Expanding Cooperative Intelligence, Surveillance, and Reconnaissance with Allies and Partners in the Indo-Pacific

COL JACOB J. HOLMGREN, USAF

Throughout its history, the United States of America has relied on extensive cooperation with allies and partners to compete with and, when necessary, defeat adversaries. Australian and American forces worked closely in concert during World War II to find and destroy enemy air and naval forces, perhaps most famously through the utilization of Australian national and indigenous Coastwatchers throughout the Solomon Islands and Papua New Guinea. This arc of history continues today, especially on the Korean Peninsula, where US and Republic of Korea (ROK) intelligence, surveillance, and reconnaissance (ISR) assets work together to maintain 24-hour-a-day eyes and ears on North Korea. Although the United States has a rich history and strong current relationship with partners and allies regarding ISR, the future challenges of the region will require even closer cooperation. The decision advantage that ISR provides can be the deciding factor in success or failure.

The National Defense Strategy acknowledges a move toward interstate strategic competition as the primary concern for US national security.¹ The role of ISR in this complex and volatile environment is vital—ISR provides decision advantage to planners, operators, and military and civilian decision makers. It ensures not only the ability to fight tonight but a deterrence value in understanding enemy intentions to prevent the fight tomorrow. Whether countering the People's Republic of China (PRC) moves in the South China Sea, interdicting Russian Long-Range Aviation flights, or providing a continued deterrence of North Korea, ISR is vital.

Gen Charles Q. Brown, the Chief of Staff of the Air Force, has challenged the service to "accelerate change or lose," and it is clear that US adversaries in the Indo-Pacific are a central focus of the need to accelerate. Within General Brown's strategic approach, he explicitly states that what is good enough today will fail tomorrow. Among the areas the Chief knows we must concentrate is "how to achieve improved interoperability and data sharing with our closest allies and partners so that we can fly, fight and win together."²

It is without doubt that one of America's greatest strengths is its robust, mature, and strong constellation of partnerships and alliances. This network of likeminded and willing participants ensures America's advantage, especially in the Indo-Pacific. Rather than transactional coalitions or a zero-sum approach to geopolitics, the *National Defense Strategy* makes clear the US commitment to alliances built on free will and shared responsibility.³

Current ally and partner capabilities are especially appropriate within the umbrella of ISR platforms and processes. While ISR is integral to war fighting, it is also the capability that is absolutely critical during competition as well as Phase 0 and Phase I shaping and deterring operations. While America needs strong ally and partner war-fighting capability, the ISR realm allows for close work in areas that prevent and predict conflict or provocation.

Current ISR Cooperation

The United States has already made significant strides in building cooperative ISR with allies and partners across the region. The Pacific Air Forces (PACAF) in particular, and US Air Force in general, have worked hand-in-hand with the Republic of Korea Air Force (ROKAF) on the fielding of the latter's high-altitude unmanned aerial vehicle (HUAV) program, an RQ-4 Global Hawk platform that literally takes the ROKAF to higher levels of airborne ISR capability. The time on station, sensor range, and beyond line-of-sight capability of the HUAV allows the ROKAF to keep persistent watch of the North Korean threat and allows the flexibility to respond to other regional threats to ROK interests.⁴ As longtime allies on the peninsula, the ROK RQ-4 program has been built with interoperability as a key factor from the start.

Japan has also stated an intent to procure the RQ-4 Global Hawk platform for high-altitude ISR.⁵ This platform has the same advantages of all RQ-4s, and its long endurance and range make it ideally suited to the great distances that face Japanese forces in securing their borders and territory—a distance of nearly 1,400 miles separates Sapporo from Okinawa. Tokyo has also expressed interest in the MQ-9 platform, which would be easily integrated into existing ISR architectures.⁶ These new capabilities will complement an already strong alliance structure with the United States and ensure continued interoperability and sharing of critical data and intelligence.

Australia has a long history of partnering with the United States within the Indo-Pacific region and as a close ally in conflicts abroad. Several interoperable ISR platforms already are fielded within the Australian inventory, including the MQ-9 Reaper and the MQ-4 Triton. Australia has also focused on the processing, exploitation, and dissemination of intelligence in an interoperable and distributed fashion. The adoption of Distributed Ground Station–Australia, a system for analysis and processing of ISR information similar to that employed by the

Holmgren

United States, was envisioned and designed to optimize partner and coalition operations.⁷ These centralized nodes allow a broad range of allied and partner information to be ingested and disseminated to key decision makers and allow the flexibility to share workload and analysis.

