

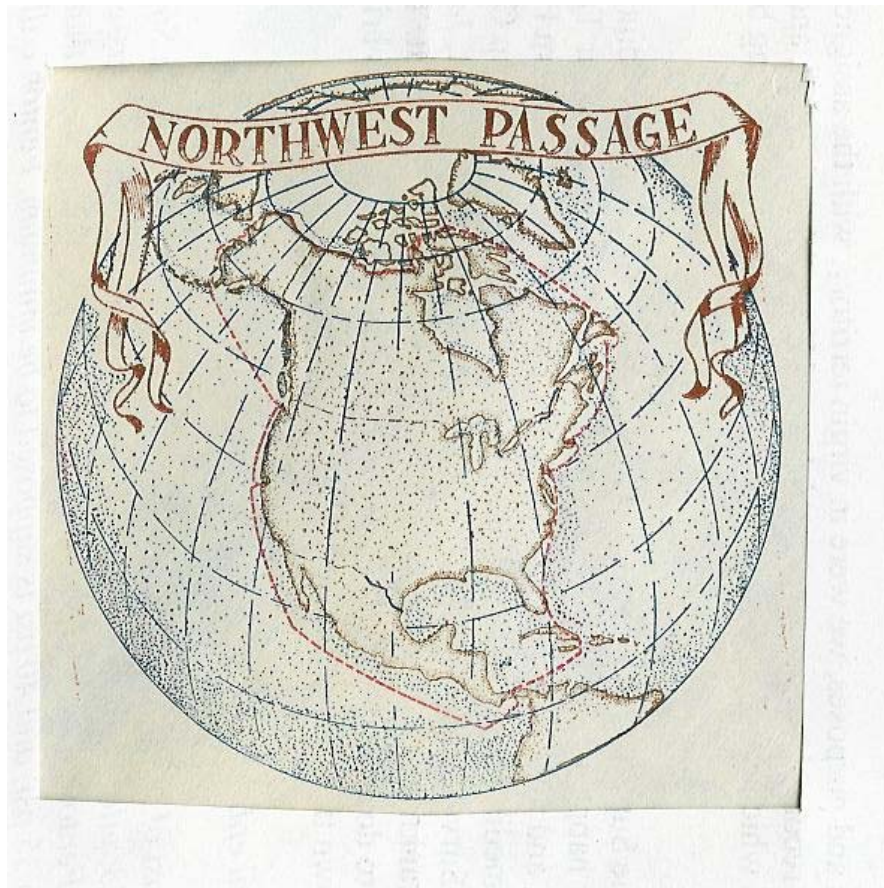
NOTES FROM CALUMET

Excerpts from the Journal and Letters of

Captain Harold L. Wood, USCG

During the transit of the Northwest Passage by U. S. Coast Guard Cutters
STORIS, BRAMBLE, and SPAR

1957



Compiled and edited by

Lucinda Wood Langjahr

FOREWORD

The purpose of this exercise was to assemble some of Dad's documents concerning the trip into a readable and somewhat chronological order, in time for the 50th Anniversary Reunion of alumni of the Northwest Passage.

As a child, I recall meeting a sailor on an ice-skating outing in Kodiak. He asked who my father was, and when I replied, he said in an aside to his friend, "Oh, that S.O.B!" I didn't know what it meant, but I was pretty sure it wasn't a compliment. At the time, I was hurt that he didn't seem to like my Dad, but as an adult, I can imagine Dad was a tough taskmaster who expected a lot from his crew. Through the warp of a daughter's perspective, Dad was gentle, sweet and funny...he also liked to write long and windy descriptions, and I hope to share some of that side of his personality.

The following pages start with a letter from my Dad to a teenager who visited the ship during an "open house" when STORIS docked in San Francisco on the way home, in late November, 1957. He asked for more detailed information about the adventure. I used Dad's letter to this young man as a narrative framework into which I inserted excerpts from his daily journal and almost daily letters home. I have titled this "*Notes from Calumet*" as Calumet was Dad's personal call for the operation.

What I left out could fill another book. There were pages of description of the repetitive task of the survey work, and there was the mushy stuff in the letters, too, mostly along the lines of "I miss the other half of my family and want to be home!" Dad obtained permission to have my brother, Tim, (also referred to as "TJ" in the letters) accompany him, for the extraordinary experience. Some of the impetus for that decision may have been Mother throwing up her hands at the prospect of trying to survive one more summer in Juneau keeping a 13-year-old boy out of trouble by herself. There were many references to TJ's activities and whether he was eating well and behaving himself.

Dad also carried on board with him a small letterpress; it rode on a cabinet that housed several drawers of moveable lead type. Before departing Seattle, he commissioned a lithographer to prepare a set of plates he designed – a globe, in three-color separation, showing the North American continent, with the route the ships would travel depicted in a red line. He used this "logo" to print commemorative envelopes, or "covers," to be mailed from the ships under their own postmarks, and wallet cards to distribute to the crew members who participated in the voyage.

The expedition was right up Dad's alley in that it was a problem that could be worried and a puzzle to be solved by application of engineering and navigation principles, methodical effort, and patience. I think he took great pride in adding another thread to the rich tapestry that is the history of Arctic Exploration, though he would never admit it out loud.

I hope you will enjoy reading it.

Lucinda Wood Langjahr
Port Ludlow, Washington
kj7dg@arll.net

September, 2007

JOURNAL AND LETTERS

9 December 1957

Mr. John Wills
Santa Barbara, California

Dear John:

Your Father has written me a note, indicating the interest of you and your sister in the recent trip of our ship, the Coast Guard Cutter STORIS, through the Northwest Passage, and around the continent of North America....if you will bear with me...I'll spin a yarn for you.

STORIS, built in 1942 in Toledo, Ohio, for duty in the Greenland Arctic, is unique in that there is no other ship exactly like her. Having a displacement of just under two thousand tons, she is 230' long, 43' of beam, and draws just under 16' when fully loaded and provisioned. I had the pleasure of being assigned as an Inspector during her building, and served on her as Engineer Officer upon her Commissioning in September of 1942, and in the early months of 1943, in the Greenland Patrol. She is a light ice-breaker, with a hull especially designed to resist lateral pressure of ice, in the event she becomes "beset"...stuck in the ice, under pressure.

In the Spring of 1955, with the Navy's Marine Sea Transportation Service assuming the task of supplying the then-under-construction Distant Early Warning Line (DEW Line) stations along the Alaskan Arctic and through the Central Canadian Arctic, it was imperative that an ice-protected, relatively shallow-draft vessel be assigned to precede the supply ships into the central arctic waters which had never been charted or sounded. This, of course, to assure that the proposed route to be followed by the supply ships was in fact a practicable one.

The charts issued to the whole task force were effective outlines of the terrain, made from aerial photos. There was practically no horizontal control available to the cartographers, so although the land outlines were precisely correct, there were many instances discovered in which the represented land would be out of position by as much as three miles. In addition, for a linear distance of something like fifteen hundred miles, there were NO soundings on the charts...no water depths indicated. Our chore, the first year, was then to proceed into the area, taking soundings as we went, and then to add those soundings to charts which we reproduced as rapidly as we obtained information, and to return those charts, NOW containing hydrographic information, to the ships which followed us carrying supplies for the DEW Line.

The Hydrographic Survey Unit was made up of STORIS, and a light Navy AGS, the "REQUISITE." REQUISITE was well fitted for survey work, but ill-fitted for work in ice. Her plating was extremely light, and she was very lightly framed. However, with

the expert handling she had, and the assistance of STORIS in extracting her from tough spots, she, with STORIS, managed to round Point Barrow, and to proceed as far to the east as the longitude of Duluth, Minnesota...our entire route, and to acquire much hydrographic information in the first summer...Enough to permit the successful completion of the first sea-lift supply of the DEW Line. During the winter of 1955-56, the Hydrographic Office, in Washington, using the data which the Hydro Survey Unit had gathered, was able to produce charts which were used the second season, in 1956. Again STORIS and REQUISITE were the ships making up the Hydro Survey Unit, and again, the additional information which was gathered that season, materially assisted in the third season. In addition to survey work, STORIS, because of her design and her equipment, was able to set buoys each season which were used by the Supply Elements as they came along behind us. These buoys were a light, expendable type, made up of four oil-drums, welded together to form a long, cylindrically shaped buoy which served very well to mark particularly hazardous shoals or tortuous channels in the narrow straits.

We in the STORIS wanted, from the very outset, to make an effort to transit a Northwest Passage, but the requirements of our primary mission precluded such additional work, and in fact, our services were much in demand, in 1955, for ice-escort of the belabored supply ships which very nearly became frozen-in for the winter because of the extremely bad ice-conditions along the Alaskan Arctic coast.

In the planning stages of the 1957 Operation, it was determined that a usable route to the East must be established, to preclude the possibility of a whole task force becoming blocked in by ice, preventing their return westward around Point Barrow. This year, then, the organization of the Hydro Survey Unit provided for three Cutters, all ice-protected and all of a hull design which the Coast Guard has used for some years. The Navy has no ships of this particular type, so we (the Coast Guard Ships) were all loaned to the Navy for the Operation. The other Cutters, SPAR, from Bristol, Rhode Island, and BRAMBLE, from Miami, Florida came round from the East Coast, through the Canal, joining STORIS at Seattle, 28 June. STORIS, whose homeport at that time was Juneau, Alaska, had sailed from Juneau, for Seattle, on 20 June.

[HLW letter home Wednesday, 26 June 1957:

The Admiral said the brass hats are lining up like crows, in Washington, waiting for a chance to climb on board. He has said he'll do all he can to attempt some control. We already have received a call from the Canadian Dept of Transport Captain Cuthbert, whom I had had onboard for lunch last year at Simpson Strait...He wants onboard. I might be able to squeeze him in on one of the WAGLs. In San Diego, met a Cmdr. Thomlinson, who is a PIO for Admiral Persons, in SanFran...He's planning on being onboard, and is resigned to a sleeping bag...(just, of course, for the trip through Bellot Strait...) He says Admiral Will, in Washington, is trying to dope out a way in which HE can ride through, without being too long away from his office! Tim's liable to be shipmates with a lotta brass, before this thing is over! Send me my bottle of chlorophyll Aspirin...I'll need it!]

Wills Letter, cont'd:

On 1 July, the Hydro Survey Unit, Task Unit 5.1.5, a part of Task Group 5.1, the Western Supply Group, was formed, and departed Seattle in company with the Navy's heavy icebreaker, BURTON ISLAND. Leaving seventeen days ahead of the supply forces, our task was to make an early entry into the Arctic, to verify the route the later ships would follow, and to set aids to navigation which would be of assistance to them in making their transit across the north coast, to resupply the DEW Line stations.

[HLW Journal entry, Monday, 1 July, 1957:

Made preparations for getting underway. Draft forward 14'-10", aft 15'-03". 1405, departed Berth L, Pier 91, NSD Seattle. Wind was from 000° to 330° -- force 10-18 mph. Experienced difficulty in backing clear of dredged channel to west of Pier 91. Stern came rapidly to port, and bow blew down to starboard, making it necessary to use maximum power with little headway to right the ship, keeping her from blowing down on LST 1110, moored in the berth immediately behind STORIS. Resumption of backing gave same results, and this time, as engines were turning ahead, vessel dragged perceptibly on mud-bank just inside of the fender piles opposite Berth L, but abreast the midship section of LST 1110. STORIS did not stop due to grounding, but simply dragged to slow as ahead turns were being made with screw. Vessel regained headway, and it was apparent that to insure prompt and safe departure, yard tug assistance should be asked. Call was placed through Control, and STORIS worked back to berth L, putting nose into string-piece to spring stern clear of LST 1110's bow. LST 1110 had veered chain on his outboard bower anchor (port) to reduce danger of flukes or anchor-heels damaging STORIS' side. While keeping stern clear of LST 1110, bulwark plating on starboard bow of STORIS, above 01 deck, was deflected inward, and breasthook was forced upward in inward deflection of shell plating. Two tilt-back welds were torn in the vicinity of bottom of jackstaff socket, but damage was superficial. Examination of voids and spaces aft showed no damage to hull as result of dragging through mud, and rudder and screw seemed un-touched. Yard tug USS NAIGO made power-hookup to port bow, to assist in clearing pier 91. At 1430, NAIGO was let go, and STORIS departed Seattle.]

[HLW letter home, 4 July 1957:

We had some trouble getting away from the windy side of the long navy pier, at (91). To avoid hitting an LST astern of us, we had our fanny smelling a mud-flat...but no real trouble. I mentioned to Mr. Wills that instead of considering it ominous, I felt it was symbolic of a good summer, since the last time I touched bottom we'd had a rip-snorting year! He was reading Captain McClintock's account of the Franklin Search, and said, "Of course, so did McClintock!"... (he'd gone aground his first day departing on that trip, too.)]

[HLW Journal Entry, July 1 cont'd:

Column formation was used, STORIS, BRAMBLE, and SPAR. BURTON ISLAND, because of superior speed-capability, was directed to proceed independently.

