

CHAPTER III
VOYAGE OF THE "BEAR"
LITTLE AMERICA TO EAST BASE
Feb. 1 to Mar. 12, 1940

THURSDAY FEBRUARY 1, 1940
COURSE 295° 20° DROPPING TO 11° AIR WATER 30°

This poor little journal and I have parted ways for some little time. I'll do my best to catch up, but because my physical self has been overworked and my mental self has suffered to compensate, I probably will only recall the scant highlights of a two weeks camping trip on the ice near Little America III.

It all started when the "Bear", with admiral's flag at her mizzen, suddenly departed for parts unknown. I was busy doing my part unloading the "North Star", and didn't get a chance to remove my gear. She was due to be gone, at the very maximum, three days. It turned out to be closer to three weeks. There I was, left with only the clothes on my back, and, luckily, my sleeping bag. It being a cold day, my clothing was at least sufficient - shirt and shorts plus two piece heavy woolen underwear plus heavy wool Pendleton shirt plus heavy wool ski pants plus heavy beach jacket plus 2 pairs of heavy wool socks plus complete windbreaker with hood and pants plus pair of mukluks (caribou "fur" boots) plus wool watch cap plus heavy sun goggles.

While the "North Star" was in, I camped in a tent hastily set up on top of the barrier with a couple of others in a like "picklement". We ate on the "North Star" and slept out in the cold in our neat sleeping bags which are equipped with fancy hoods so that only one's nose is exposed.

I worked harder than ever before during this enforced sojourn on the ice. Sometimes loading sleds at the cache, with the wind whipping up a tataroo with the marker flags, the ice crystals cutting into your skin, icicles forming at your leaky nostrils, snow clotting in your beard, lips cracking open from exposure, oiled mittens frozen stiff with fingers numbing within and toes constantly flexing to ward off the chill, one meets the next sledge with new exertion. But even that was preferable to loading the slings in the North Star's hold. The hundreds of drums of gas and oil, weighing around 500 pounds each, were a cinch to handle by rolling and hooking. The endless lumber was somewhat harder, but cargo hooks and slings again helped. Worst of all were the two thousand 100-pound sacks of coal. They had to be man-handled from the far forward hold back to the hatch. I did my share and I sure was tired and dirty at the end of the day. I didn't care if I ate or slept or not. I didn't mind carrying the coal sacks so much, but the tossing them around was kind of tough along about the 12th successive hour.

When the time finally arrived for the unloading to come to an end, the "North Star" was quite impatient to be off and the "Bear" was several hundred miles to the east, making new discoveries along a heretofore sketchy coastline. I was scheduled to be aboard the "North Star" for a comfortable and civilized ride via Valparaiso, but then all my gear was aboard the "Bear". Everyone of course was only too anxious to go via the "Star", especially a couple of those scheduled for the "Bear". I felt then that it would be best for me to volunteer for the "Bear" and thus release the other two. The Admiral required three dog drivers on the "Bear" to form a rescue party in case the plane had to make a forced landing. I was especially acceptable because of my knowledge of radio and navigation, the latter of which I had picked up on the voyage down. I hoped also to make this voyage more to my advantage by getting some collecting done, something that would be impossible on the "Star". So here I am once again back in my old bunk

on the "Bear", ready to leave the Bay of Whales for parts unknown, with the final destination as East Base.

SUNDAY FEBRUARY 4, 1940

COURSE WSW

TEMP. 32°F

SNOWING

It looks pretty darn sick to make a new start and then skip two days right off the bat. It's not quite as bad as it appears, however, as we have passed the International Date Line again and automatically missed a day. Our destination is unknown but rumor has it that the Admiral has the South Magnetic Pole in mind. At any rate we're headed just opposite the direction of East Base. We followed along the great ice barrier for a while and then started angling across the Ross Sea. Icebergs were plentiful but the weather was surprisingly mild. The Mailbag program last night came in quite well. I got a message from Frank and one from Mother unexpectedly from Berkeley. All messages from the East Coast mentioned the extreme sub-zero cold and here I was sitting on the foc's'l head splitting bamboo for trail flags. Without gloves or cap, I was enjoying the mild evening although 'way south of the Antarctic Circle.

Right now we are passing Franklin island, at least 80 miles off our beam. Its volcanic mountains rise up to around 10,000 feet abruptly from the sea. Although mostly covered with ice and snow, it's the first land seen since Malpelo Island on December 7. The poor boys at Little America probably won't see land for another year.



We've been working to clear the forward hold and finally have made a fairly neat job of it. I have piled cases and crates so as to make myself a handy cubbyhole of a laboratory. All I need now are some specimens!

Before I get too far away, I want to recall some of the wildlife at the Bay of Whales. The most obvious and numerous creature is undoubtedly the South Polar Skua. Like a large sea gull with gray body, black wings with an angular white patch and sharply hooked beak, this bird congregates around the seal carcasses kept for dog feed. As many as fifty birds could be spotted from the ship at one time. Some groups rest apart, drowsing on the snow, and others pick away like buzzards at cast-out seal remains. Others form scouting parties in quest of new provender. When approached, the birds let one get within about 15 feet of them, then they lazily take wing. While cutting up meat for the dogs, I was more than once startled by suddenly looking up and finding one of these big birds hovering motionless about five feet above my head and eyeing me curiously.

The next most noticed denizen of the far south would be the seals. Almost always one could spot one or two from the ship. Those in the distance were only dark spots on the ice, while others near at hand could be seen to flap their flippers now and then as they sunned themselves on the ice. The little Crabeater Seals, up to six feet in length, climb up on the bay ice near the ship for sunning but the big Weddell Seals, up to 11 feet in length, swim under the ice and squeeze out to the open where pressure ridges have opened up cracks. A less common variety, the

Sea Leopard (up to 15 feet in length), is sometimes found. It is a carnivorous type living to a certain extent on penguins. Before arrival of the "Bear", the boys on the "North Star" had cornered one and Davis of the National Zoo managed to put it in captivity. This creature's mouth carries heavy ordnance and he will attack man when provoked. I learned this at first hand when the devil got away during an ice break up. Three of us cornered it, but would not dare go close enough to rope it. The big net used the first time was not available. After teasing him with long poles to keep his attention and prevent his escape to a nearby open crack, we finally got hold of a rope and I neatly lassoed him. We pulled him into his crate with a dog team. If they can get him back to the States alive, it would be a great thing, but the beast will no doubt die as he just won't take any sort of food.

