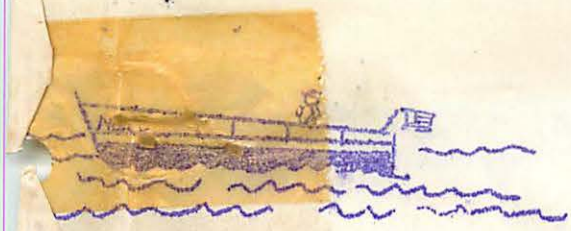

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USCGC NORTHWIND WAGB

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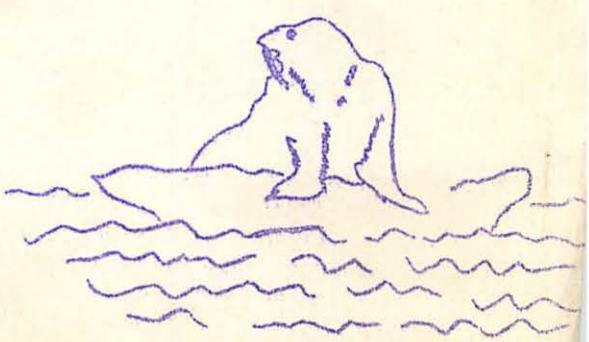
BERING SEA PATROL



REPORT

BERING SEA PATROL

1958

NARRATIVE

1. PLANNING PHASE

A. By copy of COMMANDANT (OSU) letter dated 7 February 1958 to Commander, Thirteenth CG District which was received on 17 February 1958, NORTHWIND was informed that the vessel was designated to carry out the Bering Sea Patrol - 1958. On 19 February 1958, NORTHWIND departed for San Diego, California for Underway Refresher Training under COMFLTRAGRU, Pacific. Return to Seattle, Washington was made on 25 March 1958. Action was commenced immediately to plan for the commencement of the 1958 Bering Sea Patrol. USCGC MACHUSETT (WPG-44) which conducted the 1957 Bering Sea Patrol, was contacted and six copies of the Report prepared by that vessel were obtained for study and analysis of the problems encountered and recommendations submitted. In addition, arrangements were made for a conference between officers and leading petty officers of the MACHUSETT who had made the previous patrol and officers and petty officers of the NORTHWIND. This conference was held on board the NORTHWIND on 16 April 1958. Action was commenced at this time to put into effect many of the recommendations contained in the MACHUSETT's report insofar as they had application to NORTHWIND. On 18 February 1958, a letter was addressed to Commandant (O) which in effect requested one additional Landing Craft making a total of two and emphasizing that the best apparent solution to many of the problems which could be anticipated was the assignment of two HO4S Helicopters. By Commandant (OSU) letter dated 15 April 1958, NORTHWIND was authorized to receive from NSY, Bremerton, Washington, two articized LCVP's and in a letter from Commandant (OPI) was informed that one HO3S Helicopter would be assigned from CGAS Traverse City, Michigan for the duration of the patrol. On 1 May 1958, preliminary copies of the 1958 Bering Sea Patrol proposed itinerary were received and on the following day, the Executive Officer received permissive orders to Juneau, Alaska for a brief conference with the Commander, 17th Coast Guard District. Upon return, copies of the proposed Operations Order for the 1958 Bering Sea Patrol and copies of the Commander 17th Coast Guard District Operations Plan No. 1-57 were brought back. At this time, it was determined that the NORTHWIND would CHOP to C17CGD on 15 June 1958 and depart for Ketchikan, Alaska on 17 June.

B. In the meantime, preparations and planning proceeded at all echelons in accordance with schedules. This will be touched on briefly at this point as the details are expanded in the Annexes and Appendicies to this report. The dental facilities were overhauled and repaired under the supervision of the dentist assigned to CG Base, Seattle, and all X-ray equipment was brought up to peak performance by civilian

technicians. Additional medical stores were obtained based on recommendations contained in WACHUSETT report and the advice of the medical authorities at the USPHS Hospital, Seattle. A portable dental chair and portable drill were obtained from Tacoma Indian Hospital in Tacoma, Washington. Canvas cots and additional life jackets were obtained from Navy Surplus. Thermous jugs, paper drinking containers, boat anchors, boat fenders and additional line were obtained. The operations department researched all sources for the latest available charts. The accomodation ladder was overhauled and redesigned as subsequently described, (see Appendix 1 to Annex E). The U. S. Weather Bureau assigned a weatherman to the patrol and additional helium, weather balloons and radar targets were received along with two drums for the collection of sea water and an apparatus for collecting air samples. Helicopter spares arrived by R4D from CGAR&SB, Elizabeth City, and CGAS Traverse City and were onloaded. Orders were received for exchange supplies for Annette Island, Ketchikan and Juneau. Extensive overhaul to all six main engines was accomplished during this period and while the deck force prepared the exterior surfaces for extended operations, the engineering force worked around the clock to ensure maximum operating capability. Allowance lists of spare parts were brought up consistant with available funds, lube oil was loaded to capacity and commissary stores were ordered and received. A 675 Cu. Ft. portable chill box was obtained on custody from Military Sea Transport Service and mounted aft of the stack as it has been on many extended cruises conducted by NORTHWIND. On 24 May 1958, HO3S Helicopter CG No. 232 under the command of LT. Richard T. PENN (4226) arrived after a cross-country flight from CGAS, Traverse City, Mich., and reported for operational control. CG 232 was based at USNAS Sand Point for inspection and check and thence to CGAS Port Angeles until it was brought aboard on 10 June 1958. LCVP's Nos. 26945 and 27008 were delivered by NSY Bremerton on 27 May 1958 and work was immediately commenced to redesign the existing LCVP cradle for piggy-back deck stowage. NORTHWIND was designated as the icebreaker assigned to Operation Deepfreeze IV under the operational command of COMNAVSUPFOR ANTARCTICA by Commandant letter dated 13 June which was received on 16 June with a tentative departure date from Seattle for Lyttelton New Zealand of 15 November 1958. This fact had a decided influence on the conduct of the Bering Sea Patrol as it necessitated a greatly accelerated patrol in order to ensure that NORTHWIND received a minimum of eleven weeks availability, machinery repairs and outfitting time prior to departure Seattle on DEEPFREEZE IV.

C. On 10 June, CAPT. T. R. MIDTLYNG (1385). USCG relieved CAPT. J. A. BRESNAN (1355) USCG as Commanding Officer and the internal organization of the vessel was redesigned with a view toward assimilating medical, dental and aviation detachments and accomplishing the basic mission of the Bering Sea Patrol as supplemented by other special operations with a maximum of efficiency in a minimum of time. C17CGD Operations Order No. 10-58, was received 4 June. By NORTHWIND message 151600Z. CHOP was effected to C17CGD at 0800U on 15 June and NORTHWIND departed Pier 70, Seattle, Washington at 0800U on 17 June 1958 for CG Base Ketchikan via the Inside Passage.

2. OPERATIONAL PHASE - SOUTHEASTERN ALASKA

A. Transit of the Inside Passage from Seattle to Juneau was accomplished in beautiful June weather without incident and with complete appreciation for the excellent photographic opportunities afforded by this scenic route. Due credit was awarded to those men of industry who had recently removed the shallow depths of Ripple Rock, however, because it was obvious that Seymour Narrows could have been difficult. Approximately one hour out of Ketchikan, the first of a long series of operational helicopter flights was made when the Executive Officer took off to observe the general layout of the mooring facilities at Base Ketchikan and the wind and current conditions at that location. Official calls were made and repaid in Ketchikan, the members of the crew were taken on guided tours of the Pulp Mill as guests of the Chamber of Commerce and the officers were entertained by the Base officers. Bering Sea Patrol gear from the Commander 17th Coast Guard District, together with construction material for the Radio Beacon Station, St. Paul Island were loaded at this stop. Upon departure, members of the local Coast Guard Auxiliary and Reserve groups were invited aboard for a short cruise through the harbor but only the CO and XO of the Coast Guard Reserve Unit were able to participate.

B. Arrival in Juneau was accomplished on schedule and the vessel moored to Government dock. Official calls were made on Territorial, Municipal and Coast Guard officials and a series of conferences with 17th District personnel on general operations, medical and dental, law enforcement, boarding, aids to navigation and communications were commenced. Charts, publications, material on law enforcement and boarding and other Bering Sea Patrol equipment was received from the 17th District. A briefing was held on the construction of the Coast Guard Radio Beacon Station antenna ground system at St. Paul Island as well. At this time, the operational commander was impressed with NORTHWIND's necessity to expedite and accelerate the patrol in order to return in time to outfit for Deep Freeze IV. This stop provided an excellent opportunity for the Indian level staffs of the District and the vessel to reach a meeting of the minds on most routine questions. During the stay, NORTHWIND entertained the Commander 17th Coast Guard District and his guests including officials of the Territorial and Municipal governments, staff officers from the District and members of the Juneau Flotilla of the Coast Guard Auxillary with a buffet in the wardroom during a short cruise down the Gastineau Channel. Included as a feature of this occasion was a training flight by the helicopter which was designed to exhibit its many versatilities.

C. The purpose of the visit to Sitka was to permit a medical and dental conference with the authorities at Mt. Edgecomb Public Health Service Hospital and to obtain additional medical supplies. Additionally, an open house was held on board the NORTHWIND in honor of the Sitka Flotilla of the Coast Guard Auxillary and over 100 persons attended including many Auxilliarists. As NORTHWIND was anchored approximately one mile from the dock area, this placed a considerable burden on the two LCVP's which proved well worthy of their

capabilities. At the suggestion of the Hospital authorities and with complete concurrance by the pilot, a helicopter training flight was arranged for the benefit of the patients at the hospital including many crippled and disabled children and this event was attended with enthusiam. The Commanding Officer paid his respects to the proper officials of the community.

D. Yakutat was the first medical and dental stop and the first real opportunity to test out the air-surface coordination system which was to prove so effective in the ensuing phases of the patrol. A helicopter flight was launched approximately one hour from the anchorage and landed the Executive Officer on the beach in front of the town. This unique method of arrival attracted considerable interest so that in spite of an extremely early hour on Sunday morning, the impending arrival of the Bering Sea Patrol was a matter of common knowlege in a very short space of time. The helicopter returned to the NORTHWIND and landed the medical officer ashore soon thereafter. These officers called upon the mayor, arranged for the use of the clinic in town and set the wheels in motion for the dental patients to assemble. By the time the first LCVP landed most of the patients were readily available and received rapid transport to the dental facilities on the vessel. This basic system was refined and variants added to improve its effectiveness in later medical-dental stops but the essentials were as recorded above.

E. The stop at Tatilik offered no unique problems and the District nurse who was present in the village was of considerable assistance in coordinating the medical and dental treatments. Some members of the ship's company enjoyed trout fishing in a lake several miles from the village. Upon departure, a diversion was made to the Columbia Glacier to afford the crew an opportunity to observe an active glacier but in spite of several rounds of 40 MM and two rounds from the 5/38, no ice was dislodged. Tatitlik was interesting in that it was the most primative of the native villages visited.

F. Seward was visited with a two-fold purpose. NORTHWIND personnel gave stature to the local Fourth of July celebration and the proximity of the city to Anchorage afforded the opportunity for the medical and dental team to confer with their opposite numbers in the Public Health Service and Alaskan Native Service in that city. NORTHWIND was the first vessel to moor at a newly finished section of the Alaskan Railroad dock. Over 900 persons were aboard at an open house for the citizens of Seward and their visitors on 4 July. CG 232 once again exhibited its virtues and was received with interest and enthusiasm. This visit is more fully described in Annex K, Special Operations.

G. Passage to Kodiak was uneventful and the mail and recreation facilities received and available there were accepted with appreciation. An opportunity was afforded to confer with STORIS immediately prior to her departure on DEW LINE RESUPPLY - 1958.

3. ALASKAN PENINSULAR - ALEUTIAN CHAIN PHASE INCLUDING ST. PAUL ISLAND

A. Sortie from U. S. Naval Station, Kodiak on 10 July was made in the face of an increasingly worsening weather situation until, during the early morning hours of 11 July, MSB NOR. No. 4 was extensively damaged and lost over the side while attempting to rig it in. A complete report of this incident was submitted in NORTHWIND Board of Investigation dated 29 July 1958. Attempts to recover the boat resulted in additional damage in other topside areas and the boat was abandoned in the interest of escaping with the least amount of weather damage. Ikatan-False Pass were serviced on schedule and due to the prevailing weather, helicopter operations were kept to a minimum for the only time during the Patrol. This stop marked the first use of the portable X-ray equipment on the beach and the experiment worked very successfully due to a dependable power supply ashore and the cooperation of the cannery doctor at False Pass. There were no natives at Ikatan at the time of the visit. Akutan offered a delightful, well protected harbor with some fishing available and a point of interest in the old Whaling Station. The natives are improvished due to the few employment opportunities available but were cheerful, friendly and cooperative. They were highly impressed by the helicopter and the LCVP's and came aboard en masse for medical and dental treatment. Cape Sarachief was bypassed at the time of transit of Unimak Pass due to impossible surf conditions but the Group Commander indicated no logistical or medical problems. For the record, there are no native inhabitants in the Cape Sarachief area in spite of a directive to conduct chest X-rays of the natives at that location. Nevertheless, a liaison helicopter flight was made from Akutan to Cape Sarachief Loran Station by the Executive Officer and the Pilot to discuss any existing problems with the Cape Sarachief Group Commander. A brief inspection of the Loran Station was made and personnel were interviewed. No major problems were disclosed and matters appeared to be in fine shape logistically. The sheep ranch at Chernofski was visited and the six native employees of the rancher were rendered medical, dental and X-ray treatment. It would appear that this stop could be avoided except for the sincere gratitude of the rancher at the visit of the Bering Sea Patrol vessel. Nikolski was worked during the daylight hours of one day and presented no problems, except for the distance involved from the village to the nearest safe NORTHWIND anchorage. LCVP's must excercise care in beaching as the gradual slope of the beach precludes a dry ramp at low water except on the extreme northwesterly side of the harbor. Mr. Ray Harris, the rancher at Nikolski, would appreciate favorable consideration of his repeated requests for bouyage at the seaward side of the main channel leading into the inner harbor.

B. NORTHWIND made a rapid trip to St. Paul Island in order to rendezvous with technical personnel from the Electronics Repair Shop, Juneau on the 17 of July. The purpose of the visit was to assist in the construction of a new antenna ground system for the Radio Beacon Station at that location. As frequently happens at St. Paul, the plane bringing the electronics personnel was grounded at Cold Bay for two days elapsed before they arrived. However, enough knowledge was available on the project to permit commencement of the work and it

progressed satisfactorially. Details concerning this special operation are included in Annex K. As on previous occasions, ship's personnel enjoyed the hospitality and cooperation of the Fish and Wild-life Service at St. Paul under the direction of Mr. Clarence Olsen and the Foulke Fur Co. under Mr. May. The Seal rookeries were visited by all and thoroughly photographed. Some hearty souls even attended a drive and slaughter in the early dawn hours. Excitement was caused by an emergency appendectomy performed on ENS Jon UITHOL by the ship's medical officer assisted by the Public Health Service Doctor both of whom were in turn further assisted by the dentists. Transportation for patient and medical staffs to and from the local hospital ashore was funished by helicopter. Further details are contained in Annex C.

C. The trip to Adak was scheduled via Atka and a medical and dental stop was made at that village preceeded by the usual beach reconnaissance and native liaison by helicopter which greatly expedited the length of stay. Atka was impressive by its apparent lack of gainful employment and the sheer poverty of the native inhabitants. NORTHWIND proceeded to Adak for mail, recreation and to await the arrival of SS Sea Serpant on 27 July with a shipment of cargo for NEL, Wales. Sea Serpant arrived on 28 July but it was late on 29 July before all NEL cargo could be off-loaded and transferred to the vessel. In the meantime, the Navy Exchange, Adak surveyed a considerable amount of merchandise and sent this material to NORTHWIND for distribution to the natives along with the clothing received from the Coast Guard Wives Clubs at Kodiak (see Appendix 1 to Annex E).

4. SEWARD PENINSULAR - BERING STRAIT - CHUCHI SEA PHASE

A. The NEL, Wales resupply mission coupled with a native medical and dental stop at the village was a project of some worthy accomplishment. Details concerning the resupply mission are contained in Annex K, Special Operations but suffice it to say that the weather was designed expecially for the operation and that hard work and teamwork by all personnel involved, ensured the successful accomplishment of a mission which no vessel with lesser capabilities than NORTHWIND could have achieved. This must be acknowledged when it is noted that a reel of cable weighing over two tons was offloaded successfully to the beach via Navy LVT from an anchorage two miles away. At Wales, one of the most valuable contacts of the Bering Sea Patrol was made in the person of Mr. Frank Brady, school teacher, BIA representative and ham radio operator. He immediately became a NORTHWIND admirer and thenceforth broadcast the itinerary, alerted villages of the impending arrival of the patrol vessel and arranged mail delivery for helicopter pick-up. Mr. Brady functioned as Bering Sea Patrol herald throughout this phase of the operation and was instrumental in the successful accomplishment of this highly accelerated patrol.

B. As set forth in the Chronologhy, Wainwright, Pt. Lay, Pt. Hope, Kivilina, and Shishmaref were visited in rapid succession on a self-imposed schedule designed to afford the maximum medical, dental and X-ray treatments in the minimum elapsed time. Helicopter and boat schedules were meticulously adhered to, villages were alerted well in advance of arrival and the medical and dental teams worked as long as the daylight lasted which averaged twenty-two hours per day. After forewarning over the BIA net on local village schedules through ALC22, NOME, a pre-arrival helicopter flight and the establishment of early

liaison, no difficulty was experienced in being assured of a group of native patients awaiting the LCVP when it made its first landing. At Wainwright, the village council requested that the Deputy Marshall and U.S. Commissioner assist the council by their good offices in the readjustment by warning of a local juvenile delinquent. This proceded without mishap and it is honed that the stern warning administered will help the young native to become a useful citizen of the new state. Mail transshipped from Nome to Wales was picked up by the helicopter leaving from Shishmaref and the Commander 17th Coast Guard District tentative operating schedule (revised) was received at this location. As the self-imposed NORTHWIND schedule appeared to be somewhat more realistic from the standpoint of vessel operating characteristics and actually deviated very little from the District schedule, it was decided to continue as planned. A question arose at this point as to whether to proceed to St. Lawrence Island or to Teller and Teller Mission but a study of the weather map influenced the latter course.

C. Conditions of low visibility first detained the scheduled advance helicopter flight to Teller but as they improved with land proximity, the flight was made and information was received that there were no natives at Teller Mission. Consequently anchorage was effected as close to Teller as water depths would permit while the helicopter with the Commanding Officer aboard scouted the island areas to alert the fishing camps and berrying parties. Medical facilities were established in the village and dental patients were ferried out to the ship where the dentist once more worked tirelessly. At approximately 1900 on a rainy Saturday night, the services of the Deputy U. S. Marshall were requested in Teller by Mrs. Blodgett who was acting in her husband's stead as one of the local store owners. It developed that the assignment consisted of patrolling the streets in the interest of keeping law and order and the Marshall accompanied by several other ship's officers was able to oblige. Native craft work and Alaskan souveniers were available at the Teller Merchantile Co. in quantity and diversity so most members of the crew were given the opportunity to purchase items as they desired. At Teller, the medical officer found himself working with both hands on a Sunday morning attempting to bring a native baby into the world and save another from going out. The latter case precipitated an emergency helicopter flight to Nome performed under marginal conditions. Details of these incidents will be found under appropriate Annexes to this report.

5. BERING SEA - NORTON SOUND PHASE

A. Arrival at Savoonga on St. Lawrence Island was amidist NNE winds of from 25-30 knots and cold rain. An advance helicopter flight was made to survey the landing beaches and establish early contact. A landing was made on questionably soft terrain so the aircraft was dispatched back to the ship for the medical officer while the beaches were surveyed and a more stable landing platform constructed of 2" X 10" boards. The medical clinic was established ashore and the boat directed to proceed to attempt a landing. Weather conditions worsened during the interval, however, and after the LCVP beached, noticable pounding was observed before the ramp could be lowered so the landing was declared unsafe. The LCVP was directed to return to the ship without dental patients and after the Doctor secured the medical clinic, the remainder of the mission was aborted. Similiar weather conditions prevailed at Gamble and the wind rose in intensity from the same direction making landing conditions on either beach completely unsafe. The following

day some abatement was experienced and it was found that on the steadiest possible course, the helicopter could be operated. The medical and dental teams were ferried ashore and clinics established in the village. Liaison was established between ship and shore by radio and the mission satisfactorially accomplished. One dental patient and the dentist were rushed to the ship for emergency treatment by helicopter during the day's operations. Details of the operation at Gamble are fully described in Annexes C, G, and H.