After rounding Fourmile Rock Light, on approaching turn for West Point Light, with can buoy bearing approximately 045° relative, about 600 yds, auxiliary generator in use stopped because of overspeed trip acting when machine surged as result of removal of galley load, approximately 70 amperes. Governor did not react quickly enough to control speed, and the surge tripped the overspeed mechanism. Other generator had just been secured, and without power, ship proceeded in slow turn to starboard, heading for shoal in vicinity of black can buoy. Starboard anchor was let go to 60 fms, and vessel brought to, and held, in 80' water. The generator was started, and as soon as all conditions were ascertained to have reached normalcy, the ship was again got underway...anchor secured for sea, and convoy again resumed. (Signal for breakdown had been made to convoy by flaghoist since radios were without power). Conditions were normal for remainder of the night, and an easy trip made out Admiralty Inlet and Straits of Juan de Fuca.]

[HLW letter home, 6 July 1957, Unimak Pass:

TJ caught up with his diary today...he had two days off while he suffered from mal-de-mer. Before inspection yesterday, we had an officers' conference in the Wardroom, as usual, and when I asked the doctor how business was, the rest of the officers almost went into hysterics...seems the Dr. was sicker than any of his patients!

I think the guy who made up the voice calls for this operation was a wag...this year, my personal voice call was changed from that of last year...this year it's "CALUMET" --- not the baking powder, but the Indian word for "pipe".]

Wills Letter, cont'd:

We experienced good weather for our trip across the Gulf of Alaska, to Unimak Pass, and thence up along the Alaskan Coast, through Bering Strait, to approach Point Barrow. BURTON ISLAND, which could make more speed than the slower survey ships, proceeded into Nome, to pick up mail and late-ordered spare parts which had been air-lifted to Nome for delivery to us. The Navy ice-observation flights, P2V Neptunes, flying daily reconnaissance trips to make observations of the ice conditions which we might expect, gave us unexpected good news. Their observations, together with weather-forecasts from Kodiak Fleet Weather Central, which we copied by facsimile machine onboard STORIS, caused us to continue directly for Point Barrow, instead of stopping off, as we had done the two previous years, at Nome. Winds were from a direction and of a force which drove the polar sea ice off the coast, and we were able to make good progress all the way to Point Barrow, rounding it on 12 July, the earliest recorded rounding ever made.

We surveyed a reported shoal off Point Barrow, permitting the BURTON ISLAND to join us late on the night (broad daylight, of course) of 12 July, and then all four ships proceeded eastward. Conditions were good, and we had need of the heavy icebreaker for only about twenty miles, actually, although we continued to travel in company until we

reached Cape Parry, east of the Mackenzie River delta. There we refueled all the survey ships from BURTON ISLAND, and then I released her to return, that she'd be able to give ice-support to the supply ships when they came up.

(I'd here recommend that you refer to a good map of the Arctic regions...)

Cape Parry is the Cape extending northward from the Canadian NWT coast, just to the eastward of Franklin Bay.

[HLW letter home, Sunday, 14 July 1957:

Our helicopters are worth their weight in cold cash in finding leads...or in assisting us to avoid "blind leads"...and with the twenty-four hour daylight, we can and do use them at all hours when they're needed. I flew this morning at 2:30 am, when we had run into a cul-de-sac, and by simply an hour's flight, we had found a way around the ice, and have been steaming merrily at eleven knots since then. STORIS' gang is proving its worth and dependability...the guide ship calls us to find out where the convoy is...and so far, we've been able to give'em the right answer!]

Wills Letter, cont'd:

Here we encountered unbroken, winter-ice. Normally, in the summer time, Amundsen Gulf, Dolphin & Union Straits, and the waters along the north coast to the eastward, become ice-free about the 4th of August. That had been our experience the two summers previous, and the local residents (there are a few Hudson's Bay Company trading posts along here) had kept records indicating that to be normal. However, we were in the region about two weeks earlier than we had anticipated, and actually, that much before the break-up. We had additional ice-recco support, in the form of DC3s operating from Point Barrow, and as the survey unit made progress, one plane was assigned to move along with us, basing itself at the nearest DEW Line site having an airstrip which would accommodate it.

At Cape Parry, there was so much ice grounded along the shore that we were unable to land our boats, and since it was essential that some of our officers make the recco flights, we simply landed them by means of the helicopters which STORIS carried onboard.

[HLW letter home, Cape Parry, 18 July 1957:

Had an informal report from one of the commercial pilots today as he passed overhead...and it sounds pretty solid ahead. We'll work here, amplifying the soundings into the landing beach, as far as we can go. Four men from the beach just walked out over the ice to visit the ship...They appear to be UDT (under water demolition team people) since they appear to have swim suits (rubber, mitt feet und hoods) on.]

[HLW Journal entry, Friday, 19 July, 1957:

... Off Cape Parry, NWT, Canada, lying-to against shore-fast ice. Ice recco flight scheduled for 0730U, from airstrip, appears to be in jeopardy because of inclement weather. Miraflores prepared the breakfast table, we ate at about 0600. Lt. Cmdr. Carter and Lt. Cowing came aboard, ready for the trip to the beach. We got the word that the trip would be delayed until 1200U... Had coffee with Carter and Cowing, sent Adm. Stelter's covers (Editor's Note: covers are postal courtesy cards) down for cancellation (and those for BRAMBLE and SPAR) in order that those vessels could simply apply their cachets and drop them in the mail. Didn't issue complete enough instructions, and as a result, the mail-orderly put STORIS cachets on all four, for the two vessels, completely fouling up the deal. Thereupon, I gave to each of the skippers ONE of the remaining two which I had been saving to use for STORIS. Complete consternation now reigns, since BRAMBLE put her cachet on BOTH of those. I'll have to work hard to get out from under this!]

Wills Letter, cont'd:

Upon return from one of these ice-recco flights, and during the ferrying of observers from the airstrip to the ships, we lost one of our two helos. The pilot was only slightly injured, but the airship was a total wreck, so it was necessary for STORIS again to rendezvous with BURTON ISLAND, which carried onboard a "fleet-spare" helo.

Leaving BRAMBLE and SPAR at Cape Parry to continue survey work in that area as ice-conditions permitted, STORIS returned to the westward as BURTON ISLAND again headed eastward, and we managed to effect a meeting in Mackenzie Bay, there picking up our replacement helo.

[HLW journal entry: Saturday, 20 July 1957:

Day opened with five of us on the airstrip adjacent to the hangar at PIN. The two helos from STORIS were awaiting us upon our arrival, and two passengers were quickly airborne...the two skippers of the WAGLs...first, on the grounds that they still had a boat ride upon arrival at STORIS. They were landed in STORIS and the helos returned. I, being without an exposure suit, assisted in loading Capt. Cuthbert and fastening him in, in 84 with Lt. Fenton. Then, when Woody landed in 72, I fastened Mr. Wills in. Woody had brought back an exposure suit, so I donned it while awaiting the return of one of the helos to pick me up. It seemed an interminably long time, and when I was sure one must be returning, I heard a dull thud or explosion-type noise, with an apparent reduction in engine noise. I worried, fearing that something had happened to a helo. Shortly thereafter, one of the helos came over the hill-horizon, and came in for a landing. I had walked out toward the junction of the hangar runway with the airstrip, and for an instant, Woody, making an approach in 72, had not seen me...I had on a yellow suit.... When he spotted me, he landed, and I immediately concluded all was in order. I had some difficulty getting the seatbelt fastened, by reason of the gear I carried in both pockets of my parka (revolver, ammunition, shaving gear, gloves, etc)...Woody laughed when I tried to extend the length of the belt...commenting that there "wasn't any more"...I finally got

in, put on the passenger's hard hat, but didn't bother to connect the headset or mike. He signaled that I should, in that he had something to tell me. My premonition returned....and I asked him if 84 was down. He allowed as how it was, that it had rolled off the stern. While I was steeling myself to ask after the welfare of the occupants, he continued, telling me that Mr. Fenton had discharged his passenger, and had crashed while taking off. He said Mr. Fenton had climbed out and that 72, hovering behind the ship while 84 was taking off, had landed alongside the disabled craft, and had taken Fenton up on 82's float until the boat reached him. 72 had then gone up, and Mr. Wills was landed safely.

When we got back to the ship, the crew was hoisting in 84 at the well deck. Fenton suffered a cut leg, immersion, but otherwise seemed all right. We issued him some brandy, the Dr. checked him over, reporting that his pulse was somewhat accelerated, but that his blood-pressure was normal, and that there seemed no danger from shock.

...It was established that the cause of the accident to helo 84 was the fact that the deck signalman gave an all clear signal for take-off, when in fact, the after starboard nylon-hold-down was still attached. Pilot started to lift, felt he was losing control, and attempted to settle down again, but was unable to recover, and the aircraft rolled over the after, starboard, quarter, entering the water in a vertical attitude. Fenton made his escape through the door on the pilot's side.]

[HLW letter home, 27 July, 1957:

Thought you-all might appreciate a zipper story...not the usual! The waterproof exposure suits we wear in helicopters, in case of dunking in this ice water, are tricky to get into and out of. You climb into the thing through a long sleeve, cemented to a lashed opening running diagonally across the chest. After getting legs and arms in place, you duck your head down onto your chest, and pull the upper part of the suit (which is of course against your shoulder blades) up over your head, ducking your head and putting it up through the neck-opening, which is as tight as three-hundred forty rubber bands. Then you roll-up the entrance "sleeve" and zipper some tough material on the edges of the slash together, so the suit is then closed. The boots are cemented to the legs, the sleeves (real sleeves, for the arms) have tight fitting rubber wristlets, so they won't leak, and then there is the tight neck fitting, which prevents water from entering around the neck.

I came back from a reconnaissance flight about 12:30 am this morning, and after telling the bridge people of our findings, went down to my stateroom, to struggle out of the thing. The damned thing is a beartrap anyway, and imagine my consternation when I found the chest zipper stuck! Wow! It was only my inherent mechanical adeptness that helped me to get out without cutting the dawgonned thing off. Had I had to wear it until I got to New York, I betcha I'da been down to 79 pounds! It'd make a wonderful reducing garment. Sorta smelly, by then though. The aviators refer to them not as "exposure suits", but as "POOPY-suits". But we don't object to wearing them up here.]

Wills Letter, cont'd:

Upon our rejoining the other two cutters at Cape Parry, the three ships continued eastward, working through heavy ice...one-year winter ice...which grows to a thickness of from six to eight feet. At this stage of its deterioration, the one-year ice is penetrable by ships like STORIS, although it is essential that the ice not be under "pressure".

I must here digress to acquaint you with the nature of ice in the open sea. Even in winter, it does not exist as one unbroken sheet, flat as a table top. Under the action of the sea's motion, and of the terrific influence of strong winds, blowing for hundreds of miles across its rough upper surface, it tends to ridge, or build up "windrows" which might be two or three times the thickness of the undisturbed ice. This ridging occurs through-out the winter season, and by the end of the winter, the heavy hummocks or ridges might be thirty to forty feet deep, and a hundred yards wide, but extending sometimes for dozens of miles, like long hedges. They re-freeze, or congeal into snakelike "walls" and are extremely difficult to penetrate. In addition to these barriers, must be born in mind the fact that the motion of the ice during the breakup is influenced again by the wind and the sea motion. Great expanses of ice might well be broken and churning, due to the drag of a strong wind, so that on the lee side of a large field of ice, ice might be driven up on the beaches for a distance of a quarter mile, and piled up to heights of fifty feet. Possibly you have read of the same phenomenon happening in the Great Lakes...especially along the south shore of Lake Erie, where homes have literally been pushed into kindling by the advancing ice-wall resulting from prolonged northerly winds.

It should be obvious, then, that it would be extremely dangerous for a vessel to be on the lee side of an expanse of ice, with a strong wind moving it down on the ship. It was this very hazard which had threatened the 1955 Task Force, by nearly entrapping the ships as they made their way westward across the Alaskan Arctic coast...and which makes it so difficult to move in either direction along that stretch. Moreover, it was this very hazard, which could happen at any time, in any season of resupply, which caused the writing of our orders to endeavor to find a useable route to the Eastward.

The three ships of the Hydro Survey Unit are so designed as to resist damage from lateral pressure of the ice. The hull plating and framing is extremely heavy, and the shape of the hull is such that lateral thrust of the ice, because of the inclination of the plating from the waterline almost to the bottom, causes the vessel literally to be lifted upward, like a cork popping from a bottle, if the vessel is beset. However, in a "beset" condition, the ship is unable to move, so no progress can be made. Obviously, then, one avoids ice, if possible, or if there is risk of being caught in pressure fields. For a ship which is relatively invulnerable against damage, from lateral pressure of the ice, the principal danger of being beset is the threat of being pushed ashore, or grounded on shoals, not from being squeezed.

Our plan, then, was to make the best of our way, relatively well offshore, through leads which would develop in the ice-fields. Amundsen Gulf is relatively deep, and if we

could penetrate it, we would enter Dolphin & Union Straits, which we might expect to begin breaking up by the beginning of August.

[HLW journal entry, Wednesday, 24 July 1957:

Underway as before, in column with BRAMBLE and SPAR, making devious way through close ice with small leads and polynyas, (Editor's Note: a polynya is a void in the ice cover) endeavoring to proceed in the general direction of PIN 1. From midnight until 0150, breaking hard winter ice, puddled but not rotten, endeavoring to reach a sizable polynya. When within 400-500 yards of ice-edge, reached relatively rotten section with only two pressure ridges between ships and open water. CO went below and OOD was endeavoring to make one continuous though slow run thru remaining ice when he got a call from fantail lookout (icewatch) to stop engines. He complied, and immediately the pressure laterally caused the ship to become beset.

