the targeting effort, and to effect coordination of regional air support requirements via the air operations centers (AOCs) and joint operations centers (JOCs) which were co-located in the MRs, and the combat operations center (COC) in Vientiane."²

The mission of Project 404 personnel was to "observe and administer" the effectiveness of the military support being given to Laos. Later, their duties would include military advisory assistance, technical support, and intelligence gathering. The assistant attachés were required to submit status reports on the condition of US equipment and the performance of the Lao military.

As part of the 1962 accords, the US embassy in Vientiane had been allowed to keep its military attaché office. Within the military attaché's office both a senior USAF and ARMA were assigned, along with their staffs. Upon arrival of Project 404 personnel to Vientiane, they were designated as *assistant* air attachés (AIRA) and *assistant* ARMA and placed under the control and direction of the appropriate senior service attaché. This gave them cover as "noncombat" personnel in Laos. They were issued either Department of State passports or embassy identification cards and worked in civilian clothes; however, they often wore unmarked military uniforms. In 1969 diplomatic agreements were made to allow Project 404 personnel to once again perform duties as military advisors and wear military clothes. Project 404 advisors lived either in compounds near the embassy, team houses, or villas in major towns and cities. Outlying assistant attachés traveled by aircraft to their military sites daily, returning to their villas by nightfall. Project 404 ARMAs serving in major cities were located in the vicinity of the military region's commanding general's headquarters.

USAF Project 404 personnel were located at major airfields in Vientiane Wattay Airport (L-08), Luang Prabang (L-54), Long Tieng

(LS-20A), Pakse (L-11), and Savannakhet (L-39). Those who served in Project 404 clearly understood the ambassador actually controlled them while in-country, through the RO and the senior military attachés, with little input from the DEPCHJUSMAGTHAI in Bangkok.

There were basically four types of Project 404 “observers” and “augmentees”:

1. **Logistic, Support, and Administrative:** These personnel came from branches such as signal, Army Security Agency, intelligence, targeting, clerical, and other critical support skill sets and worked from the embassy to administer support. This list also included psychological operation (PSYOP), counterintelligence (COIN), and interrogation support. (Collectively, these diverse groups of support personnel to the embassy were titled the Joint Army, Navy, and Air Force [JANAF] section).
2. **ARMAs:** These were as little as one-man or up to three- to five-man teams assigned as regional observers and advisors stationed in MR-I thru MR-V. A normal composition of a team in a military region was one lieutenant colonel or major, possibly one or two captains, and one or two enlisted men as radio operators. Personnel selected for these positions were primarily from infantry and artillery branches but could include a Special Forces (SF) officer or noncommissioned officer (NCO) as well. In the initial start of the program, the tour of duty began as a six-month tour; this later transitioned to a one-year duty. If desired and the senior attaché was willing, Army Project 404 personnel extended to do multiple tours. On average, about thirty Army personnel served each year in this capacity, with perhaps four to five SF operators as part of manning the teams.
3. **AIRAs:** The USAF began Project Water Pump in 1964 as one of the first major initiatives to help train Laotian, Thai, and Hmong T-28 pilots. The training was conducted at Udorn Royal Thai Air Force Base, Thailand. Water Pump pilots flew occasionally into Laos, and other detachment personnel, including enlisted men, began a rudimentary FAC capability in-country to support this effort—the Butterflies. When USAF senior leadership discovered enlisted men were flying in Laos to conduct FAC duties instead of rated pilots, this program was changed into the famous Raven FACs, who were stationed inside Laos to support the AOCs. Other USAF Project 404 activities included

personnel for liaison with the RLAF at each of their major air-bases, combat controller (CCT) teams, medical personnel, and weathermen. In the late 1960s, hand-picked Air Commandos in Thailand and from the United States deployed to five major RLAF sites to establish or advise the RLAF AOCs. The AOC teams at each site consisted of an officer in charge; targeting experts (who were also assigned to the embassy); operations, intelligence, and communications officers; and maintenance and ordnance technicians. The AOC teams ranged from five to nine personnel, with an augmentation of USAF personnel from Thailand who flew daily across the Mekong to perform their duties, and then returned to Thailand. Project 404 personnel were responsible for the RLAF AC-47 program. The Air Force personnel program for the USAF’s administration of Project 404 was named Palace Dog.

4. The Raven FACs. All qualified FACs with duty in Laos were assigned to Project 404. They were administered by Detachment 1, Water Pump, and adopted the name *Ravens*.

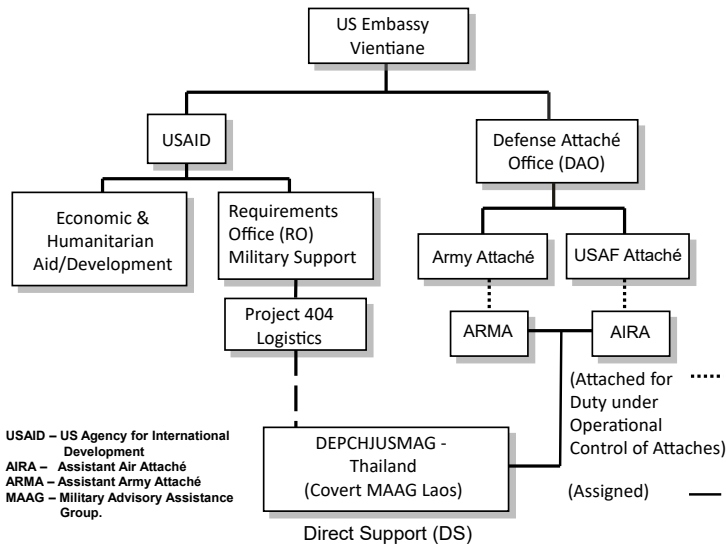


Figure 6.1. Project 404 personnel were assigned to the DEPCHJUSMAGTHAI and then further assigned in support of the US Embassy’s Defense Attaché’s Office in Vientiane.

Project 404 Communications

Communications to control the Project 404 personnel in the field were conducted from the AIRA compound using a universal automatic computer, the UNIVAC 1004 Data Line Terminal. Both Air Force and Army communications personnel were responsible for the field operations of Project 404 radio operators. To facilitate communication with Thailand, a microwave radio station was established at Udorn, run by Page engineers. A microwave station was also later constructed at Pakse, to establish communications with Ubon.

In the field, KWM-2 transceivers were located at Pakse, Savannakhet, Luang Prabang, and Long Tieng. These were bulky devices; in the event of imminent evacuation from any of these sites, the radio operators were required to destroy the communication equipment in place, since the equipment could not be loaded aboard helicopters. In an effort to overcome this liability, portable single sideband radios were issued to the radio operators.

In the field, the radio operator's job was to report back to Vientiane their logistics, personnel, targeting, battle damage assessment, intelligence, and situation reports. At the base station in Vientiane, USAF Project 404 radio operators transmitted information pertaining to the deployed Air Commando operations (the AOCs and Ravens). This communications system was not used to relay any psychological warfare (PSYWAR) products or transmit any PSYOP products.

US Army enlisted and NCO personnel assigned to Project 404 attended the Military Assistance Training Advisor (MATA) course conducted by the US Special Warfare Center at Fort Bragg, North Carolina. Personnel assigned to Project 404 required knowledge of tactics and techniques of internal defense and development operations and duties of a military assistance training advisor. The MATA course was twelve weeks long.

Academic instruction consisted of background information and statistics on the country of Laos (geography, culture, history, etc.), and military, paramilitary, and interagency organization in the host country. The MATA curriculum was focused around; (1) the administration of unconventional warfare programs, (2) subjects oriented on the tactics and techniques for combat in Laos, (3) pacification and civic action, and (4) the role of the US advisor. Additionally, Project 404 students were oriented and trained on the types of weapons, communications, and demolitions they would be exposed to as trainers and

advisors. Language training was a requisite, preferably Thai or Lao, but proficiency in the French language could suffice for course qualification; up to 300 hours was devoted in the course for language training.

Project 404 personnel were also required to serve as observers and to collect intelligence. Courses were taught on intelligence collection activities, photography, and reporting. A working knowledge of political warfare and PSYWAR was essential to understand how to combat communist ideology.

For the Air Commandos, personnel assigned to Project 404 received predeployment training at Hurlburt Field, Florida. Pilots assigned to the Ravens, chosen as experienced FACs and who had flown in Vietnam, merely required orientation training and area familiarization flights once assigned to their operating location in Laos.

Project 404, the 1970s

To effect better coordination between the deputy chief and Vientiane, DEPCHJUSMAGTHAI moved its headquarters to Udorn in December 1971. Army chief warrant officer, Raymond J. Millaway, served with Project 404 from 1970 up to its phase out in-country (as a result of the Paris Peace Accords [1973]). He served as a communications and crypto officer and traveled extensively throughout Laos to provide communications advice and training. One of his duties was exchanging crypto materials with other US military personnel operating in Laos. Millaway also worked with supporting bases throughout Southeast Asia, which also assisted operations in Laos. He often worked alongside special operation forces ARMAs and AIRAs deployed out in the MRs, especially during seasonal combat operations. He described his impression of how Project 404 was handled between Vientiane and Bangkok:

It was apparent once you processed into Deputy Chief JUSMAGTHAI that it was a “paper tiger.” It was pretty obvious the embassy in Vientiane was the power. The ambassador, AIRA, and ARMA were joined at the hip.

The embassy approved everything going on in Laos. There were even E-4s and E-5s coordinating air targets! The embassy in Vientiane was the operational 900-lb. gorilla in the room. MR-IV, during my time, was the weak point of the tactical combat operation. Everyone in Project 404 in the other military regions were getting things done. The embassy was up close and personal with ground combat operations in Laos. Ambassador Godley, also known by the nickname the “Field Marshal,” traveled extensively throughout Laos and con-

sidered himself the equivalent of any military general officer! Once, he personally drove a captured enemy tank from a battle partially back to Vientiane.

No one got assigned to Project 404 without the deputy chief knowing about it, even if you were just TDY. Project 404 message traffic was handled separately in all the strategic and tactical communication systems. Messages with “404” headers were forwarded to the ARMA and AIRA; the deputy chief was not even CC’ed on the day-to-day in-country operational traffic. They were only like ADCON of the program. However, when they moved to Udorn, where all the classified stuff was going on with the various agencies and military headquarters there supporting directly the War in Laos, they got more involved.³

In February 1972, control of all advisors in Project 404 was transferred from the US embassy in Vientiane to the DEPCHJUSMAGTHAI, Brig Gen John W. Vessey Jr. It was an attempt to regain theater military control and direction over Project 404 personnel solely directed by the ambassador and his senior military attachés. In October 1971, budgetary constraints from Congress also forced the program to be administered by the deputy chief as the single, fiscal manager.

In October 1972, DEPCHJUSMAGTHAI once again became MAAG Laos. During the cease-fire in Laos pursuant to the Peace Accords in February 1973, the new deputy chief, Gen Richard Trefry, took back control of Project 404 personnel upon becoming the chief MAAG for the US embassy (albeit still forced to keep his headquarters in Thailand). It became his job to manage the downsizing of the American military effort in Laos while simultaneously attempting to improve RLG military forces. He quickly assumed control of the RO in April, combining their efforts with Project 404 activities.

Project 404 was slowly phased out as the US involvement in Laos virtually ceased after the Vietnam Peace Accords. On 21 February 1973, the warring factions in Laos signed the Agreement on the Restoration of Peace and Reconciliation in Laos. Article IV of the agreement dictated the removal of foreign military forces from Laos: “Within a period no longer than 60 days, counting from the date of the establishment of the Provisional Government of National Unity . . . the withdrawal of foreign military personnel, regular and irregular, from Laos, and the dismantling of foreign military and paramilitary organizations must be totally completed.”⁴

The Ravens departed in June 1973. On 5 September 1973, General Trefry moved from Udorn with a small staff and became the Defense Attaché Office in Vientiane (DAO).

After the establishment of the Provisional Government of National Unity (PGNU) in Laos in 1974, Project 404 disbanded in accordance with the 60-day timetable for withdrawal of all foreign military forces (just prior to June 1974). The last Army SF Project 404 advisor left Laos in 1974.

Portions of Project 404's remaining military equipment in Laos were transferred to the RLAF and the *Forces Armées Royales*. Under the direction of the DAO Vientiane, USAF Project 404 personnel then worked to develop suitable tables of organization and equipment for the "new" Laotian Air Force.

Most of the USAF Project 404 team members experienced hostile fire or participated in combat operations with their Lao counterparts. AIRAs—Ravens and AOC commanders—flew combat missions with their host-nation counterparts and were also under enemy fire, most notably those who operated in northern Laos in MR-II area (the *Plaine des Jarres*).

In December 1975, the DEPCHJUSMAGTHAI disbanded. It was the end of an almost fourteen-year involvement of military assistance to Laos.

Notes

1. Conboy, *Shadow War*, 159.
2. St. Jean, "Twenty-three Years of Military Assistance to Laos," 49–50.
3. Millaway, interview.
4. Castle, *At War in the Shadow of Vietnam*, 118.

Chapter 7

The Ravens

You know the biggest problem we had with the Ravens, and God, I used to talk to them quite frequently about not going out there and killing themselves. Because it was my opinion that we could do an effective job without going too gung ho. . . . They had a tendency to do that; they were just so motivated to do a good job that they just over-extended themselves. . . . That was a great bunch. . . . They did a fantastic job. Because, Jesus, they were out there flying over the ground fire all the time, every day. They realized that it wasn't their war; they were exposing themselves, and they were getting killed, and still they would do this. They just did an outstanding job.

—Col Robert L. F. Tyrell, Air Attaché
US Embassy, Vientiane

The Ravens were Project 404 augmentees assigned to fill the requirement for rated forward air controllers (FAC) in Laos, as ordered by Gen William W. Momyer in 1966. They were not a formal USAF organization or squadron; the pilots and aircraft were carried on the manning and equipment documents of the Detachment 1, 56th Special Operations Wing (SOW) and the air attaché's (AIRA) Military Assistance Program (MAP), all under Project 404.

The introduction of a formal FAC system by the USAF illustrated the use of airpower in counterinsurgency (COIN) and unconventional warfare scenarios, as described by Lt Col David J. Dean in his work, "The USAF in Low-Intensity Conflict: The Special Air Warfare Center" (covered in the introduction to this work). Of his three forms of airpower relevant for use in low intensity conflicts, the employment of Raven FACs met the needs of the last two: cadre for host-nation forces with longer-term teams, and as the conflict escalates, the introduction of USAF squadrons and special operations (SO) units performing combat with host-nation forces (integration).¹

With the increase in Seventh and Thirteenth Air Force air strikes into Laos, the ambassadors, who oversaw and provided direction

for the air war in Laos, required an air control system to ensure the effectiveness and application of American airpower. Since the Air Force could not officially station personnel in Laos, Project 404 became the mechanism to employ the Raven FACs in a clandestine manner. This required the Ravens to operate as “civilians,” working for the AIRA in Vientiane.

The Ravens were much more than just FACs; they represented the ambassadors’ efforts to apply force in Laos to enable military operations of the RLG and serve as warning to the North Vietnamese government to cease its incursions. There were two major balancing acts each ambassador to Laos had to perform. The first was the application of US military power in a measured and clandestine way in order to not provoke Chinese intervention or incite further incursions of North Vietnamese military forces. This balancing act was achieved by a “smoke and mirrors” veneer of the US objective to maintain a neutral, and if need be, coalition government in Laos. Too much in the application of American military force might tip the balance in this complex situation, which required a political solution over outright US military intervention.

The second balancing act is incumbent on any manager of a COIN campaign fraught with elements of political warfare. Any act of the government that harmed the populace only fueled the fire for enemy propaganda and destroyed the concept of hearts and minds among the populace. Collateral damage and indiscriminate wounding and killing of civilians had to be avoided. If airpower was going to substitute for lack of aggressive spirit on the part of the *Forces Armées Royales* (FAR, Royal Armed Forces), it had to be precise to avoid harm. Using professional FACs as part of the air control system ensured mitigation of harm to innocent Laotian civilians who were caught on the battlefield between the communists and the Royal Lao Government (RLG).

Retired Col Karl L. Polifka, Raven 45 in 1969, described the use of American airpower in Laos: “Airpower is essential. You need more than the Lao can do—you need American firepower, and only the US can run it. Without airpower, the whole thing would have come apart.”²²

The role of the Ravens to operate as an extension of the ambassadors’ policies of restraint in the air war illustrated what the eminent strategist Colin S. Gray describes as “strategic utility.” Special operations forces (SOF), by their nature, conduct high-risk ventures to achieve high-payoff results. This is part of their strategic utility. According to

Colin S. Gray, “With so much uncertainty and so little margin for error, it is not surprising that special operations forces plan their operations in excruciating detail, mastery of which can provide a sound basis for emergency improvisation.”³

In the case of the Ravens, the ambassadors used a limited and scarce SO asset to achieve their political tasks in such a way as to prevent an outright communist take-over of the country—for at least six to seven years. Gray describes SOF’s contribution as follows: “Special operations forces are a national, grand-strategic asset: they are a tool of statecraft that can be employed quite surgically in support of diplomacy, of foreign assistance (of several kinds), as a vital adjunct to regular military forces, or as an independent weapon.”⁴

The use of Raven FACs in the delivery of airpower allowed the ambassadors to build space for diplomacy (ongoing negotiations), frustrate the efforts of the Pathet Lao and North Vietnamese Army (NVA), and bolster the Laotian military forces—all to create conditions for success. With limited force, the Ravens “expanded the choices” of the ambassadors. An inherent benefit provided by their service was to stop or “slow the pace of military failure” as described by Gray’s strategic utility.⁵ In this role, the Ravens were an essential part of “the ambassadors’ SOF”

Col Darrel D. Whitcomb, USAF, retired, served as a first lieutenant Raven FAC in military region (MR)-II. He described the critical role of the Ravens in serving to accomplish the ambassadors’ objectives:

The ambassadors were smart guys. They knew who we were and what we did. They were friendly towards us. I was told that the ambassador knew everything about the war, and watched the rules of engagement [ROE], etc. There is no doubt that the ambassador ran the war. He was very attuned to things.

As to our role for the ambassador . . . the US had given him a certain amount of power—a big fist in Laos—and we are the fingers of that fist. We find targets, get intelligence, and are the eyes and ears. We interact with the forces on the ground. We connect airpower to the forces on the ground who need help. We are your liaison for airpower to have proper effect!⁶

With the reintroduction of FACs into the air control system during the onset of the air war in Southeast Asia (SEA) (there were no airborne FACs in the new, strategic nuclear Air Force after the Mosquito system developed in the Korean War and was abolished post-Korean War), the USAF Special Air Warfare Center was designated by Tactical Air Command as responsible for FAC training. Initially, pilots attending the FAC course were required to have a background of

one-year experience as a fighter pilot. Logically, the USAF required anyone who directed strike aircraft to understand the capabilities and ordnance parameters used during air strikes. The USAF also wanted to ensure the Army was comfortable with the USAF close air support (CAS) capability by using experienced pilots as FACs, to prevent incidents of fratricide.

The demand for FACs in the war outstripped the capability to keep enough pilots in the pipeline; inevitably, arguments ranged throughout the USAF on the necessity for fighter pilot experience. Did becoming a good FAC really require a year of experience as a jet fighter pilot? On 12 October 1965, anticipating they could reinstate the requirement once the backlog of FACs was satisfied, the USAF waived the one year requirement as a fighter pilot for students attending the course at Hurlburt.⁷

Birth of the Ravens

As is normal to the SO community, creating and implementing a new and unorthodox capability requires people with dedication, adaptability, ingenuity, and flexibility. It requires operators with conceptual skills and vision. It also requires advocates and champions to overcome the inertia whenever change is introduced into the military. Fortunately, men of this type existed to get the Raven program up and running by 1968. However, between General Momyer's decision to end the use of Butterfly FACs in 1966 and the end of 1967, there were a lot of patchwork and ad hoc measures taken to create a viable FAC capability inside of Laos.

With the end of the Butterfly FAC period, MR-II and Barrel Roll activities were essentially being covered by the AIRA's FACs, Air Commando air operations center (AOC) personnel, and temporary duty (TDY) personnel assigned by the 504th Tactical Air Support Group (TASG). In southern Laos, the situation was not as dire. Operations in the south were mostly covered by the 23rd Tactical Air Support Squadron (TASS) FACs and FACs available from the 606th Special Operations Squadron (SOS), who all had their own aircraft.

On 5 May 1966, one month after General Momyer's directive and with the initiation of the Steve Canyon Program, the first two rated FACs arrived to Laos and were deployed, flying in O-1 Bird Dogs, to support Gen Vang Pao and agency operatives at Long Tieng. The

operatives—first lieutenants Jim F. Lemon and Truman “T. R.” Young—were both FACs in the 23rd TASS at Nakhon Phanom Royal Thai Air Base (NKP). After returning from controlling airstrikes in the demilitarized zone, it was highly “suggested” by their commander to volunteer for a secret program. (The first Raven FACs under Project 404 arrived in 1967 and 1968.)⁸

In MR-II, FAC-configured aircraft were in short supply. The FACs at Long Tieng only had the AIRA’s U-6 and ride alongs with Air America in Pilatus Porters to control air strikes for Vang Pao. In a June 1967 message from the embassy to Pacific Air Forces (PACAF), a U-17B with a pilot and crew chief was requested to improve services at Long Tieng. MR-II was unique in its FAC requirement in that the American FAC had to fly with a Thai FAC and a local observer or military commander—the O-1 Bird Dog could not meet this requirement. Any aircraft used to FAC required a configuration for capable FAC operations, including rocket tubes and launchers on the wing for marking targets and very high frequency (VHF) as well as ultra-high frequency (UHF) and FM radio capabilities. (The early O-1s used handheld sets because they did not have UHF.) The solution was short term; the 606th Air Commando Squadron (ACS) loaned the AIRA one of its U-17Bs on a semipermanent basis.⁹

The embassy attempted to identify suitable aircraft for use until they could be replaced by O-1s arriving later in the year via the MAP equipping program. In October, three O-1s from the 23rd TASS, equipped with rocket rails and radios, were loaned to the embassy until the MAP’s O-1s arrived. Two of these went to satisfy the requirements at Savannakhet, and one went to Pakse.

Rated FAC pilots were another matter. In 1967 the AIRA had three rated FAC pilots on its manning documents (Project 404), filled by the 504th TASG. Detachment 1, 606th ACS, provided three FAC rated Air Commandos on a ninety-day TDY basis—still part of the Butterfly program in transition. The 606th unit manning document (UMD) allowed for six FACs; this was later changed to eight to satisfy the growing requirement.¹⁰

The turmoil in keeping a reliable roster of FAC-rated pilots took a new turn. The 504th TASG warned the embassy they would not be able to keep the pipeline going much longer; the 23rd TASS was scheduled to get rid of its O-1s and transition to O-2s.¹¹

It was around September when the Raven call sign was first used to replace the Butterfly call sign. The origin of the term *Raven* for the

new call sign remains a mystery, but Col Paul A. Pettigrew, the AIRA, is often credited with its origin.¹²

Christopher Robbins, in his book *The Ravens*, explains the term:

Raven was the radio call sign which identified the fliers of the Steve Canyon Program. As a symbol of intelligence gathering and aerial control of ground combat, no name could have been more fitting for the men of the secret war. The raven is the bird of the gods. In Nordic mythology, two ravens, Hugin (Thought) and Munin (Meaning), perch upon the shoulders of Odin, lord of gods. Each day they fly to the ends of the earth and return to their master at night to whisper in his ears the world's news. The Vikings believed that the excited birds soaring above a battle were the gods in the guise of the Ravens.¹³

In the embassy's discussion with Seventh/Thirteenth Air Force in Udorn, the matter of a permanent fix to the patched-together FAC program in Laos was raised. The AIRA recommended a one-source unit for its requirements—the 23rd TASS—where pilots, aircraft, and mechanics for the Steve Canyon Program could be administered. The 23rd TASS begged off, citing the same reasons as the 504th TASG—they were transitioning out of O-1s and into the O-2s. As a counter-argument, they recommended Detachment 1, Air Commandos.

Not solved by November 1967, the embassy outlined their requirements in a formal request to PACAF. At this time, the AIRA had eight FACs and three O-1s to work with. One of the O-1s on loan from NKP was assigned to the newly established Luang Prabang AOC.¹⁴ At this time, Raven FACs were averaging eighty-five flying hours a month. The FAC aircraft roster was a hodge-podge of loaned aircraft.¹⁵

In December 1968, Commander in Chief, PACAF supported the embassy's request with the issuance of eight O-1 aircraft. The UMDs to support the Raven program were also fixed to provide a steady flow of pilots and more permanence to the pipeline flow of new pilots.

The AIRA's UMD was affixed with six FACs. The 504th TASG's UMD was increased to nine additional FACs for the Steve Canyon Program. The Deputy Chief Joint United States Military Assistance Group, Thailand maintained three FACs—the AOCs at Wattay, Savannakhet and Pakse—for use by the US embassy on the Project 404 roster. The agency chief operative at Long Tieng was wary of establishing an Air Force AOC at Long Tieng, which he thought would interfere with his capability to conduct covert and clandestine air strikes. This all shook out as twelve Ravens for duty and six AIRA FACs.

Status of Raven Aircraft as of November 1967*

Location	Aircraft Availability	Hours Flown per Month
Luang Prabang	1 x O-1 (loan from NKP)	100
Lima Site (LS)-20A (Long Tieng)	1 x U-10 (loan from 56 ACW)	160
	1 x U-17 (loan from RLAF)	165
	Continental and Air America Porters	120
Vientiane	1 x O-1 (loan from RLAF)	60
Savannakhet	None (use RLAF O-1 occasionally)	75
Pakse	2 x O-1s (loan from 23rd TASS)	210
Various	1 x U-6 (loan from Thirteenth AF)	20–30

Figure 7.1. In 1967 available aircraft to conduct FAC duties over Laos were woefully inadequate for the assigned tasks. *Chart adapted from Capt Henry S. Shields, *USAF Control of Airstrikes in Support of Indigenous Lao Ground Forces* (HQ PACAF: Directorate of Operations Analysis, CHECO Division, July 1972), 55.

The Project 404 Air Commando FACs went straight to Vientiane for duty after completing the FAC and Air Ground Operations School course at Hurlburt. They did have the stipulation to get some type of FAC training in theater before they flew FAC missions. In October 1968, the AIRA reoriented the three AOC FACs to serve only AOC duties, having a sufficient number of Raven FACs by this time. However, this did not stop FAC-rated AOC pilots from conducting missions; they just adopted the call signs of their counterpart T-28 squadrons. To compensate for this restriction on AOC pilots, the 504th TASG increased its UMD by three Raven FAC slots.

Raven FACs were assigned permanent change of station (PCS) to Detachment 1, 56th ACW with TDY to the AIRA in Vientiane. From there, they were sent to one of the five operating locations used to maximize and integrate the air control system in Laos: Vientiane, Long Tieng, Luang Prabang, Savannakhet, and Pakse.

A final part of the Raven concept implementation solved the O-1 aircraft maintenance woes. Air America was contracted to perform on-site

maintenance inside Laos and inspect and repair as necessary (IRAN) maintenance at their facilities in Udorn, using Filipino technicians for the most part. This effort was augmented by aircraft maintenance mechanics on the AOC rosters and Water Pump maintenance personnel flying across the Mekong on a case-by-case basis.

By January 1969, the Steve Canyon Program was up and running with a working system to support the program with pilots and aircraft.¹⁶

USAF (non-SOF) rated FACs operating in SEA were assigned to a TASS. The first TASS established in Vietnam was the 19th TASS at Bien Hoa in July 1963, with twenty-two O-1 Bird Dog aircraft (L-19s) and twenty-two crews. The unit was fully operational by 15 September.¹⁷

By June 1965, the Air Force had activated the 20th, 21st, and 22nd TASSs to meet the growing demands for FACs in the Vietnam War theater. By 1967, the 23rd TASS was organized at NKP. All five TASSs were under the control of the 504th TASG. The 504th TASG had the responsibility to provide Raven FACs to Laos under the Steve Canyon Program.

From Steve Canyon to Raven in the Field

The Steve Canyon Program was a highly classified, in-theater program to recruit qualified FACs for entry into the Project 404 FAC program in Laos, with duty as a Raven. The program was designed to fix the ad-hoc, temporary nature of assigning FACs for duty in Laos and was administered by the 504th TASG. Pilots who met the initial requirements were put on orders to Thailand. Upon arrival, the FACs were assigned to Detachment 1, 56th SOW for administrative purposes, then on for duty under the AIRA in the US embassy, Vientiane. The Steve Canyon Program served as one of the pipelines for the Ravens based on field requirements, aircraft requirements, and maintenance requirements.

FAC pilots in SEA heard of the Steve Canyon Program through a variety of means. There was chatter among the FACs about a war being fought “out-country,” shrouded in secrecy. Pilots ran into Raven FACs during officer’s club excursions and learned of the program in Laos. In some units, a headquarters twixt was posted on the bulletin board, with just enough information to pique the interest of the most adventuresome. On the official side, FACs were approached by their own commanders as their six-month tours were coming to a close, and

offered the chance, or opportunity, to join the Steve Canyon, Project 404 venture. What was common to all these methods was the interested pilots would not learn much about the details of the program until they applied.

To be eligible for the Steve Canyon Program, a FAC had to complete six months of his in-theater service and be retainable for six to eight months. He had to have served as a FAC for at least sixty of those days (tours to SEA were one-year tours). The FAC Raven nominee had to have an accumulated total of 750 flight hours, 100 of them at least as a FAC, with 200 of the hours on the O-1 Bird Dog. The only exception to the requirements was for the three FACs assigned to the AIRA UMD in Vientiane because they were considered as Project 404 officers. No fast mover (jet qualified) FACs were supposed to be considered for the Steve Canyon Program, but it is known that at least two senior Raven FACs were previously F-105 pilots.

A candidate for the program could accumulate his qualifying hours as a FAC even if not flying in O-1s. A-26 pilots and copilots, C-123 Candlestick pilots, and AC-130 and AC-119 pilots could self-FAC. In these cases, the Raven candidates were required to conduct a sixty to eighty hour O-1 conversion course in South Vietnam. The pilots gained experience FACing in the mountainous region of II Corps in the Republic of Vietnam, with focus on TIC.

As shortages accrued in the pipeline and the O-1 was phased out in Air Force units in Vietnam and Thailand, some waivers were made to the requirements. New pilots fresh from undergraduate pilot training were only required to have a total of 350 hours flying time if they went straight to Hurlburt and entered FAC training. For a period, the 200 hours as a FAC were waived. For instance, in 1971 only 100 hours as a FAC were required.

When the 504th TASG left Vietnam, it was necessary to conduct a Phase II reorientation training course for pilots who had previously been qualified on the O-1 but had later transitioned to the OV-2 and OV-10 in Vietnam and Thailand. After April 1971, Detachment 1, 56th SOW ran a transition course at Udorn; however, it was eventually transferred to Wattay Airport in Vientiane and aligned with the assets of the Royal Lao Air Force (RLAF) FAC training program, established there in late 1971. And of course, there were always exceptions to the rule for exceptional FAC pilots to fast fill the Raven roster when combat losses occurred.

The next step for pilots applying to become FACs in Laos was completing the application procedure developed by the 504th TASG, director of operations. On the application, the pilot clearly had to state he was volunteering for the Steve Canyon Program and list his marital status. Other required information included; present duty location, total flying time, date of rank, date of departure from duty assignment, and willingness to extend his tour in SEA to ensure six months of service in the Steve Canyon Program. With a constant shortage of Ravens, the most important qualifier of an applicant—if he agreed to everything—was how soon he could be released from his current duty. The application required two endorsements from either the applicant’s supervisor, operations officer, or commander, stating his familiarity with the Steve Canyon Program and providing confirmation the officer applying met the qualifications, thereby offering a formal recommendation. If the chain of command was unaware of the Steve Canyon Program, the 504th either arranged to send a personal letter with some details to them or conducted a personal visit to the nominee’s commander to discuss the qualifications.¹⁸

The Raven nominee then reported to the 504th commander for a final determination and, if chosen to enter the Steve Canyon Program, was put on orders transferring him to Detachment 1, 56th SOW in Udorn for administrative purposes. With orders in hand, Raven nominees procured transportation to Thailand and reported into Udorn.

The consolidated base personnel office for Detachment 1 was located on the second floor, southern side of the southernmost hangar in the Air America compound. In-processing took about three hours; billeting was procured, and then the Raven nominee usually spent about one week conducting inbriefings and administrative procedures. This included required briefings by the 432nd Tactical Reconnaissance Wing, although some Ravens completed in-processing in as little as three days after arriving at Udorn.

The Raven nominee turned in all military clothing and identification for storage while he was “up-country” on his tour in Laos, only civilian clothing would be worn.

Raven FACs were prohibited from flying in official USAF flight suits but were urged to bring along personal gear needed to operate out in the field. Pistols, binoculars, and survival equipment were issued while at Udorn. Detachment 1 encouraged the pilots to choose civilian clothing and boots commensurate with their duty in

the field to protect them from the environment. The new “jungle boots” were highly recommended for walking if the aircraft was downed. Many pilots either had their own sterile flight suits sewn by Thai tailors in and around Udorn or made when they got to Vientiane to preserve secrecy.

It was then on to Vientiane to meet the chief FAC. This constituted the final in-processing, where the Raven nominee received ROE briefings, intelligence briefings, an orientation to Vientiane, and then lodged in the Raven quarters in the AIRA compound. With the issuance of embassy identification cards and Laotian driver’s licenses, the Raven nominee began his new life as “Mister So-and-So,” and awaited his assignment.

“Mister” Darrel D. Whitcomb, Raven 25, Long Tieng, September 1972–March 1973

Capt Darrel D. Whitcomb, USAF, retired, was an OV-10 Bronco FAC with the 23rd TASS. Prior to his time with the 23rd TASS, he flew a tour in Vietnam as a C7A pilot. He occasionally heard about the Ravens and the Steve Canyon Program.

I learned about the Ravens from friends, some parts myth about them (or, I might have read a directive or regulation). There were a lot of “special programs” all over SEA. Their story had intrigue and mystique. I saw some of the guys who had been Ravens, wearing the big gold bracelets and watches. I then met a guy running the program and got my orders through him. You had to have six months as a FAC. They initially began the program by only taking O-1 guys, since that is what the Ravens used; but later, OV-2 and OV-10 guys could volunteer.

Detachment 1, Water Pump, was at Udorn. The Detachment 1 handled the Ravens program—it was covert. We had to sign nondisclosure agreements, turn in all our military gear, and change into civvies. We then took a thirty minute flight to Vientiane. There, we got special ID cards. When we went to Vientiane, I met Jim Coombs (my Raven boss). He took me to the embassy where we got briefed up, and after that we went to the contracted house (the ICE house, AIRA quarters). It was a whirlwind for me; five days from flying an OV-10 to flying an O-1!¹⁹

He became a Project 404 Raven after entering the Steve Canyon Program but first had to conduct O-1 orientation and transition.

When I joined them, I had to spend days and days flying the O-1. It was a tail dragger and landed differently than other aircraft. You had to learn that or it had a tendency to do ground loops. There was a Raven who was the trainer for

us; we flew out of Vientiane and made landing after landing on a dirt strip, some touch and go. That was the thrust of the training; we already knew how to FAC. The O-1 is a very light aircraft and you also had to be able to handle it in high winds. I made about 100 landings to qualify.

We flew out of Wattay for our training; we used dirt strips with no traffic control. We made maybe ten landings a day; you made enough until you puked. We had to practice no flap landings—short airstrips required full flap landings. You were always at risk for a stall. But, this practice came in handy a few times later, landing on dirt roads in Laos. You had to be trained well, or there would inevitably be an accident.²⁰

The priority for assignment was MR-II, Long Tieng (LS-20A), where almost half of the Ravens were assigned. Approximately twelve to fifteen of the Ravens served at MR-II during the program's peak. MR-II was where most of the combat conducted in Laos occurred, requiring FACs to support the "customer"—both Gen Vang Pao and the Agency CAS operatives working throughout the *Plaine des Jarres* (PDJ). The combat flying was intense in MR-II, and Ravens assigned to Laos could expect to spend at least half their tour flying there, then rotate to other MRs if they desired; although, many chose to fly the entire six months in MR-II. The other twelve or so Ravens were split between the other military regions, mostly Luang Prabang, Savannakhet, and Pakse, supporting the AOC commanders (up to three Ravens at each site). At these sites, Ravens were required to support Lao government troops, advise and assist on the tactical air system, and assist in the training of Lao RLAFF FACs.

Whitcomb flew his O-1 in MR-II, as Raven 25:

In the O-1, our job was to go out and find targets, and then mark them. If the weather was bad, and no fighters could get down, we just stayed below the clouds and did the strike ourselves, using the rockets. I used to have a Hmong in the back seat with an automatic weapon we would use it if we got into ground clashes. I took hand grenades. I had smoke grenades to mark targets or to use to direct ground troops if they were lost as to their location. In this way I could direct them to someplace they recognized.

I would pull the pin on a smoke grenade; it goes fast, maybe in two to three seconds. If you were too high, it burnt out before hitting the ground and the smoke would extinguish. Usually we had to get low for them to be effective markers. I even pulled the pin and put the hand grenade in a glass jar, so it would break when it hit the ground and go off!

I flew back daily to Vientiane, but sometimes would go to 20A en route and stop for fuel. Sometimes I spent the night there. My route every flight was usually take off from Vientiane, go to 20A and get targets, fly and FAC over the

PDJ, then back to Vientiane. I repeated this two or three times a day. Vang Pao really wanted us to stay on-site at 20A. There was no night flying, due to no lights on the airstrip at 20A. At night, maybe we would help with the control of the Spectre or AC-47s. It was like a *Festung* situation up at 20A.

I normally worked with friendlies—killing a lot of enemy artillery. I did not fly down south. (I did when I was in 23rd TASS—Tchepone, Mu Ghia Pass, Saravane.) I also worked with Thai and Lao FACs. In MR-II, the Ravens were the “2 series”—Raven 25, Raven 26, and so forth. The Raven boss in MR-II was Raven 21. The Hmong T-28 guys were pretty good (Vang Pao’s air force).²¹

All Ravens were afforded “government quarters” at each of these sites. If located in the major cities, Ravens could expect a nice villa-type set of quarters with cooks and maids and access to local amenities. American niceties could be procured anytime a Raven pilot was in Udorn. In-town quarters, for the most part, were air conditioned, except at Long Tieng where at high altitude, it was believed fans were enough. Ravens received about \$16 dollars a day per diem. The monthly per diem allowances for Ravens—combined with combat pay and bachelor officers’ quarters (BOQ) fees—were \$490 for a first lieutenant, \$504 for captains, and \$522 for majors.²²

In 1969, since the Ravens at Long Tieng were living in so-called “government quarters,” per diem rates for were cut to \$8. To gain some money back, a \$2 BOQ fee was added, giving them \$10 daily.

Upon arrival to their MR duty location, the Raven FAC spent a small time either with the AOC commander or senior Raven FAC on-site to conduct an orientation to the MR. If the outgoing Raven was still present, the incoming Raven FAC performed flight orientation and control of a few air strikes before becoming “fully qualified.”

Thus, the chain of command for a Raven FAC began with the senior FAC on site, thru the AOC commander, to the AIRA, and then administratively back to Detachment 1, 56th SOW. This would cause some consternation for official officer efficiency reports (OER) throughout the tour of a Raven. Precisely who had the best input—Air Commandos in the field or bureaucrats far removed from the battlefield—was in question. By the 1970s, the AIRA wrote the OER and it was endorsed by the designated official or commander of the 56th SOW.

Officially, at no time were Ravens not in the Air Force, even though they lived a cover story. They were never under the command of Central Intelligence Agency (CIA) operatives, although they “worked” for them on some sites as part of their duty and orders to “sup-

port the customer.” This pretense (or cover story) was dropped in October 1970. The US government openly declared they were US military personnel working for the embassy in Vientiane. If asked, Ravens were told to identify themselves as working for the AIRA. (Even at that, some Ravens in MR-II kept to their cover story.)²³

Ravens flew in civilian clothes chosen for comfort or tailored, hand-sewn local flight uniforms, at the same time, taking environmental conditions into consideration. Most wore some type of rugged boots. Ravens carried AK-47s— preferred for its folding stock and short barrel—which fit nicely in the O-1 cockpit along with spare magazines. Other Ravens chose to carry the Swedish K submachine gun and, later, CAR-15s issued by the USAF. Side arms differed based on personal preferences, but the .38-caliber Combat Master pistol was available from USAF stocks.

Raven 43, William E. Platt, used tracers in his rifle ammunition. “Unless the guy dropping the bombs is right behind you, he cannot see where the rounds are going. Tracer was also good for “probing with fire.”²⁴

All carried some form of smoke grenades and often hand grenades (and some pilots carried the M79 grenade launcher). Smoke grenades were used initially by the Butterfly FACs to mark targets until FAC aircraft became sufficiently equipped with 2.75-inch marking rockets. Even so, the smoke grenades were essential for signaling rescue assets if a Raven was downed.

A Raven was also issued a standard USAF pilot’s helmet with communication jacks along with a survival vest for carrying essential evasion gear. Beyond this, additional gear or weapons were carried to allow for food and water during the flight or a chance to poke a gun out of a side window to shoot at the enemy.

Maps, notebooks, and grease pencils rounded out the tools needed during a flight. Grease pencils were used during an engagement to write critical information on the cockpit windows needed during an engagement.

1st Lt George S. “Steve” Wilson, Raven 27, January–June 1972

Before entering the Steve Canyon Program, 1st Lt Steve Wilson had seventy-five flight hours flying in Vietnam and over the Ho Chi

Minh trail (HCMT) in an OV-10. He described his entry into the Raven pipeline:

There was a single page letter posted in the operations room; it was very cryptic. The letter was asking for volunteers and it listed the prerequisites. It did not say where the duty was, but people talked and the word was out it was probably Laos and the Ravens. We had heard their radio calls occasionally when they came up on Guard Net if there was an emergency, and they posted their location, so we knew guys were flying in there.

I had no prerequisites; they needed pilots due to losses, and I was accepted. The reality was, if a Raven was down and got captured, they got killed. With orders to go to the Ravens (PCS to Detachment 1, 56th SOW in Udorn Thailand), I took two weeks of Christmas leave. I returned and landed in Saigon, then over to Thailand, and by 4:00 p.m. that afternoon I was in Laos. I went to Vientiane. There was a checkout process, in-processing, a ROE test, where you had to pass at least 90 percent of the questions. (It was Top Secret.)

I spent three or four days checking out on the O-1. You had to make sixty full stops with full flaps. During that time, I flew training missions. We had to leave our flight suits in Thailand. I had civvies, my dog tags, jungle boots, and a Geneva Convention card.²⁵

Raven Forward Air Controller Aircraft

During the transition from the Butterfly and AOC FAC era to the Raven FAC program five types of aircraft were used to perform airborne FAC duties, until the O-1 Bird Dog became standardized. These were the U-6A/B de Havilland Beaver (L-20), the U-10 Helio Courier, the embassy's U-17B, the Air America Pilatus PC-6 Porter, and the O-1 Bird Dog itself. The choice of these variants was based on aircraft allowed for operation into Laos under the MAP and foreign military equipment sales. Unfortunately, this prevented upgrading the Ravens to the Cessna O-2 Skymaster and the North American OV-10 Bronco, as they were prohibited for acquisition by the RLAF through the MAP program. Also, O-2s and OV-10s could not operate out of Long Tieng. RLAF T-28s and A-team, B-team, and Water Pump T-28s were also available for FAC operations.

The O-1 Bird Dog

The Cessna O-1 Bird Dog was the most ubiquitous Raven FAC aircraft, chosen for its simplicity to operate and maintain and its sta-

bility in flight, allowing the pilot to occasionally use both hands off the stick. It was a taildragger and was famous for ground looping. It was powered by a six-cylinder engine with 213 horsepower (hp), giving it a cruising speed of 100 miles per hour (mph) or eighty-five knots, with a maximum speed of around 115 mph, and with some pilots up to 140 if redlined. With two twenty-gallon fuel tanks in the wings, the O-1 could operate around four hours and fifteen minutes per sortie, based on load weight configuration (a cruising range of 530 miles). The fact that the fuel tanks in the wings were not self-sealing proved to be a weakness. It had a two-passenger, in-line seating configuration.

It was a short takeoff and landing (STOL)-like aircraft if handled well by the pilot and had less range than the U-17B and T-28. Other than a one-quarter inch armor plate under the pilot's seat, the O-1 Bird Dog had no armor and was slow to climb after a rocket-marking run. At a level and smooth climb, it was rated for 500–600 feet per minute. Platt remembers, "But with jinking, steep climbs, and weight on the aircraft, it was more like 200 feet per minute."²⁶ This exposed the pilot to anti-aircraft artillery (AAA) for a long period until reaching a safe altitude. However, it had the best visibility of all the aircraft Ravens used to FAC. An additional feature was the plexiglass panels overhead of the pilot, allowing him to track aircraft above him.

Instrumentation was basic and it did have night flying capability—phosphorous marking on the instruments and red lights in the cockpit—along with ultraviolet spotlights. At Hurlburt O-1 pilots were required to conduct two nighttime check-out rides; however, Ravens were urged not to fly at night. Night flying did occur based on circumstances. (Karl L. Polifka, Raven 45, made four night landings at LS-20A during his tour.)

All O-1 Bird Dogs used by the Ravens were painted light gray with only an aircraft number stenciled on the tail. A red stripe was painted across the top of the wings. There were no US national markings on the aircraft.

The O-1, like other FAC aircraft, carried the AN/ARC-44 FM radio, the AN/ARC-73 VHF radio, and the AN/ARC-45 UHF radio used by backseaters (later replaced by the ARC-51BX).

The U-10 Super Courier

The U-10 Super Courier (ex-L-28) was built by the Helio Aircraft Company and had a Lycoming engine. In the civilian version, it was

configured as a six-seat aircraft. The military version was a four-passenger, side-by-side arrangement. The U-10 was designed for a variety of tasks: liaison, light cargo, small supply drops, psychological operations, reconnaissance, and FAC capability. It was a STOL aircraft that could take off from unimproved strips in about 300 feet. The STOL capability came from forward leading edge slats that activated when the aircraft was doing about forty-five mph. Its maximum speed was 180 mph, with a cruising speed of 160 mph. It had a range of 1,000 miles and a climbing rate of 1,150 feet per minute. Its largest downside was the wings could not be configured for mounting of rocket rails.

The U-17B

The U-17B was the military version of the Cessna 185 Skywagon. It was a six-seat, single engine aircraft first produced commercially in 1961. It was equipped with a 300-hp Continental engine and was more powerful than the O-1 Bird Dog. It had a long flying time, up to seven hours. Its downside was the tandem seating arrangement, which blocked the right hand view of the FAC pilot if a passenger was aboard. It did not have visibility overhead, a feature desired for the FAC to track strike aircraft inbound or in orbit.

The Pilatus PC-6 Porter

The Pilatus PC-6 Porter was built in Switzerland for use in the Alps. It was a STOL aircraft with a reversible turboprop, allowing it to operate on very short and austere landing fields. It only required 300 feet for takeoff. It was a high-wing monoplane with large tires and a steerable tail wheel. It could cruise at 120 knots and took 128 gallons of fuel, with duration of flight for about three hours. The PC-6 was designed to carry eight or nine passengers but often loaded over twelve Hmong, due to their small size.

It had cargo doors on the side and a hatch in the floor for dropping supplies. The front cockpit windshield and door windows offered excellent visibility; however, because it was a civilian contract aircraft, it was prohibited from being configured with rocket rails. When the Ravens first operated out of this aircraft, they had to throw smoke grenades out to mark targets.

The U-6A Beaver

The U-6A/L-20 Beaver began its military service in the latter part of the Korean War as a utility and liaison aircraft. In 1962 the L-20 was designated the U-6A Beaver. The USAF version of the aircraft was designed to be used for aerial medical evacuation and was outfitted with litters. Due to its STOL capabilities, it was also used for liaison, aerial reconnaissance, cargo hauling, and transport.

It was equipped with a Pratt & Whitney Wasp Junior engine, with a constant speed propeller. It had a crew of two and could carry up to five passengers, with a maximum payload of 1,675 pounds. Its max speed was 163 mph, with a cruising speed of up to 130 mph. Its range was 455 miles, and it could operate at ceilings between 18,000 and 20,000 feet. It required only 1,000 feet of runway for takeoff.

The T-28 Trojan

The T-28 was a suitable FAC aircraft and had speed and range greater than any other aircraft used by the Raven FACs. It was liked for its ability to carry more marking rockets than the O-1. It had a good climbing rate of 2,500 feet per minute, which was preferred to avoid AAA fires after a rocket-marking dive. Its speed was also its downside; the T-28 did not have a slow loiter rate time as the other aircraft used to conduct FAC missions. The low wings also tended to obstruct visibility towards the ground.

Platt, Raven 43, loved the T-28 as a FAC aircraft:

I accrued 72 hours in the T-28. I checked out in the T-28 in February; there were three Laotian pilots who were flying several sorties, every day, every year. They were amazing pilots.

You could not see out of it well, it was oily. I liked the .50 calibers, combined with flechette rocket rounds. I flew the T-28 because at Long Tieng, the first guys to the flight line got their pick of aircraft. Plus, most guys liked to fly the aircraft they flew the day before. They knew it; if you picked a different aircraft, you did not know its status, quirks, or what the guy did with it the day before. We did not have any markings when we flew; if Laotians flew, then they inserted a panel into slots on the aircraft to indicate Laotian markings. We did not have markings on the O-1s, but the Raven O-1s had a red stripe across the top of the wing. The O-1s were painted grey.²⁷

I liked to be one of the first Ravens to the flight line in the predawn quiet. The goal was to select my aircraft for the day. Perhaps tail #322, which had brought me home safely the day before; perhaps an aircraft recently returned from the 100-hour Udorn inspection.

One day in January 1970 there were ten to fifteen trucks lined up just off Route 6. Foliage-laced nets covered most vehicles. A flight of two A-1 Skyraiders destroyed them all with bombs and CBUs [cluster bomb units]. The secondary explosions cooked off for hours. Enemy staging areas were vulnerable in good weather but when the ceiling was low and the visibility was poor, vehicles flowed toward their objective in slow, lumbering convoys.

We were the artillery! Our Raven T-28s often carried four pods of seven rockets each. I preferred a mix: one pod of high explosive warheads, one of flechette darts, and two pods of white phosphorous smoke marking rockets. I planned to conserve the twin .50-cal machine gun ammunition for emergencies or below the weather strafing runs on roadside hideouts and trucks.

I carried a .38 combat masterpiece sidearm and an AR-15 rifle with several magazines of tracer. I carried an M-79 grenade launcher, called a “thumper,” with twelve to fifteen grenades. These personal weapons were reserved for ground escape and evasion if necessary. The PAVN usually remained hidden until discovered. Occasionally, I used my AR-15 to probe a suspect position to cause the enemy to give away their location. Muzzle flashes and gun smoke were often the first indication of enemy locations. Time to call for the bombers to explode the area.²⁸

In 1971, the Raven aircraft inventory consisted of the following thirty-two aircraft:

- Seventeen O-1Fs
- Two O-1As
- Five U-17s
- Eight aircraft in phased IRAN maintenance or battle damage repair in Udorn

Rules of Engagement

The ambassadors used the Ravens to enforce their ROE for US air strikes. Two issues constantly drove the application of airpower in Laos: (1) not to widen the war and risk Soviet, Chinese, or increased NVA involvement, based on adherence to the Geneva Agreement; and (2) prevent collateral damage and killing of innocent civilians. Any attacks against civilians were prohibited. There were other considerations when designing the ROE—termed “Romeos” by the pilots. First and foremost was input from the Lao prime minister, who had a say over where, when, and how much airpower could be applied within the kingdom. In many cases, Prince Souvanna Phouma agreed

with any of the ambassadors recommending strikes as long as it was kept quiet and out of the news.

Other considerations were cultural. For example, *Wats* (temples) and historic sites were off limits. The other consideration was political. The RLG and the Pathet Lao were constantly in negotiation, so Pathet Lao headquarters in Sam Neua and any aircraft or helicopters to transport them—possibly to a negotiation site—were off limits. The Chinese cultural center at Khang Khay was off limits, even though it was mysteriously destroyed during the war.

In the early sixties, with the advent of RLAF AT-28 capability, the ambassador held release authority over use of bombs and fuzes, approving each target. Napalm was initially strictly forbidden since it had such an onerous reputation. (The first use of napalm was approved to defend Nha Khang, LS-36, to prevent its overrun on 17 February 1966.)

Due to previous incidents of fratricide during the onset of Barrel Roll and Steel Tiger, restrictions were placed on inhabited areas and fixed structures. Luang Prabang (the royal capital) and Vientiane (the political capitol) had a twenty-five nautical mile avoidance zone around them. Other major cities—Pakse, Savannakhet, and so on—had a ten-mile safe zone and a 15,000-foot avoidance for any US strike aircraft inbound.

No ordnance could be delivered on any village or building; they had a 500-meter safe radius. This was later amended to allow ordnance delivery if AAA emanated from a building, as long as it was 14.5 millimeters (mm) or higher.

Strike aircraft were prohibited from operating near the Chinese border. It took Joint Chiefs of Staff approval for any ordnance expended or to return fire on AAA in that zone, with validation from the American embassy, Vientiane. There was also a restricted zone along the North Vietnamese border of 16 kilometers (km), with the same requirements to expend ordnance as was in the Chinese border zone.

Initially, no strikes were authorized more than 200 meters off major roads and trails. This restriction was placed to protect covert teams conducting reconnaissance and to prevent deaths of civilians who may have been pressed into labor service along the HCMT. As the air war intensified, more latitude was given to strike deeper off trails to hit logistics dumps, truck parks, and troop bivouac areas. Striking mobile targets was fine, if a military vehicle was positively identified.

All incoming strike aircraft had to be under the positive control of an airborne FAC. In the quieter areas of western Laos, a ground for-

ward air guide (FAG) might suffice. If possible, the Raven FAC was required to take a Thai, Laotian, or Hmong observer to assist with the strike and who had local knowledge of the military situation.²⁹ By 1969 military targets of any kind could be hit in areas designated as devoid of civilian population, called special operating areas, which operated as free fire zones.

The ambassadors had almost exclusive control over the US ROE. Friction developed between the Air Force, the embassy, and the Ravens on this command and control arrangement. Senior Air Force officers did not understand the unorthodox measures of the Raven FACs and made their displeasure known when it was understood the ambassador appeared to run the air war in Laos. One senior official, after visiting the Ravens at Long Tieng, compared them to Mexican banditos, professionally incapable of controlling US air assets.

Darrel D. Whitcomb was a Raven FAC at Long Tieng from January to June 1972. His view of the role of the ambassador and the ROE in the Barrel Roll area was practical:

ROE was part of the business. War is political. Civilian leaders give us guidance. I understood that some of that made sense, and some of that doesn't. The State Department had to work on maintaining political relations in the light of the Geneva restrictions. We were required to have a good, solid working relationship with the embassy and its folks. There are times with contact with the enemy that the ROE fades away, particularly when the enemy is in front of you trying to kill you—it clarifies what you are willing to do. But in general we were required to respect religious sites and locations, and peaceful villages. One thing is frustrating though; politicians never flew in our area and never took risks, even though they sit and write ROE for our situation!

The Raven Box. We were not restricted to the Raven boxes, but we were the controlling authority if anyone flew into them for strikes. Sometimes other people would come into the box to work strikes. We also checked in with ABCCC [Airborne Battlefield Command and Control Center]—like Hillsborough when working the HCMT. ABCCC knew when Ravens were up. The Army was flying SIGINT (U-12s); there would be EC-47s, gunships, RF-4 Recon, Nail FACS. They all checked in with us when servicing the Barrel Roll area.³⁰

Will Platt, Raven 43, stated his view on the ambassador's ROE:

I'll tell you about ROE—they were written to protect commanders, our pilots, civilians, and friendly forces. For the most part, the ROEs were common sense. We obeyed the ambassador's rules of engagement. They were not inconsistent with my values or combat ethics. ROE clearance delays did result in some missed targets but we did not cause any friendly fire incidents while I was there.

The US ROEs did not apply to Lao, Thai, or Hmong fighter pilots. They hit everything deemed nonfriendly or of enemy value. The Lao/Hmong military commanders made the strike decisions and approved the targets in MR-II while I was there.

Mobile targets vanished under the canopy in minutes. The time to coordinate approval, rendezvous, bomber brief, and employment often required thirty minutes or longer. Our need was for quick strike capability. Enemy supplies were said to be in abandoned settlement structures. I found enemy outposts and bunkers camouflaged among the ancient jars of the *PDJ*. We resented the restrictions that compromised or delayed our ability to strike valid targets immediately when found. I was satisfied that no one ordered me to strike enemy civilian settlements. . . . Ambassador Godley coordinated preplanned targeting lists. I understand the Lao prime minister approved each area bombed.

In January, February, and March there was a lot of combat on the *PDJ*. The NVA counterattack was multiple blitzkrieg waves of ground assault of men and equipment. Small PAVN units dispersed across the entire *PDJ* along every road and stream. Emergency calls for a FAC were constant. Troops-in-contact battles were frequent. Lives and tactical positions were lost or reclaimed each day.

The ROE for SAR [search and rescue]: The Jolly Green aircraft and crew were occasionally positioned at Long Tieng. Usually they were on alert at Udorn two hours south of LS-20A. They could not go on a rescue mission without A-1 cover and support. The A-1s were on alert at Udorn, an hour away. Air America helicopters could, and did, react immediately to SAR events. These cool operators often picked up our downed crewmembers before enemy forces or Jolly Greens could respond. They were selfless and ignored the danger. They just flew in unarmed to make the pickup.

We lost four Raven pilots—missing in action or killed in action—in the spring of 1970. Many more aircraft were hit by ground fire and were nursed home. Two Ravens were recovered on the *PDJ* by Air America. The Jollies rescued several fighter-bomber crews shot down over the HCMT.

The senior Ravens and AOC met each morning and evening with Gen Vang Pao and the CIA customer and his staff to coordinate military plans and operations for that day. Jerry Rhein was the MR-II Air Operations Center commander in January of 1970. He earned exceptional confidence and respect from General Vang Pao who recognized a no nonsense warrior with skills.³¹

The Threat

The threat to the Ravens and all other airpower assets flying in Laos was from antiaircraft (AA) guns and automatic AAA, along with ground fire from Pathet Lao and NVA troops firing automatic weapons. Heavy machine guns consisted of the 12.7 mm with effec-

tive ranges between 1,000 and 3,000 feet, followed by the 14.5 mm with lethal ranges between 1,300 and 4,200.

The next step up in the enemy's inventory was the 23 mm, which could range out to 6,500 feet. Most of the 23-mm guns faced by the Ravens were not on the *PDJ* but sited in Sam Neua Province (and at times in the Ban Ban Valley).

The 37 mm, a heavy AAA weapon, was the gun most often fired against the Ravens. Heavy AAA was generally positioned to protect valuable targets. Weapons heavier than the 37 mm—such as 57 mm, 85 mm, and 100 mm AAA and (later in the war) surface-to-air missiles—were not normally employed other than on the HCMT and to protect key logistics sites along infiltration routes (Routes 6 and 7) in northern Laos.

The Pathet Lao and NVA employed AA and AAA both in single gun positions and in ring batteries. Heavy AA machine guns were either ground emplaced around enemy camps or mounted on armored vehicles such as the BTR-40. Without precision weapons, initially, strike aircraft in Laos were forced to fly lower than these effective ranges to achieve accuracy in their bombing and ordnance runs. Tactics included flying at low altitude, hopefully using terrain masking and jinking (altering the speed, direction, and altitude of the aircraft flown) to throw off enemy gunners.

Trying to suppress AA and AAA often became a high-risk, low-pay-off operation and led to loss of aircraft. When decisions were made to destroy enemy AA positions, the most favored method was to deliver CBU-24s and, if released for use by the RLG or the ambassador, napalm.³²

Raven FAC Platt described the threat environment during his tour:

The major threat to Ravens flying in Laos below 1,500 feet was from small arms ground fire and mobile ZPUs [14.5 mm towed AA gun]. Heavy machine guns were slow to aim, elevate, and track aircraft. Maneuvering FACs and fighters are a difficult target when not flying predictable patterns. Unfortunately, our repetitious bombing box patterns enabled enemy gunners to predict fighter location and intercept lead points.

Our fighter pilots trained to follow the leader around “the box,” retracing ground tracks and altitudes in predictable sequence: one after another, over the same turn points, with the same dive angles, airspeeds, altitudes and release points. With each pass the guns became more accurate as enemy gunners made refined corrections. Fast movers flying common patterns were especially vulnerable as they dived toward the target and as they pulled up and away after ordnance release.

Experienced A-1 and T-28 pilots attacked anti-aircraft weapons with random headings, altitudes and dive-angle, with different types of ordnance, to confuse the NVA gunner's alignment and timing. Bombardment smoke, concussion, destruction, and chaos in the target area forced gunners underground until the smoke cleared. When the forward air controller flew low to assess the damage, they would reappear and shoot if they were able.

The NVA mounted ZPU-2, 14.5 mm, dual-barrel AA guns on a 360 degree swivel turret. This type of crew-served, anti-aircraft weapon on mobile four-wheel drive BTR-40A armored personnel carriers and recon vehicles was deadly accurate. They were radio-equipped and often defended headquarters locations. These mobile guns were our greatest threat. They were rapid fire, with the ability to quickly traverse their weapon azimuth and declination. With near vertical elevation, they could line you up and shoot you down from an effective range of almost a mile. Jinking, swooping, swerving, nonrepetitious orbit tracks, ranges, and altitudes proved to be my best defense.

Twenty-three and 37 mm AAA were usually stationary weapons in pits or rings with a 360 degree field of fire. They often protected high-value targets within a few hundred meters of their location. Their effective range was well over a mile with adjustable airburst altitudes. Tracers and airburst sightings were rare but memorable.

The most often used heavy AAA weapon fired against Ravens was the 37 mm, ranging out to 7,400 feet. The 37 mm guns had a five-round magazine, with a sixth round in the chamber. Their rhythm was distinct and memorable.³³

Platt experienced the dangers from AA and AAA constantly:

We flew into small arms range, mostly AKs, every day; further east the guns got heavy—57 mm, plenty of 37 mm, ZPU and .50 caliber (cal). Due to this threat, I learned to shoot my spotting rockets from short range—200 meters—to long range, against certain threats. We did not fly at nighttime; Cricket was daytime C-2, and Alley Cat was nighttime, mostly to C-2 gunships.

My first ride on my *PDJ* orientation flight was with Craig Morrison. We roomed together at Long Tieng for three months and became close friends. I jumped into the back seat, and we flew to Moug Soui, then 15 km east from Moug Soui. We passed by two 37 mm sites and then saw the destroyed sites 37 mms, .51-cal positions, and a truck. We flew on, dodging the bad weather. Morrison asked me, "Ever seen one of these?" I saw AA barrels swinging towards us as we passed by.

Morrison demonstrated his famous jink. Do not stay on the same heading for more than twenty seconds; be elusive and unpredictable.

We landed at LS-22 on the *PDJ*. We fueled up, got a bite to eat, and walked across a field to where the captured NVA equipment was stored (tanks, artillery, etc.). We explored the PT-76 tanks and a BTR-40A with dual ZPU guns on a turret.

A call came in that an outpost was under attack on the southeast side of the *PDJ*; it was a bunkered site on top of a ridge line. They provided the enemy mortar location and requested an immediate airstrike. We joined with A-1 Skyraiders and put in a smoke rocket to mark the target. When we pulled off to the left, we were hit by a 12.7 mm round in the engine. I saw rounds streak by the canopy. Oil covered the forward canopy. The T-28 engine was running rough and the oil pressure went to zero. We prepared for a bail-out as we declared an emergency and headed home. The A-1s escorted us to Long Tieng where we landed safely. That was my initial orientation flight on the *PDJ*! It was an exciting warning of things to come.³⁴

Operations

Ravens performed a variety of duties, but three were primary:

1. Control for air strikes conducted by Thai and Lao strike aircraft (on occasion). Generally, Lao, Thai, and Hmong had the capability to FAC or control their own air strikes.
2. Control for air strikes conducted by US assets.
3. Visual reconnaissance (VR), including probing and recon by fire.

Air strikes were primarily conducted to support TIC with CAS assets. The second role for air strikes was interdiction missions. Other duties included responding to SAR incidents and, in bad weather and lack of available strike aircraft, artillery spotting.

A Day in the Life of a Raven

Good weather and aircraft availability notwithstanding, a Raven FAC's day actually began the night before. In the evening meeting between the Ravens, AOC commanders, host-nation, and controlled American sources (agency operatives), targeting for the next day was discussed along with updates from intelligence sources on the disposition of enemy forces. Preplanned and target of opportunity air strikes flowed down from Seventh/Thirteenth Air Force sources through the AIRA in Vientiane, the combined operations center in MR-V. The AIRA's office had its own intelligence and targeting officers on the staff and also developed air strike missions to pass down. In reality, given the Ravens' frequent movements between sta-

tions, most target and mission nominations emanated from local military commanders and CAS operatives,

Whether in an O-1 or T-28, the Raven took into account the time of his sortie based on aircraft fuel consumption rates. Since it was the norm to fly several sorties a day, a refueling landing strip location had to be considered sometime during the day.