I could mention the penguins too. Some Adelies would usually show up every day, apparently attracted out of nowhere by the goin's on. Like sidewalk spectators at a city excavation they would idly watch the unloading operations. If some particular phase seemed especially interesting, they would hobble closer, singly or in pairs, to get an eyeful and then retire. One day a pair of Adelies arrived to watch the building of the house at Little America III. Like prospective buyers, they made a complete circuit around the great structure and then discussed its merits between them. After much gesticulating, they finally both shook their heads with a strong negative motion, turned their backs to the great house, and wandered off. Several members of the ice party were said to be planning to live in a tent, because if the house wasn't good enough for the penguins it certainly wasn't good enough for them.

MONDAY FEBRUARY 5, 1940

POS. TERRA NOVA BAY 74° 29'S. 166° 06'E. 30° AIR 34° WATER

TUESDAY 21:00 FEBRUARY 6, 1940

ROSS SEA

Here I am perched upon a dog crate on the upper deck drinking in Antarctic sunshine and scenery. It's cool in the shade but quite comfortable in the sun. Directly before me lies an old broken-down volcano rising abruptly from the sea. It is entrenched with glaciers but shows large cliffs of lava. It is known as Coulman Island.

Yesterday we explored Wood Bay looking for a suitable landing spot. Huge glaciers swept down from surrounding mountains ending in the sea with a sheer ice face up to 200 feet high. A large volcano rose up to 8000 feet at the head of the bay and long capes reached out on either side. Floating ice was quite prevalent and carried a full quotas of seals and penguins. An interesting point concerning the ice face was a very black stripe running approximately parallel to its surface and at least 50 feet below it. It was clearly a layer of ash deposited by an eruption of a nearby volcano several hundred years ago.



Towering snow-covered ranges extended in all directions and mountains, ice and sea all met together on the horizon. It was really a sublime sight, one I

welcomed with wild acclamation, a stirring sight anywhere, but especially after having accustomed one's self to flat icy wastes. Only photographs will be able to give a small idea of the virgin vastness of it all. I only hope that East Base will be in country like this. It is known as South Victoria Land and it's coastline has been pretty well explored by the British. In the bay yesterday all was calm and peaceful when suddenly a gale fell upon us out of nowhere. The ship tossed sharply and great confusion reigned in the hurried attempt to secure deck cargo and set staysails.

FRIDAY FEBRUARY 9, 1940

COURSE 056° NOON POS. 72°57'S. 176°45'E. TEMP. 29°F. AIR 33°F. SEA

After spending two days carefully feeling out the South Victoria Land Coast for a suitable spot to land the plane, which has been now equipped with skis, we're now headed eastward towards the East Base. This jaunt to the westward has been exceedingly interesting and will always be recalled as one of the high spots of the voyage. I will probably never see such scenery again unless I sail the rugged Alaskan Coast. One day we pierced a large ring of pack ice in hopes of finding some smooth and low ice, but to no avail. The most likely spot we finally found was at the end of Terra Nova Bay next to the Drygalski Ice Tongue. We tied up to the ice where the barrier height had dropped to about seven feet and gradually sloped up to the great glacier squeezing between the peaks.

The Admiral was on the ice immediately, making an inspection for a runway. The ice proved to be too rough and we soon pulled away, but not before we had filled up all available containers with snow. While there, though, the Admiral and I found time to make a rough observation with the dip needle which, at this point, was nearly vertical, showing a close proximity to the South Magnetic Pole. At this same point our magnetic compasses pointed South-east. We determined our true direction by the use of a sun compass - a chronometer-sun-shadow correlating device which is pretty nice to have when magnetism plays such tricks.



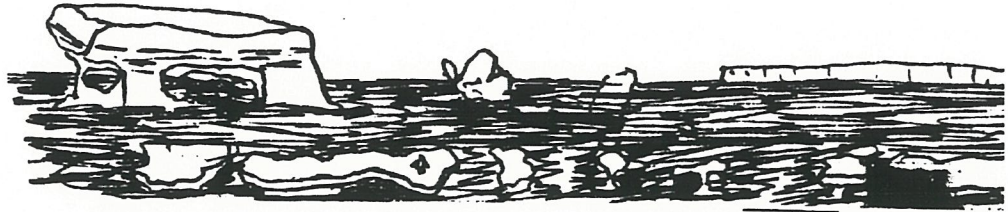
I've been pretty busy these last few days preparing for a possible emergency trail trip in case of a forced landing. Sledges needed plenty of repair after use at Little America and tents and rations had to be made up. An ice trip of a possible three months duration for four men is quite an undertaking and must be carefully planned and provided for. Of course it's only a very long chance that we'd ever have to carry out these plans, but they'd be mighty helpful in case of an emergency.

P.S. I can tell from the knocks this old hull is transmitting that we've once again hit the ice pack -- this time on the way out.

SUNDAY FEBRUARY 11, 1940

ANTARCTIC OCEAN - NOON POS. 69°15'S. 179°15'E. (PACK CLEARED)

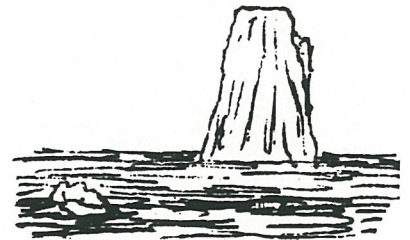
An easy passage through the pack put us once more in the Antarctic Ocean. The day was calm and a long low swell undulated the slick green surface, transmitting an easy rolling motion, sure sign of the high seas. The pack was especially interesting this time as the ice pieces had been scattered a bit by a storm and were worn into curious shapes.



We saw a nice billiard table, some fancy bridges, and many mushrooms, tea kettles and swans. Many flat cakes carried Crabeater seals or Adelie penguins; we even saw one Sea Leopard. Many snow petrels were about. One hit one of the wires and strangled itself. It is now a study skin. The Captain rescued another from one of the dogs. At his request, I released it with a band. It is truly a pretty bird. Absolutely pure white except for beak, eyes, and feet which are a bluish black. It reminds one very much of a dove, but is not as slim. Its feathers are quite thick and soft, while its legs seem to be only good for swimming. It always squats rather than stands, blending itself with the snow. Close inspection shows the long pointed wings crossed scissors fashion over the back.

We have now crossed back into the Western Hemisphere and our clocks gain an hour. Navy discipline shows up particularly on this point. They always put in the extra hour going west in the morning so they can get more work done, but always take away the extra hour from your sleep. The time changes come fast at this high latitude and I can see where I lose some more sleep. Sea yarn sessions under my bunk are no aid to pleasant dreams.