Pressure was terrific, to the extent that pressure ridges built up on both sides of the ship, and the ship was heeled 10° to port. The two WAGLs suffered the same fate, about 500 and 800 yards astern. Valiant efforts to right the ship by using a boom load were to no avail, and all use of the engines were fruitless. Situation was disturbing, since pressure seemed so great, and all three vessels were bound. It seemed obvious that the only "out" was to await a wind shift, with possible reduction of pressure.

At some time about 0300T, SPAR managed to work free to the point where she was able to come up alongside BRAMBLE, through ice which STORIS had previously broken. SPAR then managed to work her way up alongside and then ahead of STORIS. Immediately she came into the fulcrum point, STORIS righted to three degrees list, rather than ten, but the pressure was still sufficiently great to preclude STORIS moving. Up to this time, lateral cracks in the ice, as long as two hundred yards, had appeared, in a direction normal to STORIS' fore-and-aft line. It was the severing of these pressure pieces which had enabled STORIS to come back from her inclined attitude. However, while SPAR was in position abreast of STORIS, total pressure remained, and SPAR's progress was sufficiently slow to preclude easing of pressure for STORIS to move.

As soon as SPAR got in to the ice on STORIS' starboard bow, which had been unbroken, her progress was slowed, and as she passed from the overlap position, to one ahead and on the bow, SPAR herself became beset. By valiant effort, SPAR finally won through to clear water.

I requested SPAR to come into the ice from a position approximately on STORIS' port bow, in order that the ice ahead of STORIS would be broken out, and would not then be exerting pressure on either SPAR or STORIS. This was not heeded, and SPAR came directly in from the direction of her exit. She made two or three sallies, and then one dinger, driving her in to the point where her starboard bow overlapped STORIS' starboard bow. She was immediately beset. It was amazing to note the rapidity with which she heeled from pressure after being beset...She was heeled to starboard, approximately 8-10° and was unable to right herself.

One fixed charge was placed about 75' from STORIS' stem, in a direction about 315° relative, but it did not release pressure on SPAR. STORIS' starboard anchor was dropped on what appeared to be the "key" piece of ice exerting pressure on SPAR. It was interesting to note that the anchor and chain hardly dented the ice, let alone break the piece!

Both STORIS and SPAR worked loaded booms vigorously and continually, endeavoring to move the hulls in the ice-nest sufficiently to allow progress either ahead or astern.

Two demolition kits, total of sixteen blocks, 2 lbs each, of tetryl connected with primacord were laid normal to the pressure line, on the port bow of STORIS, and were fired simultaneously, but the shock was insufficient to remove pressure.

A twelve-inch hawser was rigged from STORIS' capstan to SPAR's bow, to use as a warp, but it did not do the trick.

Pressure had finally caused STORIS and SPAR to be moved so close together that SPAR was able to plumb STORIS' forecastle with her boom, and using the whip, after parting two straps, finally heaved herself down to the point where she was able to shake free of the ice-grip, and was able then to withdraw.

SPAR then managed to widen the opening sufficiently to enable STORIS to make her way to clear water, and then to break out BRAMBLE. With STORIS clear, the pressure was relieved sufficiently to enable the second break-out to be done expeditiously, and without any time becoming beset.

CONCLUSIONS:

Ice, under pressure, is a fearsome thing!

Persistent patience is a virtue.

Explosives, to be effective, must be used in considerable quantities.

Heaving-down by means of applying tackle to fixed object such as an adjacent ship, gives terrific heeling moment.

SPAR applied power ably, and almost without regard to ice in wheel.

SPAR was very admirably handled.]

[HLW Journal entry, Friday, 26 July 1957:

Drifting in polynya, in poor visibility, awaiting improved conditions to enable TU 5.1.5 to reach PIN ONE or some site from which patient in BRAMBLE may be evacuated by air.

About 1700T, visibility improved sufficiently to allow helo flights, and a reconnaissance was made toward beach, looking for possible leads. It was observed that the giant floes forming our polynya had formed pressure ridges, but that at the time of observation, the pressure seemed to have diminished, with the result that along the old pressure ridges, sufficient open water, or easement had occurred to conceivably allow passage by TU 5.1.5. Thereupon, about 1910T, upon recovery of helos, STORIS entered the floes toward the beach, following generally the route marked by an eased pressure ridge, and by staying close to the toppled ice was able to negotiate approximately three-quarters of a mile with fair assurance of continued success in the transit. SIZZLE was called, and all the ships proceeded in column. BRAMBLE and SPAR had no difficulty whatever in following the path taken by STORIS, though all with experience agreed that REQUISITE would have been helpless to do so. Good progress was made, though at one time, having run over an early-winter pressure ridge, STORIS had so much of 6-7' blue ice under her bends, with no room on the sides for the ice to move into, that she hung up. BRAMBLE was called up to hack at the side ice to create space into which ice under STORIS could move. When this was done, STORIS was readily freed. Again, REQUISITE would have been unable to effect such assistance, and it was amply demonstrated that WAGLs are the type to afford assistance to STORIS as an advance survey ship.]

Wills Letter, cont'd:

Our plan was a good one, except for the complication resulting from the sudden illness of one of the sailors in BRAMBLE. We were beyond range of our helicopters (reaching land) and there was nothing to do but to work inshore where we could land our sick sailor, so he could be air-lifted out by the 10th Air Rescue Group of the Air Force. It took us two days to work our way inshore, and by that time, our ice-recco reports and weather reports gave hopes of our being able to make our way into Dolphin & Union Strait by following a shore-lead all the way. We landed our man, and the SAR group got him out to a hospital in good order. We immediately started along the north coast, getting as far as Point Hope.

[HLW Journal entry, Saturday, 27 July 1957:

At about quarter after six in the evening, Tare time, AF72726 landed at PIN ONE, making a beautiful landing after buzzing the strip once. He touched down very near the west end of the runway, and used up only about three quarters of the strip before he came to a stop. He turned in place, and taxied back to the west end, and was there met by a jeep and passenger carrier from the Site. All hands seemed to go up to the site, and about twenty minutes after seven they returned. The patient was delivered into the care of the AF medic, and preparations were made for the plane to take off. He took off shortly after 1930T, and seemed to take less than half the runway before he was airborne.]

Wills Letter, cont'd:

Then a sudden wind shift brought pressure on us, and we all three were beset. We had two hours notice, and managed to get ourselves about two miles offshore, but were then and there beset. The pack continued to move to the southeast, and from a position two miles offshore, with ninety feet of water under the ships, we were forced in until we were only 700 yards off the beach, with fourteen feet of water between us and the bottom. It was a tense three days!!

[HLW journal entry, Monday, 29 July 1957:

Continued in close concentration of winter ice, puddled but hard.

During mid watch, pressure increased, listing vessel to 1° starboard. It is interesting to note that when beset off PIN A, the ship was listed to the east, and that here again, because of the opposite heading of the vessel, it was listed to the side opposite, but still to the east. I conclude that it is the combination of current moving the ice, and working on the submerged portion of the hull, which caused the listing, and that with a stronger current moving to the west than to the east, the tendency is to “trip” the vessel, causing her to list eastward.

OOD was cautioned to oscillate the ship fore-and-aft, keeping a small pocket in which the ship could lie without excessive pressure, rather than to sit and allow the unimpeded ice to take control. This he did, from time to time.

Shortly after four a.m., OOD shifted vessel, attempting to return through an increased polynya to the track thru which we had initially progressed to our spot, to the end that he could return to help SPAR to join us. When entering the compressed old route, he got himself beset, although only partially into the ice. Stern was free, with contact back as far as frame 190 on each side. Conditions remained unchanged until about eight thirty (am) at which time it was observed that some shock cracks, ship’s width to the west of our old route, had begun to open. Wind was fresh from 310° at about 18 knots, ship’s head at 220°, into the old route. General drift of the whole containing pack was noticed, in the general direction of 135° for about five hundred yards in twenty-four hours.

Later in day, SPAR managed to move a short distance in our direction. They were then beset under extreme pressure for a short time, but managed ultimately to get going toward us, cutting across the unbroken giant floe between the two ships.

Shortly after noon, we started cutting away the leeward side of the giant floe, to the end that ice would move off down-wind, reducing the unbroken distance they’d have to cross, with no danger of STORIS getting squeezed as did SPAR on the previous Wednesday.

STORIS did excellent job of paring off field, although the newly formed loose ice began to clutter up the leeward side of the already diminishing polynya. Worked in to point where windward floe was held in place by just one key block, and it became apparent that when that “keystone” was cut out, both STORIS and SPAR would have to work fast in order not to be pinched. When all was ready, made the attempt. It failed, because of

the terrific pressure from the windward side. Field moved down and pinned SPAR even as the cut was made. STORIS retreated to the polynya, leaving SPAR in almost her same, fast position, but with plan to return a short time before the next slack, to try again. About 1900T, it seemed that pressure was easing, although the slack was not anticipated until nearly midnight. Thereupon, STORIS started again to pare off the leeward edge, as before. SPAR called, stating he was not under such terrific pressure as previously, and that it seemed he was practically free, forward, but that he was bound amidships and slightly abaft midships. He felt that we could sneak through some open water ahead of him (remnants of the old paring job) and come up against a bar of ice which separated THAT open water from some on his starboard beam. By cutting that one pier that was binding him on his lee side, he could fall down into the relatively open water, and retreat out from under the windward pack.

We started to do just that; got in, and even before we could make a final cut, the motion seemed to free SPAR. We hastened back to our nest in the polynya, and SPAR followed.

SPAR stuck stem into weather edge of polynya, while we came up to her stern and passed mail over to her. We then retreated to lay against weather edge of a small floe within the polynya, for the night.

Tuesday, 30 July 1957:

During the night the polynya collapsed. At the last moment, when STORIS was being beset, SPAR came in in a valiant effort to free her and became beset, too, in close proximity to STORIS' starboard quarter. Pressure and ice movement was terrific. Helo-deck nets were rigged in, as was the ready-boat. Tire-fenders were rigged out...and we waited. Engines were to no avail. Ice blocked screws and rudders, and the relentless elements just took over control. Listing was extreme. SPAR heeled to nearly 20°. We finally made contact; our cant-frames about at frame 225 starboard, with her port 'midships area. We began gradually to be forced a bit relative to SPAR. She rigged airplane tires as fenders, while we used rope ones. Her airplane tires were flattened until they were like gaskets. The ships overlapped, being close aboard each other so we could step from one to the other, and SPAR's stem being as far forward as our well-deck.

We then began relative motion which sent us ahead of SPAR. Side pressure was terrific, and as we moved ahead, we tended to add to the pressure heeling SPAR to her starboard. When we came up to where our cant frames were working toward her eyes, one of SPARS tire fender lines parted, and the fender fell to the ice as we moved clear of it. SPAR dropped her anchor onto the ice, with a couple of fathoms slack, so the heels of the anchor wouldn't pierce our hull... With airplane tire fenders ahead of the contact, we rode past her bolster and contact was lost.

We were almost upright, while SPAR had a maximum heel of close to twenty degrees. It is interesting to note that because of the hull shape, designed to convert side-wise thrust into partial lifting component, we had been lifted appreciably, bodily out of the water. Ice was completely under both vessels, to judge from the fashion in which it came to the

surface when finally pressure was released. At one time, SPAR advised she could see practically all of our propeller...and that all the blades seemed still to be in good condition.

When the ships were well clear of each other, all efforts to move ourselves being to no avail, we simply secured in that direction, and after setting condition Able, waited, sweating the situation out. From time to time, a check was made on state of fouling of screw and rudder... Rudder was jammed much of the time, in a hard-over position, and the screw could be turned only infrequently.

Helos made mail trip, and then made a mail run to BRAMBLE, which was still in her position of some hours, northwest of STAPYLTON BAY entrance, beset. (she was in this spot, 9 miles 096 from PIN TWO) for about sixty hours.]

Wills Letter, cont'd:

I feel that only our strenuous efforts at the very outset, when the wind shifted and we immediately recognized the danger, saved the three ships. The ice piled up on the beach until it was fifty feet high, and there were so many pressure ridges between us and the beach that the ice for a quarter mile from the original beach line must have been solidly on the bottom, like a mammoth glacier. It was practically impossible for further compression to take place, unless the wind, which had reached thirty knots, were to increase markedly... We had taken all precautions to combat piercing of our hulls, with damage control materials at hand, and continuous watches being kept on conditions in all spaces of the ships....Our ship, which normally was drawing 15'6", was lifted out of the water until we were drawing slightly more than 9 feet (that is, our nine foot draft marks were showing at the ice edge...there was ice completely under the ship, and probably very little water. With all precautions taken, there was nothing to do but keep our TG commander apprised of the developments, and to sweat it out. On the morning of the third day, the wind died down, and we noticed a marked opening of the pressure cracks in the larger pans of ice that were squeezing us. Eventually we dropped down in the water, and by persistent effort, managed to work our way offshore. SPAR and STORIS had been together, and by mutual support, got off to the point where BRAMBLE was still beset, approximately five miles away. We were able to "break her out"...and then the three ships, with conditions much improved, followed a tortuous lead about twenty-one miles northerly, where we came to the edge of the ice, almost over to the Victoria Island shore.

