

Story of the WINTERING OVER PARTY

prepared at Davisville, R. I.

Paul Cummins
9-27-90

... March 1959 and covering activities
in the Antarctic through November 1960



This book is dedicated to the Officers and Men of the United States Navy and the Scientists of the United States Antarctic Research Program who wintered over on the Antarctic Continent during the Winter of 1960.

DEEP FREEZE 60 WINTERING OVER 1959-1960

ANTARCTIC SUPPORT ACTIVITY AIRDEVRON 6 DET. ALFA UNITED STATES ANTARCTIC RESEARCH PROGRAM

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EXECUTIVE OFFICER	- LCDR BURTIS W. WARREN
AIRDEVRON 6 DET. ALFA OFFICER in CHARGE	- LCDR ROBERT L. DALE
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AMUNDSEN - SCOTT SOUTH POLE STATION MILITARY LEADER	- LT C. C. DUMAIS
BYRD STATION MILITARY LEADER	- LT E. F. BARTLETT
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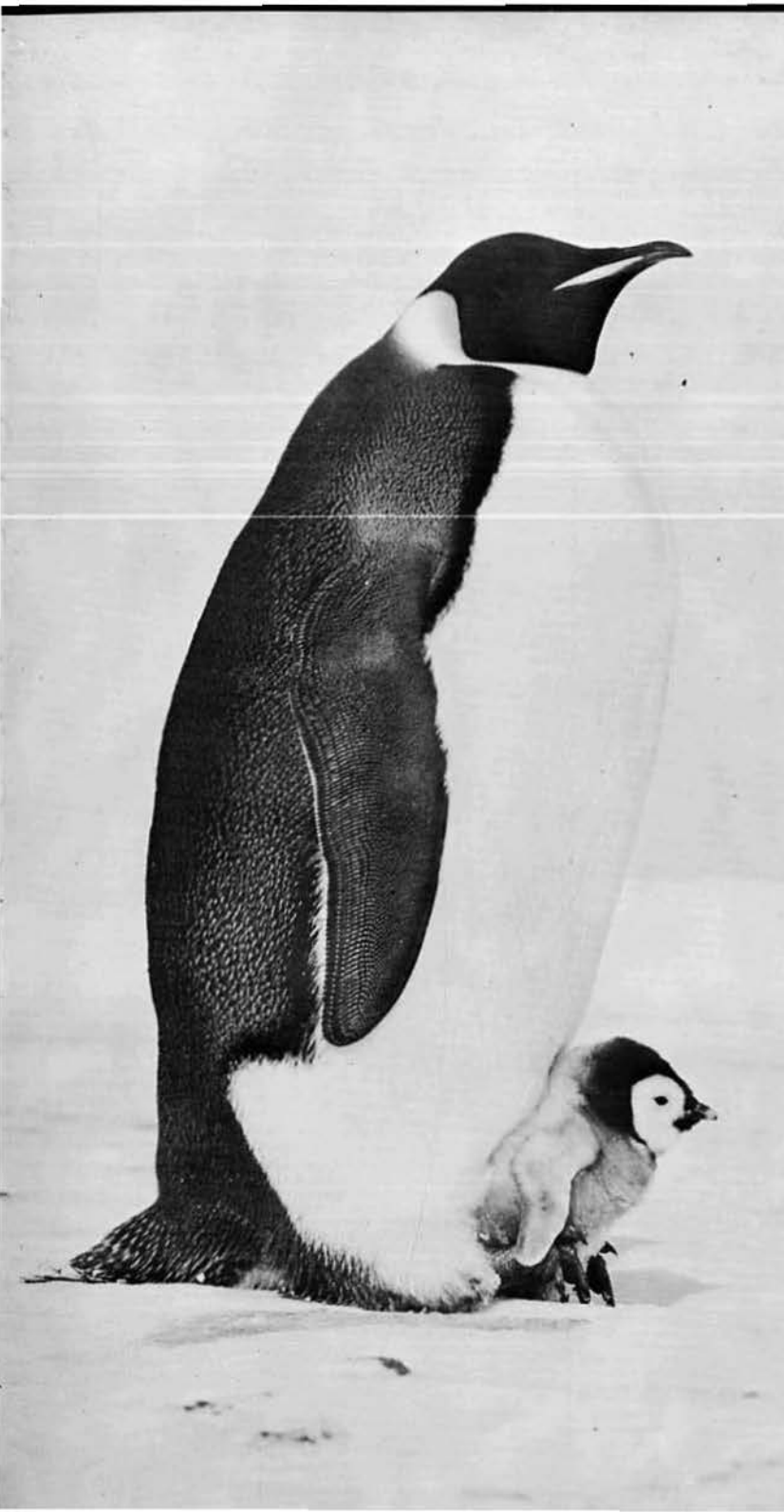
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SUMMER SUPPORT PHOTOGRAPHERS OF VX-6 AND TASK FORCE 43

PRINTED AT NO EXPENSE TO THE GOVERNMENT BY

The Cruise Book Firm
BURDETTE & COMPANY
120-130 Tudor Street
So. Boston, Mass.



NAVAL AIR FACILITY, McMURDO SOUND, ANTARCTICA







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THE MISSION OF THE WINTERING OVER PARTY, ANTARCTIC SUPPORT ACTIVITIES OPERATION DEEP FREEZE '60

In order that United States scientific investigations in Antarctica continue on a year around basis, it is necessary that the stations at McMurdo Sound, South Pole, Byrd, and Cape Hallett be manned both summer and winter. The officers and men of the Wintering Over Party are entrusted with this great responsibility. These "residents of Antarctica" arrive each year in the month of October and remain isolated upon the Antarctic continent for a year or more.

Wintering Over Party members begin to get acquainted with each other during the staging phase of Operation Deep Freeze at the Naval Construction Battalion Center, Davisville, Rhode Island. Here they meet their Captain, Commander Antarctic Support Activities, and the other members of the party destined to be their shipmates during the coming months. They live, train, and work together continuously and are gradually welded into a close working group of specialists whose job it will be to keep all the Antarctic stations operating at peak performance. They receive special training in all phases of Antarctic living from cooking and baking to fire fighting and survival. Each man gradually observes that he is part of a highly specialized team of individuals, each depending on all the others for survival in a hostile and strange environment.

During the hectic summer operating season of 24 hour work days and through the long winter night in Antarctica the men of the Wintering Over Party experience hardships unknown to most people in today's civilized world. Bitter cold and continuous darkness are constant companions of this intrepid group. Outside work during the winter, when it can be performed at all, proceeds at a very slow pace. It takes hours to do even the simplest task because of the burden of heavy clothing, darkness, biting wind, and the inability to remain out of doors for longer than an hour or less at a time. The men quickly learn to accept these hardships a part of the normal course of living in the Antarctic. Living and working together and depending upon one another draws the men even closer and off-duty hours are filled with a kind of comradeship and fast friendships which will never be forgotten.

The year "on the ice" is spent by Navy personnel of Antarctic Support Activities and Air Development Six and civilian scientists of the United States Antarctic Research Program. This distinction or separation is not recognized by the members of the wintering party as a whole. They think and act as a team to construct new buildings, repair and maintain existing facilities, and continue research programs to increase the store of man's knowledge of Antarctica and its environs. To the men of Antarctic Support Activities falls the task each spring of making the tiny scratches on the face of Antarctic ice and snow which aircraft pilots recognize as landing strips. Insignificant as these landing fields might seem amidst this enormous trackless "desert of snow", they represent an effort beyond maximum by men and machines and a great sacrifice in time, patience, and personal comfort by the members of the Wintering Over Party.

And so it is that another successful Operation Deep Freeze comes to a close. But the vital continuity of valuable research programs is not lost. As the members of Deep Freeze '60 Wintering Over Party move to new duty stations and return home to loved ones they relinquish to their successors the heritage of a job admirably completed. They were given a herculean task to perform - and they did it!!

DEEP FREEZE 60 was formed early in 1959 at Davisville, Rhode Island. CDR Bertoglio first greeted the outfit in April, outlining the training and deployment schedule ahead of us.



The outfit got off to a good start, Rogers RM1 (right) was the first man reenlisted in the newly formed unit, Ed Carey RMC pitched a mean curve over the plate for the ASA ball team (below left), we found enough spare time in our schedule for picnics which everyone enjoyed (below right)



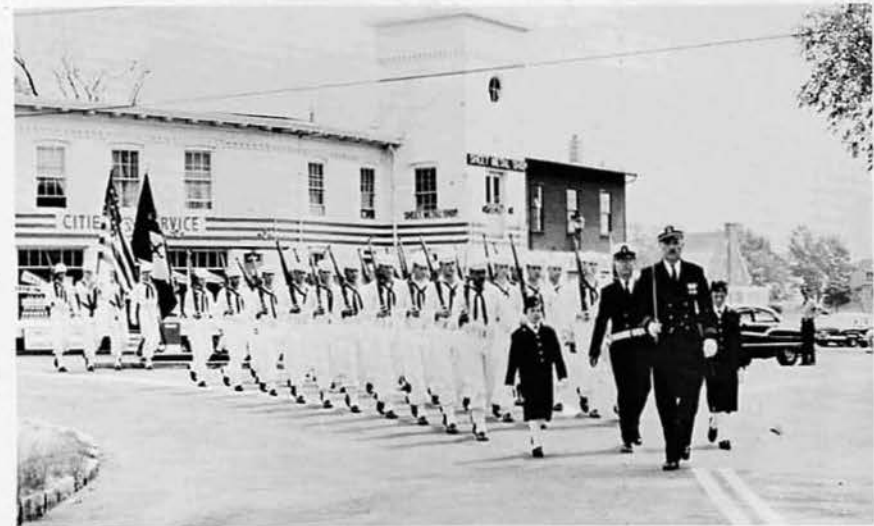


The skipper found us all shipshape at inspection.

Wilcox's (right) former carnival experience brought many people to our booth at the Navy relief carnival at NAS Quonset Point.



Memorial Day was a busy day for most of us.



After the holiday, it was back to business, as supplies had to be ordered, inventories held, and there were many sets of orders to be cut.



VX-6 DEPLOYS



Final farewells are exchanged.



When the Squadron's Super Constellation is loaded, it taxis out from the hangar for its long trip south.




After a short stay in Christchurch, a VX-6 P2V with its snow shoes on gets set for the final leg of the trip to the ice.



Springboard For Antarctica

For the last five years, the arrival of spring in Christchurch has been heralded by the thunder of giant C-124 Globemasters of the United States Air Force, arriving at Christchurch Airport, the last stop on the 2,300-mile flight to the frozen wastes of Antarctica. Until the Antarctic summer makes the ice airfield at McMurdo Sound unusable, the Globemasters, recently reinforced by turbo-prop Hercules transports, which are equipped with skis, lumber to and fro between the base at the airport, McMurdo Sound, and the South Pole station on a series of supply-dropping missions for the United States scientific surveys in the Antarctic.



Operation Deep Freeze, as the American operation is known, has become an integral part of Christchurch Airport. Globemasters thunder in and out of the airport at all hours during the spring and early summer, Navy passenger and rescue aircraft shuttle visitors back and forth and helicopters from American icebreakers at the port of Lyttelton are frequent

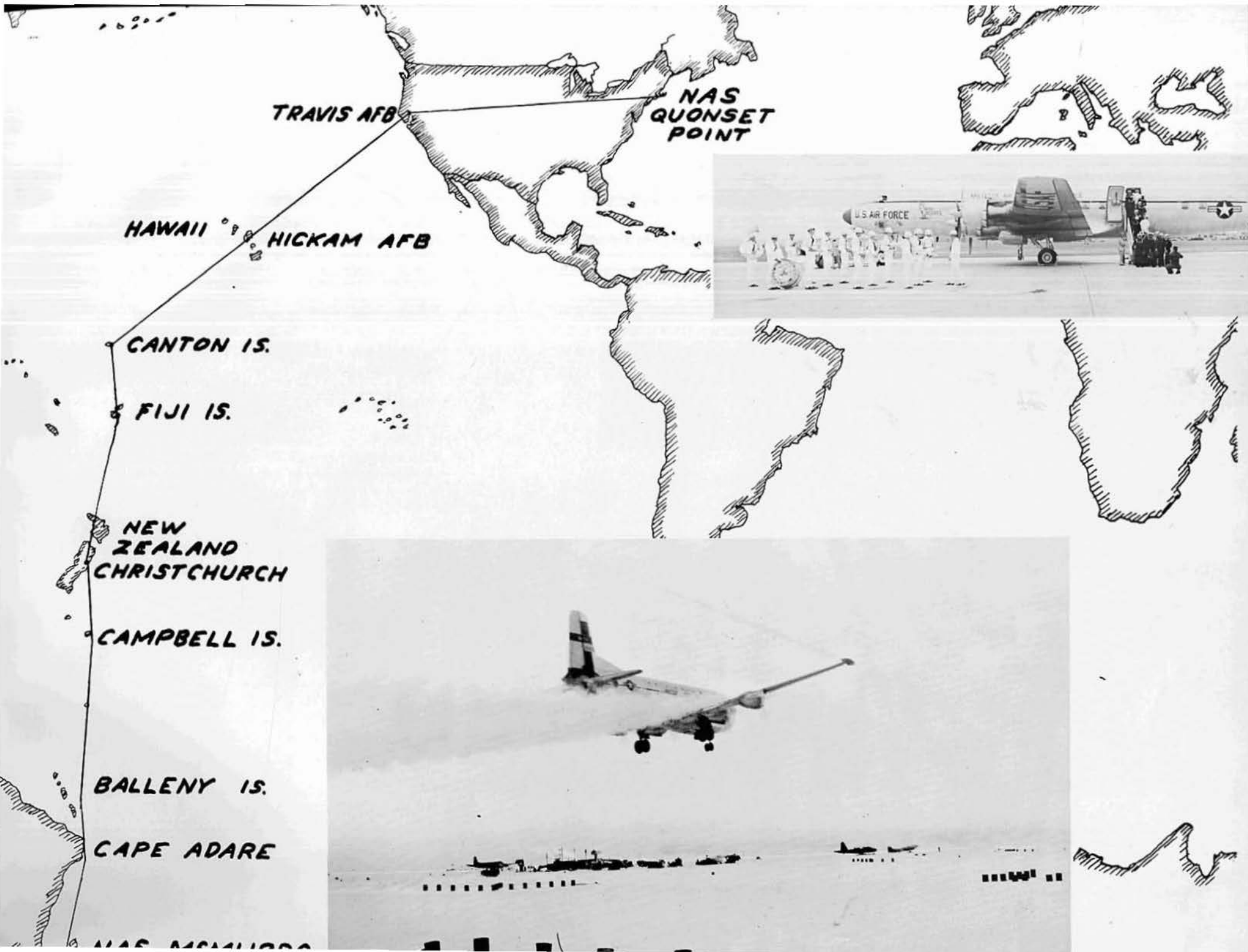
visitors. A huge prefabricated hangar for American stores has been erected.

With the establishment of the principal American base of Operation Deep Freeze at Christchurch Airport, accommodation for the many American servicemen involved was something of a problem. For a time, the men were quartered at a practically disused Royal New Zealand Air Force Station several miles away, but with the easing of accommodation problems in the city, a transit housing camp at the airport was made over to the Americans. The camp, which is quite up to the standard of new buildings in naval shore establishments in the United States, can accommodate about 360 officers and men comfortably.

Today, the Stars and Stripes flutters alongside the New Zealand flag at the airport—a symbol of the friendly co-operation existing between the airport authorities and the American authorities and between Christchurch citizens and their American guests.

A Globemaster of the United States Air Force leaves the runway at Christchurch Airport. The next stop is Antarctica.





TRAVIS AFB

NAS
QUONSET
POINT

HAWAII

HICKAM AFB

CANTON IS.

FIJI IS.

NEW
ZEALAND
CHRISTCHURCH

CAMPBELL IS.

BALLENY IS.

CAPE ADARE





CDR L. W. Bertoglio addresses ASA personnel upon assuming command of Deep Freeze 60 and 2 November 1959.

RADM David M. Tyree, Commander TF-43, gives his wishes for a successful year.



The Deep Freeze 60 flag is raised, officially starting starting DF-60.



Members of Antarctic support activity, brave the bitter cold Antarctic weather to witness the change of command and official start of Deep Freeze 60.

CDR W. A. Lewiston bids farewell and wishes DF-60 a big success.





The HUS-1A helicopter which was loaded at NAS Quonset arrived on the 8th of October at NAF McMurdo.

Kilo Alfa Cargo Arrives



ASA Seabees turn to unloading the C-124's as soon as they hit the deck. The Kilo Alfa Cargo is carried by ship from the United States to New Zealand during the summer months, the C-124's then fly the cargo on into NAF McMurdo Sound as soon as flying commences on 1 October.



Building the cake.



Finished products, the turkey and the cake are admired and enjoyed by all.

Thanksgiving Antarctica 1959



Everyone enjoyed a hearty meal, the Kiwi's from Scott Base were guests

Preparation for ships arrival.



The ice saw is towed to the location chosen for the ARNEB'S unloading operation.



The Pipe line is laid on the bay ice from Hut Point to the prospective berthing site. The oil cargo will then be pumped from the ships to the storage tanks on Hut Point.

The ice saw is used to cut a berth for the USS ARNEB.



**A welcome sight ...
...the ships arrive**



The USS ATKA, AGB-3, rams the ice of McMurdo Sound in an attempt to cut a channel to the camp area of the Naval Air Facility.

The supply ship, USS ARNEB AKA-56, takes a moment of rest at the ice edge while the channel is cut.



A larger class icebreaker, the USS GLACIER AGB-4, comes in to help cut the channel.



The Adelies were out in force to watch the unloading and give a lot of laughs to all hands.