B. The Norton Sound area was covered very rapidly in spite of the controlling water depths which seriously curtailed NORTHWIND's operating capability. Nome was by-passed in favor of a helicopter mail pick-up and the first stop was made at Golovin. Patients from White Mountain also made the down river trip for medical and dental services. One LCVP was beached on a sandbar at this stop and after remaining immobile for approximately ten hours, it was discovered upon return to the ship at the end of a towline from her twin that a perfectly fitting rock was wedged between the tip of the propeller blade and the hull effectively jamming the propeller. Elim and Shaktolik presented no problems, both villages being forewarned as to arrival, alerted by an advance flight and expeditiously completed. At Unalakleet, the closest anchorage which could be feasibility occupied was five miles from a sandbar about 100 yards from the beach which effectively closed the harbor to landing craft except at high water once each day. Facilities were obtained in the village and both medical and dental teams were flown in to establish their clinics ashore. Many patients were treated in this large village using this system in a relatively short period of time and it afforded the boat crews with a much needed respite. Fishing parties ventured up the river in the outboard propelled recreation boats and in spite of considerable competition from Air Force personnel with the same objective several good sized silver salmon were landed.

C. St. Michaels and Stebbins were worked from a common anchorage equidistant from the two villages dispatching one LCVP in one direction and one in the other. As there were involved boat trips of approximately ten miles each, here the early liaison helicopter flights really paid off ensuring the receipt of all dental patients in one boat trip to each village. The medical officer established his clinics ashore being ferried from St. Michaels to Stebbins by helicopter conclusion of his work there.

D. Mekoryuk presented no problems in spite of the fact that many of the natives were engaged in a reindeer drive and the ship's anchorage was six miles from the village. Early warning the night before by contact flight ensured a full boatload of dental patients at first light the next day and a standing room only line for the medical officer at his clinic ashore. In consequence all services were completed by 1330 of the day after arrival and departure was made for Kodiak.

6. TERMINATION PHASE

A. The Bering Sea Patrol - 1958 was terminated at Kodiak after all Patrol equipment obtained from Commander, 17th Coast Guard District was transferred to Coast Guard Air Detachment Kodiak for further disposition. Times of arrival and departure are contained in Annex A.

7. GENERAL COMMENTS

A. The mission of the Bering Sea Patrol-1958 as contained in C17CGD OpOrd No. 10-58 is quoted as follows:

> "To perform law enforcement duties coming within the preview of Title 14 USC 89, including assistance to Federal and Territorial Government agencies in law enforcement. To provide medical care, marine inspection, aids-to-navigation and assistance whereever necessary."

It is the opinion of this command that all phases of this mission were satisfactorily completed, even though the conduct of the patrol was greatly accelerated due to future operational commitments.

B. Credit must be given to all departments of the vessel for a devotion to duty far beyond normal expectations coupled with a coordinated teamwork which ensure maximum effective operation and utilization of all equipment. Of the latter, NORTHWIND was amply endowed. The helicopter and LCVP's unquestionably proved their value and worth on an operation of this nature. The medical and dental facilities including the portable gear obtained for the patrol contributed materially to the successful accomplishment of the operation. NORTHWIND's large capacity for transporting cargo of all types left little to be desired from that aspect.

8. SUMMARY

A. The Bering Sea Patrol for 1958 commenced 15 June 1958 at Seattle, Washington and terminated 24 August 1958 at Kodiak, Alaska. 7,368 miles were cruised on this patrol. 28 anchorages and moorings were made; 30 towns and villages visited; more than 134 beach landing were made by LCVPs and 321 landings were made by HO3S helicopter, in weather varying from calm to 35 knots winds; more than 900 native Alaskans were transported to and from NORTHWIND for various reasons. Medical treatment was administered to 557 natiges; 365 native Alaskans were given dental examinations and treated and 418 X-rays were taken.

B. 11 boats were boarded and examined and 2 were cited for violations. There were no other law enforcement problems encountered. The services of the U. S. Commissioner were unofficially utilized on one occasion and the Deputy U. S. Marshall performed local constable duties on two occasions.

C. One hundred and twenty-two boxes of clothing received from the Coast Guard Wives Clubs, Kodiak were distributed in accordance with Appendix 1 to Annex F, and sundry supplies received from the Naval Exchange, Adak were distributed according to need.

D. A total of three passengers representing official agencies were transported including one cameraman for a TV film presentation entitled "March of Medicine" to be displayed by a national network.

E. Aside from an emergency medical flight from Teller to Nome, no SAR missions or other diversions were encountered.

9. OPINIONS

A. NORTHWIND is an excellent vessel for the Bering Sea Patrol mission because of the equipment and gear which she can carry and the many advantages of space and facilities. Her one limiting feature is her exceptionally deep draft which curtails her operating ability in the immediate vicinity of many of the villages.

B. The Bering Sea Patrol could be materially shortened if it be so desired without detriment to essential missions by the abbreviation of the Southeastern Alaska phase where too much time is allowed for conferences, recreation and public relations. This opinion, of course, is based on the immediate observations of the Patrol vessel commander and without knowledge of other over-riding reasons which may motivate the scheduling officer.

C. With the exception of Tatitlik, Atka and Savoonga, all villages visited had ready access to air strip facilities or favorable water landing areas; (the air strip at Atka can be utilized in an emergency). Virtually all of the villages had U. S. Commissioners either in the village or within reasonable travel range by air. Deputy U. S. Marshalls were found to be in available contact within a reasonable length of time, also. As a result, it would appear that these functions of the Bering Sea Patrol have been outmoded by progress.

D. By and large the Alaskan natives have a much more serious dental problem from a standpoint of availability of treatment than a medical problem. About the only contribution of the Bering Sea Patrol to this problem as outlined in the recommendations contained in Annex H to this report is the temporary alleviation of pain and improvement in dental health through education and enlightment.

E. There remains some question as to the desireability for the continuation of the Bering Sea Patrol in view of the improved travel conditions in the near Arctic and dependable communication circuits which have been established.

10. RECOMMENDATIONS

A. From a purely operational standpoint, the continuation of the Bering Sea Patrol by a major operating unit of the Coast Guard should be reviewed in the light of the almost inevitable potentiality that Alaska will, in the near future, become a State. Some of the functions currently being performed would appear to be an encroachment on statehood responsibilities. This is in particular reference to local law enforcement functions and the responsibilities of state agencies for public welfare and assistance.

B. If there are deep, underlying reasons for the continuation of the Patrol, WAGBs are the best vessel for its conduct due to their almost limitless capabilities restricted only by their deep draft.

C. A helicopter detachment should always be included as a part of the Patrol Vessel's complement and equipment insofar as the landing capability of the assigned vessel will permit.

D. Two dental officers should be assigned to the patrol together with associated portable equipment elsewhere described if it is desired that the Alaskan natives receive more than emergency treatment only. The workload on one dental officer for more than such treatment would require the vessel to stay in each village longer than could be reasonably expected and disproportionately increase the operating cost of the patrol.

E. LCVPs or a suitable landing craft of this type be included in the vessel's small craft equipment but the boat stowage be redesigned so that no boats are stowed more than one deep in a cradle on the main deck. Accepted stowage on icebreakers of the "piggy-back" type proved very infeasible on this patrol due to the difficulties of handling the upper LCVP with any degree of roll or pitch on the ship. Further information on this recommendation will be the subject of separate correspondence.

F. The possibility of outfitting an airborne medical and dental clinic should be explored with a view toward providing the natives with reasonably good health services on a schedule of more frequency than once each year. This possibility is to take advantage of the numerous landing areas near the villages which are now or soon will be available.

G. More specific recommendations are contained in the annexes and Appendicies of this report as they pertain to the functions to which they apply.

ANNEXES

A. CHRONOLOGY
B. INTELLIGENCE
   App. 1 - Navigation and Electronics
   App. 2 - Aerology
   App. 3 - Ice
   App. 4 - SAR
   App. 5 - Oceanography
C. HELICOPTER OPERATIONS
D. BOARDING AND LAW ENFORCEMENT
E. DECK, BEACH LANDINGS ANDTHE HANDLING OF NATIVE PATIENTS
   App. 1 - Modification of Accomodation Ladder
F. SPECIAL SERVICES
   App. 1 - Distribution of Clothing
G. MEDICAL
H. DENTAL
   App. 1 - Statistics
I. Communications
   App. 1 - Mail
J. LOGISTICS
K. SPECIAL OPERATIONS
L. ENGINEERING
M. EDUCATION AND TRAINING

ANNEX A

CHRONOLOGY

DATE	LOCAL TIME	
24 May	1445	LT R. T. PENN, Helicopter CG 232 and three crewmen arrived Seattle and reported aboard.
26 May	0850	ADS S. J. GARZA, reported aboard for duty in conjunction with BSP.
2 June	1415	SAS R. S. MORAITES, reported aboard for duty in conjunction with BSP.
10 June	1010	CAPT. T. R. MIDTLYNG, relieved CAPT. J. A. BRESNAN as CO, NORTHWIND.
13 June	1000	MR. CHARLES GREEN, reported aboard as U. S. Weather Bureau Observer.
15 June	0800	CHOP CCGD17 for BSP.
17 June	0800	Underway enroute Ketchikan, Alaska via inside passage.
	0917	Moored fuel dock, Pt. Wells for Aviation Gas.
	1235	Underway, having received 5000 gals. Aviation Gas.
19 June	1737	Moored starboard side to berths 1 and 2, CG Base Ketchikan.
20 June	1130	CO made official call on the Mayor of Ketchikan.
21 June	1300	Held open house for 135 persons.
	1530	Concluded open house.
	1631	Underway for Juneau, with 2 CG reserve personnel aboard.
	1730	Reserve personnel placed ashore by Boat #6.
22 June	1830	Moored port side to government dock, Juneau.
23 June	0955	CO made official call on the CCGD17.
	1345	CO made official calls on the Governor of Alaska, and the Mayor of Juneau. Held conferences with the staff personnel of the CCGD17 concerning boarding, BSP, communications and mail.
24 June	1600	CAPT. G. A. TYLER, CCGD17 and 39 other officials, auxilarists, reservists, and guests aboard for channel cruise and reception.
	1610	Underway from dock.
	1755	Moored.
	1825	CCGD17 and guests ashore.

25 June	1300	Held open house.
	1500	Secured open house, 350 persons having attended.
	1602	Underway enroute Sitka, Alaska.
26 June	0933	Anchored near Sitka, one mile from city. Carried out boarding and held conferences with USPHS hospital, Mt. Edgecumbe.
	1321	CO made offical call on the Mayor of Sitka.
27 June	1130	Boat #5 gave assistance to the F/V Olympic, while engaged in boarding and towed her one mile to moorage. NORTHWIND Report of Assistance #3-58.
	1621	Commenced open house for Auxilarists and civilians of Sitka.
	1800	Concluded open house for 129 guests.
28 June	0753	Underway enroute Yakutat, Alaska.
29 June	0745	Anchored off Yakutat in Monti Bay.
	1912	Underway for Tatitlek.
	2000	Retarded ships clocks one hour to conform with zone plus 9 time.
30 June	1843	Anchored off Tatitlek in Boulder Bay.
	2000	Retarded ships clocks one hour to conform with zone plus 10 time.
	2230	Mr. Ray DeKay, Representative of the Alaska Department of Public Welfare aboard for transportation to Seward.
1 July	1910	Underway enroute Seward.
	2125	Visited Columbia Glacier for recreation and photographic Purposes.
2 July	1307	Moored starboard side to berth #1 Alaskan Railroad Dock, Seward.
	1320	Mr. DeKay departed ship.
3 July	1200	BSP tentative schedule ammended by CCGD17 Msg. 032215Z July.
	1435	Doctors Moriates and Garza departed on TAD to Anchorage for conferences.
4 July	0800	Full Dressed ship.
	1009	Landing force participated in fourth of July Parade, Seward.

4 July	1500	Held open house.
	1700	Concluded open house, 935 visitors.
5 July	1345	Doctors returned from Anchorage.
	2034	Underway for Kodiak, Alaska.
6 July	1649	Moored south side of Fuel Pier, U. S. Naval Station, Kodiak, Alaska.
7 July	0935	CO made offical call on the Comdt, 17th Naval District
8 July	0955	Piped the side for RADM A. W. McKECHINIE.
10 July	1745	ENS. UITHOL, PETERSON, POTTER reported aboard for duty.
	1800	Underway, enroute False Pass, Alaska.
12 July	0240	Boat #4 lost, parted falls and abandoned.
	1115	Anchored off False Pass in Ikatan Bay.
	2235	Underway enroute Sarichef, Alaska.
13 July	0747	Landing conditions unfavorable at Cape Sarichef, enroute Akutan.
	1101	Anchored Akutan Harbor.
	1440	CG 232 airborne enroute Cape Sarichef with XO.
	1726	CG 232 aboard.
15 July	0600	Underway for Chernofski, Alaska.
	1330	Anchored, Chernofski Harbor.
	2150	Mr. Isaac M. C. Anderson aboard for transportation to Nikolski, Alaska.
	2205	Underway, enroute Nikolski, Alaska.
16 July	0705	Anchored in Nikolski Bay.
	0805	Mr. Anderson ashore.
	2133	Underway, enroute St. Paul Island, running sounding track.
17 July	1600	Retarded clocks one hour to conform with zone plus 11 time.
	1531	Anchored in English Bay, St. Paul Island.
	1833	Working parties and supplies ashore to commence work on radio beacon antenna ground system. Working two shifts of about 20 men.
20 July	1535	Construction on radio beacon completed.

20 July	1556	ENS. J. C. UITHOL ashore by Helicopter for emergency appendectomy.
21 July	0644	ENS. J. C. UITHOL returned aboard by helicopter.
	0727	Underway, enroute Atka, running sounding track.
22 July	0750	Anchored off Atka in Nazan Bay.
	2051	Underway enroute Adak, Alaska.
23 July	0954	Moored Starboard side to dock 3, U. S. Naval Station, Adak.
	1330	CO paid official call on the CO, U. S. Naval Station.
	1600	CO, U. S. Naval Station piped aboard.
28 July	1815	Commenced receiving stores for transportation to NEL Wales, from SS Sea Serpent.
29 July	2300	Completed loading and securing of stores for NEL Wales, having received 14.5 Tons.
30 July	0803	Underway for Wales, running sounding track.
1 August	2329	Anchored off Cape Prince of Wales.
2 August	0050	Commenced off-loading cargo for NEL Wales.
	0730	Completed off-loading cargo for NEL Wales.
	2328	Underway enroute Wainwright.
4 August	0738	Anchored off Wainwright.
	1741	Underway enroute Pt. Lay, Alaska.
5 August	0312	Anchored off Pt. Lay, Alaska.
	1036	Underway, enroute Pt. Hope, Alaska.
	2134	Anchored off Pt. Hope in south Anchorage.
6 August	1503	16 natives, skin boat, and gear aboard for transportation to Kivilina.
	1530	Underway enroute Kivilina.
	2038	Anchored off Kivilina.
7 August	0040	Underway, enroute Shishmaref.
	0802	Anchored off Shishmaref.
	0943	CG 232 airborne for Wales (for mail).

7 August	1405	CG 232 returned from Wales with Mail.
8 August	0420	Underway, enroute Teller.
	1540	Anchored off Teller.
10 August	1320	CG 232 airborne on emergency medical to Nome as per NORTHWIND report of assistance #1-59.
	2229	Underway enroute Savoonga.
11 August	1144	Anchored off Savoonga. Conditions unfavorable, medical clinic ashore.
	1228	Underway, enroute Gambell, mission aborted.
	1600	Arrived off Gambell, weather conditions unfavorable. Steamed off the west coast of the island taking soundings during the night.
12 August	0900	Weather improved enough for helicopter operations. Doctor and dentist ashore via helicopter.
	2030	Doctor and dentist aboard.
	2117	Took departure for Golovin.
13 August	0927	Helicopter airborne for Nome to pick up mail.
	1218	Helicopter aboard with mail.
	1553	Anchored off Golovin.
14 August	0837	Underway for Elim.
	1118	Anchored off Elim in Norton Bay.
	2237	Underway, enroute Shaktolik.
15 August	0215	Anchored off Shaktolik.
	1927	Underway, enroute Unalakleet.
	2300	Anchored off Unalakleet.
17 August	1500	Mr. Leroy Ball aboard to take pictures for TV program "March of Medicine".
	1726	Underway, enroute St. Michael-Stebbins.
	2100	Anchored off St. Michael-Stebbins.
18 August	2044	Underway, enroute Mekoryuk.
19 August	2123	Anchored off Mekoryuk.

20 August	1405	Underway, enroute Kodiak.
23 August	1820	Moored, Marginal Pier, Kodiak, Alaska. Bering Sea Patrol Terminated.
24 August	0900	Underway, enroute Seattle via Bangor
28 August	0750	Moored, Naval Ammunition Depot, Bangor off-loaded Ammo.
28 August	0946	Underway, enroute, Seattle.
28 August	1329	Moored, Pier 39, Seattle.

Distance cruised	8651.7 miles
Moored	473 hours 10 min.
Anchored	528 hours 41 min.
Underway	731 hours 38 min.
Total	1733 hours 29 min. 72.25 days

ANNEX B

INTELLIGENCE

A. SECURITY

No information considered essential to internal security or national defense developed.

B. NATIVE VILLAGES

A breakdown of the native villages visited is included in this annex based on the following pertinent intelligence:

(a) Population
    (1) summer
    (2) winter
(b) Anchorage data
(c) Important personages
(d) Beach data
(e) No. of patients treated
(f) No. of boat and helicopter trips required
(g) General remarks

VILLAGE		POPULATION
YAKUTAT		Summer - 298 Winter TOTAL
ARRIVED	DEPARTED	
0745, 29 June 1958	1912, 29 June 1958	11 Hours 27 Minutes

ANCHORAGE DATA

In 28 fathoms water to 90 fathoms chain in Monti Bay. True Bearings: r/t cannery dock 325° degrees, r/t Government Dock 095.5°, Tower 193°.

BEACH DATA

Good sandy beach, no obstructions to the right of the cannery dock. Distance to the boat landing 1 Mile. 12 boat trips were made transporting 76 natives to ship.

KEY PERSONS CONTACTED

Mayor	Mr. Millet (absent)
CAA	Mr. Robert Tibbles
CO	Ocean Cape Loran Station

ASSISTANCE DATA

Medical Patients 32	(clinic ashore)
Dental 25	X-Rays 47

REMARKS

Helicopter with XO reconnoitered harbor and alerted village prior to ship anchoring. Medical clinic set up in schoolhouse. Natives apathetic; fishing more important. No key native persons around to assist. Village Mayor departed via air for Juneau at 1000.

VILLAGE

TATITLEK

POPULATION

Summer - 95
Winter
TOTAL

ARRIVED

1743, 30 June 1958

DEPARTED

1910, 1 July 1958

25 hours 27 minutes

ANCHORAGE DATA

Good sandy beach in front of village, but care must be used to avoid a few rocks near beach and charted reefs along channel approach. A few natives used their own boats. Ship's boats made six trips and 82 natives came aboard.

KEY PERSONE CONTACTED

John Levshakoff	Village Chief
Jean Schultz	Nurse, Alaska Dept. of Health
Ray de Kay	Alaska Dept. of Welfare

ASSISTANCE DATA

Medical 37
Dental 22

X-rays 61

REMARKS

Helicopter with XO reconnoitered village and beach prior to ship anchoring and conferred with key persons. Miss Schultz and Mr. de Kay were in transient status.

Vessel could anchor closer to the village but the Coast Pilot does not recommend it because of the rocky bottom and poor holding ground. All medical and dental treatment was given aboard. The presence of Nurse Schultz was of great help.

VILLAGE

FALSE PASS-IKATAN

POPULATION

Summer 60 False Pass only

ARRIVED	DEPARTED	TOTAL
1115, 12 July 1958	2235, 12 July 1958	11 hours 30 minutes

ANCHORAGE DATA

In 12 fathoms water to 75 fathoms of chain in IKATAN BAY. True Bearings: L/t Palisade Cliff 331°, r/t Palisade Cliff 055.5°, Cpl 0.7 miles.

BEACH DATA

Boats made 5 trips of 3.5 miles each to a boat landing south of the cannery dock. Swift tidal currents in False Pass slowed boat operations. 20 natives came aboard.

KEY PERSONS CONTACTED

Dr. Cannery Contract Doctor

ASSISTANCE DATA

Medical 0
Dental 15

X-rays 41

REMARKS

The cannery officials were very cooperative. All the people from Ikatan were at False Pass for the fishing season. The helicopter was not used for this stop because of fog. Fishing and canning operations probably resulted in some natives foregoing medical and dental treatment.

VILLAGE		POPULATION
AKUTAN		Summer - 90 Winter
ARRIVED	DEPARTED	TOTAL
1101, 13 July 1958	0600, 15 July 1958	42 hours 59 minutes

ANCHORAGE DATA

Anchored in 30 fathoms of water to 105 fathoms of chain in AKUTAN HARBOR. True Bearings: Cross 291°, Akutan Point Light 065°.

BEACH DATA

The boat made landings near marine railway in front of the village with no problems. This is the only dry-ramp landing area on this beach, however, except in the boathouse area which is a considerable distance from town. 30 boat trips, 68 natives aboard.