[HLW journal entry, Thursday, 1 August, 1957:

About 1400T, by radio from CFC38, learned that COMSTS was at PIN TWO and wanted to see me. Went in by helicopter, with beach visible, but STATION not visible from ship, because of low fog. Upon arrival at beach, flew along the shoreline with 500 yard visibility, until when about two miles from the Site, it was picked up, and a landing made in front of the hangar. Two TU 5.4.2 aircraft were there. Party consisted of:

*Vice Admiral John M. Will, COMSTS
Rear Admiral Henry S. Persons, COMSTSPACAREA
Capt. R. F. Price, Operations for COMSTS
Commodore O. C. S. Robertson, RCN, DEWJPO, New York
Two Air Force Generals
One Army General
Lt. Cmdr. Reynolds, CTU 5.4.2*

Discussed our being beset with Admirals Will and Persons, pointing out the improved conditions, and that we were then on our way to relieve BRAMBLE. They seemed confident that things would turn out favorably, and appeared favorably impressed with the way we had so far progressed. Admiral Will brought up the subject of news events in Newsweek and the New York times. Asked if I had seen Sullivan...writer for the Times ..Enjoyed my remark to the effect that I had so far been very fortunate in not having had to talk with any newsmen....

Regretted they could not do anything for us, but seemed happy that we were able to get out of the mess ourselves, and left wishing us good luck. Commodore Robertson pointed out that Admiral Will had gone way out on a limb in promoting the Bellot Strait trip, and that we must do it, if we could. I assured him on that score!]

[HLW letter home, Sunday, 8 September 1957:

In the Queen Maud Gulf area, we encountered a great deal of ice...the break-up was about two weeks late, inside, this year, and since we were about that much earlier than that getting around Barrow, we soon came upon a relatively unbroken mass of ice. You know my philosophy, "Wait until the ice is out of the way!"...that's fine, but the Navy doesn't exactly subscribe to it. I was my own boss, as far as the final decision concerning running of the survey was concerned, but I didn't control the advance of the re-supply units, and they were rapidly overtaking us. In addition to being charged with getting the survey work done, there was a "secondary" requirement, ...by gentlemen's agreement, to assist the re-supply units in getting through. I had perforce, to hurry along, in order that we could establish in the Queen Maud Gulf area, shore radar-reflector towers, which are also good visual aids to navigation, in order that the re-supply outfit could readily get across the Gulf...and in addition, we had, in spite of not having any written instructions to that effect, the need of running a recco trip through Simpson Strait, and then of installing buoys which WE could use in leading the supply unit through, and in our own survey work. There were no buoys purchased for use this year, but we brought up all that hadn't been used last year, and in addition, to our delight, of eleven that we had placed in Simpson Strait last year (STORIS design), we were able to find eight ON STATION, one slightly off station, but recoverable, and one more so far off station as to present no hazard to the navigators. It was a hard fight, getting through the ice to Simpson Strait, but once we got to the eastern side of Queen Maud Gulf, we had clear water. We left BRAMBLE and SPAR in the Gulf, erecting towers, while we set buoys in the Strait, and continued the survey.]

Wills Letter, cont'd:

We worked down into D&U Strait, examining by helicopter the radar reflectors we had erected the previous year as aids to navigation. All but one of the many set up in D&U Strait were in excellent condition. That one, on a low islet, had been overrun by ice, and wiped completely off the island. It had been erected on a knoll of the islet, approximately twenty-two feet above the normal water line, so you can see that the ice really does move, when it gets going!

In three days, we reached Cambridge Bay, to find the outer harbor of that place completely frozen. The ice was deteriorating... actually melting, and was quite rotten, although about six feet thick. All that was needed was for us to break it up, allowing the wind and tidal currents to carry it off. We still had to avoid the danger of becoming beset, although it was less here than it had been in Amundsen Gulf. In two days, we managed to open Cambridge Bay (the inner harbor was clear, just from melting) and then we were able to set buoys in this particularly hazardous inner-bay channel.

[HLW journal entry, Tuesday, 6 August 1957:

In Cambridge Bay outer harbor, off airstrip, lying to in ice, pending penetration to clear water to east of Simpson Rock. Cmdr. Treadwell, USN, ashore at CAM, had arranged a flight for CO and three officers, to Queen Maud Gulf. Weather was favorable, and at 0800, CO, Mr. Ralph Wills, of the Canadian Hydrographic Service, and Ens. Milton J. Stewart from BRAMBLE were ashore at the airstrip, meeting Cmdr. Treadwell.

We boarded an Anson, twin-motored training plane, now used by Pacific Western Airlines...which has the contract for the DEW Line Sites. The pilot came down, and we warmed up for takeoff. We had been cleared, and had started the final run down the strip, when suddenly the plane was braked to a stop, just at the end of the strip, and we turned back. I remember my reaction being "Golly, these arctic fliers certainly do taxi at a helluva high rate of speed!": ...thinking he had simply run down to the other end of the strip for a 090° takeoff. Instead, it had developed that he was unhappy with a sputtering starboard engine...we went back to the hanger, after aborting the takeoff...and waited while the mechanic found water in the gasoline strainer. They revved up the engines again, but found one still cutting out...diagnosis, magneto trouble...returned to the ship by helo.]

[HLW letter home, Friday, 9 August 1957 Cambridge Bay:

Next morning, I went ashore, and arranged liberty for all hands. We granted liberty to the crews in three, three-hour shifts...which was about all they needed anyway, since there is nothing to do except to walk around, and it's tough walking! Hudson's Bay store opened, but they hadn't yet been re-supplied, and had practically no stock. No furs nor art-works of the Eskimos....nothing...except stuff we could buy at Sears for 1/3 the price.

Now, on Friday noontime, we're getting under way to go out, on the way to Queen Maud Gulf. Spent this morning inspecting wheels, rudders, and bottoms of all three ships. We're in good shape except for some of our bilge keels being missing and our fathometer (one of several) being inoperative from ice damage. SPAR lost one blade from her propeller, BRAMBLE has a little of one bilge keel missing, but no other apparent damage.]

[HLW letter home, Monday 12 August 1957, near Hat Island:

TJ just came in, with some "rock tripe"...a lichen which is alleged to be palatable for starving arctic explorers, and for which he and I looked during our long walk the other day. We hadn't been able to find any, then, but the boy just came back with a sampling. I doubt we'll try eating it...Sir John Franklin's recipe is an involved one, requiring drying, boiling, drying, pounding, re-boiling, and then, properly I guess, vomiting! Don't let my last influence you...the stuff is fascinatingly pretty, and would make very smart earrings or brooches if its present, beautiful almost-black color doesn't change as it dries. Tim's working on a project to start manufacture! I can imagine a conversation between two ladies at a formal gathering: "My dear, what fascinating earrings! Are they hematite?" .."No, just some old ROCK TRIPE!"

Now 1:30 am next morning...we couldn't land anybody or anything on the island, because the beach was filled with ice, and we got caught in a current change which brought old, more-than-one-year winter ice down on us at about two knots. With shoal water all around us, we couldn't do more than find a large hunk which was grounded, and literally hide behind it until the current slacked. We were in 45 feet of water, hiding behind a floe which was AGROUND...so you see the kind of games we've played!]

Wills Letter, cont'd:

With that job finished, we proceeded on to the eastward, finding a fairly comfortable passage as far as Jenny Lind Island, in the Queen Maud Gulf. The Gulf itself, is throughout its whole extent extremely dangerous, in that is fraught with shoals, and subject to marked currents and wind, which bring ice down from McClintock Channel, through Victoria Strait. Here, in Queen Maud Channel, was our major task...erecting shore aids-to-navigation, and charting a good, usable channel across the gulf to Simpson Strait. We first set up the shore aids, in order that we'd better be able to do our survey work. These completed, we started the humdrum job of miles and miles of soundings, each recorded on our charts, and each obtained under adverse conditions of weather, with fog and moving ice making further complications.

[HLW journal entry Wednesday, 14 August 1957:

Anchored in Simpson Strait, in vicinity of Buoy #11... Got underway at 0800T to set buoys. Current setting to the east. Set Buoy #14, then, in maneuvering to recover old buoy in situation of 1957 buoy 14, backed into region shown on chart as relatively clear, and found STORIS set down bodily against shoal, touching on starboard side, ship heading north. Soundings were quickly taken all around the ship by UC4, which was in

the water and had its fathometer rigged and in operation. Simultaneously, soundings were taken from deck, and it was apparent that though the vessel might have slid up on some bottom, essentially, she was simply held against the shoal, touching about from frame 90 to possibly frame 140. Wheel and rudder were still operable, and boat soundings indicated that should we be able to exert enough power, it was probably feasible to roll the ship off the shoal (pivot it) by moving ahead, and having the current, which was running at approximately four knots, swing the bow to starboard, and into clear water...the channel. The "goat boat" was immediately put over the side, and sent to the port quarter, boat UC4 was sent to that position, with the boats to exert push against the ship at frames 126 and 140 respectively. Checks were made for damage to the hull by visual inspection from within and by sounding voids. No damage was apparent.

With both boats pushing full power, and using right full rudder, an effort was made to move the ship against the current, and across the current stream, pivoting her off the shoal. No motion was apparent in three minutes of trial, and since the tide was due to rise about 0.75 feet, and we calculated from previous observations made during the night's anchorage, the current would shift about 1100T, it was decided to rest in position, rather than endanger the hull by dragging it along the rock shoal with full easterly current holding it against the ledge. The engine was kept at 5 nitches ahead with right full rudder, to offer some resistance to further progress upon the shoal, in an athwartships direction, as the tide rose. Calculations showed max high tide at 1344T, and our horseback calculation was 1100T for current change. Preparations were made for discharging overboard some 24,000 gallons of water from the after tanks, and transfer of fuel to the forward tanks to press them up, was started. Computations of total weights of sinkers, buoys, and chains were made, to enable an estimate of how hard the vessel was aground by comparison of draft marks while grounded with draft marks computed from fuel, cargo, boat and miscellaneous lightening since last observed draft marks. Observed draft during grounding was Fwd 13'-7", Aft 14'-4". Last previously observed draft readings, made in Amundsen Gulf, at PIN One, 27 July, was Fwd 14'-7", Aft 14' -6".

With fuel, boats, buoyage etc, total of 15.6 tons was removed fwd, with a moment of approximately 1092 foot tons, or enough to lighten the ship 4.5" fwd. It appeared that the full height of tide would be sufficient to make easy the taking off of the ship, since the tide was expected to rise nearly nine inches, which would be more than enough to float the ship, provided it was possible to keep her from riding higher on the shoal by reason of the tidal current.

At 1045T, chips were thrown over to gauge the current strength, and it was found to be reduced greatly. By 1100T, the current had reversed, and was tending to free the vessel from the shoal. At 1110T, it was apparent that the vessel was only lightly grounded, and with both boats exerting pressure away from the shoal direction, full power was used with the main engine. The vessel slid easily into deep water ahead, pivoting somewhat on her bottom, to the starboard, and with full right rudder assisting in the turn, she moved

easily into the channel. A subsequent check of interior, and soundings showed no apparent damage from the grounding.]

[TJW letter home – undated:

The cargo boat is called the “goat boat” by everyone on the ship. It got its name when an admiral was on the ship and they were putting the cargo boat over. He saw everyone standing up in the boat as it went by, and he asked, “Why are all those sailors standing up?” When he was told there were no seats in the boat, he said, “Hunh! They look like a bunch of goats!” Ever since then, the sailors call the boat “The Goat Boat”. It has a square bow, fitted with a ramp which can be lowered onto the beach, like a small landing craft. Dad had a small cabin built on it last summer while he was up North to protect people from getting wet from spray when the boat is running in rough water. It has a diesel engine and it can travel about eight knots. The STORIS used it last summer for a survey boat and to be able to see the boat in the ice floes, they painted the cabin a fluorescent red flame color.]

[HLW journal entry Friday, 16 August 1957:

Anchored off Cam Two during the night, and at 0735T got underway to move inside the Inner Harbor, to go alongside GRAPPLE. SPAR, which had been alongside there for inspection of bottom and screw, had moved out, making room on GRAPPLE’s port side. Sent helicopters in for mail while the ship moved.

Experienced no difficulty entering the inner harbor, nor in making a turn directly under GRAPPLE’s stern to moor Chinese fashion, in order that her divers could work in vicinity of our fathometer transducer opening. Phillips did a very fine job in swinging the ship, using rudder only, with wind helping, swinging STORIS 180°, within 30 feet of GRAPPLE’s stern, and without making contact until he was ready to warp in alongside.

Water very shoal this area, so much silt (black, organic-matter mud) was brought up by screw current, but the maneuver was beautifully executed. As soon as we came alongside, their divers proceeded to inspect the job, then to affix the designed cover-plate, using the designed neoprene gasket. With the transducer hull opening blanked off, it will be possible for ship’s personnel to remove the damaged transducer, replacing it with one to be flown to CAM after being delivered by commercial air freight to POW.]

Wills Letter, cont’d:

By the middle of August, the supply ships caught up with us. STORIS had gone into Simpson Strait, and had reset the buoys necessary for safe transit of this narrow, constricted passage, where the currents sometimes reach four knots. STORIS escorted the supply ships which had to go still further east, through the strait, and then resumed survey work, until, after a few days, they returned, having safely delivered their cargoes. We escorted them back, through the strait, and saw them safely on their way toward Point Barrow and home. We were then on our own, hurrying to complete our survey of Queen Maud Gulf, in order that we could make our attempt at penetrating to the eastward.