Rumors spread around camp that everything was aboard the ARNEB, it was almost true.

The ARNEB took aboard passengers bound for CHRISTCHURCH and cast off her lines as the ATKA stood by to escort her out the channel.



CHRISTMAS 1959

Santa Claus arrived on the ice from Christchurch aboard the super constellation.



Chaplain E. R. Weidler decorated a tree in the chapel for the occasion.

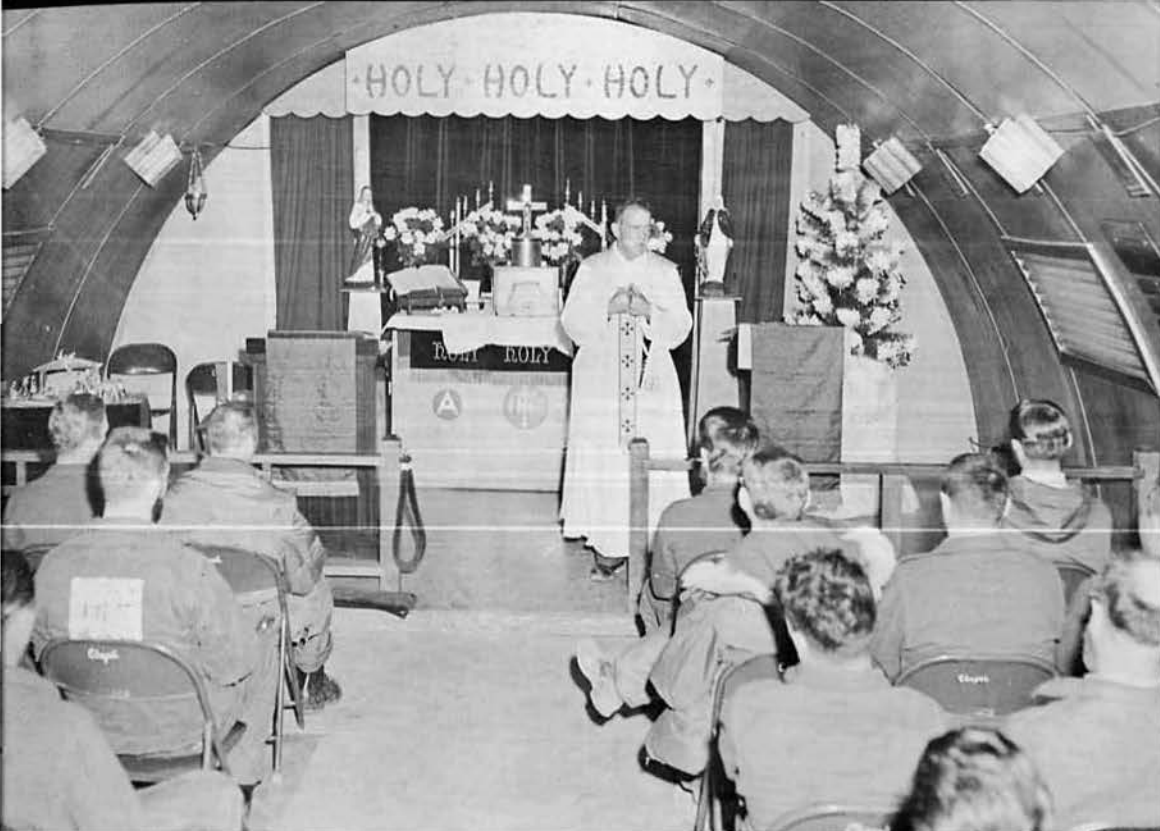


Christmas 1959 was a memorable occasion at McMurdo, many of the personnel never having spent the holiday season so far from home. The VX-6 super Connie landed a few days before Christmas bringing mail and the usual holiday finery, which helped the morale of the men.

Chaplain Weidler held religious services and Father R. O. Gorman came down from Christchurch, New Zealand to conduct Catholic Mass at this lonely outpost.

The commissary men went overboard in their efforts to make the occasion one to remember. The crew welcomed the holidays as a well earned break in the routine of 12 hour working days seven days a week.

Real Christmas trees arrived aboard the Connie along with loads of mail.



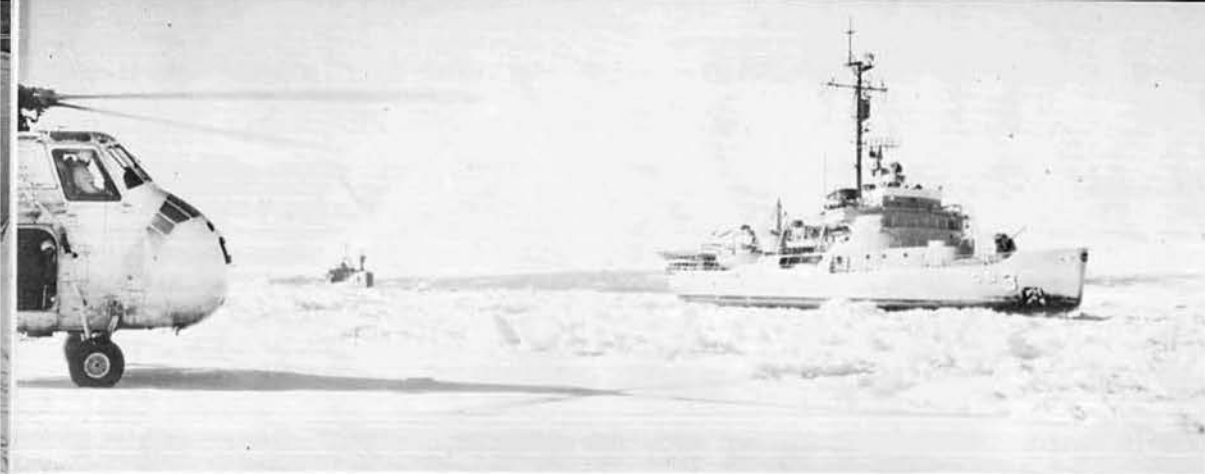
Father R.O. Gorman, Catholic Priest from Christ Church, New Zealand, held Christmas Midnight Mass in the Station Chapel.



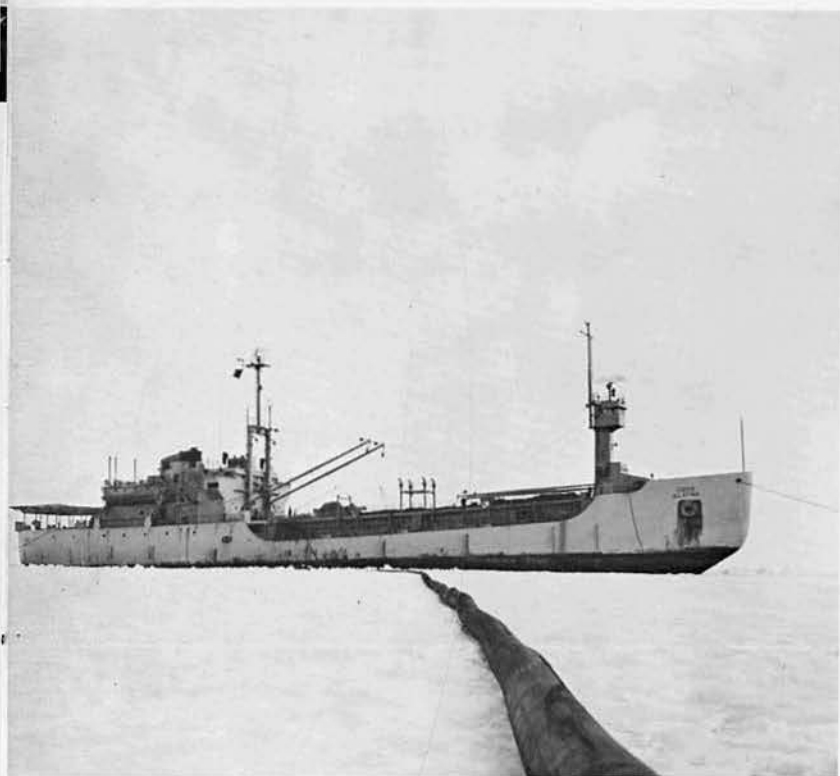
The mess hall was a source of much Christmas cheer, with their serving line loaded with special dishes.

"Snake" Meyer CS2 went all out to bake a special cake for the crew, CDR L. W. Bertoglio had the honor of cutting the first slice.

More ships arrive, USNS Alatna



A VX-6 HUS-1A "Chopper" watches as the USS ATKA, AGB-3, clears the channel of ice for the oil freighter USNS ALATNA.



After the ALATNA tied up off Hut Point,.....

She started pumping fuel to the YOG which.....



Boosted the fuel on up the hill to the huge storage tanks.



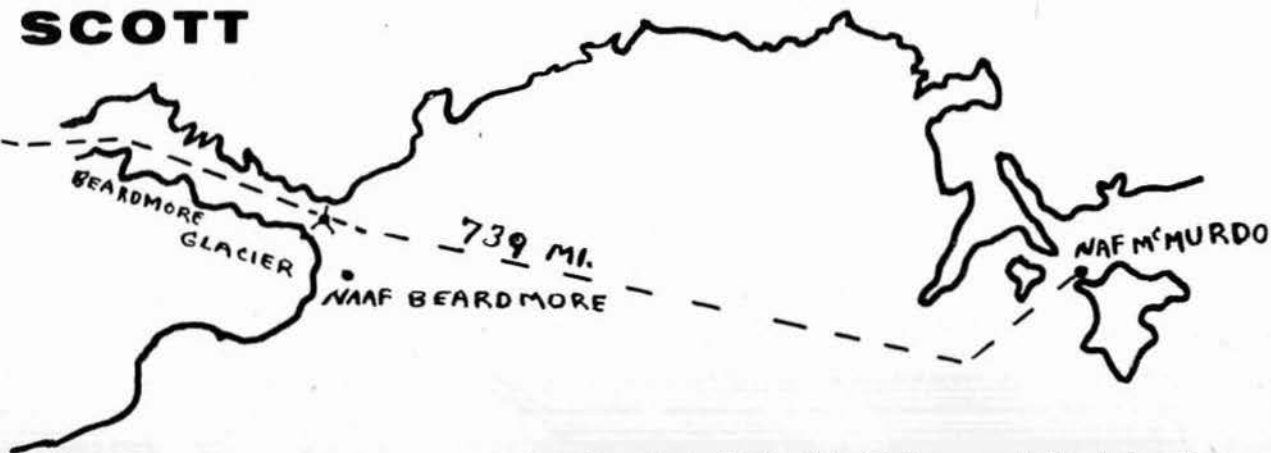
USNS Towle



After the USS ATKA cleared the channel of ice (left), the USNS PVT JOHN R. TOWLE came in to tie up to her ice berth. (top) Cats and sleds were waiting, so the offloading started immediately, this offloading continued around the clock until it was completed. The highlight of the operation was the unloading of the Traverse Type Sno-Cats (right). The United States Antarctic Research Program will use these Sno-Cats this coming summer for a land traverse from NAF McMurdo Sound to the South Pole.



U.S. AMUNDSEN - SCOTT & SOUTH POLE STATION



Amundsen-Scott South Pole Station was built during Deep Freeze II by Seabees flown in by VX-6 aircraft with materials air dropped by the Air Force. An extensive building and scientific program is carried on continually at this southernmost U.S. Base. During DF-60 five new buildings were erected to improve the under-snow village and replace buildings which were dangerous to occupy due to the weight of snow atop the building.

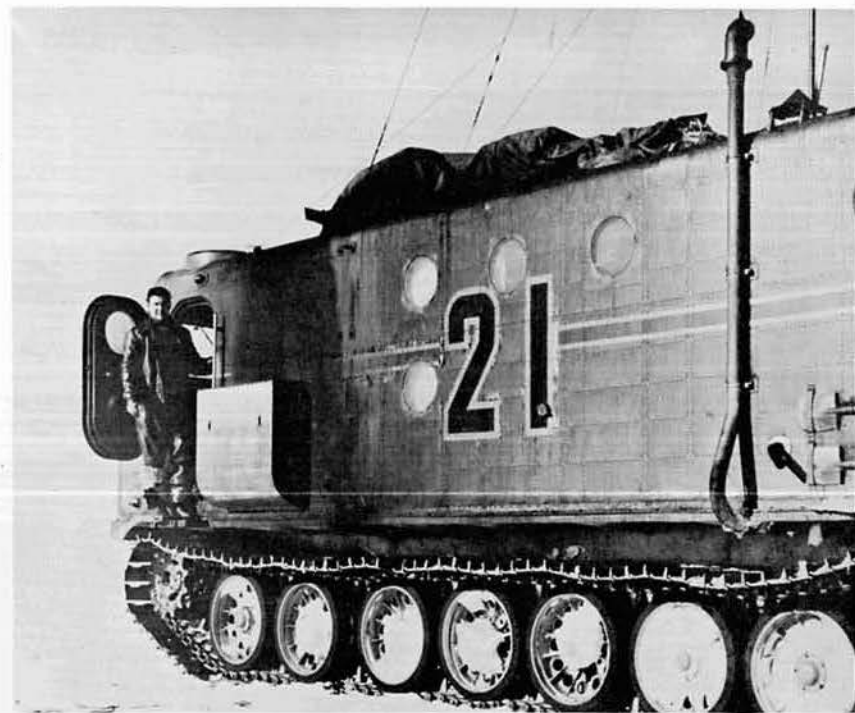
Two events marked high points of DF-60 at the South Pole, these were the arrival of the Russian Tractor Train from Mirny Station, and the first use of the C-130 cargo aircraft.





Many flag raisings took place, here the Arizona State flag is raised on December 7, 1960.

Events at the Pole



The arrival of the Russian Traverse was a big event.





10,000 gallon combat fuel cells were used to quench the thirst of the huge C-130's.



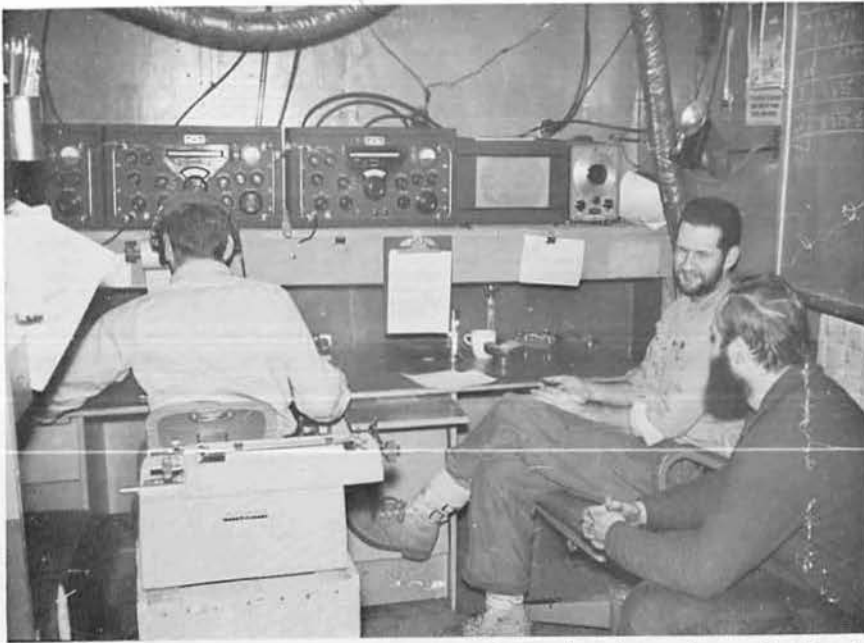
The cargo loading facilities of this aircraft were far superior to other types of planes.



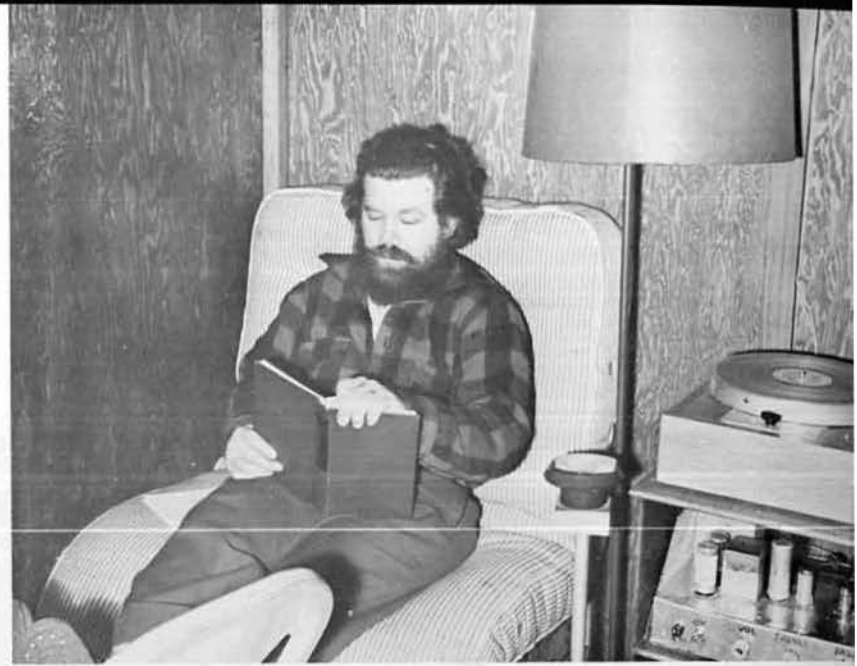
A C-130 takes off on a resupply flight to Byrd Station far inland.



After all cargo is flown to Byrd and the South Pole Station and the operation is over, the last C-130 leaves McMurdo and heads north.



A popular place, the radio shack



Keeping out of mischief.