The iceberg belt now surrounds us. Each morning we have seen a long mesa like berg at our stern, causing many cracks about icebergs chasing us, or that: "No wonder we're not making better time, what with towing that ice hill". It so happens that the tabular bergs breaking off from the barrier are the commonest type and also all look alike - and one is almost always in sight. The Admiral called my attention to an interesting berg yesterday. It was almost twice as high as it was broad - quite unusual. At first, in the distance, it reminded me of Ship Rock and then coming closer, it resembled one of those dream castles on the cover of a Fairy Tale book. As we passed by and saw its far side, I immediately likened it to Devil's Tower. It's great sport modeling in icebergs.



A grand turkey dinner again today - and every Sunday since we left Little America. The chow has sure improved with the Admiral aboard.

The days wear on and the equinox draws ominously near. Even now the sun dips below the horizon and we have a continuous sun-set-rise all night long. The tinted clouds slowly change and ever keep the southern sky in pastel dress. The artistic combination of soft sunset glow with lapping water, blanketing snow and faceted ice makes the Antarctic night a fairyland that absorbs the infinitesimal ship. WHOA!

MONDAY FEBRUARY 12, 1940

ANTARCTIC OCEAN

Today steady southwesterly winds are billowing out the sails to steady us against the choppy sea and the "Bear" takes on a definite port list. Our course is ever eastward, passing along the fringe of the outermost pack ice and threading our way between bergs.

The Admiral has lent a small portable phonograph to the crew and it has certainly played incessantly. Music seems to make the chow taste better somehow.

The most popular numbers, without a doubt, are a couple of hot rhumba arrangements of "Siboney" and "My Shawl" featuring Henry King. Following close on these favorites comes a group of Strauss waltzes from "Der Rosenkavalier". These latter, I have greatly enjoyed.

We have left most of the Snow Petrels behind in the main pack and are now followed by a number of Antarctic Petrels, which seem to stick to the melting ice. We have also seen Antarctic Fulmars and Frigate Storm Petrels. Many whales have been reported but I haven't seen any close enough for a positive identification. They're probably Blue Whales which reach nearly 100 ft. in length.

FRIDAY FEBRUARY 16, 1940

POS. 67°S. 130°W. ANTARCTIC OCEAN BAR. 28.53

We have been pushed almost up to the Antarctic Circle by the pack ice which we have been edging for some time. Great icebergs and pretty sunsets have added variation to the ever-present pack with its fringes of broken-up and worn brash-ice. Snow and Antarctic Petrels flit beside the ship but I can't catch any of them even though I need specimens to work on.

The Broadcast came in fine tonight and the southern music drew a few pangs. The message from Washington State was quite intelligible and greatly appreciated. It took a big atlas to find out where that town was. No doubt Dad is up in the Olympics on business. Frank keeps me well informed with D.C. news.

The barometer started failing yesterday and is still heading for the cellar. The ship started squirming last night and woke me up. Today with each hour the waves grew higher and now she's really rolling. Huge waves with foaming lips licked at the bulwarks, and at times nearly swallowed them as tons of water washed aboard.

SUNDAY FEBRUARY 18, 1940

POS. 69.5°S. 121°W. ANTARCTIC OCEAN BAR. 28.40 !!

For the third day now, the barometer has been playfully flirting with it's absolute zero. The winds have been terrific - around 85 miles an hour - and drive the snowflakes right into one. The temperature has stuck to the middle twenties but it doesn't take much blowing to chill one. I've kept my eighteen dogs inside and aired them twice a day on deck. It's quite a chore moving them, but I'd hate to see them take a chill now, as most of them are shedding. The Admiral seems quite fond of the dogs and we have long discussions about them. He also is keenly interested in the wildlife of the region and I have been able to help him out a little with field identification.

The recent heavy seas made for a very depleted mess attendance, but I held forth strongly. In fact I'm getting quite a reputation among the sailors for my insatiable appetite and have to take a lot of kidding. They say I'm getting fat - at least I'm putting on some weight.

We've nosed into the ice pack now and the pelagic mass neatly quenches the seething waves.

WEDNESDAY FEBRUARY 21, 1940

POS. 70°30'S. 109°W. ANTARCTIC OCEAN 28°F. AIR BAR. 29.37

Bad visibility plus a heavy sea prevented a flight today. We've pulled up next to another inlet to the pack and are waiting and hoping that tomorrow will bring fine weather.

The bird life has been frequent and varied at this God-forsaken spot. Today I have identified the following: Snow Petrel (12), Antarctic Petrel (2), Cape Pigeon (3), Antarctic Fulmar (5), Giant Fulmar (3) Wilson's Storm Petrel (1). I ran a fish line over the side today baited with some bacon, but no results as yet.

As we proceed east, the radio reception seems to become better. Short-wave brings us all the popular programs, but we seldom get around to listening in. Perce (co-pilot) was telling me that, while in the air yesterday, he heard quite a few regular broadcast stations coming in on the plane's radio, all but drowning out the "Bear". They were mostly California and Texas stations. This seems impossible but the Antarctic is famous for its quirks in radio reception.

THURSDAY FEBRUARY 22, 1940

POS. 70.5°S 109°W. 28°F. AIR BAR. 29.48 SNOW

Hove to - awaiting favorable weather for another flight.

FRIDAY FEBRUARY 23, 1940

POS. 70.5°S. 108.7°W. 27°F. AIR BAR. 29.44 FOG

Still looking for favorable flying conditions.

SATURDAY FEBRUARY 24, 1940

POS. 70.8°S. 107.8°W. 20°F. AIR BAR. 29.39

The weather broke today and we sped SE until we found a fair lee next to the ice pack. The plane was put over the side, was loaded, and took off with pilot Snow, co-pilot Perce and the Admiral. Heading due South, it wasn't long before Perce reported mountains ahead. A sight was taken as they cruised nearer, and then the plane returned, a new coast line discovered for Antarctica.

While the boat was overside, I let one of the officers shoot a Snow Petrel for me. I am making a study skin from it tonight.