We still had ice-recco support... not only from our own Navy planes, but from a squadron of Canadian aircraft. In the two summers previous, we had ourselves penetrated as far as Shepherd Bay, which represented the easternmost limit of our "beat"...but we still had to go through the uncharted, and except for two small vessels, untravelled waters of Rae Strait and James Ross Strait. It was in James Ross Strait that Roald Amundsen, in his "GJOA" (which you can see in Golden Gate Park, in San Francisco) and Inspector Larsen, in the RCMP Vessel "ST. ROCH", went aground. Their vessels drew 13' and 10', respectively, and we anticipated we might have some difficulty finding a deep-water passage, or in fact, might have trouble getting through ourselves....

Our ice recco support kept us advised of conditions, and the pattern seemed to follow the recorded observations of the two previous summers...the ice to the north of Matty Island, in James Ross Strait, was heavy, very concentrated, and would without doubt be influenced by wind to the extent that we might need a south-easterly storm to blow the ice clear of the west side of Boothia Peninsula, in order to make the run from Matty Island up to the vicinity of Bellot Strait...which separated Somerset Island from Boothia Peninsula...and in which the Canadian Arctic Patrol Ship LABRADOR was doing survey work.

Amundsen, in GJOA, had entered from the east, via Lancaster Sound and Peel Sound, coming down on the west side of Somerset Island. After much struggle, he got to the south of Matty Island, and there he wintered, in a little cove he named Gjoahaven on the southeast side of King William Island. The next summer he was able to work his way as far west as Herschel Island on the west side of Mackenzie Bay, where he had to winter a second time. The next summer, in 1906, he was able to round Point Barrow, and work down to Nome. He had made many meteorological observations and magnetic observations, but he had recorded practically no hydrographic information.

Larsen, in ST. ROCH in the summer of 1941 got across the central Arctic, following the reverse route, until he managed to get north of Matty Island, and there he had to winter in Pasley Bay, on the west shore of Boothia Peninsula. He had, in common with Amundsen, very poor charts, with no hydrographic information on them. However, he had plotted his route, as best he was able, and had indicated some water depths. We had that information, but it has long since been considered of dubious value in the respect that his EXACT route, navigationally speaking, was in doubt.

To all intents and purposes, we were in virgin territory, with the assigned task of conducting a reconnaissance survey which would be of future value, and of erecting aids to navigation which would facilitate use of the charts we were making by ships to follow in later years.

[HLW letter home, Sunday 18 August 1957:

The transport group has gone as far east as it will go, and has come back here to this site...We led them through Simpson Strait both ways, and they have only

one more stop to make after this, then they're through and will go back to Pt. Barrow. I conclude that further to the west, things are going smoothly enough, and that the operation will be concluded possibly even before it was last year...you know these Navy characters, gotta beat the guy who did it last time! Good thing Navy will not have to come this far next year, 'cause ultimately they'd run the thing down to the point where it couldn't be reduced any more!

We contemplate being released to the East Command...TF 6 instead of Task Force Five...on Wednesday or thereabouts. Got a message today, indicating the Admiral's intention to do so. Then we'll continue our survey work while the transport groups go West...and just wait for the conditions to improve. Ice conditions between here and Bellot Strait improve each day, from the ice recco reports, which we get regularly...and the prognosis is good. We plan to keep the TU (task unit) together. I have so recommended to the Admiral, and we'll be much surprised if he doesn't go along with that recommendation. SPAR is suffering considerable un-rest, over the possibility they'll not be permitted to try with the rest of us. Actually, they have one blade missing from their propeller, but Angus MacWood (Editor's Note: Dad's nickname for himself) isn't likely to attempt the day's run from shelter up to Bellot Strait unless conditions are so wide open that we could even get there in a rowboat!]

Wills Letter, cont'd:

As soon as the Supply Elements of the Western Force had cleared Point Barrow, and were on their happy ways back to the States, we were released by our Task Group Commander, and we changed to the operational control of the Eastern Force, moving under the immediate control of LABRADOR, which was Task Group Commander for Bellot Strait Survey. Our task was to survey the waters of Rae Strait, James Ross Strait, a passage in Franklin Strait, and the western approaches to Bellot Strait. This we were able successfully to do, though again we were hampered by tidal currents bringing much winter ice down through Ross Strait.

[HLW journal entry Friday, 23 August, 1957:

Anchored, east of ETA Island, in the eastern approaches to Simpson Strait. ...Took off at 0445 in UP73, piloted by Lt.(jg) C.J. Fenton, USN. We had hardly passed ETA Island when I noticed that Fenton was perturbed about the aircraft. It turned out that oil pressure was low, down to 35 psi, and 40 psi is supposed to be minimum. Fenton called the ship, directing that a mechanic with tools should take off with UP72, joining us on the beach. We made a safe landing at CAM2, and went on up with the mail for coffee. 72 came in about fifteen minutes later, having brought Bowman. It then returned to the ship with incoming mail, and to ferry in the other two officers who were making the recco flight. We had set up for a 0600 takeoff, but since the ferry facility was reduced to one helo, it was slightly after seven before all were on the beach, and aboard 239. We got off before fog shut down, and proceeded along the route the ships will take to ROSS STRAIT. Ice free waters except for incidental drift patches northeast of Matheson Point. Went up the east side of Ross Strait, eastward of Matty Island. The strait was reasonably clear east of Matty Island, and some of the shoals previously reported could be seen. My

impression is that we CAN find a deep channel through there, however. The north end of the strait between Matty Island and the eastern shore was partially blocked by close, broken ice. There were some tongues, but all of it looked passable. From Oscar Bay up, it showed the development of a shore lead, and by the time we reached Pt. Alexander, a five mile lead, next to the beach, was evident. This lead widened as we flew north, until at the Tasmania Islands, it was ten miles wide, and as we went north it became even wider, being fifteen miles wide, in the latitude of Cape Swinburne. It held all the way to Bellot Strait and beyond, as far as the eye could see. Western end of Bellot Strait was clear, for a radius of 15 miles.

We flew through the straits. Found it cluttered with broken ice, at Halfway Island, and again near the eastern end. None of the cluttering would have stopped the Survey Unit from passing through. I alerted the pilot to be on the lookout for LABRADOR, and sure enough, there she was, anchored just west of Long Island. We orbited, and called her by radio. I talked with Captain Pullen, learned that they had completed all the triangulation, and were running sounding lines. Upon our return to Pt. Alexander, found the ice had moved an additional two miles offshore. This with a NORTH WIND! (The old Corielli rule: 40° to the right of the wind.)

From Wellington Channel we flew back to CAM2 direct, landing just before noon. Had a delicious lunch at the Site, meeting Mr. L. E. Blanchard, Station Chief. He kindly lent me three hundred tea-bags...our supply in the Cabin is exhausted. No way in which I could pay for them, so I'll have to tow his yacht off a reef sometime!]

[HLW Journal entry Sunday, 25 August, 1957:

Had to shift during the early morning hours, because of impending ice-floe coming down upon the ship. Weighed anchor, and moved out of the way of the ice, then drifted in vicinity of SPAR, which had not had to move. At 0720, SPAR's boat brought to STORIS our men and gear recovered from the tidal observation post on ETA Island. STORIS proceeded with survey.

At 0837, having come upon an extensive shoal area, previously indicated on the chart by "Discolored water", we anchored in the vicinity, for the express purpose of examining the shoal by sound-boat. Visibility was failing fast, and we were fog-bound by the time we anchored. Fixed ship's position accurately by radar, and then used radar control on boat, to conduct shoal examination.

After 1300, with boat still examining shoal, and with visibility down to 400 yds, rigged for diving. A very practical plywood panel stage was rigged under the ship, using four suspensions lines, splayed forward and aft of the stage from the sheer-line of the ship, and then a divers' landing stage, improvised, using a large pallet, suspended from a pallet sling on the whip hook. A shot of chain was placed as ballast, between the upper and lower platforms of the pallet. Steadying lines were used to keep the platform stable, controlled from the deck, and then the platform was lowered to a position approximately three-and-one-half feet below the water surface. It served admirably for the divers,

permitting them to test their suits prior to stepping off, and affording them ready access upon return from a dive. We experienced about half-a-knot of current, from ahead, since the ship was current-ridden at anchor. A descending line had been rigged from the landing stage to the working platform, to assist the divers.

Lt. Cmdr. Robert C. Phillips and Lt.(jg) Richard Nielsen were the first to dive. They tested their rigs, then went down to commence the work. Had difficulty in keeping the pipe extension on the wrench handle, so they returned to the surface to get the thing lashed. They returned and in about twenty minutes, had removed the cover plate, dropping only one cap-screw in the operation, and had come up with the gasket and their tools. They had left the coverplate on the platform. Nielsen had had trouble keeping his suit sealed in vicinity of his beard, and was practically soaked from the waist up...but he stayed with the job.

I was about to order operations secured, but Phillips requested that the other two divers who were ready be permitted to put the plugs in the tapped-holes of the cover-plate bolt-circle. Ens. Richard I. Rybacki and Robert Segebrecht, SA, wished to dive for the experience, in addition to getting the bolt-holes plugged. Segebrecht experienced some difficulty upon initially submerging, in getting his ears adjusted to the pressure experienced. He returned to the surface, leaving Rybacki working on the plugs, and conferred with Lt. Cmdr. Phillips. Then he returned to the stage, with Rybacki, and they managed to get two of the plugs in place. Segebrecht was having discomfort with his ears, in addition to nervousness increased by the fact that the water was cold, his breathing was difficult...he was literally gasping...and he shortly had to fall back on his reserve air supply. Rybacki had a small leak in his suit, which allowed one foot to get wet, and with the 34° water temperature, he soon had to surface to be taken onboard.

I ordered operations secured when both had come up, and the gear was stowed.

When first the cover was slacked, some seepage was noticed from between the newly installed transducer and the hull-plating. This was stopped by the DCs taking-up on the cap screws holding the transducer in place. When the leakage was stopped, and the cover removed, the fathometer was tested and adjusted. Operation was extremely satisfactory. It really appears to be better than prior to the damage.]

[HLW journal entry Friday, 30 August 1957:

About 0005T, Mr. Myers called me, reporting that a large ice-floe, seemingly unbroken, was fast working down upon our anchorage to the NE of Blenky Island, anchored to 60 fms starboard chain.. We heaved around posthaste, though we had to use power to put the ship's head into the ice before we were at short stay. As the ice-floe came close aboard, it became apparent that it was in fact broken ice, but very closely packed, to 10/10ths within the floe. We had no trouble entering the edge, and holding position until the anchor was aweigh. We then turned, and set a generally southeasterly course 120 - 135°, working out of the edge, and working ahead of the ice, endeavoring to get down to the south of Blenky Island, to our anchorage of first approach to the tight straits.

We worked down at 4 notches, passing through depths up to 60' under, but ultimately became stymied by a barrier which indicated 20' under, and no easement ahead. We had by this time gained a position 2900 yards ahead of the ice. It was not a comfortable spot to be searching for deep water, with the ice coming down upon us from astern, and shoal water ahead. A check of the current-times-of-change indicated that we might shortly expect a change with the current becoming northwesterly. This would stop the ice, and would allow us to search ahead with an opposing current. We worked up to a point within 700 yds of the previous anchorage and then hove-to, drifting with the ice. Drift was so slight, that for twenty minutes 0210-0230T, no drift was apparent from radar fixes, but by means of a drift-lead, we determined the drift still to be approximately 150°T at a very slight rate. It seemed that the current was about to change, and that we were in the slackening southerly current still, with change imminent. It seemed that we had proceeded hardly 3/4th of a mile INTO the ice, when we returned to the spot 700 yds from our anchorage.

During the remainder of the morning watch, we worked toward the southeast, coming slightly further to the east than we should have. I had told the navigator to transfer from the original chart we'd used in approaching Blenky Island the track line...to the end that it could be used in reciprocal to make our exit to deep water. At about 0700T, Mr. Solomon called me, indicating that we had scarcely more than eight feet under, and that he desired my presence on the bridge. He worked nicely, searching for deeper water by using the sea-scannar, but there seemed to be no way off the spot we were in, with about ten feet under. I assumed the conn, ultimately, and anchored.

We put No. 4 boat over, with a sounding crew, and explored the region around the ship for a way out. Current setting approximately 120°T, at 1/2 knot, increasing to 1 knot by 0900. Boat found deeper water in direction of 125°T, though it is my desire to make more westerly, generally in the direction of 210-220°. At 0945T, we're preparing to launch boat No. 2, to be used with No. 4, to lead us ahead, to get back into deeper water.]

[HLW journal entry Saturday, 31 August 1957:

Underway at 0800T, enroute northward in Ross Strait, to resume survey, and to erect additional radar reflector towers as permanent aids to navigation. Weather much improved. Wind velocity reduced somewhat...good deal of ice in the strait, but it stays well over toward the Matty Island side, giving us room to work. Shouldn't be surprised if the current is slightly stronger on that side, in spite of it being somewhat on the inside of the curved path of the strait. At any rate, there appears to be a definite correlation of current and ice-floe. Might be the old Italian's theorem is taking over, and that with northerly winds the ice HAS to hug that westerly shore.