KEY PERSONS CONTACTED

Mr. Steve McGlashon	School teacher
Mr. Tcherinpanof	Council President

ASSISTANCE DATA

Medical 36	X-rays 61
Dental 13	

REMARKS

Recreation parties were sent by boat to the old Whaling Station. Several fishing parties were organized for recreation. The helicopter was used to reconnoiter the village prior to anchoring with the XO aboard. Fair Dolly Varden and Halibut fishing at west end of the bay.

VILLAGE

NIKOLSKI

POPULATION

Summer - 60
Winter - 100
TOTAL

ARRIVED

0705, 15 July 1958

DEPARTED

2133, 15 July 1958

14 hours 28 minutes

ANCHORAGE DATA

Anchored in 29 fathoms of water to 105 fathoms of chain in Nikolski Bay. True Bearings: Anaiuliak Island Light 340°, Church cross 120°.

BEACH DATA

The boats made a total of 5 trips to the beach of approx. 2 miles through a channel through the reefs. These reefs are very noticible at low water. The best landing is 200 yards to the left of the river in the village. 35 natives came aboard. Good aircraft landing strip near village.

KEY PERSONS CONTACTED

Mr. Ray Harris — Harris Sheep Ranch

ASSISTANCE DATA

Medical 12
Dental 15

X-rays 37

REMARKS

The helicopter was used to reconnoiter the village before anchoring with the XO aboard. Fishing parties were sent ashore for recreation. Good Humpback Salmon fishing where Sheep Creek empties into the bay.

Most male natives at Nikolski work either for the Air Force installation contractors or the sheep ranch and are not available for treatment during working hours. Natives were fairly cooperative.

VILLAGE		POPULATION
CHERNOFSKI		Summer 6 Natives
ARRIVED	DEPARTED	TOTAL
1330, 15 July 1958	2205, 15 July 1958	8 hours 35 minutes

ANCHORAGE DATA

Anchored in 18 fathoms of water to 90 fathoms of chain in Chernofski Harbor. True Bearings: Chernofski Harbor Entrance Light 323°, Chernofski Harbor Inner Light 113°, r/t Observatory Point 078°.

BEACH DATA

The beach in front of the ranch house is good and no sand bars are present. The natives used their own boats to come out to the ship. Six persons came aboard.

KEY PERSONS CONTACTED

Mr. Mac Laughlin — Sheep Ranch Manager

ASSISTANCE DATA

Medical 6
Dental 6

X-rays 6

REMARKS

All medical and dental treatment was conducted aboard. All natives are residents of Nikolski and are employed by sheep ranch.

The helicopter with XO reconnoitered sheep and beach after ship anchored.

VILLAGE		POPULATION
St. Paul		
ARRIVED	**DEPARTED**	**TOTAL**
1531, 17 July 1958	0727, 21 July 1958	88 hours - 56 minutes

ANCHORAGE DATA

In English Bay in 9 fathoms of water to 75 fathoms of chain. True Bearings: R/T Reef Pt. 159°, L/R Tolstoi Pt. 045°, L/T Zapadin Pt. 307°.

BEACH DATA

Two miles from anchorage to concrete dock north of village with controlling depth of 5 feet. Sand bar and rocks about 50 yards north of dock. LCVPs will ground on this reef at low water.

KEY PERSONS CONTACTED

Clarence Olsen	Superintendent (F&WLS)
Mr. May	Fur Company
Mr. Hand	Biologist, (F&WLS)

ASSISTANCE DATA

Medical - 0
Dental - 0
X-Ray - 0

REMARKS

This stop was made for the purpose of assisting CCGD17(eee) in installing the Coast Guard Radio Beacon Station Antenna Ground System.

Mr. Olsen and Mr. May were very cooperative and arranged tours of seal rookeries and a drive to killing grounds for NORTHWIND personnel. Important that helicopter check with Superintendent for areas to fly over so that rookeries are not spooked.

Natives have continual USPHS facilities available. Mail service by commercial flights once each week.

VILLAGE	POPULATION
ATKA	Summer - 85 Winter - 85

ARRIVED	DEPARTED	TOTAL
0750, 22 July 1958	2051, 22 July 1958	13 Hours 01 Minute

ANCHORAGE DATA

In KAZAN BAY in 22 fathoms of water to 105 fathoms of chain. True Berings: L/T Cone 1SL 166° , L/T UYAK 1SL 114°, Palisades Pt. 067°.

BEACH DATA

In front of village alongside grounded barge.

7 Boat Trips - 80 Natives Aboard.

KEY PERSONS CONTACTED

Larry Dirks	Acting Headman
Mike Lokanin	Headman - Absent in States.
Mr. Murray	School Teacher - Absent in States

ASSISTANCE DATA

Medical - 22	X-Rays - 62
Dental - 17	

REMARKS

Helicopter with Commanding Officer aboard reconnoitered village and beach and confered with key person prior anchorage. Also alerted native family living on Pacific side about 4 miles from village. Abandoned military airstrip in very poor condition.

VILLAGE	POPULATION
WALES	Summer - 60 Winter - 125

ARRIVED	DEPARTED	TOTAL
2329, 1 August 1958	2300, 2 August 1958	23 Hours 31 Minutes

ANCHORAGE DATA

Off village in Bering Strait in 81 feet of water to 90 fathoms of chain. True Bearings: Cape Prince of Wales Light 009°, R/T of Wales 137°, CPL 2100 yards.

BEACH DATA

Sand bar 100 yards off beach in front of village. 7 boat trips with 55 natives aboard. Ship's or native skiffs must be used to cross sand bar.

KEY PERSONS CONTACTED

Mr. James Brown	Officer-in-Charge NEL
Mr. Frank Brady	School Teacher

ASSISTANCE DATA

Medical - 29	X-Rays - None
Dental - 20	

REMARKS

Helicopter with Executive Officer conferred with key persons prior anchorage. The off loading of NEL supplies was accomplished by LVTs belonging to NEL. Many natives absent from village, berrying or fishing.

VILLAGE	POPULATION
WAINWRIGHT	Summer - 220 Winter - 250

ARRIVED	DEPARTED	TOTAL
0738, 4 August 1958	1930, 4 August 1958	11 Hours 22 Minutes

ANCHORAGE DATA

In Chukchi Sea off village in 51 feet of water to 60 fathoms of chain. True Bearings: Tank 078°, Dome 113°, Building 183.

BEACH DATA

Excellent gravel and shale beach in front of village 2 miles from anchorage. 6 boat trips, 39 natives aboard.

KEY PERSONS CONTACTED

Gregg Tagarook	President, Village Council
Raymond Aguvluk	Vice President, Village Council
Alva Nashoalik	Postmaster

ASSISTANCE DATA

Medical - 32 (Clinic in Schoolhouse)
Dental - 23 X-Rays - None

REMARKS

Prior to anchoring the helicopter with Commanding Officer and Medical Officer, reconnoitered village and beach and conferred with key persons. Medical clinic set up ashore. Excellent cooperation from village council, especially Raymond Aguvluk.

Commanding Officer and Executive Officer met with village council at its request in capacity of U. S. Commissioner and Deputy U. S. Marshall in case of Jonny OGEATAK, 15 years old, accused of stealing.

Issued death certificate for small boy who drowned 1 August (ANDREW MATOMEALOOK).

VILLAGE		POPULATION
POINT LAY		Summer - 29 Winter - 29
ARRIVED	DEPARTED	TOTAL
0312, 5 August 1958	1036, 5 August 1958	7 Hours 24 Minutes

ANCHORAGE DATA

In Chukchi Sea off village in 48 feet of water to 60 fathoms of chain. True Bearings: Belfry 096°, Radar Doms 119.5°, CPL 1.95 miles.

BEACH DATA

Good beach in front of village. Excellent dryramp landing conditions. 4 boat trips, 21 natives aboard.

KEY PERSONS CONTACTED

Billy Meakuk	Village Chief

ASSISTANCE DATA

Medical - 3 Dental - 2	X-Rays - 20

REMARKS

Prior to anchoring, helicopter with Executive Officer reconnoitered village and beach and conferred with Key Persons. This village had been visited by an area-medical team approximately one month prior to arrival.

VILLAGE	POPULATION
POINT HOPE	Summer - 295 Winter - 312

ARRIVED	DEPARTED	TOTAL
2134, 5 August 1958	1530 6 August 1958	17 Hours 56 Minutes

ANCHORAGE DATA

In Chukchi Sea on South side of village in 73 feet of water to 60 fathoms of chain. True Bearings: Two Story House 342°, CPL 600 yards, Range to Spit, 1400 yards.

BEACH DATA

Excellent gravel and shale beach sheltered from northerly winds 1/2 mile from anchorage. 13 boat trips, 65 natives aboard.

KEY PERSONS CONTACTED

Dan Lisbourne	President, Village Council
Fred Fisher	School Teacher
Helen Tuzryluke	President, Health Council

ASSISTANCE DATA

Medical - 10	X-Rays - 8
Dental - 25	

REMARKS

Prior to anchoring, helicopter with Commanding Officer and Medical Officer reconnoitered village and beach and conferred with key persons.

Most of village X-rayed and given medical examinations one month ago. Village hired dentist from Nome to work on school children last winter.

16 natives and skin boat from Little Diomede Island transported from Pt. Hope to Kwalina.

VILLAGE		POPULATION
KIVALINA		Summer - 85 Winter - 143
ARRIVED	DEPARTED	TOTAL
2038, 6 August 1958	0040, 7 August 1958	4 Hours 2 Minutes

ANCHORAGE DATA

In 51 feet of water to 60 fathoms of chain. In Kotzebue Sound. True Bearings: Schoolhouse, 050°, left house in village 041°, point of land 320°.

BEACH DATA

Boat landing good. Sandy beach, no bars. If surf bad, use the lagoon entrance. Distance to the boat,landing, 5 miles. 6 boat trips. 46 natives aboard.

KEY PERSONS CONTACTED

Patrick Tuckrook	President, Village Council
Esther Schaubel	Nurse, USPHS (transient)
Oscar Swan	Sanitary Aide

ASSISTANCE DATA

Medical - 2	X-Rays - 73
Dental - 2	

REMARKS

Helicopter with Commanding Officer and Medical Officer reconnoitered village and beach prior to ship anchoring and conferred with key persons. Cooperation excellent as a result of the persence of Nurse Schaubel. All natives had been screened by Miss Schaubel prior to arrival of ship.

VILLAGE		POPULATION
SHISHMAREF		Summer - 50 Winter - 200
ARRIVED	DEPARTED	TOTAL
0802, 7 August 1958	0430, 8 August 1958	20 Hours 18 Minutes

ANCHORAGE DATA

In Chukchi Sea off village in 42 feet of water to 45 fathoms of chain. True Bearings: Shishmaref Light, 114°, R/T Sariehef Island, 141°, EAR Mt. 185°, CPL 5100 yards.

BEACH DATA

Sand bar off the beach approximately 100 yards. Skiff used to transfer personnel to LCVP. 9 boatstrips, 62 natives aboard.

KEY PERSONS CONTACTED

Vincent Tocktoo	Council President
Vern Eutuk	Councilman
Ray Ninnegevlook	Postmaster

ASSISTANCE DATA

Medical - 17 (Medical clinic set-up ashore)
Dental - 43 X-Rays - 2

REMARKS

Helicopter with Executive Officer reconnoitered village and beach prior to anchoring. Helicopter used to transport Medical Officer ashore to set up clinic prior anchoring.

8 natives flown to ship by helicopter for dental treatment in an effort to expedite departure. Many came in from summer occupations for dental treatment.

VILLAGE	POPULATION
TELLER	Summer - 40 Winter - 200

ARRIVED	DEPARTED	TOTAL
1540, 8 August 1958	2229, 10 August 1958	54 Hours - 49 Minutes

ANCHORAGE DATA

In Port Clarence Sound in 40 feet of water to 45 fathoms of chain. True Bearings: Grantly Hbr. Light 115.5°, R/T Cape Riley 192.5°, Teller Mission 335.5°.

BEACH DATA

Very good landing in front of Teller Commercial Company Store in Grantly Harbor, 3.5 miles from anchorage. 17 boat trips, 65 natives aboard.

KEY PERSONS CONTACTED

Helen Blodgett	Teller Commercial Co. (Reg. Nurse)
Ken Hughes	School Teacher (Absent)
Harry Bourne	U. S. Commissioner

ASSISTANCE DATA

Medical - 40 (Clinic Ashore)
Dental - 58 X-Rays - None

REMARKS

Prior anchoring, helicopter with Commanding Officer reconnoitered village and beach and conferred with Mrs. Helen Blodgett. Helicopter with Commanding Officer alerted natives at fish camps in Grantly Harbor, Tuksuk Channel and Imuruk Basin to mouth of Kaviruk River.

Helicopter made one mercy flight to Nome with one month old infant.

Medical Officer delivered baby in village.

Best ivory and curio stock and prices found during patrol at Teller Commercial Co., Deputy U. S. Marshall patrolled village on night of 9 August at request of Mrs. Blodgett.

VILLAGE

TELLER MISSION

POPULATION

Summer - 0
Winter - 85

ARRIVED

See TELLER

DEPARTED

TOTAL

ANCHORAGE DATA

See TELLER

BEACH DATA

See TELLER

KEY PERSONS CONTACTED

Mr. & Mrs. Abbot

New School Teachers - Due to arrive fall 1958

ASSISTANCE DATA

See TELLER

REMARKS

A few families live in tents south of Teller Mission on a sand spit between Port Clarence and Grantly Harbor. Remainder in fish and berry camps. All alerted by the helicopter.

VILLAGE		POPULATION
SAVOONGA		Summer - 225 Winter - 225
ARRIVED	DEPARTED	TOTAL
1016, 11 August 1958	1248, 11 August 1958	2 Hours 32 Minutes

ANCHORAGE DATA

Anchored in Bering Sea, 44 minutes off village. Increasing northerly wind and heavy surf made it necessary to get underway.

BEACH DATA

Heavy surf made landing impossible. One boat trip attempted. Declared unsafe by Executive Officer.

KEY PERSONS CONTACTED

Frank Hall	School Teacher
Joseph Noongowook	President, Village Council
Fred Okoomealingok	Vice President, Village Council

ASSISTANCE DATA

Medical - 12 (Clinic set up in village via helicopter)

REMARKS

At 0945, helicopter with Executive Officer ashore to reconnoiter and confer with key persons.

At 1016, Helicopter transported Medical Officer and assistants to village to set up medical clinic. Executive Officer returned by helicopter.

At 1248, helicopter back aboard with doctor. Increasing northerly winds made it advisable to depart for Gambell.

VILLAGE		POPULATION
GAMBELL		Summer - 340 Winter - 340
ARRIVED	DEPARTED	TOTAL
1628, 11 Agust	2117, 12 August 1958	28 Hours 49 Minutes

ANCHORAGE DATA

Retained underway off Gambell because of adverse weather.

BEACH DATA

Strong northerly winds made boat landings impossible.

KEY PERSONS CONTACTED

Mr. & Mrs. Earl Alexander	School Teacher
Arthur French	Missionary
Carolyn French	Nurse
Abraham Kaningok	President, Village council
Clarence Irrigoo	U. S. Commissioner

ASSISTANCE DATA

Medical - 14 (Clinic Ashore)
Dental - 33 (Clinic Ashore)

REMARKS

At 0940, 12 August the Medical Officer and Dental Officer were flown ashore via helicopter to set up medical and dental clinics and assistants and gear immediately thereafter.

At 1601, the Dental Officer and one native patient flown aboard for dental emergency.

At 2035, all personnel and gear back aboard via helicopter.

VILLAGE		POPULATION
GOLOVIN - WHITE MOUNTAIN		Summer - 24
ARRIVED	DEPARTED	TOTAL
1533, 13 August 1958	0837, 14 August 1958	17 Hours 4 Minutes

ANCHORAGE DATA

In Golovin Bay in 42 feet of water to 45 fathoms of chain. True Bearings: Rocky Pt. Light 252°, Carolyn Island Light 041°, Golovin Bay Light 359°.

BEACH DATA

Very poor landing because of sand bar in front of beach. Best landing on end of spit, but treacherous at low water. Strong northerly winds lower water level to a marked extent. Great care must be exercised by all boat crews in negotiating the channel to Golovin particularly at low water and after strong winds. 4 boat trips, 22 natives aboard.

KEY PERSON CONTACTED

Charles Tutchok	Postmaster

ASSISTANCE DATA

Medical - 9
Dental - 16

REMARKS

Helicopter with Commanding Officer and Medical Officer reconnoitered village and beach prior to ship anchoring and conferred with Postmaster. Helicopter also alerted 7 natives at fish camp 4 miles from Golovin at mouth of Kachaink River at White Mountain School.

Natives very apathetic and with no sense of responsibility. They evidently lean on school teacher, Kenneth Fugleburg, at White Mountain for medical relief.

VILLAGE		POPULATION
ELIM		Summer - 70 Winter - 110
ARRIVED	DEPARTED	TOTAL
1118, 14 August 1958	2237, 14 August 1958	11 Hours 19 Minutes

ANCHORAGE DATA

In Norton Bay in 37 feet of water to 60 fathoms of chain. True Bearings: Aero Beacon 033°, School House 348°, Aero Radio Range 014°.

BEACH DATA

Good beach in front of village 2 miles from anchorage. 7 boat trips, 46 natives aboard.

KEY PERSONS CONTACTED

Enoch Moses	President, Village Council
Mr. & Mrs. Kriger	School Teachers

ASSISTANCE DATA

Medical - 46 (Clinic ashore)
Dental - 42 X-Rays - 0

REMARKS

Prior to anchoring, helicopter with Commanding Officer and Medical Officer reconnoitered village and beach. Medical Clinic set up ashore in schoolhouse.
Helicopter also alerted about 30 natives at Fish Camp near Moses Point.

VILLAGE		POPULATION
SHAKTOLIK		Summer - 184 Winter - 200
ARRIVED	**DEPARTED**	**TOTAL**
0215, 15 August 1958	1927, 15 August 1958	7 Hours 12 Minutes

ANCHORAGE DATA

In Norton Sound off village in 36 feet of water to 45 fathoms of chain. True Bearings: L/T Cape Denbigh 313°, R/T Besboro Island 188°, CPL 8800 yards.

BEACH DATA

At high tide the LCVP made it to the beach. Otherwise eskimo skiffs were needed to bring patients out about 75 yards. No surf conditions.

KEY PERSONS CONTACTED

Mr. & Mrs. Darrell Greenup	School Teachers
Henry Sookiayak	President, Village Council
Willie Takak	Marshall

ASSISTANCE DATA

Medical - 40 (Clinic set up in village)
Dental - 45 X-Rays - None

REMARKS

Helicopter used to transport Medical Officer ashore to set up medical clinic.

Helicopter flew to Unalakleet with Executive Officer on reconnaissance.

VILLAGE		POPULATION
UNALAKLEET		Summer - 500 Winter - 600
ARRIVED	DEPARTED	TOTAL
2300, 15 August 1958	1726, 17 August 1958	42 Hours 26 Minutes

ANCHORAGE DATA

In Norton Sound off village in 6 fathoms of water to 45 fathoms of chain. True Bearings: Aero Beacon 090°, CPL 1000 yards.

BEACH DATA

Boat channel into river is between sand bars and is marked by oil drums. It is not usable to LCVP at low tide. 4 boat trips, 5 miles to landing.

KEY PERSONS CONTACTED

Fred Katchatag	Mayor
John A. Moore	School Teacher
Arne Belte	Nurse
Frank Ryan	Postmaster

ASSISTANCE DATA

Medical - 67
Dental - 82

Medical and dental clinics set up in village
X-Rays - 0

REMARKS

At 2045, 15 August, helicopter flew Medical and Dental Officers ashore to investigate setting up clinics in village.

At 0655, 16 August, helicopter flew Dental Officer and assistant ashore.

At 0714, 16 August, helicopter flew Medical Officer and assistant ashore.

All medical and dental treatment in clinic ashore. Doctors and assistants remained ashore overnight.

VILLAGE		POPULATION
ST. MICHAEL		Summer - 185 Winter - 195
ARRIVED	**DEPARTED**	**TOTAL**
2100, 17 August 1958	2044, 18 August 1958	23 Hours 44 Minutes

ANCHORAGE DATA

Off St. Michael Island in 37 feet of water to 45 fathoms of chain. True Bearings: Cape Stebbins Lt., 252°, Whale Island Lt., 170°, Egg Island Lt., 080°.

BEACH DATA

On west side of Northern Commercial Dock. Large boiler 80 yards off dock, submerged at high water. 9 miles from anchorage. 2 boat trips. 26 natives aboard.

KEY PERSONS CONTACTED

John Washington — President, Village Council
Mr. & Mrs. J. C. Reichert - School Teachers

ASSISTANCE DATA

Medical - 47 (Clinic ashore)
Dental - 26 X-Rays - 0

REMARKS

Helicopter with Commanding Officer and Medical Officer reconnoitered both St. Michaels and Stebbins prior to ship anchoring. Both villages worked from same anchorage. Medical clinics set up ashore at each village via helicopter.

VILLAGE		POPULATION
STEBBINS		Summer - 125 Winter - 145
ARRIVED	**DEPARTED**	**TOTAL**
2100, 17 August 1958	2044, 18 August 1958	23 Hours 44 Minutes

ANCHORAGE DATA

See St. Michael

BEACH DATA

Excellent lava beach in front of village 9 miles from anchorage.
2 boat trips. 17 natives aboard.