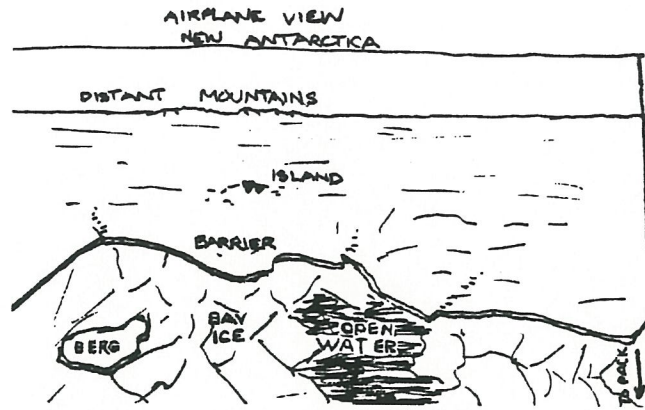


SUNDAY FEBRUARY 25, 1940

POS. 71.4°S. 105.6°W. 16°F. AIR BAR. 29.42

During the night we worked further south. We are the first ship to better the record set by Captain Cook in 1774 for the farthest south in the Pacific Quadrant. Taking advantage of the good weather, preparations were made for another flight south. This time Lt. Dufek took the Admiral's place as navigator. As before, signs of mountains poking through the ice barrier were soon discovered, photographed and roughly mapped. Land in this case was found quite close to where Wilkins made his flight in 1930 and reported no land.

I almost feel as though I'd been along on these flights as the pilot's bunks are right next to mine and we can pore over the photographs carefully and rehash the details far into the night.



MONDAY FEBRUARY 26, 1940

POS. 70.7°S. 102.3°W.

18°F. AIR BAR. 29.51

We are working our way eastward now through scattered ice pack. The Captain shot a tern and stopped the ship to pick it up. It was pretty much shot to pieces but is important as a specimen. No one has ever determined whether this bird is the Arctic tern or a variety that stays in the Antarctic regions.

TUESDAY FEBRUARY 27, 1940

POS. 70.2°S. 94.8°W.

24°F. AIR BAR. 29.51

The Admiral, Snow, and Perce made another flight today, discovering some more new land to the south. Good flying weather comes so seldom, one has to make the most of it when it arrives. Today, for the first time, we found water smooth enough for a perfect take-off. The usual scattered brash ice was not as frequent either.

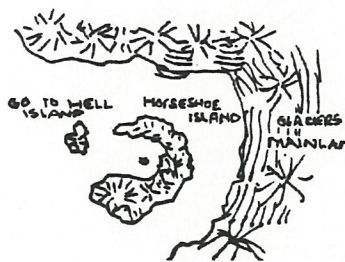
After the flight, we had to head somewhat west of north to clear some pack. Seals were frequent. Chief Engineer Dawley shot a fine Sea Leopard from the bridge and we stopped to pick it up. It must have weighed nearly 1000 pounds and measured 11 1/2 feet in length. Having no time to prepare a skin, I secured the skull, well armed with vicious teeth.

TUESDAY? MARCH 12?, 1940

I've gotten behind here and forgotten the dates. We proceeded eastward along the pack and soon ran into a heavy storm. Once more all was battered down and our sleep was restless. The big bergs had disappeared. A day or so after the main storm, the sea still had a great swell and was pretty choppy. One evening on deck we crossed a regular dividing line across which the sea was slick and smooth as though oil had been poured on it. It was probably due to new ice just beginning to form, because later on we ran into pancake ice - new ice that paves the ocean surface with millions of whitish pancakes. They ride with the swell but smooth out the waves. We ran into a lot of snow and finally came out of it sighting the mysterious Charcot Island many miles away in the dim horizon. Icebergs appeared again in great profusion - great huge ones that we mistook for mountain ranges again and again. The water became shallower and no doubt the bergs were grounded. Among the bergs we actually saw some unknown islands and steamed in close enough to verify our find. Bare rock was the only distinguishing feature of the islands. It would have been nice to establish our base

on the unknown Charcot Island but we passed it to the south well protected by a ring of ice. Sailing on, we saw Alexander I Land silhouetted in the sunset glow. By morning we had passed by it far to the north and entered Marguerite Bay. Heavy ice dashed our hopes of settling at one of these far southern landfalls.

Crossing the ice-spotted bay we ran into an abrupt wall of sheer mountains rising directly from the water. They were trying to hold back the fields of ice behind that squeezed through every opening and dumped their load of bergs into the sea. We found anchorage in a bay formed by Horseshoe Island and "Go to Hell" Island (actually named Lagotellerie Island by Dr. Charcot, the French explorer). By this time the date was March 2, 1940. A day or so of waiting and the "North Star" catches up with us fresh from Valpo (Valparaiso, Chile). Not only does she bring our leader Dick Black, but also many bags of mail. The last radio program brought short word from Vancouver and Washington D.C. but it sure was good to get the low down in long letters. An additional surprise was the



finding of the airmail bag the next day with a whole handful of letters for me. It sure was a field day. It's too bad I won't have a chance to answer each one.

With a safe anchorage here at Horseshoe Island, the "Bear" has made a few trips with the "North Star" looking for a suitable place to establish camp. Every spot so far has presented distinct disadvantages, but the ice is gradually encroaching upon us from the south and we will have to hurry. This last week the plane made one trip and aerial-mapped the coast. Since then a terrific wind, seldom under 40 m.p.h., has kept the "Bear" in harbor and prevented the "Star" from making a landing. A site has been picked out from the air and we are steaming toward it right now while the weather is with us. I expect to go ashore and will leave this journal with the Admiral. He has been very good to me and I fully expect he'll be able to get this diary through to you. Please be careful and not let any of it get into print, but I do hope you can send it around to the relatives and to Frank Hoadley and thus make up for my not writing.

I have been ashore a few times here and find that the country is very interesting. The mountains appear to be granite with a lot of diorite intrusions. The glaciation can be studied at first hand. I picked up some nice pieces of rock out of the fresh moraines showing glacial scratches and polish. Fresh water streams run along the glaciers but are milky with rock flour. Wherever the water forms a little lake, it freezes over and the flour sinks to the bottom. The ocean is alive with marine life. Small jelly fish are so numerous they color the water. I have collected a small sea urchin and a number of limpet shells. There are possibilities of much more when time and equipment is available. I bagged a new specimen here the other day - an Antarctic Shag. I've got him skinned out, but I've got to get all the fat off of it before he's finished. I hope I can get it done in time to send it back with the ship.