The Philippines and the United States already boast a very mature relationship cooperating in countering violent extremist organizations (VEO). While to date the ISR cooperation has been focused on more tactical ISR assets, such as the Scan Eagle and MQ-1C in the counter-VEO role, the continued disputes in the South China Sea provide opportunity for greater cooperation to reinforce and bolster Philippine interests within their territorial boundaries.

These are just a few examples of the current ISR cooperation that continues between the United States and its key partners and allies in the Indo-Pacific region and are by no means all-inclusive of the efforts across the theater. Although these achievements have moved all nations forward in securing common interests, the United States must seek to further improve and expand such cooperation.

Expanding Interoperability

Several areas within current and future ISR cooperation must be improved to move allied and partner integration to a position where we can compete in the future operating environment. Just as the United States has often struggled with common standards for data, these present the same challenges for the integration of partners and allies. While the Department of Defense (DOD) has developed department-wide data standards, the reality is that data formats remain nonstandard. It is imperative that staff elements and planners working ISR interoperability remain focused on data standardization. If the problems are difficult among the services, it is not hard to imagine the exponential increase in complexity dealing with key partners and allies.

The DOD Data Strategy specifically lays out the desire to apply data standards at the earliest practical point in the data lifecycle and that industry standards should be used whenever practical.⁸ These same standards must be shared and the concept promulgated to partners and allies. Working back from nonstandardized data is time-consuming and costly. Whenever possible, ISR assets and systems should be developed with data standards in mind and using industry standards as a starting point, allow for collaboration and future compatibility.

With a solid approach to standardized data, the next step is to ensure partner and allied integration with the cloud environment and access to the data lake. These concepts are relatively well-understood but remain challenged by requiring standardized data, interoperable systems, and, as will be discussed later, an information-sharing environment. The *data lake* is a repository for all information that is collected by any sensor and any coalition member. With the data lake existing in a cloud environment, any member of the coalition can access it. While robust firewalls and security protocols are absolutely necessary, the overall move to cloud environments allows continuity and failover operations. These concepts are especially useful in the Indo-Pacific environment, where there are great distances between partners and allies and some elements may be operating in austere locations.

Another aspect of expanded interoperability is a coalition understanding and linkage with the sensing grid. The *sensing grid* delivers a cross-functional understanding of both the changing environment and the constantly adapting adversary. ISR systems feed the sensing grid and support its key purpose in delivering predictive and timely characterization of the operating environment.⁹ As the Air Force matures Joint All-Domain Command and Control (JADC2) networks, we must remain cognizant of the key contributions partners' and allies' systems and information can have in a sensing-grid environment.¹⁰

Expanding Information Sharing

The United States already has robust information sharing arrangements with partners and allies throughout the region based on shared interests, values, and common adversaries. While discussion of a "NATO for Asia" would perhaps be a useful long-term concept, there can be no denying that the geopolitics, history, and economic linkages of Asia and the Pacific region make such an arrangement challenging. The key for Air Force and the Intelligence Community is the laser focus on analytical write to release. This concept assumes that any actionable information should attempt to be presented at the most accessible level to allow its utility across a broad range of partners and allies.

The importance of information sharing has been documented in the *National Intelligence Strategy (NIS)* as one of the core intelligence-enterprise objectives. Linked with the NIS Enterprise objective of partnerships, including foreign allies, the US Intelligence Community is committed to increasing access to information to meet mission needs and to institutionalizing strategic approaches to partner engagement to facilitate collaboration and understanding.¹¹

The continued expansion and commitment to information sharing matches the course of PACAF's mission, vision, and priorities. The diversity priority specifically notes the requirement for integrated international partners to compete with near-peer adversaries. These partnerships are not possible without extensive information-sharing structures and apparatus. The United States and its allies and partners must continue to keep information-sharing protocols in the cross-check as they look to enhance their ISR collaboration.

New Approaches to Accelerate Cooperative ISR

Expanded interoperability and intelligence sharing are the building blocks that enable current constructs of command and control for airpower to utilize and integrate intelligence across a large coalition environment. The emerging model of Air Force next-generation processing, exploitation, and dissemination (PED) is a transformation from a purely production-based model of PED to a problemcentered model of analytical teams and nodes. Often referred to as DCGS Next Generation, the problem-centered approach allows analysts access to a broad spectrum of intelligence-sourced information to tackle the toughest questions presented by commanders through their Priority Intelligence Requirements and Essential Elements of Information. By moving Airmen away from being locked to exploitation of an intelligence source from one specific platform, they are freed to look at a much broader range of questions.¹²