...Used relief crews as needed. Ice was continuously along the western side of the strait, prohibiting the landing of a tower erection crew. Worked northward beyond point we had attained previously, and then at 1129T, anchored south of 35' shoal (5 1/2 mi N. of

Blenky) found by boat, in order to relieve boat's crew, and to permit more extensive investigation of the shoal. Current had shifted to the south, with ice 4,000 yards to the north, so it appeared expedient to ascertain all we could of that shoal spot by boat investigation, controlled from the ship, until ice forced us to move south. At 1257, with ice close aboard, we got underway, putting boat No. 4 ahead of ship on southerly reach, and retreated ahead of the ice, adding another line. Since current was now favorable, we launched boat No. 2 to work with No. 4, in sweeping for good water ahead of the ship. At 1532T, with current shift, and with conditions favorable for a northerly run...good visibility, smooth waters, warm sun and no ice in immediate vicinity, we came about, setting a course of 331°T, resuming our search northerly for a clear passage past Matty Island.

...By 1920, had reached a point west of Oscar Bay, and encountered shoaling, with progress impeded by ice to the west. Considered setting a tower on island off entrance to Oscar Bay, but change of current to south, and impending darkness, together with continuation of favorable conditions for boat recco work, and need to contact other units of the Survey Unit prior to their rejoining and entering the Strait (to give them our charts) caused decision to proceed south, completing another line of soundings, and to escape entrapment by influx of ice from the north. Current is with us, certainly not the best way to approach shoals, but with the conditions as they are, and with a boat ahead, it seems the wise thing to do.

Changed boat crew at 2027T, and resumed southerly trek. About 2200, transducer in boat No. 4 failed, and transducer from No 2 was substituted. Transducer rod (pipe extension from boat's side, locating transducer head beneath waterline) was bent by ice.

Have noticed that whenever I approach the bridge, shoaler water is found, so I shall be true to my mystical instincts, and stay off the bridge as much as I can! Watch officers are doing a very fine job of conning the ship, and are extremely competent.]

[HLW journal entry Sunday, 1 September 1957:

...At 0830, having returned slightly north of the island off Maria de Gloria Point, we launched boat No. 4 with a tower erection crew and materials, to have an easy down-current trip into the island (called ALT on our boat sheets). This tower should facilitate transit of the strait by anyone and should make easier our survey of the area. It will enable the two shorelines to be tied together by triangulation, and if we're able to get a third tower, north of the two presently on the Matty Island side, the one on ALT, together with one we'll put in the vicinity of the West side of Oscar Bay, will make a total of five which should enable good triangulation between the two shorelines.

...We have anchored at 0910, in 41' water, planning to use the survey boat which is now returning after having landed the tower party. Using ship control by radar, the boat will erase a pronounced holiday in the soundings. Subsequent plotting of the boat work indicated very satisfactory performance. The boat work fitted in nicely with previous soundings, and filled in the holidays.

At 1756T, got underway, having finished boat soundings in area, and now proceeding down to rejoin BRAMBLE and SPAR. Holding BRAMBLE visually. SPAR is approximately in position of last night's anchorage for STORIS, doing an oceanographic station. Anchored at 69-84.8N 95-03.2W, and took BRAMBLE alongside for the night. SPAR came alongside BRAMBLE at 1952T. CO's from BRAMBLE and SPAR came aboard, bringing us up to date on their happenings, and discussing work for the next day.]

[HLW Journal entry, Monday, 2 September, 1957:

...Ships will proceed up Ross Strait in line, at 500 yard interval, STORIS guide on left flanks with BRAMBLE, then SPAR. When off Cape Maria de Gloria, will launch sound-boats, to proceed ahead of the three ships, each ship furnishing its own boat. As we work north, if we can approach Oscar Bay, we'll endeavor to scout ahead by helo, to ascertain if we can break through, out of the straits, then, if possible, we'll make one additional pass to the south, and another to the north, making a track 1½ miles wide, if water depths permit. ...Message from LABRADOR indicates she is headed south...to investigate ice conditions north of Matty Island.

Just as we were getting along, in thick fog, preparing all three ships' boats for use, medical officer reported to me that the diagnosis on the BRAMBLE patient who had been brought over just before we sailed, was appendicitis. We wanted to get close to LABRADOR, in order that their medical officer could assist if Dr. Ecklund had to operate. ...left BRAMBLE and SPAR anchored west of Cape Maria de Gloria in the fog, and felt our way north through that shoal section which we hadn't previously scouted out...heading parallel to our old track at the turn-off into the vicinity of Oscar Bay, and cutting slightly northwest. We found a pronounced shoal. ...we had only ten feet under, and the boat, just ahead, was down to twenty-one feet total...we turned left, attempting to get around the shoal by flanking it on that side. We went nearly three fourths of a mile, and found no appreciable gain...the boat was on the starboard bow, getting twenty-three to twenty five feet total, and suddenly we had only twelve feet under. I called the boat to run across our bow, and by so doing, he found fifty feet on our port side. We doubled back, crossing under our own position of first encountering the shoal, and then proceeded up the way we had gone the day previously, except that we bore left, going to the NW as soon as we had passed the shoal. Visibility began to improve considerably about that time. In addition, Dr. Ecklund came up to announce that his patient was much improved, and that no emergency existed. I sent a later message to LABRADOR, calling off the emergency, and then directed BRAMBLE and SPAR, in view of the increased visibility, to come along behind us. Gave them our track, and directed them to run lines each side of it, to afford maximum coverage of the area.]

Wills Letter, cont'd:

We completed the survey and erected the salient aids-to-navigation...and then on 3 September, joined with LABRADOR, in Franklin Strait, just off Pasley Bay, where ST ROCH had wintered in 1941-42. In company with LABRADOR, we proceeded north to

the west end of Bellot Strait, and there made a survey of the western approaches to that strait.

[HLW Journal entry, Tuesday, 3 September 1957:

...At 0407T, sighted HMCS LABRADOR off port side. 0615T, moored alongside LABRADOR. Called on Capt. Thomas C. Pullen, RCN, Commanding LABRADOR, and Commander, TG 6.5. Uniform, upon inquiry, was "as'is". Quite surprised to be piped aboard, and to be met with a battery of flash-cameras. Crews visited during our stay alongside. Seemed a very friendly group. Met Cmdr. Law, XO of LABRADOR, who had done some effective watercolors of the north...Cmdr. Focht (CTF 6 PIO) came onboard, talking first with Lt. Cmdr. Phillips, and then stopping in cabin to see me. Indicated that he had instructions to join STORIS, in order to get effective PIO coverage of TU 6.5.1 during its return to States. I pointed out the absence of accommodations. Later Capt. Cuthbert volunteered to transfer to SPAR or BRAMBLE, in order to accommodate Cmdr. Focht. Undetermined yet as to just what shall be done. Cmdr. Focht wants to have three men with him...his photo team plus lab and office facilities.]

[HLW Journal entry, Wednesday, 4 September 1957:

After passing through a belt of ice, took two main engines off line at 0043Q, and reduced standard speed to approximately 7 knots.

...at 0720 messenger reported that the view directly through Bellot Strait, with eastern sky lighted up, and all the rest overcast and snowy, was worth recording by picture. Made some exposures, though the sound of the shutter was not too encouraging...Don't know if we're getting any pictures, Tim and I, with this old Argus.

...LABRADOR proceeded on through the Strait. We entered the west end to find shelter for receiving boat from BRAMBLE with field chart (boat sheet) upon which to do our sounding record. Sent LCPR off to land two men to join the Canadian tidal observation party, and to bring back a couple of their men if they so desire, for a breather. BRAMBLE's boat is still alongside, with hydro people and navigators conferring about survey area. Sound lines are to be three-to-the inch on the chart, (about 800 yds) and are to run east and west...a most uncomfortable course.

Boat returned, after successfully landing two STORIS men and gear at tidal observation post on SW tip land at entrance to False Strait. Retrieved two Canadian Navy men, to be brought aboard for showers, meals, and relaxation, while our men took over their position of the tide-observation job. The Canadians are R. Cunningham and J. Siggers, who had been living on canned stew for ten days, during their sojourn on the beach, and who were met with a meal of STEW in STORIS!.

We left Bernard Merrifield, Jr., RM2, and Phillip Jones, SA, on the beach to continue the tidal observations. Boat was hoisted in by 1415, and we commenced survey of our area of the Strait approaches.

All went merrily until about 1935, when water shoaled rapidly, due to a very precipitous pinnacle. OOD backed full, immediately, and while ship was coming to dead-in-water state, depth shoaled from over 100' under to 11' under. We dropped the starboard anchor immediately, and veered to 30 fms on deck. In the short time required for the ship to fall down wind on the chain, and even before the chain was stretched out, depth increased rapidly to 35' then 70' then 90' under.

We lay to anchor a few moments, studying the contour of the bottom by means of the SeaScannar...and found the knob to be then on our port bow, with deep water behind and on the starboard hand. Navigator had previously mentioned the possibility of extension of shoaling in vicinity of the little islands, labeled "Alice" on the boat sheet, so the OOD had been particularly careful. In addition, he had been royally chewed out thirty hours before for continuing to approach shoal water found by the scouting boat, northeast of Matty Island. As a result, he handled this situation very well.

We heaved up the anchor, drifted downwind slightly, turned, and continued our survey on a reciprocal course. During the night, the remaining holidays in the area were sounded out.]

[HLW Journal entry, Thursday, 5 September 1957:

...entered False Straits...anchored, approximately two thirds the way from the mouth, in 110' water. Ran sounding lines around the ship, and then the remainder of the outside of the harbor, using the No. 4 boat, and ship control. Party ashore, using the Goat Boat at 1313Q, to erect a cairn, and to leave crew-list, and brief statement Cairn party was:

*Capt. James Cuthbert, DOT
Cmdr. T. K. Treadwell, USN, Hydrographic Office
Mr. Ralph Wills, Canadian Hydrographic Service
Master Timothy John Wood
Cmdr. H. L. Wood, USCG, Commanding STORIS*

Cairn was a small one, erected on the north shore of False Strait, in a spot which is not particularly the best for a cairn, but which had ample material for building, with some considerable effort. The message was placed in a 1 quart mayonnaise jar, in duplicate, and with a stamped, cacheted envelope, by means of which the duplicate could be returned to... CG Headquarters, Washington D.C., with whatever message the finder desired put in the letter! In addition, a crew list for each of the three ships was placed therein.

...LABRADOR came 'round the bend at 1800Q and moored alongside STORIS about 1900Q. BRAMBLE and SPAR had already moored, and all was quiet. Wind blew thirty-five knots directly into the strait, so we had moved somewhat more off the lee bulge we were on, and had re-anchored in 120' water, to 90fms starboard chain, and then had dropped the port anchor just ahead of the ship, veering on it until we dropped back and

evened the strain on both. Wind remained constant for the first hour or so, then began to subside somewhat, and veered some to the northwest. This was a bit easier, and the ships rode comfortably all night. By morning, we had half a cross in our hawse, what with the wind coming 'round 145°', but before the ships got underway, the wind had come back to the west, and the hawse was clear.

Commanding officers and Executive officers of all three ships, Capt. Cuthbert, Mr. Wills, Mr. Marshall, S/L Alexander, were invited to a Mess Dinner, by the Commanding Officer and Wardroom Officers of HMCS LABRADOR. We went over at 1930 for a drink before dinner, and at 2000 went into the wardroom for a most delightful dinner.

All assembled in the cabin of STORIS before going over. Uniform for CG Personnel I had set as Blue, baker. Capt. Cuthbert wore the uniform of a Captain in DOT, S/L Alexander wore his RCAF Blue, and Cmdr. Treadwell, who had no blues with him, wore Khaki, dress. The civilians wore civilian clothing, and a very respectable group it made. The Canadians wore Service with bow tie, and looked smart, as usual.

We were met at the gangway by Cmdr. Anthony Law, RCN, Executive Officer, and escorted into the anteroom, introduced to those present and drinks were served. The anteroom is off the wardroom, and has their bar facility. It is a most attractive room, about 15' X 24', with drawing room furniture, attractive table lamps on the end tables beside the divans, and an artificial fireplace. Over the mantle is a painting by Cmdr. Law, in oil, but done in the direct, even-cover technique of water color or gouache...almost poster-ish in its even tones...but beautifully composed, and beautifully executed.

We had all been served drinks, and were busily engaged in chatting and in making ourselves acquainted with their ship's personnel when Capt. Pullen came in. He was introduced to all of the guests, and then engaged in small talk until it was time to go in to dinner.

As senior of the guests, I was taken in first by the host, Cmdr. Law, who is president of the mess. I sat at his right, with Capt. Pullen to my right, and Lt. Cowing sat at his right. On Cmdr. Law's left was Lt. Cmdr. Carter, and on his left, Mr. Charles Marshall. That was the head-table group. The tables were beautiful – of highly polished and varnished cherry, with place setting and crystal for formal serving. Place mats were round paper doilies. The tables were lighted by tapers, about four to a table, with only a few other soft lamps furnishing general illumination. The guests at the head table sat facing the remaining places, with Cowing and Marshall at the ends of the table. The remaining tables had to be occupied on both sides and both ends, in order to accommodate all the people. Thus, some of the diners had their backs to the head table, but under the circumstances, it was the most that could be done. The menu was set up in little teak blocks, and the sheet-head had been done by hand, in water color, by Cmdr. Law. I was presented with the one that was nearest me. It is a delightful sketch of LABRADOR, followed by the three Coast Guard Ships, with several Eskimos in the foreground watching the passage of the ships.