Again, based on the location, the Raven met with his backseater, called Robins, or other accompanying flight passenger (local military commander, a Thai FAC, or others) at the flight line. After receiving a report from his maintenance crew on the status of the aircraft, the Raven took off, headed towards the location of the first mission. If conducting a preplanned strike with dedicated aircraft, the Raven held his takeoff time to intercept the incoming flight about fifteen minutes before the time on target, thus saving fuel.

Platt described the role of the Robins: “Gen Vang Pao’s airborne scouts bore the radio call sign Robin. These men were veteran special guerrilla unit [SGU] soldiers with a thorough knowledge of the Hmong defenses, tactics, and unit locations. They were VP’s [Vang Pao’s] eyes and ears above the battle area. They would relay VP’s specific instructions to SGU commanders. Robins had the authority to validate targets for air strikes.”³⁵

If there were no planned strike missions then the flight was conducted as VR. The flight pattern was altered to allow for known enemy AA locations, which were bypassed.

Upon arriving to the mission area, the Raven checked in with the local ground commander—through the use of the backseater on FM and VFH radios—and then checked in with some sort of airborne command and control aircraft. Another common scenario was the Raven FAC relieving a FAC already in place, or joining him, and getting a quick update on the current situation.

Raven FACs then coordinated for and controlled available strike aircraft to service targets. The ABCCC passed over to the Raven FAC contact frequencies of the incoming flight of aircraft, which the Raven contacted and guided into the target area. It was the Raven FACs job to mark and identify the target, recommend the attack approach, and provide suggestions on the type of ordnance being delivered. Once the air strike was completed, Ravens continued to loiter in the area to attempt bomb damage assessments.

With the norm being several sorties during the day, the Raven FAC chose a landing strip in his vicinity that was designated as a refueling site.

Refueling was conducted from 55-gallon drums using a hand pump. If time allowed, before the next mission, a lunch from rations was consumed; then the Raven FAC went back in the air.

Anything of an unpredictable nature could happen throughout the day. Diverts were always necessary when troops were in contact. Emerging and fleeting targets that needed servicing were found during VR. If a plane and pilot were downed, everyone turned to the guard frequency and pitched in to save the pilot and his crew. It became normal for Ravens in MR-II to put in up to 150–175 flight hours a month. Day after day, month after month, Ravens were dedicated to getting the mission done.

The Raven operations in Savannakhet and Pakse were not as busy but were no less dangerous. Ravens working in southern Laos were prohibited from flying HCMT missions. Much of their duties consisted of assisting Lao RLAf strikes to support TIC. AOC commanders (Air Commandos) also flew as Raven FACs, even though this practice was prohibited by the AIRA. Water Pump pilots also flew FAC missions, which was prohibited and discouraged but got the job done away from the politics of Vientiane.

Raven call signs were selected based on the MR assigned them. For MR-I, the call signs were in the tens; MR-II, in the twenties; MR-III, in the thirties, and so forth. Senior FACs in each MR held the call sign first in the series, thus, for MR-I, Raven 10, for MR-II, Raven 20, and so on.³⁶ There were exceptions to this rule, such as in the case of MR-II; for example, the Raven 44 call sign was in use, left over from the Butterfly usage before the arrival of the Ravens. Karl Polifka remembers, “The designation of the Ravens at Long Tieng was the 40 series. The AIRA or the senior Raven changed this to the 20 series. The senior Raven slot was a lieutenant colonel position, with the call sign designator as Raven 01.”³⁷ Platt, Raven 43, remembered call signs were changed each year for operations security and to protect the names of well-known Raven pilots.

Based on the strenuous nature of the Raven’s six-month tour, Ravens were allowed to fly FAC aircraft requiring maintenance down to Udorn when the airframes reached the 100-flight-hour mark or required other maintenance—a welcome break from normal duty. Other breaks from the grueling pace of MR-II were to assign the Raven for duty at one of the less demanding AOCs or on the staff of the AIRA’s office in Vientiane.

William E. Platt, Raven 43 FAC, Long Tieng

Platt chose to be a FAC right out of his pilot training. He was commissioned through the Officer's Training School program and completed pilot training at Laredo AFB, Texas, with class 69-05. After graduation, he was selected for a follow-on assignment to fly the O-1 Bird Dog and deployed to Vietnam for FAC duties. When asked what assignment he desired, he chose an area of high combat activity, the northern portion of South Vietnam at Ban Me Thuot (II Corps). He was assigned to work as a FAC with the 5th Special Forces Group's mobile strike force, flying as call sign Mike 82.³⁸

After flying in support of SF A-camps and fire support bases near the Cambodian border—to include participating in ground combat with the Green Berets and their mobile strikers—he had a chance meeting with Raven Craig Morrison to discuss the Steve Canyon Program. He volunteered shortly thereafter.

I went to Bangkok and then up to Udorn [Det 1, 56th SOW]. I spent a day with Det 1 getting orders, in-processing, and storing my military gear. I went clean to Vientiane, in civvies. At the US embassy, I was issued a passport. I met John Garrity, the assistant air attaché, who gave me a full Laos briefing. After a day in Vientiane, I boarded a C-47 to Long Tieng. I reported in to Joe Potter, who was the departing AOC commander at LS-20A. Operation About Face was complete and Gen Vang Pao reclaimed much of the *PDJ*. The NVA were staging a counterattack force of two divisions in the Ban Ban Valley, east of the *PDJ*.

The Ravens there in late December 1969 were seasoned, competent, and hardened pilot FACs. We recognized no rank and were equals as volunteer warriors. Craig Morrison, Bill Kozma, Harold Mesaris, Smokey Green, Moose Carrol, Tom Palmer, Henry Allen, Jerry Greven, Jim Strusaker, Stan Ersted, Allen Holt, and I were a unit that knew the mission and operated effectively under Joe Potter's and Jerry Rhein's style of minimal supervision. New Raven replacements arrived as Ravens were wounded, killed or rotated back to the US. We flew and fought dawn to dusk every day and every hour that the weather permitted. Fatigue and combat stress were as severe and unforgiving as the NVA.³⁹

His first FAC duties as a Raven were concentrated near the Ban Ban Valley, up by Route 7 on the eastern leading edge of the *PDJ* supporting Hmong outposts. Due to enemy AAA concentrations he preferred to fly low, on the deck. In that first month of operation the FACs worked in a chain, calling air strikes on truck targets and other lucrative enemy sites.

By January 1970, the NVA and Pathet Lao had pushed the Hmong out of many of the Lima Sites, and the SGUs began their fighting withdrawal back to Long Tieng and Sam Thong. The Jolly Greens (20th SOS, 56th SOW) began evacuations of Hmong families and refugees to the new defensive positions near Long Tieng. Platt describes:

The Hmong guerrillas would remain behind in small pockets of stay behind forces, so we helped them defend those sites. (This was the first month of flying.) Capt Craig Morrison was a super FAC; he was my roommate there, and we would fly in two-ship formation when going into hot areas. (In case one of us got shot down, the other could spot it and get rescue started).

There were ten or twelve Ravens at Long Tieng. With rotations, new Ravens coming in, old going out, and R&R, and so on—this number fluctuated every day (it once reached fifteen). Our Laotian “scout-observers” were called “Robins.” The term backseaters has been used, but they were much more than that. We used them as target spotters and to coordinate with the ground folks so they could translate. They were good, experienced, and absolutely essential to finding targets.

The O-1 was *thrilling* to fly, particularly when loaded with ordnance rockets. When flying, we took off and ran through the valleys, headed towards whatever Lima Site needed help. Then we put in some strikes, did some recce at around 500 feet. If we found targets, we were the artillery for the ground troops. We also helped out with radio relays. There were no RLAF FACs where I worked; these were down at Pakse and Savannakhet; they had a FAC program down there.⁴⁰

Platt and the other Ravens at Long Tieng were fortunate to work for the senior FAC in Vientiane, who they all admired as a mentor and sounding board, Bob Foster (Raven 01). Foster flew a RLAF U-17B into Long Tieng to meet with the Ravens of MR-II. Platt described the important role played by Bob Foster to ensure the Ravens could accomplish their mission:

Bob [Foster] greeted the Project 404 team as a good coach would and announced that he was stationed in Vientiane with a mission to keep the monkeys off the back of the Ravens. He said, “Do your job well! Go free the oppressed!” He asked a few questions and listened to our concerns and needs. He understood our combat mindset and encouraged us to fight smart, endure the stress, and survive.

Bob was a full colonel in a Thai-tailored, dark blue flight jacket with matching trousers and stylish black Italian pull-on boots. His attire featured zippered bicep pockets on both sleeves and map pockets below the knees. He wore a side arm that may have been a Colt .44 revolver. A CAR-15 was strapped across his broad shoulders. Bob had the credentials of an experienced forward air controller. He also was our cool operator presence and voice at the US

embassy. No one would besmirch, or second-guess, a Raven while he was in the briefing room and we were in the field. Bob had social officer skills. He got the word direct from the ambassador, and air attaché after hours, socially.

Bob was on the inner circle militarily, paramilitarily, politically, and socially. He represented Ravens and took the responsibility for our brash combat mode repeatedly. He was our shield from what flowed downhill from blame game administrative failures.

On the social level, he and his wife befriended RLAF generals and senior aviation peers. The man was smooth in a courteous, warrior's way. Bob and his lovely wife Jinx moved into a comfortable villa near the US embassy where farewell and welcoming parties were enjoyed by the Ravens and the 404 air attachés AOC team. He flew to each of the forward locations to evaluate conditions and morale. He appreciated our tireless diligence. Bob's responsibilities did not include flying into battle leading the fight. That responsibility would fall to steely-eyed captains, and fiery lieutenants. Bob Foster was often the intermediary between frustrated AIRA and 7/13th Air Force planners and the operators.⁴¹

Raven Boxes

With Seventh Air Force's introduction of F-4 "Fast FACs" into the eastern portion of the Barrel Roll box, Raven pilots began to be appalled at the lack of the F-4 FACs' knowledge of the situation and status of friendly forces, prior to having ordnance delivered. In response, the ambassador approved the implementation of Raven boxes where all air strikes had to be under the positive control of Raven FACs. This did not endear the ambassador to the USAF.

Two Raven boxes were created: one around the *PDJ* and its southern and northern environs in MR-II and the other around the Bolovens Plateau in MR-IV, extended to include Pakse, Saravane, and Attopeu. Activities in these "boxes" consisted of daily CAS to TIC, changing situations on the ground, and the employment of trail watchers and SGUs who moved every day to evade enemy forces. There was no way USAF targeteers and pilots operating from outside Laos could hope to keep up with what might be a target today from what would be a target tomorrow.

Within the Raven boxes, Raven FACs controlled all targets in the daytime. At night, Air Commandos operating gunships performed self-FAC duties reinforced by the necessity to have radio contact with Lao FAGs operating with friendly forces. The only exceptions to this

rule were if strike aircraft had specific approval from the embassy or were requested by the AIRA to service targets.⁴²

Lieutenant Wilson recalls a different approach to the ROE during his FAC duties with Gen Vang Pao:

I'm not sure of the "Raven box" coordination measure. I did not use that when I was there. I will tell you about the ROE—if the backseater said hit a target, then you could hit it. Who serviced the targets? We had unlimited air strikes from USAF, Navy, [and] Marines. But, we FACed for T-28s, mostly. The backseaters coordinated with the RLAF on VHF, and then FM to talk to Vang Pao's guys or ground staff. We got directions of where to go for targets from that system. Their call sign was "Skylight." They told you where to go look.⁴³

Whitcomb explained why the Raven boxes were essential in MR-II:

I would clear people into the Raven box, and then hand off targets. One day a Nail FAC (23rd TASS) came up on the net. I didn't recognize his voice, but he sounded a bit tenuous about what he was doing. I listened to him over the radio—he was conducting an air strike with fighters, marking targets. The fighters could not see where he was trying to direct them. He told them it was near a big river and a small river; just drop the bombs where they thought the target was. He said he was on the TACAN [tactical control and navigation system] 040 at forty miles. I intervened. We just didn't drop bombs aimlessly. I found that he and the fighters were on two different TACAN headings! They were 100 miles apart! I called the fighters and told them, "Don't drop! You are not hot!"

I called the 23rd TASS after that and asked about the guy. They said he was just a new guy, but they admitted he was weak. The Raven boxes had meaning!⁴⁴

Raven Operations, 1969–73

In 1969 the first increase in US airpower assets to support Gen Vang Pao's Operation Pigfat, followed by Operation Rain Dance—the aggressive use of air assets to hinder NVA advances on the *PDJ* between March and April—proved to be a significant turning point. This was probably the moment when military activities in MR-II came to be overwhelmingly reliant on more airpower. It began to replace ground power. The Ravens began to grow in number with the addition of five FACs. Almost half of the Raven strength in-country was assigned to MR-II, which basically remained as a template for assigning Raven FAC strength till the end of the war.

Although they could not save Moung Soui in June 1969, the aggressive role played by the Ravens prevented a complete disaster for the

Forces Armées Neutralistes (FAN, Neutralist Armed Forces) and Thai special regiment artillery, buying time for their evacuation. Raven FAC support was key to the retaking of the PDJ during Operation Off Balance, which initially faltered but gained renewed emphasis as it changed to Operation About Face, setting NVA plans back a year. A heavy interdiction campaign in the Barrel Roll area followed in the fall, most of it controlled by Raven FACs.

In the south, Raven FACs supported FAR and SGUs during Operation Junction City Junior in MR-III. This operation allowed ground forces to successfully seize the Routes 9 and 23 junction and to capture the town of Muong Phine (July–October). To handle the increased requirements, Raven FAC strength grew to twenty-one pilots by the end of the year. First and second lieutenants began to arrive into the ranks of the Ravens with waivers to the stringent requirements earlier in the program; however, most were first lieutenants because of their prior Vietnam service. The O-1F became the general use aircraft of the Ravens—although U-17Bs and T-28s were also flown. In 1969 the use of RLAFF T-28s for FAC duties was introduced. The Ravens struggled through the bad maintenance year of 1968 and were now supported by line mechanics.⁴⁵

1st Lt Karl L. Polifka, Raven 45, Long Tieng, 31 March–17 December 1969

Polifka wrote about his wartime experience as a FAC in his book *Meeting Steve Canyon* and described a “normal” day for a Raven FAC. He served in Vietnam from September 1968 to March 1969 before entering the Steve Canyon Program. His first six months as an O-1F FAC were flying in support of Advisory Team 32, located at Gia Nghia in the Quang Duc Province of South Vietnam, where he amassed 440 flying hours in the O-1.

After acceptance as a Project 404 Raven, he was assigned to support Vang Pao at Long Tieng. Upon his arrival he conducted orientation flights with Fred Platt over the PDJ and on 7 April 1969 was declared qualified to serve as a Raven. It is noteworthy that Fred Platt would be one of the most shot down Ravens during the war.

The day 20 April 1969 began as any other for the six Raven FACs stationed at Long Tieng. In the morning, three went aloft to conduct their missions. Don Service was flying north of the PDJ, Polifka near Ban Ban and Route 7, and John Bach, Raven 44, flying near Xieng

Khouang in support of Vang Pao and a CIA case officer. Polifka and Service heard an alert from the ABCCC that a Raven FAC was shot down; it was John Bach. Polifka and Service flew to the site to assist with the SAR. Polifka described his flight into the Xieng Khouang area:

I headed towards the karst that defined the east end of the remains of the town, running at full power and in a slight descent. Don beat me to the town by about a minute and I hear him checking in with a case officer as I started rounding the karst at an altitude of perhaps twenty feet. I glanced right towards the karst and in a stunning instant saw a 37mm gun, in another instant it fired and my mind recorded the recoil ripple on the vegetation, and in another instant the 37mm shell passed between the propeller and the windscreen of my O-1—at a distance of perhaps five feet. Considering that I was traveling about 170 feet per second you can figure the odds. I immediately turned left and descended to almost ground level while flying down slightly sloping terrain away from the gun. They fired twice more, barely missing my retreating figure.⁴⁶

While Polifka evaded the AAA, Don Service began to work a flight of F-105s against several 37-mm and 12.7-mm guns. The flight was inbound to work with Bach before he was downed. Bach had been flying in support of Vang Pao and Hmong military actions around Xieng Khouang before Hmong forces became threatened and required evacuation. It was imperative to get Vang Pao, the Hmong, and the CIA case officer extracted from the area as soon as it was safe for Air America helicopters to approach.

Service and Polifka worked the air strikes into the area all morning. At lunchtime, Polifka flew back to Long Tieng to refuel and eat lunch. Once he was airborne again, he came across a PT-76 tank on the *PDJ*. Suspiciously, it smelled of a “flak-bait” trap. Polifka worked an F-105 “Thud” flight against the vehicle until it was destroyed.

Polifka ended his duty day by directing another flight of F-105s against a 37-mm gun. He summed it up with, “All in all it had been a crappy day and another reminder that this was a very tough environment.”⁴⁷

Karl Polifka returned to the states after his almost nine-month tour. He later went on to fly the RF-4 in Udorn from 1972 to 1973. He spent most of his remaining time in the Air Force as an intelligence officer. His next flying assignment was as a B-52H pilot at Minot AFB, North Dakota. In 1991 he was serving as the deputy director of intelligence at the US Central Command when he retired with the rank of colonel.

Polifka clarified the role of the Ravens as a “tool” for the ambassador:

The reality was that we were supporting a large CIA operation authorized by the president of the United States. The CIA was well aware of the many nuances of the environment where they were operating, had good intelligence sources, and shared that information with the Ravens as necessary to accomplish the mission defined by the United States government. Additionally, many of the CIA personnel had many years of experience in Southeast Asia and provided exceptionally valuable insights otherwise not available. In short, the CIA provided the requirements for the use of airpower and provided essential information—often in near real time—to make that airpower use exceptionally useful and effective. The Ravens were experienced professionals who implemented that airpower selectively and effectively.⁴⁸

(Another excellent accounting of Raven experiences is described by Col Craig W. Duehring, USAF, retired, in *The Lair of the Raven*.)

In 1970 and 1971, the gains by Gen Vang Pao and the RLG began reversing. In the north, Vang Pao was pushed off the PDJ into a defensive arc thrust forward of his main base in Long Tieng. In the south, communist forces threw the RLG off the Bolovens Plateau and seized sizable portions of territory in the central and eastern panhandle. Raven FACs once again were instrumental to applying airpower to prevent further catastrophes and slowing down enemy forces, particularly in the assistance of the defense of Thateng.

In December 1971, the NVA attacked Long Tieng. Sappers were able to penetrate to the airstrip, and three O-1 Bird Dogs were destroyed. The ambassador, fearing for the capture or death of an American pilot, ordered the Ravens, their aircraft, and mechanics to return to Vientiane. The pilots were placed in the villa known as the “down-towners” house. The Ravens flew out each day to LS-272, Ban Son, about twenty nautical miles south of Long Tieng. After refueling, MR-II Ravens continued onward to fly in support of the “Battles of Skyline Ridge” brewing at Long Tieng. At the end of the day, they returned to LS-272, then back to Vientiane for the night.

Lieutenant Wilson, Raven 27, recalls some of the events of that time:

I flew in support of the fire positions on top of Skyline Ridge. In the late afternoon, we would own it. Then, at night, the NVA would attack and use artillery and own it. Then we would retake it. Lots of aircraft working that and you had to be careful to coordinate with the friendlies.

I had two bad close calls. March of '72 . . . there was a small village near an LS we had previously controlled. It was 16–20 clicks north of Long Tieng. The NVA were building a dirt and gravel road near Hill 1800. The hill had all kinds of AAA: 12.7-mm, small arms (there was always small arms), 37-mm, 23-mm. The worst threat was the 14.5-mm “Zeep”—it was belt fed. They were putting

a [expletive deleted] load of rounds out. We sent two Ravens looking for this. We used the high-bird, low-bird concept. I was the low bird. As low bird, my job was to fly low (like trolling); the high bird would observe where I was taking fire from. I never saw them. Some gunner got me. That day, a T-28 pilot was also killed and a helo shot down. The round hit my prop.

The second time I got hit four times, and this knocked out my engine. I just rode it in—I was 10 nautical miles from friendlies. Do I go to Long Tieng at 20A or go to Site 20 at Sam Thong? Both were not safe, and this idea was tenuous. I decided to glide into Skyline ridge and crash somewhere near there. I looked at the backseater, and yelled, “Lock your harness!” (to survive the landing). I asked him, “Are you afraid?” I cleared the ridge by 100 or 50 feet! I landed safely at Long Tieng. A CIA guy met me with a warm beer. The next flying day, an intel guy gave me an intercepted message from the NVA where they were talking about shooting me down. I still have that copy.⁴⁹

By the end of 1971, the Raven program had reached its peak in assigned pilots and aircraft. The O-1F became the standard model aircraft for the Ravens. Maintenance procedures were much improved, and the Raven aircraft achieved a 90 percent utilization rate.

In July 1971, Nail FACS from the 23rd TASS turned over their operations in Cricket West to Raven FACs in MR-III. In-country Raven FAC pilot training was transferred to Detachment 1, 56th SOW, which also began the training of RLAF FACs at Wattay in November of 1971.⁵⁰

To gain tighter control over American strike assets, the ambassador approved the implementation of Raven control boxes: one around the *PDJ* and one surrounding the Bolovens Plateau.

In 1972 and 1973, Raven FAC operations were predominantly focused on defending Vang Pao’s beleaguered forces at Long Tieng. There was some limited retaking of portions of the *PDJ*, but nothing as impressive as the gains that were made during Operation About Face. A shift into interdiction operations on the *PDJ* and Routes 6 and 7 began, including the use of B-52 strikes. In the south, a holding action characterized military activities in MR-III and MR-IV, but RLG forces lost Saravane and Attopeu in the process.

Training the Ravens’ Replacements

One of the distinguishing attributes of SOF, so favored by many of the embassies around the world, is to get a return on the MAP investment in a host country. There are two methods SOF use to do this:

(1) work yourself out of a job after conducting foreign internal defense by leaving a replacement system operated by the host nation, and (2) “train the trainer,” so the partner nation can continue to improve its military capabilities through their own, organic assets. With the impending downsizing of the American effort across SEA in the 1970s, the Ravens contributed to ensure there would be an RLAFF capability to continue FAC operations once they left. This feature was the “cost-benefit” capability of SOF afforded to ambassadors worldwide to gain maximum effectiveness from MAPs and to extricate US military programs on a timely basis.

Ravens in MR-III had attempted to train Lao FACs but were unsuccessful in getting any of their students into active status. The one pilot they declared qualified soon transferred to another job.

In 1971, the AIRA office instituted a program to formally train RLAFF FACs under the MAP. On the front end of the program USAF FAC-qualified pilots assigned to the AIRA were used as instructors in order to not pull Ravens from field duties. Out in the MRs, the senior Raven FAC completed the training requirements for RLAFF pilots.

The RLAFF FAC course began in November 1971 and was held at Wattay Airport in Vientiane. RLAFF students attending the course were already T-28 qualified and were required to speak English. Two USAF FAC-qualified instructor pilots ran the course using two O-1 Bird Dogs assigned to the embassy. The RLAFF FAC training program was based on the Laotian pilot achieving success in the course’s three phases and not on any time requirement.

The first phase transitioned the Lao pilot from operating the T-28 to operating the O-1, an understanding of basic FAC tactics, and advanced flight tactics. Phase I also covered aircraft preflight training and airport and radio procedures. Phase II covered map reading and orientation, target spotting, and how to learn from/contribute to intelligence briefings. Phase III was actual FAC duties: how to acquire targets, linkup with strike aircraft, mark the target and control the fighters.⁵¹

The first RLAFF FACs graduated the course in January 1972. By the end of the year, over twenty RLAFF FACs were operating throughout Laos; four of them were certified to conduct air strikes with US aircraft.⁵²

Graduates of the RLAFF FAC course were then assigned to their originating MRs where they came under the tutelage of the senior Raven FAC. The senior Raven FACs continued their training and

education on VR, FACing in T-28s, aircraft maintenance, and scheduling. Again, there was no given time period to be rated as qualified; it was up to the senior Raven FAC to declare when the RLAF FAC was mission capable. The newly minted RLAF FACs were called Nokkatens, or Nak Ka Tiens, meaning “Kingfisher.”⁵³

Whitcomb personally attested to the skill of the Nokkatens during one of his missions: “I worked with some guys [Lao] who were trying to be FACs, taught them how to FAC. They were called the Nokkatens. One day I put some fighters in contact with the Nokkatens while I monitored their radio transmissions. The USAF was hesitant to work with the guy. I called them and said, “This guy is legit; I certified him. Put in the air strike for him.”⁵⁴

Effectiveness

The Raven FACs ensured tight control of American airpower as desired by the ambassadors. It is clear in hindsight that without the intervention of Seventh/Thirteenth Air Force strike assets, Laos would have been taken over by the communists much sooner. When airpower assets provided to the kingdom expanded, the Ravens grew in capability to incorporate their use into all major military operations conducted by Vang Pao and the RLG and, incredibly, limited collateral damage on the civilian population. Operating with simple, rugged aircraft and basic equipment, the Ravens extolled the virtues of SO application: daring to take high-risk operations and be adaptable, flexible, and innovative.⁵⁵

Polifka understood that to be effective and achieve the ambassador’s intent while maintaining control over air strikes required Ravens who could adapt to the local conditions:

When I arrived in Laos, we were given one ROE: “There are a whole lot of NVA up there. Kill them.” While that was a Gus Sonnenberg off the cuff, it was the only “guidance” we ever received, and it was appropriate.

We had total latitude to do what was necessary in whatever fashion worked operationally. We had detailed intelligence support, constant interaction with those doing the fighting, and the authority to make things work. We had no rules. We were completely unaware of all the meetings, planning sessions, agreements, conferences, and navel gazing described. None of that had any consequence or influence on the battlefield—other than to give us the needed resources. We, of course, completely ignored buffer zones and all that sort of thing—and the fighters we worked were certainly aware of that. We knew how

to fight a war, we worked with people who knew how to fight a war, and we did it. All this infuriated the big Air Force, and we paid for it.⁵⁶

When flying with the RLAF and with Vang Pao's air contingent, some of the ROE could not be enforced, as the local Lao forces were not under the same strike prohibitions as US air assets.

Final Days of the Ravens

Whitcomb, Raven 25, described the end of the mission as a Raven FAC in his article, "Raven Duty Mid-Sept 1972–Mid-March 1973" that he provided to the Raven Historical Project:

We flew until 22 February 1973, until ordered to cease missions as per the theater-wide cease-fire. As I flew back from my last mission, I could hear on my FM radio the plaintive call [for help]. Obviously, the enemy was not observing the cease-fire, but there was nothing more that we could do.⁵⁷

We sat around Vientiane for a few more weeks awaiting orders. I had requested to extend my tour in SEA and return to FAC OV-10 duty with the 23rd TASS. I received my orders and rejoined my old unit at NKP. Subsequently, we flew combat in Cambodia until 15 August 1973, when the "cease-fire" there was directed by the US Congress. After that, I continued to fly the OV-10 at NKP until sent home in March, 1974. I then reported to Moody AFB, GA, to be a T-38 instructor pilot.

During my time as a Raven, we lost John Carroll, Hal Mischler, and Skip Jackson. Several more were wounded, and all of us were shot up and /or shot down. But, we were young men at war and that was the deal.⁵⁸

The Ravens departed Laos in June of 1973. They reached their peak manning in 1971, when twenty-eight Raven FACs were assigned to Laos; three of these were TDY to support operations. In 1973 only eight Raven FACs were still flying when the US military in Laos began downsizing in accord with the Geneva Agreement. A few remaining Ravens and aircraft were positioned at Wattay Airport in Vientiane in the event the United States might return with airpower to punish Geneva Accord violations by the communists. A total of 153 Ravens served in Laos; twenty-three were killed in action.⁵⁹

Whitcomb explicitly summed up what it meant to be a Raven:

The Raven tour was six months. Some of the Ravens spent a longer time. Guys were in and out all the time. It was a unique experience, and everyone had their idea of what they saw, differently. It was a covert, high-risk program. A lot was asked of us; we were young, and we had a lot of authority on our own. There were never any Raven POWs (the enemy policy was to kill them), and a

lot of Ravens never made it home. It was one of the most interesting periods of my life, FACING in SEA. The Vietnam War was a misnomer—there was a war all over SEA. We had a view of strategic airpower as a tool for the ambassador. It was a very powerful tool.⁶⁰

Whitcomb received a silver star during his tour for saving friendly forces on Skyline Ridge during an NVA attack. He directed several air strikes coming dangerously close to the enemy, busting up the ambush and saving friendly lives. During this mission, he was hit by AK-47 fire and successfully conducted a “dead-stick” landed at Long Tieng.

Notes

1. Dean, “USAF in Low-Intensity Conflict,” 6.
2. Polifka, interview.
3. Gray, *Explorations in Strategy*, 147.
4. *Ibid.*, 149.
5. *Ibid.*, 169–70.
6. Whitcomb, interview.
7. Lester, *Mosquitoes to Wolves*, 119.
8. Zimmerman, “Ravens and the Secret War in Laos,” 143, 145.
9. Shields, *USAF Control of Airstrikes*, 46–47.
10. *Ibid.*, 47–48.
11. *Ibid.*, 49.
12. Anthony and Sexton, *War in Northern Laos*, 222.
13. Robbins, *The Ravens*, 24.
14. Shields, *USAF Control of Airstrikes*, 52–53.
15. *Ibid.*, 55.
16. *Ibid.*, 56–59.
17. Lester, *Mosquitoes to Wolves*, 96.
18. Shields, *USAF Control of Airstrikes*, 137.
19. Whitcomb, interview.
20. *Ibid.*
21. *Ibid.*
22. Shields, *USAF Control of Airstrikes*, 125–26. Details obtained from a letter written by chief FAC to all newly assigned Raven FACs, 25 Nov 1969.
23. *Ibid.*, 60.
24. Platt, interview.
25. Wilson, interview.
26. Platt, interview.
27. *Ibid.*
28. *Ibid.*
29. Glasser, *Secret Vietnam War*, 131–32.
30. Whitcomb, interview.
31. Platt, interview.

32. Glasser, *Secret Vietnam War*, 61–62.
33. Platt, interview.
34. Ibid.
35. Excerpt from William E. Platt's initial draft of his work, *Low and Slow: Fly and Fight Laos*, Chapter 5.
36. Shields, *USAF Control of Airstrikes*, 109.
37. Polifka, interview.
38. Platt, interview.
39. Ibid.
40. Ibid.
41. Excerpt from William E. Platt's initial draft of his work, *Low and Slow: Fly and Fight Laos*. At the completion of his Raven tour of duty, Platt was assigned as an instructor pilot flying the Northrop T-38A at Moody AFB, Georgia.
42. Shields, *USAF Control of Airstrikes*, 114–15.
43. Wilson, interview.
44. Whitcomb, interview.
45. Shields, *USAF Control of Airstrikes*, 70–82.
46. Polifka, *Meeting Steve Canyon*, 81.
47. Ibid.
48. Polifka, interview.
49. Wilson, interview.
50. Shields, *USAF Control of Airstrikes*, 89–103.
51. Ibid., 103–4.
52. Anthony and Sexton, *War in Northern Laos*, 349.
53. Conboy, *Shadow War*, 403.
54. Whitcomb, interview.
55. Shields, *USAF Control of Airstrikes*, 119–23.
56. Extracted from notes taken by Karl Polifka pertaining to the USAF book project, *The War in Northern Laos: 1954–1973*.
57. Whitcomb, "Raven Duty Mid-Sept 1972–Mid-March 1973," Draft V.6, 14 January 2015. Darrel Whitcomb's narrative was written to support the Raven Historical Project; he authorized the use of his narrative, along with a personal interview, for use in this project.
58. Ibid.
59. Polifka, interview.
60. Whitcomb, interview.

Chapter 8

Project Lucky Tiger

The 606th Air Commando Squadron

At a weekly conference among Headquarters, 7AF/13AF representatives, CAS representatives, and the USAIRA Vientiane, in mid-January [1967], discussions centered around improving the capability for combating infiltration through the Laos Panhandle. Considerable attention was focused on coordinated air action against enemy truck movements and expanded roadwatch/ground reconnaissance efforts. At the conference it was agreed that in view of the high percentage of truck sightings which occurred at night, better nighttime air coverage was needed. In this regard, Ambassador Sullivan emphasized that the A-26s had been particularly effective. The T-28s would go far in providing the added weight which the night program required.

—Warren A. Trest
“Lucky Tiger Combat Operations”
CHECO Report, 15 June 1967

Along with Project 404 measures to increase US military assistance efforts to maintain the neutrality of Laos, the Joint Chiefs of Staff (JCS) looked strategically further down the road to prevent the expansion of communism. If Laos fell, it was clearly apparent the next “domino” in communist sights would be Thailand. While all eyes remained on the main theater of war, South Vietnam, the choice of using an economy of force option in Laos meant the situation there could go either way. The next barrier to North Vietnamese advances would have to be with the only other willing partner in the region, Thailand.

Thailand was fighting a communist-inspired insurgency in its northern regions, along the Mekong River border with Laos. America provided military assistance for the Thai military and police for almost a decade in this effort.

Noted in TSgt Charles E. Garland's and Warren E. Trest's Contemporary Historical Examination of Current Operations (CHECO) report, "USAF Counterinsurgency Operations in Thailand-1966," was the requirement to provide military assistance and training to the Royal Thai Air Force (RTAF):

Of particular concern to the USAF was the development of the RTAF capability to support the government in its COIN [counterinsurgency] endeavor. The preponderance of political and military significance enjoyed by the Royal Thai Army within the government structure had resulted in the RTAF being "woefully incapable" of providing the necessary SAW [special air warfare] support in COIN operations. Operation Water-pump had shown that with proper training the RTAF could assimilate the SAW role in the Thai program. Plans were made to augment the USAF SAW forces in Thailand to accommodate the training of four composite squadrons of the RTAF as well as other units having a COIN role or potential. This resulted in the deployment of the 606th Air Commando Squadron (ACS) to Thailand beginning in April 1966 under the program nickname "Lucky Tiger."¹

Air Picture in Laos, 1964-66

Between the 1962 withdrawal of US forces from Laos until the attack on the Neutralists by the Pathet Lao on the *Plaine des Jarres* (PDJ) in 1963 and 1964, there was no US air campaign to punish the North Vietnamese Army (NVA) in Laos or interdict the Ho Chi Minh Trail (HCMT). American actions consisted only of military assistance in the form of aircraft to the Royal Laotian Air Force (RLAF) along with a Military Assistance and Advisory Group (MAAG)-Thai-sponsored initiative to train Lao and Thai pilots on the T-28 aircraft—Project Water Pump (Detachment 6, 1st Air Commando Wing [ACW]).

By 1964, the State and Defense Departments became concerned with Pathet Lao and NVA aggression, as well as the increase in troops and armaments to the Viet Cong in South Vietnam, which were infiltrated via the HCMT in southern Laos. For the first concern, newly trained Water Pump pilots began offensive strikes in military region (MR)-II. President Johnson authorized the reinitiation of reconnaissance flights over Northern Laos to conduct a "show of force," but primarily to gain a sense of NVA incursions.

Earlier in 1963, experts met to ascertain how to deal with the growing infiltration of men and supplies over central Laotian routes, with focus on the Tchepone and Moung Phine sector. Since it was

clear any incursions into Laos from the South Vietnamese Army or even from American troops in Vietnam were unacceptable, interdiction of the HCMT would primarily have to be conducted with air strikes. Moreover, the *Forces Armées Royales* (FAR, Royal Armed Forces) could not be depended upon to clear the threatened sector. They had already ceded the eastern half of southern Laos to the Pathet Lao and NVA. These lines were now frozen as cease-fire lines in light of the 1962 Geneva Agreement. Fearing a strong response from the North Vietnamese, Ambassador Unger was reluctant to authorize air strikes on the HCMT, hampering even an air solution.²

One solution was internal; the RLAF was not prohibited from conducting strikes on the HCMT, they just needed additional T-28 aircraft and ordnance. This was the impetus for Project Water Pump, along with fielding more T-28s to Laos through the military assistance program (MAP). General Thao Ma—promoted from colonel to general in the spring of 1964—was not hesitant to fly his squadrons against trucks and bridges throughout the length of the HCMT, including Routes 6 and 7 in northern Laos; however, it was a matter of capacity in both pilots and aircraft. Even so, the RLAF did what they could, resembling more “harassment” attacks than a concerted air campaign.

After the Pathet Lao attacks on the *Forces Armées Neutralistes*, (FAN, Neutralist Armed Forces) positions on the PDJ and with concurrence from the JCS, President Johnson responded with the reauthorization of reconnaissance flights as a show of force—Operation Able Mable. On 19 May 1964, to get a sense of the scope of the HCMT complex, RF-101s flew reconnaissance missions over northern Laos. Operation Able Mable fulfilled this task through June and July; the combination of aircraft from both the USAF and the Navy was called the Yankee Team.

On 6 June, an RF-8A was shot down near Xieng Khouang and the pilot captured. The next day, another RF-8A was shot down near the same area. President Johnson authorized the use of armed escorts as a response to the attacks on US aircraft. F-100s began escort duties and were authorized to attack antiaircraft (AA) guns prior to the reconnaissance runs. With all this increased air activity, a USAF Search and Rescue (SAR) capability was added to Yankee Team operations—Air America augmented the SAR effort. To coordinate the effort, the 2nd Air Division headquarters and an air operations center (AOC) were established at Udorn.

This intelligence-gathering attempt, which included pictomapping of the border by U-2s, was necessary to plan and organize the counter-infiltration plan. The Military Assistance Command, Vietnam (MACV) proposed ground incursions to reconnoiter the HCMT, using surveillance teams to call in air strikes. When Ambassador Unger refused the offer of these initiatives, he proved yet again he lacked a clear understanding of special operations forces (SOF) capability to use small teams to conduct reconnaissance and direct action missions. Any solution for the frustration MACV had in getting its designated targets hit would be answered by the RLAf, not US airpower or ground forces from South Vietnam. The ambassador agreed; the use of the RLAf's new T-28 strike capability would provide "psychological bolstering" for the FAR positioned in the central Laotian panhandle. The RLAf ably stood up to the task, striking thirteen of the MACV designated targets between October and November 1964.

None of this appeared to stem the flow of communist supplies and forces infiltrating down the trail into South Vietnam. It was time to convince everyone a larger air effort was the solution. Operation Barrel Roll—airstrikes along the Laotian and Vietnamese borders, as well as along the HCMT complex bordering South Vietnam—began on 14 December with the first strikes being performed by USAF aircraft based in South Vietnam.

In February 1965, Viet Cong forces attacked Army barracks and airfields in Vietnam, with the first attack on 7 February, followed by a second attack on 10 February. In response, Operation Rolling Thunder, the air strikes on North Vietnam, began on 2 March. There were now two distinct air operations to punish and interdict the NVA: Rolling Thunder in North Vietnam and Barrel Roll in Laos.

Months of these activities resulted in no apparent slowdown of infiltration by the enemy. Weather, terrain, and jungle made it difficult to find targets of opportunity. With limited night air strikes being flown at this time, the NVA began conducting night operations as a countermeasure to daytime strikes along the HCMT. Other NVA countermeasures included the use of superb camouflage, the concealment of trucks, and the establishment of troop assembly and supply areas, which were well defended by AA positions.

Amb. William Sullivan—grudgingly regarded by the USAF as the "single air manager" of Laos—proposed a different methodology than trolling for targets: (1) attack a series of choke points along the trail and go after fixed installations as secondary targets, and (2) establish

a quicker reaction time for emerging targets detected during road watch team operations and during visual reconnaissance (VR) flight missions.

A new interdiction area in southern Laos was established, Steel Tiger, which would have the greatest impact in helping MACV stem the flow of enemy forces and material to South Vietnam. This area would be separated from Barrel Roll and Rolling Thunder operations; Barrel Roll was now reduced to northern Laos. Steel Tiger went into effect on 3 April 1965.³

A lack of precise intelligence on the enemy, the onset of the monsoon season, and NVA countermeasures did much to thwart this initiative. Finding intelligence of enemy movement along the HCMT in the Steel Tiger area would require actual reconnaissance teams on the ground. Most of the intelligence gained during the summer was due to the efforts of the Laotian road watch teams. As the dry season approached at year's end, a new strike area was proposed along the Lao and South Vietnam border area, designated as Tiger Hound. These operations began on 5 December 1965. It was in this contiguous border area that the MACV-Studies and Observation Group (SOG) was finally able to launch its Shining Brass ground reconnaissance teams' initiative. Ambassador Sullivan agreed with Gen William Westmoreland to allow reconnaissance teams organized with three to six Army Special Forces (SF) operatives, along with about 10 South Vietnamese operatives, to penetrate overland into the Tiger Hound area; however, they were limited to a twelve-mile penetration across the border into Laos. There would be no helicopter insertions; helicopters could only be used to replace team members once inserted, for resupply or exfiltration. Once a team was in position along the HCMT, F-4Cs of the Bango flight on strip alert in Thailand, combined with an O-1 FAC, provided a quick response to targets identified by the teams. Shining Brass was placed under the command and control of MACV-SOG. The first mission was inserted on 18 October and the second on 2 November.⁴

To support the new, concentrated interdiction effort in Steel Tiger, the RLAF began flying sorties against the HCMT. General Thao Ma moved a squadron of T-28s to Saravane after being supplied with USAF O-1Es to conduct FAC duties. Water Pump received the five O-1Es to begin training of Laotian pilots as FACs. This became the method of operations for Tiger Hound; increased reconnaissance teams combined with FACs flying VR to improve the rate of detection

of enemy forces. A C-130 Airborne Battlefield Command and Control Center (ABCCC) was assigned to control incoming air strikes, with the stipulation of having an RLAFF officer aboard to approve targets. Forward air controllers (FAC) could also approve targets if a Laotian was riding along in the back seat. By 5 December 1965, all the pieces to operate this new approach were in place and the first mission flown.

December air sorties also included the first use of the 4th Air Commando Squadron's (ACS) AC-47s; the concept for their employment was completed in late 1964. Ranch Hand C-123s defoliated portions of the HCMT beginning on 6 December. All this increased air activity was due to the dry season, allowing for better visibility. One of the tactics used during interdiction operations along the HCMT was the use of flares at night, giving the best results for target destruction now that the NVA was moving mainly at night.

By the year's end, intelligence indicated the NVA was still able to increase its movement of troops and material down the HCMT into South Vietnam. Perplexed, and with the restrictions of no ground forces to be used, USAF senior commanders and planning staffs could only come to one course of action: more air.

In the new year, Pathet Lao and NVA forces in central Laos threatened to cut the Laotian panhandle in half. Enemy staging areas in Tchepone and Moung Phine went unopposed and, in fact, were being reinforced. As a response, a separate operating area was established to deal uniquely with the problem—area Cricket. The USAF provided defoliation aircraft, B-52 strikes, and psychological operations (PSYOP) leaflets to the new engagement area. Thai-based O-1s, who would become the 23rd Tactical Air Support Squadron (TASS) on 1 June, flew as FACs with RLAFF backseaters. Along with American strike assets, the RLAFF flew sorties from their squadron at Savannakhet. On 1 April 1966, three AC-47s from the 4th ACS were added to Cricket operations.⁵

Also in April, four UH-1Fs of the Green Hornets and several Jolly Green Giant CH-3s were deployed to Nakhon Phanom Royal Thai Air Base (NKP) to support transport of reconnaissance and road watch teams as well as to conduct SAR—all assigned to the 20th Helicopter Squadron (HS).

This was the operating posture when the JCS proposed the deployment of a composite SAW squadron to assist the Thai government in its COIN efforts. Designated as the 606th ACS Composite, the

Lucky Tigers assembled in the United States and moved to NKP on 8 April 1966.

Project Lucky Tiger

In January 1966, the chairman of the JCS approved adding a SAW capability to assist Thailand's COIN air abilities, modeled on the Operation Farm Gate deployment to South Vietnam in the earlier 1960s. This initiative was named Project Lucky Tiger. The Thai government approved the measure on 2 February 1966.⁶

The purpose of Project Lucky Tiger was to improve the RTAF's ability to prevent communist intrusion into the country and to counter aggression from communist forces. The elements of airpower proposed for the Thai included lift and transport (especially rotary wing), liaison and reconnaissance, offensive strike, and interdiction. Although the USAF had assets stationed throughout Thailand at five major air bases, these were all dedicated to out-country missions. There was only one obvious choice to fill the JCS requirement, which would be sending the Air Commandos to tackle the mission.

Back in the states, the 1st ACW assembled a composite squadron of twelve U-10s, twelve T-28D Nomads, and six C-123s, numbered as the 606th ACS, Composite. The squadron was commanded by Lt Col Joseph L. Price. Lt Col Russell D. Barney became the director of operations. After a train-up at England AFB, Louisiana, the squadron deployed to NKP, sending personnel by air and loading the unit's aircraft aboard ships. The squadron was activated at NKP—also known as “Naked Fanny” among the Air Commandos—on 8 March 1966.

The primary mission of the 606th ACS was to provide COIN advisory support and to train to the RTAF, along with participating in the United States Agency for International Development (USAID) sponsored civic action programs. The squadron's secondary mission was to conduct secret combat missions in Laos.

Thai military and police operations—as part of the country's COIN strategy—were called “communist suppression operations.” These operations were controlled by the Communist Suppression Operations Center in Bangkok; regionally and locally, these activities were controlled by the Joint Security Operations Center. There was one for northeastern Thailand, where the most active communist subversives

operated. The terrain, weather, and lack of roads in northeastern Thailand dictated the need for airlift support for the RTAF.⁷

The choice for NKP as the base for the 606th ACS met several variables desired to keep this a low-key operation. Initially, the Thai airbase at Koke Kathiem was considered; however, it was decided adding additional USAF assets would crowd out RTAF operations. Conversely, NKP—although not a major fighter or bomber base—had enough excess ramp space to incorporate the composite squadron. It had been used as a base of operations for COIN and electronic warfare efforts, primarily because it was centered in a known Thai communist insurgent and subversive sector. The hope was that discretely adding “prop-job” aircraft to an already existing “prop-job” airbase would not draw attention to the increase in USAF assets in Thailand.

Not being a primary airbase did, however, have some drawbacks. The facilities were poor and the airfield was pierced steel planking. The airstrip would not be paved over until 1967.⁸

NKP was run by the USAF’s 6235th Air Base Squadron, along with the 634th Combat Support Group. Already operating temporary duty (TDY) at the base was the 20th HS’s UH-1Fs, nicknamed the “Green Hornets,” as well as a couple of CH-3s. The base would also host the A-26As of the 603rd ACS, known as the “Nimrods,” who would begin operating out of Thailand on night interdiction missions along the HCMT in the Steel Tiger operational area, as part of a test of their capability to replace AC-47s (Project Big Eagle). The 602nd ACS—the “Sandys”—was also flying six A-1Es while TDY to Udorn to support SAR operations. Last, the Air Commandos of Detachment 6, Water Pump were also at Udorn continuing the program to train Laotian and Thai T-28 pilots. This disaggregated deployment of Air Commando assets would be rolled into the fold of the 606th ACS by December. The U-10 Helio Courier was added to the fleet, serving as both a liaison and PSYOP platform.

Colonel Price, commander, 606th ACS, answered to Maj Gen Charles R. Bond Jr., commander of the Seventh/Thirteenth commander at Udorn. Said one of the senior Air Commandos in the squadron:

DARPA [Defense Advanced Research Projects Agency] had conducted a study on the situation in northern Laos. Here was the big picture: Washington DC wanted to know what would occur if the communists took Laos. Would they go through Thailand? So, Project Lucky Tiger was a program to bolster the Thais.

When we landed at NKP, we went over to visit Major General Bond. He asked us, “What are you going to do?” We looked at him and asked, “I thought you were going to tell us!”

Bond thought the 606th were “cowboys” and that we did not know what to do. I became a liaison from the squadron to his headquarters to smooth things out.⁹

The 606th ACS operated at this time only in Thailand, and would not participate in out-country combat operations until December 1966. (COIN in Thailand was the main effort). The squadron deployed a variety of military training teams (MTT) to the RTAF for training and advisory operations on the T-28s, U-10s, and C-123s. Additionally, the squadron participated in the civic action program, which was required to maintain support from the Thai populace.

606th Air Commando Squadron Aircraft

AT-28D

The AT-28D detachment of the 606th ACS consisted of eight to twelve AT-28D Trojans. They were transported to Bangkok by ship; the crews arrived in the summer of 1966, put the AT-28s back into service, and flew them to NKP. The AT-28D was derived from its Navy trainer configuration. After modifications, it was armed with .50-caliber machine gun pods and with six external pylons that could carry a maximum capacity of 3,500 pounds of bombs and/or rockets. It was also configured to carry external fuel pods.¹⁰ The T-28Ds of the 606th ACS were painted camouflage, vice those of the Water Pump detachment. In January 1967, the T-28Ds began to fly combat operations on interdiction missions along the HCMT. They became their own squadron named the Zorros and flew their AT-28Ds until 1968 when they were replaced with A-1Es. They retained the name Zorro but became part of the 22nd Special Operations Squadron.

Fairchild C-123K Provider

The Fairchild C-123K Provider lived up to its name by providing the 606th ACS with cargo and lift capability, enabling operation from short strips. When operating as a nighttime FAC, it was employed with flares and starlight scopes, giving it the nickname *Candlestick*.

Liaison Aircraft

The 606th ACS employed both the U-6A de Havilland Beaver and the U-10D Helio Courier to conduct a variety of light aircraft missions. These included liaison, transport of passengers, delivery of mail and classified materials, PSYOP leaflet drops, and loudspeaker operations. They were extremely useful during the squadron's civic action missions.¹¹ Prior to the 606th ACS's activation at NKP, CH-3Cs from the 20th HS assisted the RTAF in air transport operations. During this time, the RTAF was moving to establish a robust airlift capability with H-34 helicopters. The CH-3Cs, along with four Bell UH-1F helicopters deploying later, would all be folded into the 606th ACS upon their activation. The 20th HS assets would continue to fly to support the RTAF until Thai airlift squadrons became capable of supporting their own operations.¹²

However, there was ongoing friction between the Thai army and the Thai air force—the army being the predominant service in Thailand—which caused them to lose efficiencies in combined operations. Amb. Graham Martin—in fear of the Royal Thai Army (RTA) gaining control over RLAF assets—chose the 606th ACS to conduct the COIN advisory mission instead of Thailand's recommendation for an army helicopter unit. General Westmoreland, surprisingly, supported the ambassador's position on the matter, noting that USAF special operations helicopters were already in Thailand. General Westmoreland sent additional CH-3Cs and UH-1Fs to support the COIN mission. He was very interested in suppressing communist activities in northeast Thailand, which could have had an impact on his operations in South Vietnam if not contained.¹³

To state his preference for the SOF aviation assets and not establish another US Army unit in Thailand, Ambassador Martin advised the Seventh Air Force commander in May 1966 and said, “that prompt action by the USAF in providing the rotary airlift support had a ‘dramatic’ effect upon the Thais and provided essential mobility in effecting operations against insurgents.”¹⁴

By December 1966, the Air Commandos of the 606th ACS had firmly established four MTTs operating with the four RTAF composite squadrons. COIN training was conducted in four areas: (1) helo tactical airlift operations, (2) PSYOP operations, (3) reconnaissance, and (4) combat air control. An advanced training course was

developed and implemented by the Air Commando AT-28 section to teach the RTAF air strike and ordnance delivery techniques.

For its civic action mission, the squadron performed medical, dental, and veterinary services. In addition, it provided civil engineering services for the Thai people, including digging wells, building structures and airfields, and completing various other construction projects. All civic action projects were coordinated with local Thai officials, Thai police, Thai army, and the USAID.

At the Thai national level, the USAF worked to establish a countrywide tactical air control system by establishing AOCs and direct air support centers as well as tactical air control parties. These tasks were performed by Air Force personnel already stationed in Thailand.

Although Ambassador Martin was clear when he prohibited US personnel from running the Thai COIN program directly or participating in COIN operations, this order was not always followed to the letter, particularly when 606th ACS assets were taking fire while transporting Thai army personnel.

20th Helicopter Squadron

The 20th HS was activated at Eglin AFB in October 1965 and deployed to South Vietnam with eight CH-3Cs and twenty combat crews. The squadron was assigned for service with the 2nd Air Division at Tan Son Nhut Airbase on 8 October 1965. Considered as rotary-wing tactical airlift, the squadron performed a variety of troop transport and resupply missions before being assigned to the 14th ACW in March 1966. The 20th HS reoriented its mission to support special operations activities in South Vietnam with primary support to US Army SF units—the Green Berets.¹⁵ To perform its mission, the 20th HS was soon equipped with fourteen CH-3Cs, organized into Detachment-A (five helos), Detachment B (three helos), and Detachment C (six helos).

The Sikorsky CH-3 was a twin-turbine helicopter developed for both the Air Force and the Navy—the Navy version was the SH-3A—to satisfy the requirements for both tactical lift with a higher payload and long-range capabilities to support SAR. After fielding the CH-3B improved version, Sikorsky added a rear ramp, making it the CH-3C variant.¹⁶ The CH-3C had a range of 500 nautical miles, flying

between 110 and 120 knots. It had a crew of five. The helicopter was nicknamed The Jolly Green Giant due to its green and brown camouflage resembling the famous giant on canned vegetable products.

With the advent of increased road watch team employment in Laos—and Project Shining Brass and Prairie Fire from MACV-SOG to support intelligence gathering operations in the Steel Tiger and Tiger Hound interdiction areas—long-range, heavy-lift helicopters were required to support the infiltration and exfiltration of reconnaissance teams. They, along with other intelligence agents, were transported into the Laotian Panhandle and North Vietnam; this unconventional program was codenamed “Pony Express.”¹⁷

In early 1966, the first two CH-3Cs to support Pony Express operations were deployed to NKP and designated as D-Flight. In April 1966, Detachments B and C of the 20th HS were moved from bases in South Vietnam to join the two CH-3s at NKP, giving the squadron a total of eleven CH-3s. In April, six of the CH-3Cs were attached to the 606th ACS, conducting a support mission to Thai COIN efforts. These missions included conducting troop airlifts, providing aid in the emplacement of tactical control and navigation (TACAN) stations and to USAID civic action programs that were installing very high frequency (VHF) radios in local villages, offering humanitarian flood relief, and completing other vital projects.¹⁸

The remaining CH-3Cs, TDY in Thailand, continued the transport of unconventional reconnaissance teams on cross-border missions for the Pony Express program; these missions were directed by MACV-SOG and the CIA.¹⁹ During 1967, the Pony Express helicopter assets averaged over 400 flying hours per month.²⁰

Along with the CH-3Cs sent to Thailand, four UH-1F helicopters joined the squadron in TDY status. Ambassador Martin urged the fielding of additional helicopter support to the Thai COIN advisory program performed by the 606th ACS. The helicopters, previously used at nuclear missile support sites in the United States, originally came from the Strategic Air Command and arrived in-country still painted blue with white on the top. They were immediately camouflaged to perform the new mission. Air Force pilots were surprised to start getting orders to transfer from fixed-wing status to one of flying helicopters. C-124 pilot “Chick” Svoboda remembered, “I was convinced that if I had to fly a helicopter in combat, I wanted to have some firepower. I was told it was an Air Force version of a gunship—an armed helicopter.”²¹

In August 1966, six additional UH-1Fs from G-Flight at Nha Trang were shipped to the 606th ACS, and assigned as Detachment E to the 20th HS. The UH-1Fs did not fly in distinctive USAF colors; they were painted camouflage with no insignia other than tail boom numbers. If being used to support Thai Police Aerial Reinforcement Units (PARU) or civic action organizations, those unit insignias were surreptitiously applied to the aircraft. There were times when even Air America “borrowed” the aircraft. UH-1Fs and CH-3Cs flying in support of Prairie Fire missions had no markings, and pilots and crew flew in civilian clothes without any papers or identification cards recognizing them as Americans. However, the UH-1F detachment did employ one distinctive marking—a black, spray-painted Green Hornet emblem. The unit adopted the name *Green Hornets*.

The UH-1F was distinguishable from the Bell UH-1 Iroquois by its lengthened tail boom—the UH-1F had a larger main rotor than the UH-1, requiring lengthening of the boom—and powered by a CH-3 engine, requiring the exhaust port to be rotated 90 degrees to the right. With additional fuel capacity, it had a cruising speed of 125 mph and a range of around 315 miles. Its loaded weight was rated at 9,000 pounds, it had a two pilot crew, and it could carry ten to twelve passengers or 2,000 pounds of cargo. The UH-1F was armed with two 7.62-mm machine guns on pintle mounts.²²

James William “Bill” Daniels Jr. was a graduate of the Virginia Military Institute. In pilot school, he applied for helicopters but did not want air rescue. He first qualified on the UH-1 Huey, and then flew H-34s at Minot, North Dakota. The Air Force came out with a request for volunteers for Southeast Asia (SEA) helicopter pilots. Daniels went to Hurlburt with the batch of Green Hornet helicopter pilots, where the 606th ACS was being assembled (Field no. 9). Everyone in the unit trained together at that location until they deployed to Thailand. Said Daniels,

I conducted a six-month tour to Thailand, Nakhon Phanom (NKP) from 1966 to 1967. The helicopter detachment was not originally named the Green Hornets, someone just picked the term. There were a lot of propeller aircraft at NKP in those days; there was a sign at the end of the runway which read, “Welcome to Antique Airlines.” We mostly worked on civic action programs. We had the UH-1Fs (The USMC had the “E” model.). It had a GE-T58 engine with 1250 horsepower; real good speed.

We got fragged for our missions by Heinie Aderholt in Vientiane. We supported Lima sites in Laos—bringing in supplies like water, food, batteries, and so forth—and then backhauling trash and body waste.

The UH-1F detachment had twenty helicopters. There were about 81 personnel in the flight detachment: pilots, mechanics, crew chiefs, medics, doctors, messing officer, and so on, which made up the crews. The unit was commanded by a lieutenant colonel, with a lieutenant colonel as executive officer (Lieutenant Colonel McGhee). There was even a forestry guy and a veterinarian.

The helos were olive drab green (not camouflaged); they had the tail numbers and a Green Hornet painted on them in black paint. We had little insertable name plates on a device mounted between the door for the pilots and the cargo sliding door. You could put what you wanted on it, then insert it when you flew. This is how you can distinguish 606th Green Hornet helos when looking at pictures of the helos from that period.²³

During the summer of 1966, fourteen UH-1Fs were assigned to the Pony Express mission. Overall, helicopter strength of the 20th HS reached twenty-five aircraft: eight CH-3Cs and seventeen UH-1Fs.

In August 1966, the 20th HS performed one of its largest COIN support missions for the Royal Thai forces. Ten of the squadron's aircraft were used to transport 350 Thai police and army troops from Udorn and Sakon Nakhon into positions to surround communist insurgents. The eight UH-1Fs and two CH-3Cs also performed resupply for the committed Thai forces. Ambassador Martin praised their SAW COIN efforts: "The work of these helicopters has shown dramatically to the Thais not only the need but the practicality of unifying this region. These 25 helicopters have had a catalytic effect on the Thai counterinsurgency effort which could not have been produced by several years of vastly more expensive and more diffused direct assistance. The results are evident everywhere—in getting governors out in their provinces; accelerating the fielding of medical and information teams, and stimulating further deployments of Thai security forces into critical areas."²⁴

In June 1966, Detachment 6, Water Pump transferred to the 606th ACS. To forsake assumption of the "Air Commando squadron" name, Detachment 6 changed to become Detachment 1, Water Pump.

A-26A Nimrods

Due to the vulnerability of the AC-47s operating over the HCMT (driven out of the Cricket area by AA), A-26A Counter Invaders were

proposed as a suitable replacement for night operations. They began flying as an operational combat test in June of 1966—named Project Big Eagle.

The B-26B was a versatile attack bomber used extensively in the Korean War. After the war, the B-26Bs were put into mothballs or storage. With Pres. John F. Kennedy's urging to the services to develop and field COIN capabilities, the USAF's answer was to create the Jungle Jim program—a special operations, COIN capability. The unit was equipped with the B-26B. There was one problem: the aircraft was old and suffered spar fatigue, causing the loss of a wing during heavy G-loads. After a few tragic accidents—one involving the Air Commandos at Hurlburt—the On Mark Engineering Company was asked to modify and upgrade the B-26.

The bomber was upgraded with improved and more powerful Pratt and Whitney engines (R-2800-52Ws with a maximum of 2,500 horsepower when water injected), strengthened wings, wing-tip fuel tanks, eight wing pylons, and improved communications and navigation gear. The modified aircraft had a speed of 323 miles per hour and could fly 2,700 statute miles, with a service ceiling of 30,000 feet. The new version of the bomber was designated as the B-26K. The first bomber off the line was sent to Hurlburt for flight testing. All tests were successful, and subsequent bombers were fielded into the ACW, creating the 603rd ACS.

The B-26K was armed with eight .50-caliber machine guns, forward mounted in the nose. The total ammunition carried for the guns was 2,800 rounds, giving the bomber the capability for up to 20 seconds of firing time. The eight pylons could carry flare dispensers on the outboard pylons (six on each wing tip), and fragmentation bombs, cluster bomb units (CBU), and napalm on the inner pylons (8,000 pounds of mixed ordnance). There were twelve bomb bay stations inboard; bomb loads usually consisted of 250-lb. MK81s, 500-lb. MK82s, and 750-lb. MK-117s, and MK-31/32 incendiary cluster bombs. A fully loaded B-26K could carry up to 12,000 lbs. of ordnance load.²⁵

Lt Col Joe Kittinger was the operations officer for the squadron. He had flown the B-26 during Operation Farm Gate at Bien Hoa and was one of the last TDY crews on the bomber before it was grounded. One of the limitations of the B-26 was that it was designed as a medium bomber, not an aircraft for diving runs. He was present at Range 52 (Eglin AFB) when a B-26 lost its wing during a night napalm drop in

front of over 1,000 people watching the demonstration. He clearly noted the difference between the earlier B-26s and the new On Mark B-26K. The first On Mark B-26K was issued to the Air Commandos in 1965. Kittinger stated, “It was one helluva airplane! A tremendous improvement over the B-26, which was not designed for night dive bombing. It was just a wonderful plane, so reliable, and so strong. A phenomenal aircraft. Its only downside was that it was not good in a high antiaircraft or SAM [surface-to-air missile] threat environment.”²⁶

Interdiction in Laos

With lack of progress to interdict NVA truck and troop traffic on the HCMT in the Barrel Roll and Steel Tiger engagement areas, one of the solutions adopted was to increase nighttime interdiction assets. The USAF preferred a move to an all-jet force and proposed using the F-100 along with flareships. The “prop heads” of the USAF called for the introduction of the AC-47 gunship (“Spooky”). The AC-47 gunship was first introduced to the interdiction of the HCMT in December 1965.

Ambassador Sullivan was not convinced jets were the answer and advocated for a suitable replacement in the event the AC-47s were removed. He said, “I was no expert in air warfare, but I could not accept the military’s contention that high-speed, high-performance jets are the best instruments to attack slow-moving trucks which traveled only at night under a thick jungle canopy. I asked whether the Air Force still had any propeller-driven attack aircraft that could operate at night and could use machine guns and rockets as well as bombs.”²⁷

The 4th ACS deployed with six AC-47s to NKP and initially had good results, yet it lost four aircraft in the first half of 1966. Ambassador Sullivan asked for eight more AC-47 aircraft to be apportioned to the effort in Laos. The USAF pushed to have the aircraft pulled out due to its vulnerability to AA fire. The AC-47 had to fly lower in order for its 7.62-mm miniguns to have an effect, exposing them to deadly ground fire.

To solve the problem, a test was proposed to introduce the only other propeller-driven aircraft that could meet the night interdiction requirement—the B-26K of the Air Commandos. The B-26 was first used in SEA in support of Operations Millpond in Laos and Farm Gate in South Vietnam. The operational test was named Project Big Eagle.

Project Big Eagle

On 11 June 1966, Detachment 1 of the 603rd ACS deployed under a six-month TDY to Thailand with eight B-26Ks—now designated A-26As—to perform the test. The first permanent personnel would begin to arrive in August. The unit had previously been stationed at England AFB, Louisiana, where it developed its tactics for night flying, using the ranges at Camp Polk to determine the best ordnance delivery and flare use for night missions. Detachment 1 was commanded by Col Domenico A. Curto; the squadron was commanded by Col Al Howard. Prior to their arrival in-country, the Thais balked at the stationing of American “bombers” on their airbases. The issue was quickly smoothed out by redesignating the aircraft as A-26As—attack versus bomber variant. The unit flew the A-26s and two KC-97s across the Pacific on a long and grueling flight and was ready to fly its first sortie on 20 June, operating in the Cricket engagement area. Initially, half of the crews were already combat qualified, some coming from the Texas and Georgia Air National Guard B-26 units.

Kenneth G. Floyd was stationed at Stead AFB, Reno, Nevada, when he was called in by his base commander to answer some questions. Floyd was being interviewed to join the Jungle Jim program. He entered the Air Commandos and served six months on Operation Farm Gate in South Vietnam. When he returned to Hurlburt, Floyd was on the team to visit On Mark Corporation and receive the tenth aircraft built, tail number 650. (A-26 number 650 was later shot down when flying a mission out of NKP.)