Neck trim please



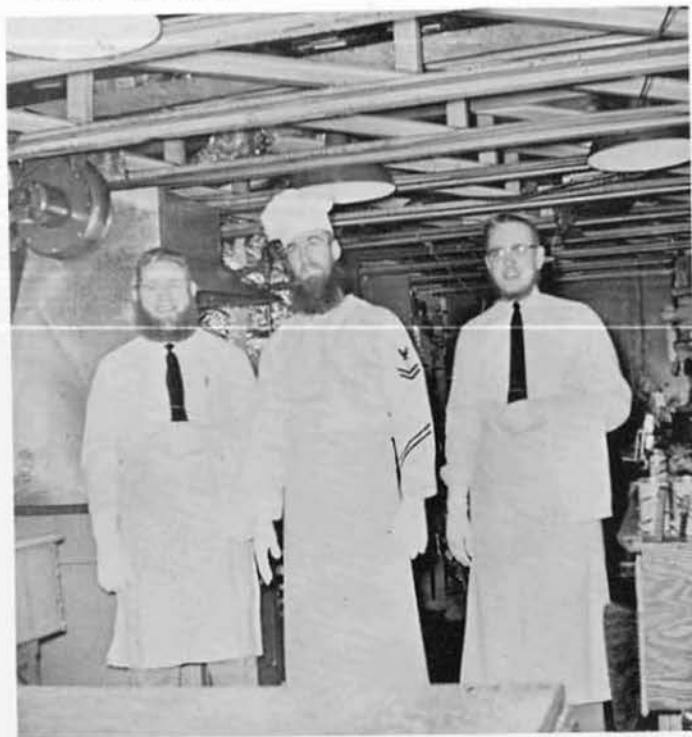
The winter knight club.



Radford's 4th of July masterpiece.

A time for play

Waiters and chef, mid-winter night.



The mid-winter setting.



Releasing weather balloon.



A time for work

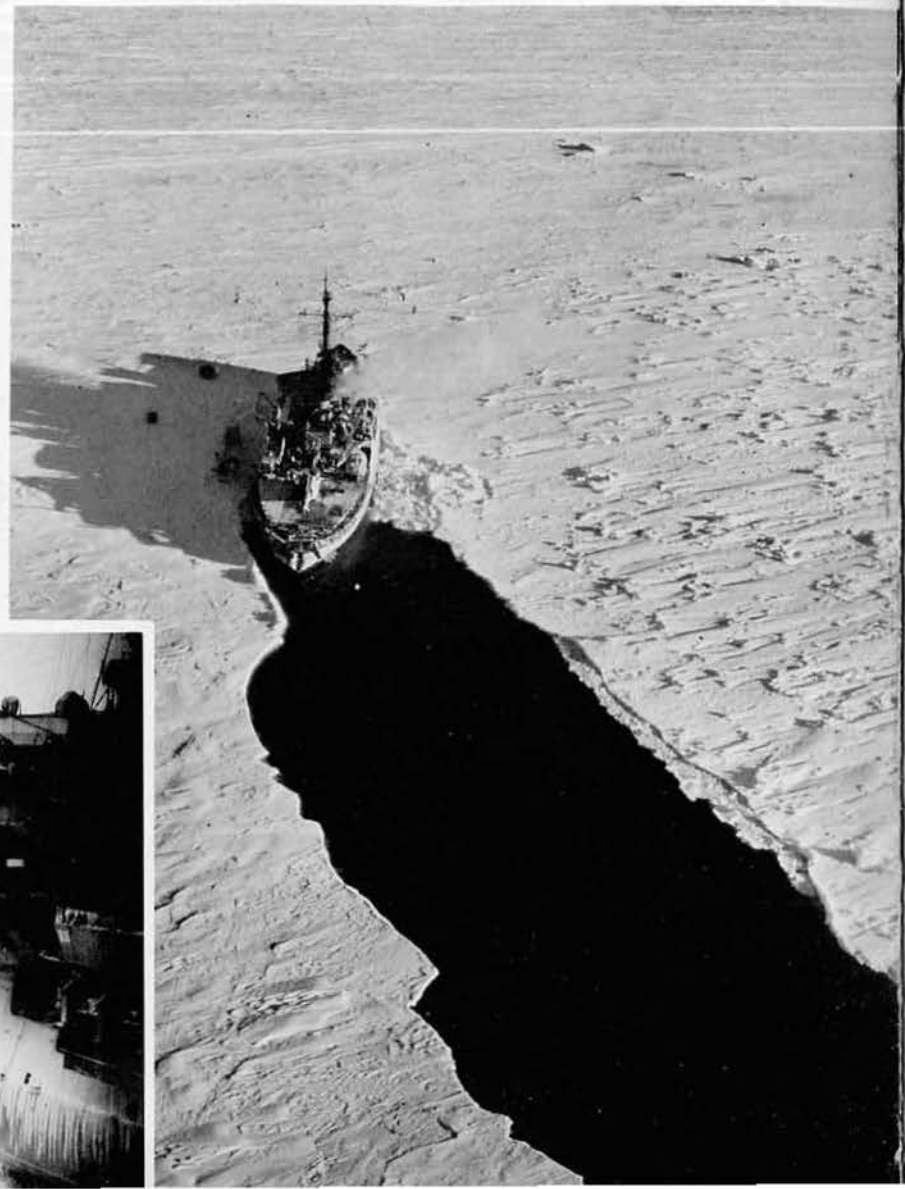


Recording ionospheric data.

The last ship calls

We are alone...The last of the summer support personnel left on the USS ATKA AGB-3 on March 13, 1960. This was the last visual contact with the outside world, for the next seven months our only means of communications would be by radio.

The ATKA at rest in a berth she cut for herself.



The ATKA was covered with ice from stem to stern.

The last emergency cargo is unloaded.



The day following the ATKA's departure, CDR Bertoglio declared a holiday to celebrate the end of the summer season and the start of the winter season, the first half of our Antarctic Year was over.

For the occasion, Chief Beaudoin broke out lobster, trout and steaks and we had a real feast. The entire crew dug out what civilian clothes they had to make it a colorful affair, enjoyed by all.



The waiters were ready.



The steaks were ready.



The waitress was ready.



The Chaplain gave thanks



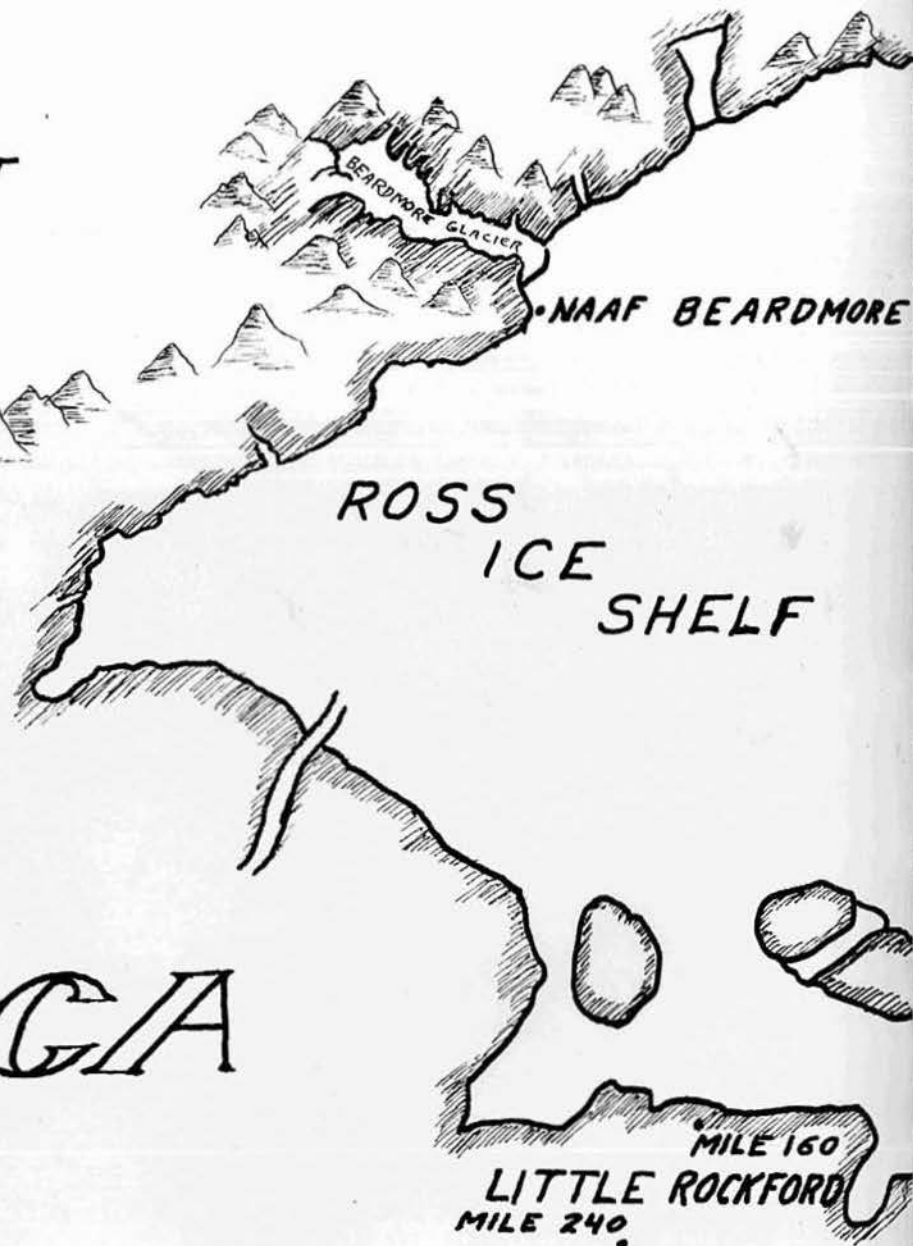
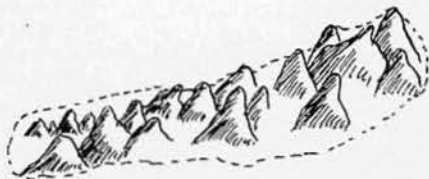
...And we
all turned to





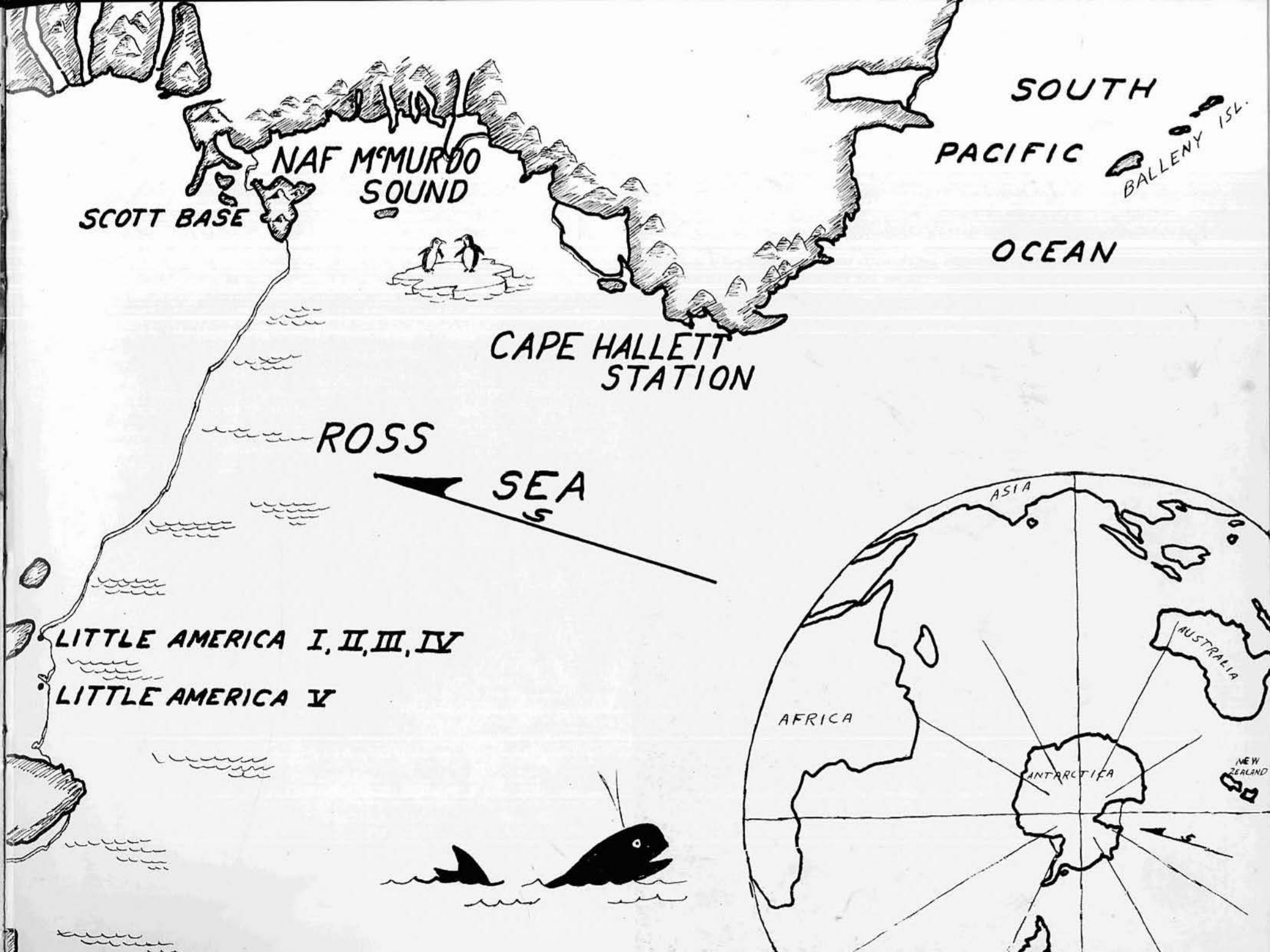
AMUNDSEN-SCOTT
SOUTH POLE
STATION

THE
U.S.A.
STATIONS
ANTARCTICA



BYRD STATION





Little America V

Snow bridge over a crevasse near Little America V.



This type LGP D-8 Cat with Tanker bow was used on the L.A. to Byrd Tractor Train.

During Deep Freeze 60, after 10 months of abandonment, Little America V was re-opened for purposes of salvage. 38 ASA personnel accomplished this job. Most of the equipment was taken on the L.A.-Byrd Tractor Train, the remainder was transported to NAF McMurdo on the USS ARNEB. A small tractor train also came from L.A. to NAF McMurdo.



Three vehicles were left at L.A. for emergency use, the tube by the flag marker contains maps of the base for use in any future re-entry.



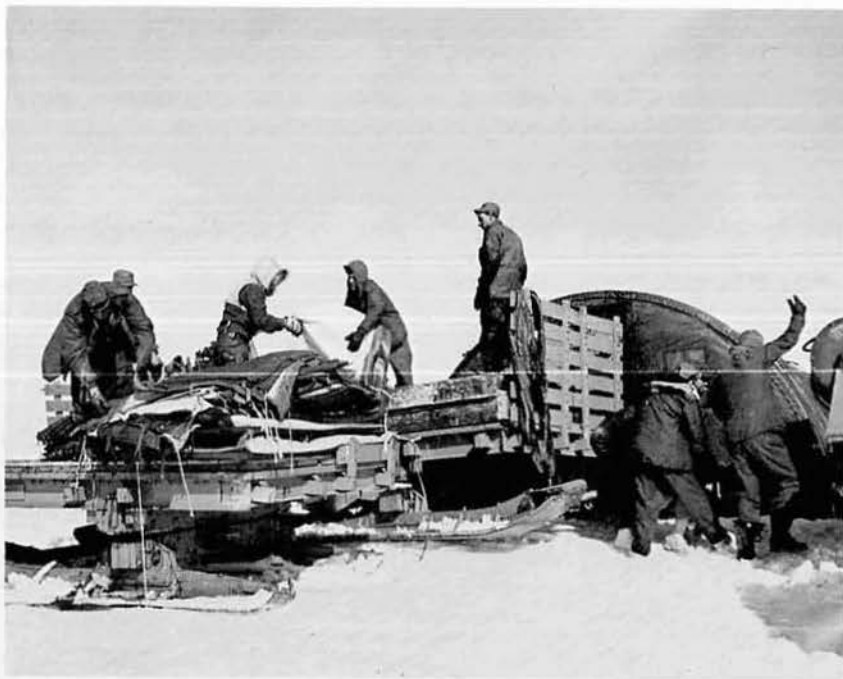
Little Rockford is the larger of the two auxiliary weather stations, being located between NAF McMurdo and Byrd Station. This year the position of this station was moved from mile 160 (right) on the Army-Navy drive to mile 240 (top) to facilitate more useful weather reports.

Little Rockford is manned by 8 ASA men during the Antarctic summer months.