When all had been seated, the Mess President banged his gavel, (an avik oosik puk) and asked the Chaplain to ask a blessing. Chaplain Bell asked a very simple blessing, and then the serving commenced. The meal was beautifully served, well cooked, and very tasty. It was served in courses, and because of the large number, each table ate as soon as all at that table were served. The food was HOT and good. Sherry was poured with the first course, and burgundy with the entrée. Chaplain said grace when we had finished eating.

After the meal, port was passed, starting with the guest to the left of the host, and being passed from diner to diner, around the table until it returned to the host, who poured last for himself. He then rapped his gavel, and proposed a toast to the President of the United States. I responded with a toast to Her Majesty, the Queen. Then Cmdr. Law made a few remarks about the activities of the ships, and introduced me. After my remarks, he introduced Capt. Pullen, and then in order, Mr. Marshall, Capt. Cuthbert, and S/L Alexander. After the speeches, we adjourned to the anteroom, for small-talk and liqueurs.

The evening was a delightful one. The Canadian Navy put on a good show, and the United States Forces were well represented. We were proud of the fact that we had been able to get through to join LABRADOR, and of the way in which all the forces had worked together to achieve that end.

About twelve-thirty, I begged to leave, and that generally broke up the party. Capt. Pullen asked me to go up to his "cubby" to sign his guest book... We had a cup of coffee, exchanged insults for a little and at 1:00 am I took leave. He escorted me to the brow, piped the side, and away I came.]

Wills Letter, cont'd:

On six September, the four ships, led by LABRADOR at the head of the column, transited Bellot Strait, which LABRADOR had surveyed during the preceding week, and arrived at Fort Ross, an abandoned Hudson's Bay Trading Post at the east end of Bellot Strait. Our work was finished for the summer.

[HLW Journal Entry, Friday, 6 September 1957:

Anchored in False Straits, Somerset Island, NWT. 0900Q, LABRADOR departed from alongside our port side, and SPAR, the BRAMBLE, from alongside our starboard side. We heaved 'round, got underway, and took station astern of LABRADOR, while BRAMBLE then SPAR fell in behind us. We worked around Pemmican Rock, and then started through the Straits de Bellot at about 1130Q. Had a quiet, uneventful trip through the straits, following LABRADOR...anchoring to the SW of Port Kennedy, just west of Foxe Islands.

We put over our No. 4 boat, with a party to go ashore hunting stone jars from “Rum-Jar Cove” reported by Mrs. Heslop, who had been married to Mr. Heslop, the factor of the Hudson’s Bay Post here at Fort Ross, at the eastern end of Bellot Strait, for the last two years of its operation. The party consisted of Capt. Cuthbert, Cmdr. Treadwell, Mr. Ralph Wills, and Tim Wood. I couldn’t go because of lameness in my left hip resulting from cairn-building the day before...

The boat lay off after putting the party ashore, and then picked up the COs of SPAR and BRAMBLE, S/L Alexander and some photographers, taking them in to Fort Ross. Mr. Phillips went in to the Fort by helo, picked up the document which we were to enclose in the Cairn, that of McClintock, and after I had signed it, returned with it to Capt. Pullen, who put it in the cairn.

The boat at Fort Ross was moved twice, because of the falling water with the ebbing tide, but finally it got hung-up, and could not be taken off until about 2100. The scrounging party, meanwhile, was marooned ashore, and had quite a time trying to stay warm! Tim got a fire started, of moss and ground willow, with a lot of smoke, but not much heat. He had some candy bars, which he shared with the others, and they spent a rather frustrated time, awaiting the return of a boat to lift them off the beach! Tim got some jar-pieces, and a caribou antler...

We finally dispatched the LCVP from SPAR, which was outboard, because when our LCPR got off the beach, it was without adequate rudder control to make a beach landing...and was directed to return to STORIS. All were on board by 2200, and we got underway for departing. We went out beyond Long Island, transferred Mr. Wills to LABRADOR, where he will remain doing Hydrographic work until that ship returns to Montreal.]

Wills Letter, cont’d:

On 7 September, we were released by LABRADOR, and the three smaller ships proceeded north through Prince Regent Inlet to Lancaster Sound.

[HLW Journal entry, Saturday, 7 September 1957:

Off Fury Beach, I flew in UP72, observing ice which was getting rather concentrated. I gave the ship a recommended track, then flew in to the beach, landed, and with George Woody, the pilot, gathered a few nails as souvenirs of the Fury, enough for each man in the crew to have one. Got quite a boot out of standing on Fury Beach...of which I first heard in fall of 1940, while in the Skipshavn, at Godthaab, Greenland, at which place the Master of Hudson’s Bay Ship “NASCOPIE” had given then-Commander Ed H. Smith, USCG, a deadeye from the same spot.]

Wills Letter, cont’d:

We made a quick diversionary trip to Resolute Bay... a joint Canadian-U.S. weather station and air-strip, where we picked up mail which had been flown in for us.

[HLW Journal entry, Sunday, 8 September 1957:

Continued on toward Resolute Bay, for the express purpose of picking up mail which had been lifted from CAM for us by elements from CTU 5.0.1, the Canadian Ice Recco planes...Arrived within five miles of the Bay entrance about 1600Q, and landed our outgoing mail by helo. Had previously taken on board the outgoing mail from BRAMBLE and SPAR, in order that our postal clerk could get the stuff processed and bagged in time to put it in the helos without delay. We lay-to, off the site while the helos were ashore, and Scott Alexander and Mr. Mikel came over from SPAR for a visit.

Quite a hassle about the mail, in that we found that some mail we had put ashore at CAM 2 had been brought back to us, in addition to some which had been as far as FAIRBANKS (but with Canadian postage affixed, having been included with US mail by the site people, we must presume) and then RETURNED to us by the rock-headed Navy postal clerk who was the minister plenipotentiary at that place. The goon sent it back, instead of getting it to a Canadian post office as expeditiously as possible. Wrote a special letter to CTG 5.1 about the situation. It was the second time it had happened to us...and resulted from a situation beyond our control. Hope it won't happen again!

Got underway from the vicinity of Resolute Bay about 1800Q, heading back through Barrow Strait, to Lancaster Sound, and home. Just west of Resolute Bay, we sighted (from our position off the Bay entrance) what appeared to be the polar ice pack in Melville Sound. We decided not to try going back to the west via the northern route!]

[HLW Journal entry, Monday, 9 September 1957:

Relatively little ice. Isolated bergs, some quite impressively large, but no pack stuff. A few small belts we had to traverse, but nothing of consequence. It's a mighty pleasant sensation to cruise along with 150-200 fathoms of water under the keel, after spending the summer looking for a few feet clearance! Diverted course a few miles once during the morning to permit the crew to photograph one particularly photogenic one at relatively close range. It got to be old-hat to them, in very short order!

As we came abreast upper end of Navy Board Inlet, weather conditions within the inlet seemed uncertain because of the heavy, low cumulus cloud cover, and since we had had some snow squalls, it was deemed advisable not to go through the inlet, but to continue on, having apparently better weather, and at the same time allowing SPAR actually to complete all of her ocean stations, the last of which was at the Eastern end of Lancaster Sound.]

[HLW Journal entry, Tuesday, 10 September 1957:

Underway in Lancaster Sound, heading for Baffin Bay and the last (#54) Ocean Station. At 0210Q, stopped, for SPAR's oceanographic swansong, and then set course 150°T, down Baffin Bay for Argentia and home!]

Wills Letter, cont'd:

We then made an uneventful passage through Lancaster Sound and down Baffin Bay and Davis Strait to Argentia, in Newfoundland, where we stopped for fresh foodstuffs and fuel.

[HLW Journal entry, Thursday, 12 September 1957:

Underway in Baffin Bay, enroute Argentia. Weather fine, sea conditions excellent...unlike my recollections of Baffin Bay in 1940 and other times!]

1235Q, crossed Arctic Circle, Longitude 60°-35'W.]

[HLW Journal entry, Friday, 13 September 1957:

Radar inoperative, so stationed BRAMBLE and SPAR on lines of bearing 135° and 225° relative, to enable them to serve as radar guards for us, in reduced visibility. Technicians worked much of the night, and by morning radar was again operative. Resumed column formation at 0955Q, 14th.]

Wills Letter, cont'd:

Just before we got to Argentia, we were diverted to search for survivors of a ditched B-47 aircraft, in Cabot Strait, but we reached Argentia on 19 September.

[HLW Journal entry, Tuesday, 17 September 1957:

Underway, North Atlantic Ocean, running down past St. Johns, Nfld., enroute Argentia. During lunch, man came down, stating BRAMBLE had intercepted msg indicating plane crew had ditched from an aircraft about 180 miles ahead of our position. At the time, we were heading that direction, on the leg across under the south side of the Avalon Peninsula, in pea soup fog, making ten knots. I did not consider it advisable to increase speed, so we continued as we were. Advised TORBAY RCC our position, course, and speed. Argentia Control, on 2716, did not assume control, but did act as clearing house for info, though unsatisfactorily. RCMP Vessel IRVINE about 75 miles from the reported position of the aircraft, was the nearest ship.

USS PREVAIL was on the west side of Placentia Bay, and proceeded at 15 knots. A third stranger, USNS GEORGE W. E. BOYCE, is in the area, too. Three aircraft have been searching. The first information we had relative to survivors was a message from RCMP IRVINE, to the effect that two men had been seen in individual life rafts. A later message, received by interception between "Rescue 36", an aircraft orbiting the scene, indicated

that one man only had been picked up by an Air Force SAR SA-16 (Albatross) which had landed, but was unable to take off. He planned to taxi in to Port Au Basque, but was experiencing some considerable difficulty. He wanted to be hoisted. IRVINE is a small vessel of 153', and could not hoist him in. BOYCE, a victory ship with a thirty-ton boom, anticipates he'll be able to do the hoist, but is now still four and one half hours away, at 1800Q. We have been requested by TORBAY, through Argentia AirDet to continue on to take up the search for the still missing two airmen. We still have dense fog, and are continuing at 10 knots. We'll increase speed upon reaching clear visibility...or at least, some improvement. Visibility at the scene is reported to be approximately two miles. At 2020Q, increased speed to 12.5 knots in view of increased visibility. Departed from column formation, with BRAMBLE designated as guide for BRAMBLE and SPAR. STORIS proceeding on at best speed, with other two making speed within limitations of SPAR's damaged propeller.]

[HLW Journal entry, Wednesday, 18 September 1957:

Underway, searching for downed AF B-47 aircraft survivors. During the mid-watch, encountered a sailing craft which took right of way over STORIS, necessitating our sharp diversion to port to pass inside of him. He was on a port tack, close-hauled, and exhibited only a starboard light to us. We hadn't seen a sailing craft for some time, and upon putting a searchlight upon him, after he passed clear, we were somewhat surprised to see him under sail. At 0701, we commenced searching a square. Shortly after 0900, we got two helicopters airborne in order to make more effective our sweeps, in a creeping line search. During the day, made contact with the airborne search (on-scene) commander. It had been fruitless to learn who was running the search by messages to TORBAY.

...BRAMBLE and SPAR had sighted and recovered life rafts, with no personnel aboard. One was evaluated as having come from the downed aircraft, while the others were determined to have been dropped from the search aircraft in the vicinity of the reported ditching. No survivors were recovered by the Coast Guard ships.

The rescue aircraft which had landed on the water, recovered the one survivor, and then had been unable to take off, had been towed into the calmer waters of Port Au Basque, and was planning to take off under his own power.

First District was anxious to get our TU underway for Boston, in order to assure our timely arrival, since so many dignitaries had been invited and were scheduled for appearance. As a result, First District asked COMEastArea if we could be released from the search with BIBB taking over in our place and stead. Had the hydrographers make up hurried overlay of the search area, delineating our searches of the day, and the searches of the other two CG ships and of PREVAIL. Sent this over to PREVAIL, in order that he could pass it to BIBB upon arrival Capt. Lynch. At 2230, STORIS, BRAMBLE, and SPAR departed from the search area.]

[HLW Journal entry, Thursday, 19 September 1957:

Underway, in Cabot Strait, enroute Argentina. At 0800Q, received officers from BRAMBLE and SPAR who were scheduled to take officer promotion examinations. Had arranged with HQ for authority to delay the scheduled 9 Sept promotion exams until not later than arrival Argentina, since there had been so little time for the officers to do their preparatory studying while conducting surveys in the vicinity of Queen Maud Gulf and the Matty Island Area. Cmdr. Focht, who was aboard as CTF6 press representative, was available to assist with the examinations. He is a college professor during his civilian employment, having come on active duty for the summer, and he assisted materially by proctoring the examination in the Wardroom, while I proctored the group in the Cabin. By noon, the exams were completed, and the officers again placed back onboard their respective ships. Advanced clocks 1 ½ hours to Argentina time at 1200Q, and then, at the sea buoy, directed BRAMBLE, who would moor inboard, to proceed independently to the dock, Berth ECHO, USNS, Argentina. STORIS moored outboard of BRAMBLE, and took SPAR alongside, outboard of STORIS. The CO of the Naval Station, Capt. MacIntosh, had his band on the pier to serenade us upon arrival, and came onboard to welcome us.

Cmdr. Sharpe, CO of the CGAirDet came with him, to welcome us, too. There were press men from the air station, and Newsmen from the St. Johns, Nfld paper. Lt. Meaux, the HQ press rep, was aboard, having flown from Boston to pick up press material to be taken to Boston, and to apprise us of the plans being made for a reception in Boston upon our arrival.