Floyd deployed two weeks early as part of the advanced echelon for the 603rd ACS to set up a maintenance shop at NKP. The unit brought along all of its maintenance equipment. It was a requirement of the operational test that the 603rd was self-operational and did not require external support. The aircraft of the 603rd arrived in June; three of the aircraft were initially sent up on missions, performed during daylight. Ken Floyd soon became the night line chief:

Kittinger flew my plane over from the states; we had equipped them with long-range fuel tanks. That plane was shot down, so without an aircraft, I became the night line chief. Each aircraft had a crew chief and one maintenance/ordnance specialist assigned. Crew chiefs doctrinally flew with the A-26, but in operations over Laos, the crew chiefs remained on the ground, only flying in the A-26 during maintenance tests. During the six-month flight operations, the planes flew generally two- to four-hour sorties.

Early on, only the four SAR A-1Es and the O-1 Bird Dogs were the only other aircraft at Nakhon Phanom.

NKP had a 6,000 foot steel planking runway. We parked the aircraft on steel planking. We had only a shack to use for our office. Our quarters were one-half mile up the road; they were huts with screens and wooden floors. We had a community shower for all to use.²⁸

Prior to commencing the operational combat test, Nimrod crews conducted indoctrination to the area. It was decided by the air staff in Saigon the first orientation flights would be flown in the daytime, even though the unit's training was based on night operations. Unfortunately, this resulted in the loss of one aircraft to enemy fire, and immediately tactics were changed to night flying. One of the great multipliers with the employment of the A-26s was the ability to self-FAC during its missions since the area being flown in had no friendly forces and, thus, required no FACs under the ROE. To gain experience, each initial mission was flown with combat-experienced pilots and navigators with a new crewman riding along until they all had combat experience over Laos.

Interdiction missions by the 603rd ACS Nimrods initially consisted of single-ship sorties. A standard mission profile was the conduct of visual and armed reconnaissance, often in consort with other aircraft. Once targets were acquired, flares were launched or provided by flareships, and then the A-26As conducted multiple ordnance passes. The best attack profile at this time was to drop area ordnance first, followed by multiple .50-caliber gun runs. Over time, the Nimrods found the eight .50 calibers to be the most effective truck killing method. A truck had to be clearly destroyed and burning to claim credit for a kill.²⁹

In 1966, during the first six months of operations, the Nimrods accomplished the following:

- 11–17 June: twenty-six daylight armed-reconnaissance sorties with O-1 FACs aboard
- 18–24 June: thirty sorties flown, six at night (two A-26As were damaged and one shot down); five sorties flown into Route Package I in North Vietnam
- 25–30 June: thirty-five armed-reconnaissance sorties; first use of MSQ-77 ground radar control to conduct bombing

- 1–31 July: multiple sorties cancelled due to Monsoon weather
- 1–31 August: Pacific Air Forces decision made to extend operational test due to cancelled sorties from bad weather (extended to 31 October)
- 17–18 September: two A-26s flew in Cricket West to blunt enemy threats on Mahaxay region and their endangering Thakhek (two enemy AA guns destroyed, supplies destroyed and damaged, and 120 enemy killed in action [KIA]); repeat attack on 18 September
- 1–31 October: decision made to cancel eight in-bound AC-47s and replace them with eight A-26s; four sorties of A-26s apportioned to Barrel Roll
- 2 October: decision to extend combat testing into January
- 10 October: the Nimrods extended their operations into the Barrel Roll engagement area, supporting road watch teams in MR-II near Ban Ban (ten trucks destroyed, one main road cratered, and approximately fifty enemy KIA)
- 2–9 November: Nimrods working in consort with road watch teams along Route 65 near Sam Neua destroyed four trucks; during the remainder of the week, multiple trucks and gun positions knocked out (four AA guns, one bulldozer, 384 enemy troops killed, and sixty-seven trucks destroyed or damaged)
- 10 November–31 December: bad weather forced cancellation of sorties³⁰

In those six months of combat, the Nimrods flew 1,349 sorties. Out of the 3,000 sorties flown by the Seventh Air Force in December, the Nimrods flew over a hundred and accounted for 64 percent of the truck kills.³¹

In September, Maj Gen Charles R. Bond's staff at Udorn provided him a report on the effectiveness of the A-26s during the test: "The A-26 is doing a good job in its interdiction role. Its employment has released a number of jet aircraft to other areas. Based on a 20-minute station time for the jets the figure of 30 sorties (60 jet aircraft) is equated to the coverage being provided by the A-26s. The A-26 with the Hayes dispenser is the only 'saturation' capable vehicle within the 7AF."³²

Working with Road Watch Teams

To improve interdiction on the HCMT, the CIA established a program to place road watch teams on the trail to conduct surveillance and gain intelligence. The program was run by Air Commando Dick Secord, detailed to the CIA by the Air Force. He describes his introduction into Laos:

I went off to Command and Staff College at Maxwell AFB for ten months. While there, I was contacted by an Agency guy. (I had limited experience with them from Vietnam and Iran deployments.) Their office in DC contacted me to come up. The USAF sent me an order for “detailing” to Agency. I went TDY for one week, absenting the course, to do psychological screening, a battery of tests, and polygraphs. As a result, I was placed on orders to report to Saigon.

The PCS orders were handled by a Bolling AFB detachment in Roslyn, Virginia. The USAF had a unit “in” the CIA to handle these matters. This is around June of 1966. I reported in to the office of the air section, of the Agency station, in the embassy at Saigon. They had an old China hand in the section, “Mo” C. My job was to liaise with Air America. I ended up only really being the go to guy for protocol and VIP visits. I would be the purchasing agent for BUFs—Big Ugly Fellows; these were ceramic elephants everyone used as souvenir gifts. I was disappointed with the job. (At this time, Heinie Aderholt was the deputy to Col Singlaub, and I had started to learn about MACV-SOG.)

Bill Colby was there—the CIA station was starting to get bigger. I was at a cocktail party. I talked to one of Colby’s guys and complained about the job I was in. Days later there was a cable from the Agency in DC saying I was supposed to be assigned to Vientiane. Mo tried to *reclama* it, but they sent another message saying that it was directive in nature.

I went by T-39 to Udorn. I asked someone upon landing, “Where is the Air America Club?” because I thought that would be the best way to find out where the Agency operation was located. I ran into a helo pilot I had known in Saigon, Jim Ryan, who was in Air America and one-legged. He said, “Go to AB-1 building.”

I went into the Agency field office and met Bill Lair and Pat Landry. (Ted Shackley was the station chief in Vientiane. I saw the famous Shackley versus Landry and Lair fight go on with disagreements about how to run things. They both called Shackley the “man.”) They said, “We’ve been expecting you. Get with the air guy on the staff, he’s been running the air.” I replaced him. We had about a week of transition. (I was still a captain but would get promoted to major about a month into this job.) My duties consisted of the following: Run Air America operations in support of the irregular forces; infil/exfil rotary-wing operations with the 20 HS (Pony Express) using CH-3s and Air America H-34s; and expand the road watch teams—the task was to try and keep sixty teams reporting intelligence.³³

Strike operations into the Barrel Roll area were conducted using ground FAGs from the road watch teams. Two of the most famous FAGs who could speak limited English over their radios were “Tall Man” and “Red Hat.” Lt Col Joe Kittinger worked with both but remembers his mission with Tall Man:

We had a program working with the road watch teams—some of them Thai guys from the PARU. This was Dick Secord’s program—he ran that operation and took their intelligence reports from the field over radio. The FAGs had radios and could speak English. We would get fragged over the radio while we were in the air to support them. They would come up on the net and vector us into the target. One night, I worked with Tall Man. After he contacted me I said, “Tall Man, I hear you, but I don’t see you.”

He then would ask me to turn on my lights or drop flares to pick up my location. Then he would say, “OK, I have you five miles northeast of me. There are five trucks under your flare.” It was a very effective program.

I worked a lot with him. We established a good rapport, a good relationship, even though he did not speak English well. We just figured out how to understand each other after we worked so long together. I went on frag missions with him all the time.

On one mission, he told me he was coming out of the bush. I told him I would have a party for him at my location. (I did not say our location over the radio, but he knew where I was based.) On his way out, he was accidentally shot and killed by his own people. Later, his guys brought me out an old Meo rifle he was going to bring me at the party. I still have that.³⁴

A Nimrod Mission

In Trest’s CHECO report, “Lucky Tiger Combat Operations,” one of the missions flown by Nimrod 32 on 29 November was captured in a weekly combat report. It is a good illustration of a representative night truck killing mission. Capt Billy L. Green and his navigator 1st Lt Robert L. Tidwell were flying on an armed-reconnaissance mission in the Barrel Roll area that night. Around 1900 hours, they spotted truck lights, approximately ten miles distant. Captain Green described the action:

We went to the area to investigate the lights. There were 15 trucks on Route 65 heading southwest. The trucks were evenly spaced about 300 meters apart. Each truck had its headlights on. I made the first pass (strafe and CBU) in the dark and from the front to the rear. Pulled up for a flare drop and new attack. At this time “The Tall Man” called me and asked if I was making an attack. He said he had a team nearby and that there were 14.5mm, 12.7mm and small

arms being shot at me. He also confirmed the size of the convoy and that there was an armored car with the group.³⁵

Under flare light, Nimrod 32 attacked the fleeing armored scout car with .50 caliber and CBU, killing all four of its occupants.

The A-26 Nimrods became a permanent fixture to the air war. In December 1966, Detachment 1, 603rd ACS joined the 606th ACS. In 1967 the peak strength of the unit was twelve aircraft; in 1968 it reached eighteen aircraft. In 1968 the Nimrods switched to operating in two-ship sorties.

Colonel Aderholt assumed command of the 606th ACS in December and soon advocated for the employment of “hunter-killer” teams formed with the squadron’s AT-28Ds, the A-26As, and the C-123K Candlesticks. These operations began in January 1967. With the establishment of 56th ACW, the Nimrods became the 609th Air Commando Squadron in September 1967.

By 1969, the pressure was once again on by the USAF to rid itself of propeller-driven attack aircraft and replace them with jets. Even in the face of statistical evidence that the A-26A suffered no more losses than other aircraft employed in theater, the Nimrods were shut down in November 1969. Colonel Kittinger, the unit’s operations officer during the Big Eagle test, said it succinctly during his official Air Force interview, “I think there were a lot of people that were really in the know that realized how effective that weapon system was. But when the boss doesn’t believe in it, you are in a world of trouble.”³⁶

Operating in the engagement area was problematic and not necessarily due to faulty employment of the Nimrods. Cricket, like the other interdiction areas, suffered from disparate attacks against targets spread out in the strike box; the Navy did its thing and the Air force did its thing. In frustration, Col James P. Hagerstrom, directing air operations for Cricket out of Udorn, was quoted in Jacob Van Staaveren’s *Interdiction in Southern Laos 1960–1968* as saying, “Once the supplies get out of the arteries and into the capillaries, it becomes literally impossible to get them. And as long as you have ‘X’ amount of airpower to apply, you ought to apply airpower at the point where you get the greatest return . . . right adjacent to where the passes come in from North Vietnam.”³⁷

Aderholt Assumes Command

In 1966, Colonel Aderholt was serving at Clark AFB in the Philippines when Gen Hunter Harris, commander in chief, Pacific Air Forces, requested him to perform a special assignment in Saigon. Barney Cochran, the former Water Pump commander, was assigned to the Pentagon and informed Aderholt of the Air Force's requirement to establish a personnel recovery center in South Vietnam for downed pilots. When Aderholt met with General Harris in Hawaii to discuss the job, a topic of discussion was Aderholt's desire to command an Air Force combat wing. Getting a command of that nature was going to be difficult in the current atmosphere of command selection—Aderholt was not jet-qualified.³⁸

Fortunately, General Harris had been working with the Air Staff to expand the 606th ACS into a full wing. After Aderholt worked to get the Joint Personnel Recovery Center (JPRC) up and running with MACV-SOG, General Harris informed him of his intent to place him in command of the 606th ACS in December 1966, with the desire to have Aderholt in place when the new ACW was formed. The only dissent to the assignment was Aderholt's nemesis, General Momyer, who had another selection for wing commander in mind. General Harris' decision stood, creating the atmosphere for future tension between Colonel Aderholt's employment of the Air Commandos and General Momyer's distaste for special operations and nonjet units of the Air Force.³⁹

Colonel Aderholt commanded the JPRC from its activation on 17 September until 4 December 1966. He arrived to NKP on 9 December, and assumed command of the 606th ACS. The 606th ACS felt the immediate effects of his leadership. Aderholt was known for being a "can do" combat officer and for getting a tough job done. He immediately raised the morale of the unit and began upgrading its facilities to take better care of the men. He had one immediate desire: increase combat missions for the squadron, particularly oriented to interdiction along the HCMT. He won immediate favor with Bond, the Seventh/Thirteenth Air Force Commander at Udorn.⁴⁰

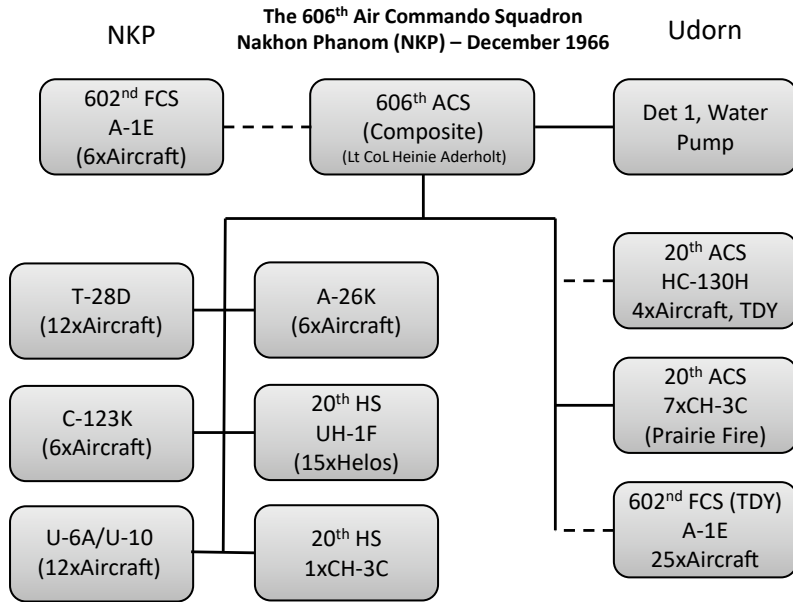


Figure 8.1. Task organization of the 606th ACS stationed at Nakhon Phanom and Udorn Royal Thai Air Force Bases, as of December 1966.

Lucky Tiger Combat Operations, January–April 1967

Up to December 1966, the 606th ACS conducted limited combat sorties into Laos via the AT-28D teams of Detachment 1, Water Pump, and sorties to emplace Laotian and Thai Road Teams with the 20th HS flight detachments equipped with UH-1Fs and CH-3Cs. With the assumption of command of Col Aderholt and the assignment of the 603rd A-26A assets to the 606th, it would not be long before an aggressive commander like Heinie Aderholt explored ways to move his unit away from the earlier COIN mission in Thailand to flying combat in support of Ambassador Sullivan and Col Paul A. “Pappy” Pettigrew, the air attaché in Vientiane. The detachment of A-1s from the 602nd ACS also flew multiple combat and SAR missions but were not under the 606th ACS’s operational control; this merge would happen later in 1967 when Air Commando units at NKP were established as a full ACW—the 56th ACW.

Aderholt found he was sitting on unused aircraft capability for the Thai COIN support mission; he proposed he could generate Laos's air combat missions from his daily COIN mission, using aircraft not needed for the Thai training.

He first wanted to augment the truck-killing and interdiction mission of the A-26s with the T-28Ds at his disposal. Until more A-26s were sent to NKP (as a result of the Big Eagle tests), the addition of T-28Ds—along with his C-123K Candlestick flareships—would increase the rate of targets serviced at night. On 4 January 1967, Aderholt proposed the addition of the T-28Ds into the Steel Tiger interdiction area. He had twelve AT-28Ds and proposed the detachment's T-28 end strength as twenty-five aircraft with supporting personnel and logistics. Subtracting his COIN training aircraft requirements, eight sorties a day were offered for the interdiction mission.⁴¹

Analysis by the Seventh Air Force concurred; they advised the deputy commander of the Seventh/Thirteenth Air Force at Udorn of the following:

Analysis of utilization data on T-28s at Nakhon Phanom indicates some unused capability which might be applied to the Laotian conflict. For the last four weeks T-28s averaged 42 hours per aircraft per month capability. In addition, the lessened proficiency of the aircrews is an unfavorable residual effect.

Request you evaluate the feasibility of approaching AMEMB [American Embassy] Bangkok concerning application of a portion of this excess capability to Laotian targets. Proficiency of the aircrews will be maintained, providing a richer background as instructors for the Thai Air Force personnel.⁴²

Aderholt enthusiastically replied he could also immediately support the Pony Express escort mission. In addition to the eight sorties he could offer daily by the T-28s, he also saw an opportunity to utilize the 606th ACS's C-123 flareships. He related in a letter to General Bond, the deputy commander of the Seventh/Thirteenth Air Force, that: "The 606th ACS can provide combat ready crews and two C-123 flare-ship sorties per night to support the T-28 strike aircraft. C-123 flare aircraft would be particularly effective if employed with the T-28s against traffic on Route 23. The C-123s would eliminate the requirement for Lamp-lighter support of T-28s in the STEEL TIGER area. C-123 flare-ship will allow the T-28s to carry larger ordnance load."⁴³ The USAF C-130 Lamplighter was a scarce resource, and could not always operate in support of the Air Commandos, usually diverted from a mission or

located far away from ongoing operations under the control of the ABCCC employing jet assets.

The AT-28Ds would operate both day and night in Steel Tiger. The concept for daytime sorties consisted of the T-28s escorting FAC O-1s, who would then direct the aircraft onto targets. Additionally, the T-28s could be directed by either airborne control assets or with forward air guides (FAG) from road watch teams. At night the T-28s would escort an O-1 FAC who was equipped with a starlight scope or with other aircraft with this capability. The T-28 was equipped with flares or could operate in conjunction with the C-130 "Lamplighters." To prove the versatility of the T-28's capability to deliver suppressive ordnance, it was offered as a replacement for daytime SAR missions and for escort to the Pony Express helicopters, freeing up the A-26A for nighttime interdiction missions only.

Thanks to Colonel Aderholt's vision, drive, and determination to get his squadron involved in combat, the 606th began combat missions into Steel Tiger on 9 January 1967. Initial operations were flown as daytime sorties, in a two-ship T-28 configuration. Operations included armed reconnaissance, SAR escort, escort of Ranch Hand defoliation missions, and escort for the helicopters involved in Pony Express.

It was during this time the Nimrods deployed their secret weapon. After a hot day of policing the airfield for debris, Aderholt had beer delivered to the work crew. The first sergeant came to Colonel Kittinger and said he had an idea to raise morale: why not take the empty beer bottles and drop them up in North Vietnam? They were soon loaded into an A-26 bomb bay. Kittinger flew the mission. He remembered, "I flew at low level and dropped the beer bottles along a road. I suppose the shattered glass would flatten some tires or impede traffic. The NVA must have thought we had a secret weapon! It was a great morale booster for the men."⁴⁴

Floyd, the night line chief, also remembered an additional secret weapon dropped by Kittinger: "We also loaded spikes. I asked Kittinger not to return these—we would have had to open the bomb bay doors, and the spikes would have scattered all over the aircraft parking area. I also found some 'rocks' for Kittinger to drop. I went out to where they were making concrete telephone poles. There was leftover concrete in the forms, a half circle of concrete. I took that to Kittinger, and he loaded them up."⁴⁵

Not long after the T-28's success in daylight sorties, the T-28s began nighttime sorties. Aderholt wanted all daylight missions eliminated to give his aircraft a better survivability rate. On the last daylight mission for the T-28s, one aircraft was lost to enemy gunfire while helping a downed O-1 Nail FAC.⁴⁶

Aderholt quickly changed nighttime tactics to one-ship sorties, with one instead of two T-28 pilots manning the aircraft. (Plus, there were not enough T-28 pilots to support two per aircraft, given the sortie apportionment.) He supplemented his pilots with either a navigator or a rated officer from another type aircraft in his inventory. In a cooperative gesture to the USAF, he even offered the back seat mission to the pilots and navigators of the F-4 Wolfpack squadron to give them a live combat orientation to the interdiction area.

In time the 606th ACS developed the most effective tactic to interdict trucks, men, and material in the Laotian Panhandle: the “hunter-killer” team concept. The concept involved the integration of the A-26s, the T-28s, and the C-123s into an effective and impressive interdiction concept. This, combined with the Air Force allowing the 606th ACS to choose its optimum load for ordnance—previously dictated by frag orders, which bore no resemblance to what the unit actually needed to perform the mission—the 606th ACS set upon the use of machine-gun runs, followed by CBUs, as the most effective means for accomplishing the mission. Said T-28 pilot Maj David R. Williams,

We did not want to discredit any type of air munition until we had tried it. We did find that you cannot obtain maximum effectiveness by splitting your mission between interdiction and armed reconnaissance. It should be one or the other. If we conduct armed recce, we need certain types of ordnance, and if we are going to interdict, we feel we should be armed only with interdiction weapons.

Studying the first thirty or so trucks destroyed, you can see that the trucks are being killed by guns first, then CBU. These two weapons are the most effective against trucks.⁴⁷

By February, the 606th ACS settled into an effective ordnance load based on initial experiences: guns and area weapons (CBU, napalm—best for truck burning) for VR and escort missions and rockets and bombs (fragmentation) for interdiction missions. Flares were integral to the loads, but the best effect was the use of a separate flareship.

Gun runs were made head on, hitting the trucks in the engine and cab. This basically stopped the truck, and then multiple runs could be made against it until it ignited. Credit for a truck kill was only given

if it burned. This was difficult to achieve, given the low ignition rate of diesel fuel. Even if FACs flying the next day over destroyed trucks confirmed a kill, which were clearly seen as destroyed (or spotted as destroyed by road watch teams), but not “burned up,” the 606th ACS was not given credit for the kill. Colonel Kittinger, USAF, retired explained the frustration: “We did not claim a kill unless the truck was on fire. It is pretty tough to get diesel fuel to burn, however. We destroyed more trucks than we were given credit for, though. I calculate we destroyed at least three times the truck kills we were credited for—they just weren’t burning. Our high day was forty truck kills. At our BBQ pit was an old iron bomb casing hanging overhead where we painted the tallies.”⁴⁸

To improve the night interdiction mission, a test was conducted using a borrowed starlight scope from the 23rd TASS. The test was conducted in mid-February; results indicated it was awkward for use in the T-28, but an excellent addition to the A-26 night capability when used by a crewman suspended in the bomb bay. The night scope capability was soon added to the C-123Ks, improving the “hunter-killer” concept.⁴⁹

T-28D Night Interdiction

Capt Felix “Sam” Sambogna

Capt Felix Sambogna flew the AT-28 in the 606th ACS. He explains his experiences as a Zorro pilot:

When Aderholt popped in, he told us to get the T-28s out on the HCMT. Our mission was to fly the HCMT, dark to light. We flew one or two sorties in the day until some of us got killed. On the day before a flight, we looked at the schedule. I always hoped to be the first to take off, since there was still some light. We went to the AOC to get our briefing for the mission (air conditioned trailers—nice!) then over to life support to pick up our pilot gear. The briefings included weather and intel. We were always assigned alternate missions (like Tchepone, etc.).

Our ordnance was .50 caliber, 600 rounds. (We found these to be the most effective against targets.) Also, 2.75-inch rockets and CBU. Occasionally, due to shortages, we just took whatever ordnance was on hand. Bombs were sometimes not feasible.

We flew single-ship missions. They lasted about two hours. When you took off, you checked into ABCCC (C-130). We carried flare pods. We used

TACAN to navigate to the highways. First, we dropped flares and looked for targets. We flew south of the Mu Ghia Pass and the Tchepone area. I never saw more than six trucks my entire time; it was normal to only see one or two. We would also call for the flareships instead of using our own—it was a better tactic which did not give our location away. We worked with O-1s, which were painted black and equipped with a starlight scope. They would hunt while we orbited around them. They had a white light on the top so we could see where they were. If they found something, a flare was dropped, and we went in to destroy it.

The threat: ZSU-23s, with tracers. But, I didn't think they were very accurate. The karsts were the other danger at night. We did not have ejection seats on our model of aircraft. My most memorable mission: I was over the Mu Ghia Pass. I dropped a flare, and I saw six trucks. I called for the flareship to back me up. An A-26 Nimrod was in the area, and it became a competition for who was going to destroy the trucks. There was no air control to orchestrate the thing. I did not have radio contact with him. But, I think we got all six trucks.

A colonel in the command section bugged Aderholt to let a guy fly in the back. I had a FAC one day who told me there were two fuel tanker trucks on the trail. I dropped a flare, and they were there! I shot armor piercing rounds and hit the first truck. When the other truck pulled off the road, I got him with a CBU. Aderholt would let excess pilots from Robin Olds' fighter unit to be GIBs [Guys in the Back]. All of this GIB thing was for safety and to help the single Zorro pilot.⁵⁰

Search and Rescue Operations

The Nimrods also provided armed escort for SAR missions. One mission included a SAR for one of their own. Kittinger explains as follows:

Once in a while, we were fragged to take off before dark; some of this was to get better results during visual recon. I followed Howard (squadron commander) out about one-half hour before sunset. I heard him on the radio call out, "I've been hit, and my engine is on fire!" I headed his way. He was trying to return to base, but after about five minutes, he bailed out along with his two crewmen. I flew over the area and saw the flame from the burning aircraft. I was able to talk to Howard; they were all OK and were reporting no sign of the enemy. I contacted the ABCCC to request a SAR. I did not hear anything back from them for ten minutes; then I called again.

I was told they would not launch a rescue mission until the morning. [At NKP, Heinie Aderholt was trying to mount his own rescue using a Bell helicopter.] After some terse conversations, a helicopter was launched. When they got in our area, they were concerned about enemy ground fire and would not approach the downed crew to rescue them. I told them, look, I will put on my

lights and beacon and fly down low, to point out that no one was shooting at me. I did this three or four times, with no shots fired at me.

The helo went in and picked the guys up. I thought this tactic, to rescue folks at night, was a good idea, because you could see whether or not someone was shooting at you. Not so for the daytime. But, no one followed that advice from me.⁵¹

Escort for Road Watch Teams

The Nimrods developed an effective tactic during their escort of Pony Express helicopters, resulting in no loss of the road watch teams during insertion, an impressive combat record. Kittinger and Secord developed a tactic that would serve them well. Kittinger said,

You cannot hide a helicopter doing an insertion. So you need a tactic to raise their survivability. I escorted these missions. I would fly three to five miles off from the insertion landing zone and then drop bombs and strafe as if that was the location of our activity. It provided a diversion while the teams were successfully inserted.

One day a colonel from the Seventh Air Force came to attend one of our mission briefings for an insertion. Dick Secord gave the brief, but took no questions. The colonel stood up (he was sitting in the back of the briefing area) and said our tactic was all wrong—we were wasting ordnance on empty jungle. Dick, who always wore civilian clothes, chewed him out royally, then told him to get out. The colonel was sitting in my office when I returned. He asked, “Who was that guy, a general? Because it must be a general to chew out a colonel like that!”⁵²

Effectiveness of the 606th Air Commando Squadron

In Trest’s CHECO report, “Lucky Tiger Combat Operations,” 15 June 1967, he calculated the success of the 606th ACS’s interdiction mission as of early March 1967. At that point, the squadron was flying with ten T-28Ds and ten A-26As:⁵³

- A-26As: From July 1966 to 28 February 1967—2,004 sorties flown; destroyed 275 trucks and damaged 246; attacked 1,223 truck parks with 1,033 secondary explosions; hit 24 gun positions, 148 structures, and 823 bivouac areas resulting in 492 enemy troops KIA; 23 AA guns, 27 boats, and 79 structures damaged; several road cuts (twenty-five A-26As damaged and three lost to combat)
- T-28Ds: From January to February 1967—455 sorties flown; 42 trucks destroyed and 68 damaged; seven gun positions destroyed

and five damaged; 15 enemy troops KIA; 65 secondary fires and 77 secondary explosions; one bivouac area damaged and one structure destroyed (three T-28s hit by ground fire and damaged, and one lost to combat)

Said Joe Kittinger,

All of our operations showed the versatility of the A-26A. We performed close air support for troops in contact; we ran SAR missions; we escorted guerrillas for reconnaissance insertions, and we interdicted along the Ho Chi Minh Trail. And, we hit targets! The airmen were magnificent. They worked their butts off. We were on night cycle and slept during the day in our trailers while the maintenance and logistic crews worked all day long in the heat to keep the aircraft flying. They were great people.⁵⁴

To coordinate the growing operations out of NKP, the Seventh/Thirteenth director of operations established the requirement for a tactical unit operations center (TUOC). Colonel Aderholt, the senior tactical commander at NKP, commanded the TUOC. The TUOC coordinated the activities of the 606th ACS, the 23rd TASS O-1Fs, SAR forces and the Pony Express mission assets (including intelligence provided by CIA detailee Maj Richard Secord, coordinating the activities of the road watch teams). The TUOC arrangement was instrumental in providing increased intelligence to the operational units. Morale increased with this effective use of resources.⁵⁵

Due to the effectiveness of the 606th ACS, in March 1967 the Seventh AF asked the unit to increase sortie generation; there was a race to get more results ahead of the on-coming monsoon season. Heinie Aderholt, ever the aggressive combat commander, was not to be slowed down by weather. At the beginning of March, he made a statement to the squadron outlining his philosophy:⁵⁶

I cannot speak for the other commanders here at Nakhon Phanom, but I want to make it clear that we are not going to just sit here at the base because the weather is bad out in the target areas. Our job here is to stop truck traffic—the movement of men and supplies—and if the weather here allows it, we go.

Senior officers will be at the TUOC at night. We are involved in a war at night, and I want you here to work with the pilots, to direct operations and make decisions. We need every degree of control, and I want the pilots informed about every facet of their mission.

Even in bad weather, we can work with the ABCCC, possibly divert to Barrel Roll. We can harass the enemy with flares, even if we can't get down to strike. If the base is open, the mission is flown. I want this made very clear.⁵⁷

606th Air Commando Squadron to the 56th Air Commando Wing

As promised by General Harris, the USAF activated the 56th ACW at NKP on 8 April 1967 (254 officers, 1,589 enlisted, and 1,484 civilians).⁵⁸ Colonel Aderholt assumed command of the wing, turning the 606th ACS command over to Colonel Price. The 602nd Fighter Squadron (Commando) A-1s were assigned permanently to the 56th ACW. Ambassador Sullivan was on his way to having his own COIN air force.

Notes

1. Garland and Trest, *USAF Counterinsurgency Operations in Thailand*, 25.
2. Van Staaveren, *Interdiction in Southern Laos*, chapters 1–3.
3. *Ibid.*, 55–58.
4. *Ibid.*, 91–92.
5. *Ibid.*, 107.
6. Glasser, *Secret Vietnam War*, 92.
7. Garland and Trest, *USAF Counterinsurgency Operations in Thailand*, 25.
8. Glasser, *Secret Vietnam War*, 92.
9. Air Commando who wished to remain anonymous, interview.
10. Haas, *Apollo's Warriors*, 201–3.
11. Glasser, *Secret Vietnam War*, 97.
12. Garland and Trest, *USAF Counterinsurgency Operations in Thailand*, 26.
13. *Ibid.*, 34.
14. *Ibid.*, 35.
15. Nelson, *USAF Helicopter in SEA*, 15.
16. Mutza, *Green Hornets*, 14.
17. Haas, *Apollo's Warriors*, 306–7.
18. Nelson, *USAF Helicopter in SEA*, 36.
19. Mutza, *Green Hornets*, 16–17.
20. Nelson, *USAF Helicopter in SEA*, 36.
21. Svoboda, interview.
22. Mutza, *Green Hornets*, 39.
23. Daniels, interview.
24. Nelson, *USAF Helicopter in SEA*, 22.
25. Hoadly, “The Junkyard Air Force,” 11–12.
26. Kittinger, interview.
27. Trest, *Air Commando One*, 189.
28. Floyd, interview.
29. Hoadly, “The Junkyard Air Force,” 12–14.
30. Anthony and Sexton, *The War in Northern Laos*, 209–11; Hoadly, “The Junkyard Air Force,” 41; Trest, *Lucky Tiger Combat Operations*, 7–19.

31. Hoadly, "The Junkyard Air Force," 16.
32. Trest, *Lucky Tiger Combat Operations*, 11.
33. Secord, interview.
34. Kittinger, interview.
35. Trest, *Lucky Tiger Combat Operations*, 17.
36. Hoadly, "The Junkyard Air Force," 23. Quote extracted from Col Joseph W. Kittinger's oral interview with Robert B. Zimmerman, historian AFHRA [File K239.0512-807, Maxwell AFB].
37. Van Staaveren, *Interdiction in Southern Laos*, 113.
38. Trest, *Lucky Tiger Combat Operations*, 164–66.
39. *Ibid.*, 180.
40. *Ibid.*, 184–5.
41. *Ibid.*, 26.
42. *Ibid.*, 29.
43. *Ibid.*, 29.
44. Kittinger, interview.
45. Floyd, interview.
46. Trest, *Lucky Tiger Combat Operations*, 31.
47. *Ibid.*, 34.
48. Kittinger, interview.
49. Trest, *Lucky Tiger Combat Operations*, 39–41.
50. Sambogna, interview.
51. Kittinger, interview.
52. *Ibid.*
53. Trest, *Lucky Tiger Combat Operations*, 42–43.
54. Kittinger, interview.
55. Trest, *Lucky Tiger Combat Operations*, 43–45.
56. *Ibid.*, 46.
57. *Ibid.*, 46.
58. Glasser, *Secret Vietnam War*, 92.

Chapter 9

Air Operations Centers

The term “Palace Dog” was an Air Force personnel designation for augmentation of the Office of the Air Attaché in Vientiane. It was a cover story. It was for the 179-day TDY folks. Project 404 came out of the requirement for tactical air for the Laotians and Hmongs, and to replace the T-6s with T-28s . . . The object of Project 404 was to maintain the RLAFF Air Operations Center (AOC) in fighting condition for the defense of Laos.

—Maj Jerome W. Klingaman
Commander, AOC, Vientiane and Pakse

There were two sides to the air war in Laos. The first, under the direction and support of the American ambassador for the application of US airstrikes, predominantly focused on interdiction. The second was internal and under the control of the Royal Lao Government (RLG) general staff: transport, reconnaissance, and offensive airstrikes in support of ground forces, conducted and run by the Royal Laotian Air Force (RLAF). From its beginnings with an aircraft squadron at Savannakhet—reinforced with Water Pump Thai and Lao T-28s operating out of Udorn—the RLAFF grew throughout the 1960s to run air operations from four of its major airfields: Luang Prabang, Wattay, Savannakhet, and Pakse. A fifth operating location would be opened up at Long Tieng using Hmong T-28 pilots under the control of Gen Vang Pao.

To make Laotian airpower more effective, air operation centers (AOC) were established as each squadron of T-28s began service at their respective operating locations (OL). Project 404 Palace Dog helped to man the AOCs with Air Commandos as assistant air attachés (AIRA) and temporary duty (TDY) personnel to perform the tasks and functions of an AOC. The establishment of the AOC at the OLs was implemented as follows:

- An ad hoc AOC function was established at Wattay to support A- and B-team strike T-28s operating out of Udorn in late spring 1964; in 1965, the AOC became formal under the command of

Maj “Swede” Svedson; Capt Glenn Frick, with an ordnance airman and an aircraft mechanic, operated at Luang Prabang in June 1965.

- An AOC was established in Savannakhet in early 1965.
- The Luang Prabang AOC was established between January and February 1967.
- The Pakse AOC was in place in August 1968.
- An AOC function was running at Long Tieng at the end of 1969, although not official.
- Between 1968 and 1973, forward or temporary AOCs were established for short periods at Lima Site (LS)-22 (“Lima Lima”) on the *Plaine des Jarres (PDJ)*, Moug Soui and Moug Kassy, Vang Vieng, Ban Houei Sai, and Ban Son.

(On 26 May 1970, Lt Col Bill Keeler assisted the Lao general staff with establishing an overall combined operations center at Vientiane to integrate the activities of the joint operations centers [JOC] and AOCs.)

The story of the Project 404, Air Commando-run AOCs, is the story of the growth and effectiveness of the RLAF. It is also a story of differing and unconnected air operations in each military region (MR), run by the senior, regional military commander. The AOCs experienced five different air wars.

To some extent, the French influence on the doctrinal application of airpower affected how the senior RLAF and military commanders used their assets. Per the French experience, the role for airpower in counterinsurgency (COIN) consisted of transport, reconnaissance, liaison, and offensive strike operations in support of ground forces. As most insurgent movements lacked any of their own airpower, there was no need for air-to-air platforms. Insurgents rarely presented strategic targets, being adept at remaining hidden and dispersed. Therefore, bombing of targets was limited to close air support (CAS), attacks on enemy forces and supplies beyond the artillery firing line, and in limited cases, battlefield air interdiction. Strategic targeting was not a role for the RLAF.

The primary operating principle for strike aircraft was to support ground maneuver (the lessons of airpower in the Indochina, Malaya, and Algeria insurgencies). Troops in contact (TIC) needed the highest

level of response, which could only be achieved if strike aircraft were decentralized down into the military operating regions and most responsive if under the direction and control of a senior Army commander. Hitting a few enemy trucks on a line of communication did not end the war; loss of a major battle or town or even an overrun province could be catastrophic. Other assets—such as bombers and transport aircraft, including helicopters—could be centralized and apportioned as needed.

Other than light liaison and reconnaissance airframes stationed alongside strike assets at remote airstrips, there was no move by the RLAF to form composite squadrons, although American air advisors urged the RLAF to consider such an organization later on in the war, which was eventually adopted. The prevailing doctrinal opinion for centralization of larger and technically complex aircraft was based on efficiencies gained in maintenance and armaments; senior air commanders chose to not plague local air commanders with those problems. Also, the field commander only had one type of aircraft to maintain, making his task simpler.

Purpose of Air Operations Centers

The purpose of an AOC is to provide effective, responsive airpower. The AOC is the senior component of a theater air control system, which is used to match targets to available aircraft. In Laos, the AOC was the senior component of an MR air control system with responsibility for centralized planning, direction, and control of a singular air asset—the RLAF AT-28 strike squadron (and later Lao AC-47s). Regionally, the AOCs performed the role of a direct air support center, which was a linkage body for Lao and American air assets in support of ground operations, with no higher control organization and initially no integration with the other AOCs. This level of control would not be achieved until the establishment of the combat operations center (COC) in Vientiane. Internal to the MR, the AOC commander, like the air component commander, ran his operations similar to a tactical air control center.

In some of the MRs, the AOC commanders exercised operational control of RLAF AT-28 assets at the squadron level. Although there may have been a senior pilot within the squadron, some were reluctant to serve as squadron commanders. On some Lao airbases, the

base commander was not a rated officer; therefore, he was not in command of the squadron. This job often fell by default to the Project 404 AOC commander.

The AOC commanders set the priorities and objectives for their respective squadrons to meet the tactical requirements of the senior MR commander, tailored to the squadrons' capabilities. This was accomplished through attendance to a JOC, if one existed in the MR, where RLAf, AOC, Central Intelligence Agency (CIA) operatives, and *Forces Armées Royales* (FAR, Royal Armed Forces) representatives met to coordinate operations. It was at the JOC meeting where the AOC identified operational priorities and intelligence needs of the MR commander.

The AOC was collocated on the primary airbase in the MR. The AOC functioned to receive targeting input from the MR commander, local sources, and CIA operatives. (The RLAf did not directly receive targets from the AIRA in Vientiane.) The AOC then apportioned the squadron its daily missions: CAS for TIC, support to ground operations, interdiction, or search and rescue (SAR). Subsequently, the AOC allocated the sorties and ordnance for the missions. One of the important aspects of improving Lao airpower was to increase sortie generation.

Each AOC established a combat operations function internally. Combat operations included communication, management of air control, intelligence fusion, and SAR operations. AOCs were equipped with high frequency (HF), Collins KWM-2 radios for long-range communications with Vientiane and other AOCs. This process normally occurred in a small building or room, with the appropriate maps and charts to track a battle or ongoing combat operations. The COC also deconflicted US airstrikes within Laos.

At the end of each day, the AOC met with the squadron, or senior RLAf commanders if present, to analyze daily operations and adjust future operations to the tactical situation. If a senior RLAf commander was present, the AOC commander served as his advisor to present problems and issues found within the squadron, which could affect the performance and execution of the assigned objectives. If the AOC commander was also serving as the squadron commander, then his role was to plan, direct, and assess daily activities. As squadron commander, the AOC commander coordinated the targeting for the squadron and disseminated the necessary intelligence products to perform the mission.

AOC commanders were responsible for the health and welfare of their men and serviceability of their aircraft. They all saw it as a solemn obligation to keep their airmen alive. They were mentors and teachers to the Laotian pilots and helped improve their proficiency and survivability. One thing most AOC commanders insisted upon was the need to fly with the squadron to assess their performance. This often put them into direct violation of the ambassador's restrictions on flying.

Other duties for the AOC commander were tackling the administrative requirements that came with running a squadron. These included the following: (1) improving logistics and supplies to support the unit, (2) confirming manning rosters, (3) distributing combat pay (pay provided by the Agency for sorties flown by Lao pilots, 500 kip per mission), and (4) providing weekly reports to the AIRA. An unpleasant, yet necessary, duty was stopping corruption and abuse from within the squadron and from high-ranking Laotian officers.

Maj Bill Keeler was the first AOC commander to fly with his pilots, the Thai T-28 squadron at Wattay (the B-Team). The AIRA prohibited his predecessor, Major Svedson, from flying sorties with the squadron. The Thai mission performance was not good; Keeler made the case he had to fly to observe their performance in order to correct the problem. He also felt the need to "bolster" their flying skills.¹ (All American advisors serving with a foreign counterpart expressed the need to fight alongside their partner for credibility.)

Organization of Air Operation Centers

The manning for the AOC consisted of assigned Project 404 personnel, augmented with TDY personnel. The AOC commander, line chief, communications operator, and medical slots were all Project 404. TDY slots varied but generally consisted of an armaments airman from Pacific Air Forces (PACAF), a TDY Air Commando munitions specialist, and TDY engine mechanics. The Raven forward air controllers (FAC) cycled in on six-month or less tours and, in some AOCs, operated more independently from the AOC commander than in others.

The Palace Dog program administered Project 404 slots. Project 404 AOC personnel were selected from highly qualified volunteers. Air Commandos from Eglin AFB, Florida, predominantly made up

the ranks of AOC commanders. (An exception was made whenever shortages of personnel and volunteers existed.) AOC commanders attended a one-week mobile assistance team supervisor's course (MATSUCO) conducted by the USAF Special Operations School at Hurlburt Field.

All personnel going to fill the ranks of the AOC conducted pre-deployment training at Hurlburt. AOC commanders, if not already qualified, attended a two-month T-28 course, conducted by the 4407th Combat Crew Training Squadron (CCTS). Line chiefs untrained on the T-28 attended T-28 flight training device instruction, followed by a two-week on-the-job training course. Other optional courses offered at Hurlburt included COIN and various types of air control, as presented by the air ground operations system (AGOS) committee.²

Maj Jessie E. Scott was an AOC commander both at Vientiane and Moung Soui, and later in support of Long Tieng (LS-20A). Between his tours, he assisted in the training of personnel chosen to deploy as Project 404 AOC teams. He describes the depth of the training:

Usually a class would consist of four to six replacement instructors for Det 1 and one or two 404 people. Essentially, the T-28 unit handled just about all of the training because the line chiefs that were selected may have been working on 123s or something like this. They would come down and spend one to two months working on the T-28. With the 404 people, we went into depth with them on training. The people going to Det 1 simply had to be qualified in accordance with Air Force requirements to fly the airplane and instruct. The 404 people, there was very little written on it. They had to go through the air-to-ground school, AGOS course and so on. In this MATSUCO program that I talked about before we trained them to operate all of the radios, the portable radios, the GRC-10, GRC-25, and so on. I trained them how to work the MRC-108 radio jeep. This was part of their training, and an auxiliary power unit. The pilots were sent down to the hangar to go through maintenance procedures on the T-28.

When we were flying actual ordnance missions as part of their training, they were out there observing the loading, the munitions storage, [and] things like this. The AOC commander had to be knowledgeable on all of these areas. In fact, while the O-1 training was still being conducted at Hurlburt, they would go over for a two-week checkout in the O-1, forward air control orientation. Then they would go to England Air Force Base for just a basic two-flight orientation in the AC-47, as far as the systems and other delivery and so on. The training required was quite broad and quite a bit on the background of the people. In the base library at Hurlburt we had a book stack on counterinsurgency-related material and things on Laos. Individuals had brought back language books or history books from Laos, things like this that we would keep

in this section for these people to read as background information. There doesn't exist within the Air Force one particular specialty that you can draw upon that would completely fill the bill for this particular job. He [the AOC commander] has got to be extremely broad.³

An AOC was organized to conduct several functions. In no cases were there enough personnel to perform every task, and members of an AOC wore several hats to conduct multiple duties.

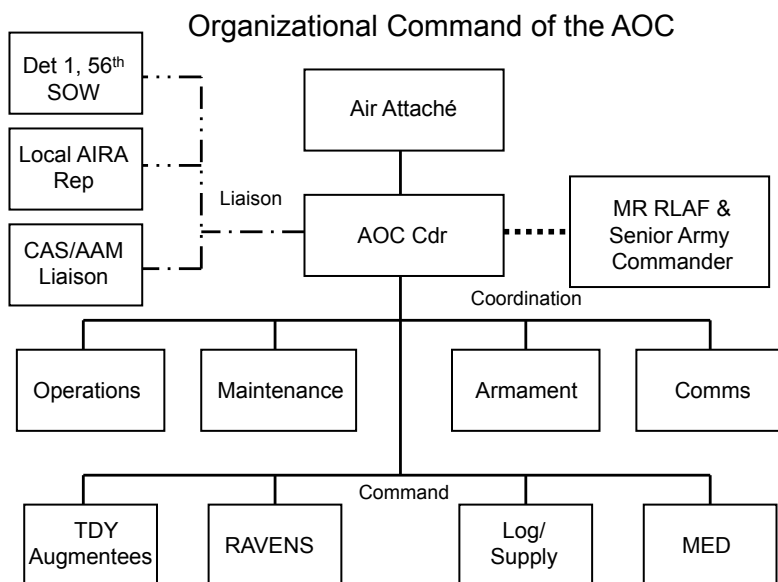


Figure 9.1. The AOC was primarily manned with three to five Project 404 personnel and augmented with either USAF TDY personnel or from Air Force assets stationed in Thailand. Ravens assigned to the AOC's airfield were attached to the AOC commander. AOC personnel performed multiple jobs to keep the function running.

Jerome Klingaman, an AOC commander at both Wattay in Vientiane and later at Pakse, wrote a history of Project 404, *Palace Dog*. He described the part played by the Air Commandos manning the AOCs and the various military training teams (MTT) conducted for the RLAF:

From October 1968, USAFSOF [United States Air Force, Special Operations Forces] provided continuous personnel manning of Project 404. Deployed on a 179-day TDY rotation basis, the personnel were assigned to APO 96237

(Udorn AB, Thailand) with duty actually performed in Laos under the operational control of the Air Attaché to Laos (OUSAIRA). In 1968, an AOC commander, line chief, medic, and communication specialist were assigned to each of four AOCs located at Vientiane (Lima Site 08), Savannakhet (Lima Site 39), Luang Prabang (Lima Site 54) and Pakse (Lima Site 11). A fifth officer was deployed to Vientiane as advisor to the Lao combat operations center (COC) and a medical officer was deployed to Long Tieng (Lima Site 20A). After approximately nine months of operations, the COC advisor's position was converted to an AOC commander slot at 20A and two more personnel, a line chief and a communications specialist, were added to the 20A AOC. A medic was later added to assist the doctor. In October 1970, USAFSOF deployed an additional officer, AFSC 1045Z to Project 404 to function as an advisor to the Royal Lao Air Force (RLAF) AC-47 gunship program. This TDY was also on a 179-day rotation basis. As the process of "Lao-ization" continues, the number of personnel required has decreased. The following positions were now deleted: AC-47 advisor, the doctor, a medic, four communications specialists and the AOC commander and line chief.⁴

Major Klingaman's AOC operation at Pakse illustrates the blending of Project 404 Palace Dog personnel and TDY augmentation personnel to keep the RLAF T-28s flying.

The AOC commander was under the command and control of the Air Attaché at the US embassy in Vientiane. At the same time, the advisory mission required extensive independence of action and innovative thinking on the part of AOC commanders in dealing with operational situations in a politically sensitive and highly fluid combat environment. The duties of the AOC were maintaining the combat capability of the assigned RLAF T-28 and AC-47 strike force and the same for maintaining the combat capability of the RLAF airlift force of C-47s and H-34s. The commander of the AOC was responsible first as the senior US air advisor in his military region on matters relating to the employment of both USAF and RLAF tactical air assets and for the development of targets for air strikes. The employment of air also included input on its best use to support special agency programs and in support of the Lao Army. If Raven FACs were assigned to the AOC's military region, the AOC commander exercised operational control over their activities.⁵

Aircraft with maintenance problems or those needing excessive flight hour inspections were rotated to Udorn, while operational T-28s in Udorn were swapped to keep the sortie rate higher in MR-IV. His line chief—responsible as the maintenance officer, supply officer, transportation officer, and first sergeant of the AOC—personally increased the instruction and advice to the RLAF ground support personnel and improved the spare parts system to solve the maintenance deficiency problem. Site facilities were also improved.

The AOC communications specialist saw to it in a short time that all communications channels for essential coordination were up and running. The communications specialist also served to improve the skills of the RLAF communicators, teaching the Laotian airmen improved communications procedures and techniques.

In 1967, David Ross was 19 years old and serving at Udorn when he was sent by the USAF to serve as a Project 404 ground radio operator in Savannakhet (an eight-month assignment). He had only been at Udorn for about a week when he was told to surrender his military identification (ID) card and dress in civilian clothes. He was then sent to Savannakhet on an Air America flight. Upon arrival, he reported to the Project 404 AOC commander to begin his duties. He found his new job interesting because it included much more than being a ground communicator in support of the Lao T-28 squadron.

My Air Force Specialty Code (AFSC) was 29350 (Radio Communications). My assignment was six months. I started at Udorn in the 506th Tactical Control Maintenance Squadron. These were the same guys and equipment who got attacked at Phou Pha Thi, LS-85. We had a team of thirteen men at Savannakhet; this included flight line ordnance folks and maintainers.

We had a Quonset hut at Savannakhet to work out of near the airfield. There was another little trailer where they ran the TS-crypto microwave, but I did not have that clearance so never worked with them. I ran a switchboard for the land lines which went to other locations. My call sign was Texas. In the Quonset hut, I had my own little room. We also had KWM-2As and teletype. Our job did not include talking with the Laotian Air force, T-28s, or the pilots. We did not provide radio communication with the Ravens. This was done out of the control tower, run by Air America. We took Lao strike reports and their BDA [battle damage assessment] stuff, along with the Ravens' reports.

I was a young "go getter" in my time there, kind of seeking adventure, so I had friends in the Ravens and sought opportunities to fly with them. There did not seem to be any prohibitions on this practice. There were times we landed to pick up weapons from the mountain people (I know they are called Hmong, but we called them Meo.) I remember an American ordnance team was also at the site. We got a bullet or two in the aircraft on these flights.

I also went up to Pakse where we lived in tents. We would fly into "Victor" sites near the Ho Chi Minh Trail. It was mostly recon flights, checking out BDA for results from airstrikes. I was like the "Covey" riders; we just rode along to give the pilot an extra set of eyes. I also remember seeing the O-2s from the Nails (23rd TASS), but I did not ride with them, they had their own backseaters.

I think it was during the Tet offensive when the assistant air Aattaché took me up to Luang Prabang with radio gear. I worked with the Lao Army on the

ground. I helped to train them in radio gear and comms procedures, and then helped to set up a radio operation in their field command posts. Again, I was in civilian clothes and carried my .45 pistol.⁶

The medic (or physician assistant [PA]), who was responsible first to USAF personnel, extended the “hearts and minds” COIN approach to assist with medical support for RLAF personnel and their dependents. If possible, the medic also conducted medical clinics with the local populace. Part of his job included advice and support to the Pakse air base hospital and to local clinics in the town. Establishing a proficient medical evacuation (MEDEVAC) program within the RLAF for support to the Lao army was essential in improving their morale. This program was in place before Klingaman’s AOC tour was over and proved capable of helicopter MEDEVAC of Lao army soldiers during the battle of Thateng. The AOC PA participated in the reception of wounded soldiers when they returned to Pakse. The AOC FACs (the Ravens) flew reconnaissance missions to photograph Pathet Lao positions, mark targets for strike, and control strike aircraft during the battle.

Essential to the operation were the TDY augmentees that kept the AOC aircraft running. These included additional AOC personnel not only from the 1st Special Operations Wing (SOW) in the United States but also USAF augmentees with critical skills in maintenance, combat control, intelligence and targeting, air base operations, logistics, and ordnance. The additional personnel were all supplied by other units throughout the USAF, mainly from Thailand-based Air Force units.

Maintenance

The AOC commanders ensured the T-28s were maintained. The first level of maintenance was performed by their AOC line chiefs and aircraft mechanics, working alongside Lao mechanics. Any maintenance requirements above flight-line level were performed under contract with Air America in Udorn. This included the 100-hour inspection and the repair of major battle damage. Jack Spey, the AOC commander at Pakse in 1973, commented on the role of the Lao Air Force maintenance personnel: “The routine maintenance, just changing the radio that quit working or something like changing the cylinder on an engine or sparkplugs or a magneto or something of

that sort, the Lao mechanics at the military region knew how to do those. Knew how to do that kind of work and did it well.”⁷

Intelligence

Spey (who was also the AOC commander at Savannakhet in 1970) described the intelligence assets and system used by the AOCs at that time:

The Lao and the Thai irregulars —particularly the Lao irregulars—were pretty good at intelligence gathering. The American effort included surveillance of radio transmission by the enemy. For the most part it was pretty good intelligence. As good as you might expect under the circumstances. The forward air controller, the Raven FACs, of course many of their missions were visual reconnaissance missions where they would go out and VR known points of travel, if you will. We could request photo recon if the situation warranted. Air America had, I believe it was two Volpars . . . Volpar was a C-45 [modified with nose gear vice a tail wheel]. . . .

. . . I believe they had two that were modified with a camera system in them so that they could take essentially the same kind of aerial photography as an F-101. So, we had photo intelligence available. We had interceptive intelligence available and pretty much the same type of information gathering that existed in South Vietnam. . . .

. . . The recon teams did a good job too. . . . They were Laotian and Thai that were inserted for road watch teams. Their job was not to engage the enemy, but just to go in and sort out where the bad guys were. A lot of that is covered quite well in the book *Backfire*.⁸

When Spey was asked if the AOCs had signals intelligence, he responded by stating:

Yeah. We had that. That information was being collected and was being utilized by the intelligence, both the agency intelligence as well as the Air Force intelligence. . . . There was quite a bit of sharing because if radio intelligence indicated a grouping of people, a grouping of bad guys if you will, the forward air controllers were fragged to go and take a look at that area and see if they could confirm it, spot the troops, and so forth. Then call in either Lao air or USAF air if we could get it.⁹

Known AOC Commanders*

Vientiane	Swede Svedsen (1965–1966), Bill Keeler (1966), Jerry Klingaman (1966), Joe Holden (1967), Robert Downs (1968), Larry Harwood (1968), Jessie Scott (1969–1970)
Luang Prabang	Donald Moody (1966 and 1970), Karl W. Leuschner (1967), Norman D. Munsey (1967–1968), Jack Walker (unknown), Joe Chestnut (1970–KIA)
Savannakhet	Jack Ryan (1965–1966), Robert Downs (1966), Jack Drummond (Jan 68–July 68), William L. Sweeney (summer–Sep 1968), Wayne O. Landen (Nov 68–Apr 69), Jack Squires (1969), Maj Dee Houk (1970),
Pakse	Edward A. Bender (May–Sep 1969), Jerry Klingaman (1966–1967), Karl Leuschner (1967), Jack Spey (1972–1973)
Long Tieng	Gene Kirkley (1968), Richard Patterson (1968), Joe Potter (1969), Jerry Rhein (1969–1970), Bill Keeler – Moug Kassy (1969), Nate Claassen (1970)

*Data compiled from official interviews, personal interviews, CHECO reports, etc. This list does not constitute all the AOC commanders; some of the AOC Commanders were from PACAF vice Air Commandos.

Figure 9.2. Some of the known AOC commanders, their place and time of service indicated. For a short period, AOC commanders were drawn from USAF officers in PACAF but were replaced by Air Commandos who were more suitable working with host nation forces.

The Royal Lao Air Force, 1965–66

The Royal Laotian Air Force (RLAF) was an arm of the Lao general staff and not an independent service. It was first called the *Aviation Laotienne*, but changed its name to the Royal Laotian Air Force in 1960. Its first commander was Brig Gen Sourith Don Satorith, who served as the commander from 1957 to 1959.

In 1961, however, the RLAF took on the form of a complete air arm with six T-6 converted trainers—provided by the Military Assistance Program (MAP)—armed with 2.75-inch rockets and .30-caliber machine guns, giving the air arm an offensive strike capability. (The T-6 was first used to attack Kong Le Neutralists in January 1961.) The squadron, when in use, came under the control of the FAR regional military commander, setting the tone and style for the future

employment of RLAF assets: under a decentralized, regionally autonomous system.

Prior to the deployment of Water Pump, the Lao were replacing the T-6s with T-28s. T-28s were in position at Wattay Airfield in 1963, with five pilots trained in the United States at Moody AFB, Georgia. Although the squadron initially was based and flew out of Vientiane, it was moved to Savannakhet and placed under the command of Col Thao Ma. By then, the squadron consisted of twelve pilots and six T-28s. With a crash fielding and training program by the MAP and pilot training from Water Pump, the RLAF had thirty-three pilots and T-28s by September 1964.¹⁰

In a bold and aggressive move designed to show off the new offensive air capability, Colonel Ma led the squadron on 14 October 1964 to raid the Mu Gia Pass along the Ho Chi Minh Trail (HCMT).

The Thai T-28s (B-Team Fireflies) and the Air America-piloted T-28s (the A-Team) flew daily from Udorn to Wattay, uploaded ordnance, and flew their missions. Laotian-trained pilots were called the C-team. Thai pilots were “volunteers” from the 223rd Royal Thai Air Force (RTAF) squadron. (This volunteer program was named Project Firefly, thus its call sign.) A loose air operations control system was manned by augmentation from USAF assets in Thailand augmented with Detachment 6, Water Pump personnel. The Thai’s were solely controlled by the AIRA, not the RLAF.

Air America’s Flight Information Center coordinated activities for the A-Team, along with input from the AIRA and at times, Maj Barney Cochran, the commander of Detachment 6, Water Pump.

Initially, Thai and Air America assets flew many of the airstrikes in northern Laos, with some Water Pump pilots also participating. In the south, Colonel Ma covered MR-III and MR-IV. This dispersion and use of aircraft assets set the pattern for T-28 apportionment across northern and southern Laos.

On 24 January 1965, an uploaded T-28 suffered a malfunction and shot off its machine guns into other parked aircraft, setting off sympathetic explosions and destroying eight aircraft positioned in line at Wattay. Soon thereafter, the aircraft were replaced.

With over forty T-28 aircraft available for use by August of 1965, the FAR and Hmong started to appreciate the effects of airpower and CAS. Due to this added dimension of Laotian military power, the North Vietnamese Army (NVA) and Pathet Lao were thwarted in every MR. This became the impetus for Colonel Ma to advocate for more

independence and control of the RLAF—particularly to fold the transport assets under Ma’s command as a single air manager—and improve the morale and standing of the organization within the RLG’s military structure. Gen Kouprasith Abhay and the general staff clashed with Ma over any such notions, setting the scene for a more destructive personality clash between the two in 1966.

In 1965 the RLAF flew 5,000 sorties, with 50 percent of those being flown by the Thai Fireflies and with a loss rate of twenty to twenty-five T-28 aircraft throughout the squadrons.¹¹ In 1966 the general staff reorganized the RLAF and separated the transport and operational planning functions, placing them under *FAR* control.

The embassy and the AIRA suspected that corrupt generals in the *FAR* were using the C-47s of the transport branch to smuggle contraband, a lucrative business. This apparently could not happen under General Thao Ma’s command because of his overwhelming integrity and honesty. The concept to shift the transport arm to under the control of General Thao Ma was not approved by the general staff; he was left with only the four separate squadrons of T-28s. Subsequently, there would be no single air commander for the RLAF.

In May 1966, Prime Minister Phouma relieved General Thao Ma (promoted January 1966) of his command in Savannakhet and made him the deputy chief of staff operations and intelligence, a position in Vientiane where he could be monitored. Thao Ma refused to move to Vientiane and in July he survived an assassination attempt against his command car. He ultimately moved his headquarters from Savannakhet to Luang Prabang. To replace the loss of the headquarters in Savannakhet, the MAP funded an AOC for that location.

Maj Bill R. Keeler, AOC Commander, Vientiane, March–September 1966

Major Keeler entered the Jungle Jim program in 1964, initially assigned to the T-28 squadron. He later switched to operate the On Mark A-26. In 1966, he was selected to serve in Laos as a Project 404, Palace Dog, AOC commander, replacing Major Svendsen in Vientiane. His duties at Vientiane were to serve as the commander and air advisor to the Thai B-Team Fireflies and the Air America piloted A-Team T-28s. He worked under Colonel Pettigrew, the AIRA at the embassy.

As part of the embassy team, he lived in the AIRA quarters in town. (There were other RLAf assets at the field not under Keeler's control: T-28s, C-47s, and helicopters.)

Major Keeler's T-28 squadron flew in support of Gen Vang Pao in MR-II. He convinced the AIRA that, unlike his predecessor, he needed to fly with the Thai T-28 squadron to assess its performance (and was granted permission). During his T-28 sorties, he became one of the original Butterfly FACs. Some of the original Butterfly FACs were: Keeler, Jim Stanford, Charlie Jones, Bob Farmer, and John Garrity.

The Thai and American pilots flew into Wattay each morning from Udorn, using the slide-in panels on the side of the aircraft to place Lao roundels before taking off. Upon arrival to Wattay, the AOC crew fueled and loaded the aircraft. Keeler had about twenty personnel to run the AOC. Keeler assigned their targets, primarily from the input of the case officers and Vang Pao. Some targeting information also came from the FAR. Keeler flew up to Long Tieng two to three times a week to coordinate with the "customers" and the Butterfly FACs. He flew to LS-20A either in the T-28s, the U-10, or the U-17. Available for his use was also the AIRA's C-47, or the RLAf "bomber," the BC-47. The BC-47 was a converted C-47 with roller pallets for 100 lb. bombs. If no targets were received for the day, the squadron was directed to fly up to the *Plaine des Jarres (PDJ)* anyway, in case of emerging targets.

I often took the air attaché intel officer, Maj John Garrity, and his several cameras to look for new targets and BDAs. Other times I took Sgt Charlie Jones, our Butterfly FAC combat controller, for the northeast, or Jim Stanford for the northwest. We all used the Butterfly call sign when there was a need. We were armed airplanes and personnel. Don't know who we were kidding, but the ambassador nixed our carrying USAF weapons. Not sure about the others, but I carried a "borrowed" USAF survival radio, a folding stock Chinese AK-47, and 100 rounds in five clips, plus six clips of 9 mm ammo for a Browning automatic hand gun.¹²

Keeler explained the evolution of why the Thai B-Team was created and employed:

The CIA built a guerrilla army. They needed fire support and had gone to the Thais to get artillery assets. But, this was not enough for the type of battles the Hmong were getting involved in. They needed air support for firepower beyond the range of the artillery. The Lao RLAf, with T-6s, were not capable of providing the solution. (This was a result of Kouprasith's and Ma's disagreement on the role of airpower.) The first idea to solve the problem was to use

the Thai T-28 B-Team, who was operating out of Savannakhet in 1964 and 1965. (Joe Holden was the AOC commander down there during this time.)

At that time, it was fair to say the ambassador owned everything, with the Agency running around in the background. Well, the Thais were not doing that well for Vang Pao, he was very dissatisfied with their performance. This is what actually sparked the beginning of us performing as Butterfly FACs (me and Charlie Jones), until the USAF found out. This is when I made the case that the AOC commander must be able to fly with his squadron. I started flying with them to bolster their performance.

There were other means I used to increase the morale and proficiency of the B-Team. One was to check on the welfare of the men. Another was coaching and teaching them on tactics. I started the 100-mission award (even though some of these guys had many more sorties than that); this helped to raise *esprit de corps* in the unit. I also got money from the Agency to pay the pilots a combat bonus award. The #2 job of being an AOC commander was to keep my guys alive.¹³

Major Svedson, the previous AOC commander, had managed to get a ramp and a building built for the Thai T-28s. The squadron located itself on the civilian side of the Wattay runway (the east-west runway). Each day, the Thais conducted between ten to twelve sorties for Vang Pao.