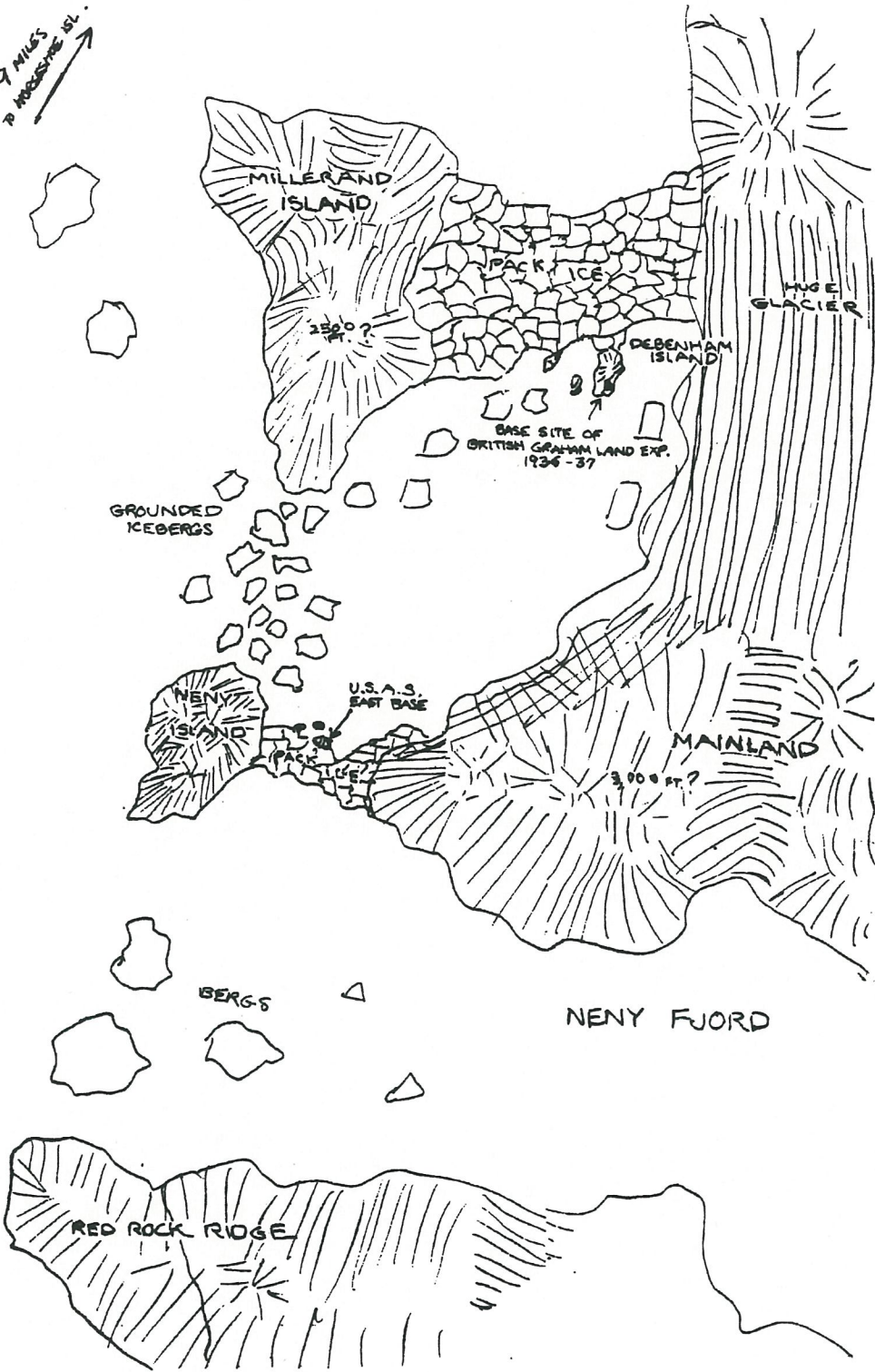
We had another Thanksgiving Dinner today - celebrating the 70th birthday of the "U.S.S. Bear". Turkey and mince pie and all the fixin's - and only a few days before we had roast duck. I've even learned to enjoy the oysters that are kept frozen and broken out from time to time.

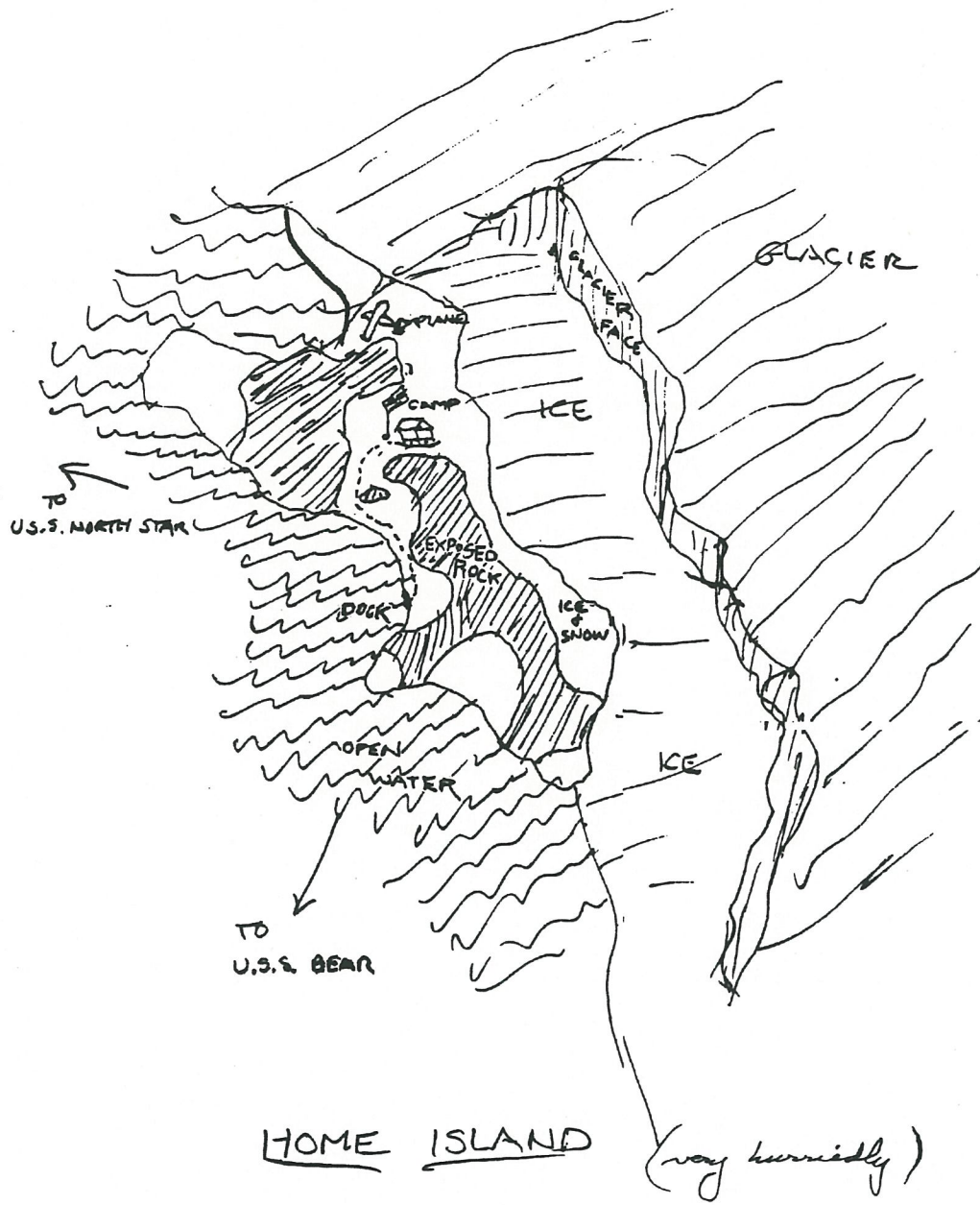
We're fast encroaching on the spot now and I'll have to be on the job. Any further news will have to come by letter.