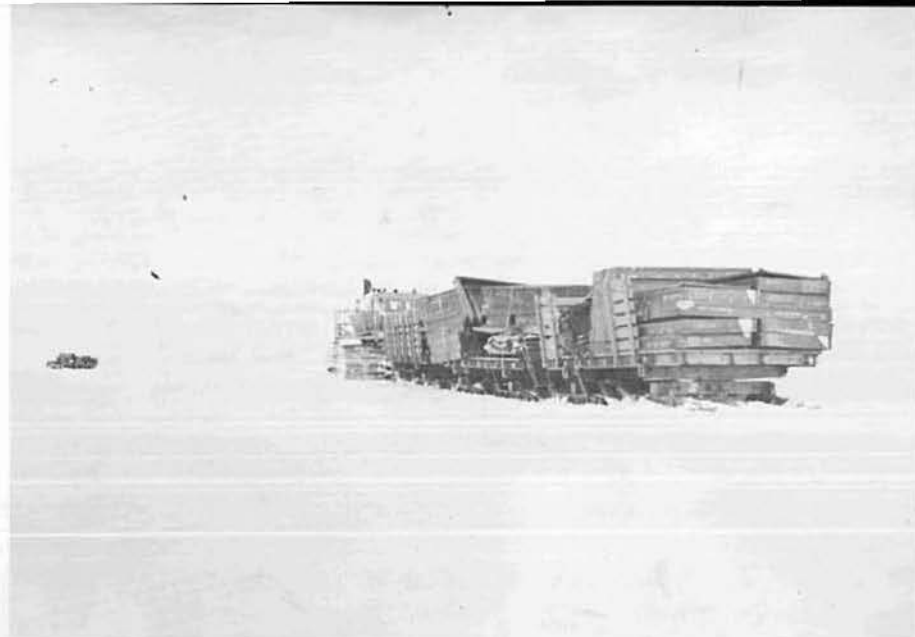


NAAF Beardmore is the smallest of the U.S. weather reporting stations in the Antarctic. This outpost is manned by three naval personnel and is only open during the summer operating months. It is strategically located between NAF McMurdo Sound and the South Pole station which makes its weather information of prime importance.

The ski runways

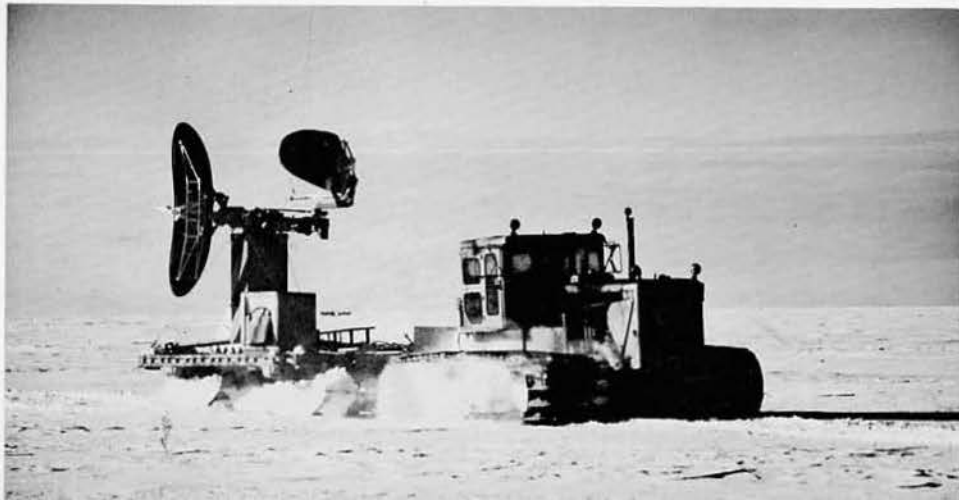


After arrival the Jamesway Huts start going up.



The tractor trains of supplies heads out to the ski runway site on the barrier.

GCA gear was transported to the barrier.



The C-130's arrive

The Air Force played a double role in Operation Deep Freeze 60. First, the C-124's flew the Kilo Alfa cargo in and conducted the normal air drop resupply of Byrd Station and the South Pole Station.

Later, around the end of January, the 61st Troop Carrier Squadron flew down to McMurdo in seven C-130 type cargo aircraft. This was an experimental program to find out if the C-130 aircraft was capable of resupplying the in land stations.

The C-130's proved highly capable of doing the job. Not only was the cargo more easily handled, there was less equipment breakage and less cargo loss. The C-130 method of resupply will probably reduce or eliminate the amount of cargo air drops in future operations.



C-130 No. 495 of the Air Force 61st Troop Carrier Squadron was the first to land on the ice.

The Air Force Camp on the ice is completed by ASA Seabees.





Entrance to Pole Station.



New geo-magnetic building is erected early in the year.



South Pole men stack empty fuel drums for later use as roof supports in passageways between the camp's buildings. Much time was used working on camp maintenance.

Resupply



LT Dumais, OINC, (L) discusses resupply problems with ADM D. M. Tyree, in the background is C-130 No. 495, the first of its type to land at the Pole.



After the airdrops, the R4D was used to transport personnel and delicate cargo to and from the South Pole.



Unloading the C-130 was a problem with the meager equipment available at the Pole Station.

New Buildings



Also brought in on the C-130's were volunteer workers off the CG icebreaker EASTWIND and the USS ARNEB, AKA-56 (above) These men helped erect T-5 type buildings at the Pole Station (left).

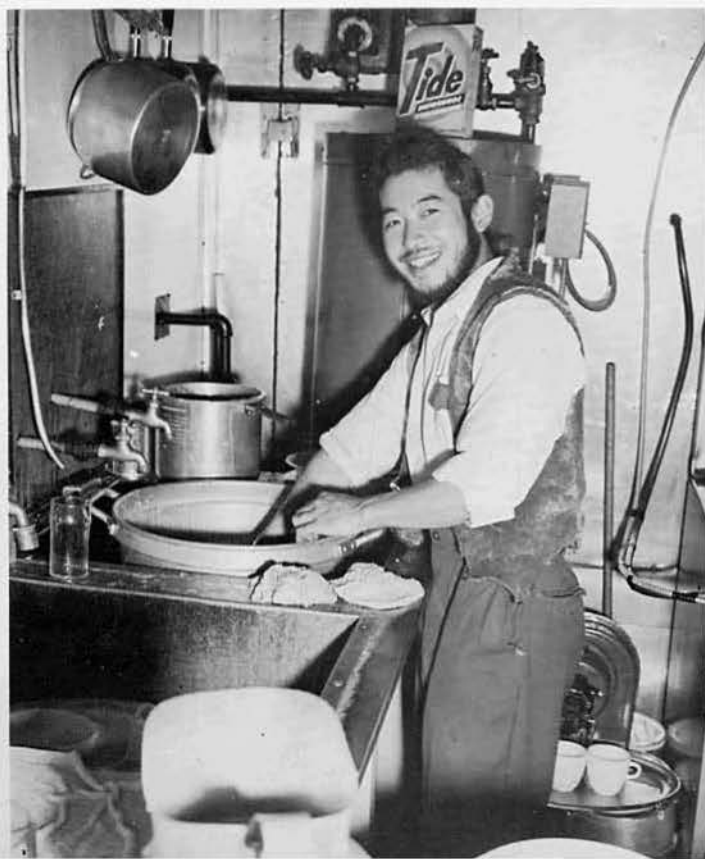
With the departing of the last C-130, the men at the Pole Station started their period of isolation.



The Scientists



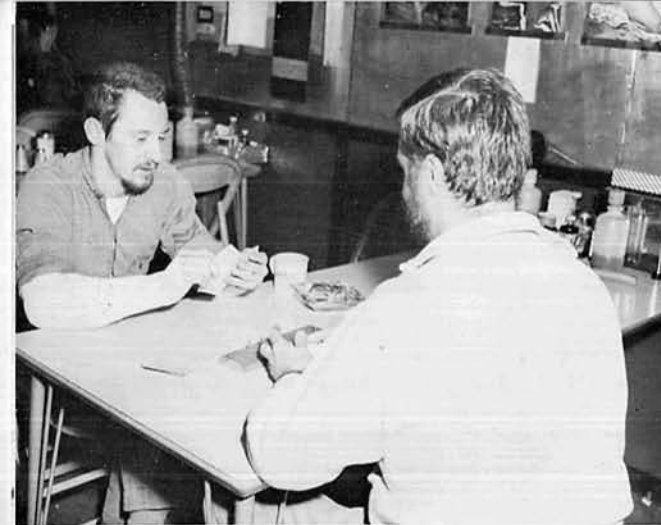
G. Meyer taking ice samples from the ice mine, this is a slanted shaft which descends 75 ft. below camp level.



Some of the scientists work is not so scientific, here Henry Morozumi takes his turn at scullery duty.



Oliver Moore working on his recording equipment



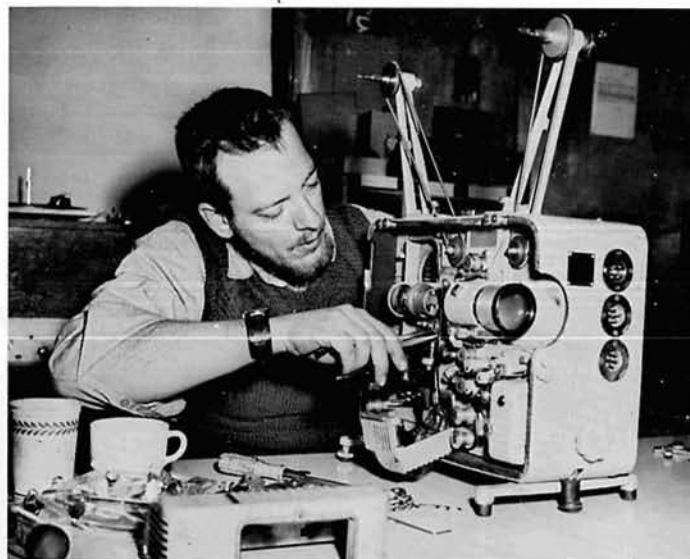
Wilcox and Wallace enjoy a game of cribbage.



Flowers, Bibbee and Goodwin enjoy a steak dinner.



Allison, Bell and Miller shoot the breeze.



Blake keeps the station movie projector running.



Ted Miller cuts steak for evening meal.



B. C. Lekander, CMCA took over as senior E.M. when Chief Fairbairn was recalled to McMurdo.



F. T. Dodd, BU3 was substitute cook when needed.



O'Quin, ETCA kept home fires burning by keeping ham rig in operation.



With the coming of summer (temp still -57) new faces were welcome as the first plane landed. L to R. are: CAPT M. K. Greenberg, RADM D. M. Tyree, LT C. C. Dumais, OINC Pole Station, and RADM B. W. Hogan.



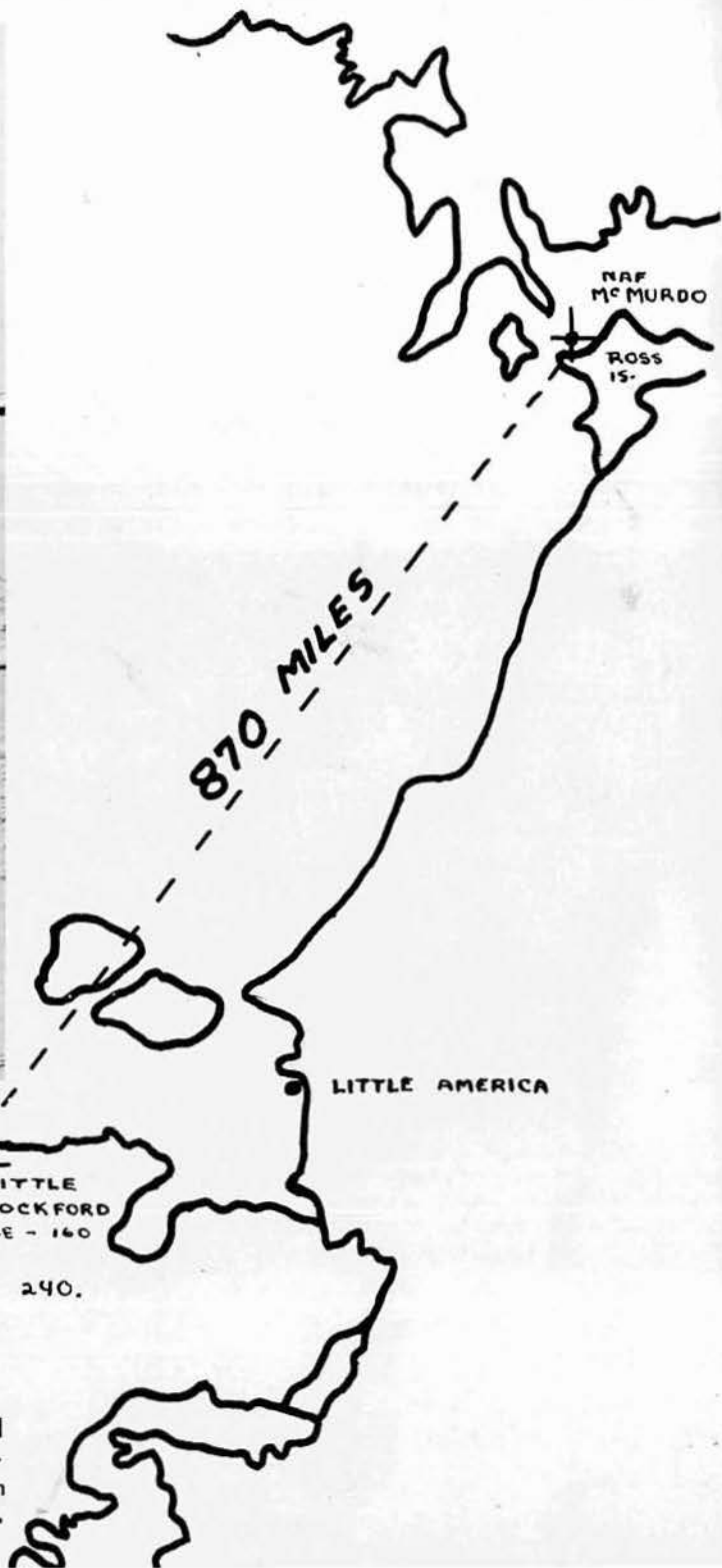
BYRD STATION

Byrd Station was built during Deep Freeze II with material hauled 640 miles by a tractor from Little America V.

The Station was designed to accommodate 25 men but during Deep Freeze 60, the Station was used as the operating base for many aerial activities and at this time as high as 74 men were living at the base at one time.



During Deep Freeze 61, the base will be rebuilt by ASA Summer Support, the accumulation of snow over the base through the years is the reason for the rebuilding.





Finishing touches being put on new garage, new powerhouse in foreground.



The new powerhouse gets buried by the first storm of the year.

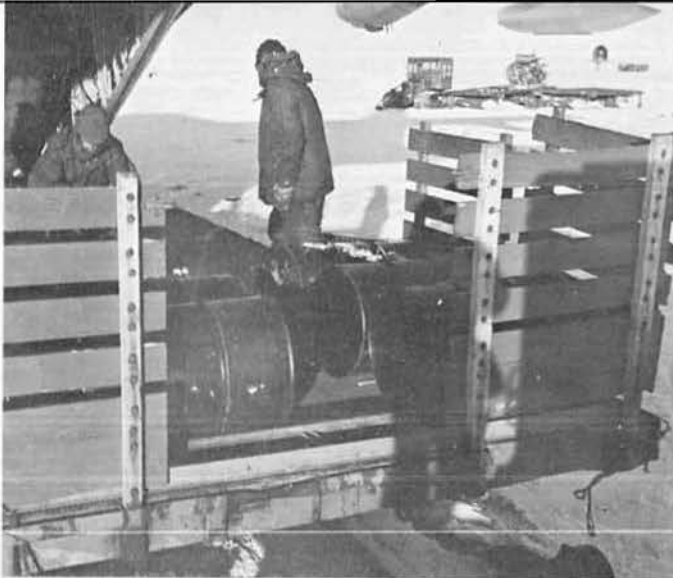


One barrack done, one to go



New wind velocity and direction tower is erected by station meteorologists.

Building in Byrdland



Unloading fuel drums

Resupply by C-130



Backing a 20 ton sled up to the cargo hatch of a C-130.



Loading engines from the R4D that crashed at Byrd Station during DF-60 into an AF C-130



Sundown

Byrdland 18 April 1960



Summer support personnel check out with McCabe BU1 at the transportation and billeting office.



Personal gear is loaded on sleds for hauling to the ship.

When all passengers were aboard, the USS ARNEB cast off lines and steered north toward New Zealand.

Summer support goes home

February 18, 1960 was a memorable day for the wintering over party at NAF McMurdo. That was the day our long chow lines and long ships service lines disappeared, and the theater was almost empty during showings.

On this day we were all able to relax a bit, especially the corpsmen and commissary men, as this was the day the USS ARNEB took aboard their cargo of summer support and left the ice.



The ice goes out

As is the case each year near the end of the summer, a certain amount of the ice in McMurdo Sound gets carried out to sea. Our summer season of 1959-1960 was colder than normal, and the ice didn't go out until March 7, 1960. Not as much ice went out this year as in previous years, as the photograph shows, the ice air field was left intact.





The new garage was dug out in Sept. 60 after being buried by storms during the winter.

Byrdmen watch the first plane land.



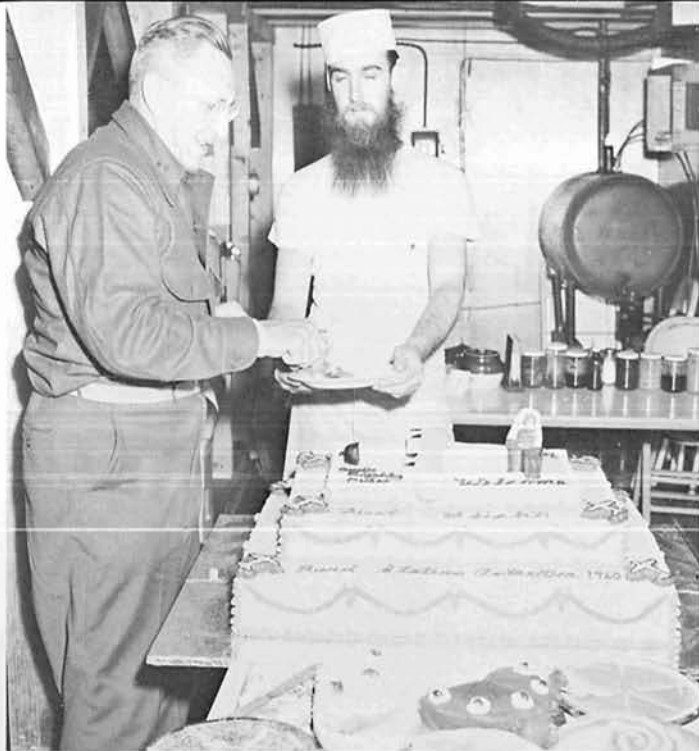
Daybreak at Byrd Station



ADM D. M. Tyree checks station records.