There were fifteen Water Pump T-28s in Udorn; Keeler generally got the use of eight to twelve each day. They arrived between 0830 and 0900 hours, accompanied by a C-123 bringing American personnel and equipment to run the operation. The basic ordnance load for a Firefly T-28 was six, 500-lb. bombs.

On the Thai T-28 operation, Keeler noted:

Mostly, the Thai T-28s really worked for Vang Pao. He had first priority. They were *dedicated to him*. Of course, they were paid by CAS [CIA]. We had a special uniform that we all wore, kind of a gray thing that looks sort of like a flight suit and sort of like a Lao uniform. Then you had Lao ID cards and Lao names and all this. But they were dedicated to Vang Pao. Occasionally we would give the sorties to a guy named Tony Poe, who worked over at Ban Houei Sai, and we would also work for that group. That was up on the Chinese road mainly. Dropped a lot of delaying weapons, 12 to 36 hrs delayed.¹⁴

Keeler remembered his interaction with General Thao Ma during the tensions between Kouprasith and Ma over the use and role of the RLAF:

He came up [to Vientiane]. They put him in my office and so I moved my desk over, and we sat there. He fussed and fumed. He is a very emotional little guy. He fussed and fumed for a few weeks, and he finally asked me to get the maps

of the city and where everything was. Boy, we drew out all the strategic locations and I thought he was trying to set up some kind of defensive thing, being a little stupid. But then I found out actually what he was planning to do, so I told the attaché, who didn't believe me. Sure enough, he [General Thao Ma] came back and bombed the city.¹⁵

Keeler summarized the role of the AOC commander:

Running an AOC took constant innovation. The tactics changed each season and even weekly and daily. We were always in response mode. At times it seemed a bit like playing in a “for life” football game. Except we were always on defense and they had more players. There wasn't a rule book nor a play book for the AOC commander—just concepts from experience and a lot of agility. We were provided with people and things, but, in my thinking, the secret of success was to mold a multi-national group into an effective team that thinks they can win today and tomorrow.¹⁶

Maj Jerome W. Klingaman, AOC Commander, Wattay, 1966

Major Klingaman joined the Air Commandos at Hurlburt in the summer of 1965 and elected to fly C-47s, quickly becoming an instructor pilot (IP) for the aircraft. Even though he was not T-28 qualified—he had been F-84F and F-100D qualified—he received orders under Project 404, Palace Dog, to report for duty as the new AOC commander in Vientiane.

Klingaman flew to Bangkok with his deputy AOC commander, John Lee. He was held over in Bangkok by the Joint United States Military Assistance Group, Thailand (JUSMAGTHAI) office due to the monsoon floods inundating Wattay Airport in Vientiane. He was fortunate to meet Major Keeler at his Bangkok hotel room, who he was replacing as AOC commander. John Lee was soon sent north to serve as a Butterfly FAC.

Major Klingaman reported into Detachment 1 at Udorn, but again was put on hold for several days to await the draining of floodwaters off Wattay Airport. While in Udorn, he had his new “Lao” flight suits made. He finally deployed to Vientiane wearing blue jeans and a blue-jean jacket. He saw the immensity of the task to dig out the mud and debris at Wattay:

The place was a mess at Victor. (“V” for Victor is name for Vientiane.) They were digging out—snakes were everywhere! There was a bulldozer from

USAID [United States Agency for International Development] trying to get all the mud shoved off.

I lived in the “Ice House.” This is a term we used for the AIRA compound—the two buildings inside we lived in—because an old French icehouse was across the way. In one of the buildings they housed the folks who were TDY status. In the other buildings, were the one-year or permanent party guys (explosive ordnance disposal, Butterflies, AIRAs coming and going, etc.). The enlisted folks lodged in the Koon compound.¹⁷

Klingaman’s mission was to serve as the AOC commander for the Thai T-28 B-Team squadron. He was the only special operation forces (SOF) member of the AOC team. The AOC was manned with bomb loaders, a line chief, engine and munitions chiefs, and mechanics. Additionally, to cover the medical tasks, an enlisted PA named Fitzpatrick was assigned; Fitzpatrick was the oldest member of the team, a World War II veteran. All of these personnel (approximately thirteen) were volunteers from different USAF units in Thailand and were deployed TDY to the AOC at Vientiane. They were a motley crew and in conventional units probably were considered rough and unorthodox men. Klingaman soon took them under his leadership, with the *nom de guerre* of “Klingaman’s Hoodlums.” They thrived in this new unconventional environment and turned out to be highly dedicated and hard workers.

They wore engineer boots and cut-off shirts, carried switchblades, and rode rented motorcycles, and so on, but they were a dedicated, loyal bunch and we worked seven days a week, from “dark-to-dark.” Those guys were hard workers.

As an example, if all the MJ-1 bomb loaders were down for maintenance, the Hoodlums would load bombs by hand and they would do it all day long. With the steel shipping plugs screwed into the nose and tail of the bomb, someone would insert a burned out .50-cal gun barrel into the ring of each plug, keeping the bomb in the middle. Four guys, one on each end of a gun barrel would lift a 500-pound bomb up into the bomb shackle under the wing, and then install the fuse. That’s the kind of initiative and performance that wins wars. I made it clear to assistant air attaché personnel and augmenting staff that I would lead the team and run the AOC. Outside embassy policy, second guessing and gratuitous guidance was not welcome. Running air combat operations with bombs and rockets covertly from the corner of an international airport was challenging enough without additional problems.¹⁸

Like Major Keeler, Major Klingaman believed it necessary to fly combat with the Thai and Lao pilots. He was aware of the prohibition against flying strike sorties, although it was not entirely clear when, and under what circumstances, that prohibition would actually result

in military prosecution and/or denial of a “line-of-duty” finding if an AOC commander was killed. In that case, there could possibly be no benefits paid to his dependents by the government.

So, it was presented as a risk for Air Commandos flying in combat; however, it was often the only way to be an effective advisor, especially with the RLAF pilots. This policy would be tested in 1970 when the AOC commander at Luang Prabang, Maj Joe Chestnut, was killed when flying a strike mission with his squadron during the battle of Nam Bac and was knocked down from his own bomb fragmentation. One of the assistant AIRAs immediately sent out a message stating the pilot was moonlighting on an unauthorized combat mission. The incident rose to the senior levels of the Air Force.

The International Control Commission (ICC), consisting of Canadians, Poles, and Indians, monitored our operations at Wattay to determine if US military personnel were launching into combat. This duty was not exactly fun and games! It was serious business. Later, at the Pakse AOC, I knew I would have to fly with Lao fighter pilots to make it work, so I did; by then, it was a given. It was also vastly easier at Pakse, because the ICC was not around spying into our activities. The objective was to make self-confident, aggressive fighter pilots out of them. The guy before me at Pakse was not effective; that’s why I replaced him on that tour. This was serious business, so we maintained a serious relationship with the Lao pilots! I used all the leadership skills I possessed to gain their trust and confidence. I got to know them well; I ate with them, sang Lao songs and drank beer with them, and flew missions with them, even in the back seat or on their wing at times to demonstrate my confidence in their flying abilities. They had to know that you were sincere and honestly concerned with their well being.¹⁹

The number of T-28 pilots and aircraft available for operations at Wattay was dependent on the Water Pump schedule in Udorn. There was never a fixed amount the AOC commander could count on for his daily combat sorties. After subtracting daily training sorties and aircraft out of commission, Water Pump sent the excess to Laos. However, if a big operation was coming up, Klingaman was able to request more aircraft and pilots ahead of time. On average, this gave him between eight and fifteen T-28 aircraft a day.

The B-Team Thai pilots and airmen lived in Udorn and were under the command of a Thai lieutenant colonel. Each day they flew up to Wattay, arriving around 0800 hours, where the AOC crew gave them their daily missions, loaded them with munitions, and launched them.

Major Klingaman’s duties as the AOC commander varied:

My duties at Wattay included running the AOC contingent coordinating with all the players and acting as operations officer. Basically, I did everything a squadron commander does, except I also coordinated for, and acquired, targets and missions for the T-28s. Target inputs came from all over: the Agency, RLA, Butterfly FACs, and so on. One day a Hmong tribesman showed up, very ragged and dirty having traveled cross country for some time to pass on an airstrike, complete with the coordinates! This guy had apparently traveled over a week to hand this to me.

There was also an immaculately dressed Lao Army major, actually the RLA liaison officer to the AOC, who would come by occasionally. Speaking excellent English, he would say, “Mr. Klingaman, we have an operation and need your support.” Then he would show me a map, and we would coordinate the targeting for the operation as he pointed out what he needed. These were all verbal briefings and discussions between me and an official representative of the RLA, so, again, I was both an operations officer and a squadron commander.²⁰

The AOC operated out of Quonset huts at Wattay. Duty was performed in civilian clothes to keep a low profile from the ICC and press. A map on the wall served as combat tracking for operations, both for air and ground operations. For communications, the AOC had a landline to the embassy for contact with the AIRA and a KWM-2A HF single-sideband (SSB) radio with a 200 watt linear amplifier to talk and coordinate over long distances. One minor irritation during the tour was the Chinese embassy jamming the AOC communications. The AOC found a workaround, as described by Major Klingaman, “We had a system where we skipped frequencies, manually, for instance, when we were talking to Donald Moody [Luang Prabang AOC]. ‘Switch to A, now switch to B, etc.’”²¹

It was important to travel up-country and get a feel for the battlefield. Major Klingaman availed himself of opportunities to fly with Air America to various landing sites on the *PDJ*, including Long Tieng (LS-20A), flying in their Porters or C-46s. At a reception one day in Vientiane for Project 404 personnel, he met the US Army, Project 404, artillery advisors working with the Neutralists at Moung Soui—a captain, a major, and some communications men. They approached him and asked the following:

We need some air support up there, how do we get some? We have never been trained to control air. Can you guys give us a hand? I said, “Absolutely!” Later, I flew up there on a C-46. The aircraft was loaded with tin cans full of water, with a couple of live fish in each one. It was a USAID project to build and stock a fish farm for the locals. I don’t think it worked; I heard later they fished

by throwing in hand grenades, destroying the intent of the humanitarian gesture!

Anyway, we were up there for several days. We taught them some AGOS basics skills and CAS fundamentals. It was up there where I saw combat for the first time. They took me out in a jeep to see the firing batteries. There were 155-mm and several small 105-mm batteries. I was taught how to load and fire the 105-mms. We had a *bacci* ceremony with the Neutralists while there. It was a wedding ceremony; we drank the local brew and ate BBQ from an ox they had hanging over the fire.

One day, Mort took me out in a jeep to see one of the outposts—OP-1. He told me that I was going to do a live call for fire mission, and adjust. He pointed across the gully to a ridge and said, “There’s the enemy.” They were really close to us! He urged me to hurry up because it was not healthy to stand out in the open too long. So I completed the mission (it was preregistered), but the Pathet Lao were dug in on the reverse slope, so the artillery rounds just went over the ridge. What was needed was a strike from T-28s.²²

Gen Thao Ma’s Coup and Air Attack on Vientiane

On 21 October 1966 matters came to a head between the regime and leadership in Vientiane and General Thao Ma. Thoroughly disgusted with the corrupt officials in the capital, General Thao Ma ordered his T-28 squadron in Savannakhet to strike the city. Targets included the FAR headquarters, General Kouprasith’s house along with his headquarters, and the Wattay artillery ammunition storage site.²³

On that day, the AOC received a message from the AIRA’s office warning them to evacuate the airfield due to the incoming air attack. Klingaman remembered the day:

This was the incident of General Thao Ma’s rebellion against the government—he sent his T-28s to attack Vientiane and Wattay airfield. I alerted all my pilots to immediately board their ships and fly away south. I got my guys to jettison their ordnance onto the airfield before they took off (bombs don’t explode unless they’re armed). My guys flew off, unarmed. The C-Team (Lao piloted T-28s) were on their way and I was hoping my flight did not cross paths!

I told my crew, “Do not load or service the C-Team if they land. We are going to shut down operations here.” They came over the airfield at the wrong landing approach altitude. I yelled to my men, “Take cover!” They got behind the revetments while I ran back to the operations building—I needed our communications. I never made it. I took the shock from the first impact of high-explosive rockets. They weren’t blowing up the airfield, but they were hitting the Lao Army ammunition storage dump across the rice paddy from the

AOC; fragments of the exploded ordnance were falling everywhere. Pieces of that were smoking and raining all over. They did not drop bombs on the position. They were recovering very low over our operations building.²⁴

After the attack, he asked “Mister” Wright, the line chief, for a status report, and Wright acknowledged, “all personnel present and accounted for.” Then the secondary explosions started.

The ammo exploding looked like the 4th of July, smoke grenades (all colors), mortar rounds, [and] 105-mm howitzer shells, tumbling through the air or blowing up. Our operations building was shaking. Then, after the secondaries quieted down, I saw a truck coming our way with some troops in the back. At that point, I ordered the communications NCO [noncommissioned officer] to open the file cabinet and issue side arms (it was illegal for us to have weapons in Vientiane). I told the men, “Guys, go to the Koon Compound and cover up. Don’t stop along the way.” They streaked off on their motorcycles, carrying .45-cal. pistols and smoking cigarettes. Looked like a biker gang. I got into my International Harvester jeep, but up the road I was stopped by an Army Lao captain. He told me, “This is all your doing. General Thao Ma is a friend of yours. This is your coup!”

We had sort of a gun standoff. His pistol was in his holster, but mine was in my waist band, with my hand near it. The standoff ended and I moved on. We found out later that someone had actually walked into the embassy attaché’s office with a note to warn them about the raid!²⁵

Nineteen FAR soldiers were killed and fifty wounded. There were some civilian casualties. The general staff emerged unscathed although there was significant damage caused on all the targets. The AIRA in Vientiane reported on the attack, “Attack commenced from approximately 5,000 feet, all high-angle dives. Pilots displayed a high degree of professionalism. General Sourith, designated RLAf commander, stated artillery compound totally destroyed, Kouprasith’s home leveled, FAR headquarters heavily damaged. General Sourith said, ‘Foolhardy event, but a good example of what the little planes can do,’”²⁶ After the attack, General Thao Ma fled to Thailand with his “rebel” pilots in their T-28s, where he sought and was granted political asylum. General Sourith became the new commander of the RLAf. Sourith would serve as commander up to 1973.

It was also during this tour the RLAf tried to create its own bomber, using a C-47. Major Klingaman and the AOC personnel assisted in the project.

One time I helped to build an “arc light” C-47 bomber! (The Lao had no heavy bombers during the war.) The ambassador OK’d the air attaché’s request to build this thing. While the C-47 was at Udorn, I told them to paint it dull

black and send it over. I got with my armament guys—we got cargo roller conveyors to place on the floor. We set up a tight jump cable that we strung with big, heavy brass rings. We got some new rice pallets from USAID. We took old WWII issue 100-lb. general purpose bombs and stacked two side by side on each pallet, then stacked a 100-lb. Willy Pete (White Phosphorous) bomb on top of that. We lined up all these pallets on the rollers and hooked a wire from the fuze in the nose of each general purpose bomb to the brass rings on the jump cable. Approaching the target, the first load out of the aircraft was a pair of MK-6 flares. It was timed so that thirty seconds out from the target, the flares began illuminating. The C-47 pilot and crew would acquire the target, do a circle back, and then roll out the bombs. Everything worked, and it was effective, but I never received detailed assessments about any further operations with this C-47 bomber. I heard they flew it every night, until it was destroyed in a ground munitions handling accident and resulting fire at Savannakhet.²⁷

Major Klingaman returned to Laos for a second tour, as the AOC commander at Pakse, in command of a Lao T-28, C-Team squadron.

Maj Robert Downs, AOC Commander, Savannakhet, 1966

In April 1966 Maj Robert Downs was selected to be the AOC commander in Savannakhet. He had already served one six-month TDY tour in 1964 as an IP in Detachment 6, Project Water Pump. He was rated as a C-123 pilot before joining the Air Commandos and qualified on T-28s at Hurlburt.²⁸

Major Downs reported into Udorn with his Project 404 AOC crew, left their military gear, and flew over to Savannakhet in civilian clothes. He was chosen to be the AOC advisor to General Thao Ma, the RLA commandant. With him was Al Schenke, an intelligence officer and a crew chief. To assist with the T-28 squadrons, a member of the AIRA was also stationed at Savannakhet, along with one man from the USAID/requirements office (RO), whose job it was to provide the ammunition and bombs for the Laotians.

Major Downs lived downtown in a house rented by Schenke. (Schenke also arranged a rental house for the enlisted crew.) At sixty dollars a month, the houses were very affordable and within the per diem budget, although neither house had hot water for bathing.

General Thao Ma had twenty or more T-28s at Savannakhet. There was also a modified C-47 bomber, configured to drop bombs that were loaded on pallets and pushed out the cargo door on rollers (Klingaman's

BC-47). Unlike the experience of other AOC commanders in having to take charge of a squadron, Thao Ma was in charge of the squadrons at Savannakhet; he briefed the pilots each day on their mission and selected the apportionment and allocation of the T-28 strikes, sending the aircraft out in packets each day. Most of the Lao pilots were older and experienced. Several of them had been to the United States for their training and spoke English well.

The AOC had a KWM-2 HF SSB radio for communications with Vientiane and other AOC locations. There was an assigned Raven detachment, equipped with the O-1 aircraft. Major Downs often flew with Thao Ma as part of his duties. Major Downs explained, “He was a very suspicious guy, by nature. I flew with Thao Ma in C-47s, and T-28s. My job as the AOC commander was to try and get him the support he needed. I also recommended targets and shared intelligence. But, the general ran his own operation. He would fly and troll for targets, or he knew where places were that had targets.”²⁹

Additionally, Major Downs performed duties as a FAC, often flying down near Attopeu. To improve the performance of the squadrons, Downs attended each class at Water Pump to train with three of the pilots for each iteration. He said, “There were pilots who had been trained but were not doing all that well and needed some more coaching. If you were a bad pilot, you went to become a helicopter pilot!”³⁰

During FAC missions, Downs carried a Swedish K, and later the CAR-15, which Al Schenke had managed to purchase from the US Navy. Major Downs was an example of why the AIRA did not want AOC commanders flying in combat with the T-28s, or conducting FAC duties: the danger of potentially being shot down. Major Downs recounted, “I got hit a few times trolling for targets, when I was low. But, you had to get down low. I was flying a U-17. The enemy gunfire blew the flap handle out between the seats. We had flak vests, but they were too heavy. We also used an aircraft in the Ravens, an O-1. There were rockets on the U-17, and we could throw out smoke grenades to mark targets. I did not work for any US entity, but occasionally the air attaché would talk to me. I worked freelance. If you had the guts, you could do whatever you wanted to do.”³¹

Maj Donald R. Moody, AOC Commander, Luang Prabang, 1966–67

Maj Donald Moody was selected as a Project 404 AOC commander in the summer of 1966. He deployed to Luang Prabang along with an engine maintainer, an armament specialist, and a medic. During his tour, his duties mostly involved working with the RLAF as an advisor and trainer. General Thao Ma was at Luang Prabang at this time with twelve aircraft and about twenty men from out of Savannakhet. Major Moody worked for the AIRA in Vientiane and also helped to support the CIA operatives with their operations in MR-II. AOC personnel lived in an AIRA house in downtown Luang Prabang. The Luang Prabang airstrip was an improved concrete strip. Major Moody explained as follows:

We helped with tactical air control, responded to requests for air support, daily flight operations, and how to develop and issue frag orders to the pilots. The RLAF squadron at Luang Prabang operated under the Chaophakaow call sign. My call sign was John Black; when the Ravens started it was Raven 71. Earlier during my Butterfly role, it was Butterfly 22.

We shared intelligence and targeting stuff with the Lao. The targets for each day came from a variety of sources: air attaché, the Lao, and the Agency. Did I fly? We had an agreement with Ambassador Sullivan that we were not to be combat participants! But . . . let's just say I flew "maintenance checks."³²

The Royal Lao Air Force, 1967–68

1967 was a static year for the RLAF, with a slight decline in sorties. The Luang Prabang T-28 squadron, operational in the fall of 1966, became the third AOC established in-country for the Thai and Lao squadrons and was manned by six Americans. On 2 February 1967 Luang Prabang was attacked by rockets, followed by a ground attack that destroyed six T-28s and two H-34 helicopters. The AOC building was partially destroyed during the attack; no American casualties occurred, but five Laotian troops were killed.

The base was hit again on 16 July; sappers destroyed nine T-28s and one H-34 helicopter. This caused the RLAF to examine the capability of the FAR to conduct base defense, with recriminations flowing between the two.

Major Moody, the AOC commander, remarked, “They had changed the parking of the T-28s after the sabotage raid. The aircraft were moved to the west end of the runway and put into protected revetments, well away from the AOC operations.”³³

Also in 1967, the first two Hmong were sent by Gen Vang Pao to Water Pump in Udorn to become T-28 pilots: one was Vang Pao’s nephew and the other was his brother-in-law, Ly Leu, who would become famous in MR-II as a bold and aggressive aviator. As would be the case with most of the Hmong-trained pilots, he would “fly until he died.” The two pilots graduated in late January 1968.³⁴

Maj Robert Downs, AOC Commander, Wattay, 1968

In 1968, Maj Robert Downs returned to Laos as the AOC commander in Vientiane, Wattay Airport. He had a larger AOC crew this time, and they lived downtown in Vientiane in homes rented for them by the USAID/RO; Major Downs lived in the AIRA house. Their mission was to support Gen Vang Pao on the *PDJ* using RLAF and Thai B-Team T-28 assets. Major Downs described the activities of the AOC and their role to support Vang Pao as follows:³⁵

I used my medic as a loadmaster. Other people maintained the T-28s; I guess there were about twelve of us. The RLAF had T-28s there and occasionally some C-47s. My duties were to send reports to the air attaché weekly; I did not attend his meetings. I had an O-1 for use. Our other duties were to service and refuel the aircraft. (We hired Laotians as the refuelers.) I just briefed the pilots where to go—they went to some RLAF targets, and at other times, they went to Vang Pao’s targets.

Once a C-123 picked us up, and we went up to Moung Soui. We didn’t stay up there as a rule; the crowd before us had got hit and learned the lesson. I would not let my crowd carry weapons. We hid in the weeds and had our radios. When the crowd up there got hit, they counted seventy-nine bullet holes in their tent! One guy was lightly wounded. One Army guy up there got killed. The guys were living in tents up there; I did not want them in the buildings because the buildings were always targeted.

I flew combat missions on the *PDJ*. You didn’t have to fly very far to find a target when flying out of Luang Prabang or Moung Soui—it was a quick sortie. We did drop leaflets—these were made up from Lao sources or intel sources given to us to drop. They were surrender leaflets—like Cheu Hoi leaflets in Nam. I had a medic from Hurlburt with me.

We coordinated air stuff with Vang Pao. I flew in the backseat with Ly Leu. The Lao pilots became very tired from all the flying they were doing. A guy could fly maybe fifty-five sorties in one month! I convinced Ly Leu to take a rest, occasionally, and would send him down south for a few days at a time.³⁶

Throughout 1967 airpower had helped to delay the enemy dry season offensive. Pathet Lao and NVA forces resorted to a strategy of “nibbling” attacks on garrisons and outposts throughout Laos. The average monthly sortie rate for the RLAf was 736—with the highest months being 842 in May and December.³⁷

On 27 September the RLAf considered another reorganization to establish functional commands. The T-28 squadrons were grouped into the Tactical Air Command, with the 1st through the 4th Fighter Wings.³⁸ The reorganization took place on 1 January 1968.

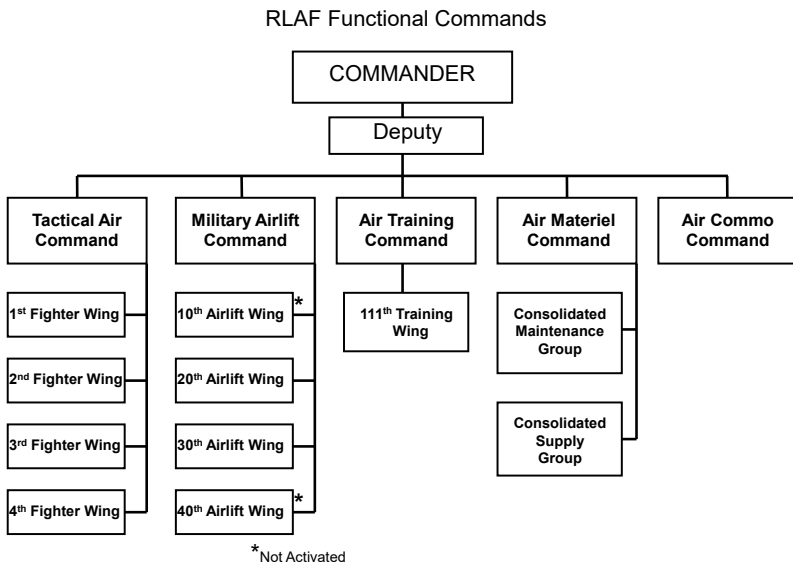


Chart derived from MAJ John C. Pratt’s work, “The Royal Laotian Air Force 1954 – 1970.” HQ PACAF Directorate Tactical Evaluation, CHECO Division (undated): pg. 49. Source: DOD IR 2 856 034267, 21 Sep 67. (Figure 9)

Figure 9.3. The Royal Laotian Air Force reorganized after 1967 in order to gain efficiencies with functional commands.

Due to problems in command and control, CAS and interdiction missions flown by the RLAf could not prevent the fall of Nam Bac.

In 1968 the Thai B-Team T-28 squadron moved permanently to Vientiane—obviating the need to fly there daily from Udorn. The

RLAF had intensified its decentralization of air assets, with a move to assign rated officers as base commanders; however, this did not come to full fruition as some of the selected officers refused to move to new locations. As a result, on some airfields the AOC commander continued to serve as the T-28 squadron commander. The RLAf T-28s were dispersed as follows (along with the Thai squadron):

Luang Prabang	1st Fighter Squadron (FS)
Pakse	4th FS
Savannakhet	3rd FS
Wattay	Thai “Fireflies” B-Team and Lao 2nd FS in support of Long Tieng

It was this same year the Hmong T-28 squadron began operations with six pilots and six T-28s. They flew from Vientiane to LS-20A, conducted their sorties, and returned to Vientiane at night. Over time, these assets would operate and remain at Long Tieng (LS-20A). The Hmong squadron, although fully controlled by Vang Pao, was considered part of the RLAf, giving the RLAf five T-28 strike squadrons’ worth of capability.

The C-47 and AC-47 MTTs began in 1968, supported by an Air Commando MTT. Ly Leu, one of the first Hmong graduates from Water Pump, flew his first tactical strike operation to assist BV-23 at Tha Thom and the Muong Ngan Valley in May 1968. His fellow graduate from Water Pump flew into a karst during the strike and was killed.³⁹ RLAf sortie rates increased; in 1968 the RLAf flew 8,000 sorties. In 1969 this would increase to around 15,000 sorties. The RLAf grew in aircraft strength to sixty T-28s during this year.⁴⁰

In the north, Phou Pha Thi (LS-85) fell to enemy forces. Air Commando CCTSs were instrumental in the defense of the site prior to its fall (first at the site was TSgt James “Jim” Gray, who was then replaced by Sgt Roger D. Huffman). After its capture, A-1s from the 56th SOW bombed the site to destroy remaining sensitive equipment. In the south, Saravane, Attopeu, and Thakhek were all probed and their lines of communications isolated by Pathet Lao forces. In MR-III, a well-coordinated FAR ground attack supported by the RLAf proved successful in the Houei Mune offensive, showcasing what coordination, planning, and execution between the FAR and the RLAf could accomplish. In MR-IV, the enemy retook portions of the Bolovens Plateau and isolated the garrison at Thateng. Both RLAf and 56th SOW

assets were employed to keep the garrison alive and prevent its overrun.⁴¹

The “Dual Role” AOC, Savannakhet and Pakse, 1968

In 1968 the AOC at Savannakhet became additionally responsible for operations at Pakse. When the former Pakse AOC departed, the position could not be filled for a year. The Lao fighter squadron at Savannakhet consisted of twelve to eighteen aircraft. The squadron operated in a flight of four aircraft; the flights were named Red, White, and Blue flights. As needed, the AOC and its T-28s flew to Pakse for a week at a time and supported ground operations for the local commander. These missions normally consisted of attacking static ground targets; performing a TIC mission, or a SAR, was a rare occurrence. In August 1968 the AOC at Pakse was established, initially employing six T-28s.

The most difficult problem for the RLAf in 1968 was lack of a credible maintenance and a logistic system to support operations, continuing their reliance on American assets. Although the scope of the problem was large by any measure, there was no sufficient answer from the embassy to solving the problem in the short term.

Maj Jerome W. Klingaman, AOC Commander, Pakse, 1968–69

Maj Jerome W. “Jerry” Klingaman became the AOC commander in Pakse in November 1968. As with other AOC commanders operating in Laos, he was administratively assigned to Detachment 1 of the 56th SOW at Udorn, Royal Thai Air Force Base. Detachment 1 was also his “cover assignment” for purposes of receiving mail and open-source accountability status. The 56th SOW was an operational unit located at Nakhon Phanom Royal Thai Air Base (NKP). Detachment 1 at Udorn was actually a training facility, primarily responsible for basic and tactical training of RLAf student pilots. Instructor personnel and staff were drawn from USAF units (often USAFSOF for one-year assignments).

In performing this mission, Detachment 1 maintained a fleet of 44 security assistance-funded AT-28 aircraft. Actual hands-on maintenance and repair of the T-28's was performed by Thai-Am, a

commercial facility under contract to the US government. The Thai-Am contract included maintenance and repair of RLAf AC-47s, C-47s, and H-34 helicopters, plus the USAF O-1 Bird Dog aircraft flown by Raven FACs in Laos.

At the time of his deployment there were four Project 404 AOCs established in Laos: Vientiane, Savannakhet, Luang Prabang, and Pakse. Starting with Major Klingaman's Pakse tour, the AOC commander positions were filled by USAFSOF personnel, while an additional Air Commando officer was assigned as an advisor to the Lao COC in Vientiane. As in previous years, a USAFSOF flight surgeon was assigned to the hospital at LS-20A. In 1969 LS-20A also included an AOC, consisting of an AOC commander plus two other personnel assigned. This brought the total of Air Commandos in the AOC function to about twenty personnel.

Upon arrival to Thailand, Major Klingaman checked in briefly with Detachment 1 and proceeded to Pakse (L-11) for a 179-day TDY assignment. He carried out his AOC commander duties under the operational control of the AIRA in the US embassy, Vientiane. His USAFSOF staff at Pakse consisted of a maintenance line chief, a medic (usually an enlisted PA) and a radio operator. Non-SOF TDY augmentation personnel were brought in from various bases in Thailand to cover such functions as T-28 engine maintenance and electrical systems, munitions maintenance, O-1 Bird Dog crew chief, and logistics resupply. An AOC contingent of between eight and nine personnel at any given time was typical at an RLAf AOC.

In performing his second tour as AOC commander, Major Klingaman also found himself commanding the RLAf 4th FS which consisted of six pilots and six assigned AT-28 aircraft. There was no squadron commander in charge when he arrived at Pakse; the flight lead pilot who functioned in that capacity was killed in a motorcycle accident and was never replaced. Major Klingaman directly represented the 4th FS and reported to Gen Pousouk Somlay, commander of MR-IV. This responsibility drew Klingaman into active mission planning and flying on operations with the RLAf pilots. His arrival at Pakse was celebrated by an extremely abrupt transfer of duties. Klingaman got off the embassy C-47 as the outgoing AOC commander got on. There was no overlap. Apparently, there had been a problem with his predecessor, who was quickly removed.

Performing his first team assessment of the AOC he found the AT-28 pilots were only averaging about one sortie per week, the munitions

storage area was almost empty, and the overall condition of the aircraft was problematic. He next met with American personnel at the “USAID annex” in Pakse to determine if the problem was a lack of targets. He was told that there were plenty of targets.

There was clearly a major leadership problem. He immediately got into the business of working with his pilots, building rapport, and ascertaining the reasons for the slump in their performance. He began flying maintenance test flights and operational sorties with Laotian pilots, sometimes in the back seat of their aircraft to build their confidence in flying the T-28s.⁴²

He ordered additional ordnance for the squadron—cluster bomb units (CBU), napalm, 250-lb. and 500-lb. bombs, and .50 caliber ammo—much to the surprise of the Vientiane USAID logistics people and the AIRA staff in Vientiane who were all convinced the Pakse RLAf squadron *just did not fly*.

Major Klingaman got the ordnance he wanted with the support of the AIRA, and soon the 4th FS started flying sorties. The squadron eventually reached the point where it flew the largest number of sorties on one particular day among all the AOC’s in Laos. The AIRA was keeping count and had a bet on that day to prove to the USAID supply people the 4th FS was in the game for keeps.

The AOC team lived in a large, French-style house that was rented for them in Pakse. It was located three miles south of town and about six miles from the airstrip. It was a very small AOC team: Major Klingaman, a line chief; McDaniels, an Air Commando; Stan, an Air Commando radio man; and Frank Dean, the PA. These four comprised the Project 404 personnel. The other four living in the house were supporting the AOC as TDY augmentees with specific specialist skills.

There were occasional Pathet Lao mortar attacks at night against the airfield and a purported Pathet Lao threat near the AOC house, but the enemy never bothered the team. However, the team did arm themselves against this potential threat. Major Klingaman described their “defensive” measures, “I carried a Smith and Wesson Combat Masterpiece and a Marine bolt knife. John Mansur [Raven FAC] had an AK-47 and a genuine Jim Russell-made knife. The rest of the crowd bought used weapons down in the market—some probably being battlefield finds—or wherever they could find them. The AIRA began to get worried about the threat, so we were moved to a new house in Pakse.”⁴³

A typical day for the AOC team began with breakfast at the house. There was a Vietnamese family, a man, his wife, and two kids who took care of the cleaning and cooking and lived in a building behind the house. There was no place to eat at the air base. The team occasionally visited restaurants in town or drove back to have lunch at the house. Major Klingaman noted the Chinese influence in Pakse, “Every business in town seemed to be Chinese run! And the products for sale in town were Chinese made. We even drank Chinese beer. Commerce was still good coming down the Ho Chi Minh Trail and from Cambodia into southern Laos.”⁴⁴

The airstrip at Pakse was hard, made of laterite. The aircraft parking area was pierced steel planking (PSP). There were no buildings for the AOC to use there; the operation ran in the open. There was no water supply and no electricity. Major Klingaman describes some of the conditions at Pakse in the following statement:

I essentially operated out of my jeep, although I spent most of the day on my feet. There were no operations building or hangars. When I had birds in the air, I waited for them in the jeep. It was maddening not having a radio jeep; like the MRC-108, so I could communicate with them while they were in flight in the local area. There was one tiny shack we used for storing 2.75-inch rockets for the Raven FACs. The FAC and his mechanic would load their own rockets. There was also a small shack alongside the strip next to the AT-28 parking ramp where you could sit in the shade and buy a bowl of watery soup or drinks and cokes, but that was it. We did everything in the “dirt” (or in the aircraft PSP parking revetments). We used an A-frame rig to change engines; unhook the engine, push the aircraft back, and lower the engine down onto some truck tires lying on a bomb dolly.⁴⁵

There were six T-28s in the Pakse squadron. The squadron typically operated in flights of two, unless they had a target requiring four birds. The Pakse call signs were Eagle Red for the first two T-28s, Eagle White for the next two, and Eagle Blue for the remaining two. Major Klingaman used the call sign Eagle Black. Additionally, one or two Ravens supported the site. Klingaman noted of the Ravens, “They worked themselves to the bone—flying up to six hours a day, mostly below 1,500 feet.” Major Klingaman occasionally had an O-1 Bird Dog for his own use. “We had an immediate target to serve one day, laying some landmines, but had no FAC to mark the run-in headings. John Mansur, the Raven, was at Ubon just returning from R&R [rest and recuperation], so I flew over and got him. That was my first solo flight in the O-1.” Afterward, Klingaman began flying the O-1 more and more, eventually earning the “Raven 50” call sign.⁴⁶

Dean was the PA for the AOC. Major Klingaman noted his importance to the mission, “He was critical for keeping the pilots in good health and free from disease. To build rapport with the surrounding populace and collect information, Dean set up a daily medical call for local civilians in a shack behind the bomb storage area. It was an excellent way to gain intelligence and maintain situational awareness on activities in the surrounding area. Each person he saw he would question. ‘Have you seen any strangers around your village recently? What have you heard about things going on around you?’ and so forth.”⁴⁷

As an imbedded American advisor, Major Klingaman knew he had to not only run the AOC but also lead the squadron, even when it meant conducting combat operations with them. He explained as follows:

I flew some strike missions in the T-28, including flights in the back seat with the Lao pilots up front. Looking back on it, I wish I had flown more. I think most of us feel that way today, but back then, it was easy to take things for granted and not realize that you may not get to do this again. I had to lead the Lao pilots and share a portion of the risk. They had to know you were committed, and you could not fake it. People higher up in Vientiane did not understand this concept, or did not want to understand it, but those performing as combat advisors in a covert role certainly did. Being an embedded advisor with the RLAF and keeping the 4th Fighter Squadron together was probably the greatest privilege I ever had in the Air force.

None of the T-28’s sustained battle damage from ground fire during my tour, the principal reason being that the threat consisted of nothing heavier than 12.7-mm ground fire in the areas assigned to them. Most of the threat was from AK-47 automatic rifles. Whereas the Raven FACs flew constantly below 1500 feet looking for targets to hit with US air, the T-28 roll-in altitude for bombs and rockets was 4,500 feet AGL [above ground level]. That altitude put the T-28’s above most of the small arms fire. T-28 tactics for that type of ordnance were simple: Acquire the target, roll in, pickle, then pull up, and jink out of the way. Delivering napalm and cluster bomb units was a low-altitude maneuver, and we were subjected to ground fire in that situation. Somehow, we got through it all.

I never put my T-28s against targets on the HCMT or inside the designated USAF/Navy strike zones, where they would have encountered 37-mm and 57-mm ground fire. And, frankly, no one wanted us over there. We had no targeting data and no sense of enemy antiaircraft order of battle in those areas. Moreover, the T-28s were not tied into the 7th Air Force Tactical Air Control System, and they would have been badly outgunned in that environment. Their purpose was to hit targets within MR-IV that were under Lao Army jurisdiction and normally off limits to US air strikes.

We got most of our targets from the Agency. One time, at a local USAID reception for official American personnel, an operative handed me a paper with coordinates for a target he wanted servicing. I went out to check it out, flying with Ken Elley in an O-1, cruising at 1500 feet. Below was triple canopy forest, and under the canopy we could see a mass of little twinkling lights, something we called “twinkie lights.” At that moment, another Raven flying above us on a separate mission (John Mansur) yelled at us, “Get out of there!” We moved away from the ground fire and got some F-100s to drop 500-pounders on the target. The bombing was really accurate—no more twinkie lights!

Later, when I ran into the operative to talk about the mission, he told me we had “smoked a lot of enemy.” I was furious at the guy. I said, “You could have told me what you thought was out there.” He said he was afraid that if he told us the extent of the expected ground fire, we might not have flown the mission. We needed to have an understanding right there and then, so I told him, “Doing the mission is my call, not yours. Give me what you know, and I will plan accordingly. Don’t ever do that to me again!”⁴⁸

RLAF fighters did not intentionally fly at night or in bad weather as they were only trained for daytime—visual flight rules. Major Klingaman timed their missions to get them back before nightfall.

Battle of Thateng

The principle battle fought in MR-IV during Major Klingaman’s tour was the Battle of Thateng. In November 1968 the NVA threatened Thateng, which was a key crossroads on the northern edge of the Bolovens Plateau. Loss of Thateng could potentially mean the loss of the Bolaven and Saravane. On 13 December the People’s Army of Vietnam, Group 968 captured the town. The defenders, BV-46, held out in their fort. A USAF AC-130 Spectre supported them during the night, being the first use of an Air Commando AC-130 asset to support Laotian ground TIC. Over the next four days, gunships flew at night and the Pakse squadron flew its T-28s during the day. When a MR-IV guerrilla force established blocking positions to the south of Thateng to intercept enemy reinforcements out of Attopeu, the NVA broke contact.⁴⁹

When BV-46 reoccupied the town, the NVA shelled the airstrip and began a siege lasting for almost two months. In February massive air support prevented the loss of the garrison and the town. Reinforcements were flown in and the wounded were evacuated. In April the garrison deserted; the reinforcements left soon after, and Thateng fell, leaving the routes to Saravane and Paksong open. Paksong

would later be taken by the NVA.⁵⁰ Major Klingaman related his memory of the battle:

The Thateng battle was terrible. There were wounded friendlies laying out on the battlefield for twenty-one days before anyone could get to them. Flying out there with Raven Ken Elley one time, I saw poles in the ground with commo wire strung on them reaching from the far horizon and jungle almost up to the wire at the defense perimeter. That's how well the enemy had prepped that battle. It was a target rich environment, although you could not actually see enemy forces in the open around the perimeter wire. They stayed back in the woods, yet within range of small arms fire. The Ravens FAC'd for Navy, USAF, and Lao T-28s.

Given the strategic importance of Thateng, the Air Attaché, Robert Tyrell, flew down to meet with me during the final, decisive stage of the battle to get my take on the situation. After I described some of the combat strikes and the results, he queried, with a genuine smile on his face: "Were you doing any of that in the T-28?" I said, "Yes, I was flying the AT-28, but my time over the Thateng garrison itself was in the O-1," and he was good with it. He was not aiming this question as a warning about flying the T-28, because he, of all people, understood the risks and the undeniable need to lead in the air.

Robert L. F. Tyrell was one of the best Air Force officers I had ever known. As it turned out, the use of T-28s became almost inconsequential during the siege, given the enormous amount of US air that was applied defending the garrison, a very large portion of it at night. During this visit to Pakse, Colonel Tyrell told me the Agency had reported to him that we had possibly killed as many as a thousand enemy troops during the defense of Thateng. This defensive operation would have included strikes by RLAF, USAF, and Navy aircraft. Since neither the Raven FACs nor the T-28s flew at night, there was a USAF O-2 pilot accompanied by a Lao Army validation officer who FAC'd US air during operations around Thateng. Also, I had HF radio contact with the USAF C-130 Airborne Battlefield Command and Control Center [ABCCC] from our house near Pakse and could coordinate and validate US strikes around Thateng. There was a Forward Air Guide [FAG] on the ground who worked with the air assets, both day and night. His call sign was Hongtong (Golden Swan).⁵¹

The period was early 1969. There was a proscription by the USAF against AOC commanders flying in combat with the T-28. After the death of Joe Chestnut while flying his T-28 in the Battle of Nam Bac, the USAF had taken a hard position to deny benefits to the dependents, through a line of duty investigation if any the AOC commanders were killed flying in combat. Project 404 AOC commanders had to sign a paper declaring they understood this restriction as part of the rules of engagement (ROE). The object of the statement on the paper was to give the USAF plausible deniability that the United States

was generating combat sorties from within Laos. Many found the policy disdainful, putting families and beneficiaries at risk.

The AOC at Pakse also supported the PSYOP mission. George Williams, a Raven, would occasionally drop by Pakse and carry out PSYOP flights. He had a load of propaganda leaflet bundles tied up in string with an explosive squib attached to the point where the string was tied together. After first gathering some local intelligence, he flew out to a location where enemy forces were suspected of gathering and dropped his bundles. Klingaman remembered, “He would fly over the site, pull the time-delay fuse on the leaflet bundle, and throw it out of the Bird Dog window. It must have been something of a feat to continue doing that and stay alive. His Bird Dog had bullet holes all over it.”⁵²

None of the Pakse T-28 pilots were lost or hit by ground fire during Klingaman’s tour. Unless they were delivering lay-down ordnance—napalm, CBU’s, and other types of suppressive ordnance—the AT-28s generally were flying above most of the small-arms fire. The AOC experience at Pakse illustrated the nature of five different wars in five different MRs. Said Klingaman, “There was nothing standard about Laos; everyone had a unique experience. We had good morale and a good mission. Each numbered military region had its own internal dynamics; such as, primary defense objectives, strategic game plan, association with local tribal groups, and even political loyalties to the government and general staff in Vientiane.”⁵³

Major Klingaman was successful in most of his endeavors to improve the squadron, but the establishment of the JOC was a challenge. The Lao army headquarters was not familiar with the JOC process, but when it worked, it worked well. “One of the Raven FAC’s serving at Pakse (Dale Richardson) was instrumental in creating the Pakse JOC before I arrived.”⁵⁴

Klingaman worked at keeping it going. “But the FAR was more inclined to think and operate unilaterally, a phenomenon not peculiar to them. One of the critical elements in this equation was getting them to understand what air support could, and could not, do for them.”⁵⁵ When a meeting of the JOC was scheduled the principle participants were: Gen Pousouk Somlay; his director of operations; another, younger tactical operations officer; a couple of MR-IV intelligence officers; a Raven FAC; and Major Klingaman.

Klingaman recalled some of the planning challenges the JOC faced:

When planning ground combat maneuvers with allocated air support it was glaringly apparent that the FAR Headquarters staff had only marginal situational awareness of the tactical situation on the ground. They also lacked an in-depth knowledge of the topography and physical terrain at forward locations outside the larger towns. The first deficiency was no doubt due to them not having a working intelligence program with collection and analysis assets located at various levels of command, especially in the field. The lion's share of their intelligence probably came from American sources. The second problem presents more of a puzzle, but, then, it must be remembered that the interior of Laos was not all that well known to people outside certain tribal groups. In 1968 there were still aboriginal tribes living in small oval clearings on the Bolovens Plateau.⁵⁶

At the end of his tour, Major Klingaman noted how far the 4th FS had progressed, from a nearly defunct collection of nonperforming malcontents to a highly motivated flying unit with the *esprit* needed to fly two combat sorties daily, six days per week. He also noted the exceptional ability of the USAFSOF team to adapt to complex situations and devise solutions to absolutely unique problems. The AOC team consisted of highly motivated volunteer specialists trained in a special operations ethos and in some cases more preferred for these types of advisory duties than conventional USAF personnel. He also found it noteworthy that many of the TDY augmentation personnel often picked up on the spirit and professionalism of the USAFSOF team.

Based on his own training and experience in Southeast Asia, Major Klingaman was somewhat astute in identifying the potential pitfalls of sustained American security assistance and advisory efforts with RLAF forces. He was essentially questioning what America would leave behind as well as the effect of long-term RLAF dependence on US support once the United States withdrew its logistics and air combat advisory effort. RLAF survival in the long-term view was not encouraging, although it must be noted the US goal was only to maintain the status quo in Laos while finding a favorable solution in Vietnam. In his report, Klingaman stated, "A major consideration over the long term, however, was the influence that current USAF participation will have on the RLAF's ability to support itself if and when they are ever left on their own. The degree to which RLAF personnel identify with USAF attitudes and ideals will ultimately determine the nature of future air operations and the country's defense posture. This is especially true in the case of the younger USAF-indoctrinated officer pilots who will eventually and hopefully take over

RLAF command positions presently occupied by French-oriented Army commanders.”⁵⁷

Major Klingaman left Pakse in April 1969 and returned to the 1st SOW at England AFB, Louisiana. He was soon transferred to HQ USAFSOF, Eglin AFB, Florida, as director of operations plans, where he performed duties as the USAFSOF Project 404 officer. He accompanied Brig Gen Joseph P. Wilson, the SOF commander, to Laos in January 1970 to assess the effectiveness of the AOC in-country program. They toured all five AOCs and the forward sites of Moung Soui and Lima-Lima. The improvements in effectiveness of the air operations in Laos, as well as recommendations for development of a RLAf reconnaissance capability, were outlined in the survey report, “Report of Reconnaissance Survey, 12 June 1970,” and forwarded to HQ USAFSOF and the USAF for their consideration. (It was shortly after this visit when Maj Joe Chestnut was killed at Nam Bac.)

The Royal Lao Air Force, 1969–70

In 1969 the RLAf flew their most sorties ever. The Lao AC-47s became operational and gave the RLAf a night-fighting capability to support ground troops. A much needed, embassy sponsored, manpower survey was conducted to formalize RLAf manning documents. Given the downsizing and withdrawal of American forces in Southeast Asia, the AOCs and the USAID/RO-administered MAP worked to keep the RLAf tactically operational, with an eye to the “Lao-ization” of the RLAf—the first steps to self-sufficiency.

The RLAf performed in an impressive manner to support the garrison at Thateng in MR-IV. There was a concern on the part of the embassy for the attrition of T-28s in combat and problems with procurement of additional aircraft to replace combat losses. The T-28 was no longer being flown in South Vietnam, which had provided a ready source of replacement aircraft. In 1969 the RLAf had forty-five T-28s, with nine being flown by Thai pilots.⁵⁸

In June 1968 Moung Soui fell, and the following month, Gen Vang Pao attempted to retake the town in Operation Off Balance. The effort fell short with the miserable performance of the Neutralists. Ly Leu, now one of the most famous T-28 pilots in the service, flew in support of the operation. He racked up an impressive 1,000 combat sorties in his first eighteen months of flying. On 11 July near San

Luang, enemy gunners—keenly on the outlook for him as they could tell his distinctive flying style—stitched his aircraft with heavy machine gun bullets. Gen Vang Pao and the Army attaché, Capt Bob Nelson, watched in horror as he flew his plane into the ground and was killed. There was an impressive funeral held for Ly Leu, befitting a Hmong hero. The AIRA, Colonel Tyrell, attended and pinned a Distinguished Flying Cross on his casket.⁵⁹

In 1970 the RLAF had an offensive strike capability of forty-four T-28s and eight AC-47s. With the loss of the *PDJ* airstrip, the Vientiane based T-28 squadron used MOUNG SOUI as a forward staging base. When MOUNG SOUI fell once again, the squadron forward-staged out of MOUNG KASSY. In June 1970 an official AOC was finally introduced into LONG TIENG. There was an increased use of the AC-47s for night defense of *FAR* and Hmong garrisons.⁶⁰ By July of 1971, RLAF AC-47 squadron strength was back up to ten aircraft.

In the south, valiant efforts on the part of the RLAF could not prevent the fall of ATTOPEU and SARAVANE. On 26 May 1970, the COC in Vientiane became operational. The chief of RLAF operations commented on the value of the COC: “The COC is a great help in moving aircraft. Before, we had to go through the JOC only. To move an aircraft, the request would come to the AOC, then to me at operations, and I would have to go into General SOURITH and then send the answer back the same way. It took a day. Now we can do it with a radio call.”⁶¹

Lt Col Bill Keeler, “Father” of the Combined Operations Center

Lt Col Bill Keeler left Laos to serve in Thailand. While there, he was asked by Colonel Tyrell, the AIRA in Vientiane, to return to Laos and set up an “unofficial” AOC at LONG TIENG (LS-20A). Keeler would serve this tour from July 1969 to July 1970.

Due to enemy pressure at LONG TIENG the T-28s were moved to a forward staging base on the airfield at MOUNG KASSY, which served as the alternate AOC. The forward staging base had both a bomb and fuel depot—the AOC was in a trailer. The airstrip was really just a portion of the highway (Route 13) widened to land aircraft. Its unofficial title was “the highway strip.” It could not be used during the wet season, as the ground along the highway turned to mud. This operation lasted about a month. T-28s from the PAKSE, LUANG PRABANG, and

Savannakhet squadrons augmented the ground effort in MR-II and returned to their bases during June 1970, the onset of monsoon rains.

Lt Col Keeler was then appointed by the AIRA to work with the general staff in Vientiane as the advisor to General Oudone. It was in that job Keeler worked to establish the COC, along with the opening of JOCs in all five MRs. He recounted, “I was advisor to General Oudone, who was Chief of Staff of the General Staff. I built a command and control system, physically, with the buildings, built a combined operations center, a COC. . . . Ambassador Godley was trying to perpetuate this, and Tyrell said, ‘Okay, you go out and do it.’ So we built the building and paneled the walls and stole air conditioners and radios out of wrecked airplanes and set up a complete COC, ops center similar to BLUE CHIP, about the same size.”⁶² (Blue Chip was the COC in Saigon.)

The COC gave the general staff the ability to talk and coordinate with everyone involved in the air war over Laos. Brig Gen Bouathong Phothivongsa was assigned as the chief of the COC. Keeler served as the advisor to the COC. This move ended the provincial nature of Lao airpower. As a further professionalization of the system, Lt Col Keeler wrote the first Lao staff manual, the *Royal Lao General Staff Manual 1-1*. He also made it a point to visit and attend regional JOC meetings.⁶³

Maj Jack Squires, AOC Commander, Savannakhet, June–December 1969

From June to December 1969, Maj Jack Squires served as the AOC commander in Savannakhet. He followed Karl Leuschner and was replaced by Wayne Landon. (Maj Ed Bender was the AOC commander in Pakse.) Squires described his job: “There were six T-28s in commission. These were Chaophakaows. I flew as Chaophakaow 13. I FAC’d in an O-1 and T-28—my call sign was Raven 36. I had a line chief (Gene Autrey), a comms guy, and a medic, along with some occasional TDY augmentees (ordnance, aircraft repair). There was an AIRA also stationed onsite at Savannakhet. I flew on airstrikes. FAC’d. I would call the C-130 ABCCC—I used ‘el jocko’ to contact them. Our missions were mostly flown to the east around Tchepone. I got my targets from the Agency.”⁶⁴

Maj Jessie E. Scott, AOC Commander, Vientiane, 1969–70

Major Scott served as the Wattay, Vientiane AOC commander from October 1969 to April 1970. At this time, the Hmong T-28 squadron was flying as part of the RLAF, but in actuality, flying totally in support of Gen Vang Pao and MR-II. Major Scott began as an Air Commando flying the U-10 PSYOP mission, serving in Vietnam with the 1st Air Commando Squadron from 1964 to 1965. He returned to the United States and was assigned to the Air Training Command with the mission to train South Vietnamese T-28A pilots. He returned to the Air Commandos, serving as an A-26 pilot at Eglin AFB. In October 1969 Scott got his orders under Project 404, Palace Dog, to report to Laos.⁶⁵

Upon arrival to Bangkok, he was given the phone number to the AIRA in Vientiane, whom he called to arrange transport to Udorn. He in-processed to Detachment 1, then flew to Vientiane and “became” a member of the USAID as “Mister” Scott, a radio and communications technician for the organization. In Scott’s words, “We became in-the-black civilian assistant attachés.”⁶⁶

He turned in all his military orders and ID, receiving an embassy ID card in return. Extensive briefings on the ROE, the workings of the embassy interagency country team, and a reminder of the combat restriction from the ambassador followed. The combat restriction for Project 404 aviators had been drilled into him prior to arriving in-country. It had been emphasized to him back at Hurlburt, where he signed a waiver to enforce the rule. Colonel Tyrell, the AIRA, was his boss; however, Scott would find himself working for a more immediate boss, the director of operations under Colonel Tyrell. The director was responsible for Project 404 operations, while Tyrell focused on American airpower assets for Laos.⁶⁷

When asked by Lt Col Vaughn H. Gallacher to explain the function of the AOC during his official USAF oral history interview, Major Scott explained his role: “Primarily, the AOC commander had responsibility to the Air Attaché for the overall indigenous Air Force operation in a specific military region. In the case of Vientiane, it included C-47, AC-47s, H-34 helicopters and T-28s that were operated by the Lao in addition to the American Raven forward air controllers, who incidentally, were also TDY from Det 1 at Udorn. In this rela-

tionship you had a direct report back to the Director of Operations and in turn to the Air Attaché for your operations as far as the safety, the number of air sorties generated, and so on.”⁶⁸

He began duty as the AOC commander in Vientiane. At Wattay, Major Scott shared the same building with the Lao AOC commander, or wing commander. His primary air advisor responsibility was to the Thai B-Team, who with its twenty or so pilots generated about five or six sorties on average, daily. Different than earlier AOCs, Major Scott also handled the air apportionment for the *FAR* operating in MR-V; although a very quiet MR, there were maybe one or two missions over to Paksane. What differed for the AOC this tour was in forward positioning the AOC to run operations out of Moung Soui, L-108. These operations ran from January to February 1970. When the Lao-tians were run out of Moung Soui, the forward AOC was moved to Moung Soui and Moung Kassy (LS-153), where Route 13 had been widened about 4,000 feet as a runway to support the six or seven T-28s.

While at Moung Soui, Major Scott had four Americans with him to run the forward AOC and twenty-five Laotians also helped run the airstrip. They ran air control using a Mark 108G, HF SSB radio. Being forward based allowed for the T-28s to generate more sorties in support of the battles on the *PDJ*; at times they achieved fifty-five to sixty sorties per day. With the loss of the *PDJ* airstrip at LS-22, it was only a matter of time before the NVA would press on to attack Moung Soui. When intelligence indicated the growing threat to Moung Soui—often confirmed by the visual trek of refugees streaming past Moung Soui, whom the AOC tried to help—the Americans were required to return to Vientiane each night.

When the base became surrounded, Major Scott flew up from Vientiane in a C-123 to ascertain the status of the stored equipment and ordnance at Moung Soui in the event of evacuation of the site. He reported back to Vientiane and informed the AIRA of what he found. A plan was put in place for Major Scott to take a T-28 back up in the morning to assess the feasibility of flying in military reinforcements. Unfortunately, that was the same day Moung Soui was attacked and overrun.⁶⁹

Major Scott returned to Hurlburt after his tour and participated in the training of future AOCs. Along with the MATSUCO course, old returning AOC hands were responsible for preparing and giving briefings on the situation in Laos to prepare the next deploying AOC team. He remembered his assistance in the process:

Like when I got back, in the six weeks I was back before I came up here to the school [Air Command and Staff College], I conducted two courses. I was the most recent returnee. We would debrief, of course, and keep this constantly updated so that our training—it was such a foreign operation by comparison with an average United States Air Force operation that you just couldn't send a man in cold. The instructors, because they had repeated tours and very, very much—the Lao blood was almost in their veins. We were extremely fortunate in that respect that we had just an ongoing, almost a constant change. A man would be back for a year and go back again on another tour.⁷⁰

Some of the repeat AOC commander deployments to Laos included Scott, Klingaman, Downs, and Keeler.

The Royal Lao Air Force, 1970s

The RLAf came into its own in the 1970s and was on its way to becoming more professional than ever. Although it was still plagued by poor senior leadership and still relied on the Americans for its logistical and maintenance systems, it had a good transport arm and offensive strike arm, with a high sortie generation. A functioning tactical air control system was in place (FAGs, FACs, and AOCs), and targeting and intelligence systems were better than ever. A JOC system had been introduced into each of the five MRs, and a central COC was running in Vientiane. The Thai B-Team T-28s were phased out and the program with Thai mercenary pilots ended on 4 September 1970. By this time, there was sufficiency of trained RLAf pilots; the expenses for the Thai B-Team program could not be justified.

Major Moody, AOC Commander, Luang Prabang, 1970

Major Moody was serving a tour at England AFB, Louisiana. General Aderholt was looking for people to serve another tour in Laos, so Moody asked to go back to Luang Prabang. Major Moody recounted as follows:

There was a guy already there (1969), so I extended my tour at England until he was finished, then I deployed. We had Ravens there then, and I could fly as a FAC. We flew O-1s and T-28s. It wasn't legal, but we were allowed to do what we had to do! We lived in the same house. Most of our missions were CAS with the Agency. Doug Swanson was also in a T-28. We did river patrols; lots

of boats on the river. We did TIC, CAS, and recce. Medical capability was a big thing in Luang Prabang. We always had people lining up for that.⁷¹

The RLAF had shown the ability to transcend its decentralized, regional system of autonomous squadrons and had the flexibility to employ air assets across MR boundaries.

The advisory abilities of the Project 404 AOCs were at their best, with many of the AOC commanders serving additional tours. There was even talk of a replacement aircraft for the T-28—primarily the A-37 Dragonfly—but those plans were soundly dropped by the American advisors and the embassy, given consideration of the lack of maintenance proficiency within the RLAF.

Maj Jessie E. Scott, AOC Commander, Long Tieng, 1970–72

Major Scott returned to Laos in December 1971 to conduct a second tour as the AOC commander in Vientiane (Amb. McMurtrie “Mac” Godley was the ambassador at this time, and Col Hayden Curry was the AIRA.) What differed on this tour was his role as the air liaison officer to Gen Vang Pao at Long Tieng, LS-20A. A more formal AOC was finally located at the site. Twelve T-28s, six Hmong pilots, six Laotian pilots, ten Ravens, and seven Americans comprised the AOC: a radio operator, an intelligence officer, an intelligence sergeant, a line chief, a supervisor for the bomb dump, and two aircraft mechanics. Of the American contingent, there were only four Project 404 AOC personnel; the positions on the AOC had been downsized as part of the “Lao-ization” effort to get the Laotians to do their own jobs. The Ravens were also being downsized with replacement from the Nokkatens, the Lao FACs who were being trained by Air Commandos in the FAC school at Vientiane.

Major Scott coordinated daily with Vang Pao and the CAS to ascertain targets for the squadron. In late December, the NVA increased 130-mm artillery attacks on the Long Tieng position, beginning the Battle of Skyline Ridge. Major Scott reflected on those times:

The fighting on the Plaine des Jarres occurred as best as I can remember on the 19th of December [1971]. Just after that a sapper team did get in the valley with us on about the 20th of December. They pinned us down in our compound, or they succeeded in getting through our perimeter defenses and into the valley and got sapper teams up to the T-28’s. I’m going back now to about

20 December. I had ten T-28s on the ground and six O-1s. We had dispersed the O-1s as best we could, and the T-28s, there was no place to disperse them, realizing that we would be getting artillery fire shortly. As it worked out, we played into their hands. We dispersed the O-1s and made it a little bit easier for the sapper team to get to them. We had Meo guards but they [enemy sappers] did succeed in blowing up two O-1s and damaging a third airplane. They killed one of my Lao mechanics and then, of course, pinned us down in our compound with B-40 rocket fire. Once again, true to form, the weather was bad, about 300-foot overcast and no way to get any air support or so on. We did get a message out saying that we were under attack and then the radio operators had to shut down. We had the encrypt device on the radio. It was just touch and go whether we were going to have to destroy it or not. CRICKET, of course, we could contact him but we couldn't get any air support at all. One Lao AC-47 was successful in dropping some flares into the valley.⁷²

Major Scott moved the bulk of the Americans out of Long Tieng; he himself remaining with two others to support Vang Pao. The next day, Scott returned to Vientiane to run the Long Tieng air operations from that location, shuttling up-country daily. The T-28s were pulled back to Vientiane, and on 1 January 1972, the Raven FACs were moved to Ban Son (LS-272). Ban Son was located about eighteen miles southwest of LS-20A. T-28s could still land at Long Tieng to pick up ordnance, yet none remained more than thirty minutes on the ground.⁷³ Major Scott moved forward to Ban Son where a new JOC for MR-II was put into operation. From there, he shuttled each day to Long Tieng to coordinate with CIA operatives and Vang Pao.

As the fighting waxed and waned around Long Tieng, Vang Pao requested the return of the T-28s to the airstrip. The ambassador relented, and the aircraft returned; however, not so for the AOC. Scott once again had to shuttle every day from Vientiane to Long Tieng. Colonel Curry, the AIRA, told him, "Look, the Lao Air Force has been in this business long enough that if they can't move their airplanes up there and work them, they just don't deserve to be up there, and there will be no Americans going with them. They've got to go by themselves."⁷⁴

The NVA found the T-28s to be lucrative targets for its artillery, and it was not long before the T-28s returned to Vientiane. At this point, Major Scott became an air liaison officer to Vang Pao, helping to coordinate daily airstrikes for him on the *PDJ*. At the end of his tour in June 1972, Major Scott was sent to work for the North Atlantic Treaty Organization.

Maj John “Jack” Spey, AOC Commander, Pakse, 1972

Maj John “Jack” Spey flew in Vietnam as a C-123 Ranch Hand pilot in 1962. After Vietnam he served as an instructor pilot at Hurlburt from 1966 to 1970. While in the training squadron, he checked out on the T-28 aircraft. He then became an IP for Project Water Pump pilots who were required to receive certification on the T-28 before deploying to Udorn. IPs were an experienced bunch and were highly desired for duties under Project 404 as AOC commanders.

In 1972 Spey arrived to Pakse to serve as the AOC commander, but due to an emergency at home only served one month. He returned to Pakse after his emergency leave and reassumed the duties of AOC commander. His job was to advise the RLAf commander, Lieutenant Colonel Quang.⁷⁵ As AOC commander, he was under the command and control of the AIRA in Vientiane.