Our two Aviators, Capt. Cuthbert of the Canadian DOT, our press photographers who had joined us at Cam Two, and some of our hydrographic office people, including Cmdr. Treadwell, were detached.

Plan to get a haircut tomorrow...first in five weeks! And boy, I look like Peter Fruechen, without the wooden leg!]

Wills Letter, cont'd:

We left Argentina on 20 September, proceeding to the states. BRAMBLE and STORIS went directly to Boston, while SPAR went to her homeport, Bristol, R.I. We were royally received, simultaneously at the two ports.

[HLW Journal entry, Monday, 23 September 1957:

Underway enroute Boston. Weather and sea conditions good. At 2100, maneuvered at various speeds, various courses, drifting at times, off Boston Light, awaiting rendezvous with District craft in the morning, which would have press representatives and PIO onboard, preparatory to our entering the harbor.]

[HLW Journal entry, Tuesday, 24 September 1957:

At 0743, stopped to receive passengers from CG 40495, between Boston Lightship and Finn's Ledge.

Entered North Channel at 0805. After passing Deer Island, found fireboats awaiting our arrival. Steamed into the harbor through President Roads, with an escort of fireboats with elevated streams, and press and photographers' boats. Quite impressive for little boys from the country!

At 0926, moored, starboard side to, Pier 2, Coast Guard Base. Much ado on the Pier. Many families down to receive us, and much gold from the District. QMs had our "Northwest Passage" flag hoisted. Phillips made an excellent landing, and we were impressed by the arrangements that had been made for our reception. Lorraine and Lucinda were on the pier, we were happy to see...When the ship was moored, the brow was put over, and I went first down the brow. Mike (Editor's note: "Mike" = "Lucinda") came over, with her Mother, and the photographers had a field day, photographing the reunion!]

[HLW Journal entry, Wednesday, 25 September 1957:

...an appearance on radio with a Miss Anne MacDonald...WNAC. After our interview, we met a Mr. George Weston, writer for the Tribune, and author of "Boston Ways"...which book was being plugged by Miss MacDonald. Miss MacDonald gave us a copy of the book he had written, and I asked him if he'd like to see the ship. He returned with us to the STORIS, and we had a pleasant chat...and he stayed for lunch.

I had to appear on Arch MacDonald's TV program that evening, so I got into uniform and picked up the family, then we went to the WBZ-TV studio, out on Soldier's Road...near Harvard Stadium. We made it in good time, and I was interviewed again on that program. Lorraine (Editor's Note: Lorraine was my mother) saw it in the lobby of the studio, and the kids stayed at the hotel, to watch it on their television set. I suspect they didn't see it because of interference from the Lone Ranger, or some such program!]

[HLW Journal entry, Friday, 27 September 1957:

Left at 1000 for New York. Made quiet exit from Boston, and went out through South Channel, past Needham, etc, enroute to the Canal. Had a pleasant run thru the canal, in good time. Clear weather, though blowing somewhat. While passing the old "ERIE", we got a challenge by flashing light from some reserve QM who wanted to make conversation. He asked our destination and homeport. We announced we were from Juneau, enroute Juneau via the Northwest Passage and the Panama Canal!

As we passed Wood's Hole, I called the Base there, and asked them to deliver my respects to Admiral Smith. They did. The Admiral was not at home, but Mrs. Smith took the message. I got a nice note from him about a week or so later, thanking me for the thought, and indicating that NORTHLAND had come closer than I had realized in 1940 to making an effort to go through the NW Passage.]

[HLW Journal entry, Saturday, 28 September 1957:

Underway in Long Island Sound, enroute New York. We paced ourselves carefully going down, having a scheduled rendezvous with Admiral Perkins under the Brooklyn Bridge at noon. He was ahead of schedule, however, and came alongside, by 40-footer, just as we cleared Blackwell's Island.

As he came up the Jacob's ladder, a swell between his boat and our side wet him down rather thoroughly. I immediately hurried him to the cabin, and gave him my green trousers and a khaki shirt to wear. The steward took his heavy-with-gold blues off, and after sponging them down, pressed them dry. We had an easy passage down the East River, with a following current...and arrived off Battery at 1215 on schedule. There we were met by a fire-boat detail and tug escort. It was impressive, but some of it was lost due to the fact that the people were all out of town for the week-end, so we saw not a soul in Battery Park!

We went to Pier 26, North River, and tied up after walloping the pier and going through three feet of concrete with our stem! We'd tried going into the slip on a full flood, not an easy thing to do, there, with no room to straighten up after getting out of the current.]

Wills Letter, cont'd:

Our (STORIS') return trip, around the continent, has been a pleasant recreation-cruise...with stops at Boston and New York, for three days each, then to Curtis Bay, our Coast Guard repair yard, near Baltimore, where we had some small ice-damage repairs made...Thence to Miami, Kingston (Jamaica), Balboa (CZ), Acapulco (Mexico), San Diego and San Francisco.

[HLW letter home, Saturday, 26 October 1957: off the South Carolina Coast, cutting directly toward Florida.

Your boys are encountering the first really hot weather, I guess. Sea temperature is eighty, so the air temperature can't get down much below that during the daylight hours. We're still having the last of the stormy weather that started about the time you were due to take off from Philadelphia. Hope you were able to get off, cause, come Wednesday morning, it was so foggy we couldn't see across the dock. We'd been scheduled for underway sea-trials, but it was too thick, until ten o'clock. By that time the sun burned it off, and we got out for a successful trial trip. We got back to the dock about fifteen minutes before four in the afternoon. The next morning, we went across the way at 0800, loaded our ammunition onboard, then went back to the Yard to load buoys which we had to transport down to Norfolk, for the Fifth District. We arrived Norfolk at 0730, Friday morning, having left the yard at 1730 the evening before. We spent the morning offloading our buoys and taking on one automobile we're transporting to Kodiak for one of our chiefs.

We left Norfolk (Portsmouth Base) at 1230, after lunch, and here we are. I mentioned "stormy weather"...it has been very moderate, really, though we've had some considerable rain, in the form of drizzle at times, and hard showers at others. But now, we have bright sun...and the boys are just eating it up. It's Saturday afternoon, and they're sitting out in the sun, without any parkas on! I'm sweltering!

Got the list of dependents still in Juneau. Would appreciate it if you could check up on the condition of Mrs. C--- who has two daughters, and who went into the hospital with flu last week. We think she's come home from the hospital. Neighbors were taking care of the two kids for a day or so, then came the word that the kids had been put in a nursery at \$7.00 per day. The man is a yeoman, and seven bucks a day will break him, soon...]

[HLW letter home, Tuesday, 29 October 1957: Miami, Florida

...fortunately for us, we arrived after a northerly wind had been blowing for three or four days...helped us get down here four hours ahead of schedule! In addition, it made Miami folks shiver under their coldest weather they've had yet this year...it was way down to 58° at night...and all the Miamians were complaining loudly!]

[HLW letter home, Saturday, 9 November 1957:

Just off the western end of the Panama Canalcame down off the bridge, after dropping the compulsory Panama Canal Commission Pilot, having left Fort Rodman Naval Station twenty minutes earlier...

We left Miami on time, at 1000 on the 31st, and had a hot, clear-weather trip down to Kingston. Good heavens, it seemed hot in Kingston! We arrived on a Sunday morning, and the Vice-Consul came down to call. This one was a young lady of about thirty nine summers...She had actually been assigned in Jamaica for two years, and seemed to be holding up rather well. The temperature seemed to bother her, too. She wore a loose-ish white frock, with eyelet piqué blouse top with no sleeves and no collar, and the same piqué skirt, attached, but with a voile or some frothy stuff as an overskirt...the whole decorated with a sorta royal-blue voily stuff scarf around her middle and draping down one side. She wore white shoes with highish heels...and really didn't succeed in looking either cool or smart. She had a cold, and her nose was giving her troubles, and she perspired (she wasn't aglow, she was sweating!) about as much as I was!

Since it was Sunday, the consular office was closed, and I couldn't return the call. TJ and I walked around the town in the afternoon, but it wasn't very inspiring and of course all the shops were closed. We walked for about three miles, I guess, in the heat...that was plenty. As soon as the sun went down, about six pm, it cooled off on deck. We had a movie out on the well-deck, and it was pretty comfortable, but then rather stuffy when we came back in to go to bed.

I did go up the next morning, paying my respects to the Consul-General, and then took a cab and Tim, and drove out to the residence of the English Governor-General, Sir Richard Foot, about seven miles out in the country on a tract of land like an English Baronial Park. It was a lush place. I didn't have anything to do but acknowledge the salute of a Jamaican Infantryman who was standing guard outside the "office" wing of the mansion, and walk just inside the door, signing the "Guest Book" which was on a large marble table. Tim sat in the cab, eyeing the infantryman's uniform....

Afterwards, TJ and I didn't do anything except go shopping. Too bad you didn't want rum for Christmas, cause that was the only thing that was a bargain...The stores had "Free port" sections, where stuff allegedly could be purchased, in bond, and delivered, duty-free, to the ship. Nothing there except French perfumes, which we didn't buy, ...

The next day, we went for a trip to the north side of the island, ...a fifty mile drive through coconut groves, banana plantations, and the like. We stopped to see the Royal Colonial Botanical Gardens...Saw many exotic plants and trees, from the old British Colonies. Saw cinnamon growing, pimento shrub from which they make pepper, many kinds of palm trees and mahogany trees. Drank milk from a green coconut, then resumed our ride. When we got to the north coast, we stopped at the swankiest hotel and had a buffet lunch: yam (like our white potato), cold cuts, longusta tails, cold wax-beans, rolls, Danish oranges, pawpaws and bananas. Tim didn't like the longusta nor the meat, nor the pawpaws. We sat on the terrace, having lunch, watching the other people (about a hundred tourists) having lunch, and relaxing on the beach...and Tim made one of his classic remarks: He sat, enjoying the breeze, but not enjoying his three-dollar luncheon, and said, "Dad, I wonder how many of these people who could afford to come here again, would?" Apparently, many people come in by air, for a short, three-four day vacation, then hurry back to tell the snow-bound northerners what a wonderful time they had. We sat on the terrace for an hour, having lunch and watching, and narry a soul was swimming at the time. There were twenty-thirty people lying around in the sun, on chaise, or on the sand, but nobody was really having "beach-fun" as they do at the (Jersey) shore! I can't help but feel that TJ came pretty close to the mark in his comment.

We left the hotel, and continued on our trip...along the coast a little further, then back toward the south, through a section of the island known as "Fern Gully"...the road follows a very tortuous route, in a gully, with large ferns on either side, and with the jungle trees meeting overhead. The Jamaican government preserves it as a National Park is preserved, not widening the winding, narrow road, nor allowing busses to get franchises for using the road (except for organized tours.) It was an enjoyable ride, and since much of it was in the upland country, was cool. Our Jamaican chauffeur was very interesting, his vocabulary was fantastic, and his Oxford English was fascinating....

We left Jamaica the next morning, glad to go, and started for the Canal. It was oppressively hot, with high humidity, all the way down. We arrived at the Atlantic end of the canal yesterday morning, and started right through with no delay. Had good, sunny weather almost all the way through, and then, at Pedro

Migules lock, a downpour came on. It cooled off for ten minutes, then got hot and sticky again. We tied up at the Naval Base at Fort Rodman, on the Pacific end, at about four-thirty. We were met with the disquieting information the Commander, Fifteenth Naval District, had asked Commander, Seventh Coast Guard for permission to use us. We found the temperature and the humidity so bad, that we're not sorry to leave, so we left this morning, instead of staying over the weekend, on a typical STORIS job. It seems that Cape Mala light station (a lighthouse on Cape Mala, which is the southernmost light we have, it being on the southernmost lump or point just 90 miles west of the end of the canal) had two of her three motor-generators fail. The Fifteenth Naval District people had managed to have a tug come down, and take the deranged machinery to the Naval Base, and had repaired the burned out generators, but they had no facility for re-installing (actually, transporting) the equipment and we happened along. We now have the stuff aboard, and will land it at Cape Mala, then install it. Because of the relative emergency, we fueled last night, got our stores, new movies, etc, and are on our way. We won't go back, and thus we missed our shopping chances there...but GOOD HEAVENS IT'S HOT! We'll shop in San Francisco!!!! This here junior-grade icebreaker ain't built for the tropics, nor am I!]

Wills Letter, cont'd:

At Seattle we stopped to load materials for our home District, and we're now enroute to our new homeport, Kodiak, Alaska.

If you've managed to read thus far, John, I think you'll agree that some seafaring folk are long-winded. However, it seemed the only way in which I could tell you something of our trip.

One thing I hadn't previously mentioned is the fact that I was able to obtain permission to take my own thirteen-year-old son with me on the entire cruise. It is not unusual for Coast Guard Officers to take their sons with them on short cruises, but it was for us a real pleasure and privilege, to be together on a trip of this length...and one which we feel was of such significance.

You see, though we didn't suffer the severe hardships of early explorers, and although we had mechanical and electronic contrivances of which those people didn't even dream, we're still very proud of the fact that in three short summers, and particularly in the last one, we were able to gather for our forces, more hydrographic information about these waters than had been amassed in the last four hundred years...It's a good feeling to have had a part of something like that.

Very truly yours,

H. L. Wood