So long,

Herwit

9 MILES
TO NEBENHAM ISL.





THE CARGO

We've coils of rope, and coils of copper.
Drums of gas, and drums on winches;
chocolate bars, and chocolate waiters.
(what, no gag-line for the pinches?)

We've drawers in the bunks and drawers of woolen;
Sails for the fore-mast, three masts for sails;
Boats for gravy, and boats for water
When we reach the Bay of Whales.

We've a poop-deck for dogs to poop on;
And a well deck that is a well;
We've leeks for soup, and leaks from hatches;
We pass the bell-buoy, we have a bell.

We've crates of dogs, and crates of oranges;
Cans of spinach; cans of paint;
Rolls for the "head" and rolls for breakfast.
What, no bananas? Yes, we ain't.

We've oakum pounded in the deck seams;
And hokum pounded in our ears.
In the name of all that's holy,
How can we take it two more years?

- MacDonald

THE SAILOR'S LINE

What a sailor can do with a line,
From a strand to a six inch hawser,
Amazes a brain like mine.
And causes no end of awe, Sir.

To his intricate knots and splices;
To his whippings and novel "fid";
To his block and purchase devices;
I humbly doff my lid.

But the line he uses aboard
Can't compare with his line ashore,
When shore-leave's his reward, Sir,
And he's off on the loose once more.

You'd better belay your line, Sailor,
Or your line will be layin' you;
She may be an angel divine, Sailor,
But she may be a "trollop" too.

- MacDonald

NOTE: MacDonald was Byrd's secretary who travelled with us in the "Bear" as far as Panama. He used to sit on the foc's'l head all day fascinated by the work and talk of the sailors. These are a couple of "poems" he whipped off for our amusement.

SAILOR'S VOCABULARY

CHOW -- meal, or anything eatable.
CHOW DOWN (pronounced Chow-Diah', Chu-du', etc. for variety) -- Soup's on
BREAK OUT -- to unpack
SQUARE AWAY -- to pack, or tidy up
RED LEAD -- catchup
COW -- milk
TIN TEAT -- canned milk
SWAB -- to scrub
SECURE -- to fasten or tie
SEA LAWYER -- one who tries to get out of work by clever talk and excuses.
CHIPS -- always the ship's carpenter
SPARKS -- either the ship's electrician or a radio man
SAILS -- The ship's sailmaker
SKIVVIES -- underwear
BLANKETS -- hotcakes
HEAD -- bathroom (latrine)
SCUTTLE-BUTT -- sink
OVERHEAD -- any ceiling
DECK -- any floors
BULKHEAD -- any wall
LINE -- any rope except
HAWSER -- mooring rope

BIRD LIST

1. HERRING GULL (*Larus argentatus*) Nov. 22-29
Boston to Florida
2. RING-BILLED GULL (*Larus delawarensis*) Nov. 26
Norfolk, Va.
3. LITTLE AUK (*Alle alle*) Nov. 27-30
Va. Capes to Bahamas
4. MAGNIFICENT FRIGATE BIRD (*Fregata magnificens*) Dec. 1
off Cuba
5. SOOTY SHEARWATER (*Puffinus gravis*) Dec. 3
Caribbean Sea
6. GREATER SHEARWATER (*Puffinus gravis*) Dec. 3
Caribbean Sea
7. Storm petrel Dec. 3
Caribbean Sea
8. Gull Dec. 5, 6
Panama Canal
9. Gull Dec. 6
Pacific off Panama
10. BLUE-FACED BOOBY (*Sula dactylatra*) Dec. 7
Malpelo Island
11. Storm Petrel Dec. 8 1°N. 83°W.
Tropical Pacific
12. RED-BILLED TROPIC BIRD (*Phaeton aethereus mesonauta*)
Dec. 12 to 15
12°S. 90°W. to 23°S. 94°W.
13. Petrel Dec 13 14°S. 90°W.
14. WANDERING ALBATROSS (*Diomedea exulans*) Dec. 22 43°S. 11°W.

15. BLACK-BROWED ALBATROSS (*Diomedea melanophris*)
 Dec. 25 50°S. 116°W.
 Dec. 28. 57°S. 120°W.
16. LIGHT-MANTLED SOOTY ALBATROSS (*Phoebetria palpebrata*)
 Dec. 29 59°S. 123°W
17. GRAY-BACKED STORM PETREL (*Garrodia nereis*)
18. WHITE-FACED STORM PETREL (*Pelagodroma marina*)
19. ANTARCTIC FULMAR (*Fulmarus glacialis*)
20. GIANT FULMAR (*Macronectes gigantea*) Dec. 25 50°S. 116°W.
 Dec. 29 60°S. 123°W.
21. CAPE PIGEON (*Daption capensis*) Dec. 30 61°S. 124°W.
22. SNOW PETREL (*Pagodroma Nivea*) Dec. 31 63°S. 126°W.
23. ANTARCTIC PETREL (*Thalassoica antarctica*) Dec. 31 63°S. 126°W.
24. WILSON'S STORM PETREL(*Oceanites oceanicus*) Jan. 5 62.5°S. 155°W.
25. SOUTH POLAR SKUA (*Catharactes maccormicki*) Jan. 12 77°S. 170°W.
26. ANTARCTIC BLUE-EYED SHAG (*Phalacrocorax atriceps*)
 Mar. 10 68°S. 67°W.