Along with Major Spey, the AOC included a line chief, senior mechanic, radio operator, aircraft repair specialist, armaments specialist, supply technician, and medic. He had a section of Ravens and a couple of intelligence NCOs attached to support the operation. In his oral interview with the Texas Tech Vietnam Veteran’s Archive historians, he described his role:

In the case of the AOC commander, if necessary, for the most part in MR-IV where I was located, [my role was] to provide some tactical guidance. It was also our job, the AOC commander’s job, was when an operation by a force to the ground forces in a particular military region was to come up with recommendations to the air attaché office for fighter support, logistical and fighter support. We also monitored aircraft flying time so that they went to their hundredth hour inspection in Udorn on time and increased the maintenance factor. That also included rotation of the O-1 forward air control airplane. Each of the military regions had, depending on the tactical situation, a number of Raven FACs (forward air control) assigned to that military region. They were operating under the AOC commanding, the forward air controller. We were responsible directly to the air attaché’s office in Vientiane. Then we were tied together, and tied to them was voice radio, ordinary telephone and encrypted Teletype, if security needed to be maintained on a particular subject matter. That communication link was maintained by the Army portion of 404. They were the ones that operated the Teletype, the secure Teletype link 21 between the different military regions and the attaché office in Vientiane.⁷⁶

Major Spey was, as were all AOC commanders in the 1970s, prohibited from flying combat missions with the Lao army. He could,

however, fly transition flights back and forth to Udorn with the newly trained Laotian pilots graduating from Water Pump or to ferry aircraft to Udorn for maintenance.

At this time in the war, the RLAF was very proficient and required little input from the AOC advice. Major Spey did not even socialize with the Lao RLAF commander, only attending receptions as necessary. He was the only major among other AOCs who were lieutenant colonels. Also, everyone on the embassy team outranked him. He explained why he had a very quiet tour:

The Lao—by the 1971 and 1972 timeframe, the Lao T-28 operation, the fighter operation—didn't need a lot of advice. They knew how to drop bombs. They knew how to load bombs. They knew how to maintain their airplane. Our mission was largely an oversight mission. As years went by there was less and less advice that needed to be given. Our main task in the field was monitoring the operation and trying to make sure that they received the support from US air, if US air was going to be needed, and often it was. Often it was desirable. Laos was almost low man on the totem pole for USAF sorties as it applied to South Vietnam, North Vietnam and so forth. But just try to smooth things out, that was the biggest task.⁷⁷

After his tour in Laos, Major Spey advised the RTAF Contingent Force assigned TDY in Japan.

Sgt Michael I. Lampe, Combat Controller, LS-20A, 1972

Michael I. Lampe volunteered for the USAF at 19. He was assigned as a typist at Clark Air Base in the Philippines. As part of his duties he handled Project 404 paperwork for his commander. Sergeant Lampe was intrigued by the operations of Project 404 ongoing in Thailand and Southeast Asia. Seeking more action, he volunteered to be a combat controller (CCT) and completed the required training, including airborne, combat dive, and survival school. He was then assigned to the 1st SOW, CCT team at Hurlburt Field. While there, he volunteered for Project 404 but was initially turned down due to lack of experience in the field.⁷⁸ He was on leave when he got a call from the senior CCT at Hurlburt, Chief James A. Howell, and was told to get back to Florida, immediately. He had been chosen to serve in Laos under Project 404.

Sergeant Lampe deployed to Laos and was assigned for duty at Long Tieng, LS-20A, along with seven other Americans. The AOC

commander was Capt Jerry Rhein, who later famously flew an A-1E during the Son Tay raid in North Vietnam. As a CCT, Lampe ran the airfield air traffic control and helped to train Hmong guerrillas in FAG duties. No one in an AOC had just one job; Lampe also flew out to emplace navigational beacons and often took turns on the airstrip to help load the Hmong T-28 aircraft ordnance.⁷⁹

As a member of the AOC, Sergeant Lampe also flew backseater in the T-28 and, like all who did, gained a rudimentary understanding of the flight controls in case the pilot became incapacitated. He worked alongside Charlie Day, who facilitated Lampe's understanding of all the aircraft in operation at Long Tieng—O-1 Bird Dogs, C-7A Caribou, and even the C-123. It was also the AOC's job to service these aircraft, every day. On 5 November 1972, Sergeant Lampe would earn the Airman's Medal for his actions during an aircraft ground mishap. The incident was described by Maj Michael E. Martin in a paper he wrote as a student while attending the Air Command and Staff College at Maxwell AFB, Alabama:

On 5 November 1972, a fully loaded O-1 was taxiing to the runway for take-off when it suffered an electrical system malfunction and fired all seven of its smoke rockets. The rockets "struck a fully armed and fueled aircraft causing the cockpit area to burst into flames. One fused bomb was knocked from the aircraft. Sergeant Lampe immediately recognized that should the burning aircraft or ordnance explode, a probable chain reaction would destroy two other aircraft parked at the wing tips of the burning aircraft." Without hesitation and risking his life, Chief Lampe extinguished the fire with a portable fire extinguisher and defused bombs on the aircraft. His heroic and life-saving work earned him an Airman's Medal for saving many aircraft and personnel in base operations.⁸⁰

Sergeant Lampe went on to become a chief master sergeant in the Air Force, serving as a CCT for over 28 years. During his career, he served in Operations Eagle Claw, Urgent Fury, and Just Cause. He also held the command chief position at the United States Special Operations Command (USSOCOM).

Ronald H. "Hap" Lutz Jr., Medical Noncommissioned Officer, AOC, Savannkhet, 1970–72

Hap Lutz enlisted in the Navy in 1947. His father had been a Navy corpsman in World War II, so Lutz signed on as an apprentice seaman, hospital apprentice. He served in a variety of medical positions,

most notably participating in the evacuation of the Nationalists from China when Mao Tse Tung's communists took over the country. In 1958 he transferred to the Air Force, again serving in a variety of medical positions.⁸¹

In January 1962 he volunteered for the Jungle Jim program with the Air Commandos. Once accepted, and after a battery of interviews and psychological tests, he reported in to Hurlburt Field. He deployed to South Vietnam to serve with Detachment 2A during Operation Farm Gate.

After his tour in Vietnam, he was assigned once again to Southeast Asia as a medic and medical noncommissioned officer in charge for the Water Pump detachment. Between 1964 and 1966, he worked medical civic action projects (MEDCAP) on both sides of the Mekong River. The mission of the Water Pump medical detachment was to maintain the health of the Americans in the unit and look out for the health of the Lao and Thai pilots. As part of the "hearts and minds" program, Lutz worked alongside others to perform civic action programs, both in Thailand and Laos.⁸²

In 1970 Lutz was chosen for Project 404, under the Palace Dog program. He departed for Laos in June, to serve as the medic at the Savannakhet AOC.⁸³ One of his duties was assisting with the SAR of Lao air force and American personnel. Additionally, he took care of the medical needs of the Americans in the AOC, along with the Lao pilots. Every evening, he held a clinic in his quarters to care for dependents of the RLAF and people from the surrounding area. Ultimately, he would serve three Project 404 tours in Laos. On his second tour, he helped to establish a RLAF hospital at the airfield in Savannakhet. Lutz's recollection of the events is as follows:

I went to the wing commander there, Colonel Concy . . . Phimaphong . . . I'd have to look it up. Anyway, he was the lieutenant colonel in charge of the Royal Lao Air Force there at Savannakhet. I went to him and I said "If you can provide me with a building, I can probably provide you with a 30-bed hospital through my resources in Detroit, Michigan." He said, "I can do that if you can do that." We had a very good rapport anyway. So, I put the wheels in motion. He gave me an old French building, with a lot of the EOD people, explosive ordinance disposal guys. There were two at a time over there all the time. They changed out every two or three weeks. The flight engineers, our flight mechanics, our comm guys all got together and policed up the building pretty well. Tiled the floor, put curtains on the windows and waited for the equipment to come in from World Medical Relief out of Detroit, Michigan, and it did, it happened. I had great assistance from the company, the CIA. Everything

had to be cleared through everybody over there. You couldn't just do something without making sure everybody else knew about it.⁸⁴

On one of his tours, Hap Lutz deployed out to the village on Nongbulao to conduct MEDCAPs.

My, what we call AOC Air, Operations Center Commander Roy Dalton was his name; Captain Loy they called him. He would come in occasionally, but they didn't stay out there because his duties were primarily back with the rest of the folks back at Savannakhet. I was out there to assist. We were taking Dong Tien is what we were doing, they were, and I was assisting taking care of the wounded. They had an eight-bed underground hospital that they'd built out there, very sophisticated thing. At the same time we were building a runway. I had some injuries from that. You know trees falling and cuts from saws and chains and this type of thing, plus wounded from the fighting.

I met Lieutenant Colonel Nheuphet . . . when I was working out in Nongbulao, the first time, he was a lieutenant colonel, and he ultimately became an MR-III commander, major general. But I had known him all these years; we had a great rapport. Anything I needed in any way from people or whatever resources he had, transportation, guards, because when I was working in Nongbulao, I'd go down to the river to take a shower; he'd always send a tank or an armored personnel carrier to make sure I was taken care of carefully. No one would harm me in any way. He was like a big daddy to me. He had foot soldiers around me all the time. The other thing about it as we got to know each other more and more over the years, when we finally went to the air field built out there and General Ma used to fly in there, he would always put me right at the head of the table, right next to him, include me in all of their discussions even though I didn't understand most of them. It was a very noble thing to have. It was a high honor for me to be invited to these confabs they had out there.⁸⁵

Lutz received a few bullet holes in his tent at Nongbulao, a warning from the Pathet Lao to discourage his efforts. Lutz also participated in SAR missions in his MR.

I always asked for a helicopter so we could land and take care of the problems, Porter if there was a field with enough strip on it, very seldom. Go and look with a Porter or U-10 or whatever I could get my hands on. That was not that often. Most of the SAR work was done by the sophisticated Sandys that were in NKP. They were just half an hour away from us. I'd get on the horn if they asked me to assist in any way of course I was available to do so.

I flew as an X-ray on several missions, X-ray being a backseater for marking targets, throwing smoke is essentially what you do. I did this because some of the pilots or the X-ray as they were called would have a bad Buddha, or a bad day we would call it. Something happened with them and Buddha said don't go up today, one of those things that they do get spooked about. It's genuine; to me it was not faking it. To me it's their way of life, so I flew a couple of those

X-ray missions. Threw some smoke at what I perceived to be targets we were told were the coordinates. But that wasn't that often either.⁸⁶

Hap Lutz retired from the Air Force in 1974.

Summary

General Bouathong, who had been the commander of the COC, became the RLAFF commander in 1973. The RLAFF was at its peak with 2,150 personnel and 175 aircraft, seventy-five of them being T-28s.

When the communists took over the government in 1975, Vang Pao's T-28s flew the last RLAFF combat sortie on 14 April 1975, when nine T-28s attacked Pathet Lao trucks in MR-II. Many of the Hmong pilots defected to Thailand, taking along sixteen T-28s with them.

When considering whether or not just any Air Force personnel could have performed this mission for the ambassador, Major Scott extolled the virtue of having a special operator to do missions of this nature:

This was all controlled within the SOF resource. In fact, when they identified a man, it was an all-volunteer program. You had to be a major ideally with a fighter background or air-to-ground experience. The people were identified and then were queried as for what we thought about the individual. When they say this, we are not talking about his ability to drop bombs, but is he just a little too boisterous to get along with the indigenous people. You could have Orville Wright over there and if he could not establish the necessary rapport with the indigenous, he was totally ineffective. No, this was an extremely important factor.⁸⁷

Colonel Keeler expressed his opinion in a similar way during his official Air Force interview held at Eglin AFB in 1973, on the value of Air Commandos to the achievement of the ambassador's goals: "The difference, I think, in the product is having Air Commando or Ops types in the field working with the people in Laos who are able to produce this 1,500 to 2,500 sorties per month with a few good sergeants, specialists, APGs, and engine man and a prop man. One good Major from the Special Operations type, put him in the field and he'll produce. And they come out of here [Eglin AFB]."⁸⁸

Notes

1. Keeler, interview.
2. Klingaman, "Project 404 Palace Dog Status Report Summary," 3.

3. Scott, interview no. 663, 50–51.
4. Klingaman, “Project 404 Palace Dog Status Report Summary,” 1–2.
5. *Ibid.*, 1–2.
6. Ross, interview.
7. Spey, interview, 79.
8. *Ibid.*
9. *Ibid.*, 80.
10. Pratt, *Royal Laotian Air Force*, 13.
11. *Ibid.*, 31.
12. Keeler, interview.
13. Keeler, USAF interview no. 651, 23.
14. *Ibid.*, 23.
15. *Ibid.*, 15.
16. *Ibid.*
17. Klingaman, interview.
18. *Ibid.*
19. *Ibid.*
20. *Ibid.*
21. *Ibid.*
22. *Ibid.*
23. Pratt, *Royal Laotian Air Force*, 38.
24. Klingaman, interview.
25. *Ibid.*
26. Pratt, *Royal Laotian Air Force*, 39.
27. Klingaman, interview.
28. Downs, interview.
29. *Ibid.*
30. *Ibid.*
31. *Ibid.*
32. Moody, interview.
33. *Ibid.*
34. Conboy, *Shadow War*, 170.
35. Downs, interview.
36. *Ibid.*
37. Pratt, *Royal Laotian Air Force*, 44.
38. *Ibid.*, 49.
39. Conboy, *Shadow War*, 196.
40. Pratt, *Royal Laotian Air Force*, 64.
41. *Ibid.*, 65.
42. Klingaman, interview.
43. *Ibid.*
44. *Ibid.*
45. *Ibid.*
46. *Ibid.*
47. *Ibid.*
48. *Ibid.*
49. Conboy, *Shadow War*, 221.

50. Ibid., 222.
51. Klingaman, interview.
52. Ibid.
53. Ibid.
54. Ibid.
55. Ibid.
56. Ibid.
57. Ibid.
58. Pratt, *Royal Laotian Air Force*, 102.
59. Conboy, *Shadow War*, 214.
60. Pratt, *Royal Laotian Air Force*, 112.
61. Ibid., 119.
62. Keeler, USAF interview no. 651, 53–54.
63. Ibid., 6.
64. Squires, interview.
65. Scott, USAF interview no. 663, 1-3.
66. Ibid., 9.
67. Ibid., 1–6.
68. Ibid., 15–16.
69. Ibid., 35–39.
70. Ibid., 48.
71. Moody, interview.
72. Scott, USAF interview no. 663, 78.
73. Ibid., 73–76.
74. Ibid., 98.
75. Spey, interview, 1–47.
76. Ibid., 48.
77. Spey, interview, 54.
78. Martin, “Chief Master Sergeant Michael I. Lampe,” 1–3.
79. Ibid., 4.
80. Ibid., 4–5.
81. Lutz, interview, 1–5.
82. Ibid., 36.
83. Ibid., 102.
84. Ibid., 103.
85. Ibid., 64–66.
86. Ibid., 111–14.
87. Scott, USAF interview no. 663, 48–49.
88. Keeler, USAF interview no. 651, 76.

Part III Photos

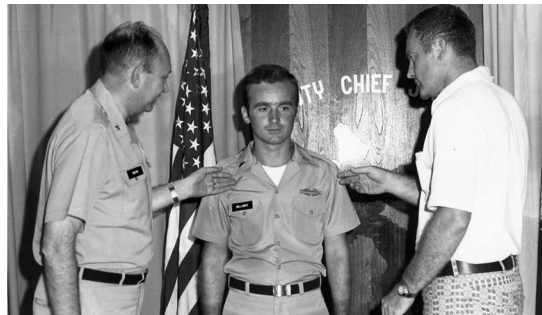


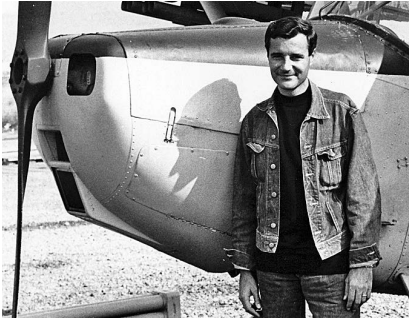
Above left: The unofficial insignia of Project 404. **Above right:** The DEPCHJUSMAGTHAI was headquartered in the Capital Hotel in Bangkok where Project 404 was administered. (Photos courtesy of CWO4 Raymond J. Millaway, US Army, retired, Project 404 Crypto communications.)

Right: Capt Roy C. Dalton served as a rated pilot FAC under the AOC commander at Savannakhet, Jack Ryan. He started his tour as a FAC Butterfly in northeast Laos, operating out of LS-36 and Gen Vang Pao's base at Long Tieng. At Savannakhet, his cover story was as an advisor to the RLAFFAC school in Savannakhet. His secret mission was to fly as a FAC for Gen Thao Ma, the RLAFF commander, to support Lao ground troops in MR-III and MR-IV. He is shown standing next to a camouflaged Lao Army L-19. (Photo courtesy of Brad Dalton.)



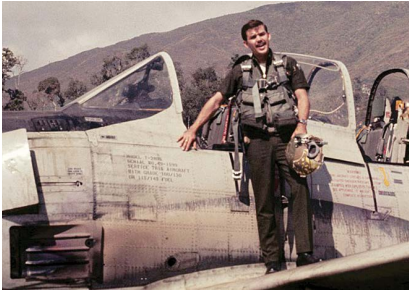
Below left: An original Project 404 handbook. **Below right:** Raymond J. Millaway receives direct warrant officer appointment from Gene Richard Trefry, DEPCHJUSMAGTHAI, and Col Ronald W. Clegg at offices of the Deputy Chief in Udorn, Thailand. (Photos courtesy of CWO4 Raymond J. Millaway, US Army, retired, Project 404 Crypto communications.)





Left: Maj Jerome Klingaman was a Project 404, AOC commander at Pakse. He also served as a Raven FAC. (Photo courtesy of Jerome Klingaman.)

Below left: William E. Platt, was a project 404 Raven FAC at Long Tieng. (From the collection of William E. Platt, Raven 43.)



Right: Maj John R. "Jack" Cassady (left), MR-V Project 404 Army SF advisor, with Jack Spey, AOC commander at Pakse under Project 404, Palace Dog. (Photo courtesy of Lt Col John R. Cassady, US Army, retired.)

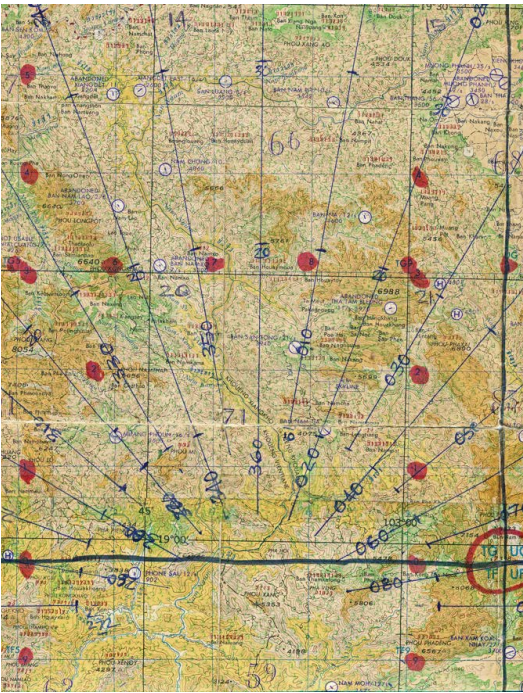


Below: Raven FAC Craig Morrison in unmarked O-1 Bird Dog over northern Laos. His aircraft is armed with 2.75-inch marking rockets. Note red stripe marking the top of the wings. (From the collection of William E. Platt, Raven 43.)





Above: One of the T-28s used at Long Tieng by the Raven FACs. (From the collection of William E. Platt, Raven 43.) **Below:** 1st Lt Steve Wilson was Raven 27 in MR-II from January to June 1972. His map (depicted below) was used to plan missions and fly FAC duties around the PDJ. (Photo courtesy of Steve Wilson, Raven FAC.)





Above: A Raven O-1 being hand filled with aviation fuel from 55-gallon drums, somewhere on the *PDJ*. (Photo courtesy of John Garrity collection via William E. Platt.) **Below:** The 37-mm AA gun. AAA shells had red, green or white-blue tracers and gave off a sonic “pop” or “whoomph” as they passed near aircraft. The larger 57-mm shell had a self-destruct capability once the tracer burnt out. These heavier guns were used mostly on enemy logistic routes along the HCMT and to guard other important installations and camps. A.D. Holt on left, Steve Wilson on right. (From the collection of William E. Platt, Raven 43.)





Above: It took flying extremely low on visual reconnaissance missions to detect well-concealed enemy AA gun positions. These photos illustrate the impressive risks taken by Ravens. If looking closely, bunkers, trucks, and other guns can be traced in the foliage and wood lines. (From the collection of William E. Platt, Raven 43.)

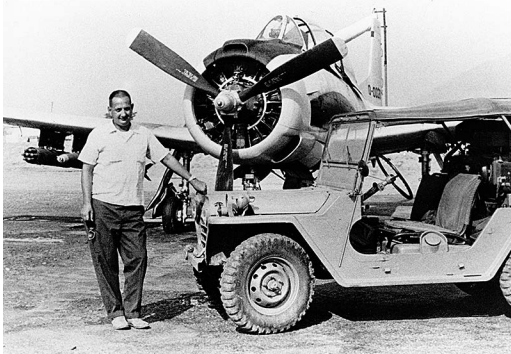
Right: Representation of a NVA 12.7-mm AA gun crew, on display at the National Museum of the Air Force in Dayton Ohio. (Author's photo.)



Left: A Robin scout-observer (Yang Bee) inspects what appears to be in size as a 37-mm anti-aircraft round, which could basically destroy the aircraft. (Photo courtesy of Steve Wilson, Raven FAC.)



Left: One of Maj Keeler's Thai B-Team (Firefly) pilots receives the 100-mission award in a ceremony. The award was instituted by Keeler to promote esprit de corps in his AOC squadron at Vientiane. (Photo courtesy of AFHRA, Bill Keeler collection.) **Below left:** Project 404 AOC commander Maj Don Moody and his squadron at Luang Prabang. (Photo courtesy of Lt Col Don Moody, USAF, retired.) **Below right:** Raven FAC Steve Wilson points out the effectiveness of a 12.7-mm "golden BB" on his O-1F Bird Dog. (Photo courtesy of Steve Wilson, Raven FAC.)



Left: "Mac" McDaniels, line chief for the AOC at Pakse, 1968. (Photo courtesy of Jerome Klingaman.)



Above: Maj Jerome W. “Jerry” Klingaman, AOC Commander at Pakse, with his pilots of the Lao T-28 squadron at Pakse. From left to right: Pitsami, Jerry Klingaman, Ringo, and Frenchy, 1968. (Photo courtesy of Jerome Klingaman.)

Right: Lao and Hmong T-28s at Moung Soui. (Photo courtesy of John R. Cassady, Lt Col, USA retired, Project 404 ARMA.)



Below: David Ross served as a ground radio operator in 1967 for the Savannakhet AOC (call sign “Texas”). At times, he flew as a backseater with the Ravens. He also served for short periods installing radios in Pakse, Long Tieng and with the Lao Army near Luang Prabang. (Photo courtesy of David Ross.)



PART IV

SULLIVAN'S AIR FORCE:

THE EXPANSION OF AIR

COMMANDOS

Chapter 10

The Ho Chi Minh Trail

Although pilots interdicted some trucks, jungle terrain or weather often obscured results. Uncertainty of bombing results also applied to strikes on such secondary targets as buildings, military and supply areas, chokepoints, and road cuts. The communists were able to nullify some of the bombing impact by quickly clearing chokepoint areas or constructing bypasses near severed roads. They made air operations more hazardous by placing more anti-aircraft weapons around vital logistics areas.

—Jacob Van Staaveren

Interdiction in Southern Laos

The establishment of the Ho Chi Minh Trail (HCMT) was a strategic initiative by the Democratic Republic of Vietnam ([DRV] North Vietnam) to infiltrate supplies and equipment into South Vietnam. Its formal development began 5 May 1959. Prior to this date, the network of existing roads and trails in Laos was used by the Viet Minh—later called the People’s Army of Vietnam (PAVN)—and the North Vietnamese Army (NVA) for liaison and limited troop movement and not as a primary line of communication. The HCMT, also referred to as the “trail,” was actually a network of multiple routes and branches designed to move trucks and supplies on its main routes while personnel moved separately on improved paths. The HCMT originated from the passes along the North Vietnamese and Laotian border (Nape Pass on Route 8, Mu Ghia Pass on Route 12, and the Lao Bao Pass on Route 9) and ran south along the western slope of the Annamese Mountains, the Truong Son Range. Lateral routes entered South Vietnam off the main feeder routes. It is best described as two main lines, parallel to one another, used for truck traffic, with multiple bypasses and lateral routes between the two main branches, resembling a ladder. Parallel to the two main routes were improved footpaths for the movement of troops. The third component of the HCMT was the incorporation of navigable rivers. It

had a north-south orientation running from the northern Laotian Panhandle down to the Cambodian border.

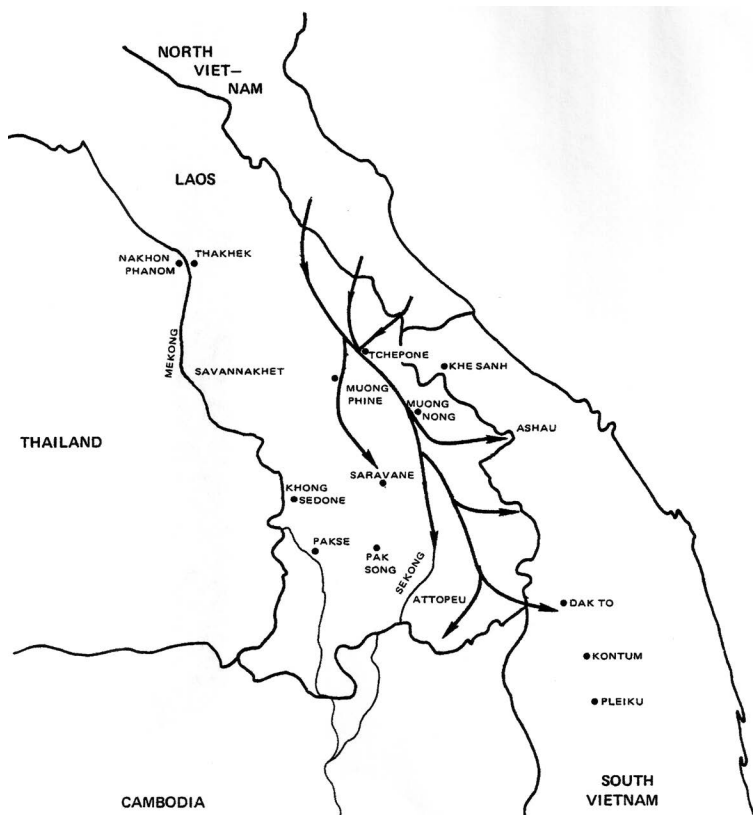


Figure 10.1. Ho Chi Minh Trail outline. (Adapted from Soutchay Vongsavanh, *RLG Military Operations and Activities in the Laotian Panhandle*, Indochina Monographs [Washington, DC: US Army Center of Military History, 1981], 6.)

The HCMT was exclusively operated and run by the North Vietnamese; their Pathet Lao allies were used as a buffer proxy to harass and impede Royal Lao Government (RLG) forces west of their main operation. The 559th Transport Group—so named for its creation in the fifth month of 1959—had primary responsibility for the operation of the HCMT. It operated in segments; men and supplies moved south down the trail in a cascading effect, supporting and replenishing NVA base areas in Laos for onward movement into South Vietnam.

The DRV initially saw the HCMT as a means to support the Viet Cong in South Vietnam in its subversion of the South Vietnamese government. By 1964, the DRV changed this strategy into one of overthrowing the South Vietnamese government. Expansion and improvement of the HCMT to move North Vietnamese conventional assets into South Vietnam began in earnest. The expansion included truck parks, troop lodgement areas, supply depots, and facilities needed to house the growing number of NVA units supporting and defending the HCMT. By the early 1970s, the HCMT would consist of over 4,000 miles of roads, trails, and navigable river routes. (About 40,000 or more NVA troops, laborers, and anti-aircraft [AA] defense troops were eventually employed.)¹

The concept for moving supplies, material, and men down the trail consisted of a day's movement (or night's movement) between way stations used as transshipment points. Subordinate logistic units, Binh Trams (communication liaison sites), were assigned to support their apportioned segment of the HCMT. Facilities for lodging, supply storage, medical facilities, and truck parks augmented each section.

Between transshipment points—where cargo was unloaded from the previous segment of the trail and reloaded to continue down the next segment (shuttling)—a series of refuel and repair camps were situated about 500 meters off the main route, located in heavy jungle areas. Feeder roads branched off the HCMT to laborer camps, Lao-tian villages, additional truck parks, storage areas, and camps for road repair crews. AA emplacements were generally located at these fixed sites to protect supplies, facilities, and equipment. In the early operation of the trail, AA consisted of 12.7-, 27-, and 37-millimeter (mm) guns, with an occasional radar-directed 57-mm in key areas like the Mu Ghia Pass and the multiple intersections at Tchepone. The gun emplacements initially numbered in the low 100s; as the war progressed and the United States intensified its interdiction efforts on the HCMT, AA systems grew to over 1,000 assets, along with employment of larger caliber guns (100-mm) and eventually surface-to-air missiles (SA-2s).

Along the HCMT, sentinels were posted to serve as early warning to detect incoming strike aircraft. Specialized tracking units that employed canines patrolled the trail to find road watch teams or Military Assistance Command, Vietnam–Studies and Observation Group teams.

Truck Routes

The NVA went to great lengths to constantly improve the main truck routes on the HCMT, primarily to counter the rains and resulting mud from the monsoon season. Truck routes were one lane with several bypasses and turnarounds (for northbound traffic), ranging from eight to twelve feet wide, and with improved surfaces to give them an all-weather capability. Crushed gravel, improved earth, raised roads—or roads built above areas prone to flooding—and some asphalt paving allowed for the almost unimpeded flow of trucks. In earlier road construction, logs were used to corduroy the roads to keep them in use during the monsoon rains. Wooden bridges and ferries helped to overcome swollen creeks and rivers. Underwater bridges at fords increased movement capability. By 1966 over 900 miles of motorable roads were in place. US intelligence estimates calculated the throughput infiltration rate of North Vietnamese truck movements as ranging from a minimum of 100 short tons per day (STPD) to a high of 400 STPD, more than sufficient to supply communist efforts in South Vietnam throughout the war.²

Primary routes, lateral routes, and feeder routes were under constant construction and maintenance. Multiple NVA engineer battalions were each apportioned sections of the HCMT to either improve existing routes or build new routes. They also kept the routes repaired, augmented by North Vietnamese labor battalions, civilian laborers or Laotian villagers organized into construction and labor battalions. NVA troops stationed along the HCMT, or troops moving south, would augment the efforts of the engineer battalions, if available. Notable in their efforts, road repairs, from weather deterioration or from interdiction, took no longer than 18–24 hours on average to put back into service. The engineers were equipped with heavy equipment such as bulldozers and earth-moving equipment to support these efforts. Labor and construction battalions were used to weave trellises of foliage over the route making them undetectable by visual reconnaissance.

The bulk of trucks used by the NVA were Russian, although some variants from Poland and China were seen operating on the HCMT. Truck convoys ranged from five to twenty-five vehicles in a convoy; not often, but occasionally, truck movements numbering up to 100 were detected. Truck convoys moved at night, using bicycle lights under their fenders to aid the drivers, all of whom were North Vietnamese.

Estimates varied; however, intelligence analysts settled on between 600 and 1,000 trucks required to keep the HCMT in operation. Even though battle damage assessment records indicated a massive number of truck kills, which should have severely hampered NVA operations, the DRV easily made up its losses through repair and replenishment of trucks supplied from communist-bloc countries. (The A-26As of the Nimrods and the AC-130 Spectre were the number one truck killers on the HCMT.)

Foot Trails for Troop Movement

Foot trails were on average about three-feet wide and for most of the war remained virtually undetected. The same concept was used for moving troops as was used for moving trucks. Foot trails ran parallel to the main truck routes of the HCMT, with way stations four days movement apart. Along with foot movement, the foot trails were also utilized by porters, bicycles, and pack animals. Bicycles could carry a few hundred pounds, pushed along by the rider. Separate rest areas were constructed along each segment of the foot trails.

Binh Trams assigned to the trail provided liaison and guides for troop movement between the way stations—ten to thirty liaison personnel at each way station. Infiltrating troops marched in formations, on average, of a few hundred troops at a time but larger groups (500 men) could be broken up into smaller ones. Travel between way stations took about four days, with a march day being about twelve miles. For troops originating in North Vietnam to make it all the way down to the southern-most portions of the HCMT, it took a couple of months. Idle troops were often used to augment road repairs before continuing their journey.³

Waterways

Waterways were the third method of infiltrating war materials to the south; however, they were reliable only during the monsoon season. The Se Bang Hieng River paralleled Route 92 and flowed past Tchepone; the Sepon River paralleled Route 9, flowing into the Se Bang Hieng at Tchepone; the Sekong River paralleled Route 92 and Route 16, flowing past Attopeu. Pirogues (canoe-like boats) and sampans transported supplies and troops. All of the rivers were

obstructed by rocks and falls requiring portage around them. An additional method used along the waterways employed the use of waterproof containers and barrels floated down waterways where they were caught in nets at the next transshipment point.

Difficulties for Interdiction

The two main obstacles to effective interdiction on the HCMT were weather and visibility. For much of the wet season interdiction sorties were cancelled, until cloud-penetrating technologies and off-set beacon bombing were introduced by the USAF. The weather cut both ways; NVA truck traffic lessened during the wet season, even with the constant addition of maintenance and repair along their all-weather roads.

The NVA was a master of countertactics to improve its survivability. Road cuts and interdiction points were easily bypassed. Way stations, supply dumps, and facilities were constructed with crude materials from the jungle and if bombed could easily be shifted to new operating sites. Labor gangs quickly filled craters and cleared road cuts, ironically, with fresh dirt provided from the bomb craters. The HCMT was heavily camouflaged. The NVA also employed fake trucks and supply dumps to deceive attacking aircraft. The early warning system along the trail for air attack allowed troops and trucks sufficient time to pull off the roads and paths and seek cover and concealment.

Sufficient repair and maintenance units ensured that most trucks reported as damaged were quickly placed back into service or cannibalized for repair parts.

The growing AA assets emplaced along the HCMT contributed greatly to pulling O-1s, T-28s, AC-47s, A-1s, and eventually the A-26As off operations against the trail due to their vulnerability to AA and ground fires.

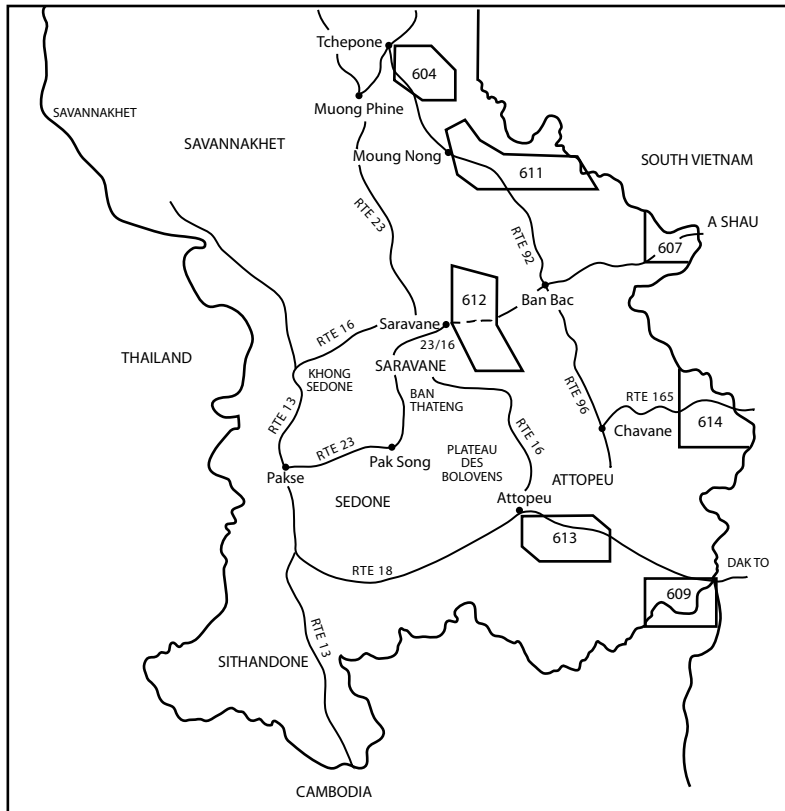


Figure 10.3. North Vietnamese Army bases in Laos. The HCHT was used to cascade men and material through these bases for use in South Vietnam. (Adapted from Soutchay Vongsavanh, *RLG Military Operations and Activities in the Laotian Panhandle*, Indochina Monographs [Washington, DC: US Army Center of Military History, 1981.]

The Rolling Thunder campaign was designed to punish the North Vietnamese, in combination with interdiction of war material at its origin; yet, when it failed to achieve significant results, the United States turned to the interdiction of the HCHT to impede North Vietnamese assets from reaching the south. In 1968 the first of these concentrated air campaigns, in conjunction with covert team insertions along the trail, began. Dubbed Commando Hunt, seven iterations of this operation were launched to cover both the wet and dry seasons.

Notes

1. Nalty, *War Against Trucks*, 5.
2. Schweitzer, *Description of the Ho Chi Minh Trail*, 17–19.
3. *Ibid.*, 11–15.

Chapter 11

56th Special Operations Wing

1967–69

Your message . . . set forth the position, which I frankly expected you to take. . . . It is the fulfillment of our daily, constructive, but essential operations, rather than response to crises, that I have made my dedication proposal for the 56th ACW. I have repeated that proposal to Washington in the hope that authorities there would be disposed to relieve you of some of your priority obligations in other fields in order to aid us in these rather dry pastures.

—Amb. William H. Sullivan
American Embassy Vientiane

On 8 April 1967 Col Harry C. “Heinie” Aderholt got his wish and was selected to command the newly organized 56th Air Commando Wing (ACW) at Nakhon Phanom Royal Thai Air Base (NKP), under the deputy commander Seventh/Thirteenth Air Force, Pacific Air Forces (PACAF). The 634th Combat Support Group (CSG), which had commanded the base, had its subordinate elements subsumed within the 56th ACW. Along with a headquarters element and a CSG element, the 56th ACW consisted of its two operational elements: the 606th Air Commando Squadron (ACS) located at NKP and the 602nd Fighter Squadron (FS) located at Udorn, Royal Thai Air Force Base (RTAFB). The initial six months of operation of the 56th ACW was characterized as growth, both in adding additional air capabilities for the air war in Laos and in construction and expansion of facilities for the airfield at NKP.

Colonel Aderholt received his operational mission tasking from the Seventh Air Force commander. His logistics and support were provided from the Thirteenth Air Force commander. Gen Charlie Bond, deputy commander of the Seventh/Thirteenth Air Force in Udorn, executed both of these responsibilities. General Bond was an old China hand and a distinguished pilot in Chennault’s P-40 Flying Tigers, the American Volunteer Group.

The missions of the 56th ACW included the following:¹

- support and conduct US combat operations and US and/or combined unconventional warfare (UW) operations
- provide readily available aircraft, under US control, to augment the operations of the Royal Laotian Air Force (RLAF)
- provide personnel augmentation to the air attaché (AIRA) in the US embassy, Laos
- provide maintenance support and training for maintenance and supply personnel of the RLAF, to be conducted in Thailand
- conduct civic action programs in Thailand and assistance to the RTAF with these programs
- organize and deploy special air warfare military training teams (MTTs) to both the RLAF and RTAF
- conduct training programs established for the RTAF and RLAF
- provide maintenance of short take-off and landing (STOL) aircraft for the AIRA, Vientiane
- provide base support to assigned and attached units of the Air Force at NKP

As commander of the wing, Colonel Aderholt also had the authority to impose nonjudicial punishment under Article 13, of the Uniform Code of Military Justice, on the US Air Force enlisted personnel assigned or attached to the command. As of April 1967, the 56th ACW consisted of 254 officers, 1,589 enlisted personnel, and 1,484 civilians.²

606th Air Commando Squadron

The mission of the 606th ACS was “to increase the capability of the Royal Thai Air Force; support and fulfill requirements of the Thailand Interdefense Plan; support and train the Royal Laotian Air Force; conduct combat operations as directed; and to assist in fulfilling USAF operational requirements in Southeast Asia.”³

The 606th ACS was also assigned a civic action section. In late May 1967, the civic action section worked with Thai medical officials to launch a medical support boat on the Mekong River. The medical

detachments of both countries used this means of transportation to get to inaccessible areas and villages during the monsoon season.

The 606th ACS aircraft assets consisted of the following: AT-28Ds (Zorros), A-26As (Nimrods), UC-123K (Candlesticks), and U-6As and U-10Ds, both light aircraft. The 606th ACS conducted its combat mission primarily in the Barrel Roll, Steel Tiger, and Tiger Hound engagement areas. By June 1967, the squadron had flown 900 combat sorties with the T-28s, 554 with the Nimrods' A-26As, and 272 Candlestick missions with the C-123K.⁴

In June, all of the U-6A aircraft of the squadron were replaced by U-10s. The light aircraft detachment provided: (1) transport, (2) liaison, (3) psychological operations (PSYOP), (4) transport of classified materials, (5) mail flights to special forces (SF) personnel in Thailand (the 46th SF Company), and (6) support to the civic action team. The C-123s also conducted in-country personnel and cargo transport along with support to the civic action program.

The 606th ACS employed several MTTs:⁵

- MTT-20 at Koke Kathiem RTAFB (T-28 and U-10 training)
- MTT-21 at Chaing Mai RTAFB (T-28 and U-10 training)
- MTT-22 at Ubon (T-28 and U-10 training)
- MTT-23 at Udorn (T-28 and U-10 training)
- MTT-61 at Don Muang (C-123 air and ground training)
- MTT at NKP (RTAF H-43 helicopter training)

Detachment 6, Water Pump, was redesignated as Detachment 1, 606th ACS. Along with providing US piloted T-28 strike missions, as requested by the US ambassador in Laos, Detachment 1 also carried out its primary mission of training T-28 pilots for the RLAf and RTAF. Detachment 1 helped to train the Raven FACs on the T-28 aircraft and provided personnel on a temporary basis to support the air operations centers (AOC) at five operating locations in Laos. In addition, they performed armament, maintenance, medical, and communication functions in support of the various AOC commanders.

The second operational squadron in the 56th ACW was the 602nd FS, equipped with the Douglas A-1E Skyraider. The squadron was known as the Fireflies but when flying the search and rescue (SAR)

mission, they were called Sandy. There were five roles for the 602nd FS when employed:⁶

- provide armed escort for SAR rescue helicopters throughout the Southeast Asia (SEA) theater of war; conduct visual reconnaissance for downed aircrews; serve as the on-scene commander as required; and provide suppressive fires during recovery operations
- conduct visual reconnaissance and strike operations along enemy lines of communication
- provide strike operations for targets in Laos and North Vietnam
- serve as airborne FAC to direct US aircraft on strike targets
- provide escort to classified Pony Express helicopters for insertion and extraction of reconnaissance teams and commando teams throughout SEA

Initially, the 602nd FS provided eight aircraft and crews for SAR alert—four flying daily to NKP and four at Udorn. As time went on and overall USAF assets were downsized in SEA, this would be reduced to two aircraft at each location. The alert lasted from first light to dark, on fifteen-minute notice. Two birds were on alert during the period of darkness. Later, a more efficient use of the aircraft evolved; in the afternoon, the strip alert aircraft took off to general strike sortie areas and loitered. If no requirement arose for a SAR incident, the pilots reverted to a visual reconnaissance role and expended their ordnance on available targets.

Base operations for the 56th ACW consisted of improving old facilities and also new construction. A new steel matting taxiway was opened at NKP on 3 May 1967 with the assistance of Redhorse teams. Facilities for maintenance, a base supply complex, and a new enlisted club were built to improve living conditions.

Air Commando Military Civic Action

From 1964 to 1966, as part of their counterinsurgency (COIN) mission in Thailand, Detachment 6, Water Pump performed military civic action (MCA). Even with the growth of USAF assets in Thailand, Detachment 6 performed the only USAF MCA up to 1966. Upon its arrival, Detachment 6 began a medical civic action program

(MEDCAP) around the environs of the Udorn RTAFB. Not specifically organized to do this function, medical personnel of the detachment conducted those duties voluntarily, in their free time after duty hours.⁷

The Detachment 6 flight surgeon balanced staffing the base clinic along with the extra duties. In December 1964 ad hoc medical civic action teams (MEDCAT) went out from the base up to a week at a time to conduct medical assistance to the Thai people. This would later be expanded to include limited areas in Laos across the Mekong River. MEDCATs performed in this role up to April 1966, when Detachment 6 became Detachment 1, 606th ACS. This was an amazing task, considering the Detachment 6 medical section consisted of two doctors and four medical technicians. One of the detractors to the Air Commando MCA was the lack of support by PACAF to provide vehicles, personnel, radios, and medical equipment to support the only USAF MCA in Thailand. Fortunately, the teams were able to get medical supplies from the charity World Medical Relief, based in Detroit, Michigan.⁸

As noted by Eric D. Roehrkaase in his 2012 master's thesis "US Air Force Military Civic Action in Thailand, 1964–1976: Modernization, US Foreign Policy, and Military Doctrine," Detachment 6 felt it had made a difference, even with its limitations:

The Udorn team continued military civic action activities until May 1966, in cooperation with the Thai MDU [Medical Deployment Units] teams. In the weekly activity reports, the teams identified increased communist insurgent activity, such as assassinations of teachers and village elders, followed by requests from Thai officials for teams to respond to those areas. Despite lack of support from headquarters and the increase in communist agitation, the MEDCAT [Medical Capabilities and Training] personnel felt their work was making a difference. In his report for the week of 14 through 20 March 1966, the flight surgeon wrote, "The goodwill generated in the Thai Government by the MEDCAT visits has been credited with a great deal of the information leading to the arrest of [communist] sympathizers."⁹

Due to a communist-posted reward of 30,000 *baht* (approximately \$1,400 at the time) for the assassination of an American, in May 1966 the Royal Thai government cancelled indefinitely the MEDCATs fearing the capture or loss of life of US personnel.¹⁰

In June 1966 Detachment 6, Water Pump became Detachment 1, 606th ACS (Water Pump). The 606th ACS received its civic action section on 5 July 1966. By this time, PACAF had formalized the USAF MCA responsibility, allowing the civic action section to use foreign

assistance funds from the US embassy in Bangkok (State Department). Detachment 1's civic action section stuck to what Water Pump knew best: medical activities through the employment of MEDCATs.

Activities of the Air Commando MCA, in conjunction with Thai medical personnel, consisted of the following:

- assisting at Thai medical clinics and dispensaries
- providing medical care training to assorted Thai medical staff
- using “medical” riverboats to reach inaccessible areas along the Mekong
- providing veterinary care for livestock

In 1968 Detachment 1's MEDCAT had a budget of \$800,000 and was staffed with almost one hundred personnel. One of these positions, at every airbase in Thailand with USAF assets, was the full-time, base-level MCA officer—the base civic action officer.¹¹

In October 1968 the Seventh/Thirteenth Air Force issued guidance on MCA efforts, which restricted civic action to within 16 kilometers (km) of any base, with a period of twelve months to reach this goal. Civic action for remote areas would be the responsibility of the Thai government. Gen Kriangsak Chomandan, commander of the Thai Supreme Command, felt the need to man MEDCAPs with Thai personnel, consistent with good COIN doctrine. He felt the United States should be in support but not provide the main effort, to ensure the Thai populace saw the efforts of its own government to improve their situation. Moreover, with the massive increase of US military personnel now stationed in Thailand, resentment of Americans was building among the Thai people. Detachment 1's MEDCAT limited its MCA program to providing medical training within the 16-km radius. One of the duties performed by Capt August G. “Greg” Jannarone in 1974, the MCA officer for 56 SOW, was the integration of Thai army doctors and medics into his weekly patrols of the villages surrounding the base.¹²

At the end of the 56th SOW's deployment in Thailand, the civic action team was only involved in giving excess medical supplies and equipment to the Thais.¹³

U-6A and U-10D Detachments

The 56th SOW's STOL and liaison aircraft were heavily used to airlift personnel, deliver supplies and mail, and transport classified film to photo interpreters. A few U-10s were outfitted to conduct PSYOP leaflet drops and PSYOP broadcasts as Operation Litterbug/Loudmouth. Litterbug referred to paper PSYOP products (like leaflets) and Loudmouth referred to speaker broadcast operations. U-10Ds were assigned to support the four most distant MTTs and conducted flights in support of the civic action section. By the end of June 1967, the U-6As were replaced by the U-10D.

The U-10 section flew 167 sorties during the month of June. Along with the missions previously listed, they also performed troop transport missions for the Thai army to move personnel to isolated areas in support of Project Lucky Tiger, a Thai COIN project.¹⁴

21st Special Operations Squadron

One of the measures to reduce North Vietnamese Army (NVA) infiltration down the Ho Chi Minh Trail (HCMT) and provide increased intelligence for interdiction was the placement of acoustic and seismic sensors along the trail. The portion of the sensor barrier emplaced in southern Laos was initially called Muscle Shoals. It was renamed Igloo White in June 1968, after an errant disclosure by a newspaper source exposed the program. The antipersonnel and anti-vehicular barrier was the brainchild of Gen Maxwell D. Taylor, President Kennedy's former military representative, who proposed the idea as early as 1961. Brig Gen Edward Lansdale disagreed with him, proposing small forces of special operations and reconnaissance teams to perform this function, along with an UW task force. In fact both proposals would eventually come to fruition, with Military Assistance Command, Vietnam-Studies and Observation Group's (MACV-SOG) Shining Brass program augmenting the sensor barrier.

With little to show from an overall weighted air campaign to interdict the HCMT and the lack of results from the Rolling Thunder bombing campaign in North Vietnam, both proposals continued to be considered by the Department of Defense. In 1966 defense analysts working on solutions to stop the flow of men and arms into South Vietnam piqued the interest of Secretary Robert S. McNamara. Harvard

professor Dr. Roger D. Fisher and Assistant Secretary of Defense John T. McNaughton convinced McNamara of the utility of a physical barrier that would preclude the need for a bombing campaign in North Vietnam, which was increasingly coming under protest in America. The Army proposed an unworkable solution, an array of five Army divisions on the border in consort with a physical barrier.¹⁵

Of all the possible solutions, combining electronic technology with air interdiction formed the most feasible and immediate means. The concept hinged on combining a detection capability for NVA vehicular and foot traffic and employing denial weapons, all followed by interdiction with airpower. P-2 Neptune aircraft would seed the sensors, and the A-1 aircraft was chosen to seed “gravel” mines for the antipersonnel component. Dragontooth mines would be employed for the antivehicular component. The concept was completed by electronic monitoring aircraft (EC-121s) that would orbit and receive pings from the sensors and relay the information back to a collection center at Udorn. Follow-up targeting with airpower employed cluster bomb units (CBU) and then coverage with reconnaissance flights to conduct battle damage assessment (BDA). The project was to be placed under the command and control of Task Force Alpha, commanded by a USAF brigadier general.

In September 1967 Secretary McNamara pushed the concept for initial activation. The airpower requirements to implement the concept, a vast armada, included twelve CH-3Cs to seed the sensors. This would provide the impetus for the creation of the 21st Helicopter Squadron (HS).

Two types of sensors at Eglin AFB, Florida, were tested by the Tactical Air Command and Air Force Systems Command in August 1966. An acoustic sensor was developed from a Navy acou buoy, delivered by parachute or dropped to the ground, implanting itself with a spike. The second sensor was seismic—the air-delivered seismic intrusion detector (ADSID)—with a variant to be delivered by the CH-3Cs from a specially equipped pod, the Helicopter-Delivered Seismic Intrusion Detector. Along with activating the new CH-3C squadron for sensor emplacement duty, the Navy modified the Lockheed P-2 (now the OP-2E) and formed a detachment to support the project, while the USAF prepared EC-121s for the electronic monitoring of the overall sensor system.¹⁶

In preparation for the launch of Muscle Shoals (Igloo White), a program initiated by Secretary McNamara to develop a system to

interdict the flow of North Vietnamese forces into South Vietnam, the 21st HS was formed on 15 July 1967 at Shaw AFB, South Carolina, commanded by Lt Col Harry Hauser. The unit—named the “Dust Devils” and flying under the call sign Dusty—was equipped with eight CH-3Cs and began training with the sensor pod arrangement on the helicopters. They arrived at NKP in November–December and were assigned to the 56th ACW. The squadron was reinforced with three CH-3Cs from the 20th HS in South Vietnam. (It was at this time the CH-3Cs were being upgraded to CH-3Es, basically with a more powerful engine and weapons pod.)

There were concerns to successfully make the September start date of the project at all levels of the military, from the Joint Chiefs of Staff (JCS) to the war theater. Delays in arranging the air fleet, solving sensor technical problems, and building and establishing the Task Force Alpha facility at NKP as fully operational all contributed to a delay in the start date of Muscle Shoals. After input from his subordinate commanders, McNamara remained somewhat firm to get the project started but was flexible for a start date of 1 November as recommended by Gen William Westmoreland. This was soon changed to 1 December 1967 with an alternate start date of 1 January 1968. USAF Gen William P. McBride was appointed by Secretary McNamara to command Task Force Alpha, putting it under the control of the deputy commander, Seventh/Thirteenth Air Force in Udorn.¹⁷

On 1 November the A-1s (Hobos) of the 1st ACS were moved from South Vietnam to NKP for the Muscle Shoals’ gravel mine seeding effort; they were also assigned to the 56th ACW. This gave the wing three operational fighter assets: the 1st ACS (Hobos), the 606th ACS’s (Zorro detachment), and the 602nd FS (Fireflies/Sandys).

A first test of Muscle Shoals was initiated in late November with the OP-2Es delivering sensors. Muscle Shoals had two components: the first, named Mud River, was antivehicular near Mu Ghia Pass in the Steel Tiger sector; the second, named Dump Truck (an allusion to sowing the gravel mines), was located near the demilitarized zone and the border with Laos. The 21st HS was assigned missions in both areas and was redesignated 1 August 1968 as the 21st Special Operations Squadron (SOS) once attached to the 56th ACW. With the addition of the three CH-3Cs from South Vietnam, the 21st SOS now consisted of twelve CH-3Cs.

By the end of December 1967, Muscle Shoals was effectively working. On 27 December, A-1s dropped their first gravel mine, the XM-41.¹⁸ The

21st HS performed dual missions: the emplacement of seismic detectors and the infiltration of Prairie Fire Spike teams. US special forces led seven- to nine-man teams to hand emplace sensors. In January 1968 Muscle Shoals was diverted from HCMT activities to assist in the US Marine Corps (USMC) defense of Khe Sanh. At this point, the 21st HS commander and his crews had adapted to a more feasible tactic to ensure accurate sensor emplacement, hand dropping them from the helicopter. A 21st HS CH-3C successfully employed this technique on 20 January in the Khe Sanh area. These operations were flown over several days to support the USMC.

Jim Henthorn was assigned to the 56th ACW at NKP serving as a weapons mechanic. Prior to joining the Air Commandos, he served in Iceland with the 57th and 59th Fighter Interceptor Squadrons. Although he volunteered for Vietnam, he was put on orders to deploy to NKP. Desiring to serve in the 21st HS, he arrived in early December and was assigned to the armaments shop of the 56th ACW, the 456th Munitions Maintenance Squadron. Once the 21st HS's helicopters arrived for Igloo White, he transferred into the unit as a volunteer door gunner on the CH-3s.

The 21st HS's CH-3Es were armed with an M-60 machine gun mounted on a crossbar at the crew door and a tactical armament turret (102B) mounted on a pylon. The normal load out was a gas pylon on the left and the gun on the right, with 7,000 rounds of 7.62-millimeter (mm) ammunition. Due to lift parameters that constrained flight while operating in humidity and high altitude, Henthorn only flew a mission if the weight allowed him to. Henthorn lists the variety of missions he flew with the 21st HS:

We emplaced the systems sensors for Igloo White; we did not ferry troops or conduct rescue missions. We also did some "ash and trash" for the 46th SF in Thailand. We went one time to Camp Cloudy to help them with an airborne operation. Sometimes we would go on training missions to train gunners, and sometimes just flew cross-country missions. We also flew into Long Tieng with shuttle runs. We did two back-to-back missions into North Vietnam for Igloo White sensor placement.

We did not support the Thai COIN program, the Lucky Tiger deployment. We also flew night perimeter patrols around NKP to look out for insurgents, using a starlight scope. We chased down rumors of a Russian helicopter flying around. We had a ten-foot chain; I would hang down head first from the crew door, and if we ever saw the Russian helo, we were supposed to drop the chain onto its blades and down it! But primarily, we flew Igloo White. (I also participated in

Heavy Hook in March of 1969.) We did some resupply into Laos—like fuel for the Americans in there. We did not do too much with the Laotians.¹⁹

CH-3E sensor-dropping missions were performed in a two-helicopter formation, escorted by A-1s. The lead bird flew low and dropped the sensors. The crews eventually discovered they did not necessarily have to hover in a static position and could fly slowly forward as a member of the crew hand dropped the sensors. The second CH-3E flew protective escort not only as a safety measure but also to recover the first helicopter crew if it was downed.

Jacob Van Staaveren calculated the results of January's Muscle Shoals efforts in his work, *Interdiction in Southern Laos 1960–1968*:

By the end of January, the CH-3 helicopters and the Navy's Lockheed OP-2Es had dropped 316 sensors in 44 sensor strings for the initial DUMP TRUCK tests and for Khe Sanh's defense. The sensors consisted of 171 ADSIDs, 86 parachuted acoubuoys, and 59 spike acoubuoys. However, not until January 25 did an A-1E sow its first load of button bomblets or mines. . . .

Despite difficulties due to over-activation of sensors and the later dispensing of gravel mines, 282 strikes were made on enemy trucks and personnel in both the MUD RIVER and DUMP TRUCK areas during January. The strikes destroyed or damaged an estimated 79 trucks, caused scores of fires and secondary explosions, and killed numerous enemy troops.²⁰

Igloo White Missions

Jim Henthorn describes a mission profile for the 21st HS:

We usually had six sensors per string. The communications troops on the base prepared them and delivered them to the chopper on the flight line. There were two different types of sensors, seismic and acoustic/audio. The audio sensors produced recordings monitored by the TF-ALPHA guys at NKP. One time I listened to one where a guy fell out of a tree, screamed, and then we could hear the thud when he hit the ground!

I did not go to the crew briefs for the missions. The aircraft commander would meet us at the bird and brief us the details with a 1:250,000 map. We would also discuss our E&E plan.²¹

On a typical mission, the 21st HS flew in a two-ship formation, with at least two to four A-1s as escorts. The A-1 escorts flew a racetrack around the CH-3s, sometimes close in and sometimes further out. There was a launch system for the sensors on the CH-3E, whereas the seismic sensors were hand-launched. There was a camera mounted on the outside of the helicopter so that the sensor

emplacement could be recorded. (The maps used during these missions could be off by up to a km; the film helped to ensure the accuracy of the location.)

Jim Henthorn describes the Igloo White missions:

When we were starting the Igloo White mission, which was the squadron's designated mission, we would hover over one place, drop sensors, and then move to the next place. Colonel Hauser nixed that technique because he felt we would be too much of a target. He predicted that we would have 60 percent to 70 percent losses. We had a lot of losses. This is why the 20th's CH-3s were incorporated into the 21st.

There was no threat on the missions I flew. But, on May 23rd, 1968, we lost our first helo to ground fire. The escort birds had to destroy the aircraft to protect the loss of the sensor technology, and there were no survivors.

I did both jobs on these missions, as a gunner and sometimes as a sensor launcher. The system was a bit above a jury-rig. The pilot on the right seat had to hit a trigger switch to fire the sensors. Sometimes they misfired, so we would manually fire the system. I fired them a few times. We flew about 110 knots, about 10 or 20 feet over the trees to emplace the sensors. I fired the gun occasionally, but mostly as a suppression method.

We stopped the sensor emplacement mission around December of '68 or early January of '69. The squadron then picked up the Heavy Hook mission [support to MACV-SOG Prairie Fire missions launched from Udorn]. During the bombing halt of North Vietnam, the NVA used that opportunity to emplace more AA, AAA on the Trail region. We could hear the radar from the ground in our headsets for the ZSU-23 mms—a buzzing sound. I have a picture of a helo with a hole in the tail where the round went through.²²

After increasing losses, an aggressive assessment was conducted into the vulnerability of the CH-3s to ground fire on the HCMT during sensor drop missions; in addition, F-4s were now operating in this role in effective numbers. The 21st HS was phased out of the sensor drop mission, and it began to operate more effectively in a special operations role. The 21st HS began to augment the 20th HS in the Prairie Fire mission and in the transport and support of *Forces Armées Royales (FAR)* troops in Laos; the 21st HS began using the call sign Knife. Later in the war, the 21st HS would be equipped with the CH-53C helicopter.

56th Special Operations Wing in Laos, 1967–69

From April through June 1967, the 56th flew nightly A-26A sorties on the northeastern portion of the *Plaine des Jarres (PDJ)*, working in

conjunction with ground forward air guides (FAG). A-26As, T-28Ds, and C-123Ks from the wing flew night interdiction attacks against the HCMT. The 20th HS continued to support covert team infiltrations.

Capt Noah E. “Ed” Loy, T-28D Zorro, Night Interdiction

In March 1967 Capt Noah E. Loy was assigned to the T-28D section of the 606th ACS at NKP. He was serving as a forward air controller (FAC) and air liaison officer in South Vietnam when he got his orders.²³

He arrived to Don Muang Air Base in Bangkok and was met by Colonel Aderholt, the soon-to-be 56th ACW commander. They flew to NKP in one of the unit’s U-10 Helio Couriers, and Capt Loy secured quarters for the night. The next morning he met Colonel Aderholt and the 606th ACS commander, Lt Col Joe Price, and was informed about the mission of the T-28s in the 606th ACS.

Although Loy anticipated he would become an O-1 FAC due to the shortage of pilots for the Zorros’ night interdiction missions, he was assigned to 606th ACS because of his T-28 experience. In the previous year, he had been an instructor pilot for the T-28s in the Military Assistance Program (MAP) at Randolph AFB, Texas. He conducted a short transition program to refresh himself with the T-28 and flew his first night combat missions on 14 and 15 April 1967. He was certified as a fully operational AT-28D pilot and as a FAC on 16 April.

Earlier in April, the AT-28Ds of the 606th ACS became the “Zorros” upon the formation of the 56th ACW. The name was chosen from a Seventh Air Force designated list of call signs—the unit had requested “Sabre” but found out it was already chosen by an F-100 unit. Ed Loy was present in the wing mission planning and briefing room when Capt Tom Deken, one of the 606th ACS’s instructor pilots, recommended “Zorro” for the call sign to Colonel Aderholt and Lieutenant Colonel Price: “Captain Deken told them that ‘Zorro’ would be a great call sign because it represented a hero who performed good deeds fighting bad guys at night. They both agreed and a message was sent back to Seventh Air Force requesting ‘Zorro’ to be the 606th ACS AT-28D call sign.”²⁴

To further the image of the Zorros, the T-28 pilots wore black flight suits and designed a distinctive patch for the unit: a red eye mask

with a red saber slashing across it, overlaid with the word “Zorro” in white letters.

Now retired, Brigadier General Loy provided a description of AT-28D night operations in his article, “A Zorro Tale.” The T-28 night interdiction was conducted as a single-ship operation, taking off at dusk and flying armed reconnaissance over the HCMT area. The mission averaged one and a half to two hours, but could go longer with an external fuel tank. Once a sortie was complete, another T-28D Zorro cycled in, giving coverage over the HCMT until the early morning hours.

A Zorro could work in conjunction with a flareship or drop its own flares, two at a time to prevent a possible dud. Pilots quickly learned to drop flares to burn between them and enemy anti-aircraft (AA) guns, a technique to throw off the gunner’s depth perception. The attack run-in was opposite of the moon or parallel to the road or track during limited visibility conditions. A Zorro pilot then chose an appropriate dive angle to deliver ordnance. The best method for hunting the HCMT was in conjunction with an O-1F FAC, using a starlight scope, the hunter, and the AT-28D as the killer. Due to its inherent slow speed, the FAC took off a half hour earlier than the Zorro pilot, and then the aircraft were vectored together by the radar and tactical control and navigation (TACAN) systems used at NKP. The Zorro flew above the FAC pilot and kept a 1,000-meter separation in the air, ensuring the pilot could see its shielded navigation lights on top. Once the backseater in the O-1F identified a target through the starlight scope, the Zorro maneuvered for his dive, conscious of where the O-1F was in the air. If visibility was good, FACs could talk the Zorro into the target; however, targets were typically marked with flares or rockets. Once the Zorro began his maneuver, the FAC ascended to keep altitude separation.

Zorros dived to their targets with a head-on pass, firing their .50-caliber machine guns or dropping CBU bomblets, with the aim to kill truck drivers. To bottle up a convoy, Zorros sought to disable or destroy the first truck and the last truck, blocking the trucks in between from escaping. If the target was large and lucrative, napalm was used to ensure wider destruction. Always aware of ground fire, Zorros and FACs constantly adjusted their flight patterns. Other strike aircraft could be vectored in to either participate or takeover the attack, given the size of the target.²⁵

The hunter-killer operations were conducted on the team's nightly assigned segment of the HCMT. If no trucks or vehicles could be found during the mission ordnance was delivered on preplanned or suspected area targets, such as a truck park or storage area. Captain Loy was accompanied by Colonel Aderholt on one of his night missions against the HCMT. In August 1967 Aderholt and Loy's mission was to cross the Mekong River and join up with their assigned FAC. Fifteen minutes into the flight the FAC located trucks moving along the HCMT. Loy lined up for the attack using a shallow dive, head-on; he did not use his flares. In his first pass, he strafed with his machine guns and dropped CBU as he passed over the trucks.