(Below) Reimer and Martens are initiated by Chief Davis on Nov. 16.





Station cook Radford CS1 serves cake to ADM Karl, a passenger on the first flight to Byrd Station.

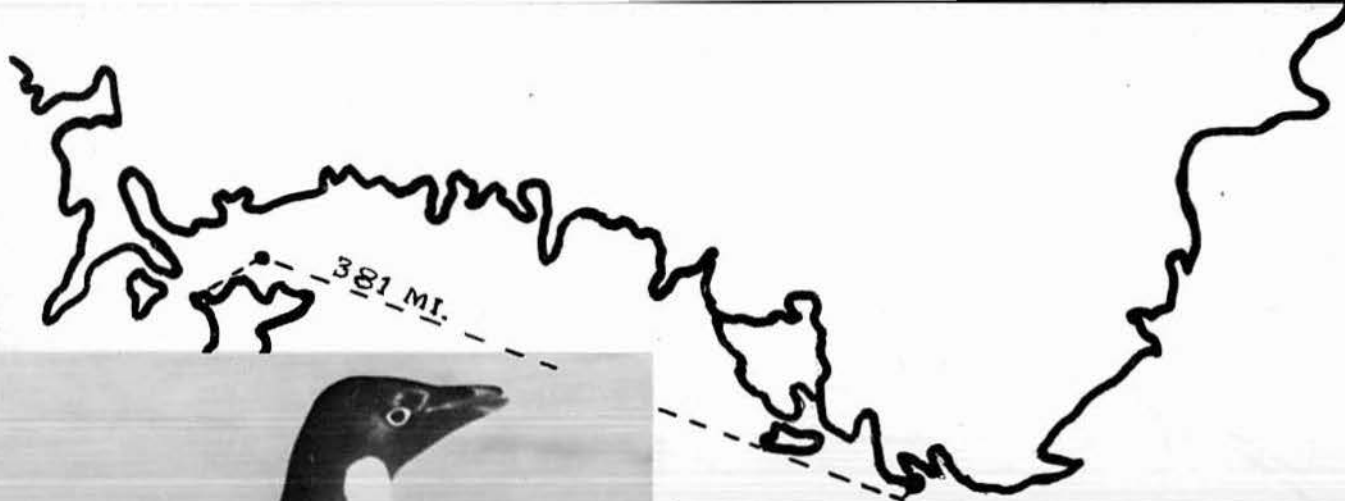
After the night, much activity



Several wintering over men volunteered for the Byrd to Pole Traverse, in the party are: back row, l/r; F. L. Dowling; M. Radford CS1; W.L. Davis CMC; Major A. Havola USA; CWO G. W. Fowler USA; E. A. Martens RMCA; front row l/r: M. F. Medlin CMH3; J. R. Douglas CMA3; S. F. Mahan RM2; W. E. Cunningham CMH3; H. Rosenthal.

(Below) the first unit of the Byrd to Pole Traverse leaves on the 650 mile trip to the South Pole. Byrd Station is in the background.





CAPE HALLETT STATION

Population
Male - 17
Penguin - 50,000, last seen
Gals - never seen

Entrance to Hallett Station





Outdoor Sports (?)
The seal and Mr. Brown (right)



Some people got all up in the air about their work.

Dozing out camp after a storm.

Indoor Activities

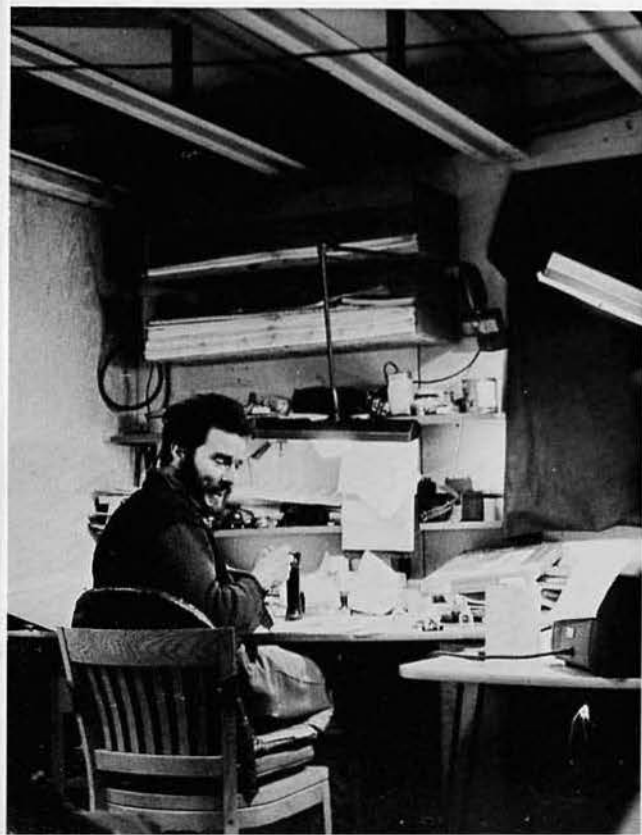


Aerologists Kittel (l) and Hartzell (r)



Radiomen White and McCall (seated)

Working

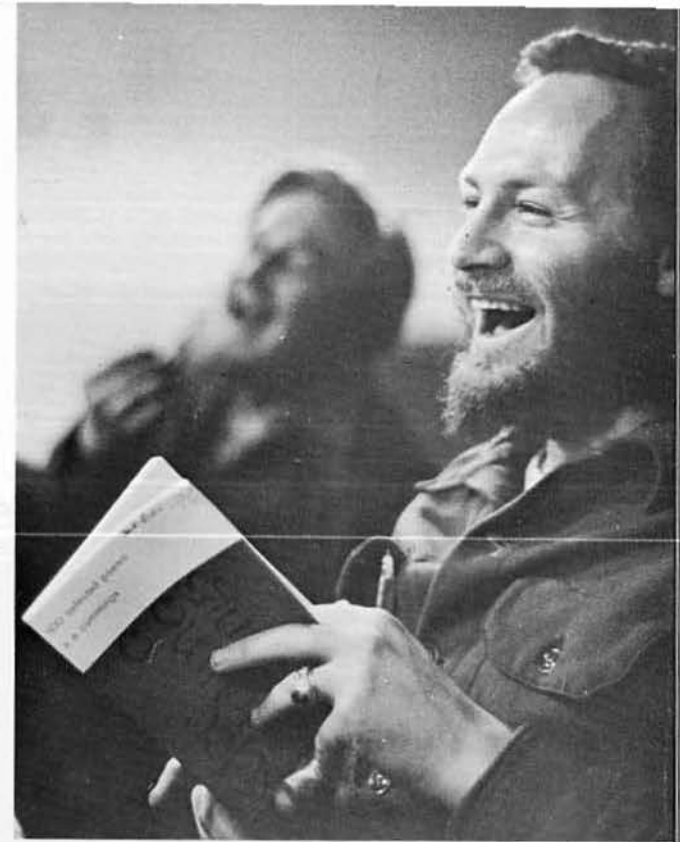


And scientists Brown (l)
and Thomson (r).





Modern poetry
readings were
rewarded
by



.... Recreation

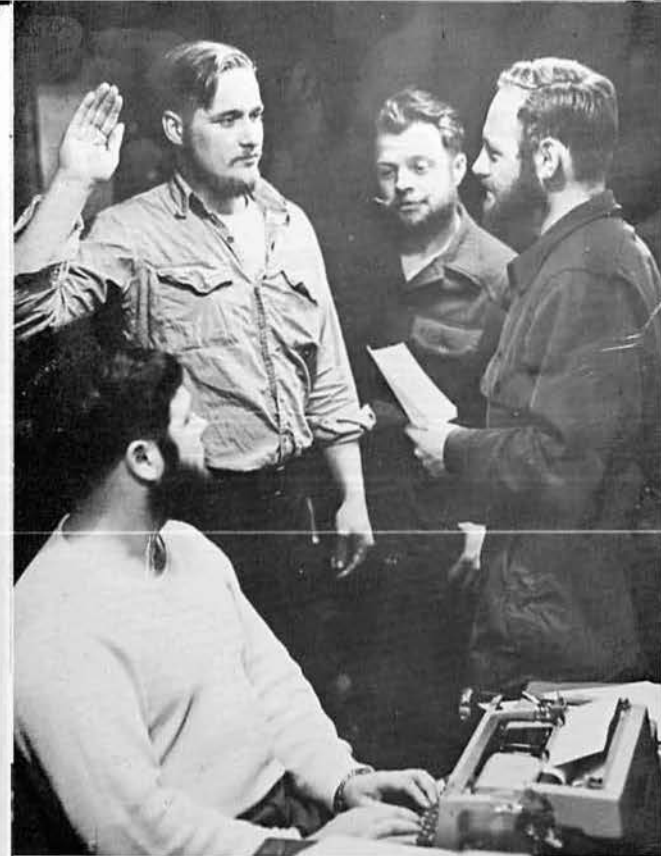


an attentive
audience.

Photography
was
popular



the little events ...



Lindau is reenlisted during the winter isolation.



A haircut



A Birthday Party



A feast at mealtime.

**...which make the winter
go quickly**



Schelin (l) and Trainer (r) at pool table.



Hartzell at Table Tennis.



Station Library



Laurin (l) and Backer (r) shoot the breeze.



The Scientific (?) Group



Bedtime stories
Towles (l)
Smith (r)



A VIEW OF HALLETT STATION AS SEEN FROM THE MOUBRAY BAY ICE.



VIEW OF MT. HERSCHEL FROM HALLETT STATION



Scott Base

A warm friendship existed between the personnel at NAF McMurdo and our neighbors, the New Zealanders, 3 miles away at Scott Base. We were the only base in the Antarctic having the unique privilege of having neighbors.

Scott Base is maintained by the New Zealand government for their Antarctic studies and research. During the long Winter, 14 Kiwi's were at the station. Their scientific activities were quite extensive, covering ionospheric and auroral phenomena, geomagnetism, seismology, oceanology, and meteorology.

Scott Base was also a tourist attraction for V.I.P.'s and tourists during the summer, as the pressure ridges near the camp were popular photographic subjects. The Weddell seals that came up to bask in the sun, as well as the Scott Base dog teams were also photographed a great deal.

For the Wintering Over Personnel at NAF McMurdo Sound it was a great privilege having our Kiwi friends so close.



LCDR J. Lennox-King, RNZN, wintering over base leader.



Weddell seals come up through cracks in the ice to bask in the sun.



Pressure ridges near Scott Base were a big attraction for amateur photogs and tourists.

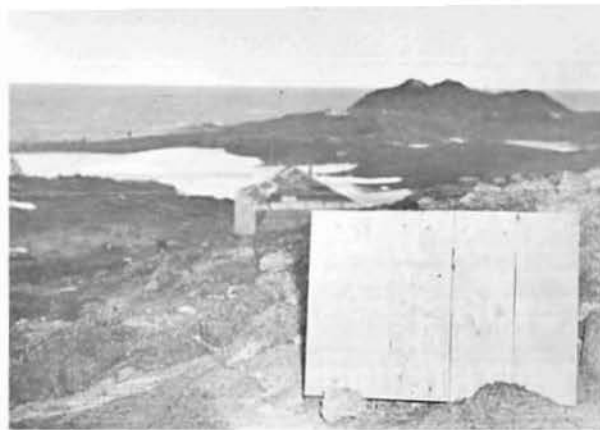


Small Oster aircraft were used by the New Zealanders for their aerial recon.

Scott Base dog team out for exercise.



The Huts



Hut at Cape Royds built by Ernest Shackelton's British Antarctic expedition of 1907-1908 (left) sign near heliport (above).

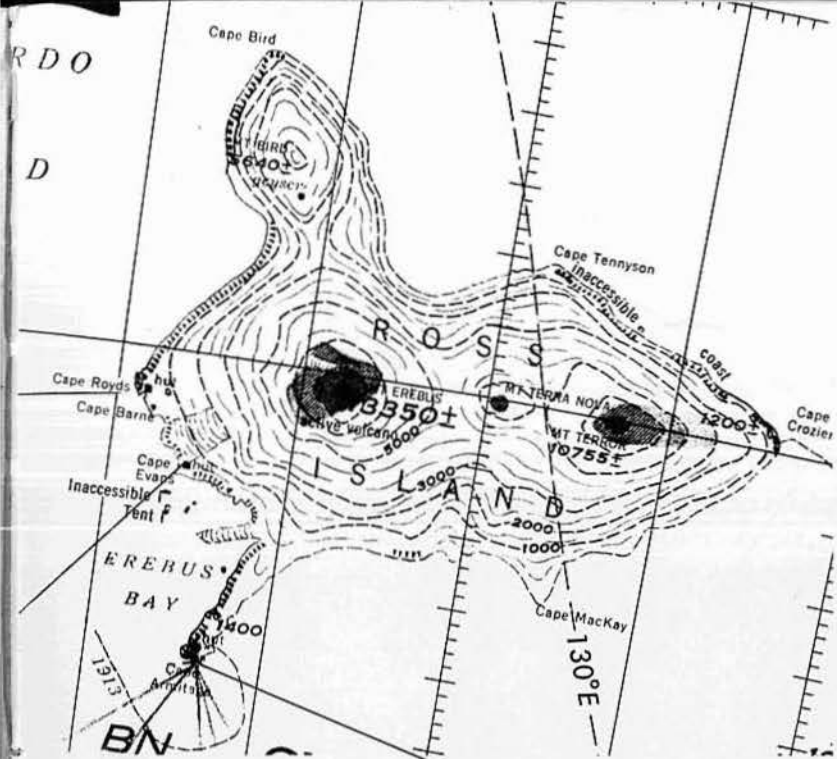


Memorial cross at Cape Evans, Ross Island, Antarctica.

Hut on Cape Evans used by CAPT R. F. Scott's 1910-1913 expedition.



The Huts



One of the historic landmarks of Antarctic exploration was within sight of our camp at McMurdo Sound. This landmark was CAPT R. F. Scott's hut on Hut Point. This hut was built by the men of Scott's Expedition in the year 1901.

This is one of the three historic huts on Ross Island, and all three are still usable today even though they are 50 to 60 years old. The climate and dry atmosphere of the Antarctic prevent deterioration of food and materials.

CAPT Scott's other hut is on Cape Evans, and was built in 1910. It was from this hut that CAPT Scott's party traversed to the South Pole successfully, but perished on the return trip.

The third hut was built under the direction of Ernest Shackleton in 1907. This hut, on Cape Royds, is still in use by the New Zealanders as a biological station, as the Cape is also a Penguin rookery.



Scott's Hut on Hut Point, Camp area of NAF McMurdo Sound in background (left) Memorial Cross on Hut Point (above).



Royal Society range mountains.

SCENERY -- ANTARCTIC STYLE



Cape Armitage as seen from the top of Mt. Erebus.



Mt. Erebus, with Mt. Terror in the background.

AIRBORNE SUPPLY ROUTES

An Air Force C-124, equipped with wing tip tanks for extra fuel, crosses one of the many mountain ranges in the Antarctic. The various scientific stations in the interior of the continent depend primarily on airborne re-supply for personnel, material and equipment.



McMURDO SOUND

A Navy helicopter, specially painted for high visibility, is disgorged from the cavernous belly of an Air Force Globemaster onto the runway at McMurdo Sound, Antarctica.





SUPPLIES BY SEA

A Navy cargo ship unloads the life giving supplies necessary for support of the U.S. scientific studies in the Antarctic into small craft for transfer over shallow water to the station ashore.



THE BARRIER

A Navy ice breaker stands in close aboard the ice barrier in the Ross Sea. The tracked weasel, visible on the ice shelf, is used for personnel transportation over the ice.



ICE BREAKER VIEW OF ANTARCTICA

Mountain ranges touch the sea in many places along the Antarctic coastline. The temperature of the crystal clear sea water that surrounds the continent never climbs above the freezing level.

ADELIE PENGUINS

Four frisky Adelie penguins cavort on the ice during unloading operations of the cargo carrying USS ARNEB. The comical antics of the Adelie and Emperor penguins are a constant source of amusement to their human friends.





MAN AND HIS DOG

Huskies and malamuts, used as sled dogs, were man's most dependable means of transportation in the Antarctic for decades. While still used today, most of their tasks in moving men and supplies have been taken over by aircraft and tracked vehicles.



PRESSURE RIDGE

Pressure ridges, formed by the contact between two moving bodies of ice, are found in many areas of Antarctica. The men shown here, outfitted in special Antarctic survival clothing, are passing through a natural path way formed in the pressure ridge.