KEY PERSONS CONTACTED

Dave Trantham	School Teacher
George Dan	President, Village Council

ASSISTANCE DATA

Medical - 28 (Clinic ashore)
Dental - 17 X-Rays - 0

REMARKS

See St. Michael

VILLAGE		POPULATION
MEKORYUK		Summer - 230 Winter - 230
ARRIVED	DEPARTED	TOTAL
2015, 19 August 1958	1405, 20 August 1958	17 Hours 50 Minutes

ANCHORAGE DATA

Off Mekoryuk, Nunivak Island in 42 feet of water to 45 fathoms of chain. True Bearings: Cape Etolin 090°, Village 132°, CPL 9460 yards.

BEACH DATA

Good landing in lagoon in front of village. Natives piloted first LCVP into lagoon. 4 boat trips. 78 natives aboard.

KEY PERSONS CONTACTED

Emil Kuckuck	School Teacher
Joe Chase	Mgr. Reindeer Project (BIA)
Eugene David	Vice President, Village Council

ASSISTANCE DATA

Medical - 16 (Clinic Ashore
Dental - 18 X-Rays - 0

REMARKS

Prior to anchoring, helicopter with Commanding Officer and Medical Officer reconnoitered village and beach. Medical Clinic set up in village.

Natives engaged in annual reindeer roundup and slaughter of about 1200 head.

Holding ground at this anchorage was very poor.

A shoal of six fathoms was observed off Mekoryuk while approaching the village on a course of 294 degrees true. Distance, 9 miles. A sounding of 9 fathoms appears on the chart at this location.

ANNEX B

NAVIGATION AND ELECTRONICS

APPENDIX 1

A. NAVIGATION

1. The NORTHWIND cruised 7367.4 miles on the Bering Sea Patrol 1958 from departure Seattle until arrival Kodiak on 23 August. Navigation on the Bering Sea Patrol is routine. The vessel traveled the inside passage to Ketchikan and Juneau, avoiding Wrangel Narrows, due to the draft of the vessel.

2. In almost all cases, it was found that the anchorages recommended by the Coast Pilot proved to be the most successful. Many of the villages north of Cape Prince of Wales and in Norton Sound are on small area charts only, and are located on low beach lines. Anchoring at these villages was best accomplished by approaching perpendicular to the beach on a known bearing from some aid to navigation. When the desired sounding under the keel was reached the ship would come to anchor. The Sea Scanner was used as a fathometer when approaching anchorages in shallow water. The NORTHLAND portfolio was used in several locations to obtain an accurate picture of the village in respect to the anchorage. A shoal of six fathoms was observed of Mekoryuk while approaching the village on a course of 294 degrees true, distance 9 miles. A sounding of 9 fathoms appears on the chart at this location.

3. Armed with the knowledge that much of the navigation in the Bering Sea would be by radar, NORTHWIND, prior to departing Seattle, procured complete portfolios of Alaska and the Bering Sea for CIC. As most of the voyage was in pilot waters, two tracklines and plots were kept, one in CIC and one on the Conn.

B. ELECTRONICS

1. The AN/SPS-23 surface search radar received extensive use, and required little maintainence. At long ranges from land the AN/SPS-6C Air Search Radar was used sucessfully to determine the ship's position by ranging off mountains and high cliffs. The Sperry Mark 3 Model 0 surface radar installed on the conning bridge proved to be extremely difficult to maintain. Many failures of this radar occurred.

2. Although the Bering Sea has several radio beacon Aids to Navigation, the RDF (AN/SRD-7) was of little value. Bearings were not reliable, with errors as high as 10 degrees noted. CCGD13 letter dated 25 April 1956 file J-5 to Commandant outlines the problems and poor features of the AN/SRD-7 RDF installed on this vessel.

3. Loran in the Gulf of Alaska and Bering Sea is very dependable as far north as St Mathew Island. Reception North of St. Mathew Island is considered poor. The AN/SPN-25 loran receiver has been installed and this equipment operated satisfactorily during the patrol. Electronics problems concerning communication equipment are included in Annex (I).

ANNEX B

AEROLOGY

APPENDIX 2

A. RADIOSONDES

1. Weather reports were made at six hour intervals throughout the patrol, except when operations were within a twenty-five mile radius of the regular weather reporting facilities.

2. Radiosondes were taken at twelve hour intervals throughout the patrol, except when operations were within a one hundred mile radius of a weather operations facility taking such observations.

3. Mr. Charles Green, U. S. Weather Bureau representative, reported aboard this vessel prior to departure from Seattle, and with the assistance of the three AG's attached, carried out the weather program.

4. In most areas the NORTHWIND was able to obtain weather facsimiles transmitted from weather central, Kodiak. These together with local forecasts from Kodiak, Radio Station Ketchikan, and ALC 22 Nome aided the ship in planning for and completing the accelerated patrol successfully.

B. RAWINSONDE

1. In accordance with paragrpah #4 of enclosure 2 to Commandant's letter dated 17 April 1958 to CCGD17, the following information is submitted:

a. A total of 15 Rawin attempts were made during the 1958 Bering Sea Patrol with only one successfully tracked. This was an unscheduled experimental 100 gram release, with approximately 150 grams of free lift, resulting in an assumed ascension rate of less than 100 meters per minute, which kept the elevation angle very low. The target was contacted after 15 minutes, and followed until the 90th minute, to a range of 56.4 miles. On two other releases; targets believed to be the rawin, appeared on radar but were tracked for only 5 minutes.

b. Prior to each Rawin release the AN/SPS-6C was tuned for maximum performance using signal generators TS-419U and AN/USM-27, along with Oscillascope 239A. A reading below minus 100DB maximum discernible signal was never obtained. Pre-TR tube type BL-25 and TR tube type 6080 were new prior to the Patrol.

c. In the opinion of this command, successful Rawins were not obtained due to the following reasons.

(1) The NORTHWIND was landlocked over 60% of the Patrol, usually within close range of mountains.

(2) Light surface winds prevailed throughout most of the Patrol, and winds aloft appeared light as observed from cloud movements, thereby rendering many releases impractical due to probable high elevation angles.

(3) Because of operational commitments, the ship was unable to manuever to obtain most desirable courses and speeds during attempted Rawins which resulted in high elevation angles upon release.

1. No true evaluation of the Delta type target can be made from the results obtained. However, the reason for the poor results is not believed the fault of the Delta Target. Targets were attached to the parachute rungs and no launching difficulties were experienced except in extremely rough weather when the after main deck became inaccessable to personnel.

ANNEX B

APPENDIX 3

A. ICE

1. No ice was encountered by the NORTHWIND during the patrol and no ice reports were made.

ANNEX B

SEARCH AND RESCUE

APPENDIX 4

A. REPORTS OF ASSISTANCE

1. NORTHWIND was not required to divert on any SAR cases during the patrol. Two reports of assistance were submitted. NORTHWIND report of assistance #3-58 occurred in SITKA, in which boat #5, while engaged in boarding operations, towed a disabled F/V to a moorage. NORTHWIND report of assistance #1-59 occurred in TELLER in which the helicopter flew oxygen to the beach for a young child and later in the same day flew the child to a hospital in NOME under oxygen.

ANNEX B

OCEANOGRAPHY

APPENDIX 5

A. SOUNDING PROGRAM

1. NORTHWIND carried out a sounding program in accordance with Operations Instruction #22-58. The collected sounding data, sounding log, sounding traces and accompanying charts will be forwarded to the Hydrographic Office by separate correspondence.

B. BATHYTHERMOGRAPH PROGRAM

1. NORTHWIND procured additional bathythermographs of the OC-1/S and OC-2/S models prior to departure SEATTLE to effectively carry out the Bathythermograph Program as directed by Commandant's letter dated 17 April 1958 to CCGD17. Bathythermograph observations were taken every six hours while the ship was underway in greater than 50 feet of water. No bathythermographs were lost. A total of 42 slides were taken north of the Aleutian chain and a total of 20 slides taken south of the islands. Slides and logs will be forwarded under separate cover to Hydrographic Office, Washington, D. C.

C. SEA WATER AND AIR SAMPLES

1. Sea water and air samples were taken in the Bering Sea in accordance with the basic Operation Order and will be forwarded to Argonne Laboratories in accordance with shipping instructions.

ANNEX C

HELICOPTER OPERATION

1. BACKGROUND - An HO3S helicopter from the Coast Guard Air Station, Traverse City, Michigan was assigned to the CGC NORTHWIND during the period of the 1958 Bering Sea Patrol to allow a complete operational evaluation of the helicopter's usefullness to the Bering Sea Patrol. This annex presents factual data along with pertinent comments, recommendations and conclusions concerning the utilization of the HO3S during this operation.

2. PRE-PATROL - HO3S CGNR 232 departed Traverse City on 19 May and was ferried via northern civil airways, arriving at Seattle and reporting for operational control to the NORTHWIND on 24 May. The helicopter was based ashore, pending availability of the flight deck, until 11 June. Prior to the NORTHWIND reporting to the Commander, 17th CG District for Bering Sea Patrol 1958 the helicopter flew a total of 25 sorties, involving 35.2 hours flight time and cruised a distance of 2350 miles. In addition to the ferry flight, two training and indoctrination flights were conducted during this period and the aircraft was ferried to the Coast Guard Air Station, Port Angeles for routine maintenance.

3. OPERATIONAL USE DURING PATROL - From 15 June to 24 August while the NORTHWIND was carrying out the 1958 Bering Sea Patrol, the helicopter flew a total of 198 sorties, involving 82.8 hours flight time, cruised 5229 miles, with an operating time away from the vessel (Alfa time) of 165.3 hours. The helicopter supported the Patrol by transporting personnel 543 passenger miles and carried cargo 19.9 ton miles. 321 landings and takeoffs were made. All flights during this period were classified as Special Operations (Code 4D on "Abstract of Operations" Form CG-3273 or Code 4C on Form CG-3273AV) as they were all incident to the Bering Sea Patrol.

4. SPECIFIC TASKS

A. Search and Rescue - On 10 August the NORTHWIND was anchored off Teller, Alaska and a medical clinic had been established ashore. At 1055, Linda TOPKOK, 34 day old daughter of WAYNE and Clara TOPKOK of Teller was brought to the clinic. The child was not breathing and was turning blue. Artificial respiration was immediately administered by clinic personnel. At 1058 the NORTHWIND was notified by radio of the emergency and oxygen was requested for administration to the baby. At 1103 HO3S 232 departed the NORTHWIND with the oxygen and arrived Teller at 1109. The oxygen was transported to the clinic and administered to the child. The child resumed breathing when oxygen was administered. At 1211 the HO3S departed Teller to refuel for possible evacuation and to obtain an additional supply of oxygen, arriving at the NORTHWIND at 1219. At 1242 CG 232 departed the NORTHWIND with additional oxygen and arrived Teller at 1249. At 1305 the first oxygen bottle was exhausted and it was discovered that oxygen could not be properly obtained from the second bottle due to a stripped fitting. The child was not able to

breath without oxygen. The baby was carried to the helicopter which departed Teller at 1307 and arrived on the NORTHWIND at 1314. The child was carried to the ship's sick bay where oxygen was administered and she resumed breathing. Evacuation to the nearest hospital was requested by the Medical Officer. The HO3S was jury rigged with an oxygen system and departed the NORTHWIND at 1415. The helicopter arrived Nome, Alaska at 1529 and transferred the child to a waiting ambulance for further transfer to Nome hospital. The HO3S departed Nome at 1549 and returned the NORTHWIND at 1652. Weather conditions during this mission varied as follows: Ceiling 200 to 400 feet, visability 3/4 to 3 miles, wind south 9 to 25 knots with light to heavy rain. It is considered that the child would not have survived if the helicopter had not been present in the area.

B. Transportation of Medical Personnel and Equipment - In those locations where suitable facilities for a medical clinic were available in the village, it was found desireable to give medical treatment ashore. This reduced the number of trips by the LCVPs to transport natives to the ship. The helicopter was utilized extensively for this transportation as it allowed treatment to begin earlier and terminate later, affording the medical officer more time for treatment. Additionally, in most villages the helicopter was able to land closer to the place of treatment than the LCVPs thereby reducing the distance the equipment had to be carried. Two villages, Savoonga and Gambell on St. Lawrence Island were given medical treatment with surf and sea conditions that made boat landings impossible. Treatment was effected at Shismarff and Unalakleet when transportation by LCVP would have been difficult due to offshore sand bars that would have necessiteated lightering by small boat from the LCVP at the bar to the beach. Aerial transportation of Medical Personnel and equipment for treatment ashore was used at Wainwright, Pt. Hope, Shishmaref, Teller, Gambell, Savoonga, Elim, Shaktolik, Unalakleet, St. Michael, Stebbins and Mekoryuk. During these flights the helicopter normally carried, with reduced gas loading, the Medical Officer, HMC and approximately 140 pounds of equipment. At Teller, obstetrical equipment was flown ashore when a baby was delivered in the clinic.

C. Transportation of Dental Personnel and Equipment - Dental treatment was effected at Gambell, St. Lawrence Island under sea and surf conditions that precluded landings by LCVP. It is noted that dental treatment had not been received by this village in several years due to similiar conditions. The dental officer, DT2 and equipment were transported ashore where a dental clinic was established. The helicopter stood by at the clinic and one patient that developed complications was flown to the NORTHWIND for additional treatment. Three dental personnel and approximately 250 pounds of equipment were transported ashore at Unalakleet, in repeated trips, for establishment of a dental clinic. LCVP transporation of personnel to the ship would have been difficult due to a sand bar approximately ½ mile offshore that would have required lightering personnel to the LCVPs at the bar.

D. Transportation to Pre-arrival conference - It was discovered that most of the villages were unaware that the Bering Sea Patrol

schedule had been revised due to the NORTHWIND's commitment to Operation DEEP FREEZE IV. Hence, it was found desireable to fly to the villages ahead of the arrival of the ship to alert the populace, confer with village officials concerning organization of treatment effort, inspect available medical facilities ashore, discuss legal aspects of the patrol and scout the beach for obstructions and selection of boat landing sites. It is believed that these flights speeded up beginning of treatment as much as several hours in some villages. Normal routine was to depart the ship 1 to 2 hours before its arrival with either the Commanding Officer or Executive Officer and the Medical Officer for the pre-arrival conference. Such flights were made at Yakutat, Tatitlek, Nikolski, Atka, Wales, Wainwright, Pt. Lay, Pt. Hope, Kivalina, Shishmaref, Teller, Savoonga, Golovin, Elim, Shaktolik, Unalakleet, St. Michael, Stebbins and Mekoryuk.

E. Alerting of Natives - In several villages it was found that large portions of the population were absent from the village fishing and/or berry picking in the surrounding countryside. These absent natives were unaware that the schedule had been revised. The HO3S proved of considerable value in alerting the outlying camps of the NORTHWIND's arrival shortly after arrival. This allowed the natives to return to the village so as to permit treatment to be completed at an earlier time than would otherwise have been possible. Where possible a landing was made and the natives advised, where a landing was not feasible message blocks were dropped. It was found that the messages must be simple as many natives did not read English very well.

F. Transportation of Natives - It was discovered that all natives to which the patrol gave treatment had little or no concern about riding in the helicopter. In fact, many expressed more concern about LCVP transportation in rough sea conditions. On three occasions, natives were transported in the HO3S, they were:

(1) At Shismaref ten natives requesting dental treatment arrived in the village after treatment had been secured. Five of these were transported to the ship by air in order that the dentist could begin treatment sooner and permit earlier departure of the ship.

(2) At Gambell one native dental patient was transported to the ship for additionald treatment, when complications developed sshore.

(3) At Shaktolik one native dental patient was transported to the ship when she missed the last boat carrying patients to the ship.

Additional air transportation of natives was not feasible because of limited passenger space in the HO3S and availability of LCVPs.

G. Other Personnel Transportation - Miscellaneous personnel were transported for the following reasons:

(1) At St. Paul, Pribilof Islands, the local Public Health Service Medical Officer was transported to the NORTHWIND for a consultation on an appendicitis case. Air transportation resulted in an earlier confirmation of the NORTHWIND Medical Officer's diagnosis.

(2) At St. Paul, ENS Jon UITHOL was transported ashore for an emergency appendectomy. He was returned to the vessel the next day as a litter patient. Air transportation was utilized as being easier on the patient than the longer boat trip.

(3) Mr. LeRoy Bell, cameraman, was transported on flights at Unalakleet and Mekoryuk to obtain aerial photographs for use in the NBC program "March of Medicine".

(4) McDONALD, YN2 was transported from north of Ketchikan to Annette Island for further transportation to Seattle when it was learned his daughter had been killed in an accident. Had the helicopter not been aboard either the ship would have had to turn back, delaying scheduled arrival in Juneau or return of the man to CONUS would have been delayed until after arrival of the ship at Juneau.

(5) At St. Paul, 17th CG District Electronics installation supervisor was transported from St. Paul airport to the NORTHWIND for a conference on construction of Radio Beacon Station, his arrival having been delayed two days due to weather conditions. This allowed early coordination of work already in progress and more rapid completion thereof.

(6) At Ketchikan, Juneau and Seward, the officer who would be conning the ship during docking was transported by air to inspect the berthing arrangements, and determine existing conditions of wind and current. This proved of considerable value as these were unfamiliar ports.

(7) While the ship was anchored at Akutan the Executive Officer was transported to Cape Sarichef for a conference with the Commanding Officer of the Loran Station to determine if a call by the patrol vessel was necessary. Surf conditions at that time precluded boat landings. At the conference it was decided a call was not required.

(8) At various places throughout the patrol, various shipboard personnel were transported ashore for conferences, inspections, etc. concerning the patrol. Helicopter transportation was found desireable in that it minimized away from ship time. Example - At Wales, Executive Officer ashore for conference to coordinate unloading of Naval Electronics Laboratory stores.

H. Transportation of Mail - Due to the fact that mail schedules in many villages were irregular, dependent on suitable flying weather, the helicopter was used to take outgoing mail ashore as opportunities presented themselves. Inasmuch as such mail was on an opportunity basis, frequently on short notice, it is doubtful that boat transportation would have sufficed because of the distances involved. Incoming mail pickups were made prior to arrival in Seward, at Wales while the ship was at Shishmaref of mail that had been forwarded from Nome, and at Nome as the ship passed enroute from Gambell to Golovin. These pickups enabled the ship to receive mail earlier or more frequently than would

otherwise have been possible and in the case of Nome saved the ship several hours that would otherwise have been required.

I. Survey for Recreational Sites - The HO3S was utilized to survey localities for suitable sights for recreational purposes. This allowed better utilization of the limited time available for recreational purposes. The helicopter also provided an effective method for recalling recreation parties when sailing times were advanced due to early completion of treatment.

J. Law Enforcement - The helicopter made several law enforcement patrols in areas were commericial fishing, hunting and trapping were being carried on. While no violations were detected, it is believed that persons observing the HO3S in the area were less likely to commit violations of applicable laws.

K. Flights during periods of Open House - Flight operations were conducted at Juneau, Sitka, and Seward during open house periods aboard the NORTHWIND. The purpose of these flights was to acquaint local Coast Guard personnel, Coast Guard Reservists, Auxilarists and the general public with the potentialities of the helicopter. At the request of the Acting Senior Medical Officer the helicopter landed on the lawn of Mt. Edgecomb Hospital, Sitka in order that patients of that facility could inspect the HO3S. The long period of hospitalization for the patients, many of them children, is extremely boring and considerable theraputic value was derived from this flight in giving the patients a break in their routine.

L. Transportation of food to personnel working on the beach - In several cases meals were transported to medical and dental personnel in the villages. Air transportation insured quicker delivery, hence better quality of the food. Since food was not available ashore in some villages, transportation of food ashore gave more time for treatment because personnel did not have to return to the ship for meals.

M. Training and Indoctrination - In the early phases of the patrol, flights were conducted to train and indoctrinate aviation and shipboard personnel in helicopter launching and recovery techniques and to familiarize NORTHWIND personnel with the capabilities and limitations of the HO3S. These flights were of great value to later operations in making efficient use of the helicopter and resulted in safer operating procedures.

5. POST PATROL

A. It is anticipated that the HO3S will be ferried from Seattle to Traverse City via northern civil airways upon return of the NORTHWIND to Seattle. This ferry movement should require approximately 28 flight hours and cover approximately 2000 miles.

6. SHIPBOARD OPERATIONS

A. Standard icebreaker operating procedures as outline in current Navy Instructions were utilized. Shipboard personnel manned crash billets

upon sounding of flight quarters. One aviation crewman was designated as responsible for flight deck clearence and functioned as Landing Signal Officer. In addition, radio contact was established and maintained with the bridge at all times when the helicopter was airborne in the vicinity of the NORTHWIND. Radio communications, backed by standard flag hoist signal, were used to coordinate landings and takeoffs with the conning officer on the bridge. On flights that were planned for a distance of more than 20 miles radio central set watch on a secondary frequency.