Antiaircraft fire arose from two directions. Loy dropped some flares to confuse the gunners and climbed to position himself for a high-angle dive. He dropped M-35 cluster firebombs at each end of the convoy and released more flares to keep the target illuminated. Aderholt and Loy took AA fire throughout the ten-minute attack. Colonel Aderholt confirmed four trucks destroyed, with others having turned off into the trees. Loy flew back up to the FAC's position and loitered while they awaited an A-26A from the Nimrods. The two watched some of the initial strikes from the A-26A, and then returned to NKP. As a result of the flight, during debriefing, Captain Loy was able to speak with Colonel Aderholt about his next assignment, the 55th Tactical Fighter Squadron, 20th Tactical Fighter Wing at Royal Air Force Wethersfield in the United Kingdom. Said Loy, "That news made this flight with 'Air Commando One' my most memorable flight at NKP."²⁶

Other Events, 1967

In the summer of 1967, Water Pump received the first two Hmong pilots for training. In the fall of 1967, the TSQ-81 radar was installed atop Phou Pha Ti, Lima Site (LS)-85. The radar was a key factor in ensuring the accuracy of bombing in the northern route packages of North Vietnam—Commando Club sorties. It also assisted strike aircraft in Barrel Roll. The radar site would soon become a potential target for destruction by the Pathet Lao and NVA operating in the Sam Neua Province.

Pony Express CH-3Es supported insertion of "Echo" action teams—Trail watchers—operating in the Route 23/Route 911 area.²⁷

On 28 December three CH-3Es inserted a company-sized element of the 1st Special Guerrilla Unit (SGU) in military region (MR)-IV to probe south of Attopeu, sparking a reaction by enemy forces. This area had been deemed quiet, with the Royal Lao Government (RLG) forces and NVA operating on a mutually accepted agreement to not disturb the other; the action by the Lao military upset the status quo.

The three Pony Express CH-3Es joined Air America helicopters at Pakse Site (PS)-22 and infiltrated the SGU company south of Attopeu without incident. They remained overnight at PS-22, as the SGU was scheduled for exfiltration the following morning. Maj Kyron Hall led the helicopter armada to the helicopter landing zone (HLZ) into what transpired as a “helicopter trap” set up by the enemy.

Hall landed and began boarding troops; Maj James Villoti landed immediately after, followed by Air America’s Bell Hueys. Intense fire broke out at the HLZ, both small arms and mortar fire. While the Air Commandos awaited assistance from A-1s that were inbound, the guerrillas returned fire. Although Hall remained unscathed after he took off with a load of guerrillas, Villoti was not as fortunate; his helicopter was hit in the windshield. He also had trouble taking off with the weight of the troops; however, after shifting them forward inside the helicopter, he was able to gain lift and exit the hot HLZ.²⁸

By the end of 1967, the 20th HS began receiving the UH-1P version of the Huey helicopter—the “gunship.” The UH-1P was armed with two GAU-2B/A miniguns and two LAU-69A 2.75-inch rocket launchers (seven rockets in each tube.)²⁹

Jets versus Props—Sullivan Seeks an Air Force

By September 1967, the first analysis of the effects of Operations Rolling Thunder, Barrel Roll, and Steel Tiger was apparent. Rolling Thunder was primarily a bombing campaign designed to punish the Democratic Republic of Vietnam (DRV) and coerce it to stop its support to the wars in South Vietnam and Laos. The bombing in the north had presidential interest, as it was tied to Pres. Johnson’s war policy; sorties into North Vietnam had high priority. The DRV absorbed the punishment; the support to communist troops throughout the SEA theater continued unabated.

There were a couple of problems with Seventh Air Force’s claim of supporting northern Laos with daily sorties. Any aircraft still with

remaining ordnance returning from the Rolling Thunder mission were often diverted to Barrel Roll. Aircraft loaded with iron bombs did not make the best interdiction capability on area targets or support for troops in contact (TIC). Diverted or returning Rolling Thunder jets flew through the Barrel Roll area momentarily, forcing FAGs and FACs on short notice to throw targets of opportunity their way, not necessarily using the sortie in a calculated, tactical manner, which did the most good. Additionally, diverted sorties were unpredictable; one day might bring several aircraft, and then a whole week might go by without any additional strikes in Barrel Roll.

The Steel Tiger interdiction of the HCMT also had a high priority. It directly supported General Westmoreland's strategy for the prosecution of the war in South Vietnam. In the eyes of some pilots, flying there held more excitement and chance for combat rather than trolling further north in Barrel Roll.

The embassy in Vientiane thus perceived that support to Gen Vang Pao in MR-II was last in priority, with only limited sorties apportioned by the Seventh Air Force. Other factors exacerbated this situation. Sorties in support of the FAR were almost exclusively flown by the RLAf with their T-28s. However, RLAf T-28 air support did not extend materially to the Hmong guerrilla force. Sullivan's rules of engagement (ROE) also complicated what USAF targeteers and planners really wanted to accomplish with airpower.

What did impress Sullivan was the limited sorties flown by the A-26As and the A-1s in MR-II, with their long-loiter times, area effects ordnance, and night-flying capability, plus the ability to self-FAC. Statistically, A-1s and A-26As, in conjunction with the C-123K Candlesticks, proved to be the most effective interdiction and truck-killing platforms in the first seven months of 1967. Some of this was due to low altitudes flown to get the greatest effect from their weapons and ordnance; the closer to the target, the better the accuracy. Jet aircraft flew at higher ceilings when delivering ordnance.

Another contributing factor to delivering air strikes effectively throughout Laos was the lack of an overall air component commander to centralize air efforts and use available airpower apportioned on "big picture" requirements. As a means of direction and control, the ambassador and his AIRA could exert influence on the RLAf yet had no control over Seventh/Thirteenth Air Force's assets. However, they did have some say through the ROEs on how and where strike aircraft were utilized. Conversely, the Seventh/Thirteenth Air Force had no

control over RLA operations or the activities of the CIA. General Westmoreland had almost no say or control of air assets used in Laos (except in Steel Tiger). Ambassador Sullivan wielded a big stick from former president Kennedy's directive that absent a US ground force commander in Laos, the ambassador would control US military operations.

There was also a long-term issue looming over the horizon. The numbers of remaining propeller-driven aircraft in the USAF inventory worldwide, their growing obsolescence, prop aircraft lost to the war, and lack of repair parts all dictated that the USAF would need to be an all jet force by the early 1970's. The one bright spot that could be supported was the A-1—there were plenty of these airframes in the inventory.

Thus, a dilemma existed for Ambassador Sullivan and the Seventh/Thirteenth Air Force. As lethal AA fires began to force propeller-driven aircraft from the day skies over the HCMT (and would eventually force off the AC-47s, C-123s, A-1s, T-28s, and A-26s, which began flying at night to increase survivability), Sullivan saw a solution to his lack of dedicated air sorties to support MR-II and the Hmong guerrillas. Aderholt's "Sopwith Camel Company," a term used by Ambassador Sullivan to spike the ire of the Air Force, would provide the perfect, tailor-made solution if only the 56th ACW's assets could be retasked under the direction of the embassy. (It is known that Ambassador Sullivan and Colonel Aderholt had extensive conversations on this concept; Sullivan was a big advocate of the Air Commandos and their COIN platforms. Aderholt was an aggressive and innovative special operator and pushed his relationship with the ambassador and the Agency in order to expand operations for the wing.³⁰)

The jet versus propeller controversy came to a head in September 1967. A study prepared by the Aeronautical Systems Division for systems analysis concluded the following: prop aircraft were ten times more effective for interdiction of truck traffic than jets; however, prop aircraft inventory and prop aircraft losses combined would effectively force the Air Force into an all jet configuration beginning in the 1970s.³¹ Inexplicably, the study recommended the introduction of two additional A-1 squadrons, along with F-4s, as the most feasible course of action. In fact, the addition occurred with two more A-1 squadrons added to the 56th. The A-1 was one of the few propeller aircraft the USAF seemed to like: rugged, effective, and survivable.

Ambassador Sullivan gladly pointed to the study as supporting his position for more sorties into northern Laos with prop aircraft. After all, Thailand-based 56th ACW assets could not be used much other than in Laos. Gen William W. Momyer disagreed; only jets could strike the length of enemy targets, from North Vietnam down thru the HCMT, and have the survivability to penetrate the ever-increasing AA defense being thrown up at strike aircraft. Organizationally, the USAF would have to standardize with jets and not waste effort on specialized propeller aircraft. The lines were drawn on the jet versus propeller debate. No one in the formal military chain concurred with Ambassador Sullivan's logic.³²

Ambassador Sullivan counterattacked, providing the State Department a study generated from his AIRA's office on 27 December 1967. Its opening statement read, "The air support requirements in Barrel Roll stem primarily from the needs of the forces commanded by General Vang Pao."³³

The study further explained those requirements emanated primarily from the need for close air support (CAS) for TIC vice interdiction of fixed targets. The AIRA's study found jet aircraft to be unsuitable to the task. In summary, the study fundamentally recommended the use of the A-1 as "indispensable." It also recommended additional F-100 sorties, as these aircraft squadrons were well versed and trained in delivering CAS. The Department of State deferred decision to act on the study; this was the domain of the JCS. Secretary McNamara voted to come down on the side of his military field commanders. Sullivan went public, citing the lack of air resources for targets in Laos and asking for a relook of the matter, with the goal of gaining more air support. He fired off a message to the Seventh Air Force: "We have for some years now been attempting to conduct a counter-insurgency program in Laos with an absolute minimum of US involvement. . . . The most striking and conspicuous, as well as the most effective input, has been . . . the USAF. During these past three years, we have tried several variations of administrative control to match these air resources with our guerrilla operations. . . . However, no matter what we have done, the result has always . . . been makeshift and patchwork."³⁴

Sullivan went on to explain that the Seventh Air Force basically provided spare aircraft from other operations and, thus, had no formal apportionment he could depend on for strikes throughout Laos. He advocated military operations in Laos should have dedicated air units. His solution to the Seventh Air Force was dedicated sorties

from the 56th ACW—its T-28s, A-1s, and A-26s. It was no surprise General Momyer refused to support Ambassador Sullivan's concept, yet there would be *some* improved, combined planning efforts among the players, resulting in the increased use of the 56th's assets.

1968

In 1968, Shining Brass became Prairie Fire. The renamed 20th SOS and the 21st SOS supported the infiltration and exfiltration of MACV-SOG teams throughout the length of the program.

The Pony Express and Prairie Fire Mission

The anti-infiltration campaign against the HCMT had three components. Along with an aerial campaign and the sensor placement, General Westmoreland advocated for boots on the ground to conduct reconnaissance and ground operations on the Trail. Earlier efforts to use South Vietnamese special forces and Montagnard tribesmen in Operation Leaping Lena—infiltration into the Laotian Panhandle—did not meet with much success. Ambassador Sullivan was not impressed with the effort. It was clear to Westmoreland that in order to gain ambassadorial support for future incursions into Laos, the operations would require anti-infiltration teams to be led by Americans. Sullivan thought any “invasion” of large military units was impractical. He also believed neither the US Army Special Forces stationed in Thailand nor the old Kha guerrillas trained by White Star teams would be practical either. In 1965, only the Thai, Hmong, and Laotian road watch teams were used for reconnaissance; however, they were limited to the western edges of the Trail and could not support Westmoreland's desires for action on the South Vietnam (SVN) border with Laos.

MACV proposed Shining Brass: US Special Forces-led teams, supported with air assets from South Vietnam. With several restrictions imposed by Ambassador Sullivan (limited penetration into Laos and limited use of helicopters for insertions), incursions began in a few limited zones to collect intelligence, designate targets for air strikes, and conduct harassment and subversion operations.³⁵

Over the next two years, the counterinfiltration program grew in scope and intensity. To run the program, the Studies and Observation

Group (SOG) was established and stationed in Saigon. To infiltrate MACV-SOG teams from Thailand, the 20th HS positioned a flight element of CH-3Cs at Udorn, under its call sign Pony Express. The Prairie Fire detachment, for launching and recovering SOG teams at Udorn, was called Heavy Hook. For the conduct of a mission on the Trail once a SOG team was tasked with a mission, it was flown from their command and control site in SVN to Udorn on a C-130, designated "Blackbird." Heavy Hook received 20th or 21st helicopter assets of the 56th SOW fraged by the Seventh Air Force's director of special activities. At the peak of its operations, the 56th SOW provided three helicopters and four A-1s from its squadrons as a standard package for infiltration of the teams; the 23rd Tactical Air Support Squadron provided FACs.

In 1968 Maj Bill Shelton was the Prairie Fire, Heavy Hook detachment commander. He provided a description of an insertion in Robert R. Arnau's "Knife Tales," a recollection of Arnau's duties as a pilot with the 21st SOS. In that piece, Shelton wrote the following:

Targets were assigned to a recon team (RT) by MACV-SOG, Saigon. A 6 kilometer by 6 kilometer "no strike" box was put on the center of the target, before the team was inserted. Several days before insert, one of my troops would fly out with the FAC, taking 35mm hand-held photos of the route to the target, the target HLZ, and the planned route back. The film was immediately developed in our small photo lab, made into slides. The mission FAC and team were briefed as soon as possible. On the day of the insert, one of us would brief the aircrews at 56th, showing the slides, and make final preps. We had even developed a "silent" insert technique, where no radio transmissions took place from take-off until the teams were on the ground and broke squelch to let the insert aircraft know they were OK. Capt Jay Mertz of the 21st SOS flew lead helo on the first of this type insert. I think I was in the FAC, and we were orbiting several miles away from the HLZ. The 21st birds were in and out of the HLZ before I could get back to the actual site.³⁶

Major Arnau was surprised to receive orders assigning him to duty in SEA, flying CH-3Es. (He was a fixed-wing pilot in Europe in 1968.) He conducted his transition at Sheppard AFB, Texas, and reported in to the 21st SOS. At the time of his arrival, the unit was being pulled off the sensor placement mission and began the Prairie Fire mission. Arnau described his role during Prairie Fire:

As to the ambassador's SOF, one of our jobs was to insert Lao roadwatch and recce teams. The difference in these guys and the Prairie Fire/Heavy Hook missions was night and day. On the MACV-SOG missions, there was also a

couple of US Army SF along with the indigo (two SF, four indigo teams). They were very professional and experienced.

We used Knife call signs. The three helicopters used for Prairie Fire missions were Knife 51 (lead bird), Knife 52, and Knife 53. Our squadron nickname was Dust Devils.

There was one occasion I had to go back after dropping the team off and do an emergency evacuation. (Every mission I flew for Prairie Fire involved threat, emergency evacuations, in comparison. Most threats were with MACV-SOG missions, during extraction. All of those missions were ended in emergency extractions.) After I had dropped a team off one day, we were about halfway back to NKP when we got a call that they were in trouble. The guy on the radio was yelling, "Beaucoup VC! Beaucoup VC!" Of course, it was NVA.³⁷

Arnau also transported Lao reconnaissance teams:

The Lao teams were about fifteen to twenty soldiers; they weren't very clandestine. They took in pots and pans and other living accouterments. We normally flew these missions with four A-1E escorts; we flew in a three-ship CH-3 configuration (for all the missions). The thing about the Sikorsky helicopter was that it loses its effectiveness (lift) at high heat and humidity and in thin air at heights/altitude over the ground. Our experienced pilots flew the lead ship.

Our normal day, when fragged for a mission, would be one of leaving NKP and going across the river to a camp, about twenty miles south inside Laos. The CIA had a large training camp where the SGUs and recon teams were housed and stationed. We flew over in the morning, not early, to give them enough time to get started, organized and prepared by our arrival. We boarded the troops and always had someone who could speak Lao on board, usually a civilian. We flew to drop off zones that weren't considered hotspots; they were in enemy controlled territory, but nothing of the threat we experienced with Prairie Fire missions. I experienced bullet holes in my helicopter all the time (mostly near HCMT missions). Helos were always being shot down, or crashed, hitting trees, etc. I did not lose a single crewman during my missions. We never got over the HCMT.

Sometimes we split the load of the recon teams into two helicopters, so we could maintain hover effect at the higher altitudes. When the Lao recon teams were finished with their mission, we flew in around noon to pick them up. I flew different missions every day; we did not have a certain designated pilot to service, just the team he inserted. Lao team insertions we made were usually in the Panhandle area of Laos.

When inserting or lifting out Lao recce teams down south, I worked with a FAC in an O-2. He normally had someone with him from Udorn who could talk to the guys on the ground. It was very hard to find teams in that jungle cover. Anyway, they would talk and fly around till they figured out where the

team was, then have the team pop some smoke; by that means we could vector in the helicopters.³⁸

(Major Arnau also flew lift missions in support of Gen Vang Pao on the *PDJ* and was involved in the evacuation of Moung Soui. He also flew the mission to assess recovery of a downed A-1D on the *PDJ*.)

On 4 January, two T-28s were destroyed by the 41st Dac Cong's mortar attack on the Luang Prabang AOC, in an attempt to relieve pressure off the Pathet Lao and NVA forces under aerial attack near Nam Bac. Two CH-3Es inserted a large force of Commando Raiders into the Dien Bien Phu area to harass enemy forces on 5 January. Part of the insertion was conducted by four Air America Bell Hueys. Ben Densely, who earlier served in MR-II as a special forces team member near Khang Khay in 1961, left the Army to fly helicopters with Air America and was one of the Huey pilots. Not being very successful and soon chased by NVA hunter teams, the raiders were extracted by A-1—supported CH-3Es on 7 January, albeit minus their team leader. On 8 January, the team leader was located and extracted, and the following day, the Battle of Nam Bac began.³⁹ During the battle, the USAF and RLAf supported RLG forces with strikes along Route 19.

On 12 January, two AN-2 Colts attacked the radar site at LS-85 (Phu Pha Thi): one was shot down by gunfire from an Air America Bell UH-1; the other was also hit by ground fire and appeared to crash near the border. The AN-2s were modified to carry ordnance and drop mortar shells from a box in their cargo hold. This incident, combined with aggressive road construction and enemy movement towards the site, signaled the pending doom of the isolated asset.

During the siege of RLG forces at Nam Bac, the NVA introduced 122-mm rockets for the first time in Laos. As the RLG forces became more isolated and surrounded, they began to flee. Nam Bac fell on 16 January 1968, with a loss of over 2,500 troops, most captured to become prisoners of war. Over \$2 million of US MAP equipment was lost, including mortars, recoilless rifles, artillery, and other military equipment and supplies.

In February the USAF conducted strikes in the vicinity of Phou Pha Thi to support the radar site. One Air Commando combat control team operative deployed to control air strikes. In March Gen Vang Pao was promoted to major general. The inevitable attack on Phu Pha Thi came on 10 March. Sgt Roger Huffman, the combat controller (CCT) assigned to the site, directed air support provided from

two A-26As. After a surprise attack atop the mountain from its cliff face, the site fell to the enemy.

The following day, Sandy 1 and Sandy 2 of the 602nd A-1E squadron, supported by a Raven FAC, attacked the site with 20-mm cannons to kill any remaining enemy forces atop the mountain. After their cannon run, the Sandys bombed the site with CBUs and bombs in an attempt to destroy any remaining radar equipment and classified material. Sandy 2 (Lt Col Louis Bechtold) then went on to support the ongoing defense of the helipad on the lower slope; an errant bomb hit the friendlies at the helipad. Major Huffman was at the helipad when the bomb landed but was unscathed and later extracted. Another four-ship sortie by the 602nd arrived, led by Lt Col William Palank, and bombed the radar site once again. To replace the loss of LS-85, a new TACAN site was established at Nha Khang (LS-36). Without a doubt, this too would become a future target for the NVA.

With President Johnson's bombing halt of North Vietnam in place, cancelled sorties from Rolling Thunder were utilized in the Barrel Roll area. In April, Gen Vang Pao, supported by these additional air assets, attacked to the east of Nha Khang to clear the People's Army of Vietnam (PAVN) forces. The enemy attempted to position forces for an attack on LS-36; however, they were thwarted by the onset of the rainy season (and the aerial pummeling).

On the southern sector of the *PDJ*, the two Hmong pilot graduates flew their first combat mission with Thai B-Team T-28s on strikes near Tha Thom and the Moung Ngan Valley. This was another offensive thrust of Gen Vang Pao's to clear enemy forces off the *PDJ* during the wet season. Ly Leu watched as his colleague crashed into a mountain when pulling off a bomb run. With the apparent successes of Vang Pao's limited wet season operations, the USAF extended its sortie support.

In March 1968, the *FAR* went through reorganization. Ground teams north and south were abolished. Phoumi Nosovan established MR-VI and MR-VII to create more general officer positions as patronage; however, the MRs were realigned back into the original five. The *FAR* also abolished the *Groupe Mobile* system after it was determined to be too bulky to be supported by what logistic capabilities existed in the *FAR*. As a result, each MR would employ independent battalions, forming them together as tactical groupings when necessary.

In August 1968, all Air Commando squadrons in Thailand were redesignated as SOSs; the 56th ACW became the 56th SOW. The

Paris Peace Accords began in October 1968. It was apparent to both sides in the conflict there would be increased fighting to gain additional territory. On 25 October, the Zorro squadron of the 606th SOS replaced its T-28Ds with the Douglas A-1 Skyraider. The 1st SOS Hobos and the 602nd SOS Fireflies—the 602nd was dual-designated as Sandy in SAR role—were already flying with the 56th SOW. The new Zorro A-1H squadron was designated as the 22nd SOS.

A-1 Skyraider Squadrons

By October 1968, the 56th SOW fielded three Douglas A-1 Skyraider squadrons. Initially, the wing was organized with the inclusion of the 602nd FS deployed to Udorn as a combat escort for SAR operations. The duties of the 602nd FS included escort of both Air America helicopters conducting SAR and for escort of the Aerospace Rescue and Recovery Squadron (ARRS), the HH-43B/F Pedros. SAR escort in Laos initially began with the positioning of US Navy A-1s in Thailand, but these were replaced in July 1965 by the USAF, transferring a detachment of A-1Es from the 602nd FS, stationed at Bien Hoa.⁴⁰

The 602nd FS, the Firefly squadron, used the call sign Sandy when flying rescue escort. The Douglas A-1E Skyraider was a suitable choice for the mission. It had a long loiter time and could take substantial punishment. The A-1E was the fifth variant of the A-1 series aircraft, with tandem seating. It was chosen by the Air Commandos flying in South Vietnam with Operation Farmgate to train South Vietnamese pilots. It was distinguishable from the A-1F and A-1H models by its blue plexiglass panels behind the pilot's canopy. This space was designed for additional crew but was generally used as a storage area or a place to haul light cargo. Some referred to the aircraft variant as “fat face” or “wide body.”

The A-1 was initially designed as a Navy dive bomber. It was equipped with speed brakes (on the A-1E, only the ventral dive brakes remained) and powered by a 2,700 horsepower R3350-26WA Wright Cyclone engine. It had a four-blade variable-pitch propeller, with a thirteen and one-half foot diameter; it was a tail dragger. The A-1E had a fifty-foot wingspan and a take-off weight of 25,000 pounds. The A-1E had a ceiling of 27,000 feet, a 1,000 nautical-mile range with wing tanks, a centerline fuel tank, and a cruising speed of 400 miles per hour (mph); it could also carry up to 12,000 pounds of ordnance.

There were twin 20-mm cannons in each wing. Its most notorious feature was the constant leaking of oil.⁴¹

For bail outs, the A-1E was equipped with the Yankee seat extraction system that pulled the pilots out after releasing the canopy, versus a rocket ejecting the seat out as found on jet aircraft. There was one variant to the A-1E, the A-1G, which was designed with extra technology to assist in night missions; both the aircraft resembled one another from the outside. Other variants of the A-1 flown by the Air Commandos were the A-1F and A-1H single-seat versions.

In May 1966, the remainder of the 602nd FS was transferred from Bien Hoa to Udorn. The squadron grew to twenty-six aircraft. Over time, the squadron expanded its combat missions to not only include SAR escort, but also as escort to Prairie Fire missions, the Igloo White sensor program (armed escort), and interdiction and CAS to Gen Vang Pao in MR-II as well as to the *FAR* in the panhandle. A-1Es struck enemy forces near Tchepone in mid-1966. In October 1967, the 1st FS—the Hobos—joined the 56th ACW to support the mission of escorting the 21st HS's CH-3Cs conducting sensor placement for the Igloo White program (still named Muscle Shoals at the time).

Capt Charlie W. Brown, T-28D Zorro

Capt Charles W. “Charlie” Brown was among the last of the 22nd Zorros flying the T-28D before the squadron replaced its T-28s with the A-1 Skyraider. He volunteered for the Jungle Jim program after flying C-124s in Europe. While in the 4400th Combat Crew Training Squadron at Eglin Field 9, he was assigned to the C-47 squadron; later he qualified on both the B-26s and the T-28s. In September 1967, he began flying in the T-28D section of the 606th ACS. Although it was authorized for twelve, there were only eight aircraft in the detachment because three had been lost in the war and one aircraft was broken with maintenance problems. He describes the mission of the Zorros:

We went out with an assigned FAC in an area to interdict the Ho Chi Minh Trail. Our area was around the Mu Ghia Pass, and near Tchepone. Tchepone was a hot area due to antiaircraft fires. They, the NVA, employed the first radar-controlled guns in the pass, so then we did not go into that area. There were six sectors of the Ho Chi Minh Trail assigned for interdiction by the 56th ACW.

During the day mission, we escorted Trail Watch Team insertions. We also flew support for troops in contact. (We backed up the Ravens.) I usually expended my ordnance in less than two hours!

Shooting the .50 caliber machine guns was a sure way to get shot back at. We used CBU, 500 pound bombs, white phosphorous, napalm, and an incendiary bomb. We had a modified bomb we called the “Trash Cans,” but they had too much drag on them.⁴²

Eventually the Zorros were pulled from the nighttime interdiction of the HCMT due to their vulnerability to AA fires. Captain Brown was flying a Trail mission one night when he was hit by enemy ground fire:

I was up around 7,000 feet or so, watching an O-2 put in a Marine A-4 Skyhawk. I made a dumb-assed move; I did a third loop around the target. I got hit by a 37-mm gun, and my plane burst into flames. The FAC, named Charlie, said, “You are on fire. Your engine is on fire!” The FAC told me to head towards the “Rooster Tail,” a known landmark. I was about twenty miles out when the engine burned through the firewall.

I jumped out, and hit the tail. My body went into a severe spin, but I stabilized myself. I tried to pull the ripcord, but I went into a spin again! I got somewhat stable and pulled the ripcord with both hands. My parachute shook out, and I hit the trees.

The FAC called me fifteen minutes later and said my airplane hit two miles away from me. I called the A-26A Nimrod in the mission area. I had injuries to my knees and hip. I was told that I was on the eastern edge of the Rooster Tail. There was an NVA R&R camp nearby, with about 300 men.

An HH-3C arrived with two A-1 Sandys. They had eight F-4s to work the SAR scene. I think I was the last guy from the T-28 Zorros flying on the trail, after that incident. For the next three months, I only flew daytime flights. I took one flight in the A-1 Zorro squadron which replaced our airplanes, and then I went home.⁴³

The mission of the A-1 Air Commando squadrons (renamed as special operations squadrons by 1968) generally fell as follows:

- 1st SOS Hobos: Igloo White support and HCMT interdiction; general purpose missions (daytime)
- 22nd SOS Zorros: nighttime interdiction
- 602nd SOS Fireflies/Sandys: SAR escort and interdiction

Over time, the missions of the three A-1 squadrons were intermixed; any of the squadrons could be assigned one of the three mis-

sions above, along with CAS for Laotian forces. Aircraft variants also became intermixed among the three squadrons.

Capt Richard E. Diller, A-1 Firefly

Capt Richard E. Diller flew over 203 missions in Laos as a Firefly. In his personal story of his time there, *Firefly: A Skyraider's Story*, he described a mission in the Barrel Roll area on 21 May 1969. He took off in the early morning hours with Jim Beggerly as the right-seater. It was the fourth nighttime mission for Diller.

On this mission, we had a combination of the two types of night Barrel Roll missions, in that we worked with a ground FAC [FAG] named Hot Dog and also FACed some F-4s against a truck park that Hot Dog helped us find. The area was along a part of Route 7 east of Ban Ban known as the Birdhead, so named because the shape of the curves in the road in this mountainous area when displayed on a map was reminiscent of the shape of the head of a bird. I managed to get two trucks with one nape (that's more like it!), and the jets damaged five more. I saw the tracers from a gun Jim identified as a ZPU on this part of the mission, which was the first time I had been shot at as far as I knew. The shells didn't come very close and I thought that "if this is all there is to being shot at, it isn't too bad."⁴⁴

Diller and Beggerly then received a call from a ground FAG named Pogo, who was thirty miles south of their position. Pogo's position was under attack; an AC-47 Spooky was in support but was almost Winchester (expended ammunition) and needed to return to base. Diller put a marker down near his position and FACed in F-4s. The F-4s expended their ordnance and left. Diller and Beggerly were now the only support Pogo could count on to save his position. From the previous engagement with a FAG named Hot Dog, the two pilots were down to only their 20 mm guns and CBU ordnance. Diller delivered the CBUs on a couple of passes, just as it was becoming lighter at dawn.

With the CBUs expended, the two made some dry-run passes to keep the enemy's heads down; the next flight of strike aircraft was on the way. Low on fuel, Diller and Beggerly returned to NKP, landing in low visibility conditions due to bad weather, with about fifteen minutes of fuel remaining. Upon inspection of their A-1E, they found several small arms bullet holes in the right wing flap and in the elevator. Diller and Beggerly each received a Distinguished Flying Cross

for their efforts to defend Pogo's base during the enemy attack, preventing its overrun by the enemy.⁴⁵

In 1969 over 110 A-1s in theater were stationed at NKP. The last Sandy mission was flown in November 1972, as by now Navy A-7Ds had taken over the SAR escort mission. During "Vietnamization" in the early 1970s and upon the signing of the Paris Peace Accords on 27 January 1973, the Skyraiders were eventually turned over to the South Vietnam Air Force.⁴⁶

Maj Don Meek, Instructor Pilot, Detachment 1, Water Pump

In late 1968 Maj Don J. Meek volunteered for a tour in SEA. He had completed his assignment at Randolph AFB as a T-28A instructor pilot in the 3512th Pilot Training Squadron, one of the units that supported the MAP for training foreign pilots—predominantly South Vietnamese pilots. Being experienced as a B-26 gunner during the Korean War and now as an instructor pilot on the T-28, Major Meek joined the Air Commandos at Hurlburt as a good fit for his skills. He desired to serve on Detachment 1, Water Pump, after his check out on the T-28D at Hurlburt.

In the New Year (1969), he deployed to Clark Air Base in the Philippines and completed the Jungle Survival course before arriving at Udorn. His instructor pilot (IP) duties at Udorn consisted of instructing Laotian pilots during the week and flying student combat missions on the weekends. Prior to each weekend, the AIRA's office in Vientiane fragged missions and targets down to Water Pump for sortie generation. Meek had only been in the unit for about a week when he received his first "combat" mission with his students:

The date was January 18, 1969. I was in the back seat for an orientation (dollar ride) flight. Two three-ship formations took off for Laos. Our call sign was Tiger Green Lead. I observed the procedures as "Moe" Stokes dropped his ordnance. I admit it was somewhat frightening as "Moe" just cleared the mountains when pulling up from the target. (The fact that he always wore eyeglasses didn't help the situation.) The Raven FAC reported that 100 percent of the ordnance was dropped on enemy troops and bunkers.

The six ships were then turned around. Four 500-lb. bombs, two 250-lb. bombs, and a full load of .50 calibers were loaded onto each aircraft. I was solo as Tiger Blue 2. Our flight took off fifteen minutes after Tiger White flight.

I had my eyes on the jettison button during all takeoffs. If an engine ever “sputtered,” an immediate decision had to be made whether to abort the take-off and jettison the bomb load just after liftoff. The heavily armed planes used most of the 10,000-foot runway in the hot climate and climbed out at extremely shallow attitude.

The mission was a complete success. Several shelters, two tons of supplies, and ten barrels of POL [petroleum, oil, & lubricants] were destroyed. A secondary explosion and several secondary fires were seen by the FAC. The flight lasted two hours.⁴⁷

On other missions, Major Meek flew the reconnaissance version of the T-28, the “Guppy,” in the Steel Tiger area, but most missions were in Barrel Roll. As one of the senior officers in the detachment, Major Meek became the squadron’s operations officer. Water Pump training lasted about six months; with his duties as the operations officer, Meek was only assigned one student for each training iteration. His most memorable mission as a Water Pump pilot (the C-Team) was flown on 14 April. He was leading the second strike mission of the day, a formation of three aircraft with the call sign of Tiger Red Flight.

Once in Laotian airspace, he contacted a Raven FAC at the rendezvous point. The first target was a suspected enemy storage area. After the target was marked with white phosphorous smoke by the Raven, the flight was cleared in hot. Meek put his formation into echelon and rolled into the target first, as flight lead. “I reduced the throttle and dove towards the target. The 30-degree dive seemed like 80 degrees as the plane plummeted towards the white smoke rising from the jungle.”⁴⁸

He “pickled” his bombs, followed by Red 2 and Red 3. With the primary target serviced, the Raven FAC then directed Meek’s formation to a nearby river. Below were supply rafts, which usually carried ammunition.⁴⁹

The FAC called, “They’re right below you, go get em!” I placed the formation in trail and descended rapidly to just above the river while lining up on the rafts. I placed the armament switch on and called in “hot.” The group of rafts in my gun sight started to scatter as I squeezed off rounds of .50 caliber. I pulled up and banked 180 degrees and made another pass, with Red 2 and Red 3 closely following. It was like shooting fish in a barrel as we flew below the top of the bluffs that were on the north side of the river. I couldn’t help but feel the same exhilaration as a WWII pilot, strafing on the deck (an experience hard to duplicate, flying a high speed jet aircraft).⁵⁰

The Raven gave the Tiger flight a BDA of the enemy storage site hit with all bombs and a BDA on the rafts as twenty destroyed.

One of the newly emerging missions for the Water Pump IPs was training Raven FACs on the T-28. Major Meek conducted a checkout ride for Raven FAC Fred Platt, but it would not be an ordinary check ride. During the flight, an explosion occurred in the engine compartment. Meek contacted the Udorn tower and declared an emergency. Not wanting to bail out, Meek selected a flat field in his view; he was pretty experienced with practice forced landings taught to his students. Due to his high speed, he overshot the field and immediately looked for another possible landing site. With both he and Fred Platt securely strapped in, he blew the canopy, hit, bounced, and hit again, skidding across a sugar cane field.

Local natives arrived to the downed aircraft. Meek broke a mirror off the aircraft to use as a signaling device while Platt made radio calls in the blind. They laid out parachute panels and were soon over-flown by an F-102 Dagger. In midafternoon, they were pleased to hear the whopping helicopter blades of a HH-3C Jolly Green Giant. Their aircraft was recovered by an Air America helicopter, repaired, and entered back into the flight line of Water Pump.⁵¹ Major Meek completed his tour as a Water Pump IP and departed Thailand in November 1969. He went on to an assignment with the 3389th Pilot Training Squadron at Keesler AFB. He later served with the 552nd Airborne Early Warning and Control Squadron, flying in “Connies.”

Gen Vang Pao began his MR-II dry season offensive in November and was becoming somewhat addicted to his “flying artillery” support. Operation Pigfat was designed to retake Phou Pha Thi and disrupt the PAVN near LS-36. To support this operation, Pony Express provided CH-3Es to ferry three Hmong guerrilla battalions to Houei Hinsa. The operation failed, even with support from USAF air sorties. Pigfat was called off during the first week of January 1969.

With the beginning of the dry season in November and December of 1968, Commando Hunt began. Commando Hunt was a campaign of concentrated air attacks on the HCMT. There would be seven iterations of Commando Hunt, alternating the iterations between the wet and dry periods of weather over the Trail.

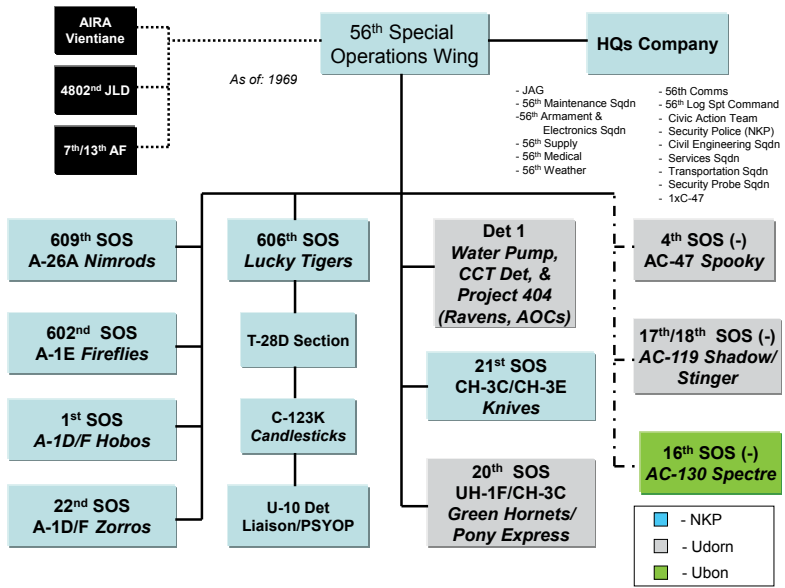


Figure 11.1. The 56th Special Operations Wing (SOW) organizational chart, Thailand, 1969. (Reference: Jeffrey D. Glasser, *The Secret Vietnam War: The United States Air Force in Thailand, 1961–1975* [Jefferson, NC: McFarland, 1995]).

1969

With the pending loss of all of Sam Neua Province in the first weeks of January, Gen Vang Pao identified the crucial need to evacuate Hmong families and refugees who were earlier moved to Houei Hinsia during Operation Pigfat, and move them west to Houei Tong Ko. CH-3Es flew 539 sorties to move almost 5,000 refugees.⁵² Vang Pao then evacuated his base at Nam Houn, leaving the Phong Saly Province in enemy hands.

On 28 February, Nha Khang (LS-36) was attacked again by enemy forces. The fighting was desperate. A-26As flew daytime sorties in support of the defenders, while at night, the AC-130 Spectre was used in MR-II for the first time in support of RLG troops in contact. During the fighting, CH-3Es were used to evacuate Hmong families from the site.⁵³

Gen Vang Pao's fallback position northeast of the *PDJ* was the mountain redoubt at Bouam Long. The enemy attacked and threatened the loss of the base in March. Two AC-47s were added to the Barrel Roll sorties to support the site on 12 March; on 15 March, three more AC-47 sorties were added. The gunships inflicted heavy losses to the PAVN attackers, who retreated after taking severe casualties.⁵⁴

In the panhandle region of Laos, the war switched from conventional operations by the RLG to a guerrilla warfare campaign, using SGUs. With the *FAR* and the *Forces Armées Neutralistes* (*FAN*, Neutralist Armed Forces) basically sitting on their hands, CIA operatives looked to replicate the success of Vang Pao's guerrillas on the *PDJ* by opening a guerrilla front in southern Laos. In MR-III, three light SGUs were formed named red, white, and blue battalions—a fourth battalion, green, would be formed later. On 23 March, red battalion was chosen to conduct a raid, named Operation Duck, on the Pathet Lao cave complex southeast of Mahaxay; the operation was supported by seven CH-3Es and three UH-1Fs. By 26 March, the red battalion had met heavy resistance and required evacuation. Eight CH-3s evacuated red battalion under heavy fire; five of the helicopters were damaged during the operation.⁵⁵

In the north, to stop what looked like an impending loss of the *PDJ*, the USAF initiated Operation Rain Dance, a premonsoon bombing campaign beginning on 17 March. With the danger of enemy forces capturing more territory, Ambassador Sullivan and Prime Minister Phouma relaxed ROE restrictions to allow the USAF to inflict more damage. Operation Rain Dance was anticipated to serve as a spoiling operation against the growing buildup of NVA during the rainy season. Rain Dance performed well and was extended into early April. With this massive air support bolstering him, Vang Pao recaptured segments of the eastern *PDJ*, reaching just short of Xieng Khouang. In consort with the success of Operation Rain Dance, the USAF instituted a commensurate air attack to interdict Routes 6 and 7 and prevent enemy forces from reinforcing on the *PDJ*. This campaign was named Operation Stranglehold and began on 22 May.

In June, McMurtrie "Mac" Godley became the new ambassador to Laos. He was an old Congo hand adept at UW. He put his own style on the secret war, leaving the details of the daily and weekly fight to his subordinates; however, he was just as aggressive as Sullivan in prosecuting the war. The Battle of Moung Soui, 26–27 June, resulted

in the fall of the position, requiring evacuation of refugees, neutralists, and Thai forces. Two UH-1Fs from the 20th SOS and seven CH-3Es from the 21st SOS conducted the evacuation. The night prior to the evacuation, gunships tried to help defend the position.⁵⁶

Gen Vang Pao attempted to retake Moung Soui in Operation Off Balance; however, the operation failed due to tepid support from the Neutralists. In what was probably the most impressive feat of the war, Vang Pao reoriented his force with the intent to recapture the *PDJ* and evict enemy forces. Operation About Face (named Kou Kiet by Vang Pao) was an overwhelming success; by the end of the rainy season in 1969, the entire *PDJ* was back in Pao's hands.

Down south, an ambitious plan to interdict the HCMT on Route 9 and Route 23 began in July at Tang Vei, near Moung Phine. This was a multi-battalion operation supported by airpower. As the sweeping operation continued into September, it was named Junction City Junior. On 7 September, four A-1s from the Hobos bombed Moung Phine, free from the earlier restrictions of the ROE. Four more of the strike aircraft returned in the afternoon. This, combined with the pressure from the nearby RLG battalions, forced the Pathet Lao to retreat from the area.⁵⁷ On 1 August 1969 the 20th SOS merged its remaining helicopters with the 21st SOS, leaving only one special operations helicopter squadron in the 56th SOW. The 606th SOS's U-10 detachment was deactivated on 10 November 1969.

Helicopter Trap, Bolovens Plateau

With the initial success of Operation Junction City Junior, the battalions pushed on to Tchepone. During the operation, the 21st SOS supported Junction City Junior with troop transport. Meeting resistance at the onset, government troops fled the area. To stem the tide, the red battalion SGU was tasked to insert as reinforcements on 6 October. Five 21st SOS helicopters were used to move the battalion onto what was supposed to be a secured airfield at Moung Phine. Instead, it was under enemy control, and they flew into an ambush.

The Knives began to insert fifty Laotian troops on a small depression in the open area. As the lead bird touched down and the following CH-3E about to land, the NVA opened fire. Lt Col Ted Silva, the 21st SOS squadron commander, was in the lead bird. Bullets riddled his helicopter, and he dropped it off the western edge of the runway—the

engine dead. He took his crew and a load of half of the guerrillas into a defensive position.

Maj Phillip Conran, in the second chopper, came under fire and led the remaining CH-3Es into an orbit outside of small-arms range. A-1Es in escort began runs on enemy forces to permit the rescue of Silva and others. Conran decided to land the rest of the guerrillas as reinforcements. He hovered over Silva's wrecked chopper, taking a round that damaged his engine, but was able to off-load the reinforcements. While attempting to depart, his helicopter was also riddled with bullets and fell to the ground. Conran and crew joined the defenses.

Conran and others ran back to the downed choppers to recover food, weapons, water, and ammunition and they awaited rescue. A-1 escorts attempted to provide support and keep the NVA pinned down to allow Jolly Green HH-53s to pick up the surrounded Knife crews and the Laotian troops. All attempts failed throughout the day, with all the Jollys returning to NKP with battle damage. While under fire, Phil Conran returned to one of the downed helicopters and retrieved two additional M-60 machine guns, along with ammunition to aid the defense of their perimeter. Colonel Silva, the 21st SOS squadron commander, received a deep crease wound across his back. He received an Air Force Cross for his actions that day.

The attack by the NVA intensified. It began to drop mortar rounds on the position, setting one of the helicopters on fire. The situation began to look grim. At dusk, the A-1s delivered nonlethal gas on the NVA positions with CBU-19 containers, allowing the HH-53 Jollys to pick up the 21st SOS crew members. Six crew members got on the first bird along with forty-nine of the Laotian soldiers; one soldier had been killed in the engagement, and several Laotians were wounded. The HCMT HH-53 picked up the remaining two crew members. Junction City Junior ended on 17 October.⁵⁸

Maj Robert L. Hoffman, 22nd SOS Zorro

Maj Robert L. Hoffman flew with the 22nd SOS Zorros and participated in every type of A-1 mission—SAR, strike, and FAC. Jeffrey D. Glasser's book, *The Secret Vietnam War*, reports that one of Hoffman's SAR missions took place over 6 and 7 December 1969, immediately followed by a SAR mission one week later, for which he received the Distinguished Flying Cross. Major Hoffman was escorting rescue HH-3s,

and flew through a hole in the cloud cover to lay ordnance, resulting in a successful rescue of the downed pilot.

In Glasser's work, Major Hoffman described a typical combat mission:

We never went in an area that was a no-no. All of our missions, that I'm aware of, were strictly on the up-and-up. We had direct air support (DAS) and troops in contact, and that was "get down in the weeds" time. For DAS, you've got to get the bombs in close, especially for the children's army [Vang Pao's guerrillas] and working around these hard points, which is what it (the war) was all about, with one exception, and that mission was right on the Plain of Jars out in the open.

We had FAGs; we had everybody, but we didn't work with those people until we were assigned by ABCCC, and they're working for (Ambassador) Godley or his predecessor, and Vang Pao, as far as Barrel Roll was concerned. What it came down to was an idea that if we were to be used, we would be diverted from our primary strike, and that's the way it always worked. We were never sent directly to somebody, and never sent to a FAG. We were never sent to a case officer or anything. We were requested tactically.⁵⁹

As a night FAC, Hoffman had little confidence in the abilities of jet aircraft to hit targets with their bombs. He carried flares in a SUU-25 pod and BLU-1/B "logs"; additionally, he marked targets with napalm. The short time of the jets on target (diversions) combined with inappropriate ordnance for the task did not instill faith in Hoffman that the effect of their pass on the designated targets was even beneficial in helping troops on the ground.⁶⁰ (Diverted jets flew into MR-II with whatever ordnance remained from their previous, priority strike targets.) Major Hoffman also flew the HCMT mission, focused on hitting trucks parked in revetments with the M-36 incendiary clusters (the "funny bomb"). Bulldozers were a prized target. "We wanted the bulldozers so bad you can't believe it. We would do anything to get a bulldozer."⁶¹

In the fall of 1969, Major Hoffman flew one of his best missions against enemy troops in the open. He was returning from the Duck's Beak area near Ban Ban. The weather was extremely bad and he had not found his primary target. He flew out of the thunderclouds down low and spotted a large formation of enemy troops in a bivouac. He marked the target with a log flare but was denied permission to conduct the strike. An older map used by the air control had the location as a village, which could not be hit due to the ROE. Frustrated, he flew home.

A week later, he was alerted by a Raven FAC who had seen the same troop cluster. Hoffman and his accompanying Zorro flew a wide path to position themselves for a run-in on the troops from the north. Hoffman described the attack: “We proceeded to come back from the north, popped out, went straight across their heads and it was CBU-CBU-CBU-CBU. And while the CBUs were falling, going all over this area, we came down and ran all our nape. We just drove it on each side of the ravine where they cut in, and just pulled out. Another loop, go back in, and this time it was rockets. We just started putting the rockets all around, touching up areas where the nape wasn’t burning.”⁶² Hoffman and his teammate finished “servicing” the target by dropping their bombs on bunkers. His number two stated, “Jesus Christ! I’m glad I’m not a North Vietnamese.”⁶³

In mid-December, the Pathet Lao attacked the town and garrison at Thateng on the Bolovens Plateau. AC-130s supported government troops during the night, flying over a period of four nights to help the besieged forces. In January the town was retaken but the PAVN counter-attacked in early February. The defense was supported by massive US and RLA air strikes.⁶⁴

Special Operations Combat Control Teams

The CCTs assigned to the 56th SOW performed a wide variety of duties to support the mission. Above all, improving the air control system throughout Laos remained a primary function. Even though the dispute about using enlisted controllers was resolved by their replacement, the Project 404 Ravens, combat control teams still continued to fly back seat with the FACs and to pull duty aboard the C-130 Airborne Battlefield Command and Control Centers (ABCCC) to enhance the air-ground system. CCTs also flew with A-26As and with C-123s to perform starlight scope observations and spotting.

When the Joint United States Military Assistance Group-Thailand schemed to inject conventional combat control teams into the 56th SOW, Ambassador Sullivan went to Colonel Aderholt to put an end to it. Aderholt was a big proponent of Special Operations combat control teams—vice conventional combat control teams—and blocked the initiative. The top priority of Special Operations combat control teams was air traffic control. This fit in with the way the

ambassador wanted the air war run in Laos, combined with their tactical and survival skills.⁶⁵

CCTs in Project 404 supported the AOCs at the five operating locations ensuring connectivity with radio communications and trying to educate and train Laotian and Hmong RLAF personnel on various procedures to enhance their use of airpower. CCTs with Detachment 1, Water Pump, continued to add value to the pilot training program by teaching classes on the air-ground system and controlling activities at Water Pump's local bombing range.

CCTs supported the clandestine mission of the 46th Special Forces Company to support FAG training and parachute and resupply operations for the various training iterations of Hmong SGUs, Thai Unity battalions, Commando Raiders, and activities of the road watch teams. CCTs also supported the 20th and 21st SOS's helicopter operations for the Pony Express mission. The combat control teams would add value to the air war with two new initiatives in the late 1960s and early 1970s: the establishment of a FAG course for Hmong, Laotian, and Thai FAGs located at Udorn and beacon emplacement throughout Laos to improve strike operations.

Forward Air Guide Course

In the fall of 1969, Lt Col Howard Hartley, the 1st SOW air liaison officer attached to the US embassy in Vientiane, contacted MSgt Gene Adcock (CCT). Master Sergeant Adcock was working under Project 404 at Luang Prabang in support of the AOC commander, Maj Donald Moody. Hartley was tasked by the ambassador to establish a FAG course to improve air-ground control in Laos, particularly with the Hmong in MR-II. Adcock was asked to develop the requirements for a one-week course, to be taught once a month. Using the 1st ACW's FAG pamphlet as a template, Adcock and the AIRA staff soon developed a course outline, lesson plans, and the required hand-outs for the instruction.⁶⁶

The location for the course would be Detachment 1, Water Pump, at Udorn. Maj Michael Werbiski, an Army Special Forces officer assigned to the Army attaché in Vientiane, took responsibility for student selection and the transport and administration of the students to Udorn. One of the requirements for the staff at the embassy was to

ensure the testing of the students to establish if they could speak English.

Detachment 1 readily supplied facilities and housing for the students and the use of the bombing range used by the Water Pump T-28 pilots. The 56th SOW CCTs at NKP would provide instructors. Along with Adcock, five other instructors were chosen and sent TDY to Udorn: TSgt Dean Stafford, SSgt Clyde Howard, Sgt Donald Swearingen, Sgt Mike Fremming, and Sgt Norman Lutz.⁶⁷

The CCT instructor cadre deployed to prepare for the instruction, setting up the classroom and preparing the bombing range along with an HLZ to support the transport of FAG students to and from the range. Transportation was provided by the Army UH-1 Huey MTT stationed at Udorn. Adcock was responsible for setting up the range. He explained as follows: "I was in the first three classes; we only trained the Lao. We used the Water Pump T-28s, through liaison with Major Ski. The T-28 sorties were fragged for our mission support. To prepare the range, we used some Air America H-34s who flew us out to a good-sized hill. We cleared the LZ of trees and brush, and set up some targets down in the valley. It took us about six to eight hours to get the range ready."⁶⁸

The first eight students arrived. With only one week apportioned to conduct the course, notwithstanding time taken away for in-processing and outprocessing of the students, the first three days were used for classroom instruction, followed by two days on the bombing range. Although the proficiency in English language did not quite pan out, the Hmong students were able to speak to their own pilots in their language. Those who had proficiency with English spoke to the American IPs flying T-28s. Throughout the course, the CCTs on the FAG cadre took every opportunity to impart the essentials of the air-ground system to the students to improve their proficiency in coordinating air strikes. The course was deemed a success.⁶⁹

Anticipating requirements for a permanent cadre, TSgt Dean Stafford (the combat control team NCOIC) and Adcock made the case for a permanent combat control team at Detachment 1 to support the requirement. The PACAF director of operations concurred, and the cadre was deployed with permanent change of station orders to form Detachment 1's 56th SOW combat control team.

The course would continually improve over the next couple of years. Eventually, Thai, Hmong, and Lao FAGs would attend the course. By 1971 it was a formal, two-week course. Retired CMSgt

Rick Crutchfield described the course in Adcock's book, *CCT: The Eye of the Storm*:

The FAG curriculum consisted of academic classes, sandbox exercises—utilizing the FAG checklist, attacking terrain lockup targets and culminating in a live-fire mission where students were required to demonstrate the capability to put ordnance on live, bombing range targets. Upon graduation, the Team Leader would deploy to a classified location with the new FAG and complete the validation process—in real-world operations. In addition to these activities, team members often deployed to classified locations and conducted blocks of FAG training for foreign nationals, in conjunction with Special Forces training courses.⁷⁰

Combat control teams also conducted humanitarian missions in support of the civic military operations.

Success of Special Air Warfare

Between 1967 and 1969, the Air Commandos of the 56th SOW demonstrated with great prowess and innovation what special air warfare could accomplish in a COIN and special operations UW environment. They performed superbly to optimize their talents and equipment and truly accomplished hard and difficult missions as the “ambassadors’ air force.”

Notes

1. History of 56th Air Commando Wing, 8 April–30 June 1967, 1–3.
2. *Ibid.*, 9.
3. *Ibid.*, 11. Derived from History of the 606th Air Commando Squadron, 8 April–30 June 1967.
4. *Ibid.*, 12.
5. *Ibid.*, 12–13.
6. *Ibid.*, 14. Derived from History of the 602nd Fighter Squadron, 8–30, April 1967.
7. Roehrkaase, “US Air Force Military Civic Action in Thailand,” 25.
8. *Ibid.*, 25–27.
9. *Ibid.*, 28–29.
10. *Ibid.*.
11. *Ibid.*, 31–33.
12. Haas, *Air Commando*, 66.
13. Roehrkaase, “US Air Force Military Civic Action in Thailand,” 35–37.
14. History of the 606th Air Commando Squadron, 1 June 1967–30 June 1967, 2; and History of the 56th Air Commando Wing, 8 April–30 June 1967, 12.
15. Van Staaveren, *Interdiction in Southern Laos*, 255–57.

16. Ibid., 266–68.
17. Ibid., 273–74.
18. Van Staaveren, *History of Task Force Alpha*, 39–40.
19. Henthorn, interview.
20. Van Staaveren, *Interdiction in Southern Laos*, 291.
21. Henthorn, interview.
22. Ibid.
23. Loy, “A Zorro Tale,” 28.
24. Ibid., 28.
25. Ibid., 12–14; 26.
26. Ibid., 26–28.
27. Conboy, *Shadow War*, 177.
28. Ibid., 174.
29. Mutza, *Green Hornets*, 27.
30. Testimony from a senior officer who served in the 606th ACW and then in the 56th ACW with Heinie Aderholt.
31. Anthony and Sexton, *The War in Northern Laos*, 240–41.
32. Ibid., 243.
33. Ibid.
34. Ibid., 243–44.
35. Van Staaveren, *History of Task Force Alpha*, 72–74.
36. Arnau, “Knife Tales,” 14.
37. Arnau, interview.
38. Ibid.
39. Conboy, *Shadow War*, 243.
40. Dorr, *Skyraider*, 95–96.
41. Ibid., 22–23.
42. Brown, interview.
43. Ibid.
44. Diller, *Firefly*, 62.
45. Ibid., 62–63.
46. Dorr, *Skyraider*, 150–51.
47. Meek, *7 War Stories*, 73.
48. Ibid.
49. Ibid., 77–78.
50. Ibid.
51. Ibid., 79–81.
52. Conboy, *Shadow War*, 207.
53. Ibid., 209.
54. Ibid.
55. Ibid., 218.
56. Ibid., 212.
57. Ibid., 219.
58. Conboy, *Shadow War*, 220; Arnau, interview; and Arnau, “Knife Tales,” 25. During the event, Arnau was in the command center at NKP monitoring the radio.
59. Glasser, *Secret Vietnam War*, 150.
60. Ibid.

61. Ibid.
62. Ibid., 151.
63. Ibid.
64. Conboy, *Shadow War*, 221.
65. Adcock, interview.
66. Adcock, *CCT: The Eye of the Storm*, 122.
67. Ibid., 123.
68. Adcock, interview.
69. Adcock, *CCT: The Eye of the Storm*, 123.
70. Ibid., 127.

Chapter 12

Psychological Operations—A Force Multiplier

Words without deeds are sooner or later falsified even as deeds without words are often misunderstood.

—H. D. Lasswell

Psychological warfare (PSYWAR) is the mix of psychological operations (PSYOP) with the achievement of political objectives, using unorthodox measures (this term coined by the British in World War II): “What we are talking about, then, when we speak of ‘psychological warfare’ is the use of symbols to promote policies—i.e., politics. Propaganda is politics conducted by the symbolization of events.”¹

PSYWAR in Laos consisted of military PSYOP, government and military propaganda, counterpropaganda, subversion, and political action. Over the period of the conflict, all of these activities were implemented to prevent the overthrow of the Royal Lao Government (RLG) by communist forces.

The entire PSYOP program in Southeast Asia was the responsibility of the US Information Agency (USIA). As the war widened to include Laos, Thailand, Cambodia, and Vietnam, the USIA created a subsidiary organization to coordinate all of these activities: the Joint US Public Affairs Office.

Strategic messaging was conducted by both sides in the war. The United States and Laos used the Voice of America and the British Broadcasting Corporation, along with several popular US weekly journals and key national newspapers. This effort also included French sources. Radio Hanoi served North Vietnamese and Pathet Lao interests as well as avowed communist journals.

The predominance of PSYWAR activities conducted in Laos was implemented by the following: (1) the Central Intelligence Agency (CIA); (2) the US Information Service (USIS); (3) the US Agency for International Development (USAID); (4) the Military Assistance Command–Vietnam (MACV), (5) the Seventh/Thirteenth Air Force PSYOP directorate (in conjunction with targeting cells), and (6) the Laotian PSYOP staff directorate. For strictly air-delivered PSYOP, these were coordinated and tasked to various flight detachments and

their crews by the Seventh Air Force's deputy of operations, Special Operations Division. The 7th PSYOP Group in Okinawa had primary responsibility to prepare and deliver Laotian leaflets and PSYOP material for the Ho Chi Minh Trail (HCMT) PSYOP campaign, then later the Laotian Fountain Pen program.

The 7th PSYOP Group shipped leaflets in conex boxes by boat from Okinawa to Thailand and then transported the material by flat-bed trucks over 400 miles to the Royal Thai Air Force Base (RTAFB) at Nakhon Phanom (NKP). Strategic themed leaflets were controlled and approved by the US embassy in Vientiane.²

The total US PSYOP program for Laos included support for printing leaflets and other paper products (booklets, calendars, etc.), audio-visual equipment for public affairs teams, aerial loudspeaker and leaflet drops, and RLG ground information teams. The United States additionally supported education and literacy programs.³

Only three US Army PSYOP augmentation teams were deployed into Laos during the early years of involvement (January 1961, June 1961, and September 1962); much of the robust capability of American PSYOP deployed in the Korean War was decimated by postwar draw downs. Not one PSYOP group existed in the US Army by the late 1950s, although small PSYOP detachments for loudspeaker and leaflet operations were scattered around. (Later, PSYOP support from the Counterinsurgency Support Office [CISO] in Okinawa assisted CIA, special operations forces [SOF], and US government PSYWAR initiatives during the war.)

Although lacking tactical presence down in the field, PSYOP detachments augmented the Program Evaluation Office in the 1961 advisory period, and PSYOP support to Laos was provided by the 4th PSYOP Group and its four regional detachments stationed throughout South Vietnam.

On the RLG side, Laotian officers were sent to Fort Bragg to attend a year-long PSYOP course, supplemented by assistance from the Security Training Center at Fort McKinley outside of Manila, operated by the Philippine government as a countersubversion, counterinsurgency and PSYWAR school. This school was covertly sponsored by the United States through the intelligence offices of the country team. Although not confirmed, the Royal Thai military and its various counterinsurgency and PSYWAR schools—assisted by US PSYOP augmentees of the Joint United States Military Assistance Group–Thailand (JUSMAGTHAI) staff in Bangkok—were most likely assets

for Laotian PSYWAR training. In 1966, The Royal Thai Army created the 93rd PSYOP Company. The 93rd was assigned to the Royal Thai Special Warfare Center in Lopburi. It participated in providing PSYOP training to the Lao and Hmong who were covertly trained in Thailand during the 1960s and early 1970s, as well as to provide PSYOP instruction to the Thai volunteer battalions prior to their deployment into Laos.

There was one exception to the austerity of US military PSYOP units to support Americans on the ground: the U-10 Helio Courier section in the 606th Special Operations Squadron (SOS), 56th Special Operations Wing (SOW), responsible for loudspeaker and leaflet drops over Laos. Loudspeaker operations were codenamed “Loud-mouth,” and leaflet operations were codenamed “Litterbug.”

The ambassadors controlled the “themes” inherent in each product and oversaw implementation of US strategic communication and public diplomacy, as well as ensured adherence to US policy on the use of PSYWAR. For instance, a restriction remained in place against the use of PSYWAR to foment a resistance group within North Vietnam.

The delivery of PSYOPs materials was conducted via hand-to-hand, commercial marketing, artillery, or by air delivery. In Laos, PSYOP product dissemination and delivery were generally through face-to-face meetings with the populace, various printed materials, and radio. Air delivery of printed products, loudspeakers mounted on aircraft, and government counterpropaganda radio were the primary means to get PSYOP products into the hands of the populace and for use against enemy forces.

Propaganda

Propaganda can be used as an enabler in PSYWAR when it is shaped to destroy the legitimacy of the enemy, or it can be used as a strategy to achieve war aims. The term *propaganda* today is often used as a pejorative word and with negative meaning. This tendency occurred as a result of post–World War II analysis of its use by Germany and the former Soviet Union to create lies, falsehoods, and disinformation within the ranks of their opponents. The word itself is neutral until the intent for its use is exposed—it is a subversive means. Propaganda is divided into three distinct types based on its origins:

1. *White* if the source of the information is known; USIS was responsible for developing white propaganda with the Laotian government.
2. *Gray* when a proxy or surrogate is used to deliver the information.
3. *Black* when the information is manipulated to make one believe the source is the opposition; the CIA and MACV-Studies and Observation Group (SOG) had the responsibility for black propaganda in Laos.

The North Vietnamese, Russians, and the Chinese furnished external materiel support—money, weapons, and logistics for example—to the Leftists within Laos as their key means to subvert the formation of a Rightist government. Propaganda, agitation, and calls for action—including acts of violent labor strikes, demonstrations through student and trade unions, sabotage, and assassinations—were other tools used as catalysts.

At the tactical level, establishing front organizations typified acts of subversion. Front organizations hid their role through propaganda and agitation. Front groups for subversive activities can be established in international groups or in advocacy groups such as labor, trade, and peace organizations. Front groups along with political groups also form the basis for political action to incite dissatisfaction amongst the populace against their government through riots, demonstrations, and marches. This approach could often be taken to extremes by politically violent acts such as terrorism.

Other subversive tactics included bribery and assassination as means to remove or eliminate key opposition leaders. By far, however, the favorite subversive tactic preferred during the war in Laos was the direct involvement of the aggressor state, North Vietnam, in support of Laos' internal resistance group—the Pathet Lao.

Royal Lao Psychological Operations Capability

The RLG conducted a multiprong PSYWAR campaign against the Pathet Lao to counter its propaganda objectives. Pathet Lao themes focused primarily on grievances amongst Laotians in attempts to atomize society and create a belief that communism was the solution to Laotian ills. Understanding the love Laotians had for the king, these messages were cloaked in socialistic solutions, all under a monarchial

form of government and respectful of the Buddhist religion, to attract the widest audience. In fact the Pathet Lao had successfully penetrated the *bonzes* (Buddhist monks) who tended to have leftist political leanings. The government's goal was to counteract these messages.

Up to 1965, the government effectuation of PSYWAR was headed by the Directorate of National Coordination. The Laotian Department *Psychologique* was established within the military general staff. These directorates were headed by Laotian colonels and brigadier generals.