McMurdo was a busy place



Public Works barracks were built



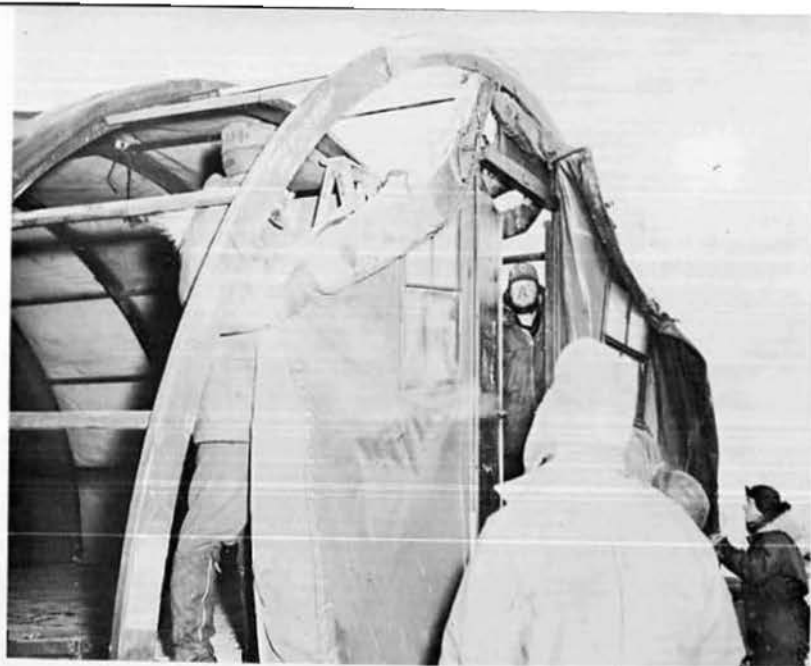
...to house a hobby shop.



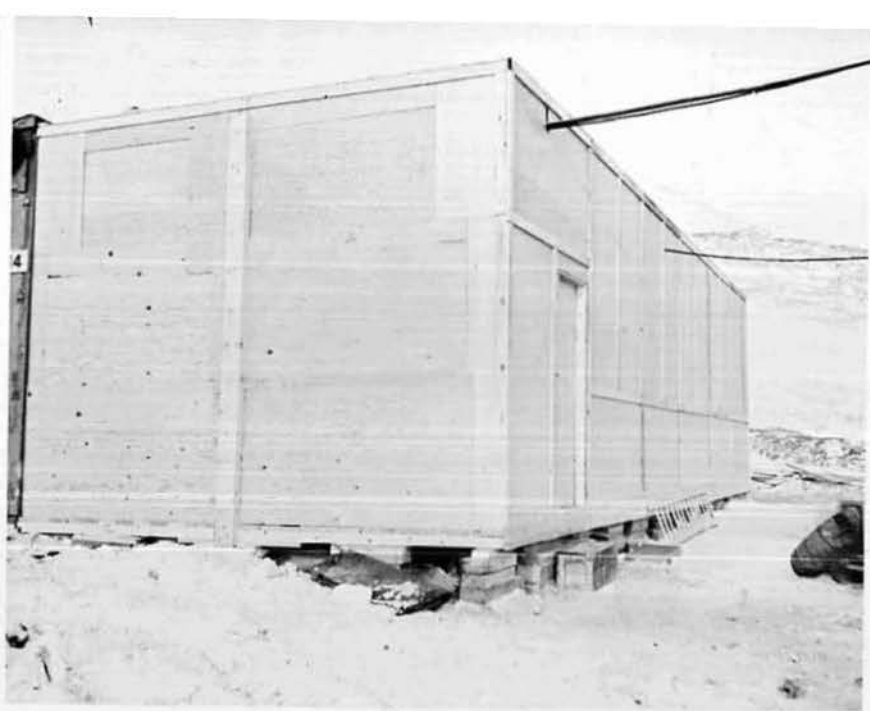
A Chapel extension was built....



New antennas were raised.



VX-6 added Jamesway extensions and a garage to their hangar.



The new Public Works garage made good progress.

Discovery deep traverse

After the USARP TRAVERSE Sno-Cats arrived on the USNS TOWLE, they had several "Bugs" that had to be worked out before the McMurdo to Pole Traverse could leave next spring.

To work out these bugs, and obtain scientific data on the Ross Ice Shelf, the "Discovery Deep Traverse" was planned and sent out.

They had considerable mechanical trouble, but in a short time had things squared away. After arrival back at NAF McMurdo they were honored as "Old Explorers" and given a medal shaped like their Sno-Cats.



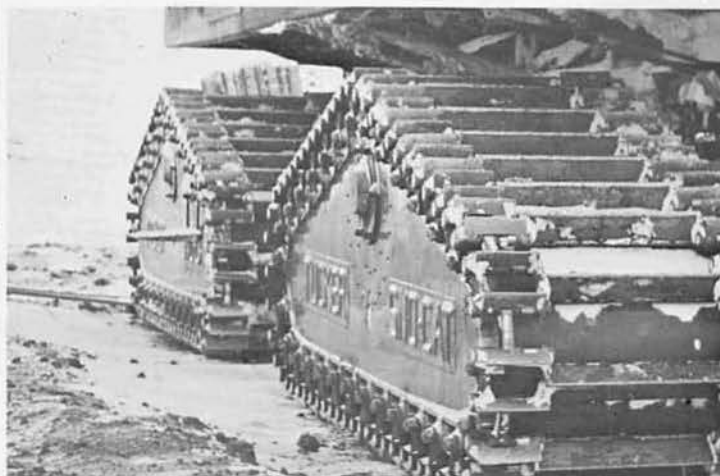
(Above) A "Chopper" made the first resupply flight, then developed engine trouble on returning to camp.



The hills of Cape Armitage come into view as the traverse returns home.

An R4D made the second resupply flight.

The Traverse arrived home, the Sno-Cats received a well deserved rest, and the "Old Explorers" received their medals.





Aircraft winterizing

As the planes land for the last time (above), they are tied down for the winter between Scott Base and the Pass (top left.)

....as the sun sinks below the horizon.

All openings are taped....



....and engines secured....





The sun looks through the clouds at the ice of McMurdo Sound (above)

As the sun sets -



Castle Rock silhouetted behind the GCA installation on the Ski runway on the barrier.



The setting of the sun was an event which will be long remembered by the personnel who wintered over in the Antarctic. We had had daylight for six months and now were in for a bitter cold six month night. It also marked the half way point of our year in the Antarctic.

All personnel who were not on watch fell in formation for colors. As we watched the flag being lowered, we all looked forward to the day when the flag would be hoisted again.

The sun sinks below Hut Point.

The flag is raised momentarily,

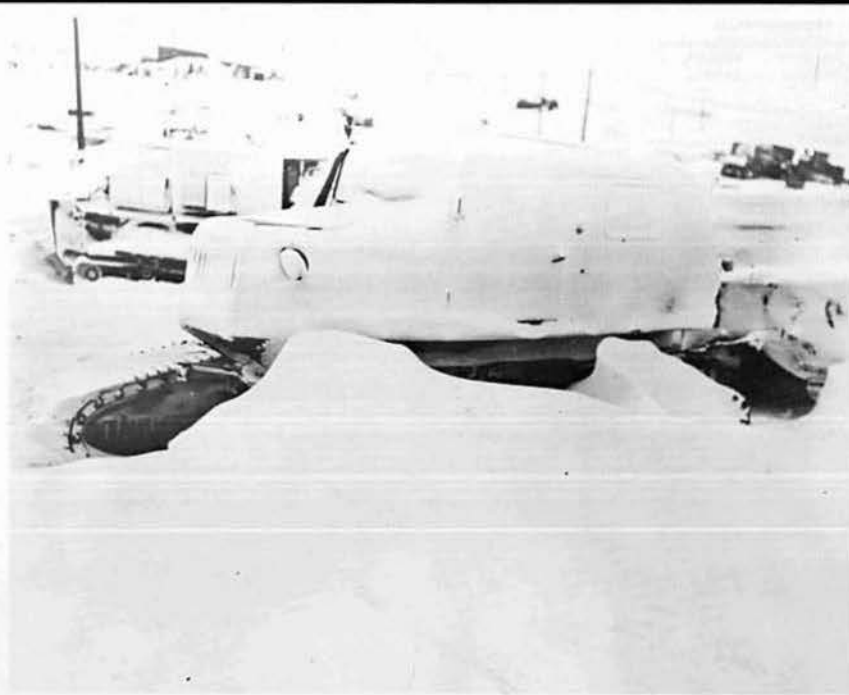
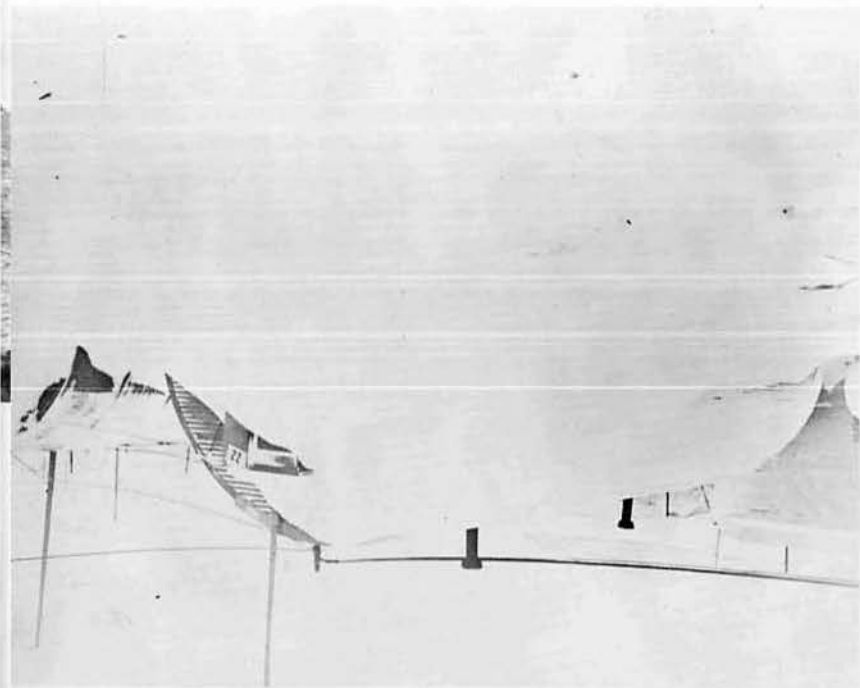


...THEN LOWERED AND PUT AWAY FOR THE WINTER.



This event took place on 23 April 1960.

Snow started accumulating ...

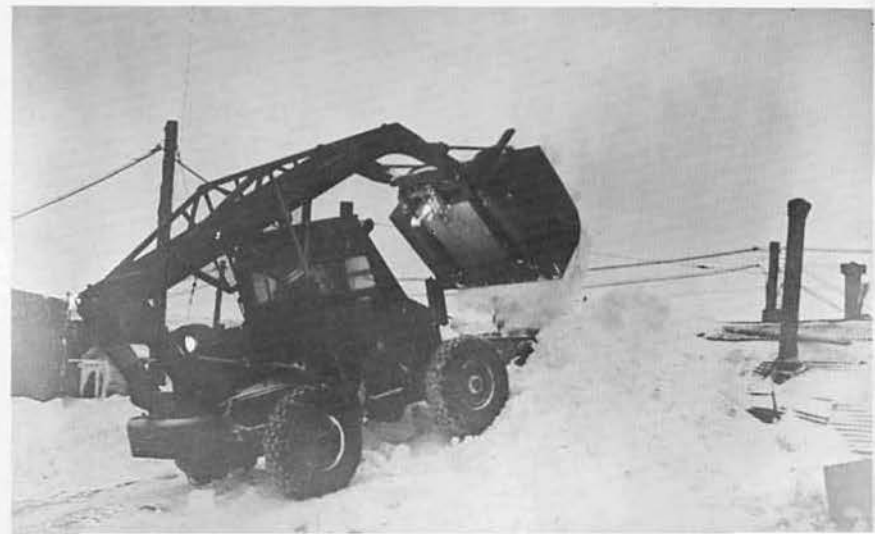


...around the camp...



Causing this reaction in places.

The snow hauler kept running regardless of weather.



BOL HALL

On Sunday afternoon 1 May 1960, in a special ceremony, the new chapel annex was presented to CDR Bertoglio by the Special Services Officer, LCDR Walters. CDR Bertoglio accepted the annex in the name of all personnel at NAF McMurdo Sound. CDR Bertoglio officially designated the annex as Bol Hall so named in memory of LCDR Peter Bol, Chaplain Corps. U.S. Navy, who wintered over at Little America during Operation Deep Freeze I.



The chapel as seen during the winter night after the extension was completed.



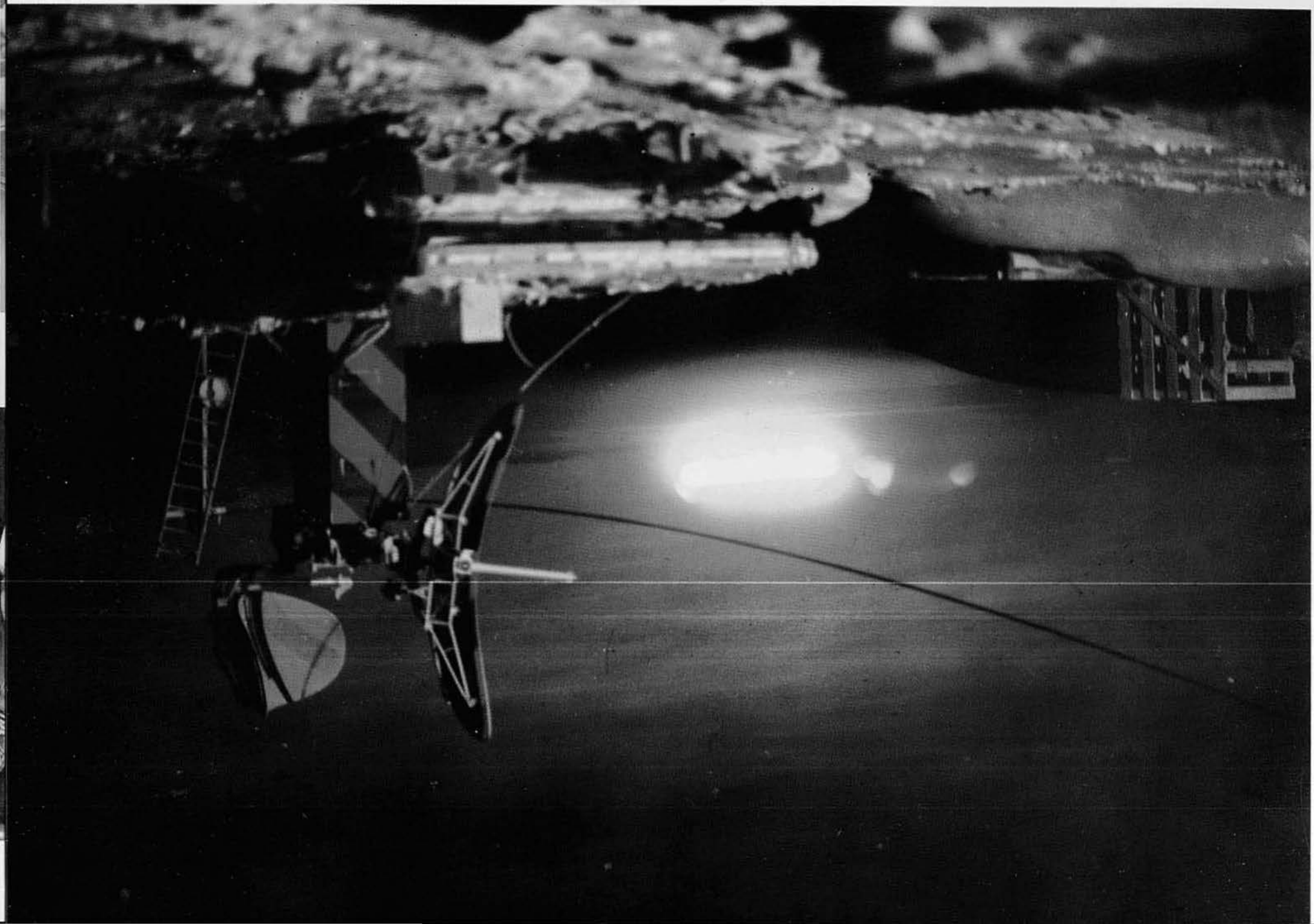
The new tape (above) deck made it possible for the chaplain to give taped concerts (below).



Books and games were made available









Looking down Main Street toward Chapel.



Flag quarters.

McMurdo at night.

A McMurdo Street scene.



The Public Works garage was completed by flood light.

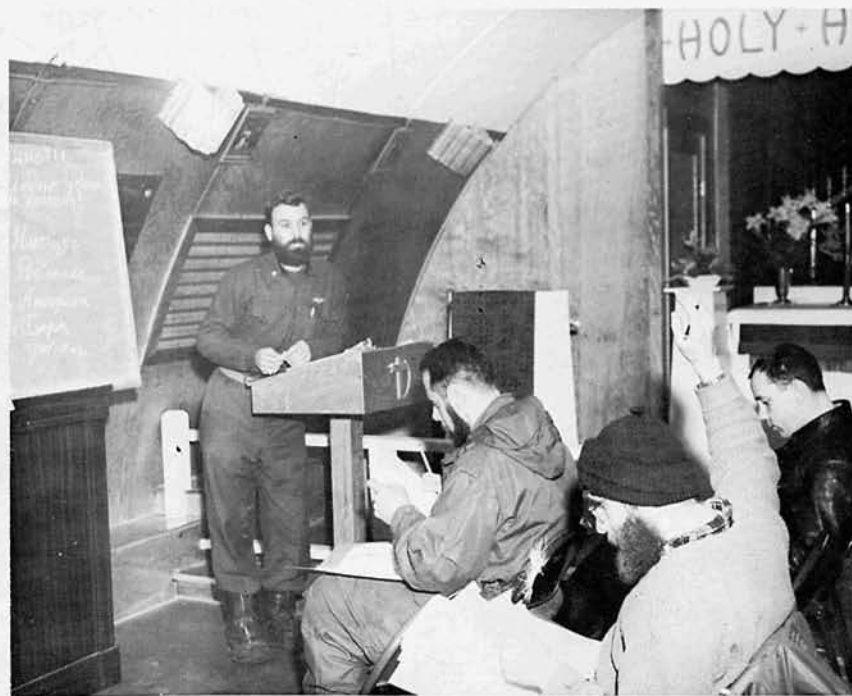




Winter time



...Recreation



A great problem in the Antarctic during the winter night is boredom. At McMurdo this was largely solved through various recreation facilities. Games, hobby materials, the E.M. and Chiefs Clubs, and the movies helped greatly to solve this problem. Parties were held in the VX-6 hangar and the station mess hall to the enjoyment of all attending. A weekly bingo game was supervised by the recreation committee.