B. Operations were conducted in a wide range of conditions. Various factors effecting shipboard operations were:

(1) Roll - Flight operations were conducted with rolls of up to 14 degrees. It was discovered that the HO3S would begin to slide, when aligned fore and aft with rotors not turning, with a roll of approximately 14 degrees on a dry deck and with rolls of approximately 10 degrees on a wet deck.

(2) Pitch - Flight operations were conducted under pitch conditions with the flight deck moving vertically approximately 20 to 25 feet. Pitch in itself was reasonably easy to judge and compensate for. Awareness of pitching lessened to a considerable degree the closer the helicopter hovered to the flight deck.

(3) Yaw - Yaw of the ship in a seaway while landing with the ship underway was not a problem as its magnitude was small as compared with other motions.

(4) Wind Velocity - Operations were conducted in relative wind velocities of up to 32 knots. Wind velocity alone presented no more of a problem than the same velocity and gustiness would present ashore.

(5) Wind Direction - Wind presented no problem as long as this velocity was less than 20 knots and the direction was not within 45 degrees of dead astern. Astern winds of sufficient velocity would require that the ship be maneuvered if it were necessary to recover the helicopter under these conditions. The only time that winds from this sector were encountered on the Patrol was while anchored at Nekoryuk and wind velocity in that case was 6 knots. With velocities in excess of 20 knots increasing turbulence was encountered when the direction of the wind was within 10 degrees of dead ahead. However, this turbulence never exceeded moderate and did not seriously affect the helicopter in winds up to 32 knots. (See maintenance section, this annex, rotor brake).

(6) Stack Gas - Some turbulence was encountered from stack exhaust with relative wind directions of near dead ahead. This turbulent area could be avoided by making a long flat approach.

(7) Night Operations - A total of 5.1 hours were flown at night during the patrol with 9 shipboard landings during hours of darkness.

During night landings care must be exercised to avoid shining lights into the pilots eyes. Close liasion between the pilot and the conning officer must be maintained in order to change lighting or request of the pilot. Precipitation greatly increases problems associated with lighting and effectively requires that the ship be darkened and the landing accomplished by use of the helicopters landing lights. When proceeding shore-ship, all instruments must be operating properly and the pilot prepared to refer to them as the ship appears as a point source of light at distances greater than about 3 miles. The use of red goggles for accomodation prior to flight is recommended in order that all available light can be utilized for visual guidance. This was found to be particularly true on overcast nights. Landing lights were utilized for night landings but care must be exercised not to allow the lights to blind the LSO. Night landings with appreciable roll or pitch are considered to be extremely hazardous and should be attempted only in a desperate emergency after all other alternatives have been exhausted. Night takeoffs with moderate pitch and roll are considered feasible but action should be tempered by the realization that extra hazard is involved.

(8) General comments concerning shipboard operations

(a) It was found that motion of the ship as observed in the helicopter, is considerably amplified due to action of the shock structs of the helicopter landing gear. When the gyro horizon had erected it was then possible to determine degree of motion in the lateral direction of the helicopter. A rough approximation of degree of motion could be obtained from the ball in the needle-ball indicator. Full deflection of the ball being equivalent to approximately 10 degrees inclination.

(b) Engagement with tiedowns attached is advised only when sliding may reasonably be expected as vibration is greatly increased and danger of ground resonance is present.

(c) When disengaging, use of the rotor brake is more severe than in land operations, (1) due to generally higher average wind velocities when underway causing a tendency for the blades to autorotate and (2) due to motion of the ship stopping of the rotors in as short a period as is practicable is desired in order to minimize the chance of a rotor blade striking the tail cone or deck.

(d) Location of the vessel under conditions of low visibility was aided by use of the Automatic Direction Finder installed in the HO3S utilizing the 2 megacycle working frequency. Use of ship's CIC to provide vectors from radar was attempted but found only moderately successful due to lack of time available for training. Use of the ship's ADF to provide vectors was not possible due to equipment malfunction.

(e) While the NORTHWIND was operating off Gambell, St. Lawrence Island the helicopter was recovered four times under the following conditions; Roll 3 to 9 degrees, vertical motion due to pitch 20 to 25 feet, Wind 350 to 010 degrees relative velocity 24 to 32 knots. It is

believed that recovery of an HO3S under more severe conditions would be a hazardous operation.

(f) It was noted that due to the slotted construction of the flight deck, about 2 to 3 inches additional manifold pressure was required to hover than under the same conditions over land.

(g) It was found that the NORTHWIND rode at anchor with the wind toward the bow unless there was a current present. Then direction of wind depended on relative effects of wind and current.

(h) Securing of the helicopter for sea was accomplished by use of 8 reel tie-downs. Two were attached to each landing gear and two were attached to the lower fuselage. Blade tip covers and dampner blocks were used to secure the blades. In this configureration, the helicopter remaind secured with rolls of as much as 52 degrees and winds of relative velocity of 60 knots.

7. SHORE OPERATIONS

A. In only a few villages were landing fields available so located that their utilization was practicable. Hence almost all shore work was conducted from sites of opportunity. (See appendix 1 to this annex for a tabulation of specific landing sites used during the patrol).

B. In general, all sand beaches in Alaska are sufficiently hard to allow helicopter operations. However, the slope of the beach in certain areas is such that caution is indicated as it was invariably found that slopes were steeper than appeared from the air, even while hovering at low altitude.

C. When operation from the beach was not feasible, landings were made in areas around the village. In selecting such a landing site, areas where the ground was clearly visable were utilized. Areas with short grass were generally firm enough to support the helicopter unless water was observed on the ground. Areas of long grass should be avoided as ground in these regions is usually soft. In all operations on tundra great care must be exercised in landing as holes are present in most areas. These holes are frequently undetectable from the air. The firmness of the tundra and hence its ability to support a helicopter varies inversely with recent rain. At Savoonga where several days of recent rain made the tundra very soft, the helicopter was observed to sink at the rate of approximately 1/2 inch per minute. It was necessary to land the HO3S on boards 2" X 10" X 8' in order to keep it from being bogged down. Due to scarcity of lumber it will not usually be practicable to lay a complete platform, but landing on boards placed to receive each wheel is practicable under moderate wind conditions. This situation could be improved by landing an LSO, by hoist, if necessary, to assist with the landing. The procedure of momentarily touching down with the helicopter, then hovering and moving to one side and observing the impression left by the wheels was found of great value in judging firmness of the ground.

D. It must be continually remembered that radio is the only means of general communication in Alaska. Hence, until proven otherwise, it is prudent to assume that all poles are supporting antennas and that antennas are strung between each building in a village. Antenna wires are hard to see because of their rusty color and often the only clue to their presence is a small insulator. In general the best landing sites as observed fromthe air will prove to be spider webbed with antennas.

E. Security of the helicopter was a problem only at St. Paul, Pribilof Islands. At all other villages the natives showed curosity about the helicopter, but were carefull to obey the admonition "Look all you want, but don't touch". At St. Paul it was necessary to post a guard at all times that the HO3S was in the village to prevent the children from literally dismantling the helicopter piece by piece. This was true no matter what the time of day (or night) and continued throughout the stay even though the HO3S operated into the village for several days.

8. LOGISTICS

A. Logistic support for the helicopter was furnished by CGAS, Traverse City. Upon being advised of the planned deployment a list of spare parts was prepared. This list consisted of 100% spares for all parts it was considered feasible to replace aboard ship. An additional list of supplies required to support the operation was prepared. All parts and supplies were ordered for delivery one month prior to sailing. Early arrival of the flight crew on 24 May allowed for the checking of all items and the expediting of the delivery of missing items. All material was received prior to sailing with the exception of one non-critical part and two non-critical support items. The part was received at Seattle the day following sailing and was delivered to the ship at Juneau. Consumption on only one item, rotor brake shoes, exceeded anticipated rate. Additional shoes were requested by message and were received in Adak in late July.

9. MAINTENANCE

A. Prior to deployment, HO3S 232 was placed in a maintenance status for approximately one month. During this period minor storm damage previously received aboard the CGC MACKINAW was repaired, all components were changed so as to provide a minimum operating time of at least 250 hours on each component, the helicopter was given a meticulous inspection and all surfaces were cleaned, primed and painted. It is believed that this effort accounts for the low number of troubles encountered during the patrol.

B. Periodic Inspections were completed at CGAS, Port Angeles, prior to boarding the NORTHWIND; at NAVSTA Adak, Alaska, while the ship was awaiting supplies for NEL Wales; and at NAVSTA Kodiak, Alaska, upon completion of the Patrol. Additionally the helicopter was washed down and checked for corrosion at Kodiak in early July. Personnel at all units where maintenance was accomplished were without exception eager to furnish any and all facilities of their command for assistance.

This statement can also be made concerning personnel at NAS Seattle where the HO3S was hangered for an extended period prior to embarkation.

C. Engineering statistics for the Patrol period show Operating Hours 165.3, Standby Hours 1404.7 and Maintenance Hours 104.0 for an availability of 93.8%. All maintenance hours occured while the NORTHWIND was moored in Adak and Kodiak. At no other times during the patrol was the helicopter on less than a two hour standby status. No flights were delayed or cancelled during the patrol due to maintenance.

D. Corrosion due to salt water presented only a minor problem during this patrol. This was due to the relatively slight sea conditions and plentiful shower activity. If rougher sea conditions had been encountered, wash down would have presented a problem. Either a portable pump would have to be transported to the shore of a suitable lake, where available; or else water used from the heeling tanks aboard the NORTHWIND. Fresh water for washdown is unavailable at any locality after leaving Adak. Also contributing to the absence of corrosion was the time spent prior to deployment preparing the helicopter.

E. Part failures of other than a routine nature were:

(1) Rotor Brake Housing - The rotor brake housing cracked when heavy braking action was applied early in the patrol. The heavy action was required because the ship maneuvered under high relative wind conditions so as to change the direction of the wind to a considerable degree, before the rotor had stopped after disengagement. Once the critical nature of this period was more fully explained to all conning officers, their cooperation in maintaining course and speed was excellent.

(2) Rotor Brake Shoes - Wear rate on rotor brake shoes was higher than anticipated. This is explained by the fact that the average winds were higher than would normally be encountered in shore based operation including a slight tendency for the blades to autorotate and motion of the ship made it desirable to stop the rotors in the shortest practicable time in order to minimize the chance of the main rotors striking the tail cone or the deck.

(3) Gyro Instruments - All gyro instruments became very noisy and sluggish by the end of the Patrol. This is attributed to motion induced by the ship during starting and stopping of the gyros causing higher than normal bearing loads. This situation should be taken into consideration in the planning stages of future helicopter deployment on icebreakers.

(4) Oil Pressure Warning Switch - An emergency landing was made aboard the NORTHWIND when the transmission oil pressure warning light came on during flight on 15 August. After landing it was found the switch had shorted out in such a fashion as to cause the warning light to burn continuously.

10. COMMUNICATIONS

A. The HO3S was equipped with an AN/URC-13, 5 channel transceiver and an AN/ARN-41C ADF. Channelization of the URC-13 for the patrol was 1 - 2678 kcs., 17th District working; 2 - 2670 kcs., 17th District calling; 3-- 3023.5 kcs., CAA general receiving; 4 - 5695.5 kcs., CG Air/Ground; 5 - 8984 kcs., CG Air/Ground. 6050 kcs., was not installed after discussion with 17th district personnel due to the greater need for 3023.5 kcs., to enable the helicopter to communicate with CAA stations. Communications for short range flights (less than 20 miles) were maintained with the NORTHWIND utilizing the URC-7 installed on the bridge on 2670 kcs. For longer flights the radio room maintained a guard on either 5695.5 kcs., or 8984 kcs., as desired. Communications were restricted to almost line of sight due to the low output of the helicopter transmitter. Better results as well as greater flexability could be obtained if ARC-38 equipment is available in future helicopters deployed on icebreakers. The ARN-41C ADF performed well throughout the deployment. Ranges of reception of low frequency aeronautical ranges averaged 80 to 90 miles. Lack of VHF/UHF equipment prevented direct contact with USAF Radar Station in the area. Information available through these stations could possibly have been of some value.

11. EVALUATION OF ASSIGNED CREW

A. Pilot - LT. Richard T. PENN, Jr., (4226), USCG, was assigned as Senior Aviator Bering Sea Patrol and NORTHWIND Helicopter Pilot for the 1958 Bering Sea Patrol. This officer's performance of duty with respect to his assignment as Senior Aviator, Bering Sea Patrol, Air Operations Officer and SAR Officer of the vessel was outstanding. He is an excellent helicopter pilot, well versed in all phases of helicopter operation and one on whom the Commanding Officer and Executive Officer were able to rely for proper advice in the conduct of helicopter operations. It is particularly desired to emphasize LT PENN's outstanding performance of duty off Savoonga and Gambell, St. Lawrence Island on 11 and 12 August 1958. Strong northerly winds and rough seas made the use of landing craft impossible. The ship was forced to remain underway. By means of the helicopter, a medical clinic was set up ashore at Savoonga on 11 August, and a dental and medical clinic ashore at Gambell on 12 August. The Doctors and all necessary personnel were transported ashore and back. Landings were made on the NORTHWIND in relative winds of 25-35 knots, with a maximum roll of 10 degrees, and with the landing platform rising and falling a maximum of 0-25 feet. LT PENN proved an excellent Officer-of-the-Deck underway, and his voluntary services were much appreciated, since the ship had only two qualified deck watch officers out of a total of seven on its trip north. LT PENN is considered an outstanding officer, extremely well qualified for all the duties of his rank both ashore, afloat and in his specialty as Senior Aviator aboard the NORTHWIND. [redacted]

B. Crewmen - WALES, Donald R. (269-992) AD1, WEIGNER, Leon L. (307-531) AD2 and DILLER, Robert E. (295-020) AL2 were assigned as crew members for the helicopter during Bering Sea Patrol Deployment. These men integrated well into the ships organization. Their display of professional ability was such as to give the pilot every confidence in the helicopter and thus devote his energies to other areas. Their work is to a large extent responsible for the outstanding availability record achieved on this patrol. The overall impression created by these men was at all times very good. WALES was particularily outstanding, in that as plane captain, he organized and carried out all necessary routine with little or no recourse to higher authority. His display of initative and ability were at all times outstanding. DILLER is to be commended for the interest he displayed and the rapidity with which he becams a major asset to the detachment, particularly so when it is realized that he was substituted as a crew member at the last minute and had never been assigned to helicopter work previous to this deployment.

12. SHIP SUPPORT

A. Support furnished by the NORTHWIND to the helicopter and attached personnel was excellent. The spirit of cooperation in performing a joint task permeated all relationships. Conferences prior to sailing paved the way to a smooth and successful cruise. Working, living and storage spaces made available to the aviation detachment were most satisfactory. Services furnished by the ship were excellent. Example - rapid refueling any time of day when required. All problems were easily resolved by joint discussion as each occured.

13. HELICOPTER EVALUATION

A. The assigned HO3S performed all tasks assigned in a satisfactory fashion. The only criticism of the type of machine selected is its relatively low capacity in personnel and/or cargo. This necessitated multiple trips to move major loads. Example - Dental personnel and equipment.

14. WEATHER

A. Early in the patrol it became apparent that strict adherence to minima of ceiling 500 feet and visability 1 mile for VFR helicopter operations would not permit effective utilization of the HO3S. In order to obtain effective utilization each days weather was evaluated as to suitability for flight operations and under the provisions of Civil Air Regulations 60.30(b)(2) and 60.31(d) flights were conducted clear of clouds at reduced speeds when visability was such as to permit observation of obstructions. Decisions were influenced by expected air traffic as determined from local information and the helicopter pilot's familiarity with the area. All flights conducted under reduced weather conditions were of operational importance to the patrol and were of short range in the vicinity of the NORTHWIND. Whenever the helicopter was operating in the vicinity of an aeronautical ground facility, radio contact was established and such facility kept advised of the helicopter's location and intended actions. When operating within the limits of control zones with conditions

less than ceiling 1000 feet and/or visability less than 3 miles instrument clearence was obtained from the appropriate Air Traffic Control Center. Local CAA personnel were universally most helpful in expiditing clearences and cooperating in every way possible to assist the helicopter in the performance of its tasks.

15. CONCLUSIONS

A. It is believed that the HO3S assigned to the NORTHWIND for the period of the Bering Sea Patrol 1958 has proven of great value. By performing the tasks detailed in paragraph 3 above the helicopter materially assisted the NORTHWIND to satisfactorily accomplish it's assigned mission within the time limits imposed by commitment of the vessel to Operation DEEPFREEZE IV. While it is thought that a helicopter would have been of value under any circumstances, the shortened patrol made it invaluable. If the helicopter had not been aboard, it is estimated that several additional weeks would have been required to accomplish the same work and it is doubtful that any treatment could have been given to natives on St. Lawrence Island, without causing unacceptable delay.

16. RECOMMENDATIONS - From experience gained on this patrol it is recommended:

A. That when a ship with helicopter capabilities is assigned to the Bering Sea Patrol, a helicopter be assigned to the ship for the period of the patrol.

B. That the type of helicopter assigned be an HO4S or helicopter of equivalent carrying capacity. The larger helicopter would permit a lesser number of trips to carry any given load and would permit the transportation of natives to the ship by air for treatment when surf, sea condition or distance make it desirable. With the increased reliability of rotary wing aircraft it is believed that helicopter transportation would be less hazardous than transportation by boat under certain conditions.

C. It is recommended that the assigned helicopter not be equipped with pontoon flotation gear. This recommendation is made in view of the following considerations:

(1) Weight penalty involved in such gear.

(2) Difficulty that would result in handling the helicopter aboard the ship.

(3) The exposed water areas over which a helicopter operates during most of the patrol.

(4) Such gear is of little value in giving additional safety to personnel but is primarily to minimize damage to the helicopter.

(5) Such gear may actually hazard personnel due to the fact that the helicopter may capsize under the influence of wind and water in an uncontrolled fashion, rather than be rolled in a controlled manner by the pilot.

(6) Technique and judgement of the pilot would have to be almost perfect to make the gear effective.

(7) Salvage of the helicopter by the ship, unless it can be towed to the vessel, is unlikely because the ship normally anchores as close to the beach as draft will permit thereby eliminating use of the ship's cranes in the area in which the helicopter does almost all it's flying.

D. It is recommended that the helicopter be equipped with a weight distributing device, similiar in design to the skis used on R4d (DC3) aircraft in artic operations. Use of such a weight distributor would permit landings on soft terrain while still maintaining the deck mobility of a wheeled helicopter.

ANNEX C

APPENDIX 1

List of landing sites used during Bering Sea Patrol 1958

Juneau - On baseball diamond east of National Guard Armory near government dock - CAUTION - Wires on poles around field.

Sitka - (1) On ramp near hangers on Mt. Edgecomb Hospital side.
(2) On grounds of hospital to west of flagpole in front of hospital - CAUTION - Electric wires on north side of road. NOTE - Permission must be obtained from office of Medical Officer in Charge before any landing can be made on Mt. Edgecomb side.

Yakutat - (1) At airport on ramp.
(2) At head of bay on beach, midway between two piers. (Rocky)
(3) On beach in front of Loran Station

Tititlak - Southwest of basketball court next to school - tundra - NOTE - Antenna across basketball court.

Columbia Glacier - On island in middle of glacier on side toward glacier - CAUTION - avoid rocky area, very uneven.

Seward - (1) At airport
(2) On new dock behind storage building - CAUTION - Electric wires to north.

Kodiak - (1) On ramp at NAVSTA - Note avoid flying close to Administration Building at southeast corner of ramp.
(2) On beaches at mouth of river southeast of NAVSTA

Akutan - On beach at mouth of stream at head of harbor - NOTE - No suitable location for landing found near village.

Cape Sarichef - Air strip 1 mile east of Loran Station.

Chernofski - On slightly higher ground just east of house.

Nikolski - Air strip just east of village.

St. Paul - (1) Baseball field at village.
(2) Airstrip.
(3) High ground at turn around northeast of village.
NOTE - Avoid seal rookeries until clearance is obtained from Fish and Wildlife Service Manager.

Atka - (1) Road north of village - steep slope.
(2) Old airstrip north of village over hill.

Adak - On ramp at NAVSTA

Wales -	(1) On beach in front of NEL and village. (2) Airstrip west of village.
Wainwright -	Beach south end of village.
Site LIZ-3 -	Airstrip at site.
Pt. Lay -	On beach near school
Pt. Hope -	(1) On parking area at airstrip. (2) To east of flagpole in front of school.
Kivalina -	On beach near school.
Shishmaref -	On beach near school.
Teller -	(1) On gravel in front of store. (2) On airstrip north of village. (3) On sand on spit across from town to north.
Imuruk Basin -	On sandspit at fishing camp on river to north of basin.
Savoonga -	On boards in center of area to west of school.
Gambell -	Southwest of school near store.
Nome -	(1) City Airport. (2) CAA Airport.
Golovin -	On road just north of village toward airstrip.
Golovin Fish Camp -	On sandspit just west of camp.
White Mountain -	On airstrip, top of hill.
Elim -	On high spot just west of stream at east end of village.
Moses Point -	(1) On beach in front of village. (2) At airport.
Shaktolik -	On beach west of school - steep slope.
Unalakleet -	(1) Vacant lot on north end of town - Electric wires. (2) Road in front of south quarters at CAA area.
St. Michael -	(1) On beach in southwest section of village. (2) Southwest of flagpole at school - tundra.
Stebbins -	On path south of outhouse at school - favor left side of path facing north - bushes to south.
Nekoryuk -	On beach - Caution tides rise and fall approximately 8 feet.