The major objectives of Laotian government PSYOP were to “reduce the combat efficiency of the enemy, to mold favorable attitudes toward the war effort, to stress the goodwill of the United States, to confuse the enemy concerning ideology and aims of leaders, to convince enemy troops to defect, and to carry out plans for economic and other development while educating the public.”⁴

Government PSYOP and information operations had to deal with a host of barriers in order to be effective. First and foremost was access to much of the rural population. For most of the war, Pathet Lao and North Vietnamese Army (NVA) forces controlled the countryside and held sway over populations residing in remote terrain. There were very few means for the government to reach these isolated pockets. The second factor was widespread illiteracy—this dictated that the most effective means for message delivery would be audio and visual. For the educated and the elites, government printed media and messaging in newspapers served well; however, a vast number of message themes were crafted with pictures and cartoons that spoke for themselves.

To reach the illiterate, the weekly government newspaper *Khao Phap Pacham Sapda* predominantly printed photos versus text, although the largest audience reached amongst the illiterate was through radio. There were five major radio stations throughout Laos: two in the capital region—Vientiane and Camp Chinaimo—and the rest at Savannakhet, Pakse, and Laung Prabang. Counterpropaganda radio stations were also established, such as the one at Long Tieng (Lima Site 20A). This radio station was used for black and gray propaganda. A similar station ran black and gray propaganda out of Pakse Site 44 on the Bolovens Plateau and was called the “Union of Lao Races.”⁵

Other means of dissemination included movies, plays, posters, calendars, leaflets, and handbills. Delivery methods were face-to-face

along with dissemination through markets and businesses. Very little is known on whether the Laotians used artillery-delivered leaflets; however, where it could be accomplished, leaflets were loaded into the aileron slats of T-28s and “dive-bombed” onto enemy positions. Effective anti-aircraft (AA) fires minimized this delivery technique.

Laotian Belief Systems Used in Psychological Warfare

PSYWAR themes used in various products during the Laotian war were based on cultural and religious belief systems of the various ethnic groups in Laos. Those directed against NVA soldiers were based on Vietnamese belief systems. Other themes were generic, based on beliefs held by soldiers fighting in any war: fear, loneliness, mistrust of leadership, and the hopelessness of the cause.

With a large illiterate population, many PSYOP products consisted of pictures that told a whole story visually, or the message was in the form of a cartoon. For literate recipients, many of the products were printed in Laotian on one side and Vietnamese on the other to target both Pathet Lao areas and areas held by NVA troops.

Religion was a preferred theme, posing the communists as atheistic and godless, one of the few messages hard to refute. For ethnic groups practicing animistic and spiritual beliefs, the use of *phi* (spirits) and ghosts of ancestors was prevalent in loudspeaker operations when these “ghosts” and “spirits” talked from the sky.

While all Laotians, especially hill tribes, may have not been strongly nationalistic, there was a large respect for the royal family and the king. Many PSYOP products had pictures of the king doing great deeds for the country.

Government PSYOP products were used to spread disaffection with the NVA where they were in control of the Laotian populace. North Vietnam was a historical enemy of Laos. This history was culturally ingrained in the Vietnamese people, meaning they felt that they were superior to the Lao race and its various ethnic groups. Messages reinforced the cultural proclivity of the Laotians who believed the NVA was in their country as occupiers, with the intent to take over Laos. This propaganda emphasized the haughtiness, contempt, disdain, and cultural dislikes the NVA had for the Laotians in

attempts to sow doubt and discord within the ranks of the Pathet Lao and its supporting populations.

The “brothers-in-arms” concept focused its theme on Buddhist beliefs of harmony, brotherhood, peace, family, clan, and kin. These ideas were consistently woven into a variety of products geared toward convincing the Pathet Lao to return to the arms of its brothers—killing one another went against the tenets of Buddhism. Leaflets welcomed the Pathet Lao soldiers who were ralliers, defected, or surrendered, promising their safety and general welfare once returned. Much was made of picturing repatriated Pathet Lao soldiers living peacefully with good jobs.

A history of conquest and occupation was ingrained within the Laos psyche—invasions and occupation by Siam, the Vietnamese, the French, the Thai in World War II, and now once again the North Vietnamese as occupiers was used as a constant theme by the RLG. In an opposing view, the Pathet Lao used the recent occupation and colonization of the French to paint the United States and its forces as the “new occupier,” all laced with communist invectives against imperialistic forces.

All major PSYWAR initiatives have to paint the enemy as wrong and the government as right. None of this works if the populace cannot see, touch, or hear how their various grievances are being addressed. The Pathet Lao had a ready-made field of play on government neglect and abuse and was able to exploit grievances of the populace. The most notable were corruption, lack of government services (with education and health care the two most predominant), and what appeared to be an endless war due to “imperialist” forces of the United States quashing improvements in the economic lives of Lao citizens. To counter these themes, governmental PSYOP focused many of its messages on nation-building, to prove the fact that government services were expanding and the country was on the path to economic prosperity—things which the Pathet Lao and communism could not deliver. However, graft and corruption were neither seriously addressed nor reduced and eliminated, giving the Pathet Lao propagandists grist for the mill on a grievance that could not be refuted by the RLG. Words and deeds do more for a successful PSYWAR campaign than rhetoric and symbolism.

The 1960s

In the mid- to late 1960s, Raven FACs and T-28s helped to deliver PSYOP leaflets, along with CIA case officers, Air America pilots, and USAID workers. (Miniature radios were also spread around the populace.) The JUSMAGTHAI in Bangkok assisted in advising Laotian PSYOP staff in Vientiane to prepare various PSYOP products for delivery by RLG forces.

PSYWAR was performed by advisors in Project 404 in the 1960s and 1970s and by other governmental agencies supporting the RLG's PSYOP programs. Project 404 Army assistant attachés (ARMA) were supplied with PSYOP leaflets from the US embassy in Vientiane for use in the field. The Project 404 air operations center (AOC) commanders (Palace Dog) were supplied PSYSOP leaflets for use in drops by their assigned Raven FACs.

Air Commandos

Air Commandos entered the Laotian air war arena with the advent of Project Water Pump in 1964. A task of the early forward air controller (FAC) Butterflies was to try to deliver PSYOP leaflets. Ron Kosh was a Butterfly FAC from 1966 to 1967, supporting Vang Pao's operations in military region (MR)-II. When trying to throw PSYOP leaflets out of the window of various Air America short takeoff and landing (STOL) aircraft became inefficient, he worked to improve the system, which was put in use for the remainder of the war. He noted, "There was an additional duty at NKP where we went out on leaflet dropping missions. I personally worked on getting a better system to deliver the bundles. I knew a bit about explosives from my days growing up in PA. I worked on a squib device to get the leaflets to separate and scatter."⁶

Capt Bob Farmer was one of the early members of the Butterflies; he delivered surrender leaflets developed by the CIA. However, there were growing pains as each Air Commando tried this delivery technique. Maj Jerome Klingaman was the AOC commander at Pakse in 1968, and he remembers their contribution to PSYOP during the war: "There were usually two Raven FACs staying with me at Pakse, often for several weeks at a time. One particular Raven would drop by to carry out our 'PSYOP' flights."⁷

Dropping leaflets in this ad-hoc manner had its own dangers. From January to June 1972, Project 404 1st Lt Darrel Whitcomb served as a Raven FAC in MR-II, flying his O-1 Birddog with a call sign of Raven 27. He experienced the difficulty of dropping leaflets during one of his first trial and error attempts:

We were given boxes of leaflets, and told to go fly over specific areas and re-lease them. We did that a number of times. The first time I did that, we were flying along, and then throwing them out. They had a fuze squib igniter on them that blew the twine wrapping the bundles, and the leaflets would blow around. Sometimes they were just loose, and we threw them out the window. I got done with the leaflet drop mission and was flying back to home base. I was trying to climb to get some altitude, and the stick wasn't working. We looked back and the tail, on both sides, was covered with leaflets. I had to shake the plane and the tail around to get enough off so I had control—learning the hard way!⁸

Ed Gunter, later the president of the Ravens Association in 2015, described his role in support of the Lao PSYOP leaflet program, while flying in MR-I:

From a personal standpoint, I frequently was involved in dropping PSYOP leaflets in MR-1 in late '69. Major Houmpang would ask us to deliver them to a specific area. I'd fly him in the U-17. Usually had a box of them in the backseat. Nothing fancy like parachutes, igniters, etc. He'd throw them out the right window; I'd throw them out the left window as I flew over the "target" area. A couple of times, they'd get wrapped around an antenna or the elevator. Had to go thru some real gyrations one time as they were stuck in the elevator horn.⁹

As USAF gunships came online and began serving in Laos, propaganda leaflets were fired out of the flare launching devices of the AC-119K "Stingers," most dropped along the HCMT targeted at NVA forces. The leaflet had a picture of the gunship on one side with the words "Rain of Death—here is the AC-119 that just attacked you" printed in Vietnamese. On the back were descriptions of the firepower and surveillance capabilities of the gunship, warning the NVA forces they would continue to die courtesy of the gunship if they did not give up the cause.¹⁰

Air America

Both Air America and Continental Air Services, Incorporated supported CIA PSYWAR initiatives. Loudmouth propaganda broadcasts were flown in the north at night urging enemy troops to defect—

sometimes using Wagner's *Ride of the Valkyries*—while a leaflet drop program was flown in the south in the vicinity of the Bolovens Plateau. Some leaflet drops conducted by the CIA were called “Bubble Gum,” after the name of a lady of the night working in a bar in Vientiane.

Ed Dearborn came under enemy AA fire when dropping leaflets during a Bubble Gum mission. Questioning the risk to life, he asked his bundle kicker to bring him one of the leaflets while circling around to make another pass, more dangerous now that the enemy gunners knew he was in the area. He was interviewed by Jane Hamilton-Merritt, author of *Tragic Mountains: The Hmong, the Americans, and the Secret Wars for Laos, 1942–1992*, while he was living in California in 1988 and described the leaflet; at the time of the mission he was astonished he had been sent up to drop them: “I couldn’t believe it. There was a picture of a local lady of the evening, standing naked in high-heeled shoes in one of the local taverns in Vientiane. The message was ‘Come on down. Surrender and meet Bubble Gum.’ I thought, ‘I’m risking my rear end out here in enemy territory to drop this!’”¹¹

Air America also dropped counterfeit Pathet Lao currency. William Wofford, an Air America pilot, was asked to perform this task after his completion of night drops. Wofford then completed his mission by flying back over communist lines and dropping several bundles of this type. He said, “It turned out the packages were full of counterfeit money. We must have dropped two hundred pounds’ weight of money, hundreds of millions of kip. They were just in paper bags and had these devices the kicker pulled which ignited a small charge and blew the bag apart. The money was packed loosely, and when the bag blew the money would scatter and drift all over the area. I’m sure a few people ate well the next day.” Upon landing back at Vientiane, the crew hurriedly cleaned loose bills out of the cargo section of the aircraft in order to conceal the deed.¹²

Air America used the DH-4 (C-7A) Caribou for most of these missions. This extra PSYWAR task added another level of risk to the already dangerous conditions experienced by Air America pilots—knowingly flying over enemy territory and being exposed to AA fires.

PSYOP Campaign against the Ho Chi Minh Trail

A wider theater PSYWAR campaign was conducted by the CIA, the Seventh Air Force, and the commander in chief, Pacific

Command (CINCPAC) to target NVA activities along the HCMT. This campaign was supported by the 4th PSYOP Group in South Vietnam, the 7th PSYOP Group in Okinawa, and with support for various PSYWAR products from the CISO in Okinawa. Air Commandos and SOG did their part to deliver these products during activities to interdict NVA truck traffic along the HCMT.

Message themes for the PSYOP products were generally designed to invoke fear and point out the futility of continuing operations. A black propaganda campaign was implemented by both the CIA and SOG.

By 1969 USAF high flying aircraft were dropping over 20 million leaflets a month on the HCMT complex, aimed at lowering the morale of the NVA and urging them to surrender. As noted by USAF historian Bernard C. Nalty, author of *The War against Trucks*, published in 2005, Ambassador Godley was enthusiastic about the concept, extending coverage to other parts of Laos where he believed psychological warfare might exploit apparent friction between North Vietnamese and Pathet Lao or otherwise erode enemy morale.¹³

Soon, Operation Fountain Pen began as the Royal Laotian Air Force (RLAF) and USAF assets added propaganda leaflet drops and bombing-release of leaflets to their portfolio. The Fountain Pen program expanded the Lao leaflet program to cover areas in Laos only limited to communist control, where noncommunist information and news media had not penetrated. Initially, leaflets drops were conducted by USAF C-130s, operating out of Okinawa and from forward basing at Ubon. In January 1971, the leaflet missions were flown by the 90th SOS, 14th SOW at Nha Trang Air Base, initially flying one mission a week in support of Laos PSYOPs, beginning their first mission in May 1971.¹⁴

Over 500 million leaflets were dropped in the first year of the program (May 1969 thru June 1970). Strategic themes for the Laotian PSYOP leaflets, written in both Lao and Vietnamese, consisted of six major areas for messaging:¹⁵

- Theme 1: Create a favorable image of the government in the eyes of the enemy and the people.
- Themes 2 and 3: Lower the morale of the Pathet Lao and NVA forces and induce them to surrender.

Themes 4, 5, and 6: Refer to the Geneva Accords, social improvements by the government, and counterenemy propaganda.

On the part of the RLAF, air-delivered leaflets were flown by C-47s and H-34 helicopters.

Air Commando Participation in the PYSOP Campaign against the Ho Chi Minh Trail

The purpose for the HCMT PSYOP campaign was to target NVA forces infiltrating along the HCMT in eastern Laos and to focus on the Steel Tiger interdiction area. Approximately 100 million leaflets a month were dropped in this area. Along with USAF C-130 assets, eleven C-123s, and thirteen U-10s of the 606th SOS, 56th SOW at NKP participated in the operation. The 9th SOS used a C-47 flying out of Da Nang Air Base. The Thailand-based special operations assets began flying PSYOP missions on the HCMT in 1968. Although interdiction of NVA trucks on the trail was the primary mission, they were secondarily tasked to also provide aerial PSYOP support to the interdiction campaign.

The C-123 Candlestick missions included leaflet dropping and the U-10s flew both “Litterbug” leaflet drops and “Loudmouth” broadcast speaker operations. In 1968 the 606th SOS flew six PSYOP missions a week. In the last quarter of 1968, both types of aircraft delivered over 20 million leaflets.¹⁶

606th Special Operations Squadron, U-10 Detachment

Capt Philip L. French was in the 606th SOS U-10 detachment that performed PSYOP missions; he began with the unit as a first lieutenant:

We had about a dozen U-10 Helio Couriers, unmarked, and painted silver. They were very similar to the Air America U-10s. They only had three-inch numbers painted on the tail. When I was at NKP, there were only two types of birds in the 606th—C-123 Candlesticks (the night FACs) and the U-10s; we were collocated with the Candlesticks. We had about ten to fifteen pilots, who served a one-year tour with the unit. We were just the “U-10 section” in the squadron. A major or lieutenant colonel was in charge of us.

We flew high altitude leaflet drops using a two- or four-ship formation. Or, based on the threat over the area of the Ho Chi Minh Trail, we flew low altitude drops. We flew over some big guns from time to time, but they did not shoot at us. I guess they figured, what's the cost of doing that? They knew we would radio for help and soon a strike would follow and bomb them, so they left us alone. I once took small arms in my aircraft, though, when flying at low altitude.

Doing a PSYOP mission was a coordinated effort. The enlisted maintenance guys had a building where tens of thousands of these leaflets were stored. They would hand pack them into boxes. The packages were about a foot to 18" square, with a fuze igniter attached. They were timed to blow at low altitude.

A daily mission started with a briefing at the operations shack. A crew was scheduled for the mission, and they would report to the TUOC (the Tactical Unit Operations Center). This was for the whole base to get mission briefings. We got our target areas assigned by the squadron. During the briefing, we were informed of the threat—areas with guns were circled in colors—for instance, a 57-millimeter location might be circled in red. A leaflet drop would consist of flying a couple of kilometers to drop a designated box of leaflets.

When we got out to our aircraft, the boxes of leaflets were already loaded. They would cram fifteen to twenty boxes in the back of the Helio. We wore regular USAF flight uniforms, parachutes, and survival vests. We took off from NKP and would fly 60, 80, or about 100 miles out. A high altitude mission was conducted at 8,000 to 10,000 feet. We flew all by ourselves, with no armed escort.

An example of one of the type leaflets we dropped said something like, "Go back to Hanoi. Go back to your wife or girlfriend. Have a good life." Then after we dropped a B-52 arc light was scheduled for that area. After the bombing attack, we would fly back and drop leaflets like, "I told you so."

We flew loudspeaker broadcast missions; we had a loudspeaker loaded on the left side of the aircraft. These things took up the whole back-seat area. We would go out at night and circle a village or designated area, play a recorded cassette tape of propaganda, then fly home.

All of these missions came from the 7th Air Force. I guess they had a section there of PSYOP folks who put this all together and chose the targets.

We flew other missions. We flew the route between NKP, Udorn, Takhli, and Bangkok. We hauled and delivered reconnaissance films on these flights. At some time, the Agency needed our Helio support at Long Tieng due to their shortage. We went up there TDY for one week at a time. I was up there during Operation About Face. SOF also had a small PSYOP radio transmitter which played propaganda stuff; we dropped that stuff also along with rice and surrender passes. When up there, we went into the CIA guys to get our missions for each day, or went along and helped them in their Helio Couriers, or Porters.¹⁷

The 606th SOS lost much of its capability when the U-10s were removed in November of 1969, leaving the requirement to service the trail with PSYOP products to the C-123 Candlesticks. Noted the 606th SOS squadron commander, “The removal of the U-10 aircraft from the 606th deleted the PSYWAR mission which had been successfully conducted by the U-10 section. The Northern Steel Tiger area is now without psy warfare coverage of any kind. Projected meeting with the 7th AF PSYWAR personnel is expected to bring forth proposals to dispense leaflets from our C-123s if that mission can be accomplished in conjunction with C-123 FAC missions.”¹⁸

The C-123 Candlesticks picked up the load, flying three of every four nightly missions with leaflet bundles. A leaflet bundle load consisted of twenty boxes, each containing 20,000 leaflets. The boxes were kicked out over a two-minute period, covering about a two-and-a-half mile area. Drop altitude was normally around 9,500 feet. A monthly average for the C-123 Candlesticks by 1970 was approximately 17 million leaflets.

Effectiveness of Psychological Warfare Programs

The effectiveness of a PSYWAR campaign is extremely hard to ascertain. Overall, attempts to subvert Pathet Lao political initiatives were successful for several years. However, the thorough indoctrination of NVA soldiers, and to some extent the Pathet Lao, nullified many of the PSYOP themes. Captured soldiers often remarked they used PSYOP leaflets and printed material to roll cigarettes and for toilet paper. The NVA and Pathet Lao soldiers were also used to deprivation and were hardy, tough people; these variables noted in PSYOP products had little impact on their morale.

The high turnover of experienced PSYWAR personnel, serving with only six-month or one-year tours, impacted the continuity of the program, often resulting in loss of institutional knowledge as the war went on for years. It is also difficult for a Westerner to really know the beliefs, values and motivations of the Laotian and Vietnamese people, relying on hired experts who invariably filtered the products through their own prejudices and understanding of the situation. Metrics are important to prove the effectiveness of the effort put into the program. For instance, how many surrender leaflets had to be dropped to get one rallier, defector, or surrendered soldier? How

much effort, in what venues, was required to change the loyalty of villages? There are basically two ways to ascertain the success of PSYWAR: direct and indirect measures of effectiveness or indicators. Direct measuring can be accomplished by oral interviews, questionnaires, and interrogation of captured or surrendering personnel. Other direct measures include signal intercepts and captured documents.

Indirect indicators are actions taken by enemy leaders who admit that a PSYOP program is getting through, affecting, and harming its operations. These are measured by the enemy's use of jamming the government's radios, censorship of government printed materials, and reactive counterpropaganda measures.¹⁹

Regardless of the effectiveness of the PSYWAR initiatives used in Laos, all of the programs continued until the end of the war, at a cost of millions of dollars. What is known is that the Pathet Lao fought against government forces for over two decades, exercised strategic patience, and took political control of the Land of a Million Elephants in 1975. Perhaps the use of PSYWAR delayed this inevitability.

Notes

1. Lerner, *Propaganda in War and Crisis*, xiii.
2. Stevens, *Psychological Operations*, 71.
3. *Ibid.*, 26.
4. 7th PSYOP Group, report.
5. *Ibid.*
6. Kosh, interview.
7. Klingaman, interview.
8. Whitcomb interview.
9. Gunter, email.
10. Fletcher, *Charlie Chasers*, 58–59.
11. Hamilton-Merritt, *Tragic Mountains*, 271–72.
12. Robbins, *Air America*, 132.
13. Nalty, *War against Trucks*, 34; and 7th AF to CINCPACAF, message.
14. Stevens, *Psychological Operations*, 27–28.
15. *Ibid.*, 29.
16. *Ibid.*, 30–31.
17. French, interview.
18. Stevens, *Psychological Operations*, 32.
19. *Ibid.*, 60–61.

Part IV Photos Section 1



Above: The 606th SOS deployed to NKP in the spring of 1966. The base was chosen for its remoteness, and was initially constructed with dirt, laterite airstrip. Several improvements over the years would turn it into a major airbase for the Air Commandos. (USAF photo courtesy of Jim Iland.) **Below left:** Lt Col Heinie C. Aderholt commanded the 606th SOS in the fall of 1966. As the mission at NKP grew with additional SOS squadrons, Aderholt was assigned as the new commander of

the 56th SOW. (Photo courtesy of AFSOC History Office.) **Below right:** The 606th SOS's offensive strike capability was performed by the Zorros using the AT-28D Trojan aircraft. (Photo courtesy of the Air Commando Association.)





Above: The C-123K. The Candlesticks flew night missions on the HCMT to provide aerial spotting and flare illumination for attacking aircraft. (Photo courtesy of the Air Commando Association.)

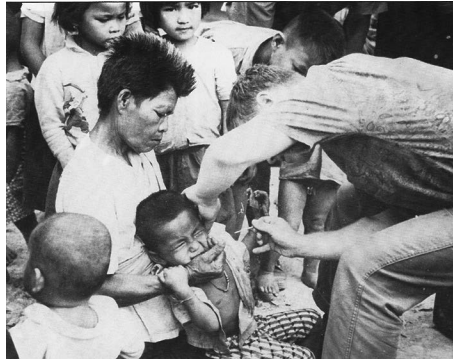


Left: The 606th SOS deployed with a Helio Courier U-10 detachment to provide for liaison services, transport, and PSYOPs. Shown here is the U-10 located at the Hurlburt Field air park. (Author's collection.)

Right and below: The 20th HS flew the CH-3Cs and the UH-1F and UH-1Ps of the Green Hornets. Their mission was in support of insertion of road watch teams and Operation Prairie Fire missions. (CH-3C photo courtesy of the Air Commando Association; UH-1F photo courtesy of USAF National Museum; Hornet detachment in Vietnam and Hornet insignia photos courtesy of Chick Svoboda, 20th SOS pilot.)



Right: Another mission for Air Commandos conducting SAW in COIN was support to civil military operations. A member of the 606th Civic Action Team provides medical assistance to villagers in northern Thailand. (Photo courtesy of the Air Commando Association.)



Left: Dr. Ted Dake, Water Pump flight surgeon, inspects a girl's ear for infection during a MEDCAT village visit. (Photo courtesy of the Air Commando Association.)

Below: The MEDCAT Air Commando ambulance at Udorn. Due to lack of support from PACAF, the Air Commandos rebuilt this scrapped ambulance with assistance from the detachment's mechanics, all during their off-duty time. (Photo courtesy of the Air Commando Association.)





Above: The 603rd ACS Nimrods deployed with A-26Ks to NKP in the summer of 1966. Their mission was to test the aircraft's performance against targets on the HCMT, under Project Big Eagle. (USAF photo courtesy of Jim Ifland.) **Left:** Lt Col Joe Kittinger (right, standing with Jack Blount) led the squadron over from the United States. (USAF photo courtesy of Jim Ifland.) **Below:** The Truck Killers of the 603rd Nimrods on the flight line at NKP. The Nimrods proved highly effective in interdicting the HCMT. (Photo courtesy of the Air Commando Association.)



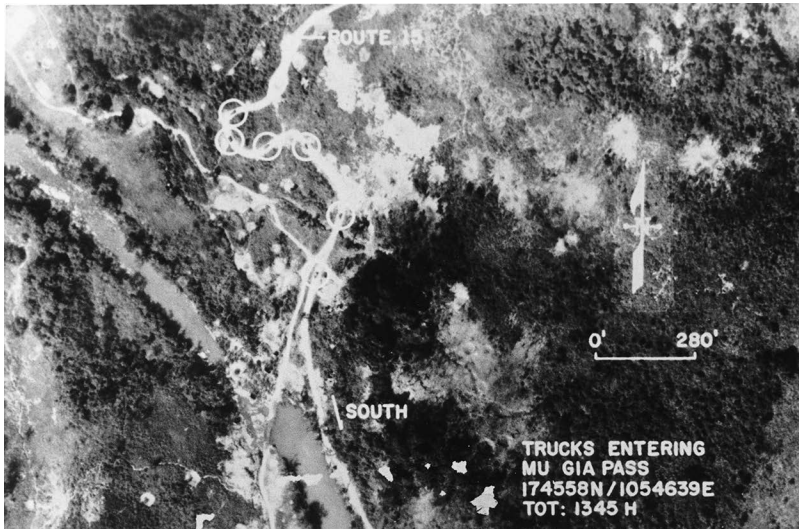


Above: A 20th HS CH-3C recovers an unconventional reconnaissance team during an Operation Prairie Fire mission. Flights in support of the reconnaissance teams were called Pony Express. (Photo courtesy of USAF.)

Right: The road watch team radio counter to identify what scouts have seen on the trail. A day's tally was then radioed in by the trail watchers. (CIA Museum photo, courtesy of Tony Hiley.)



Left: A Chinese-made truck destroyed on HCMT near the Tchepone sector. (Photo courtesy of NARA.)



Above: North Vietnamese trucks transport supplies from Mu Gia Pass heading south along the HCMT (Photo courtesy of AFSOC History Office.) **Left:** A-26A Nimrods crater a key portion of the HCMT. (Photo courtesy of the Air Commando Association.) **Below:** Road interdiction including dropping ordinance to create terrain slides to effectively block a major portion of the road at a choke-point. Shown here is such an action on the area near Route 7 and Route 13. (Photo courtesy of Bill Keeler collection, AFHRA.)



Chapter 13

Special Air Warfare in Laos

1970–75

For pennies on the dollar, Air Commandos stymied the plans of the North Vietnamese.

—Darrel D. Whitcomb, Raven FAC

As the dry season began in late 1969, the North Vietnamese Army (NVA) initiated Campaign 139 to retake and hold the *Plaine des Jarres* (PDJ). This was accomplished in 1970, with Vang Pao's forces withdrawing to the west. With the loss of the PDJ, the Hmong families and refugees who were earlier relocated to Houei Tong Ko were now in peril. On 4 January 1970, ten CH-3Es evacuated them to friendly territory southwest of Long Tieng to the village of Ban Son, Lima Site (LS)-272. Now, with most of the friendly Hmong civilians off the PDJ, military operations on the PDJ began to take on the nature of a pure military free-fire zone.¹

On 11 February NVA Dac Cong sappers raided the airfield on LS-22; the defenders were helped by AC-47s that contributed to defeating the sappers. As a show of resolve, B-52 arc-light missions were flown on the PDJ on 17 February; however, even with this injection of massive air power, LS-22 was lost on 20 February.

Continued enemy advances westward threatened the Moung Soui Air Operations Center (AOC) and its T-28 operation—placed there when Moung Soui was recaptured earlier back from enemy forces—forcing their evacuation to Moung Kassy. On 17 March enemy forces were threatening Sam Thong, which was also evacuated. Soon thereafter, enemy forces threatened Skyline Ridge itself. In March, the first in a series of battles began along the Skyline Ridge and around Long Tieng. During the battles, defenders were assisted with gunship support at night. For some unexplained reason—perhaps the fast approaching wet season—the NVA withdrew from the area, giving Gen Vang Pao and the beleaguered forces around Long Tieng a reprieve in the battle.

Meanwhile, Vang Pao did not sit on his hands. The base at Boum Long was still under enemy pressure, and Hmong forces had already lost Phou Then, which was nearby. On 29 May, Vang Pao launched forces to retake Phou Then, supported by A-26As, Thai B-Team T-28s, and AC-47s. The town was retaken on 18 June.

Vang Pao was forced to adopt a defensive strategy in 1970. This consisted of an arc-like shield along the western edges of the *PDJ*, reinforced with Royal Thai Army (RTA) artillery firebases.

It was about this time the 2nd Air Division at Udorn, coaxed by the Seventh/Thirteenth Air Force, attempted to expand its influence over the air war. They were successful with Amb. William H. Sullivan in pushing the 23rd Tactical Air Support Squadron (TASS) OV-10 forward air controllers (FAC)—call sign Nail—into the Barrel Roll region; however, they never really replaced the work of the Ravens.

C-123K Candlesticks

In 1970 the C-123K Candlesticks were still flying with the 606th Special Operations Squadron (SOS) and performing the night mission as a flare ship and FAC. Although beginning to become one of the older cargo aircraft in the USAF inventory, the addition of the jet pylons kept the aircraft viable; it had the ability to reach cruising speeds of 180 knots, allowing it to maneuver out of gunfire range.

The Candlesticks were painted black for night operations. The unit patch consisted of a burning candlestick, superimposed over a black, mountainous background. Missions for Candlesticks working the Ho Chi Minh Trail (HCMT) emanated from Task Force Alpha, who were responsible for sensor operations on the trail. Candlestick crews took off at dusk after the crew was sanitized of all US identification. Once crossing the Mekong, all navigational lights were turned off. After checking in with the nighttime Airborne Battlefield Command and Control Center (ABCCC)—“Moonbeam”—the C-123K assumed a working altitude of somewhere between 10,000 and 12,000 feet. The pilot executed a left orbit while a spotter with a starlight scope lay on a mattress looking out of the crew hatch in the floor. The job of the observer was not only to detect enemy traffic but also to call out anti-aircraft fire and give directions to the pilot for how to evade. Additional observers, all volunteers from the unit, watched outside the aircraft’s portholes as another set of eyes.

Until enemy vehicles were spotted below, the pilot flew either in a large orbit or in lazy eights. Once a target was spotted by the observer, three flares were dropped and ABCCC was contacted to send strike aircraft. Upon the arrival of strike aircraft into the area, the C-123 Candlestick served as a FAC during ordnance drops. One technique to get positive identification from the jets was to momentarily blink all the C-123K navigation lights, known as going “Christmas tree.”

John T. Halliday, in his book *Flying through Midnight*, captured his unique flying experiences as a Candlestick. He arrived at the unit in June 1970 and soon became a command pilot. He flew missions over the HCMT and in support of Lao and Hmong bases on the PDJ. His crew was one of the few fixed-wing crews to take on the North Vietnamese Air Force. On one occasion, they successfully evaded a MiG jet fighter on their tail; on another mission, they dropped chains on a large Soviet-made helicopter hovering below.

Their most memorable mission almost cost them their lives. One night while working on the PDJ as Candlestick 23 providing illumination for an outpost under attack, they were informed their replacement would be late. The forward air guide (FAG) below, named Tonto, screamed for support. Halliday quickly calculated they had just enough fuel to remain available but was then informed by the ABCCC the inbound strike fighters would not arrive in time to save the outpost. Thinking quickly, Halliday orbited lower and had his crew drop maximum flares every fifteen seconds to blind the enemy. The tactic worked, and soon F-4s arrived and delivered napalm, saving the outpost.

Sometime during the engagement, Halliday and his copilot noticed the fuel gauges emptying faster than they calculated. The crew chief discovered a leak on the outside of the port engine. Thinking they had been hit by 37-millimeter (mm) while defending the outpost, there was no way they could return to base with the leak and there was the danger of a fire breaking out. Announcing “Mayday, Mayday” to the ABCCC, Halliday decided to head towards the emergency landing site, briefed as Long Tieng. No one used Long Tieng at night.

After a harrowing flight to find the field, Halliday circled a few times to get his orientation. He was not convinced the landing direction on the emergency landing sheet was correct. On a hunch, he reversed the direction, barely missed the limestone karsts, and vectored in off a faint green light glowing from the control tower.

Safely down, they were met by a surprised case officer, complaining they had wakened Gen Vang Pao from his sleep while “buzzing” the

airfield! They successfully repaired the fuel leak the next day (upon earlier inspection, all fuel tanks were bone dry) and flew home to a surprised 606th SOS, who thought they had met their fate. The crew received air medals for their heroic efforts to save the aircraft.²

The wet season battles in 1970 on the *PDJ* resembled a see-saw type of war—battles went back and forth. Gen Vang Pao developed a smaller campaign to hit back and recapture significant portions of territory that had been lost. These operations were conducted in September through December and were called Counterpunch. On Counterpunch III, the final operation, 21st SOS helicopters were positioned at Long Tieng on 26 November to airlift troops into the operation. (Half of the helicopters were CH-3Es, and half were CH-53s.) The 21st SOS successfully air-landed *Groupement Mobile (GM) 21* in the Ban Ban Valley to interdict enemy forces at San Tiau, although the *GM's* operations were weak and inconclusive.

Meanwhile, the situation in the southern panhandle resembled a status quo; front lines stabilized around the Moung Phalane and Moung Phine sectors, near Tchepone. Attopeu fell at the end of April; Saravane fell to the enemy on 9 June. To break loose the battlefield, an operation began with three special guerrilla unit (SGU) battalions making a hook drive to Tchepone. By 16 July, the operation was failing, with the Black battalion withdrawing and awaiting extraction on an emergency landing zone (LZ) northwest of the catcher's mitt. On 17 July the battalion was supported by three sets of A1-Es performing strikes on the enemy. On 18 July the situation was controlled enough for five 21st SOS helicopters to extract the Black battalion.³

CH-53C Helicopters

On 8 August the 21st SOS received its first fielding of CH-53Cs; they went immediately into combat operations. The CH-53s gave the 21st SOS increased ability to hover and operate at higher altitudes. The Knives experienced their first two losses of helicopters in February 1971. The CH-53C was the Air Force version of the USMC CH-53A. Its performance parameters for loads, power, and operating speeds outperformed the CH-3Es. It could hover at 6,500 feet, vice the 4,000 feet of the CH-3s. It was armed with three GAU-2B 7.62-mm miniguns. It did lack the aerial refueling capability and some armor that came with the HH-53 rescue version.

Another attempt to take Tchepone began on 19 October and lasted until 5 November, near Phou Katon. Again, Royal Lao Government (RLG) forces were bloodied. The need to evacuate the wounded became dire. With support from A-1E and F-4 air strikes, the wounded were finally extracted.

The remainder of the year in southern Laos consisted of friendly and enemy forces jockeying for position on the Bolovens Plateau. During the battle at PS-22, government troops were supported by AC-119 gunships.

1971

On 1 January 1971 the Knives supported a Cambodian troop lift from Pakse Site (PS)-22 to PS-38, under Project Copper. Paksong fell to enemy forces in January. On 8 February South Vietnamese forces invaded Laos to cut the HCMT near Tchepone, dubbed Operation Lam Son 719. While Laotians were not involved directly, they did conduct diversionary attacks in support. Two diversionary operations were conducted, named Silver Buckle and Desert Rat. Eight CH-53s and six CH-3s from the 21st SOS supported the troop movement of GM 31 to Ban Houei Mun, the troop launch site for the operation, on 16 February. That same month, the People's Army of Vietnam (PAVN) and Pathet Lao forces attacked Long Tieng in military region (MR)-II. AC-130s supported the defenders at Moun Phalane during the third week of August.⁴

To relieve pressure on Long Tieng, Vang Pao launched forces to retake and regarrison Sam Thong. Three Knife helicopters supported their insertion but one crashed and killed the entire crew. Long Tieng remained besieged until the arrival of the wet season when Vang Pao renewed his offensive and retook about half of the *PDJ*.

In MR-IV (Pakse unit), Operation Sayasila began on 27 July. The intent of the operation was to accomplish major objectives to regain territory lost to the NVA and Pathet Lao, with one objective being the recapture of Saravane. Thirteen helos from the 21st SOS—including one flown by Jerry Gilbert—inserted the troops who successfully recaptured the city. The other objectives included the recapture of Paksong and Thateng. These operations were supported by Air Commando gunships.⁵

On 24 September CIA-directed irregulars of the Commando Raiders were shuttled by two Knife helicopters to retake Moung Soui, which they did. The following day, the Raiders were reinforced with *Bataillon d'Infanterie* (infantry battalion) 6, arriving to the Moung Soui airfield transported by six Knife helicopters. This effort was soon reinforced with Thai unity battalions and a battalion of RTA artillery. With the insertion of more Thai troops, a requirement for Thai FAGs arose. The first cadre of Thai FAG students was sent to Udorn for training given by the eleven-man combat control team running the course.⁶

While troops were arriving to Moung Soui in September, eight CH-53s and two CH-3Es conducted a troop lift at Saravane, followed by the use of an additional four CH-53s. Although Sayasila was initially successful, RLG forces retreated from their gains by the end of the year.

William “Bill” Follette, CH-3E Pilot, 21st Special Operations Squadron

1st Lt Bill Follette reported in to the 21st SOS at Nakhon Phanom Royal Thai Air Base (NKP) in 1971 after flying KC-135s for the Strategic Air Command; the 21st SOS commander at the time was Preston Bradley. Lieutenant Follette was assigned as a Knife pilot on the CH-3E and would be one of the last three CH-3 pilots sent to the squadron; at the time, the squadron had about five CH-3Es and ten of the new CH-53s. His call sign was always Knife plus the tail number of the helicopter he flew, but his favorite airframe was 07; thus, he flew as Knife 07.

With the CH-53s taking over many of the search and rescue (SAR) missions, Lieutenant Follette flew a variety of other missions tasked to the squadron. One was the support to the Thai counterinsurgency (COIN) mission: Lieutenant Follette recounted his experiences as follows: “We participated in assisting the Thais with their counterinsurgency mission. Within Thailand, we would fly recce at night around the local base. We also watched up and down the Mekong. One night, we had a sky cop on board using a NOD [first generation Night Observation Device] mounted on a platform. We worked all night dropping flares in support of the Thai Army who were in a rolling firefight with insurgents.”⁷

He also flew resupply to Long Tieng and flights to some of the tactical control and navigation (TACAN) emplacements out at the

LSs. One of the missions of the squadron was support of troop lift for RLG forces. Lieutenant Follette stated, "I participated in a large operation near Savannakhet, Thakhek. There were three CH-3Es and six CH-53s involved to support that operation, airlifting troops into hot areas. I dropped off some guys who got under heavy fire and mortar fire. I went back to evacuate them under that mortar fire—that was my combat hero moment and I got awarded for that action. The threat was mostly small arms that I experienced, not the heavier stuff."⁸

By the end of the year, the CH-3Es of the 21st SOS were gone. The squadron continued to fly with its remaining eleven helicopters.⁹ Lieutenant Follette flew out some of the last CH-3Es from the unit.

I took out the last of the CH-3Es from combat. We had to fly them to U-Tapao for cocooning for shipment to Davis-Monthan Air Storage Park. One of them was the "Black Mariah." It was later sent to USAF museum in Ohio (tail 676).

I got off Air Force active duty in 1973, but after a year, I got back into SOF aviation at Luke AFB in Arizona. Those very same aircraft we had cocooned in 1972 and sent to Tucson were sent there for us to fly in a brand new Special Operations Squadron of the Air Force Reserve (302nd SOS). I was happy to see again the birds I flew, including tail 676. I can safely say that I flew the "Black Mariah" longer than anyone else.¹⁰

1972

In December the NVA opened up its dry season push to recapture the *PDJ*, called Campaign Z. AC-130s were used to help the defenders of the King Kong firebase. In the south, Paksong fell to the enemy. By the opening of the new year, enemy forces were once again threatening Skyline Ridge and Long Tieng. Vang Pao responded with a limited counterattack plan. The first, named Operation Strength, attacked out of Padong towards Long Tieng to relieve the pressure. This was followed by Operation Maharat to clear Route 13 of enemy forces. The final operation was Strength II, attacking enemy forces both south and north of the *PDJ*. During this operation, CH-53s supported the movement of *GM 33* to Bouam Long.¹¹ Over March and April, AC-130 gunships and AC-119 Stingers supported Vang Pao. The 21st SOS continued to participate in the airlift of government forces.

In the south, Khong Sedone was retaken in mid-June during Operation Black Lion with the assistance of eight CH-53s transporting

government troops. During Black Lion III—the recapture of Saravane—the 21st SOS was so crippled by losses they were withdrawn from the operation. The squadron was back at it in November, inserting GM 32 into Lat Sen.

Combat Control Team Beacon Placement

There is no airpower without an aerial platform in the air with some form of destructive power. Over history, this is achieved both quantitatively and qualitatively to dominate and overwhelm the adversary, or at least achieve air control. Airpower has both a destructive and interdictive capability and can achieve a psychological dominance. To achieve quantitative superiority, more aircraft, crews, ordnance, and sortie generation are used. To achieve qualitative superiority, technologically superior aircraft and precision weapons, resistant to enemy counterattacks, are used. One way to improve the delivery of ordnance is the use of beacons (navigational aids) to ensure accuracy of where ordnance lands. Along with radar, the Seventh/Thirteenth Air Force used beacon technology combined with precision-guided weapons and aircraft that could operate in all weather and light conditions.

One of the key beacon missions conducted by the 56th Special Operations Wing's (SOW) combat control team was to emplace the AN/PPN-18 beacon in support of F-111 all-weather flights into Laos. In 1972 the survivability of the secret base at Long Tieng was in question. It would survive or fall based on the level of US and Royal Laotian Air Force (RLAF) air support to attack enemy forces in the area. The RLAF could not attack at night. To offset the deficiency, in October 1972, the F-111 was introduced as an all-weather and nighttime aircraft to support RLG forces. To achieve responsive and flexible air support, the AN/PPN-18 beacon was introduced near Long Tieng to provide an accurate and flexible aim point for radar-assisted bombing. Earlier, the Seventh/Thirteenth Air Force felt trained ground FAGs with ultrahigh frequency (UHF) radios would be sufficient to direct air strikes; this proved infeasible in bad weather and when there was a lack of training among the FAGs. In the classified (now declassified) concept of the operations, the need was clear: "The existing FAG communications network was used to receive targeting inputs from the field and a Tactical Air Control Party function was

established at existing forward area Air Operations Centers for control of beacon strikes.”¹²

Senior Master Sergeant Cass “Red Dog” Seymore was one of the Detachment 1, 56th SOW’s combat controllers (CCT) involved in the program. Combat control teams deployed to eight selected sites throughout Laos to train the FAGs on beacon employment and then emplace the devices. The initial emplacement occurred at LS-20A in support of three irregular task forces defending the southwestern perimeter around Long Tieng, known as Skyline Ridge. It was found that aircraft using the beacon could deliver ordnance up to forty miles from its emplacement location.

Once emplaced, it would be the responsibility of the FAGs to provide security for the beacon and then monitor its use. Maintenance and rotation of the beacon and battery resupply remained one of the missions for the CCTs. Between the beacon emplacement in November 1972 through operations up to February 1973, 2,392 missions were flown by American aircraft employing the beacon as radar offset point. The beacon emplacement proved highly successful with only 9 percent of the sorties noneffective.

After the success of the beacon at Long Tieng an additional beacon was emplaced by the CCTs at LS-32 (Bouam Long) in November 1972. This provided guidance to pilots operating to retain control of their aircraft in the northern portion of the *PDJ*. The beacon proved useful during the siege of Bouam Long in diverting air strikes for its defense.

Additional beacon sites were established at LS-15, north of LS-20A, to support Vang Pao’s irregulars on the western perimeter of the *PDJ*. At the request of the ambassador, an additional beacon was added to cover the area around Luang Prabang. Beacon site five was established north of Sala Phou Khoun, the road junction of Routes 13 and 7; beacon sites six and seven were established with number six at Paksong in MR-IV and number seven near Khong Sedone in MR-III. In February 1972, an additional beacon site was established in the Thakhek area.

The beacons in each case were emplaced where sufficient RLG or irregular forces operated to ensure the security of the devices. The Laotian troops were trained to destroy the beacons if threatened with their loss. Preferably, the beacons were to be recovered and a monetary reward was offered to troops who could bring them back to safety. Throughout the period of the beacon emplacement, Detachment 1

CCTs had the responsibility for their maintenance, resupply of batteries, and employment.

James A. Howell was the CCT, noncommissioned officer in charge at NKP from 1966–67. In his oral interview conducted in 1995, he described the dangers of combat when emplacing beacons:

I was at Attopeu when I was ordered to go to one of the TACAN sites to provide a direction finding service for aircraft. The TACAN had gone off the air because of generator problems, and another one could not be flown in because the Laotian guards were receiving enemy fire. Again an H-34 with a lone pilot and flight mechanic took me to that site. One night about 1:00 a.m., an enemy patrol came up the south side of the mountain. The enemy patrol surprised the Laotian guards (about thirty soldiers) and all hell broke loose. I could not fire my weapon because it was too dark and raining, and I didn't know who was who so I hid myself. That night I radioed "Blind Bat" the air border command post, but not until the shooting stopped. In the early morning I came out of hiding to check the situation, and there were dead soldiers all over the place. A helicopter came in later that afternoon. As the Air America H-34 began his approach, we began receiving ground fire. They went around, then came in fast, still under fire and got me out. The large H-34 was a big target. I don't know how the enemy missed. Whoever the pilot and mechanic were they surely deserve some recognition. But knowing Air America, I doubt they said anything. It was a routine mission for them. I can't say enough positive things about them.¹³

Training on the use and maintenance of the AN/PPN-18 was assigned to Detachment 1 CCTs by an officer from the Seventh Air Force, who was knowledgeable on F-111 operations. Once the CCTs trained the FAGS—the CCTs chose only the most qualified and capable FAGs who knew English—it was the CCT's responsibility to monitor the FAGs and conduct frequent trips to their location to ensure the highest proficiency with the use of the beacons. CCTs were designated as the responsible control agency for F-111 strikes. (Cass Seymore performed this function at Pakse, as Red Dog; additionally he performed this function at LS-20A and LS-32, west of the Ban Ban Valley.)

Combat Controller, Sgt John A. Koren

Sergeant John Koren ran the operations center with the Hmong when they were involved in the F-111 bombing program in Laos. He was serving in the six- to eleven-man combat control team detachment in the 56th SOW arriving in March 1972. The detachment was commanded by the flight surgeon, Dr. Hugh Smith, due to the lack of

a CCT officer assigned to the detachment. Koren describes how the formal FAG course evolved from the F-111 beacon program:

Detachment 1 of the 56th SOW was really the 1131st Special Activities Squadron. This was the cover story. We went up to Long Tieng under the control of Seventh/Thirteenth AF to put in the F-111 bombing beacons. I was on flight status and worked with T-28s, AC-119s, and Spectre—about 343 hours of flight time.

The Agency controlled all our movements and appearance. We went in “motley” looking. I wore a Lao volunteer patch on a black shirt, along with blue jeans. We carried CAR-15s, .38s, and M-79 grenade launchers. (At this time I was an E-5 going on E-6.) We would work about two weeks on site, and moved around a lot. We helped to train some FAGs, and emplaced beacons. Again, we were very controlled in our movements by the Agency. But the embassy knew what we were doing—we had blanket orders and could go anywhere.

In late 1972, the introduction of F-111s into Laos began. There was an ADVON of both the Seventh AF and the Thirteenth AF at Udorn. I think they were in charge of this, possibly, and we were under their command and control. We went to a lot of Lima sites around the PDJ.

We inherited the FAG school program as our primary mission. The FAG class became formal when they had to plot out F-111 strikes (the Hmongs); prior to that it was OJT in the field. There was a quest to get good BDA from the F-111 program—a lot of interest from the USAF. If 130 mm artillery hit us at Long Tieng, we could get divers from the F-111s. Vang Pao was very happy about this.¹⁴

Forward Air Guide Course in the 1970s

The CCT FAG course detachment at Udorn lived in a hootch by the F-4 squadron at the southern end of the runway. There were about 400 people in Detachment 1 at Udorn in late 1974. Koren remembers, “The school was taught in our old hootch area, where we had a terrain model we used in the course. There were too many F4s taking off and tremendously loud noise, which affected our hearing (to include getting hearing damage). So we moved. The bonus was the new classroom was also air conditioned!”¹⁵

The FAG course was a week long, followed by a practical exercise in the field. Two senior noncommissioned officers (NCO) who were TDY—one was Will Ellidge—ran the logistics for the course. By 1972 the FAG course curriculum was modernized to incorporate the newest techniques and equipment. It was a formal course; attendance was arranged by the Agency, with about six to ten students in each class.

Even at this late date in the school's evolution, the English proficiency of the students was lacking. Those students who could speak English fairly well helped the instructors to teach the others. Between Pidgin English, some French, and Thai, the class instruction proceeded.

The class instructors utilized chalkboards, movies (including Air Force movies), and slides. The CCT cadre taught map and compass and basic field subjects. A generic terrain board was used to prepare the students for the bombing range. Field survival skills, radio use, and resupply drop conduct were also taught. Koren notes, "It was effective for them, but we knew that they would never control US air assets. With an exception, the Hmong did talk to the F-111s during that program. They did talk some English to the AC-119 Shadows when they had troops in contact during night CAS [close air support]; maybe they also talked to AC-130 Spectre gunships. They were a bit angry about the AC-130s when one night the Spectre tore up some friendly road construction equipment!"¹⁶

The course ran during the week; on weekends the FAG CCT cadre relaxed. During the course, pre- and post-examinations were given on various subjects relevant to the course. The cadre used these to adapt the course to the combat requirements of the future FAGs, not necessarily stuck on strict interpretations of doctrine. In a sense, each course evolved in an ad hoc fashion, deviating from the lesson plans as required.

When the classroom instruction was complete the students moved to the T-28 bombing range for the field exercise—one day in length, daylight hours only. The bombing range was located out at Nang Bua Lam Phu, southwest of Udorn. Prior to conducting the range day, the cadre made coordination with the local Thai police aerial reinforcement units (PARU) or border police to access updates on any local communist threat. On the day of the range exercise, the cadre and the FAG students flew out to the site dressed in their combat equipment and armed, transported by the 21st SOS. A day at the range was typically six to eight hours, allowing the students to make repetitive calls for air strikes.

The cadre used the call sign Bluebonnet, signifying the blue beret worn by the CCTs. Once the field exercise was completed, the FAG course cadre held a graduation and dinner to celebrate. Since most of the courses were for Thai FAGs—assigned to the Thai artillery battalions in MR-II in Laos—the cadre was required to follow up its course with an after action report to the joint logistics board.

If possible the CCT cadre tried to conduct follow-on visits to the field to measure the effectiveness of the course; however, this was difficult to accomplish given other duties for the CCTs. One additional duty involved the team TDY to the Joint Casualty Resolution Center to assist Lt Col Charles Beckwith. Koren said, “We had no control over where the students went for assignment after they left the course. One of them was call signed ‘Small Man,’ a famous Thai FAG. He was a fearless guy, [who] did a lot of PARU missions. He was very well received by the Agency—just a good troop. A lot of the guys we got were young; we had some twelve-year-olds. Our students were Thai, Hmong, and *Forces Armées Royales*. Later, when Hmong FAGs came to the course, we always inquired about guys we had trained previously, how were they doing? They said, ‘Oh, they are dead. Got hit in the bunker. No good Buddha amulet!’”¹⁷

Project 404 Combat Controller

Another critical duty of special operations CCTs was support to the AOCs at the five operating locations. While each operating location had its unique requirements, a profile of the role of the CCT, serving as a Project 404 AOC CCT, can be drawn.¹⁸

All Project 404 CCTs were assigned to Detachment 1, 56th SOW at Udorn, with duties at one of the five operating locations. CCTs generally ranged in rank from sergeant to technical sergeant; younger CCTs arrived in-country as E-4s and quickly gained the E-5 rank after a few months of service in-country. On average, the special operations CCT had already achieved jump status and completed both the combat control radio maintenance and the radio equipment repairman courses at Keesler AFB, Mississippi. Most had also attended the Tactical Air Command, Combat Control School in Sewart AFB, Tennessee, and learned special operations CCT techniques at Hurlburt Field, Florida. In some cases, CCTs also attended the Navy Underwater Swimmers School in Key West, Florida. All CCTs practiced a daily physical exercise regimen to remain fit. Some also attended various survival courses prior to being deployed overseas.

Under Project 404, the CCT assigned to an operating location was flown aboard an available Air America or Continental Airlines aircraft to the site after checking in through Vientiane. Upon arrival to the AOC, it was the responsibility of the CCT to manage the air

communications net for all Air Force operations within his MR in the assigned engagement areas: Barrel Roll, Steel Tiger, and Cricket. The secondary mission was serving as a radio and communications advisor for the RLAF detachment located at the airfield.

The CCTs, like other Project 404 personnel, wore civilian clothes, combined with standard Air Force equipment and radios. For larger air operations, such as the fixed-base operation at Long Tieng, the MRC-108 radio jeep served as a backup.

One of the important aspects of communication at the AOCs was the knowledge and integration of Raven FAC radio procedures and the tactics, techniques, procedures, and operations of RLAF assets. Another important factor was the monitoring of common frequencies used by Air America and Continental Air Services, Incorporated (CASI), the latter most important when coordinating SAR. On a wider scale, the AOC CCT was well versed in the air-ground operations system and coordinated with the assigned ABCCC aircraft for his MR.

AOC CCTs often flew with the Raven FACs at their operating location to assist with delivering air strikes from the back seat of the O-1F Bird Dog. Very few CCTs saw a day off with the myriad of duties needing accomplishment. When there was free time, CCTs also served as trainers, advisors, and mentors to their counterparts in the RLAF. To improve counterpart proficiency, and as part of “Lao-ization,” the CCT trained selected Laotian, Thai, and Vietnamese NCOs in communications operations and radio maintenance.

CCT Rex Corbin served as the communications sergeant to the AOC commander at Pakse, beginning his duties in June 1972. He was also the communications advisor to the RLAF detachment at Pakse airfield. His primary duty was to manage the air communications net for all Air Force operations in Steel Tiger, MR-IV. He joined the Air Force in May 1968 and volunteered to become a CCT with the Air Commandos at Hurlburt Field. After completing intensive training in the required courses for CCTs, he deployed to Laos, signed in to Detachment 1, 56th SOW, and was assigned to the AOC at Pakse. He found himself as the sole CCT, although on rare occasions he took the opportunity to visit other controllers throughout Laos to compare techniques and gain an appreciation of other demands in the other operating locations. For instance, he visited Sgt Mike Lampe and MSgt Carl “Robbie” Roberts at Long Tieng; on another instance he spent time with Rodger Klair in Savannakhet.

The AOC at Pakse lived in comfortable quarters in town, about twenty miles from the airbase. It was a secure area, and their quarters were guarded by the Lao army. Each day they drove to the airfield. Along with their military duties, they also coordinated and received daily updates from the United States Agency for International Development, Air America, and CASI. For mail and supplies, they took advantage of a weekly Lao C-47 flight to Ubon, Royal Thai Air Force Base (RTAFB).

Corbin and the other members of the AOC worked seven days a week. He recalls:

We worked and flew seven days a week because we were so short staffed there weren't many opportunities for time off. The first Raven flights were always just before dawn or at dawn so they could be flying over the teams patrolling MR-IV by daylight. I had the comms up before launch and did ops normal checks every fifteen minutes to record their position and status. As targets of opportunity were spotted, I would get a radio call to send a flight of AT-28 aircraft loaded with appropriate weapons: hard bombs (20 or 500 lbs.), napalm, CBU, or just guns (.50 cal). If we had prefragged targets, the aircraft would already be loaded and cocked. If it was a quick turn or a target change, the Lao bomb loaders (jammers) would quickly change loads, or the pilots would run to other aircraft that had the correct armament.¹⁹

Air strike assets for MR-IV consisted of the RLAF T-28s or USAF and Naval jet aircraft (F-4s, A-7s, etc.) flying out of Thailand and from Naval carriers. At night, either AC-130s from Ubon, RTAFB, or RLAF AC-47s stationed at Pakse patrolled.

Corbin also flew with the assigned Ravens at Pakse: "I flew back seat for our Raven FACs as often as possible and they were in combat over MR-IV every day, although it became tough to call air strikes during the smoky season and monsoons. The O-1s were constantly shot at and often hit, but it was rare to lose a pilot and his backseater. One of the most tragic losses was when I lost two close local friends in a fight with NVA regulars north of Ban Sim, between Pakse and Saravane in October 1972."²⁰ Corbin refers to a Vietnamese volunteer FAC and his back-seater, who took 12.7-mm through their wing and could not pull up. Corbin talked to them on the radio all the way down, until the aircraft crashed and burned.

In December 1972, when his tour was over, Corbin felt there was much more to do but reluctantly departed. He commended the AOC commander, Lt Col Gene Ihli, for his great leadership during the long hours at Pakse and for keeping troop morale high. Corbin also had

high praise for the Ravens: “Of course, all the Ravens were heroes, and no kidding, most of them really were. Three of the best that I flew with are Jay Johnson, Lew Hatch, and Chad Swedberg.”²¹

1973

The enemy pressured RLG guerrilla forces in the Nam Yu region of MR-I. When they came under attack, the Thai commandos requested airlift support to Ban Houi Sai as reinforcement. While aloft with the troops, the Knives were ordered to stand down. Air Commando CCTs, including Koren, supported the Thais during this battle.

On 20 January 1973 the 21st SOS flew its last combat mission in Laos. In February, as a result of the Paris Peace talks, the cease-fire went into effect. On 1 April Water Pump pilot training for the RLAF shifted from Udorn to Savannakhet, with the Lao using their own instructor pilots. Water Pump was renamed as the Training and Liaison Detachment with the mission to conduct advanced training only.

1974

When the Military Assistance and Advisory Group, Laos was reinstated in Vientiane under Maj Gen Richard Trefry, Project 404 and the Water Pump detachment moved under his control. As per the Geneva Agreement, the Ravens and the Water Pump detachment closed operations and departed theater by 30 June.

1975

Per Thailand’s request, all US forces were scheduled to depart the country by October 1975. In June of that year, the 56th SOW moved to MacDill AFB, Florida; the 656th SOW was activated at NKP to shut down in-country operations. In September 1975 the 21st SOS shut down, and the remaining CH-53s were moved to U-Tapao.²² This ended the *special air warfare* effort during the secret war in Laos.

The role of the Air Commandos in Laos employing special air warfare validated the USAF role in COIN and unconventional warfare (UW). Their role highlighted the creativity and innovation needed to get the job done and support American foreign policy objectives.

Although the use of medium bombers and attack fighter aircraft would not prevail into today's modern USAF Special Operations squadrons, the essential skills and modern aircraft to operate in UW, irregular warfare, and to provide special operations airpower in joint operations remain the hallmark of this highly professional group.

Notes

1. Conboy, *Shadow War*, 251.
2. Halliday, *Flying through Midnight*, 248–319.
3. Conboy, *Shadow War*, 270.
4. *Ibid.*, 290.
5. *Ibid.*, 304–8.
6. *Ibid.*, 303.
7. Follette, interview.
8. *Ibid.*
9. Whitcomb, *On a Steel Horse I Ride*, 66.
10. Follette, interview.
11. Conboy, *Shadow War*, 338.
12. *Ibid.*, 147.
13. Howell, interview, 3.
14. Koren, interview.
15. *Ibid.*
16. *Ibid.*
17. *Ibid.*
18. CCT Rex Corbin, USAF, retired who served at Pakse and Udorn in the latter half of 1972, where a profile of the Project 404 AOC CCT is synthesized. He graciously provided a detailed description of those duties on a questionnaire, provided to the author during the fall of 2015.
19. *Ibid.*
20. *Ibid.*
21. *Ibid.*
22. Whitcomb, *On a Steel Horse I Ride*, 84.

Part IV Photos Section 2



Above: The unit insignia of the 56th ACW. (Photo courtesy of AFSOC History Office.)



Left: The 56th ACW increased its combat capability with the addition of three A-1 Skyraider squadrons: the 1st SOS Hobos, the 602nd SOS Firefly/Sandys responsible for SAR, and the 22nd SOS Zorros (after the retirement of their AT-28Ds). (Photo courtesy of USAF official A-1 photos.)

Below: The CH-53C became the heavy-lift workhorse of the 21st SOS. It differed from the HH-53C in that it lacked the aerial refuel probe and had less armor. Shown here is a resupply flight to Phou Pha Ti, LS-85. (Photo courtesy of Mike Ingham.)





Left: A rare reconnaissance photo of a 22nd SOS Zorro catching a North Vietnamese truck under the light of a flare on the HCMT. (Photo courtesy of Brig Gen Noah “Ed” Loy, USAF, retired.)

Right: Maj Bill Follette stands near his CH-3E. **Below:** SOS CH-3Es of the 21st SOS support troop movement in southern Laos. (Photos courtesy of Maj Bill Follette, USAF, retired.)



Right: 21st SOS TACAN emplacement. One of the missions of the 21st SOS was flying in support of the TACAN sites. (From the collection of William E. Platt, Raven 43.)



Above: A 602nd FS (Commando) A-1F Sandy escorts a USAF HH-53 on a SAR mission. This was the primary duty of the 602nd. **Below:** AC-119K "Stinger" gunship. (Photos courtesy of USAF.)





Above: Air Commandos provided a military training team to provide the RLAf with an AC-47 capability to support troops in contact throughout Laos. This RLAf AC-47 is located at Savannakhet. (Photo courtesy of the Mike Brennan collection) **Below:** Project 404 CCT Mike Lampe (pictured on right) and another 56th SOW CCT pose in front of fully loaded AT-28 at Long Tieng, LS-20A. (Photo courtesy of Mike Lampe.)



Right: Air Commando CCTs train Thai FAGs attending the course in Udorn. (Photo courtesy of Maj Paul T. Carter, US Army.)



Left: Thai FAG graduates of the course, operating at Long Tieng. (Photo courtesy of Maj John A. Koren, USAF, retired.) **Below:** A 21st HS CH-3E on ramp being prepared for Operation Igloo White sensor emplacement. (Photo courtesy of Sgt Jim Henthorn, USAF, retired, 21st SOS.)





Above: Sensors are loaded aboard 21st HS's helicopters at NKP. (Photo courtesy of USAF.) **Below:** A crewman prepares to hand-emplace an Operation Igloo White sensor string somewhere near the HCMT. (Photo courtesy of Sgt Jim Henthorn, USAF, retired, 21st SOS.)



Right: Robert Arnau's photo during a mission of the CH-3Es of the 21st SOS to support insertion of Lao reconnaissance teams somewhere on the Bolovens Plateau. (Photo courtesy of Bob Arnau's family.)



Left: Robert Arnau flew the CH-3Es of the 21st SOS. (Photo courtesy of Bob Arnau's family.)

Below: The NKP-based 56th ACW CCTs in 1967. (Photo courtesy of Dr. Forrest Marion, AFHRA.)





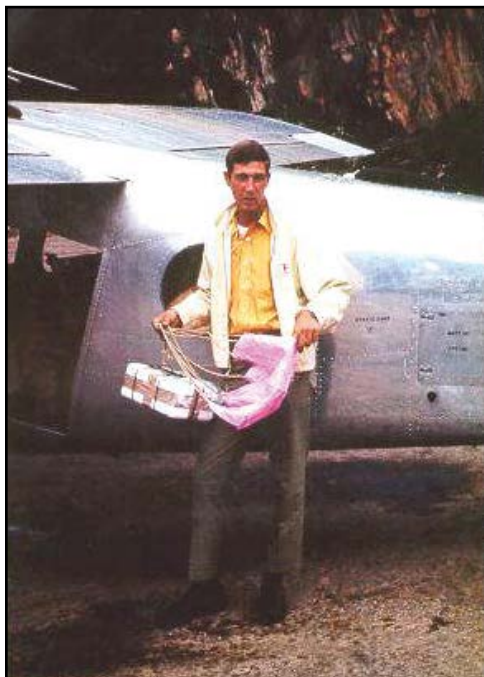
Above: A1C Michael G. Brennan, Avionics Technician assigned to the 56th SOW at NKP, works on RLAf T-28s at the Luang Prabang flight line (circa 1970). Airmen Brennan serviced RLAf T-28s for Waterpump, and the AOCs at Savannakhet, Pakse, and Luang Prabang (Project 404). Mike also participated as a back seat observer flying combat missions with the Ravens. (Photo courtesy of the Mike Brennan collection.) **Below:** Group photo in 1971 of instructor pilots and support personnel of Detachment 1, 56th SOW at the Udorn Waterpump training facility for Thai, Lao, and Hmong pilots. Capt Earl Bridges (standing second from left of the T-28 engine) remembers the bulk of the six month course was dedicated to getting these pilots to operate safely in the air, given the low technical proficiency and language barriers of the student pilots. (Photo courtesy of Earl Bridges.)





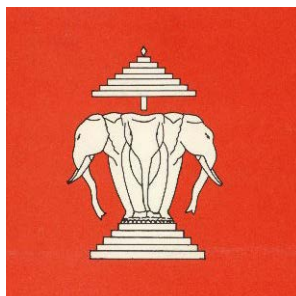
Above: Maj Don Meek with a Hmong student pilot. (Photo courtesy of Lt Col Don J. Meek, USAF, retired collection.)