The Winter Indoor Olympics was organized, with Tournaments held in ping-pong, pool, darts, shuffleboard, chess and many other games. For those who wanted to better themselves, the University of Antarctica was organized. Classes were held in languages, sciences, mathematics and business subjects.

A pin ball machine was located in the mess hall, the profits of which went into the recreation fund.



ANGLE SHUFFLEBOARD
PING-PONG



CHESS



DARTS



ACEY-DUECY



The E.M. Club

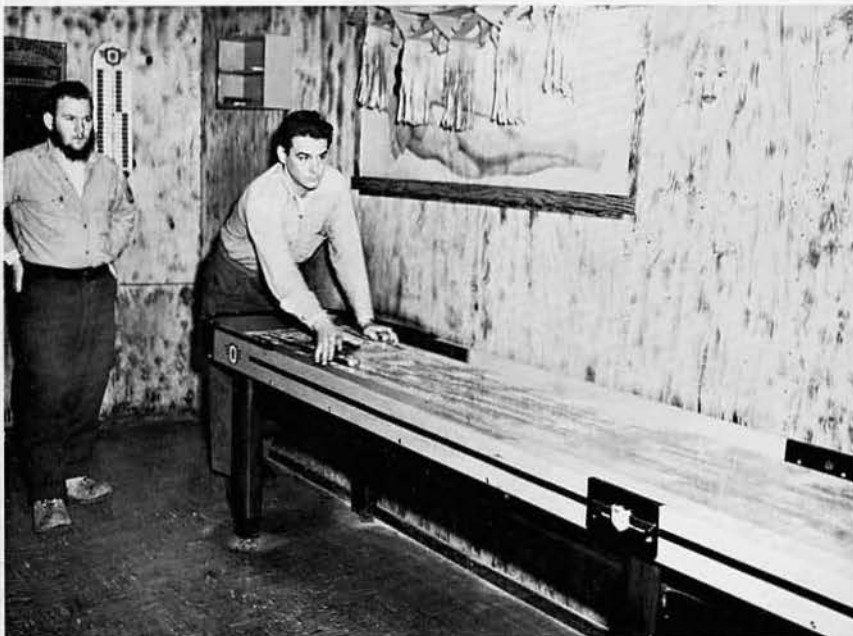


DRINKING



RELAXING

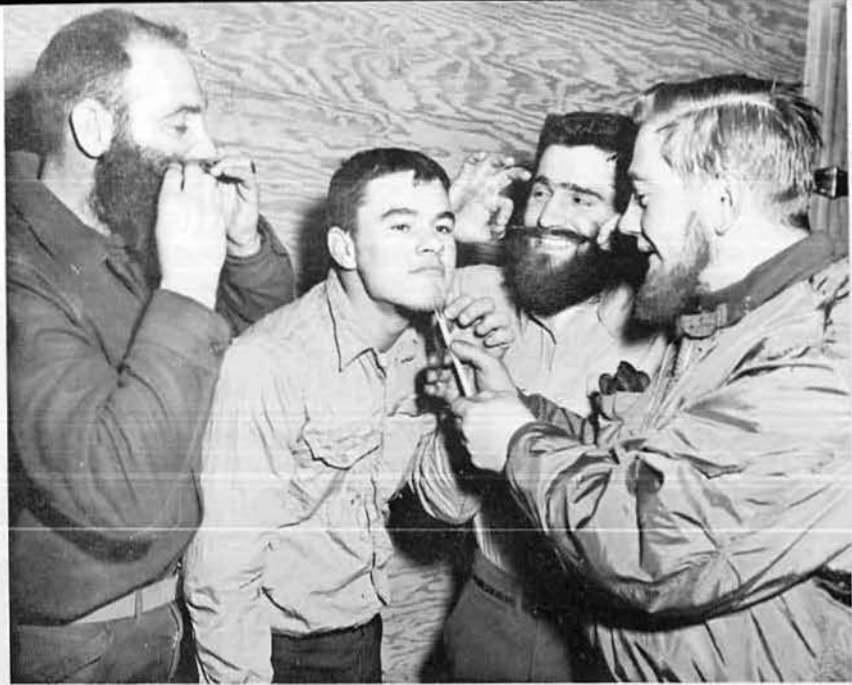
(Below) PUCKERED PETE KEEPS WATCH.



SHUFFLEBOARD



SKILL POOL



Beards were compared

The C.O. receives his book from the Mid-Winter Skit.



CRIBBAGE



The Chaplain attempts to solve a puzzle.

Barn warmings

.....In the Det a Garage.....

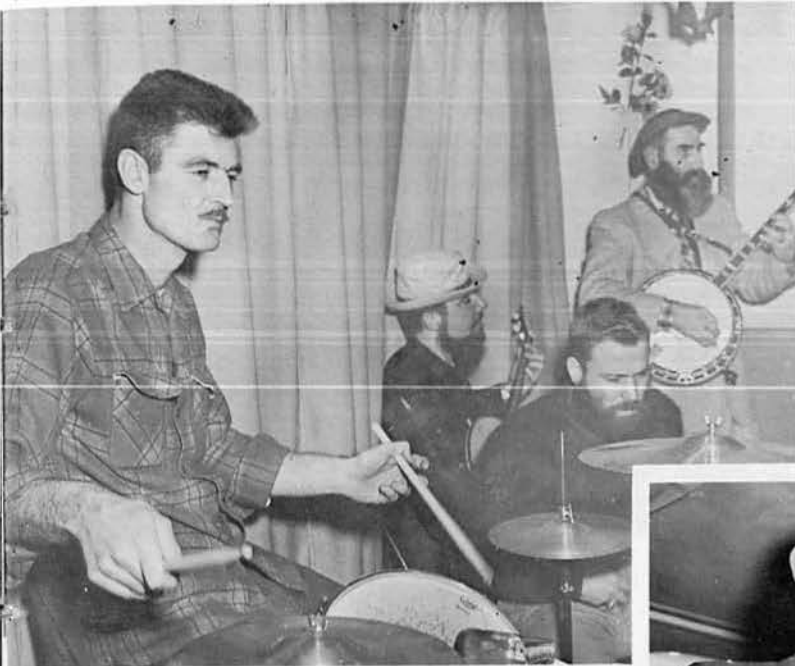


.....And the ASA Garage.



Mid Winter

JUNE 21, 1960



THE BAND



THE CAKE



THE MEAL



THE SKIT

**"THIS IS YOUR LIFE,
CDR BERTOGLIO"**

Presented by VX-6 DET. ALFA

The VX-6 Det and Master of Ceremonies Ed Robinson of USARP made the Mid-Winter Party a huge success through the presentation of their skit.



Ham Shack

NAF MC MURDO SOUND
ANTARCTICA

KC4USV



Making a phone patch to home

The shack
receives
many QSL
cards.



Writing Hamgrams



The Ham Operators

The Deep Freeze QSL Card

WOYDM - WOYDM This is King Charley Four Uncle Sugar Victor, how do you read me - over.

KC4USV - This is Whiskey Oboe Yoke Dog Mike, standing by for your phone patch traffic, I read you loud and clear, over.

WOYDM - KC4USV, we are passing the word now for anyone in the Mid-West who wants to make a patch, stand by.

From 1300 each day, this sort of talk could be heard in the Ham Shack, for these were the men who contributed greatly to higher morale of the W-O Party, the Ham Operators.

Through their diligent efforts they have made it possible for us to talk to our loved ones, send Hamgrams, and receive photos of our families.

These unselfish, tireless and voluntary deeds have made the long winter night more pleasant.



WALT



MIKE O-IN-C

KC4USV

DEEPFREEZE 60



BOB C-IN-C



FRANK



MATT



NAF MCMURDO SOUND, ANTARCTICA



DICK



RAY



LEE



KEN



CHUCK



ED



LARRY



DICK



BILL



DON

INDEPENDENCE DAY

Independence Day in the Antarctic saw the demolition team in charge of our fire works display, some trouble was encountered in getting the charges to go off, but it turned out to be a successful display.

"Snake" Meyer baked a cake in the form of a 13 star flag, and all hands broke out their uniforms to make it a colorful day.



Special Guests of CDR Lloyd W. Bertoglio (center)
Were: LCDR J. Lennox-King, Wintering Over Base
Leader, Scott Base. (left)
Sveneldt Evteev, Glaciologist, exchange scien-
tist from the USSR.





SPECIAL CHOW

THE WHITE HATS



THE HARD HATS



THE GOLD BRAID AND CIVILIANS



The original Bio-Lab as seen from flag quarters.



Wintering over scientists.

USARP

The USARP garage at left, and the new Bio-Lab at right showing the added extension.





THE TRAVERSE VEHICLES

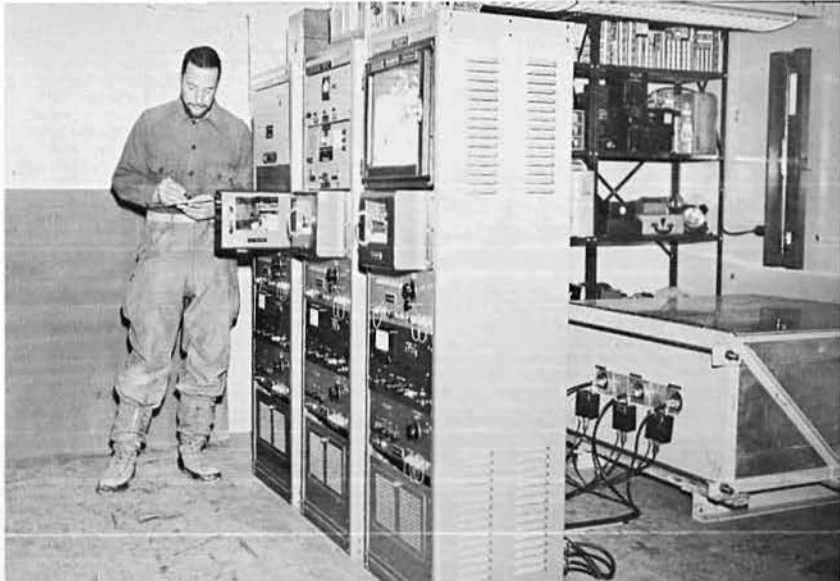


The VX-6 helicopter aided the placing of ice movement markers which were positioned by glaciologists.

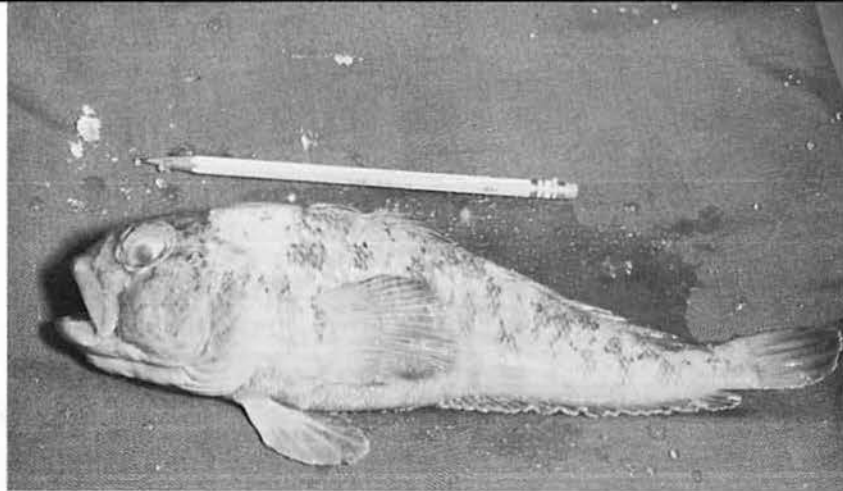
ACTIVITIES



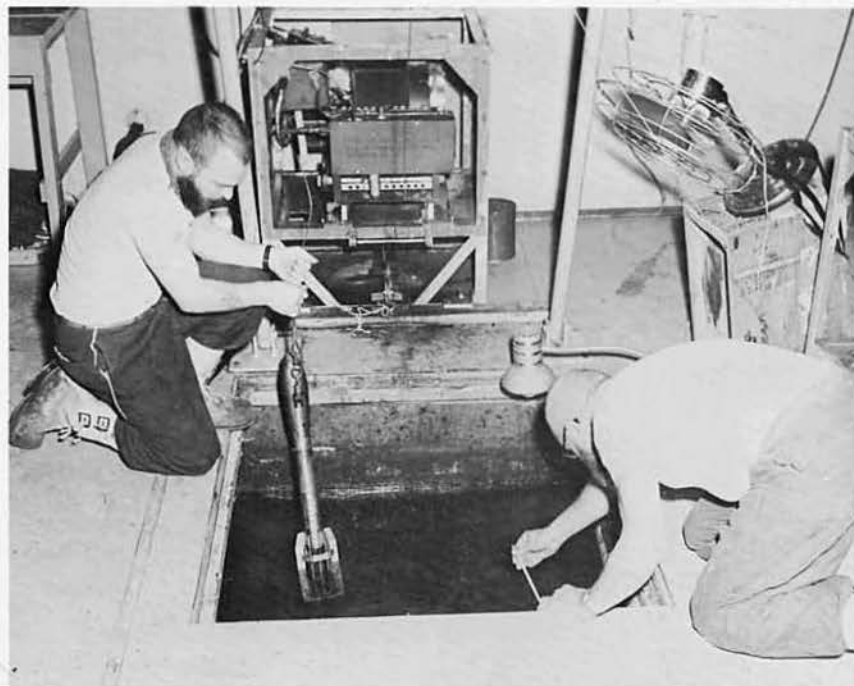
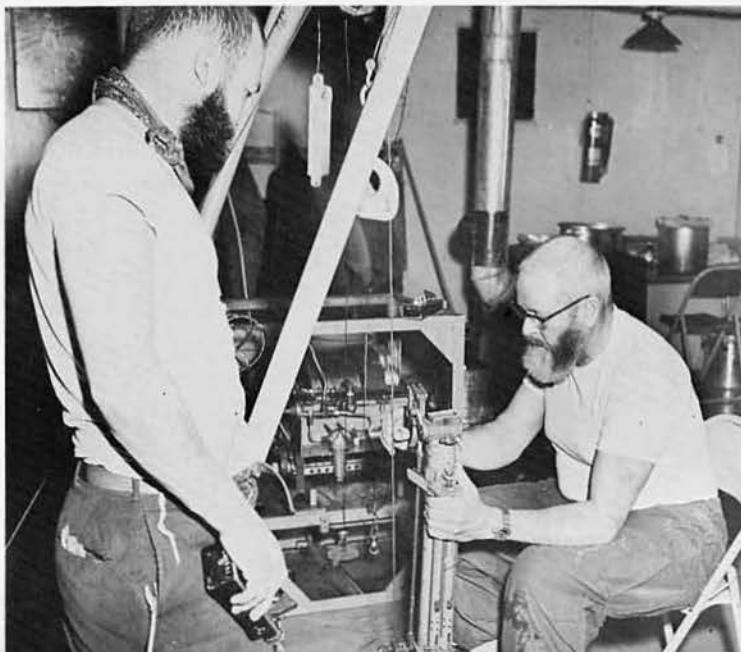
Readings and angles are recorded by exploration geophysicists.



Cosmic Ray Research Equipment

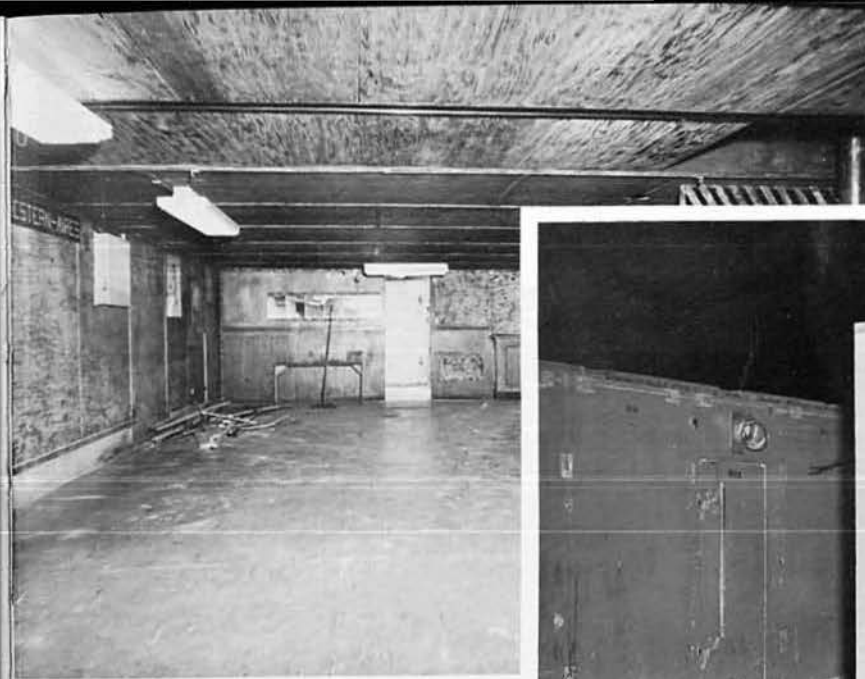


The small fish caught in traps at the Oceanographic Station are studied by Marine Biologists.



Oceanographic work is done through a hole in the ice, over which a "T" building was built to better the working conditions.

The New Photo Lab



Old E.M. Club before conversion to Photo Lab.