ANNEX D

BOARDING AND LAW ENFORCEMENT

A. BOARDING

1. ACTION: The Commander, 17th CG Officer, MIO, came aboard in Juneau, and held a conference of the Boarding Officers of the NORTHWIND. He discussed proper boarding procedure, correct use of forms, and briefed the applicable publications and directives. He also pointed out some of the special problems and cases peculiar to the Seventeenth District.

2. COMMENT: A total of 11 vessels were boarded, of which 2 were issued violations. The majority of the boardings were in Sitka, Seward, and Kodiak due to the concentration of small boats and fishing vessels in those areas. No vessels requiring boarding were encountered in the Bering Sea or Arctic Ocean. One vessel was issued a Certificate of Award of Numbers in Seward.

3. RECOMMENDATIONS: It is recommended that the practice of confering with MIO, Juneau, upon the arrival of the BSP vessel be continued. It is of great value to the Boarding Officer to be aware of what to expect, to review the forms and publications and to be appraised of the special circumstances that prevail in Alaska. In view of the increasing small boat activity in Alaska, it is recommended that the assigned Bering Sea Patrol vessel establish a vigorous boarding program.

B. LAW ENFORCEMENT

1. ACTION: The Bering Sea Patrol is charged with enforcing the following fish and game regulations: North Pacific Fisheries Act of 1954, Protection of Halibut, Regulation of the Commercial Fisheries of Alaska, Prohibition of Alien Fishing in Alaskan Waters, Regulation of Whaling, Protection of Walruses, Identification of Sea Otters, and Enforcement of Game Laws generally in Alaska.

2. COMMENT: While enforcing the previous mentioned regulations, the NORTHWIND encountered no incidents or cases.

3. RECOMMENDATIONS: It is recommended that the BSP vessel continue to enforce the various fish and game regulations insofar as it may encounter violations in the pursuit of its additional missions.

ANNEX E

DECK, BEACH LANDINGS AND HANDLING OF NATIVE PATIENTS

A. DECK PREPARATIONS

1. Before departure on the Patrol attention was given to the exterior of the ship. Exposed wire-ways were removed from the bulkheads, cleaned, repainted, and reinstalled using new clamps. All fairlead, fish davits, chock rollers, and movable components of the boat davits were completely disassembled, cleaned, and lubricated with Lubriplate. The anchor chains were led out, sounded, inspected, retiered, remarked, and the ground tackle thoroughly greased. All deck door dogs were removed, and after cleaning, thoroughly greased. The cargo booms were rigged and operated by all BM's for training. Two additional cargo nets and 10 foot accommodation ladder wooden fenders were made (see Appendix 1). All rubber life rafts were inflated and inspected. Boat decks were painted with non-skid paint. Additional knees were installed in the 19' Skiff and a new 10 hp. outboard motor purchased. Extra 2 and 2½ inch line was procured for anticipated use with stern anchors. Extra life jackets were purchased and old ones procured from Navy scrap. All ships boats were inspected and refinished. The ready life boat puddings on the port side were altered to accommodate a Motor-Self Bailer. Two arcticized LCVP's were procured and the cradle arrangement altered to tier both boats on the port side. Marks were placed on the topping lift wire of the port crane and on the sides of the LCVP's to indicate proper position of stowage for expiditious cradling in a seaway. Three BM's were sent to the Amphibious Boat Coxswain school at Coronado Calif., who upon return, trained the remaining prospective boat coxswains. All cargo spaces were cleared. All gear associated with the cargo booms, accommodation ladder, boats, etc. was individually marked and stowed for easy break-out. Twenty Army type folding cots were procured for native seating.

2. Enroute to Alaska all personnel were instructed in boat lowering procedure, safety precautions, boat crew duties, and watch standing. The helicopter pilot instructed the Deck Department in Flight Quarters. Extra wire slings were fabricated. The boat falls were "end for ended."

3. It is necessary that the above items be accomplished before servicing native villages. For the remainder of the Patrol, no time is available for such work.

4. In preparation for the Fourth of July Parade in Seward Landing Force Drill was practiced at each stop prior to Seward. Approximately six hours of related training was given the Landing Force.

B. CARGO

1. Cargo loading and off loading imposed no problems. A large quantity of canned beer was hauled to Ketchikan and Juneau. The hedge-hog magazine (empty) proved an ideal stowage space. Other cargo was

stowed in C-202 with the exception of a few heavy pieces which were secured on the fantail. For short distances chilled foods were also stowed on the fantail.

C. BEACH LANDINGS AND TRANSPORT OF NATIVES

1. Beach landings and native transportation to and from the beaches was accomplished, except at one stop, entirely with the LCVP's. With the exception of three beaches, the boats were able to make dry-ramp landings. On the exceptions, the 16 foot plastic dory, supplied by CCGD17, equiped with outboard motor ferried between the LCVP's and the beach. On the rockybeaches extreme care must be exercised by the coxswains to prevent damage to screws and shafts. Spotlights and "pin-point" type running lights were installed on the boats which proved valuable during operations at night and in fog. Boat coxswains maintained radio communication with the ship at fifteen minute intervals. Dangerous surf conditions were encountered only at St. Lawrence Island and Savoonga was the only place where a stern anchor was used. The helicopter replaced the boats to transport medical personnel after an unsuccessful beach landing at Savoonga and Gamble. At Golovin one LCVP grounded sufficiently to necessitate the other to pull it free. Coxswains must be throughly briefed at villages which have shoals and channels off shore. Canopies were rigged on the boats during inclement weather. Buoy channel markers were fabricated out of two by fours and 5 gal. gasoline cans properly weighted for use in channels through the sand barrs off some beaches. In addition, the advance helicopter party frequently improvised beach ranges from driftwood, drums or such material as might be available to mark channels.

2. Lowering the boats generally, presented no problem. A double bow and stern tending line was adopted. However, hoisting the boats in even a slight seaway was a difficult operation. With an LCVP hoisted clear of the water and supported by the crane, synchronous motion of ever increasing amplitude develops. This was especially noted when cradling the upper boat. Rapid cradling was the only solution. When weather conditions permitted, the upper LCVP was rigged over the side, hoisted to the rail, with the crane tending inboard slightly to keep the boat snug against the ship's side. Crane handbrakes and locks were set up.

D. HANDLING OF NATIVE PATIENTS

1. The accommodation ladder was used at all anchorages with few exceptions. At these exceptions, the LCVP was hoisted to the rail and the natives discharged directly to the main deck. At no time was the Jacobs ladder used to get natives aboard. The boats generally rode well alongside the accommodation ladder, however on occasion they had to be streamed astern as no boat boom is authorized for this vessel. Ladders and handrails were fabricated and installed in the LCVP's for personnel safety.

2. Three men from the Deck Department were assigned to the medical staff to assist the natives aboard and direct them around the ship. The Quartermaster maintained a running count of the number of natives aboard

at all times. Cots were situated either on the fantail or in C-202 to serve as "waiting-rooms". X-Rays were taken in C-202. Individually the natives were escorted to sick bay and upon completion of their treatment directed to the quarterdeck area. They were returned to the beach in groups. The heads in C-304 and sick bay were designated as native men and native women heads respectively. Constant vigilance was employed to restrict the natives to the above mentioned spaces as an order usually remains after they have departed. During helicopter operations extra vigilance must be observed to keep native children off the second deck, and from under the flight deck. Seaman were provided to assist the more feeble natives up the accommodation ladder.

E. GENERAL DECK

1. A three section watch was maintained. Assignments were made at the beginning of the patrol with each section having specifically assigned personnel to man flight quarters, boat crews (2), BMW, and the usual at-sea watches. With two boat crews assigned per watch, when only one boat was needed, the crews alternated runs. At times when an extra work load was imposed such as cargo handling, St. Paul Radio station work, etc., a two section watch went into effect. Watches were dogged every two weeks.

2. Underway or at some native villages some ships work could be accomplished. This was generally limited to cleaning the exterior and painting out compartments. The weather usually is not proper for exterior painting. The exterior was in good state of preservation at the beginning of the Patrol and it returned with only minor rust developments.

3. The Greenland Cruiser received use primarily as a boarding boat. It was never used to handle natives. At times it was used as a recreation boat as were the plastic dories and 19' wooden skiff.

4. A Motor Self Bailer (Boat #4) was lost in an attempt to rig it in during a storm. It had been rigged out, as the ready lifeboat when 40 degree rolls of the ship loosened it in the gripes. The depth of water is generally shallow in the Patrol areas and the seas build up quickly. Precautionary measures must be taken to secure the boat at the slightest indication of increaseing wind velocity or sea build-up.

5. A group of natives and their 40 foot skin-boat were transported about 60 miles. The skin-boat road very well in the upper LCVP stowage.

F. RECOMMENDATIONS

1. It is recommended for future Bering Sea Patrols that the Greenland Cruiser be removed from the ship and the LCVP stowage be temporarily altered so that one LCVP is stowed on each side of the ship. Under the present stowage, handling the upper LCVP in even a slight seaway is dangerous to the men and the boat. The lower LCVP can be cradled safely with the use of tending lines with a four part purchase but this is impossible with the upper boat. The Greenland Cruiser did nothing on the trip that could not have been accomplished by an LCVP.

2. Boat fenders recieved considerable hard useage. Substitutes were fabricated from 4 parts of surveyed 6 inch hawser married together and whipped with marlin. These were found far superior to the conventional type.

3. An extra supply of small shackles should be on hand and many wire straps (2 ft. to 10 ft.) should be fabricated to secure cargo.

4. Surplus folding cots and old life jackets should be obtained as they can be disposed of after the Patrol at no cost.

5. The plastic dory and 10 hp. outboard received from the 17th District should again be supplied the ship assigned to the Bering Sea Patrol.

6. Four extra propellers and shafts should be obtained for LCVP spares.

7. All boat compasses should be calibrated and permanently secured in the boats.

8. At least two 3" x 12" planks, 16 feet in length, should be in each LCVP to act as ramps on shallow beaches.

9. Six pair of hip-waters should be obtained for boat crews on shallow beaches.

10. All possible prospective boat coxswains should be trained at the Amphibious Boat Coxswain school at Coronado, California. Men must be swimmers to be qualified for this school.

11. Fabricate boat box and life jacket stowage boxes for each LCVP to hold 40 life jackets.

12. Every effort should be made to obtain and use a boat boom.

13. A guard around the propeller on the LCVP's to prevent damage on rocky beaches should be investigated.

14. Have an ample supply of gloves for boat crews.

G. COMMENT

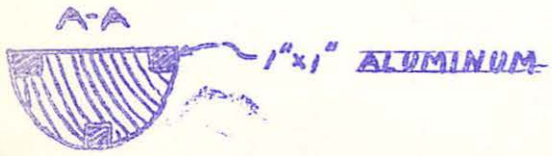
1. There was a large turnover of SA's and SN's immediately prior to the Patrol. The Patrol developed these new men into experienced Seamen and provided boat coxswains with superior knowledge in beach landings and boat handling.

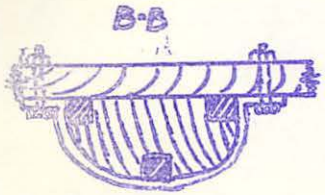
USCGC NORTHWIND (WAGB-282)

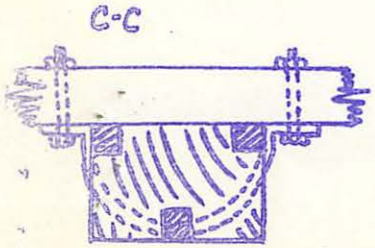
DESIGN OF EXTENDED LENGTH ACCOMMODATION LADDER FENDERS for BERING SEA PATROL 1958

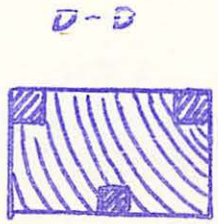
ANNEX E

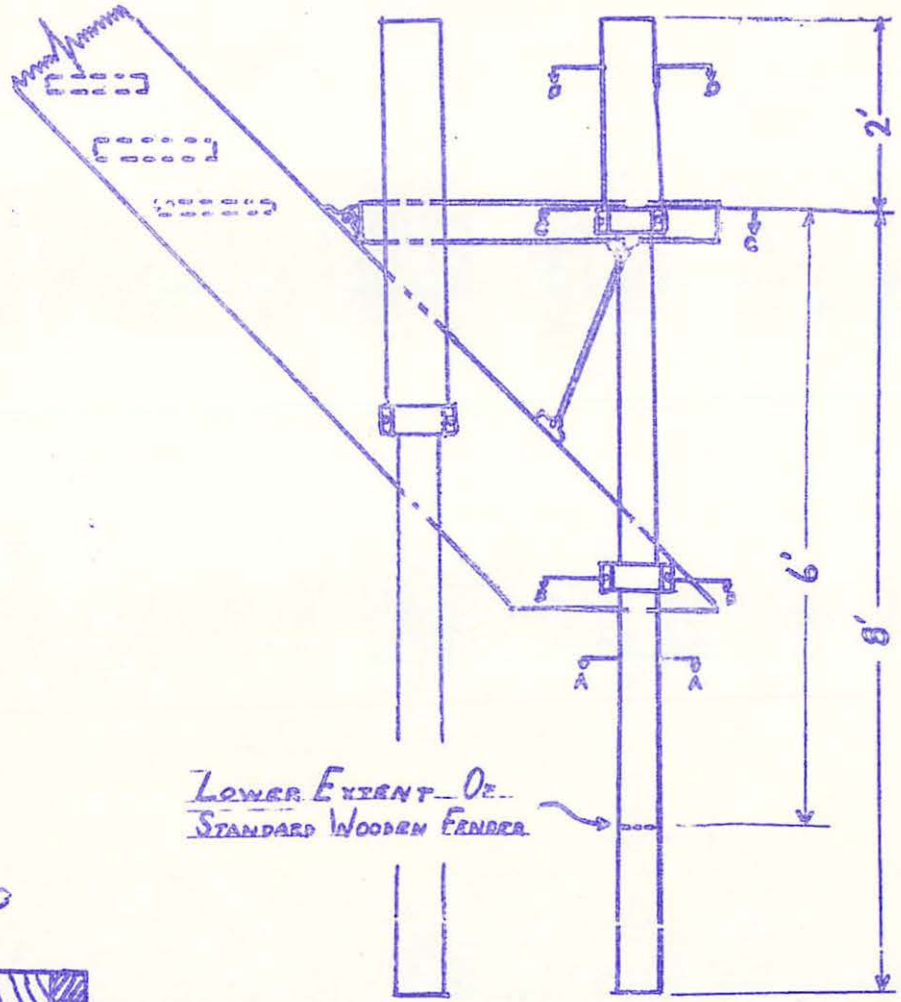
APPENDIX 1











ANNEX F

SPECIAL SERVICES

A. MORALE & RECREATION

1. Prior to departure on the patrol, an additional $200 was allotted the ship for the purchase of recreation gear. This, plus the quarterly allotment, was spent to purchase softball gear, projector spares, shotgun ammunition, crab trap, and a great deal of fishing equipment including rods, reels, line, and lures. Forty cases of beer were purchased from Exchange funds.

2. Fishing was by far the largest attraction. At almost every stop some fish were caught. Common varieties included Dolly Varden, Salmon, (Humpback and Silvers) and halibut. Shrimp were plentiful in the Aleution chain area and shrimp nets and traps should be made available to the crew. No King Crab were caught. Dungeness crabs and clams are plentiful in southeast Alaska. The most popular lure was the "Daredevil" variety of all sizes. Actually, any red and white (and copper) spoon will catch fish. Monofilament line is recommended in that it is cheap and does not rot. The NORTHWIND had 15 rods and reels for "check out" and occasionally this was not sufficient. Before departure advise the crew of the excellent fishing Alaska has to offer to encourage the men to bring their own gear. Spinning outfits are superior and a "must". To reach the river mouths the Greenland Cruiser and skiffs were utilized.

3. Softball games were arranged at Seward and Juneau. The 17th District team defeated the NORTHWIND team at Juneau and the American Legion team lost to the ship at Seward. The natives of St. Paul Is. defeated the ship at baseball as they had their usual excellent hardball team.

4. The evening of the third of July, prior to the parade, a dance was held at Seward. The Executive Officer crowned the Queen and officers of the NORTHWIND in formal dress escorted her princesses. These festivities, while enjoyable, were somewhat expensive.

5. The beer was expended a few cases at a time. Canned beer was given to the ship by the 17th District and the Exchange at Annette Island as a favor for the supply which was transported for them. This, plus some of the ship's beer was given to the crew at the EM Club at Ketchikan, the softball game at Juneau, a picnic at Adak, various fishing excursions, and to parties visiting the abandoned Whaling Station at Akutan. Adak has a recreational area as part of the Naval Base. A request must be submitted for the use of the park and to obtain bus transportation. It is recommended that a reasonable quantity of beer be carried aboard on future patrols.

6. At Ketchikan a bus tour was arranged by the Chamber of Commerce to visit the Pulp Mill. It was very interesting as it is one of the

largest in the world. The Mendenhall Glacier outside of Juneau was also visited by some members of the ship's company. This site may be reached by car or bus.

7. The ship diverted to visit the Columbia Glacier, considered the only active one in Alaska. Gunfire was used to attempt a break off-negative results.

8. At St. Paul Island tours were arranged to the seal rookeries and killing grounds. The Fish and Wildlife Service personnel at St. Paul were very cooperative in regard to such particiaption.

9. Skeet shoots were held off the fantail at such times as weather and operating conditions would allow.

10. Souvenier buying consisted mainly of ivory items. Prices were generally stable throughout Alaska. Natives should not be permitted to bring merchandise aboard.

11. A ships newspaper was published daily.

12. Bulk quantity pocket-book novels were purchased for the Patrol and distributed throughout the trip.

13. No hunting excursions were authorized. License fees were a large barrier and little time was spent at the likely hunting locations.

14. Mail service was considered adequate. This is covered further in Annex I.

15. Church services were held aboard under the direction of two officers. At various villages men from the ship attended services ashore.

16. The morale of all personnel remained high throughout the Patrol. Holiday routine was 1½ days a week; sometimes during the week when a heavy work load existed over a weekend.

B. NMPX MOVIES

1. Prior to departure, a request was submitted to COMSERVPAC and approved for an additional 30 sea prints, making a total of 60 on board. During the operations, movies were exchanged at Kodiak, Adak, and with the C&GS vessel EXPLORER.

2. A good supply of projector spare parts was obtained prior to departure. No operational difficulties developed.

C. SHIPS EXCHANGE

1. A credit policy was approved for the patrol, so that the personnel

could defray payment for merchandise purchased. This was to limit the amount of available cash aboard. The major item which caused concern during the patrol was all types of camera film. An attempt was made to obtain a list of the type and amount of film desired by the men prior to leaving Seattle. However, it developed that there was a demand for film in excess of the procured amount. Additional film was purchased via air express, but not until after 35 mm film and 8 mm roll type movie film had been exhausted. The early exhaustion of film was due to the fact that the NORTHWIND cruised from Seattle to Juneau through the Inside Passage in beautiful sunny weather. Had the ship gone outside or the usual dismal southeast Alaskan weather prevailed, the problem of sufficient film would not have occured. While all shore based Exchanges were co-operative in offering their facilities for procurement, it was found that their stocks were in such depleted condition that they could not be of much assistance. No purchases of fast moving items at shore based Exchanges should be expected.

2. With the above exception, the NORTHWIND Exchanges adequately satisfied the requirements of the Patrol with normal procurement projected to the length of the patrol.

ANNEX F

WIVES CLUB CLOTHING DISTRIBUTION

APPENDIX 1

A. The Coast Guard Officers' Wives Club and the Coast Guard Enlisted Men's Wives Club at Kodiak in a joint effort collected and packaged a total of one hundred and twenty-two boxes of clothing for distribution to Alaskan natives by the NORTHWIND.

B. As the two clubs were advised in separate letters from the command dated 20 August 1958, distribution was accomplished as follows:

10 - AKUTAN	10 - TELLER
12 - ATKA	8 - ELIM
5 - WALES	9 - UNALAKLEET
10 - WAINWRIGHT	7 - SHAKTOLIK
4 - POINT LAY	8 - MEKORYUK
5 - SHISHMAREF	9 - SAINT MICHAEL
12 - POINT HOPE	9 - STEBBINS

C. The clothing was gratefully received by the natives at all locations.

ANNEX G

MEDICAL

1. INTRODUCTION:

NORTHWIND departed from Seattle, Washington, 17 June 1958, upon the annual Bering Sea Patrol which maintains as one of its prime functions the rendering of medical and dental aid to the native inhabitants of certain relatively isolated villages located along the Alaskan seaboard. The medical department undertook to diagnose and treat the common medical and surgical problems and to recommend hospitalization or specialist consultation where further diagnostic or therapeutic procedures were indicated. Public health aspects of the patrol encompassed mass chest Roentgenography of whole villages, routine prenatal and neonatal examinations, the taking of diagnostic laboratory specimens, and physical examination with special attention to the detection of tuberculosis, phlyctenular keratoconjunctivitis, and otorhinolaryngological problems.