WIND SYMBOLS

WIND	CONDITION OF SEA
0 -- calm	glassy
1 -- light air	horizon indefinite, rippled in patches
2 -- light breeze	rippled with minature waves, horizon distinct
3 -- gentle breeze	scattered incipient whitecaps
4 -- moderate breeze	numerous well-developed whitecaps
5 -- fresh breeze	spume blown from wave crests
6 -- strong breeze	
7 -- moderate gale	
8 -- fresh gale	
9 -- strong gale	
10 -- whole gale	
11 -- storm	
12 -- hurricane	

SEA SYMBOLS

WAVES	WAVE HEIGHT IN FEET
0 -- calm	0
1 -- very smooth	<1
2 -- smooth	1 - 3
3 -- slight	3 - 5
4 -- moderate	5 - 8
5 -- rather rough	8 - 12
6 -- rough	12 - 20
7 -- high	20 - 40
8 -- very high	>40
9 -- tremendous	
precipitous - confused	

VISIBILITY

Distance in Yards

0 -- DENSE FOG	<50
1 -- THICK FOG	<200
2 -- FOG	<500
3 -- MODERATE FOG	½ nautical mile
4 -- THIN FOG	1 nautical mile
5 -- POOR VISIBILITY	2 " "
6 -- MODERATE VISIBILITY	5 " "
7 -- GOOD VISIBILITY	10 " "
8 -- VERY GOOD VISIBILITY	30 " "
9 -- EXCELLENT VISIBILITY	>30 " "

SWELL

- 0 -- NO SWELL
- 1 -- LOW SWELL -- short or average length
- 2 -- LOW SWELL -- long
- 3 -- MODERATE SWELL -- short
- 4 -- MODERATE SWELL -- average
- 5 -- MODERATE SWELL -- long
- 6 -- HEAVY SWELL -- short
- 7 -- HEAVY SWELL -- average
- 8 -- HEAVY SWELL -- long
- 9 -- CONFUSED SWELL

BAROMETER

<i>higher than 3 hrs. ago</i>	0 - ^	<i>barometer lower than 3 hrs. ago</i>	5 - v
	1 - /		6 - /
	2 - ~		7 - ~
	3 - /		8 - /
	4 - //		9 - //

WEATHER

- CLEAR
- ◐ PART CLOUDY
- ALL OVERCAST
- SNOWER
- ☉ RAIN
- * FLURRY
- ** SNOW =≡
- △ HAIL OR SLEET

reference for plant relation between New Zealand, South Africa, and South America via Antarctica?

ANDREWS, E. C.

The geological History of the Australian Flowering Plants
Am. Jl. Sci. xlii 171-232

GOD BLESS AMERICA
LAND THAT I LOVE
STAND BESIDE HER
AND GUIDE HER
THROUGH THE NIGHT
WITH A LIGHT FROM ABOVE
FROM THE MOUNTAINS
TO THE PRAIRIES
TO THE OCEAN
WHITE WITH FOAM
GOD BLESS AMERICA
MY HOME SWEET

**U.S.S. BEAR, PANAMA TO BAY OF WHALES
ROLL CALL, 62 PERSONS**

O	1	R.H. CRUZEN - Commanding officer	LT. CDR.	U.S.N.
F	2	P.J. NEIMO - Executive officer	LT. CDR.	U.S.N.
F	3	W.N. CROFFORD JR. - Second Officer	LT.	U.S.N.
I	4	C.J. DUFEK - Navigator	LT.	U.S.N.
C	5	L.L. ADAMKIEWICZ - Ship's Doctor	CDR. MC	U.S.N.
E	6	L.S. SIMS - Expedition Doc., East B.	LT.(JG)MC	U.S.N.
R	7	W.H. DALY - Chief Boatswain	W.O.	U.S.N.
S	8	F.L. DAWLEY - Chief Machinist	W.O.	U.S.N.

	1	C.C. ALLEN	MM	1C	
	2	E.F. BRADSHAW	SEA	1C	
	3	J.A. DAIGLE	RM	3C	
	4	H.J. ERTENBERG	SEA	1C	
	5	E.M. FLAHERTY	BM	1C	
	6	G.W. GIBBS, JR.	Matt	1C	
	7	A.J. HILL	PHM	3C	
	8	J.L. HOSTINSKY	BM	1C	
	9	W.J. JACOBCHAK	MM	1C	
	10	E.H. JENKINS	BM	1C	
	11	R.R. JOHNSON	SEA	1C	
	12	S. KANEFSKY	SEA	1C	
C	13	J.C. KECK	SEA	1C	
R	14	A.W. KELCZEWSKI	SEA	1C	MM-Machinists' Mate
E	15	L. LEHRKE	BM	1C	RM-Radioman
W	16	J.L. LITTLETON	SC	3C	BM-Boatswain's Mate
	17	J.T. MCFARLAIN	EM	1C	EM-Electrician's Mate
	18	R.A. MCLEAN	SEA	1C	CM-Carpenter's Mate
	19	F.B. MESSER, JR.	CM	1C	SC-Ship's Cook
	20	C.L. MEYER	CMM		SEA-Seaman
	21	R.J. MULHERN	SEA	1C	CMM-Chief Machinist's Mate
	22	C.E. NELSON	CMM		Y-Yeoman
	23	C.E. NUSBAUM	SC	1C	Matt-Mess attendant
	24	W.A. NYLUND	RM	1C	Cox-Coxswain
	25	F.W. SCHMOHE	EM	1C	
	26	R.G. SCOTT	SEA	1C	
	27	T.G. SMITH	MM	1C	
	28	E. SWENSSON	SC	2C	
	29	W. SZEELEY	SEA	1C	
	30	D. TAYLOR	Matt	2C	
	31	W.H. VROBEL	Cox		
	32	J.W. WALLACE JR.	Y	1C	
	33	C.E. WYCKOFF	MM	1C	

KEY

MM-Machinists' Mate
 RM-Radioman
 BM-Boatswain's Mate
 EM-Electrician's Mate
 CM-Carpenter's Mate
 SC-Ship's Cook
 SEA-Seaman
 CMM-Chief Machinist's Mate
 Y-Yeoman
 Matt-Mess attendant
 Cox-Coxswain