The implications for DCGS Next and the problem-centered approach are especially compelling when linked to a comprehensive coalition of partners and allies. While the key steps outlined previously of interoperability and sharing are necessary to fully leverage a problem-centered model, it exponentially increases the intelligence problems that can be attacked and answered. A simple first step is the accessibility of partner and ally data into a DCGS Next node, and the natural progression of the model is to expand the analytical exploitation team model to include partners and allies. The power of having Australian expertise on the South China Sea readily available and with access to all coalition intelligence sources is exciting to contemplate. ROK analysts could contribute directly to answering a commander's questions on North Korean intentions. Questions about Chinese special mission aircraft activities near the Ryukyu Islands could be answered by Japanese experts who watch the activity every day, year after year. Likewise, the sharing of data between and among the partners and allies allows an expansion of their collective contributions. The cross talk and collaboration that could potentially be allowed through an expanded problem-centric model across multiple partners and allies would ensure a multitude of advantages to the United States and its partners and allies.

Conclusion

The Indo-Pacific region remains one of the most dynamic and strategically vital regions in the world. The United States cannot continue business as usual in its approach to ensuring this region remains free and open. The critical role of ISR in maintaining and securing the status of the region is manifest during competition and conflict. It is absolutely essential that the United States works closely with its partners and allies and continues to nurture enhanced cooperation in ISR. From platforms to data standards, information sharing, and future concepts, all these areas require concerted and relentless pressure to get it right. With energy and initiative put forward immediately, the United States can provide capabilities that are relevant to coalition operations. Decision advantage is a commodity that is always in high demand—all intelligence professionals must do their utmost to deliver this benefit to maintain the advantage in great-power competition. \heartsuit

Colonel Jacob J. Holmgren, USAF

Colonel Holmgren is the Pacific Air Forces (PACAF) Director of Intelligence, Surveillance, and Reconnaissance (ISR), Joint Base Pearl Harbor-Hickam, Hawaii, where he advises the PACAF Commander on all ISR matters across the Indo-Pacific area of responsibility, the largest in the Department of Defense. Prior to his current assignment, Holmgren served as the Director of ISR, Seventh Air Force, Osan Air Base, Republic of Korea. Additionally, he has three previous tours in the Indo-Pacific theater and served as the commander of the 548th ISR Group at Beale Air Force Base, California.

Colonel Holmgren has deployed experience as a targeting officer during Operation Joint Forge in Bosnia, as an Intel analyst during Operation Southern Watch and Iraqi Freedom in Saudi Arabia, and deployments to Iraq as an ISR operations officer and Corps Tactical Air Control Party intelligence chief.

Colonel Holmgren is a graduate of the National War College, Air Command and Staff College, and the University of Illinois at Urbana-Champaign.

Notes

1. "Introduction," *National Security Strategy of the United States of America*, Department of Defense, December 2017, https://www.whitehouse.gov/.

2. General Charles Q. Brown, "Accelerate Change or Lose," *Air Force Magazine*, 31 August 2020, https://www.airforcemag.com/.

3. National Security Strategy of the United States of America, 9.

4. Captain Sukjoon Yoon, "A Perspective on South Korea," CNAS, May 2016 http://drones.cnas.org/.

5. Fergus Kelly, "Northrup Grumman Awarded \$490 Million for Japan Global Hawk Drone Program," *Defense Post*, 12 November 2018, https://www.thedefensepost.com/.

6. Brenda Marie Rivers, "General Atomics Begins MQ-9B Unmanned Aircraft Validation Flights in Japan," *Executive Biz* (blog), 20 October 2020, https://blog.executivebiz.com/.

7. Chris Deeble, "Wide-area ISR – a Strategic Imperative for Australia's Security," *Defence Connect*, 6 August 2020 https://www.defenceconnect.com.au/.

8. Department of Defense Data Strategy, October 2020, https://media.defense.gov/.

9. Sensing Grid Operational Framework, June 2020, 3.

10. Department of Defense Cloud Strategy, December 2018.

11. 2019 National Intelligence Strategy, Office of the Director of National Intelligence, 2019, 23, https://www.dni.gov/.

12. Kelly Borukhovich and Tyler Morton, "DCGS Next Generation: Accelerating Change to Deliver Decision Advantage," *Over the Horizon: Journal of Multi-Domain Operations and Strategy*, 26 September 2020, https://othjournal.com/.

Disclaimer

The views and opinions expressed or implied in *JIPA* are those of the authors and should not be construed as carrying the official sanction of the Department of Defense, Department of the Air Force, Air Education and Training Command, Air University, or other agencies or departments of the US government or their international equivalents.