2. INTERDEPARTMENTAL COORDINATION:

The Bering Sea Patrol reflected a high degree of cooperation and joint effort among the Alaska Department of Health, United States Public Health Service, and the United States Coast Guard.

A. Alaska Department of Health

(1) On 23 June 1958, the medical and dental officers conferred at Juneau, Alaska with the Alaskan Commissioner of Health, Dr. Gibson, who was most informative in outlining Alaskan Public health problems and the measures employed by the department to correct them. He defined our role in the tuberculosis control program and venereal disease studies being carried out, and also arranged to have our visits to the native villages be attended synchronously by the itinerant Territorial Health Nurses wherever possible. He also provided us with mailable sputum collection containers and serology venapuncture outfits.

(2) Conference with Dr. Robert T. Gardner, Jr., Director of the Division of Tuberculosis Control on 4 July, 1958 at Anchorage, Alaska clarified the role of mass chest Roentgenography in the patrol and also revealed that the villages of Pt. Hope and Wainwright, originally among those villages to be x-rayed, could be dropped from the x-ray list for they had since been covered by aero-medical units.

B. USPHS Hospital, Mt. Edgecomb, Alaska

(1) Dr. McBrayer, who was acting MOC at the time of our arrival, was most cooperative in seeing to our supplies, providing us free access to the hospital pharmacy, and even providing us with special, pre-packaged medications upon request. We also were supplied with a 14" X 17" X-ray

Cassettes, six Graves-type vaginal specula, and a portable Dictaphone transcriber. The air during our entire visit to this installation was that of warm hospitality on the part of Dr. McBrayer, the hospital pharmacist, and other officers stationed there.

C. USPHS Hospital, Anchorage, Alaska

(1) The Medical and Dental Officers attached to the USCGC NORTHWIND traveled by bus from Seward, Alaska to Anchorage, Alaska where they visited the large, modern, USPHS Hospital under the supervision of Dr. Gallagher, Medical Officer In Charge. Dr. Rabeau, Assistant Medical Officer in Charge, was most cooperative in providing certain additional medications and supplies, such as four 14" X 17" wire X-ray film holders of which we had found ourselves short in supply.

D. 17th Coast Guard District, Juneau, Alaska

(1) Special mention must be made of the cooperation of the officers of the 17th Coast Guard District Headquarters who provided a complete portable X-ray unit including cassettes and X-ray holders. They also made available a non-portable dictaphone machine which was of great value during the patrol.

3. GENERAL APPROACH AND PROCEDURE

A. Scope

(1) Due to operational time committments of the USCGC NORTHWIND, is was necessary to carry out medical assignments in each village with all possible expedition in keeping with adequate coverage of the mission.

B. Procedure

(1) The procedure which proved most effective in organizing each village involved preliminary helicopter reconnaisance by the Commanding Officer or Executive Officer and the Medical Officer. The village chief, School Teacher, health council or nurse was contacted and arrangements made for the village population to see the Medical Officer who generally worked ashore in the schoolhouse or clinic therein. The Chief Hospital Corpsman and portable medical supplies were either flown ashore or else arrived in the first small boat. Special attempts were made to see all known tuberculars, tuberculosis suspects, and patients recently discharged from BHS Hospitals; prenatal, neonatal, and school examinations were also made. On numerous occasions, house calls were made when patient were unable to come to the clinic.

(2) The Medical Officer examined patients and dictated his findings and recommendations to the Chief Hospital Corpsman who recorded them and dispensed the medications. Case summaries were transcribed by dictaphone, and the completed dictabelts were mailed to the USPHS Hospital, Anchorage, Alaska.

(3) Relatively few patients presented themselves for examination at the villages of Wainwright, Pt. Lay, Pt. Hope, Kivalina and Shishmaref because of recent visits of aero-medical teams who had adequately provided medical aid.

(4) No medical patients were seen at False Pass because of the presence of Dr. J. L. Clarke, who is engaged by the P. E. Harris Canning Company and who has cared for the village for the period of April through September for the past five years.

(5) Entire populations of villages to be X-rayed were transported to the NORTHWIND via small boats except at False Pass, where Roentgenography was performed at the local salmon cannery. X-ray films were developed aboard ship, preliminary readings made, and the films mailed to the USPHS Hospital, Anchorage, Alaska, for definitive diagnosis and treatment.

(6) The HO3S type helicopter used this year for the first time on a Bering Sea Patrol was of great value from a medical point of view. Its use permitted organization and preparation of the villages by ship's officers, often before the ship had reached its anchorage. Rough seas and high winds often made small boat handling hazardous, and transportation of the Medical Officer, Corpsman, medical supplies and equipment could be effected only by use of the helicopter. At the village of Teller, the use of the helicopter undoubtedly saved the life of a 35 day old female, native infant in a moribund state, suffering from pneumonitis with apnea, cyanosis, bradycardia and convulsive seizures. The infant was revived by repeated application of the mouth to mouth method of artificial respiration, then quickly transported by helicopter to essential oxygen-breathing apparatus aboard the NORTHWIND. After portable oxygen-breathing apparatus was devised and installed in the helicopter, the infant was flown to the Contract Alaska Native Health Service Hospital at Nome, Alaska.

(7) The NORTHWIND boasts of the birth of its first godchild, a six and one half pound female native infant, delivered by the Medical Officer on 10 August 1958, at Teller, Alaska.

(8) The Bering Sea Patrol medical staff cooperated with writer-photographer representative of the National Broadcasting Company's March of Medicine television program, which will portray "Medicine in Alaska". The film will appear as a national telecast in February 1959.

4. HOSPITAL CORPSMEN ATTACHED:

A. THOMAS, Harold C. (279-407) HMC, USCG played a vital part during the entire Bering Sea Patrol; his affable, cooperative nature, ingenuity in the resolution of numerous problems and perserverance in keeping records, maintaining and transporting medical supplies require special commendation.

B. WINQUIST, Mauritz V. (2039-155) HM3, USCGR: This man deserves highest praise for his work in taking and developing every X-ray taken during the entire patrol. He was eager to learn, untiring in his efforts and able to resolve every situation.

5. RECOMMENDATIONS

A. It is recommended that medical and X-ray units work ashore and that proper equipment be provided for this purpose.

B. It is recommended that at least one attached Hospital Corpsman be given a minimum of two weeks special hospital training as an X-ray

technician immediately prior to the patrol.

6. SUPPLY

A. Equipment: The following items should be supplied for Bering Sea Patrol 1959:

(1) The portable X-ray unit supplied by the 17th Coast Guard District proved unsatisfactory. Despite a constant power source, the MA on the machine fluctuated so erratically that only one-half the X-rays taken were readable. Consequently, throughout the entire patrol the NORTHWIND's X-ray machine was used exclusively. It is recommended that a proper functioning, portable X-ray unit be provided for future patrols.

(2) Cassettes, 10 recommended.

(3) 14" X 17", fluorescent lighted, X-ray view-box.

(4) A Dictaphone unit complete with blank dictabelts.

(5) A total of 10 vaginal specula, Graves type: 6 large and 4 medium in size.

B. Materials: The following supplies and drugs should be provided for future Bering Sea Patrols:

(1) 1400 sheets, 14" X 17" X-ray film.

(2) Thirty gallons developer, X-ray; Thirty gallons fixer, X-ray.

(3) Reserpine 0.25 mgm tablets, 500's, bottles: 4

(4) It is recommended that with noted exceptions, the basic list of drugs, supplies and equipment be furnished the medical unit selected to participate in the 1959 Bering Sea Patrol.

7. CONCLUSION:

A. It is felt that the medical aspect of the Bering Sea Patrol, 1958 was highly successful. The patrol was concerned with treatment of such acute and chronic illnesses as amenable to therapy on a one visit basis. The greatest value of the patrol, however, was the public health function of case detection through the use of physical examinations and X-ray and the institution of follow-up care by the U. S. Public Health Service and the Alaska Department of Health.

8. STATISTICAL SUMMARY:

PLACE	DATES	POPULATION	MEDICAL PATIENTS	X-RAYS
YAKUTAT	6-29-58	298	32	47
TATITLIK	7-1-58	95	37	61
FALSE PASS	7-12-58	60*	0	41
IKATAN	7-12-58	(Worked simultaneously with False Pass)		
AKUTAN	713/14-58	90	36	61
CHERNOFSKI	7-15-58	6*	6	6
NICOLSKI	7-16-58	60*	12	37
ATKA	7-22-58	85	22	62
WALES	8-2-58	60*	29	0
WAINWRIGHT	8-4-58	220*	32	0
PT. LAY	8-5-58	29	3	20
PT. HOPE	8-5/6-58	295*	10	8
KIVALINA	8-6-58	85*	2	73
SHISHMAREF	8-7-58	50*	17	2
TELLER & TELLER MISSION	8-9/10-58	40*	40	0
SAVOONGA	8-11-58	225	12	0
GAMBELL	8-12-58	340	14	0
GOLOVNIN	8-13-58	24	9	0
ELIM	8-14-58	70*	46	0
SHAKTOLIK	8-15-58	185	40	0
UNALAKLEET	8-16-58	500	67	0
ST. MICHAELS	8-18-58	185*	47	0
STEBBINS	8-18-58	125*	28	0
MEKORYUK	8-20-58	230	16	0
TOTALS			557	418

* Summer Population (See Annex B)

ANNEX H

DENTAL

I. GENERAL APPROACH

A. Methods of Organization, Examination and Treatment

1. In every instance possible, the Medical Officer and either the Commanding Officer or Executive Officer flew ashore in the helicopter prior to the ships arrival at the village to arrange for treatment of the natives, stressing the fact that only emergency dental treatment could be performed due to the limited time available. All persons desiring dental treatment were then brought to the ship where they were examined and treated accordingly.

2. In Gambell and Unalakleet, where due to rough sea and beach conditions, the boats were unable to transport patients to the ship, the dental officer, dental technician, and necessary portable equipment were flown ashore and patients treated there.

3. It was found that whenever possible, method 1 was the more desirable procedure due to the many problems arising from transporting equipment ashore. When necessary however, method 2 proved to be adequate.

B. Reaction of Villages

1. In general, the response varied from fair to good, the best response coming from Gambell where adequate dental care had not been available for two years, and in most cases those people who expressed a desire for dental treatment did have an acute or chronic history of dental illness.

II. ASSISTANCE RENDERED

A. Acknowledgement is made to the following hospitals where additional supplies were obtained.

1. Tacoma Indian Hospital, Tacoma, Washington.
   a. One portable dental chair
   b. One portable dental engine
   c. One instrument case
   d. One dental lamp
2. USPHS Hospital, Mt. Edgecombe, Alaska.
   a. Eight oz. Zephiran
   b. One box Gelfoam sponges
   c. One-half dozen #9 burs
   d. Four white smocks
3. USPHS Hospital, Anchorage, Alaska.
   a. One box Gelfoam sponges
   b. One gross finger cots

B. Dental Technicians

1. HALL, Troy T. (317-570) DT2. This man's assistance was very valuable and necessary for the success of the dental portion of the patrol. He was a good worker and a capable dental technician.

2. LEEVERS, Jack E. (2039-414) SN, Hospital Corpsman Striker. This man's help in performing many of the routine chores of assisting was also valuable. He is willing to work and is interested in learning more.

C. Helicopter Operations

1. In the two instances where it was impossible to expedite treatment of dental patients aboard ship, many people were treated who otherwise could not have been, due to the use of the helicopter in transporting the dental staff and equipment ashore.

III. DIFFICULTIES ENCOUNTERED

A. Severity of Problems

1. The dental health of the villages seen was extremely poor. The fondness of the children for sweets, lack of knowledge and practice of personal dental hygiene, and unattainable routine dental care are major problems which can be solved only in time.

B. Limited Follow-Up

1. Since practically every stop for Medical and Dental Aid was for one day only, any type of postoperative follow-up was impossible. To help prevent postoperative complications however, printed instruction sheets were distributed and explained to the surgery patients.

C. Language Barrier

1. A minor problem; this was found mainly in young children in the Shishmaref and Teller area. The use of interpreters sufficiently relieved the problem.

D. Inacessable Villages

1. At Gambell and Unalakleet, where unfavorable surf and beach conditions prevented patients from being brought to the ship, the dental officer and dental technician along with necessary portable equipment were flown ashore and the natives treated there.

E. Time Factor

1. Time alloted for each village was quite short since the NORTHWIND's operational commitments made it necessary to terminate the Bering Sea Patrol one and one-half months ahead of schedule. This made

it practically impossible to render any other dental service than extraction of indicated teeth. In some children however, attempts were made to restore permanent teeth when practicable.

IV. RECOMMENDATIONS

A. Clinic Installation

1. Whenever possible, the dental equipment should be installed under the supervision of the dental officer making the patrol or if this is not possible, by another dentist. On NORTHWIND, the installation of equipment had taken place long before the arrival of the dental officer and was found to be most satisfactory considering the limited space available.

B. Supplies

1. It is recommended that the dental officer assigned to the Bering Sea Patrol be able to take inventory of the supplies on hand and order any further equipment he deems necessary, at least two weeks prior to the departure date for the patrol.

C. Question of Portable Operation

1. As stated before, only in two villages were portable operations necessary. The difficulties involved in operations ashore included:
   a. Inadequate light source
   b. Danger of contamination of sterile instruments and supplies
   c. Question of sterilizing instruments ashore
   d. X-ray machine not available

2. With the aid of good portable equipment which included a dental engine, aspirator, dental chair, and sterilizer, and by careful transportation of sterile supplies, all problems were solved with the exception of the X-ray machine. In the one case where an X-ray was necessary, the patient and the dental officer were flown to the ship where the film was taken.

3. Although these operations ashore were successful, it is recommended that portable operations be undertaken by the dental department only when absulutely necessary, due to the difficulties encountered in these operations.

V. CONCLUSIONS

A. In view of the limited time available and the severe dental problems of the Alaskan natives, the Bering Sea Patrol can hope to accomplish nothing more than the relief of pain for these people for another year.

B. Constructive attempts to emphasize to the local schoolteachers the importance of instruction in dental hygiene to the children were made wherever the teachers could be contacted. It is definitely felt that this practice should be continued on future Bearing Sea Patrols.

DENTAL REPORT - BERING SEA PATROL 1958

VILLAGE	DATES	PATIENTS EXAMINED AND TREATED	ANESTHESIA	EXTRACTIONS	TEETH RESTORED	SURFACES RESTORED	PROPHYS	X-RAYS	TOTAL TREATMENTS
YAKUTAT	6-29-58	25	10	11	0	0	0	2	48
TATITLIK	7-1-58	22	20	33	0	0	0	0	75
FALSE PASS	7-12-58	15	12	22	2	2	0	1	54
IKATAN	7-12-58	PATIENTS REPORTED TO SHIP ANCHORED OFF FALSE PASS							
SARICHEF		DID NOT STOP DUE TO ROUGH SEAS - NO NATIVED IN AREA							
AKUTAN	7-13&14-58	13	11	30	0	0	0	0	54
CHERNOFSKI	7-15-58	6	4	4	0	0	0	1	15
NIKOLSKI	7-16-58	15	13	24	0	0	0	0	52
ATKA	7-22-58	17	14	17	2	3	0	1	54
WALES	8-2-58	20	13	23	2	3	0	0	61
WAINWRIGHT	8-4-58	23	12	17	6	11	0	4	73
PT. LAY	8-5-58	2	2	2	0	0	0	6	6
PT. HOPE	8-5&6-58	25	18	17	3	6	0	2	71
KIVALINA	8-6-58	2	2	4	0	0	0	0	8
SHISHMAREF	8-7-58	43	34	97	1	2	0	1	178
TELLER	8-8,9&10-58	58	49	115	1	3	0	3	229
TELLER MISSION	" " " " " "	PATIENTS REPORTED TO SHIP ANCHORED OFF TELLER							
SAVOONGA	8-11-58	DID NOT WORK BECAUSE OF ROUGH SEAS							
GAMBELL	8-12-58	33	26	55	0	0	0	1	115
GOLOVNIN	8-13-58	16	11	17	0	0	1	0	45
ELIM	8-14-58	42	29	46	0	0	0	0	117
SHAKTOLIK	8-15-58	45	33	57	0	0	0	1	136
UNALAKLEET	8-16&17-58	82	67	111	0	0	0	0	260
STEBBINS	8-18-58	17	14	25	0	0	0	0	56
ST. MICHAEL	8-18-58	26	17	28	1	1	0	0	73
MEKORYUK	8-20-58	18	9	15	0	0	0	1	43
TOTAL		565	420	770	18	31	1	18	1823

ANNEX I

COMMUNICATIONS

A. PREPARATION

1. Performed complete preventative maintenance on all communications equipment.

2. Miscellaneous crystals were obtained on loan from CCGD13

a. 3385 kcs.

b. 2134 kcs.

3. Reviewed CCGD17 Communications Plan and prepared ready-reference guides for RM watch standers.

4. Six MOTOROLA VHF-FMTR 40 Mc/s portables crystalized on 41.22 Mc/s and one master MOTOROLA FMTR 80-C2-R2 (CGW) 1A were issued to this unit by Headquarters prior to departure.

5. Obtained an adequate supply of batteries for FM portables and various other supplies necessary for an extended cruise.

B. NARRATIVE

1. Contact with Natives

a. Throughout the patrol, communications were considered good.

b. Early initial radio contact with the native villages was of prime importance to prevent delay of the patrol. This objective was not accomplished during the early portion of the patrol and through the Aleutian Chain as most of the school teachers (the usual village radio operators) were absent for the summer. Contacing of ACS Cordova proved of little additional aid.

c. St. Paul Island (KVR) was contacted in accordance with CCGD17 Communications Plan on 2616 kcs.

d. Prior to the visits of native villages in the Northern Alaskan area, contact was made with Mr. Frank Brady, school teacher at Cape Prince of Wales. Through him directly and his knowledge of schedules of the native communications system, contact was made with the villages in advance of arrival.

e. Communications were further aided by listing the ship on the ALC 22 (NOME) daily check-in schedule in the number two position. Most of the Northern Alaskan Villages check in daily with this station. Two exceptions were Wainwright and Pt. Lay. Contact with these villages may be facilitated through the Weather Bureau at Pt. Barrow. ALC 22 (NOME) transmits on 2784 kcs and receives on 3385 kcs. The schedule times were 0830 and 1500 Bering Standard Time. Of the various ACS stations contacted, ALC 22 was the most helpful.

f. The native villages have four common working frequencies. They are 2770 kcs, 3277 kcs, 3385 kcs, and 5150 kcs. 3385 kcs was used in most cases.

2. Navy-Coast Guard Communications

a. Limited traffic was received by the NORTHWIND for relay. While in the Bering Sea, most of the vessel's traffic was relayed through NOJ, Kodiak. No ice reports were handled.

3. Personnel Communications

a. Harbor Radio Telephone Service was not used by this vessel. While in the Bering Sea, however, an attempt was made to contact the Marine Operator (KOW) in Seattle. While this was unsuccessful, telephone relay may be obtained through the Alaskan Communication System. A pamphlet entitled COASTAL TELEPHONE SERVICE published by the U. S. ARMY, Alaska Communication System, may be obtained from the Seattle Office of ACS.

4. Portable Communications

a. The portable transceivers as described in A-4 were far superior to any other portable unit used prior to this patrol. They were observed to be durable, highly portable, simple in operation, adequate working range, and free of interferences. Although the portable transceiver was designed for line-of sight operations, they proved to be reliable otherwise. The maximum distance for which these units were used on this patrol was 8.5 miles. The average signal received from the portable unit was strength 4. In instances when receiving conditions were poor, failure to relocate the antenna, or weak batteries were observed to be the cause. The signal received from the master transceiver located in radio central was always strength 5.

b. During the course of the patrol, one bakelite antenna coupler was broken. No other repair was made to any unit other than replacing batteries. Twelve type "B" batteries and 31 type "A" batteries were used over the course of the patrol.

c. Care was taken to establish frequent check-in times as initial contact could be obtained only from the portable unit. In addition operating personnel were cautioned to ensure that the receiver switch was in the "OFF" position upon completion of transmissions.

d. A report of the performance of the portable equipment was transmitted to the Commandant in NORTHWIND letter A6-2/02 of 11 September 1958.

C. RECOMMENDATIONS

1. The VHF-FM portable transceiver is highly recommended for future Bering Sea Patrol Operations or other operations involving short range ship-to-shore communications.

2. In those instances where Dew Line and/or White Alice sites are located near villages, these may be used for initial village contact.

3. Initial village contact is highly important. Early contact with ALC 22 (NOME) will prove to be beneficial in passing on traffic and setting up schedules with the villages.