**U.S. ANTARCTIC SERVICE PERSONNEL
Boston to Little America on "U.S.S. BEAR"**

	1	O. GRAY	airplane mechanic WB	AMM 1C	USN
	2	E.B. PERCE	radioman and co-pilot EB	RM 1C (NAP)	USN
	3	A.C. SNOW	chief pilot EB	ACMM (NAP)	USN
N	4	C.C. SHIRLEY	photographer WB	Ph 1C	USN
A	5	E.L. LAMPLUGH	radioman EB	RM 1C	USN
V	6	H.T. ODOM	radioman EB	RM 2C	USN
Y	7	A.C. HILL	chief cook EB	SC 1C	USN
	8	B. JOHANSEN	ice pilot, sails expert	(from Norway)	
	9	H. DOLLEMAN	tractor driver EB	PVT 1C	USA
	10	L. COLOMBO	tractor driver? WB		
	11	J. HEALEY	volunteer EB		
	12	J. BURSEY	dog driver WB		
	13	H.E. RICHARDSON	dog driver EB*		
	14	H. DARLINGTON	volunteer EB		
	15	L. CURTIS	artist, dog driver EB*		
	16	J.G. DYER	surveyor, dog dr. EB		
	17	L.M. BERLIN	surveyor, dog dr. WB		
	18	H. DORSEY	meteorologist EB		
	19	P.H. KNOWLES	geologist, dog dr. EB		
	20	H.M. BRYANT	biologist, dog dr. EB		
	21	C. EKLUND	ornithologist, dog dr. EB		

KEY:

EB=East Base

WB=West Base

NAP=Naval Av. Pilot

*=did not stay

U. S. S. BEAR'S ROSTER -- HORSESHOE ISLAND -- MAR. 11, 1940

TOP ROW

ERTENBERG, McLEAN, SCOTT, "MIKE", KECK, VROBEL, BRADSHAW

ON BRIDGE

SNOW*, DAWLEY, DALY, DUFEK, CROFFORD, NEIMO, ADAMKIEWICZ, ADMIRAL BYRD, CAPTAIN CRUZEN,
JOHANSEN, DORSEY*

BELOW BRIDGE

SWENSSON, SMITH, GIBBS, NUSBAUM, MESSER, WYCKOFF, JACOBZAK, TAYLOR, RICHARDSON*,
McFARLAIN, SCHMOHE, JOHNSON, HOSTINSKY

BOTTOM ROW

LAMPLUGH*, "RICKEY", BRYANT*, NYLUND, KANEFISKY, "RINSKY", WALLACE, A. J. HILL, "CASEY",
FLAHERTY, KELCZEWSKI, "CORKY", SZELEY, JENKINS, "SANDY", PERCE*, MULHERN, LITTLETON,
"CATHERINE THE GREAT", DOLLEMAN*

*ASTERISK DENOTES ICE PARTY

U. S. S. BEAR
HORSESHOE ISLAND
ANTARCTICA
68°S. 67°W
MARCH 5, 1940



UNITED STATES ANTARCTIC EXPEDITION

Dear Mother and Dad,

After a month of exploratory cruising in uncharted and heavily iced waters, we're now in the neighborhood of East Base. We are now anchored in this sheltered bay within the horseshoe, while the plane scouts for a suitable spot for establishing a base. Tonight just at sunset the "North Star", fresh from Valpo, managed to find us in our hidden retreat, bringing with her some patiently-awaited mail. Your letters will be re-read again at leisure and probably off and on throughout the coming year. Right now I want to at least start a letter to go back with the ship. I have carefully kept a journal for the purpose of mailing back to you all of my impressions almost as the varied experiences happened. But our pictures and even our written word is not our own, belonging to Uncle Sam. A strict censorship prevails and I don't know whether I can get the diary to you or not. The Admiral is trying his best to cut a little red tape for me. In case it doesn't get through, I'm afraid you'll just have to wait as I can't begin to cover everything in a letter.

The main party, aboard the Star, had quite a little stay in Valparaiso and are they enthusiastic! Food and liquor is dirt cheap and the women are all beautiful -- so they say. I guess they had a regular picnic. Needless to say, however, I'm still thankful the I was the lucky one chosen to go on the Bear. Caring for the dog teams has meant lots of work but I have still

found time for biologizing. Birds have been plentiful, but I have secured only a few specimens. These Navy officers think a biologist is about the most useless thing imaginable. I have slowly gained their confidence however, and of late they have put themselves out a bit to help me. The Admiral shows great interest in my work however, and has been an inspiration to all of us. I finally managed to pile up boxes and crates high enough in the for'd hold to clear a space for a small laboratory. Time, however, or lack of it, rather, is the chief deterrent to my biological work. However, since I could have done nothing aboard the Star, I'm just that much ahead.

The Christmas Card was great. How did you happen to make the Bear so realistic? Home sure looked good, too. The two rolls of kodachrome, I suppose, are a gift from Aunt Flo. Whatever the source, they are greatly appreciated. Nothing else could have been more to the point. I had just laid up my small camera yesterday so that I would save some color film for the base. Now I'll be able to take another roll of this spectacular region and send it back with the ship. I have taken over half of my transparency rolls on the voyage as I am afraid of deterioration if I keep them a whole year more. They will have to be censored in Washington but should eventually reach you. The black and white transparencies will not be made up into slides. Any that look particularly good you are welcome to have made up. The pictures en route all had to be shot on the spur of the moment as I was practically always busy doing something else. For this reason they probably suffer greatly as regards composition. Light values go



UNITED STATES ANTARCTIC



berserk down here and I'll be lucky if I get 3 or 4 correctly exposed kodachromes on a roll. (There is a great tendency to overexpose.) Even at that, though, I'd feel it was worth while. My larger negatives I am developing as I go, keeping them filed carefully. I hope to have an album all ready by the time I get home.

MAR. 7

They brought over another mailbag from the "Star" today -- the airmail bag -- and boy! did I rate. I worked hard to get the dogs all cared for this morning -- I'm sure glad I did for I've got time to read the letters again now before lunch. Right now the "Bear" is steaming up a narrow fjord fed by a dozen or so glaciers. Mountains go up precipitously on all sides, and are too steep on their faces to hold the snow. There are no valleys or gorges but what are filled to overflowing with ice. I have never seen such spectacular coastal mountains. They evidently have Alaska and Norway together beat. The most spectacular mountain pictures that get back -- you can take for granted are in the vicinity of our East Base. The higher mountains in back are a little more rounded -- like Mt. Rainier, if it were cut off at Muir cabin. How I do miss the trees. Your descriptions of the Olympics made these mountains seem just that much more barren.

The bays are pretty well choked with ice and no one has agreed on any spot yet although we have investigated a few. We were really hoping to get further south where smoother approaches to the main plateau are available. Wherever we are dumped off, as far as I'm concerned, I'll be better off than at West Base. Seals and penguins are very scarce, but a previous expedition (British Graham Land Expedition 1934-36) which based near here found several rookeries. Skuas and terns are the only life at this spot. The ocean-bottom however, should be quite fruitful. Coelenterates and echinoderms abound with many indications of crustaceans. The water is lousy with small jellyfish.