Below left: Dick Saunders displays a PSYOP leaflet bundle, wrapped in cord string with a squib igniter on top to explode the package open when it was thrown out of the aircraft. (Photo courtesy of Lt Col Philip L. French, USAF, retired, 606th



SOS U-10 PSYOP section and Dick Saunders, www.aircommandotripod.net.)

Below right: The CIA surrender leaflet depicted the *Erawan*, a three-headed elephant under a white parasol. Instructions for surrender were on the back. The flag appealed to nationalism and unity of Laos. (Photo courtesy of Lt Col Robert Farmer, USAF, retired, Butterfly FAC.)



**BẠN MUỐN CHỊU
CHUNG SỐ PHẬN
NÀY KHÔNG?**

Left: The fate of NVA soldiers operating on the Ho Chi Minh Trail. This was designated to invoke fear that soldiers would die in a foreign country without the benefit of traditional burial, ensuring their spirits would walk the earth, restless and lost. **Below:** Reward leaflet for the return, safely, of downed Allied pilots. (Photos courtesy of Sgt Maj Herb Friedman, US Army, retired, collection.)



Below: Actual PSYOP leaflet dropped by the 606th SOS, U-10 "Litterbug" pilots and crew. It warns of the danger of Communist propaganda—a wolf in sheep's clothing. Note the wolf-like shadow cast by the caricature of Ho Chi Minh. (Photo courtesy of Lt Col Philip L. French, USAF, retired, 606th SOS U-10 PSYOP section.)



Epilogue

The linkage of local and regional conflicts into a global conflict is not necessarily wrong in itself; there is a requirement to explain how conflicts, disputes and insurrections in different parts of the world affect one another. However, the consequence has been, and will continue to be, that liberal powers are pressured to take sides and invest military credibility in conflicts that may have no clear military solution within the terms of war as traditionally understood.

—Emile Simpson
War from the Ground Up

The Royal Lao Air Force

In October 1969, during the Nixon Administration, the US Senate held hearings on the situation in Laos. The “secret war” was exposed and went public. Even with this compromise, Pres. Richard Nixon continued the efforts in Laos to prevent a takeover by the communists. That fall, Gen Vang Pao—leader of the Hmong guerrillas, advised by the Central Intelligence Agency and US Special Forces operators—attacked to retake the *Plaine des Jarres* (PDJ) and confronted the 316th Division of the North Vietnamese Army (NVA). He was supported by USAF close air support and B-52 strikes. Gen Vang Pao’s efforts first appeared to be successful, but the NVA and Pathet Lao counterattacked in force and pushed him off the PDJ. The war became one of seesaw maneuvers and attacks in a contest over the control of the PDJ. This seesaw war lasted into the beginning of 1971, with neither side gaining a clear advantage.

In February 1971, Operation Lam Song 719—a South Vietnamese Army cross-border offensive—was launched to attack NVA and Pathet Lao forces along Route 9 in Laos. The effects on civilians from the severe level of US bombing in this region angered antiwar groups in the United States. As a result, the US Congress restricted funds for the war in Laos and Cambodia and restricted any further use of US military forces in both countries—the Cooper-Church Amendment.

Without military and financial support from the US, Hmong manpower in Laos was decimated.

On 22 September 1972, the Pathet Lao agreed to begin peace talks. The Paris Peace Accords were signed between the United States and both North and South Vietnam on 27 January 1973. Although Laos was not a participant to the accords, Souvanna Phouma was urged to be a signatory. When the US delegation—including two men sent by Henry Kissinger, Gen Alexander Haig, Jr. and the former ambassador to Laos, William H. Sullivan—could not assure him the NVA would withdraw forces from Laos; Phouma refused to take part in the façade.

The North Vietnamese urged the Pathet Lao to enter negotiations with the Royal Lao Government (RLG), perhaps fearing the freeing up of South Vietnamese forces would provide Laos with another ready ally to enter the fight, similar to the support the RLG received from the Thai government—there were thirty Thai Unity battalions inside Laos at the time.

On 21 February 1973, the RLG, Neutralists, and Pathet Lao signed the “Restoration of Peace and Reconciliation in Laos.”¹ An immediate cease-fire went into effect; however, as in previous cease-fires, the communists continued their attacks on government forces to seize more ground. One of the last acts for Air Commandos in this drama occurred on 16 April. When NVA forces pressured the *Forces Armées Royales (FAR)* near the front lines at Ta Vieng (southern *PDJ*), the United States agreed to B-52 strikes as punishment for violating the cease-fire. A two-man combat control team (Air Commando combat controller John Koren was on the team) emplaced an offset bombing beacon to facilitate the strike. At the end of the B-52 sorties, the two Air Commandos extracted the beacon and returned to their base. In April 1974, Amb. G. McMurtrie Godley departed and was replaced by Amb. Charles S. Whitehouse.

As Thai Unity battalions withdrew from Laos, the 46th Special Forces Company—now United States Army Special Forces, Thailand—commensurately downsized their clandestine training support of Lao, Hmong, and Thai assets in Laos, eventually ending this effort in the fall of 1973.

The Protocols to Cease-Fire were signed by the three factions (Neutralists, Rightists, and Communists) on 14 September. On 12 October 1973, two Pathet Lao security battalions arrived, one in

Wattay and one in Luang Prabang, to observe and monitor the implementation of the Peace Accords and the cease-fire.

Instructions from the State Department to the embassy in Vientiane were cryptic and totally out of sync with the situation on the ground. The ambassador was urged to take all measures to keep the Royal Lao security forces “operational.” In April 1974, a Lao coalition government formed as the Provisional Government of National Unity (PGNU). One of the PGNU’s stipulations was the removal of all foreign forces within sixty days (by June 1974).

The Ravens departed in June, turning over forward air control operations to their Lao counterparts. Project 404 Air attachés and Army attachés became involved in standardizing the troops, organization & equipment of the *FAR*, transferring US military gear from the special guerrilla units and Thai battalions to the RLG armed forces, and transfer of the H-34 training program at Udorn to Savannakhet. Detachment 1 continued its operation in Udorn, although limited to specialty training.²

On 22 May, the last of the Thai Unity battalions departed Laos; on 1 July, US military aid to the RLG was transferred to control by the State Department, and dramatically cut. In September, the 4802nd Joint Liaison Detachment in Thailand was disbanded.

Over the next year, the *FAR* suffered defeat after defeat, now without US advisory “stiffeners” and military funding. In constant decline, and with low morale, the *FAR* was—for all intents and purposes—noneffective. Gen Vang Pao and his Hmong fled for refugee camps in Thailand. In December 1975, the king abdicated his throne and the Pathet Lao took over the government, now named the Lao People’s Democratic Republic (LPDR). As was the case with all communist governments, the country continually fell behind over the years due to the effects of a state-run economy and communist centralized control.

In the 1980s, resistance movements both inside and outside of Laos operated against the LPDR, both from Lao and Hmong groups supported by Thailand. Gen Vang Pao settled in America and continued to run the “resistance” until his death. To date, none of the resistance movements has been effective. A New York Times article reported on the sad plight of Hmong resistance fighters inside Laos as late as 2007.³ Bitterness and recrimination among those who fought and served in Laos remain to this day with respect to the abandon-

ment of not only Laotian allies and loyal anti-communists, but also the Hmong.

Lessons of Laos

There were two major lessons to take away from the US participation in Laos. The first lesson was a mismatch of strategy, that is, the *ways, means, and ends* were totally out of balance. The war was fought politically to achieve foreign policy goals back in the United States instead of being fought to achieve strategic military objectives in the theater. The war was molded by what could be achieved around a delicate balancing act to at least give the impression America was abiding by the Geneva Accords. The *ends*, as envisioned by US foreign policy, were the guaranteed Neutrality of Laos and the expulsion of North Vietnamese from the country. The *means* were military assistance and foreign internal defense (FID), using special operations forces (SOF), as well as covert activities. The *ways* were totally out of sync; each ambassador to Laos saw a different path to support the RLG. If the policy was not working, then change the policy. There was no clear way the use of SOF alone could have helped the Laotians achieve a military victory.

SOFs conducted their mission in this atmosphere: buy time for diplomacy and exhaust and attrite the enemy. It is remarkable the communists were prevented from taking over the Laotian government for almost thirteen years while SOF operators performed their mission.

The second lesson was militarily strategic: failure to effectively interdict the Ho Chi Minh Trail (HCMT) ultimately spelled the doom of South Vietnam. The failure to orient SOF assets, working in conjunction with Laotian security forces, to effectively address the NVA's major resupply route was a complete underutilization of what could have been achieved. Although the SOF alone would not have stopped all movement along the HCMT, any decision to employ them with larger conventional forces might have produced a different outcome.

It is likely counterinsurgency (COIN) and small wars will persist as a form of warfare and embody basic principles and characteristics that make them attractive to an adversary—the study of these methodologies are still relevant. There are other special air warfare (SAW) lessons from the Air Commando experience in Laos which

could ultimately be incorporated into the application of SAW to confront future, follow-on contingencies.

One cannot “Americanize” another country’s air force and build it into the image of the US Air Force. If the country does not have enough national fervor to fight a war, assumes it is working for legitimacy with its populace but is not, and does not have the technological savvy and culture to accept modernization (including development of air power infrastructure), then the endeavor will fail, or be predictably slowed down. Sometimes low and slow platforms, easily maintained and replaced, will have a better payoff, particularly in the lack of any opposing enemy air force.

Host nations must have both offensive and defensive airpower in this environment. A large utility of airpower in irregular wars and COIN is in supporting ground maneuver. However, lacking strategic targets owned by the enemy, air power is essential for battlefield air interdiction and in support of troops in contact. Enemy forces should not feel protected, neither in their base camps nor in sanctuary.

There is a definite line when the mission shifts from SAW to conventional air operations—normally with the introduction of conventional American airpower. It will be important to understand the roles and missions of both special operators and conventional forces, and recognize where the line crosses as to who does what missions. If not, special operations missions and forces are subject to improper use and a waste of resources.

SAW application requires flexibility, adaptiveness, and to some extent, independence of operations. Irregular warfare environments will require the ability to adjust to local conditions; rarely will the character of the conflict remain constant. Operations must also be integrated not only with the host nation but also with other governmental agencies, given the social-psychological nature of the conflict.

Other forms of airpower that are not military may be quite useful in executing the campaign. In some countries, civilian pilots and aircraft, along with private or public airfield infrastructure, can be harnessed (mobilized) in support of the war. For instance, the experiences with contracting Air America in Laos were a contributing factor to support Gen Vang Pao’s guerrillas and enable air resupply and vertical maneuver of government forces.

Force protection in irregular warfare is paramount to husband and protect limited assets. In small wars, the protection of assets and the survival of pilots, crews, and ground support airmen should receive a

high priority. As important as flying in combat, the professionalization of a host nation's air force in air base defense, survival and escape techniques, medical evacuation, and a credible search and rescue force will preserve combat power. These assets are not easily made up or replaced if lost to the enemy. Along these lines, mentoring of senior leaders and airmen in tactics, techniques, and procedures that keep them alive in combat is also important—many will fly till they die.

Special Air Warfare

The crucible of Laos contributed to the knowledge of unconventional warfare (UW), SAW, and proxy war—the low intensity conflict period. A period of cooperation and interdependence between SOF and governmental agencies began to form. This was also a useful period of American warfare for understanding what “war amongst the people” meant as well as to design civil affairs and population control measures accordingly. Without a doubt, the United States gained valuable experience on how SAW should be applied in the COIN environment in Laos.

SAW was used to influence, deter, and compel the adversaries in Laos and to support the political objectives of the US ambassadors and the RLG. It is fitting to note the Pathet Lao, supported and enabled by the North Vietnamese, did not defeat the Laotian army and air force before taking power politically. Air Commandos served to prevent that occurrence and buy time for diplomacy and politics to work.

SAW today is applicable across the spectrum of conflict—in peace and in the various types of warfare. Its greatest strategic utility appears to apply to the less conventional warfare environments. There is a reason the application of SAW works and is successful in these environments and important for narratives of the application of airpower. SAW is important in support of other military services and diplomatic services in their respective domains; it still provides a form of airpower to the security environment. Additionally, SAW can achieve utility in other domains and environments because it, in fact, is not employed to dominate or achieve superiority over the adversary but seeks to create cognitive effects—the “fog and friction” effect aimed towards the morale and will of the enemy—or physical effects through attrition.

SAW can be a multi- and cross-domain force as a form of airpower, capable of conducting or supporting conventional or unconventional operations on various levels leading to or supporting military and political outcomes. All military forces fight and operate based on the unique characteristics of the domain and environments in which they are employed, with consideration given to the composition of the competitors they face. Varied styles of military engagement broadly define the nature of the competition and the “way and manner” of conducting effective operations to achieve victory. For the air domain, this is called aerial warfare. For the USAF special operations, their airpower contribution is applied in a distinct manner within aerial warfare; this style and method of employment and fighting can be articulated as SAW.

The term SAW accurately describes the way Air Commandos conduct combat operations. In peacetime, SAW actions are conducted to support steady-state security activities under cooperative and collective security arrangements of the United States. (There is no naming convention for this period in peacetime for a variety of military activities, but “peaceful coexistence” and “steady state peacetime activities” may serve the purpose.) Although the term SAW is not yet accepted in joint doctrine, it should not preclude the usage and adoption of the term. Acceptance of other terms describing various styles of warfare is widely articulated by strategic thinkers, historians, academics, practitioners, theorists, and experts in their field. For example, the use of other terms such as amphibious warfare, jungle warfare, UW, and so on are widely accepted.

In a “to each his own” manner over the years a variety of terms have been used to describe the environment in unconventional or irregular forms of warfare: war in the shadows, political warfare, non-traditional warfare, small wars, low-intensity conflicts, and military operations other than war, just to name a few. This variety of naming conventions derives its roots in conflict theories and strategies where indirectness, asymmetry, and unorthodox approaches to “a contest of wills” are thought about and applied.

SAW falls into two general categories: the *indirect* use of military air advisory assistance and the *direct* use of physical attack capabilities, along with psychological and influence operations, all supported by various key and critical enablers.

What is clear for any naming convention is that the activities conducted by Air Commandos cannot be the term SAW—operations are

those military tasks assigned to and conducted by forces, under some sort of plan or strategy, aimed at accomplishment of an objective. Operations are not warfare.

The adoption of the term SAW to describe the conduct of war by Air Commandos can usefully begin with adapting and building on a previous definition in joint doctrine. Using the Joint Chiefs of Staff definition of special warfare in 1962, contemporary doctrinaires could build on its precepts and define today's role and way of combat by the Air Commandos.

As mentioned previously, this fundamental understanding of the indirect approach of special operations is more aptly used to explain the military advisory assistance side of special operations. Thus, the premise in this work for explaining SAW adopted the combat activities of Air Commandos when advising, training, and integrating with local forces during their war, combined with direct approach of the physical attack function, influence operations, and enabling functions in combat as the total description of SAW.

Of interest in the promotion of SAW as an umbrella term for the Air Commandos' operational style is additional insight on the nature of special warfare—which could then be adapted to the air domain—from retired Special Forces colonel, David S. Maxwell:

Effective special warfare is counter-intuitively characterized by slow and deliberate employment—long duration actions and activities, relationship establishment, development, and sustainment. It is characterized by thorough and continuous assessment of the situation that can and should provide feedback to country teams, Theater Special Operations Command, theater headquarters, conventional forces, the intelligence community, and even national-level decision makers (hopefully to support strategic decision making that is by necessity a constant adjustment to ensure balance and coherency among ends, ways, and means). Surgical strike capabilities are inherently reactive while always striving to be proactive. But particularly when dealing with sovereign nations, special warfare can be anticipatory—having forces deployed in locations where there is a possibility that we may have to conduct operations or where their presence can ideally contribute to preventing the requirement for large scale US military operations. The other important aspect about special warfare is that the forces are well suited for operations in sovereign nations because they can operate without having to be the main effort or in charge. They provide an effective small footprint option and most importantly, they can provide options for strategic decision makers in a wide range of situations.⁴

The term SAW as a form of airpower should be used to explain the difference in the way Air Commandos conduct special operations

missions and special operations tasks primarily in combat, but also in operations below the threshold of major combat, in distinct and often non-traditional ways. SAW describes the approaches and form of USAF special operations forces when they are engaged in conflict and whether their competitors are military in nature or adversaries competing in the political-social-psychological realm. The effective orchestration of SAW's direct and indirect functions, along with the physical attributes of the force's ability to achieve objectives through compellence, coercion, or destruction, constitutes SAW's airpower application. The totality of capabilities inherent in SAW also includes those activities conducted by special operations airmen in steady state security activities when war is not present.

The attributes of SAW include the following:

- Nonlinear approaches using strategies of asymmetry and indirectness
- Independentness of operations
- Adaptability to local conditions and technology with a high degree of cultural awareness
- Stealth
- High risk/high payoff, unorthodox operations that are outside the bounds of regular warfare
- Ability to infiltrate and operate in complex warfare environments
- Global reach, expeditionary
- Persistence

Much of SAW is conducted with foreign air forces. The direct application of military power is replaced with the ability to leverage and influence others (force multipliers, economy of force) and to enhance and enable conventional force maneuver to achieve campaign *military* objectives. The effects achieved by the conduct of SAW are generally exhaustive, erosive, and attritional against the enemy—with the art of applying these simultaneously to create a fog and friction on the competitor. In this sense, SAW is not based on large wings of aircraft as key to war. The Air Commandos are not designed and rarely used to participate in direct confrontations of strength with opposing military forces. In irregular warfare, SAW is focused on the

political-societal-psychological vulnerabilities of the competitor, not their military forces.

Use of Special Operation Forces— an Essential Capability

The United States maintains a special operations capability to give senior leaders and decision makers an array of strategic options to choose from when implementing national security policies. If those options must be limited, discrete, precise, scalable, and non-traditional when they achieve a strategic effect for the nation, then special operations can serve as a viable choice out of proportion to their size and cost. It is in the nature of special operations to be distinct or different in application of power, thus requiring specialization. They are specialized in order to achieve the ability to mitigate or overcome risk, to achieve relative superiority with small numbers, and to approach problem solving on the battlefield (and in peacetime) with unorthodox and indirect approaches to increase their strategic utility.

Special operation forces were created and tasked to conduct activities interdependent with national security policies for collective security arrangements and regional stability and to provide strategic options and situational awareness for policy makers. Air Commandos in Laos provided low-visibility, light footprint, discrete, precise, and scalable (modular) forces expert in the use of SAW. Air Commandos were used by the ambassadors to engage and reassure Thai and Lao partners, build strategic relationships, and operate in a politically sensitive environment.

The expeditionary deployment of Air Commandos to fly and operate in Laos served as a symbol of American commitment to allies and partners and used persistence as leverage in the Laotian security assistance and FID missions to enable solutions to ambiguous and complex threats. Air Commandos helped to extend US foreign policy through participation in the US Embassy country team's and ambassador's goals to prevent outbreaks of wider conflict and mitigation of military crisis during major communist thrusts. These measures were conducted through various security assistance programs, coalition-building endeavors, FID, interagency covert and clandestine operations, and if needed, direct combat and air combat advisory support.

The utility of the Air Commandos to the ambassadors of Laos was to help RLG security forces hold their own and prevent any potential conventional clash of war with the Chinese or Soviets. All out US intervention in Laos was not a practical option. In this type of security climate, the Air Commandos provided a low-cost means to achieve foreign policy objectives.

Air Commandos were successful in accomplishing their assigned missions. The work of the “ambassadors’ Air Force” was instrumental in shaping events and gaining time and space in Laos to allow diplomacy to work. The story of the Air Commandos in Laos is little recorded in military history. In light of the style of wars in the twenty-first century, the lessons of the Air Commandos in its early days and how they were used will prove invaluable to current and future generations of Air Commandos and SOF strategists pondering solutions to irregular warfare environments.

Notes

1. Webb, *Secret War*, 421–25.
2. Conboy and Morrison, *Shadow War*, 402-05.
3. Fuller, “Old US Allies, Still Hiding Deep in Laos.”
4. David Maxwell, to the author, email, 8 March 2013.

Appendix A

List of US Ambassadors to Laos during the Laotian Civil War

Charles W. Yost	1 Nov 1954–27 Apr 1956
James Graham Parsons	12 Oct 1956–8 Feb 1958
Horace H. Smith	9 Apr 1958–21 June 1960
Winthrop G. Brown	25 July 1960–28 June 1962
Leonard S. Unger	25 July 1962–1 Dec 1964
William H. Sullivan	23 Dec 1964–18 Mar 1969
G. McMurtrie Godley	24 July 1969–23 Apr 1973
Charles S. Whitehouse	20 Sept 1973–12 Apr 1975

On 29 May 1961, President John F. Kennedy issued a directive letter to the United States ambassador to Laos, Leonard S. Unger, granting Unger the authority to control all the functions of a Military Assistance Advisory Group. Consequently, the serving ambassadors became de facto air commanders and managers of the counterinsurgency air forces during the Laotian Civil War.

Appendix B

Protocols to the Declaration on the Neutrality of Laos

The 1962 Declaration on the Neutrality of Laos, and more importantly its protocols, would dictate how the United States had to diplomatically maneuver to provide security assistance and combat advisory assistance within the Kingdom of Laos. This would require covert and clandestine activities, as well as abiding by the protocols to not introduce foreign forces into the kingdom. Many of the rules of engagement for Special Air Warfare designed by the ambassadors, were to skirt the protocols and to adhere to the diplomatic spirit of the Geneva Agreements.

United Nations Treaty Series 1963, No. 6564¹

**BURMA, CAMBODIA, CANADA,
PEOPLE'S REPUBLIC OF CHINA, DEMOCRATIC
REPUBLIC OF VIET-NAM, etc.**

**Declaration on the Neutrality of Laos. Signed at Geneva,
on 23 July 1962**

**Protocol to the above-mentioned Declaration. Signed at
Geneva, on 23 July 1962**

*Official texts: English, Chinese, French, Laotian and Russian.
Registered by the United Kingdom of Great Britain and Northern
Ireland on
14 March 1963.*

**PROTOCOL 1 TO THE DECLARATION ON THE NEUTRALITY
OF LAOS. SIGNED AT GENEVA, ON 23 JULY 1962**

(pages 324–29)

The Governments of the Union of Burma, the Kingdom of Cambodia, Canada, the People's Republic of China, the Democratic Republic of Viet-Nam, the Republic of France, the Republic of India, the Kingdom of Laos, the Polish People's Republic, the Republic of

Viet-Nam, the Kingdom of Thailand, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America;

Having regard to the Declaration on the Neutrality of Laos of July 23, 1962;

Have agreed as follows:

Article 1

For the purposes of this Protocol

- (a) the term “foreign military personnel” shall include members of foreign military missions, foreign military advisers, experts, instructors, consultants, technicians, observers and any other foreign military persons, including those serving in any armed forces in Laos, and foreign civilians connected with the supply, maintenance, storing and utilization of war materials;
- (b) the term “the Commission” shall mean the International Commission for Supervision and Control in Laos set up by virtue of the Geneva Agreements of 1954 and composed of the representatives of Canada, India and Poland, with the representative of India as Chairman;
- (c) the term “the Co-Chairmen” shall mean the Co-Chairmen of the International Conference for the Settlement of the Laotian Question, 1961-1962, and their successors in the offices of Her Britannic Majesty’s Principal Secretary of State for Foreign Affairs and Minister for Foreign Affairs of the Union of Soviet Socialist Republics respectively;
- (d) the term “the members of the Conference” shall mean the Governments of countries which took part in the International Conference for the Settlement of the Laotian Question, 1961–1962.

Article 2

All foreign regular and irregular troops, foreign para-military formations and foreign military personnel shall be withdrawn from Laos in the shortest time possible and in any case the withdrawal shall be completed not later than thirty days after the Commission has notified the Royal Government of Laos that in accordance with Articles 3 and 10 of this Protocol its inspection teams are present at

all points of withdrawal from Laos. These points shall be determined by the Royal Government of Laos in accordance with Article 3 within thirty days after the entry into force of this Protocol. The inspection teams shall be present at these points and the Commission shall notify the Royal Government of Laos thereof within fifteen days after the points have been determined.

Article 3

The withdrawal of foreign regular and irregular troops, foreign para-military formations and foreign military personnel shall take place only along such routes and through such points as shall be determined by the Royal Government of Laos in consultation with the Commission. The Commission shall be notified in advance of the point and time of all such withdrawals.

Article 4

The introduction of foreign regular and irregular troops, foreign para-military formations and foreign military personnel into Laos is prohibited.

Article 5

Note is taken that the French and Laotian Governments will conclude as soon as possible an arrangement to transfer the French military installations in Laos to the Royal Government of Laos.

If the Laotian Government considers it necessary, the French Government may as an exception leave in Laos for a limited period of time a precisely limited number of French military instructors for the purpose of training the armed forces of Laos.

The French and Laotian Governments shall inform the members of the Conference, through the Co-Chairmen, of their agreement on the question of the transfer of the French military installations in Laos and of the employment of French military instructors by the Laotian Government.

Article 6

The introduction into Laos of armaments, munitions and war material generally, except such quantities of conventional armaments as the Royal Government of Laos may consider necessary for the national defence of Laos, is prohibited.

Article 7

All foreign military persons and civilians captured or interned during the course of hostilities in Laos shall be released within thirty days after the entry into force of this Protocol and handed over by the Royal Government of Laos to the representatives of the Governments of the countries of which they are nationals in order that they may proceed to the destination of their choice.

Article 8

The Co-Chairmen shall periodically receive reports from the Commission. In addition the Commission shall immediately report to the Co-Chairmen any violations or threats of violations of this Protocol, all significant steps which it takes in pursuance of this Protocol, and also any other important information which may assist the Co-Chairmen in carrying out their functions. The Commission may at any time seek help from the Co-Chairmen in the performance of its duties, and the Co-Chairmen may at any time make recommendations to the Commission exercising general guidance.

The Co-Chairmen shall circulate the reports and any other important information from the Commission to the members of the Conference.

The Co-Chairmen shall exercise supervision over the observance of this Protocol and the Declaration on the Neutrality of Laos.

The Co-Chairmen will keep the members of the Conference constantly informed and when appropriate will consult with them.

Article 9

The Commission shall, with the concurrence of the Royal Government of Laos, supervise and control the cease-fire in Laos.

The Commission shall exercise these functions in full co-operation with the Royal Government of Laos and within the framework of the Cease-Fire Agreement or cease-fire arrangements made by the three political forces in Laos, or the Royal Government of Laos. It is understood that responsibility for the execution of the cease-fire shall rest with the three parties concerned and with the Royal Government of Laos after its formation.

Article 10

The Commission shall supervise and control the withdrawal of foreign regular and irregular troops, foreign para-military formations

and foreign military personnel. Inspection teams sent by the Commission for these purposes shall be present for the period of the withdrawal at all points of withdrawal from Laos determined by the Royal Government of Laos in consultation with the Commission in accordance with Article 3 of this Protocol.

Article 11

The Commission shall investigate cases where there are reasonable grounds for considering that a violation of the provisions of Article 4 of this Protocol has occurred.

It is understood that in the exercise of this function the Commission is acting with the concurrence of the Royal Government of Laos. It shall carry out its investigations in full co-operation with the Royal Government of Laos and shall immediately inform the Co-Chairmen of any violations or threats of violations of Article 4, and also of all significant steps which it takes in pursuance of this Article in accordance with Article 8.

Article 12

The Commission shall assist the Royal Government of Laos in cases where the Royal Government of Laos considers that a violation of Article 6 of this Protocol may have taken place. This assistance will be rendered at the request of the Royal Government of Laos and in full co-operation with it.

Article 13

The Commission shall exercise its functions under this Protocol in close cooperation with the Royal Government of Laos. It is understood that the Royal Government of Laos at all levels will render the Commission all possible assistance in the performance by the Commission of these functions and also will take all necessary measures to ensure the security of the Commission and its inspection teams, during their activities in Laos.

Article 14

The Commission functions as a single organ of the International Conference for the Settlement of the Laotian Question, 1961–1962. The members of the Commission will work harmoniously and in co-operation with each other with the aim of solving all questions within the terms of reference of the Commission.

Decisions of the Commission on questions relating to violations of Articles 2, 3, 4 and 6 of this Protocol or of the cease-fire referred to in Article 9, conclusions on major questions sent to the Co-Chairmen and all recommendations by the Commission shall be adopted unanimously. On other questions, including procedural questions, and also questions relating to the initiation and carrying out of investigations (Article 15), decisions of the Commission shall be adopted by majority vote.

Article 15

In the exercise of its specific functions which are laid down in the relevant articles of this Protocol the Commission shall conduct investigations (directly or by sending inspection teams), when there are reasonable grounds for considering that a violation has occurred. These investigations shall be carried out at the request of the Royal Government of Laos or on the initiative of the Commission, which is acting with the concurrence of the Royal Government of Laos.

In the latter case decisions on initiating and carrying out such investigations shall be taken in the Commission by majority vote.

The Commission shall submit agreed reports on investigations in which differences which may emerge between members of the Commission on particular questions may be expressed.

The conclusions and recommendations of the Commission resulting from investigations shall be adopted unanimously.

Article 16

For the exercise of its functions the Commission shall, as necessary, set up inspection teams, on which the three member-States of the Commission shall be equally represented. Each member-State of the Commission shall ensure the presence of its own representatives both on the Commission and on the inspection teams, and shall promptly replace them in the event of their being unable to perform their duties.

It is understood that the dispatch of inspection teams to carry out various specific tasks takes place with the concurrence of the Royal Government of Laos. The points to which the Commission and its inspection teams go for the purposes of investigation and their length of stay at those points shall be determined in relation to the requirements of the particular investigation.

Article 17

The Commission shall have at its disposal the means of communication and transport required for the performance of its duties. These as a rule will be provided to the Commission by the Royal Government of Laos for payment on mutually acceptable terms, and those which the Royal Government of Laos cannot provide will be acquired by the Commission from other sources. It is understood that the means of communication and transport will be under the administrative control of the Commission.

Article 18

The costs of the operations of the Commission shall be borne by the members of the Conference in accordance with the provisions of this Article.

- (a) The Governments of Canada, India and Poland shall pay the personal salaries and allowances of their nationals who are members of their delegations to the Commission and its subsidiary organs.
- (b) The primary responsibility for the provision of accommodation for the Commission and its subsidiary organs shall rest with the Royal Government of Laos, which shall also provide such other local services as may be appropriate. The Commission shall charge to the Fund referred to in sub-paragraph (c) below any local expenses not borne by the Royal Government of Laos.
- (c) All other capital or running expenses incurred by the Commission in the exercise of its functions shall be met from a Fund to which all the members of the Conference shall contribute in the following proportions: The Governments of the People's Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom and the United States of America shall contribute 17.6 per cent each.

The Governments of Burma, Cambodia, the Democratic Republic of Viet Nam, Laos, the Republic of Viet Nam and Thailand shall contribute 1.5 per cent each.

The Governments of Canada, India and Poland as members of the Commission shall contribute 1 per cent each.

Article 19

The Co-Chairmen shall at any time, if the Royal Government of Laos so requests, and in any case not later than three years after the entry into force of this Protocol, present a report with appropriate recommendations on the question of the termination of the Commission to the members of the Conference for their consideration. Before making such a report the Co-Chairmen shall hold consultations with the Royal Government of Laos and the Commission.

Article 20

This Protocol shall enter into force on signature.

It shall be deposited in the archives of the Governments of the United Kingdom and the Union of Soviet Socialist Republics, which shall furnish certified copies thereof to the other signatory States and to all other States of the world.

IN WITNESS WHEREOF, the undersigned Plenipotentiaries have signed this Protocol.

DONE in two copies in Geneva this twenty-third day of July one thousand and nine hundred and sixty-two in the English, Chinese, French, Laotian and Russian languages, each text being equally authoritative.

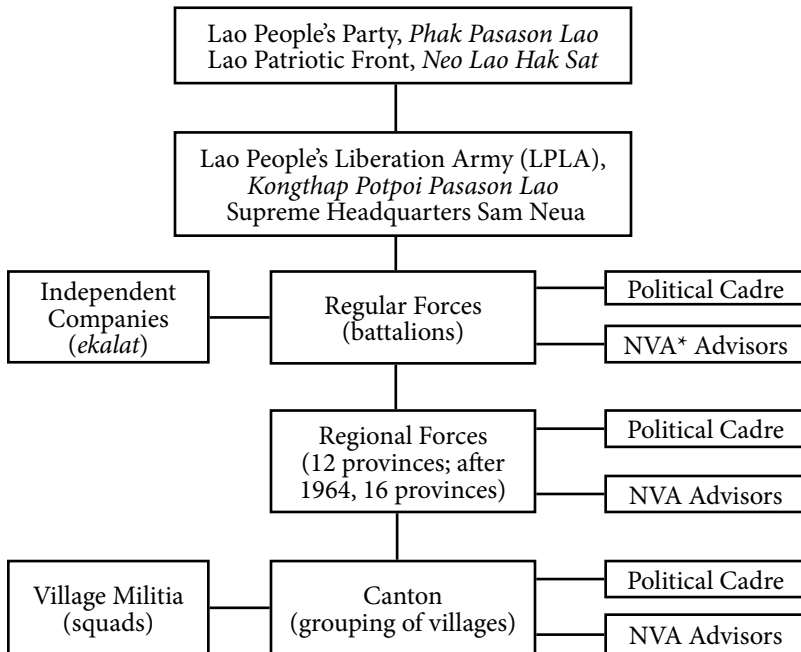
Notes

1. Declaration on the Neutrality of Laos. Burma-Cambodia-Canada-People's Republic of China-Democratic Republic of Vietnam-etc., July 23, 1962, United Nations Treaty Series 1963, No. 6564. <https://treaties.un.org/doc/Publication/UNTS/Volume%20456/volume-456-I-6564-English.pdf>.

Appendix C

Lao Communist Organization

On 13 August 1950, Prince Souphanouvong convened the 1st Resistance Conference, declaring unification of all the Lao resistance groups as the the Free Lao Front (*Neo Lao Issara*) and assumed the mantle of its leadership. This is was political-military movement. The political front was named the Lao Patriotic Front (*Neo Lao Hak Sat*). The following chart provides an overview of the basic tiered structure of the LPLA.



Line battalions of the regulars varied from averages of 200–350 men. Regional force independent companies averaged 20–80 men. Village militia was estimated at squad or platoon strength.

* North Vietnamese Army

Appendix D

Chronology of Special Air Warfare and Counterinsurgency Airpower in Laos

- 1949 January Lao People's Liberation Army (*Kongthap Potpoi Pasason Lao*) is formed after the end of the Japanese WWII occupation and when the French returned to Laos to seize back control.
- 1950 August 13 Prince Souphanouvong convened the 1st Resistance Conference, declaring unification of all the Lao resistance groups as the "Neo Lao Issara"—the Free Lao Front—and assumed the mantle of its leadership. The first use of the term Pathet Lao appears on one of the conference's documents. This is a political-military movement. The political front is named the *Neo Lao Hak Sat* (Lao Patriotic Front).
- 1954 May Viet Minh defeat French forces at the Battle of Dien Bien Phu. The Geneva conference split Vietnam into North and South while Laos was declared independent and neutral.
- 1954 September The French create the beginnings of the Laotian air force and name it the *Aviation Nationale Laotienne* (ANL).
- 1955 US Amb. Charles W. Yost arrives in Laos to establish the US embassy in Vientiane and the US Operations Mission (USOM) starting the process to provide "conventional" aid and military funding—along with continued French military support.

- With the Geneva restrictions preventing additional foreign military forces operating in Laos, a program evaluation office (PEO) is established within the US Agency for International Development (USAID) section of the embassy instead of a Military Assistance and Advisory Group (MAAG)-type organization, to work around the Geneva restrictions.
- 1955 January 28 ANL becomes operational—headquartered at Wattay Airfield, Vientiane.
- 1958 Brig Gen John A. Heintges provides the US government a study and assessment on the security situation in Laos. His dire report results in an increased role for the PEO to add more military trainers and advisors to assist the Laotian government security forces.
- 1959 July US Special Forces field training teams—twelve, eight-man operational detachment Alpha’s begin deployment to Laos, named Operation Hotfoot.
- 1959 August PEO of the US embassy in Vientiane coordinates a transfer of two C-47s and four L-20s from Commander-in-Chief, Pacific Command to the Laotian Air Force. USOM contracts with Air America to begin work in support of the military assistance mission. Air America is additionally contracted by the Department of State’s USAID for refugee relief and delivery of humanitarian aid.
- 1959 September North Vietnamese establish the Ho Chi Minh Trail (HCMT) network to provide a line of communication to communist forces fighting in South Vietnam and is one of Hanoi’s highest strategic priorities.

- 1960 ANL becomes the Royal Lao Air Force (RLAF) and begins expansion under Col (later Gen) Thao Ma. The PEO plans an expansion to increase the capability of the ANL by the end of the year.
- 1960 Aug–Dec Capt Kong Le, a parachute battalion commander, leads a coup against the government in Vientiane and declares the country neutral. The US supports Gen Phoumi Nosovan—a Rightist—in a counter coup. Air America and US Army Green Berets of the Hotfoot mission assist Phoumi during the battle of Vientiane to retake the city and the government. Kong Le flees with his Neutralist forces to the *Plaine des Jarres (PDJ)* and allies with the Pathet Lao. The Union of Soviet Socialist Republics provides air support to Kong Le, sparking a potential confrontation with the United States in a pending proxy war.
- 1961 PEO increases the fleet of C-47s to Laos.
- 1961 March To provide a US air interdiction capability into Laos, sixteen B-26 bombers and crews are moved to Thailand under CIA control. The code name for the secret operation is Millpond. Before bombing raids are conducted in April, the project is immediately cancelled by Pres. John F. Kennedy after the failure of the Bay of Pigs operation. Marine H-34s are transferred to Udorn for end use with Air America, increasing the airlift capability to move troops inside Laos. US Marine, Navy, and Army pilots, and some crewmen wear sterile uniforms and operate the H-34s into Laos until replaced with sufficient Air America crews.

- 1961 April Tactical Air Command (TAC) is directed to form the 4400th Combat Crew Training Squadron; the unit was created on 14 April 1961. President Kennedy responds to overt aggression by the Pathet Lao and North Vietnamese Army (NVA) in Laos by authorizing the US embassy in Vientiane to establish a full MAAG. Army Special Forces Hotfoot training teams are reinforced and convert to combat advisory missions, in military uniform. This is called Operation White Star, which would run until October 1962.
- 1961 May The newly formed MAAG Laos coordinates its first contract with Air America to support American forces in Laos. The secret contract was undertaken by the Air Materiel Force Pacific Area (AMFPA), a USAF procurement agency, providing the MAAG-Laos with helicopters as required to support Royal Laotian Government (RLG) operations—the Madriver Contract.
- 1961 November Air Commandos of Detachment 2 deploy as part of Operation Farm Gate to South Vietnam.
- 1962 January US embassy supplies the Laotian Air Force with armed T-6 aircraft.
- 1962 April 19 USAF Special Air Warfare (SAW) Center is established at Eglin AFB, Florida.
- 1962 May Three US T-28s arrive from South Vietnamese sources and are delivered to the Royal Thai Air Force (RTAF) at their base in Kokethiem for use as the initial trainers to qualify RLAF pilots. In a very short time, five USAF instructor pilots have readied about twenty RLAF T-28 pilots by the end

- of August. A small group of Laotian pilots are sent to the US for training.
- 1962 July 23 The *International Agreement on the Neutrality of Laos* is signed in Geneva. The protocols to the agreement also call for the removal of all US military forces from Laos, to be completed by October.
- 1962 October In accordance with the Geneva Agreement, US Army Special Forces depart Laos; the bulk of the MAAG Laos departs. In Bangkok, an alternate MAAG is established for the continuation of US military aid to the RLG, called Deputy Chief, Joint US Military Assistance Group, Thailand (DEPCHJUSMAGTHAI). Prohibited from posting military staff to oversee the US Military Assistance Program in Vientiane, a requirements office (RO) is established and placed under the supervision of the embassy's USAID.
- 1963 July A military training team (MTT) from the USAF deploys to Kokethiem Royal Thai Air Base to provide pilot and maintenance instruction on the T-28, graduating twelve pilots and fifteen technicians; additionally, four pilots were in a year-long course in the United States. Another USAF MTT deploys to Wattay Airport in Vientiane and helps to establish an Air Operation Center (AOC) to improve planning, targeting, and intelligence for the RLAF.
- 1963 August US begins upgrading of the RLAF with the transfer of six Thai T-28s.

- 1963 December Although work on the *Forward Air Guide Pamphlet* initially began on 12 December 1963, it would not become an official TAC publication until 7 September 1967. Prior to official publication, it was used in Laos and institutionalized the ability of Air Commando combat controller (CCT) teams to control strike aircraft.
- 1964 March Expansion of the airpower capability of the RLAf provides the opportunity to introduce the Air Force's newest counter-insurgency (COIN) unit into Laos, the Air Commandos, with the initiation of Project Water Pump, a Lao and Thai T-28 training program. Detachment 6 of the 1st Air Commando Wing (ACW) deploys on six-month TDY orders to Udorn, Thailand as a MTT to conduct the mission. Detachment 6's mission is to train RLAf aircrews and mechanics within the stipulations of the 1962 Geneva Agreement and provide clandestine airpower for the ambassador's use.
- 1964 April Detachment 6 begins operations with four T-28 aircraft (transferred from South Vietnam), modified as attack T-28s. From 1964 to 1966, Detachment 6, Water Pump also performs Military Civic Action as part of their COIN mission.
- 1964 May Volunteer pilots from Air America train with Project Water Pump to provide an armed search and rescue (SAR) capability in Laos. The first five pilots trained are called the "A-Team." To ascertain NVA incursions into Laos, the Joint Chiefs of Staff (JCS) respond with the reauthorization of reconnaissance flights as a show of force—Operation Able Mable.

- 1964 May 19 RF-101s fly over northern Laos. The purpose of the reconnaissance flights was to get a sense of the scope of the HCMT complex. Able Mable fulfills this task through June and July 1964; the combination of aircraft from both the USAF and the Navy was called the Yankee Team.
- 1964 Due to the shortage of qualified FACs, and the sole reliance on control of air-strikes by CIA operatives, Air Commandos fill gaps to replace civilians who previously controlled air strikes in MR-II for Gen Vang Pao's forces. US military forward air controllers (FAC) now consist of intelligence officers, enlisted personnel (CCTs), and both nonrated and rated Air Commandos who were sent north TDY to control T-28s and other US air-power assets. The temporary aerial FACs are called Butterflies; this system continues up to 1967 when they were replaced by a formal FAC program, Steve Canyon; the rated FACs are called Ravens.
- 1964 June After two Navy RF-8As are shot down, Pres. Lyndon B. Johnson authorizes the use of armed escorts as a response to the attacks on US aircraft. F-100s began escort duties and were authorized to attack anti-aircraft (AA) guns prior to the reconnaissance runs. With all this increased air activity, a USAF SAR capability was added to Yankee Team operations—Air America augmented the SAR effort. To coordinate the effort, the 2nd Air Division headquarters and an AOC was established at Udorn.

- 1964 June 6 Navy Lt Charles Klussman is shot down while flying his carrier-launched RF-8A on a reconnaissance flight. Air America pilots immediately react and fly to the incident site with fixed-wing cargo aircraft, awaiting the arrival of an H-34 helicopter to effect the rescue. Enemy ground fire is intense, requiring an armed escort. Three AT-28s manned by Air Commandos launch and fly in support of the mission. Due to intense fires from the enemy, the SAR requires an additional day to complete, when Water Pump aircraft and pilots fly once again.
- 1964 December Air operations area Barrel Roll is implemented for airstrikes in Laos.
- 1965 March 2 Operation Rolling Thunder, the air strikes on North Vietnam begin. There were now two distinct air operations to punish and interdict the NVA: Rolling Thunder in North Vietnam and Barrel Roll in Laos.
- 1965 April Air operations area Steel Tiger implemented for airstrikes in southern Laos. Area Barrel Roll reduced to northern Laos operations only. Area Cricket is also established in southern Laos.
- 1965 June 22 Air Force Manual (AFM) 2-5, *Tactical Operations—Special Air Warfare*, Department of the Air Force, is published.
- 1965 December Introduction of AC-47 gunships to the interdiction of the HCMT. Its vulnerability to ground fire causes its eventual removal from those operations.

1966—74

Hand-picked Air Commandos in Thailand and from the United States deploy to five major RLAF sites to establish or advise the RLAF AOCs. The commander AOC is designated as a Project 404 Air Force assistant air attachés (AIRA). Some AOC commanders also serve as their Lao, T-28 squadron commander. The AOC teams ranged from five to nine personnel, with an augmentation of USAF personnel from Thailand who fly daily across the Mekong to perform their duties and then return to Thailand. This program is administered under the USAF personnel program Palace Dog.

1966 April

Three AC-47s from the 4th ACS were added to Cricket Operations. Four UH-1Fs of the Green Hornets and several Jolly Green Giant CH-3s were deployed to Nakhon Phanom Royal Thai Air Base (NKP) to support transport of reconnaissance and road watch teams (Pony Express operations), as well as to conduct SAR—20th Helicopter Squadron (HS). Plans are made to augment the USAF SAW forces in Thailand to accommodate the training of four composite squadrons of the RTAF as well as other units having a COIN role or potential. This results in the deployment of the 606th ACS to Thailand under the program nickname “Lucky Tiger”, a composite squadron of U-10s (twelve aircraft), T-28D Trojans (twelve Nomads), and six C-123s. The U-10 Helio Courier section is responsible for loudspeaker. The U-10 Helio Courier section is responsible for loudspeaker and leaflet drops over Laos. Loudspeaker operations were code named “Loudmouth” and leaflet operations were code named “Litterbug.”

- 1966 May 5 The JCS approves Project 404 as a measure to provide needed personnel support in a permanent change of station status to the attachés. The initial Project 404 package consisted of 117 military personnel and five civilians. Project 404 personnel were assigned to and administratively managed by the DEPCHJUS-MAGTHAI, with operational control to the AIRAs and Army attachés (ARMA) in Vientiane.
- 1966 June Detachment 6, Water Pump transfers to control of the 606th ACS. To forsake assumption of the “Air Commando Squadron” name, Detachment 6 changes its name to become Detachment 1, Water Pump. They are later assigned to the 56th Special Operations Wing (SOW). Due to the vulnerability of the AC-47s operating over the HCMT—driven out of the Cricket area by AA—A-26A Counter-Invaders of the 603rd ACS Nimrods are proposed as a suitable replacement for night operations; they begin flying as an operational combat test, named Project Big Eagle.
- 1966 August Six additional UH-1Fs (Green Hornets) from G-Flight at Nha Trang are shipped to the 606th and assigned as Detachment E to the 20th HS.
- 1966 October Project 404 is expanded to include the Steve Canyon program, which provides USAF pilots as FACs, called the “Ravens.” The Ravens replaced the enlisted and nonrated Butterfly FACs.

- 1966 October 21 Matters come to a head between the regime and leadership in Vientiane on how the RLAF is being run by Gen Thao Ma. Thoroughly disgusted with the corrupt officials in the capital, Thao Ma orders his T-28 squadron in Savannakhet to strike the city. Targets included the *Forces Armées Royales (FAR)* General Headquarters, Gen Kouprasith Abhay's house along with his headquarters, and the Wattay artillery site; the Air Commando AOC crew in Wattay is in the midst of the attack at Wattay; however, there are no casualties. When there is no country-wide support for Thao Ma, he flees to Thailand.
- 1966 December Col Heinie Aderholt assumes command of the 606th ACS. Aderholt immediately increases the role of the 606th assets to attack the HCMT.
- 1967 March 10 After the USAF gained operational experience with SAW application in Laos and Vietnam, the Department of the Air Force publishes AFM 2-5, *Tactical Air Operations/Special Air Warfare* (revision of *Air Force Manual (AFM) 2-5, Tactical Operations-Special Air Warfare*, 22 June 1965).
- 1967 April 8 USAF activates the 56th ACW at NKP. Colonel Aderholt assumes command of the wing, turning the 606th ACS command back over to Colonel Price. The 602nd ACS A-1s are assigned permanently to the 56th ACW.

- 1967 September Amb. William H. “Bill” Sullivan advocates for the use of the 56th SOW assets in Thailand to support increased air requirements in Laos, giving him his own air force. The USAF disagrees but does increase the use of 56th SOW assets in Laos as flight operations over the HCMT become more dangerous for propeller-driven aircraft. Although the A-26 Nimrods have flown impressively on targets along the HCMT, the USAF moves to replace those flight operations with jet aircraft, to increase survivability from enemy radar-controlled guns. The 603rd ACS (A-26 Nimrods) separate from the 606th ACS to form the 609th ACS under the 56th SOW.
- 1967 November The 21st Special Operations Squadron (SOS) CH-3C “Dust Devils” deploy to NKP to participate in sensor seeding of the HCMT, code named Igloo White. The 1st ACS A-1 “Hobos” transfer from South Vietnam to NKP to participate in HCMT operations.
- 1968 Shining Brass (covert reconnaissance and interdiction operations out of South Vietnam into Laos) becomes Prairie Fire. The renamed 20th SOS and the 21st SOS supports the infiltration and exfiltration of Military Assistance Command, Vietnam–Studies and Observation Group teams throughout the length of the program.

- 1968 March The top secret TSQ-81 radar site atop Phu Pha Thi mountain Lima Site (LS)-85 is surrounded by the NVA. The Air Commando CCT team assigned to the site directed air support provided from two A-26As. After a surprise attack atop the mountain from its cliff face, the site fell to the enemy on 11 March. The following day, Sandy 1 and Sandy 2 of the 602nd A-1E squadron, supported by a Raven FAC, attacked the site with 20-millimeter cannons to kill any remaining enemy forces atop the mountain. After their cannon run, the Sandys bombed the site with cluster bomb units and bombs in an attempt to destroy any remaining radar equipment and classified material.
- 1968 August All ACSs in Thailand are redesignated as SOSs; the 56th ACW becomes the 56th SOW.
- 1968 October 25 Zorro squadron of the 606th SOS replaces their T-28Ds with the Douglas A-1 Skyraider. The 1st SOS Hobos and the 602nd SOS Fireflies—the 602nd was dual-designated as Sandy in SAR role—were already flying with the 56th SOW. The new Zorro A-1 squadron is redesignated as the 22nd SOS.

- 1969 February 28 Nha Khang (LS-36) is attacked again by enemy forces. A-26As flew daytime sorties in support of the defenders, while at night, the AC-130 Spectre was used in MR-II for the first time in support of RLG troops in contact. CH-3Es were used to evacuate Hmong families from the site. Vang Pao's fallback position northeast of the *PDJ* is the mountain redoubt at Bouam Long. The enemy attacked and threatened the loss of the base.
- 1969 March 12 Two AC-47s were added to the Barrel Roll sorties to support LS-85.
- 1969 March 15 Three AC-47 sorties were added to the Barrel Roll sorties to support LS-85. The gunships inflicted heavy losses to the People's Army of Vietnam attackers, who retreated after taking severe casualties. The base ultimately falls to the enemy.
- 1969 June 26-27 The Battle of Moung Soui results in the downfall of the position, requiring evacuation of refugees, Neutralists, and Thai forces. Two UH-1Fs from the 20th HS and seven CH-3Es from the 21st SOS conduct the evacuation. The night prior to the evacuation, gunships try to help defend the position.
- 1969 July-Oct 56th SOW A-1 aircraft, along with their helicopter assets, support the Royal Laotian Army during operation Junction City Junior, conducted in southern Laos.
- 1969 August 1 20th SOS merges its remaining helicopters with the 21st SOS, leaving only one special operations helicopter squadron in the 56th SOW.

- 1969 Fall 56th SOW CCTs establish a forward air guide course to improve air-ground control in Laos, particularly with the Hmong in MR-II. The course would be taught each month at Udorn, lasting a week.
- 1969 November USAF shuts down the 609th SOS A-26A squadron.
- 1969 November 10 U-10 detachment of the 606th SOS was deactivated, severely depleting the 56th SOW's psychological operations capabilities.
- 1970 May 26 Senior Air Commandos assist the Lao general staff to establish an overall combined operations center at Vientiane to integrate the activities of the RLAF joint operations centers and AOCs.
- 1970 August 8 21st SOS receives its first fielding of CH-53Cs; they immediately fly on combat operations. The Knives experience their first two aircraft losses in February of 1971.
- 1970–72 Air Commando assets are used throughout Laos to transport troops and refugees and provide ground interdiction for troops in contact, primarily on the *PDJ* and during the battles at Long Tieng. 56th SOW CCTs are used to emplace beacons throughout Laos to enhance air navigation and targeting.
- 1971 December To effect better coordination between the deputy chief and Vientiane, DEP-CHJUSMAG-THAI moves its headquarters to Udorn.

1972 February	Control of all advisors in Project 404 is transferred from the US embassy in Vientiane to the DEPCHJUSMAGTHAI, Brig Gen John W. Vessey, Jr., USAF. It was an attempt to regain theater military control and direction over Project 404 personnel solely directed by the ambassador and his senior military attachés.
1973 January 20	21st SOS flies its last combat mission in Laos.
1973 February 21	Warring factions in Laos sign the <i>Agreement on the Restoration of Peace and Reconciliation in Laos</i> . Article IV of the agreement dictated the removal of foreign military forces from Laos.
1973 June	Raven FACs depart Laos.
1974	Provisional Government of National Unity is established in Laos in 1974, and the country turns communist.
1974 June	Air America closes its operations in Laos; Detachment 1 Water Pump departs Laos.
1975	56th SOW moves back to MacDill AFB, Florida; the 656th SOW is activated at NKP to shut down in-country operations.
1975 September	21st SOS shuts down and the remaining CH-53s are moved to U-Tapao. This ends the SAW effort during the secret war in Laos.
1975 December	The DEPCHJUSMAGTHAI is disbanded.

Glossary of Terms, Acronyms and Abbreviations

AA	antiaircraft
AAA	antiaircraft artillery
AAM	Air America; flew in Laos to support US efforts
ABCCC	airborne battlefield command and control center
ACG	air commando group
ACS	air commando squadron
ACT	air control team
ACW	air commando wing
ADC	<i>Auto-Défense de Choc</i> (Hmong guerrilla units)
ADSID	air-delivered seismic intrusion detector
AFB	air force base
AGL	above ground level
AGOS	air ground operations school
AIRA	air attaché
Alamo	landing site 36; site of battle between Gen Vang Pao's forces and the North Vietnamese Army (NVA)
ALO	air liaison officer
ANL	<i>Armée Nationale Laotienne</i> , Lao National Army
AOC	air operations center
ARCS	Air Resupply and Communications Service
ARMA	Army attaché
A-TAC	airborne tactical air coordinator
BA	<i>bataillon artillerie</i> , artillery battalion

Barrel Roll	area of northern Laos designated for air interdiction and strike by the USAF, primarily in Military Region (MR)-II
BDA	battle damage assessment
<i>BI</i>	<i>bataillon d'infanterie</i> , infantry battalion
BOQ	bachelor officers' quarters
<i>BP</i>	<i>bataillon de parachutistes</i> , parachute battalion
<i>BV</i>	<i>bataillon volontaire</i> , volunteer battalion
Butterfly	call sign for USAF airborne combat controllers in the late 1960s
Candlestick	call sign for C-123 flare-dropping aircraft
CAS	close air support
CASI	Continental Air Services, Incorporated; flew in Laos to support the United States
CAT	Civil Air Transport; Central Intelligence Agency (CIA)-contracted airline that operated in the Southeast Asia (SEA) region (later named Air America)
CBPO	consolidated base personnel office
CBU	cluster bomb unit
CCS	combat control school
CCT	combat controller
CCTS	combat crew training squadron
CHECO	Contemporary Historical Examination of Current Operations; series of classified reports written by the USAF to examine ongoing operations of the air war in Vietnam and Laos
CIA	Central Intelligence Agency
CINCPAC	Commander in Chief, Pacific Command
CISO	Counterinsurgency Support Office
CJCS	chairman of the Joint Chiefs of Staff
COC	combat operations center

COIN	counterinsurgency
CSOC	Communist Suppression Operations Center
customer	term used by contracted pilots in Laos to refer to CIA operatives
DAO	defense attaché office
DARPA	Defense Advanced Research Projects Agency
DASC	direct air support center
DEPCHJUS-MAGTHAI	Deputy Chief Joint United States Military Assistance Group, Thailand
downtowners	term used by Air Commandos to refer to personnel who worked in downtown Vientiane or at the US Embassy and lived in Vientiane
DRV	Democratic Republic of Vietnam
DZ	drop zone
E&E	escape and evasion
FAC	forward air controller
FAG	forward air guide
FAN	<i>Forces Armées Neutralistes</i> , Neutralist Armed Forces
FAR	<i>Forces Armées Royales</i> , Royal Armed Forces
fence	term for the Mekong River boundary between Laos and Thailand; anyone in special operations who crossed the Mekong River into Thailand was “crossing the fence”
FID	foreign internal defense; a special operations forces (SOF) mission to train foreign and indigenous troops
FO	forward observer
FS	fighter squadron

FTT	field training team; usually followed by a number to indicate the unit designation of special forces advisory teams
GM	<i>groupement mobile</i> , mobile group; a unit of military organization for Laotian forces designed after the French version, approximately the size of a regiment
hard rice	term used by contracted pilots who flew in Laos to indicate their cargo was arms and ammunition, vice actual bags of rice (soft rice)
HCMT	Ho Chi Minh Trail
HELOSID	helicopter-delivered seismic intrusion detector
HF-SSB	high frequency single-sideband
Hillsboro	C-130 aerial command and control aircraft that flew during daytime operations
HLZ	helicopter landing zone
Hmong	ethnic group of people who live in Vietnam, Laos, Thailand, and China and speak Hmong
hootch	term used to refer to a thatched hut in SEA
Hotfoot	operation conducted by the first US Army Green Beret teams who deployed in 1959 to help the French training effort to improve Laotian security forces
HS	helicopter squadron
ICC	International Control Commission
Igloo White	operation to seed antivehicular and antipersonnel acoustic and ground sensors along enemy lines of communication
IP	instructor pilot

IP	initial point; checkpoint where strike aircraft report for directions by the forward air controllers (FAC) or the forward air guides
IRAN	inspect and repair as necessary
JANAF	Joint Army Navy Air Force
JCS	Joint Chiefs of Staff
JLD	joint liaison detachment
JOC	joint operations center
Jolly Green Giant	term for USAF HH-3E search and rescue helicopters
JPRC	joint personnel recovery center
JSOC	joint security operations center
Jungle Jim	program to create a counterinsurgency (COIN) capability within the USAF and impetus for the creation of the Air Commandos
JUSMAGTHAI	Joint United States Military Assistance Group, Thailand
JUSMAAGTHAI	Joint United States Military Assistance and Advisory Group, Thailand
LZ	landing zone
LS	Lima site; numbered airstrips and landing sites throughout Laos
Long Tieng	Laotian military base used by Gen Vang Pao as his headquarters and site of the CIA base built to support the war; also called Lima site-20A, or the “alternate”
LPDR	Lao People’s Democratic Republic
LPLA	Lao People’s Liberation Army
Luang Prabang	royal capital in north Vientiane where Laotian kings reside; administrative, government center

MAAG	Military Assistance and Advisory Group
MACV	Military Assistance Command, Vietnam
MAP	Military Assistance Program
MATA	military assistance training advisor
MATSUCO	Mobile Assistance Team Supervisor's Course
MCA	military civic action
MEDCAP	medical civic action project
MEDCAT	medical civic action team; medical capabilities and training
mm	millimeter
<i>MMF</i>	<i>Mission Militaire Francaise</i> , French Military Mission
<i>MMF/GRL</i>	<i>Mission Militaire Francaise pres le Gouvernement Royal Laos</i> , French Military Mission in the Royal Government of Laos
<i>MMFI/GRL</i>	<i>Mission Militaire Francaise d'Instruction Pres le Gouvernement Royal du Laos</i> , French Military Training Mission in the Royal Government of Laos
MR	military region; Laos was divided into five MRs
<i>MRL</i>	<i>Marine Royale Laotienne</i> , Royal Lao Navy
MTT	military training team
Nail	call sign for 23rd Tactical Air Support Squadron, FACs
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
<i>Neo Lao Hak Sat</i>	Lao Patriotic Front; political wing of the Pathet Lao
Nimrod	call sign of the A-26s operated by the Air Commandos
NKP	Nakhon Phanom Royal Thai Air Base
NVA	North Vietnamese Army

OER	officer evaluation report
OETG	Operational Evaluation Training Group
ORI	operational readiness inspection
OSO	Office of Special Operations
PA	physician assistant
PACAF	Pacific Air Forces
Palace Dog	operation to assist the Royal Lao Government in their fight against the Pathet Lao and the NVA during the Laotian civil war
PARU	police aerial reinforcement unit; highly trained Thai COIN units used to help train the Hmongs
Pathet Lao	Lao Communist movement and its political/military organization
PAVN	People's Army of Vietnam
<i>PDJ</i>	<i>Plaine des Jarres</i> ; mountain plateau in northern Laos
PEO	Program Evaluation Office
PGNU	Provisional Government of National Unity
<i>Phak Pasason Lao</i>	Lao People's Party
PJ	pararescue jumper
pointee-talkee	language aid used to communicate when participants to a discussion do not know one another's language
POL	petroleum, oil, & lubricants
PRC	portable radio communications
Project 404	operation to assign assistant military attachés to the US Embassy in Vientiane and provide military advisory assistance to Laotian forces
PS	Pakse site; landing site in MR-IV in Laos
PSP	pierced steel planking
PSYOP	psychological operations

PSYWAR	psychological warfare
R&D	research and development
R&R	rest and recuperation
Ravens	call sign for USAF FACs operating under Project 404
RLAF	Royal Lao Air Force
RLG	Royal Lao Government
RO	Requirements Office; established in US Embassy, Vientiane under the guise of the United States Agency for International Development to control the Thailand-based clandestine Military Assistance Program for Laos
ROE	rules of engagement
RTA	Royal Thai Army
RTAF	Royal Thai Air Force
RTAFB	Royal Thai Air Force Base
SACSA	special assistant for COIN and special activities
SAR	search and rescue
SAW	special air warfare
SAWC	special air warfare center
SEA	Southeast Asia
SEATO	Southeast Asia Treaty Organization
SERE	survival, evasion, resistance and escape
SF	special forces
SGU	special guerrilla unit
Sky	Hmong nickname for CIA operatives who usually arrived “from the sky”
SO	special operations
SOF	special operations forces

SOG	Studies and Observation Group; code name for elite SOF trained to operate behind enemy lines
SOS	special operations squadron
SOW	special operations wing
SSB	single-sideband
Steel Tiger	area in southern Laos designated for USAF air interdiction and strikes along the Ho Chi Minh Trail
Steve Canyon	code name for the USAF Air Commando FACs' support in Laos; the Ravens
STOL	short takeoff and landing
STPD	short tons per day
TAC	Tactical Air Command
TACAN	tactical control and navigation system
TACP	Tactical Air Control Party
TASC	Tactical Air Support Command
TASG	tactical air support group
TASS	tactical air support squadron
TDY	temporary duty
TIC	troops in contact
Tiger	call sign for Operation Water Pump instructor pilots
TTP	tactics, techniques, and procedures
TUOC	tactical unit operations center
UHF	ultrahigh frequency
UMD	unit manning document
USAFSOF	United States Air Force, Special Operations Forces
USAID	United States Agency for International Development

USIA	United States Information Agency
USIS	United States Information Service
USMC	United States Marine Corps
USOM	United States operations mission
UW	unconventional warfare
VHF	very high frequency
VNAF	South Vietnam Air Force. Officially the Republic of Vietnam Air Force, sometimes referred to as Vietnam Air Force
VR	visual reconnaissance
Water Pump	operation to train Thai, Laotian, Hmong and Air America pilots on the T-28 aircraft, conducted by the US Air Commandos
White Star	reinforcement effort to the original Hotfoot mission of US Army Green Berets to train Laotian security forces
Zorro	call sign for Air Commando A-1 pilots

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The story of special air warfare and the Air Commandos who served for the ambassadors in Laos from 1964 to 1975 is finally captured through extensive research and veteran interviews in what is sure to be one of the best works on the subject by Col Joseph D. Celeski, US Army, retired. For over three years, the author has meticulously put together a comprehensive overview of the involvement of USAF Air Commandos who served in Laos as trainers, advisors, and clandestine combat forces to prevent the communist takeover of the Royal Lao Government. This story includes never seen before pictures of those operations and unveils what had been a US government secret war, recently becoming more widely declassified. This work is sure to add a substantial contribution to understanding the wider war in Southeast Asia.



Col Joseph D. Celeski retired from a 30-year career with the US Army in September 2004 after successful completion of commanding the 3rd Special Forces Group (Airborne), Fort Bragg, North Carolina. He assumed command of the group in May 2002 in Afghanistan where he also served as the commander of the Combined and Joint Special Operations Task Force for two tours in Operation Enduring Freedom. Colonel Celeski is a graduate of the US Army War College and holds a master's degree in public administration from Shippensburg University, Pennsylvania. He currently resides in Buford, Georgia.

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