ANNEX I

M A I L

APPENDIX 1

A. PREPARATION

1. Prior to departure, the policy concerning mail was discussed with CCGD13(o) and CCGD17(o). It was decided that the 13th District would pick up all NORTHWIND mail and forward it to CCGD17 for further routing.

2. Notification of this policy was made to Postmaster, Seattle, Washington.

B. NARRATIVE

1. A Navy Post Office is maintained on board this unit as a branch of the Post Office, New York.

2. Mail service was considered satisfactory.

3. Most villages have at least weekly mail service so that dispatching of mail is not difficult. Also all villages have post office and money order facilities available.

4. Bush pilots carry mail on a space available basis. Therefore, overemphasis on this means of forwarding anticipated mail may result in some delay.

5. It is advisable that all personal mail be sent air mail. Instances occurred when unduly slow service was received when regular first class mail was used as it appears that all such mail addressed to CONUS is shipped by steamer.

6. The helicopter was invaluable for obtaining mail at Wales and Nome.

C. RECOMMENDATIONS

1. That early action be initiated for permission to sell money orders.

2. That an adequate supply of stamps and post office forms be obtained.

3. The possibility of the Postmaster, Seattle forwarding mail direct to the villages in accordance with the itinerary should be investigated inasmuch as this system seemed to function satisfactorily in those instances when it was tried.

ANNEX J

LOGISTICS

A. COMMISSARY

1. Prior to departure of this vessel on Bering Sea Patrol, one 675 cu. ft. portable walk-in reefer was obtained on loan basis from MSTS NORPACSUBAREA for stowage and preservation of vegetables, etc. This reefer has proved highly satisfactory for vessels of this class on long patrols.

2. Departed from Seattle with provisions for a period of approximately 5 months to subsist approximately 185 personnel. During this patrol and north of 50° latitude an increase of 15% over the monthly ration value was used for feeding in line with the inclement weather conditions which prevailed and the prolonged working hours.

3. During the stay at Kodiak, 500 pounds of bread was purchased from Lalandes Bakery, Kodiak. No other provisions were purchased at this time, but limited supplies were available in fresh provisions from the Naval Station.

4. The same conditions prevailed at Naval Station, Adak and again few purchases were made.

5. The facilities of both Naval Stations for logistic support were readily available to this vessel and deserve appreciation for their cooperation and assistance.

6. As a further recommendation the purchase of at least 3 one gallon vacuum jugs should be effected for use as drinking water, and hot coffee, and hot soup containers during beach operations.

B. CLOTHING

1. This unit has an authorized issue allowance for clothing and small stores items for essential needs of personnel. It is recommended that only wearing apparel, such as dungarees, chambray shirts, socks both cotton and cotton-wool, underwear, shoes, and white hats of normal sizes be carried to capacity for this type patrol. In addition to the above, clothing lockers were available at both Naval Stations for the convenience of the crew.

C. TRANSFER AND REPORTING OF PERSONNEL

1. One man transferred to Commander, 13th CG District, Seattle via Pacific Northern Airlines.

2. Four enlisted personnel and three officers reported for duty from Seattle via PNA.

3. Two USPHS Doctors transferred on TAD from Seward to Anchorage and returned via Northern Carriers.

4. One man reported aboard at Adak via Kodiak for assignment to duty.

5. It is recommended that prior to departure for B.S.P. an up-to-date schedule for Alaskan flights and a sufficient number of government transportation requests (Approx. 25) be obtained for personnel departing the vessel at various ports of call.

D. CARGO

1. The following cargo and supplies for transhipment to other stations and/or use on board this vessel was received.

a. KETCHIKAN - Cargo for Juneau and Kodiak, for further delivery to various CG Stations in that area. One 16 ft. dinghy with 10 H.P. outboard motor for use during the patrol. One 26' cabin cruiser for delivery to Seward, Alaska. Items of GSK and C&SS nature for ship's use.

b. JUNEAU - Cargo for delivery to Kodiak and St. Paul Island. Portable X-ray equipment and color standards were loaned to this vessel for use.

c. SITKA - Medical supplies for the ship's use from USPHS Mt. Edgecombe.

d. KODIAK - Cargo for St. Paul Island and bomes of used clothing from the Navy Wives Club for delivery to natives at various villages. (See Annex K) and Appendix 1 to Annex F).

e. ADAK - Cargo for NEL Wales. Commissary supplies for ship's use.

2. The following cargo, supplies, and records were off-loaded.

a. JUNEAU - Cargo received from Seattle & Ketchikan for delivery to small CG Units.

b. KODIAK - Cargo received from Seattle, Ketchikan & Juneau for delivery to various CG Units.
Forwarded to Commander, 13th CG District, Seattle, Closed Pay Records for the period 1 Jan. to 30 June 1958.

c. ST. PAUL - Cargo received from Seattle, Ketchikan and Kodiak for installation of radio beacon equipment.

d. NEL WALES - Cargo received from SS SEA SERPENT at Naval Station, ADAK. (See Annex K).

E. TRANSPORTATION

1. Vehicular transportation furnished on Naval Stations was excellent. This was particularly appreciated when personnel and supplies were transported to and from this vessel.

ANNEX K

SPECIAL OPERATIONS

A. 4 July Festivities-SEWARD

1. In accordance with Operation Order CCGD Seventeen No. 10-58, the NORTHWIND participated in the 4 July activities at Seward, Alaska. The Seward Chamber of Commerce in conference with Commanding Officer NORTHWIND arranged for this unit to participate as follows:

(a) Provide five officers to act as escorts for candidates for the local "Queen" of the 4 July festivities at the Coronation Ball held on 3 July. Their duties consisted of excorting the young ladies to the Coronation Ball and onto the stage, where the Executive Officer NORTHWIND crowned the "Queen" chosen from among the candidates by a ballot of the Seward citizens. Officers selected wore evening dress blue "BAKER" and carried grey gloves.

(b) Provide a marching detail consisting of a four man color guard, a platoon officer, a five man staff, and a platoon of forty-six men. Uniform for the platoon was dress blues with drill belts and rifles. The flag standards, slings, National and Coast Guard Ensigns were provided by CCGD Seventeen at Juneau. The route of the parade was down the main street of Seward, and the evolutions performed were on "eyes left" at the reviewing stand and one column movement to the right at the end of the main street. Distance marched was approximately one-quarter of a mile. Due to a timing discrepancy in planning, the Seward High School Band was not available as scheduled and the parade was marched with a cadence count.

(c) Provide five officers to ride on the float with the "Queen"of the festivities as escorts for her and the princesses.

2. Commanding Officer NORTHWIND reviewed the parade from the reviewing stand in company with local officials.

3. One crew member of NORTHWIND entered the annual Sewarard "Mile High Race" and finished twelfth among thirteen candidates.

B. ST. PAUL RADIO BEACON ANTENNA GROUND SYSTEM

1. In accordance with Operation Order CCGD Seventeen No. 10-58, as amended by CCGD Seventeen message 032215Z July, NORTHWIND provided assistance in modifying the Class "B" radiobeacon antenna ground-system at St. Paul, St. Paul Island during the period 17 July to 21 July. Logistics were arranged by CCGD Seventeen (e), with some material invoiced to NORTHWIND prior to departure Seattle, some invoiced to CG Air Detatchment, Kodiak, for transshipment to NORTHWIND, and the remainder sent directly to St. Paul. In addition to the above material, NORTHWIND supplied all silver-solder and oxy-acetylene gas and equipment used during the modification.

2. Upon arrival St. Paul on 17 July all material for the project was transported to the site. With cooperation from the Fish and Wildlife Service in providing a crane and transportation, this phase was accomplished expeditiously and with little effort. As outlined in Commander, Seventeenth Coast Guard District (e) ltr of 25 June 1958, file J16, Electronic Repair Shop, Juneau, was to provide the installation party and NORTHWIND provide such assistance in the form of manpower as requested. Due to the rescheduling of the project date by CCGD Seventeen dispatch 032215Z, and adverse flying conditions, the installation crew was not present. Accordingly NORTHWIND proceeded with the antenna system modification as outlined in the aforementioned letter, providing two construction crews each consisting of 1-LTJG, 1-CPO, 1-1st class PO, 1-2nd class PO, 1-3rd class PO, 2-FN and 15 SN. One work party was scheduled to work from 0600-1400 and the other work party from 1300-2100 to insure maximum continuity between the work parties. Hot beverage and sandwiches were made available at the construction site. As the work progressed, the work parties were reduced in size and duration; construction being completed ahead of schedual due to favorable working conditions.

3. Work commenced at 0800 18 July. The construction was greatly faciliated by the mechanized ditch digger, bulldozer, and operators provided by the Fish and Wildlife Service. When the ERS crew arrived at approximately 1100 on 19 July, all phases of the construction had been accomplished with the exception of digging the trench, burying the lead-in-cable and fabrication of the new antenna. Work continued under the guidance of ERS Juneau until 1400, 20 July when it was determined no further assistance by the NORTHWIND personnel was necessary, there being only electrical connections and testing to be accomplished.

C. RESUPPLY OF NAVAL ELECTRONICS LABORATORY, WALES

1. In accordance with Operation Order CCGD Seventeen No. 10-58, as amended by CCGD Seventeen message 032215Z, July NORTHWIND arrived in Adak on 23 July to load cargo for transshipment to NEL, Wales. SS SEA SERPENT, which delivered the cargo to Adak, was delayed and did not arrive until the afternoon of 28 July. Off loading of SEA SURPENT commenced that evening. Progress of loading stores aboard NORTHWIND was slow as the SEA SERPENT had the NEL cargo mixed with general cargo for Adak. Loading the NORTHWIND was completed on the evening of 29 July, having taken aboard 14.5 tons of refrigerated, dry, electronics and general cargoes. Departure from Adak was at 0800, 30 July.

2. Frozen cargo was carried in the portable refrigeration unit supplied by MSTS which was mounted just forward of the flight deck.. Due to the low ambient temperature, it was possible to carry chilled produce on the main deck, suitably protected from the weather. Some difficulty was experienced in properly securing large bulky items of deck cargo, especially three reels of cable which weighed 4400, 3200, and 1700 pounds respectively.

3. NORTHWIND arrived off Wales in the evening of 1 August (see Annex A) and established laison with NEL personnel. Offloading commenced at approximately 0100, 2 August utilizing two LVT's from NEL, with NORTHWIND supplying a working party of seven men ashore.

Offloading was completed at approximately 0730, 2 August.

4. The expeditious offloading of cargo was made possible by the excellent dooperation given by Mr. James Brown, Officer-in-Charge at NEL, and Mr. Frank Brady, BIA school teacher at Wales Village; the availability of the two LVT's from NEL since a shallow sloping beach precluded use of NORTHWIND's LCVPs, the only boats carried aboard capable of handling the weights of cargo involved; and a very fortunate wind and sea combination which favored the evolution.

5. This operation could have posed many problems of an almost insurmountable nature particularly concerned with the handling of heavy weights in a seaway. It is recommended that prior to volunteering the services of the Patrol vessel for the accomplishment of this resupply in the future, a careful appraisal of the type and size of the cargo be obtained.

ANNEX L

ENGINEERING

A. GENERAL COMMENTS

1. Most of the underway time proceeded with two enginerooms on the line. The third engineroom was not used due to a crankcase pressure in number four main diesel engine. The crankcase pressure was due to worn out cylinder liners which would not seat new piston rings. Renewal liners were not aboard so the worn liners were scuffed with emery paper to aid piston ring seating. This improved the situation but not enough to use the engine. Finally the engine was torn down completely and major portions of the 3,000 hour and 12,000 hour overhaul checks were completed. It had been planned to paint out the three shaft alleys and the three motor rooms during the patrol but more important maintenance and operational commitments allowed time for only the two after motor room bilges to be painted. Lack of personnel allowed for only minimal maintenance of machinery spaces.

2. The two articized LCVP's (#6, #8 boats) were brought aboard approximately ten days before sailing. Preservative residue in the fuel tanks and the fresh water systems of both boats caused difficulties for the first few days of running. The thermostatic valves in the fresh water system opened at 210°F instead of the required 180° so they were removed. The perforated sea chest covers which go over the fresh water cooling coils retarded water flow to the extent that #6 boat had to be run without this protection due to overheating. A baffle scoop on #8 boat was sufficient to induce proper cooling with the sea chest cover installed. Once the fuel oil and fresh water systems had been throughly cleaned and recleaned, very little difficulty was experienced with boat engine operation. Three bent shafts (approximately 0.10 inches deflection) and four damaged screws constituted the major boat maintenance problems. The articized boats assume a starboard list due to the weight of batteries carried for the 24 volt starting system. Sea water leaked into the after compartment of the LCVP's through the space around the exhaust pipe. This happens on the articized LCVP's because of the weight of the steel sheathing and consequent increase in draft. The motor surfboats were not used during the patrol.

3. Two outboard motors were carried. They received extensive use both for ferrying natives from sand bars (beyond which LCVP's could not pass) and for recreation parties. Considerable maintenance time was spent on outboard motors.

4. The heeling tanks were topped off with fresh water at every opportunity. This water was used for laundry purposes at the rate of one thousand gallons per day thereby reducing evaporator operating time. This also reduced the period of roll.

5. Approximately 240,000 gallons of diesel oil were consumed during the patrol. Since 560,000 gallons is normal capacity, no refueling was necessary.

B. ENGINEERING RECOMMENDATIONS FOR FUTURE PATROLS BY WAGB

1. For the LCVP's have four fresh water thermostats aboard. Pretest them to insure proper operation.

2. Carry two spare shafts and six spare propellers for use on the LCVP's.

3. On LCVP's, pack space around exhaust pipe between it and the transom, with asbestos packing to cut down water leakage. Also, pull exhaust sleve from inside of compartment and pack it prior to patrol.

4. Carry only one motor surfboat.

5. Carry a minimum of two outboard motors to allow for down time.

6. Make temporary stowage for 55 gallon drum of gasoline for use in outboard motors. Good place for installation is to port of the stern fender where depth charge racks formerly terminated.

7. Top off heeling tanks with fresh water at every opportunity.

ANNEX M

EDUCATION AND TRAINING

A. EDUCATION

1. Prior to departure from Seattle, all hands were encouraged to enroll in either Coast Guard Institute or USAFI correspondence courses. Before getting underway 16 enlisted men had enrolled with USAFI and 55 with the Coast Guard Institute.

B. TRAINING

1. While on patrol, training was carried out in accordance with flexible schedules which assured that training could be conducted when it would not conflict with the primary objectives of the patrol. The ship trained at General Quarters on an average of once a week. While at Adak, three training films on UCMJ were shown.

2. All personnel received instruction in the following subjects:

a. General Quarters

b. Abandon ship

c. Fire

d. Flight Quarters

e. Helicopter rescue operations

f. Signaling

g. Safety precautions

h. Man overboard

i. Cold weather survival

j. Manual of Ice Seamanship

k. First Aid

l. Boat drill

3. In addition to the above formal instructions, each department carried out on-the-job training.

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A9
19 November 1958

FIRST ENDORSEMENT on USCGC NORTHWIND ltr A9 of 22 October 1958

From: Commander, Seventeenth Coast Guard District
To: Commandant (OFU)
Via: Commander Western Area

Subj: Report of Bering Sea Patrol - 1958; transmittal of

Ref: (a) CCGD17 Operation Order No. 10-58

1. This well composed report was read with interest and is forwarded with the following comments:

Paragraph 9. - OPINIONS.

9A. Concur.

9B. Concur. It is believed that one 48 hour stop at Juneau for a conference with District Office personnel and other Juneau-based government agencies with an interest in the patrol, would suffice.

9C. It is too early to discontinue the functions of the U. S. Commissioner and U. S. Marshal for the Commanding Officer of the Bering Sea Patrol. As pointed out in this paragraph, three villages are still inaccessible by air. It is believed that the functions of the U. S. Commissioner and U. S. Marshal should be maintained until such time as their need is completely outmoded.

9D. This is a matter under the cognizance of the Alaska Native Health Service and United States Public Health Service.

9E. This opinion is hard to reconcile with the list of accomplishments contained in the annexes. Although Statehood may gradually eliminate many of the present functions of the Bering Sea Patrol, it is considered premature to eliminate these functions until such time as the new State of Alaska sets up satisfactory procedures to accomplish them. This can be determined only by time. Meanwhile, the Bering Sea Patrol should be continued for its humanitarian aspect in bringing medical and dental aid to needy Alaska Natives, its potential for search and rescue and law enforcement. It provides invaluable training and knowledge of Alaskan waters for the personnel of the vessel performing the patrol. It is an excellent proving ground in navigation and seamanship in developing officers and men.

Paragraph 10. - RECOMMENDATIONS.

10A. Concur, that planning of future Bering Sea Patrols should be reviewed to eliminate encroachment on Statehood functions. Since all the functions performed this year, however, came under the purview of Title 14, USC 89, including assistance to Federal and Territorial

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Government agencies, no conflict ensued. As the State of Alaska increases its police functions, judicial functions, and public health care to the Natives etc., it is anticipated that some functions of the Bering Sea Patrol may be correspondingly curtailed. Liaison with appropriate departments of Alaska to coordinate this matter will be continued.

10B. Concur, particularly due to helicopter carrying capabilities.

10C. Concur. The helicopter was obviously a considerable asset in accomplishing of the mission of the NORTHWIND's Bering Sea Patrol.

10D. Concur. This, however, is the responsibility of the U. S. Public Health Service and the Alaska Native Health Service. Even with two dental officers attached to the BSP vessel, the Bering Sea Patrol cannot, by itself, provide adequate dental care for the Native population of Alaska. The number of patients, distances involved, and weather conditions to be expected would require lengthy stays at each village to meet the problem. The Alaska Native Health Service understands this and has supplemented the Bering Sea Patrol to some extent with a program of their own.

10E. Concur. Apparently the LCVP proved very valuable on this patrol.

10F. This recommendation appears to have considerable merit. However, if it is desired by the Alaska Native Health Service and/or the U. S. Public Health Service, those agencies should make requests to Coast Guard Headquarters. Such a program would require the full time services of an aircraft for the time involved. In this case it is recommended that the aircraft be assigned much in the same manner as the aircraft for the Coast and Geodetic Survey.

ANNEX C - HELICOPTER OPERATIONS

Paragraph 15. - Conclusions.

15A. Concur.

Paragraph 16. - RECOMMENDATIONS.

16A. Concur.

16B. Concur.

16C. Concur. However, recommend that Headquarters (OAV) and (EAE) also comment on this recommendation.

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16D. Concur. However, recommend that Headquarters (OAV) and (EAE) also comment on this recommendation.

ANNEX D - BOARDING AND LAW ENFORCEMENT.

Paragraph B. - LAW ENFORCEMENT

B3. Concur.

ANNEX E - DECK, BEACH LANDINGS AND HANDLING OF NATIVE PATIENTS.

Paragraph F. - RECOMMENDATIONS.

F1. Concur, for WAGB type vessels.

F2. A valuable "tip" for future Bering Sea Patrol vessels.

F3. Advice for future BSP vessels.

F4. Advice for future BSP vessels.

F5. Concur.

F6. Advice for future BSP vessels.

F7. Advice for future BSP vessels.

F8. Advice for future BSP vessels.

F9. Advice for future BSP vessels.

F10. Concur.

F11. Advice for future BSP vessels.

F12. Advice for future BSP vessels.

F13. This sounds like a reasonable suggestion. However, this should be approved and coordinated by Commandant (ETD).

F14. Advice for future BSP vessels.

ANNEX F - SPECIAL SERVICES.

Paragraph A. - MORALE & RECREATION.

A5. "Tip" for future BSP vessels.

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ANNEX G - MEDICAL

Paragraph 5. - RECOMMENDATIONS.

5A. Concur.

5B. Concur.

ANNEX H - DENTAL

Paragraph IV - RECOMMENDATIONS.

IVA. Concur.

IVB. Concur.

IVC. Concur.

Paragraph V - CONCLUSIONS. Concur. (See comments on 9D and 10D of Basic Report)

ANNEX I - COMMUNICATIONS.

Paragraph C. - RECOMMENDATIONS.

C1. Advice for future BSP vessels.

C2. Advice for future BSP vessels.

C3. Advice for future BSP vessels.

ANNEX I, APPENDIX 1. - MAIL.

Paragraph C. - RECOMMENDATIONS.

C1. Advice for future BSP vessels.

C2. Advice for future BSP vessels.

C3. Concur. Should be function of command to notify Postmaster, Seattle, as to when and where to route mail as occasion arises, making CCGD17 information adee.

ANNEX K - SPECIAL OPERATIONS.

Paragraph C. - RESUPPLY OF NAVAL ELECTRONICS LABARATORY, WALES.

C5. Concur.

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ANNEX L - ENGINEERING.

Paragraph B.- ENGINEERING RECOMMENDATIONS FOR FUTURE PATROLS BY WAGB.

B1. Advice for future BSP vessels.

B2. Advice for future BSP vessels.

B3. Advice for future BSP vessels.

B4. Concur for WAGB vessels.

B5. Advice for future BSP vessels.

B6. Advice for future BSP vessels.

B7. Advice for future BSP vessels of WAGB type.

J. R. STEWART
Acting

Copy to:
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CGC NORTHWIND