Wall on extension goes up

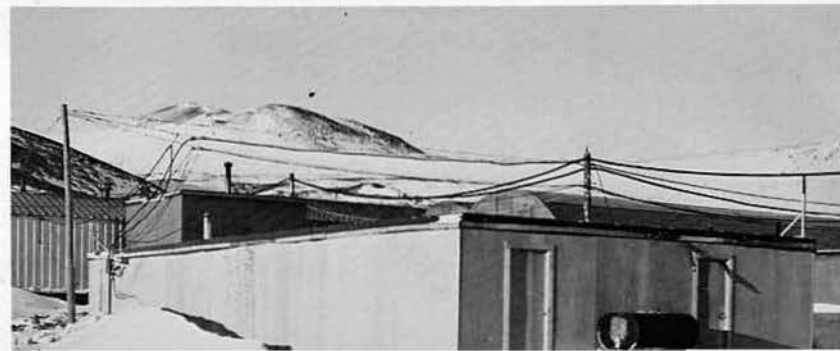


New overhead goes up fast due to prefabricating the roof panels.



Finished interior

Finished exterior showing new additions.





The buildings of the camp area almost disappear from sight in the blinding snow.



ANTARCTIC WEATHER

Antarctica is noted for its fierce weather. Blizzards develop with amazing rapidity and may last for days. It is regarded as the coldest area on earth. The lowest temperature recorded anywhere was a minus 127.5 degrees reported by Russians at the Vostok Station in 1957. The Americans at the Pole Station recorded 110 below zero in Sept. 1959. The temperature differences between inside and outside of the living quarters sometimes reaches 100 degrees or more.

As men walk down the main street, they are obscured from sight.





SUN UP 20 August 1960



After many weeks of total darkness, faint glimmers of light started showing over the horizon. Soon this turned into twilight, then for a few weeks we had an almost normal condition of day and night.

20 August turned out to be the day we all looked forward to as that was the day the flag was first raised after the long night. The flag only remained hoisted for a few minutes the first day, but each day stayed up a little longer.

We all felt good seeing "Old Glory" flying again.



AIRCRAFT



As the "Choppers" are pulled out of the hangar, the rotors are bolted in place (above), and checked for alignment (below).



A D-8 Cat blades snow drifts away from the aircraft.

BREAK OUT

The aircraft were drifted in heavily after the long winter night with its blizzards and storms, but an eager VX-6 detachment was ready to start digging them out.

Around the middle of August the helicopters were pulled out and checked. Then on the 19th of August, the entire crew, braving temperatures of 40 to 50 degrees below, started shoveling snow away from the R4D's and otters. They started early in the morning, and before midnight had all the planes dug out and towed to the check area on the ice below the squadron hangar.

The next day saw a storm hit the base, so the VX-6 crew took a well deserved rest.





The skis are cleared of snow.



D-8 cats pull the R4D's to.....



.....the check area.

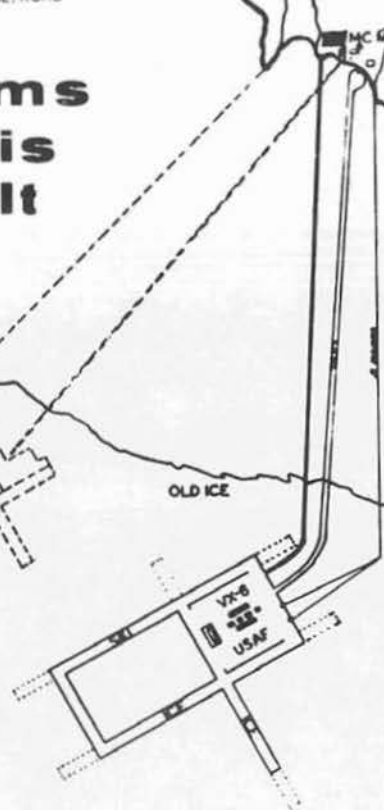
The planes are baked out.....



.....and checked for condition.

SCALE 1" = 2500'
- - - - - OF 60 R'WAY, HOSE, ROAD
x OVERUNS

Williams Field is Rebuilt



The time was the middle of August, the temperature was 60 below zero on the ice. It was at this time the surveying for the new airfield had to be started.

CWO Jackson and Larry Fairbairn EOC took their crew out to lay out the field. The effort and time spent surveying the new airfield went for nothing because the snow proved to be too hard for the D-8's to push and the old ice in this area was not flat and smooth.

Efforts were then turned to re-surveying the field used last year, the snow here was much easier on both men and machines. The snow removal then went on around the clock in order to have the field ready for the first plane on the 1st of October.



CWO Jackson and Fairbairn EOC headed the survey crew, tapersmen were Lewis EO1 and Wojtowich EO1.



Williams Field before clearing operations started, Cape Armitage and Mt. Terror in the background.



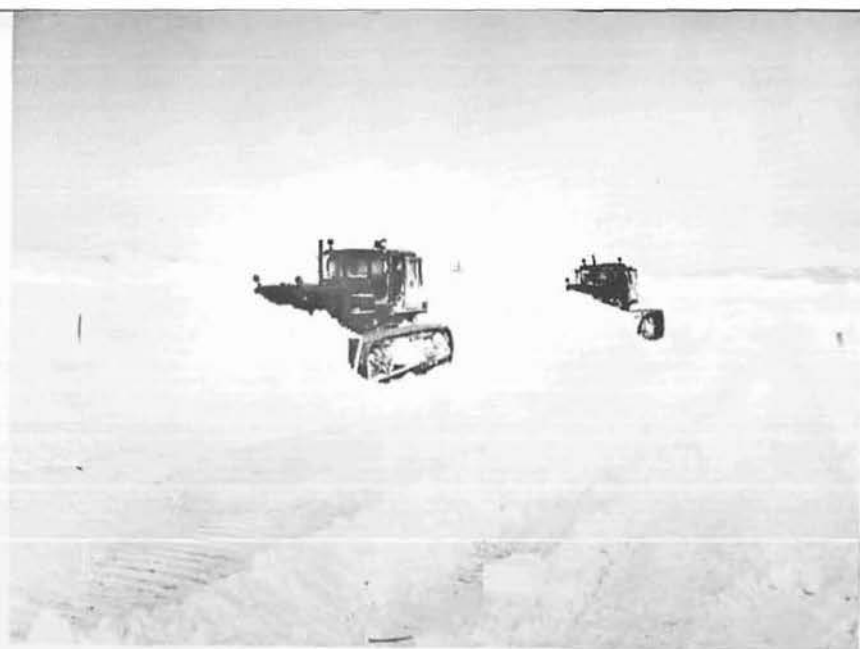
Marble Point
Camp →

←
Runway

The original runway (foreground) proved to be too rough on equipment and men, so efforts were turned to clearing last year's runway (center left).

Meanwhile, DeBord EO1 took a crew to Marble Point to clear the land runway and clear an emergency strip on the ice.

PUSHING SNOW



The D-8's worked in teams during the snow clearing operation.



The D-8 cats are almost hidden in the furrows as they push mountains of snow off the runway.



Williams Field as it looks with the main runway almost clear.

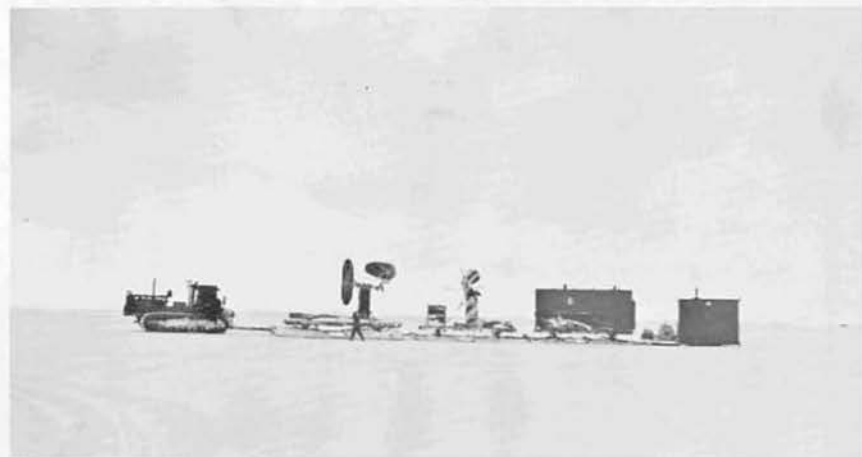
GCA'S MOVE



The Wanigans are hitched together to make up a train.



The first train included the tower, sleeping, eating, and generator wanigans, plus the Tacan sled.




The second train pulled the radar antennas out to the field.




Aerial view of the completed GCA installation.

Williams Field



Overall of completed field, Cape Armitage
in background.



Camp installation at Williams Field, this camp housed 200
personnel who were directly connected with the air
operations.



ADM Tyree arrived from the states on the R7V on 15 Sept.



Preparations in Christchurch

Some of our reliefs were aboard this first plane.



The Airforce C-133 played a part in Operation Deep Freeze for the first time.



An important cargo, Mail is loaded on the R7V for the first flight to the ice.



**Phoenix 6,
the first plane
arrives on
5 Oct. 1960**



CDR L. W. Bertoglio greets ADM D. M. Tyree,
CAPT Munson, and CAPT Eady.



The men of McMurdo turn out to greet the Air Force C-124
crewmembers and the ground support men.

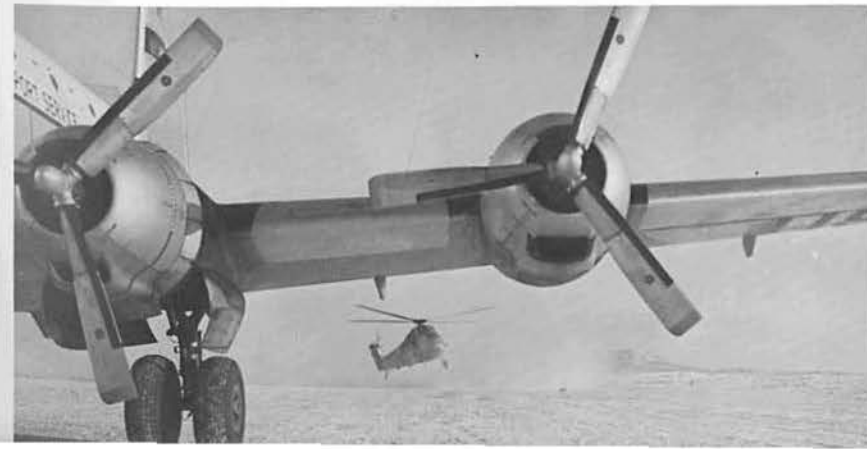
The First Mail



It warmed our hearts to see the vast amount of mail flown in.



The VX-6 HUS-1A helicopter shuttled men and mail between Williams Field and the McMurdo camp area.





Mail call



LTJG M. D. Gainey picks up mail for Communications

Mail call causes work for certain office personnel.

T. D. McCabe, BU1 reads about his new grandson.





The Air Force liked our food.



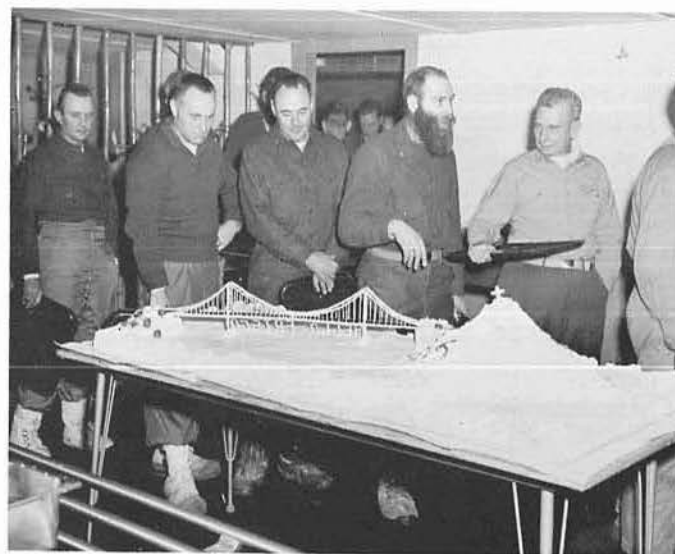
Chief McKain checked the new men in and directed them to their barracks.

New faces fresh chow

The fresh provisions, first seen in seven months, made a big hit with the wintering over crew.



A round of drinks and toasts before eating.



"Snake" Meyer's cake received much attention and admiration.

There were many topics to discuss.



CAPT Munson addressed Det Alfa Personnel.

ADM D. M. Tyree toured the base.



Activities at Williams Field



P2V making full 16 Jato take off.



The R4D used Jato assist whenever taking off with full load





The faithful "Chopper" was always ready for any chore that came up. Its chores were increased many times with the influx of aircraft and personnel for the oncoming summer season.

The new VX-6 C-130 B aircraft taking on fuel after a resupply flight inland.



GOING HOME

Some of us lived out of seabags for weeks in anticipation of leaving.



The moment we waited for all year.





Harewood
International
Airport,
Christchurch
in background

New Zealand and civilization

Greeting old friends



Exchanging money for liberty

Scenic
Christchurch
New Zealand



The "Square," center of downtown Christchurch.



The beautiful River Avon



As most of the Wintering Over Party was enjoying their last few moments of New Zealand hospitality before leaving for Conus, our Commanding Officer was still looking forward to leaving the ice. There were, however, certain official events that had to take place first, the most important being the change of command ceremony.

On the 15th of November, 1960, CDR Lloyd W. Bertoglio turned over the command of Antarctic Support Activity and the Naval Air Facility, McMurdo Sound to CDR J. J. Broshnahan. At the ceremony, ADM David M. Tyree gave a well done to Deep Freeze 60. This ceremony officially ended Operation Deep Freeze 60 and marked the start of Operation Deep Freeze 61.

ASA men enjoy the New Zealand hospitality for the last time before leaving for Conus.

Air Force Mats C-118 prepares to depart Harewood International Airport for Conus.



Change of Command

Cdr J. J. Brosnahan, C.O. DF-60 is welcomed



(Below) Setting for the ceremony



ADM D. M. Tyree gives DF-60 a well done.



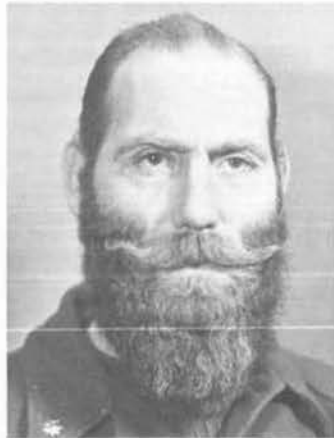
CDR Bertoglio gives his farewell address

**Ends
Deep Freeze, 60
15 Nov. 1960**



Commanding Officer, CDR Bertoglio was the last to leave the ice, he is shown here in Christchurch.

ADMINISTRATION



CDR L. W. BERTOGGIO



LCDR B. W. WARREN



LCDR E. R. WEIDLER



R. J. BORENI, YN1



R. D. WHEELER, PN1



RIVAL



W. B. BEESON, HMCA



G. I. JAMESON, HM2

MEDICAL and DENTAL



LT R. M. FORTENBERRY



LT J. S. LINDSAY

OPERATIONS



LCDR R. E. WALTERS



R. L. MC KAIN, ABCM



E. P. RAYFIELD, ACC



R. F. BOLLINGER, ETC



M. E. MARBLE, PHCA



B. J. CEREBONE, AG2



C. H. HUNT, AG2



J. E. HURLEY, AG2



L. H. MORET, ABCA



W. J. THORPE, ETCA



R. E. HUGHES, AC2



D. E. HEIBEL, ACR2



D. D. CONWAY, AG2



P. E. HOER, AG2

AEROLOGY

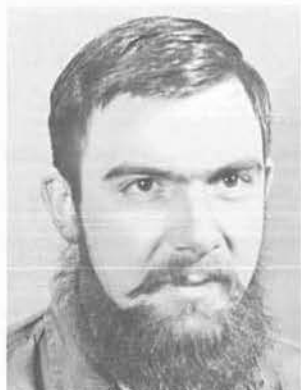


LCDR J. D. PLOETZ



E. R. EVANS, AG1

COMMUNICATIONS



LTJG M. D. GAINNEY



E. H. CAREY, RMC



E. T. RYAN, RMCA



C. J. ROGERS, RM1



H. W. REED, RM1



A. R. EVANS TE(RM)I



E. W. SAWYER TE(RM)2



A. G. ELLISON, RM2



D. P. O'LEARY RM2



W. D. FLOWERS, RM2



J. F. PHILLIPS, RM2



J. A. MONTAVON, RM3



J. E. AURES, RM3

COMMUNICATIONS cont.



M. M. ORTAS, RM3



R. P. JEWETT, RM3



W. M. AUSTIN, RM3

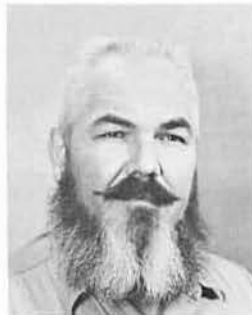


J. A. EATON, RM3



F. L. RAINVILLE, RM3

ELECTRONICS



R. E. COX, ETCA



N. L. TUCK, ET2



K. W. ROWE, ET2



J. F. ROUNER, ET2



M. E. WISE, ET2



A. H. BRADFORD, ETS3



R. E. DAVIS, ETN3

SUPPLY, DISBURSING, COMMISSARY



LCDR J. E. MC ENEARNEY



A. LOVE, SKCA



LTJG F. ATHEARN



R. A. BEAUDOIN, CSCS



C. CRAYCRAFT, SK1



R. J. LAKE, SK1



D. J. LATHROP, SK1



G. L. SMITH, JR., DK2



G. B. COPOLA, CSCA



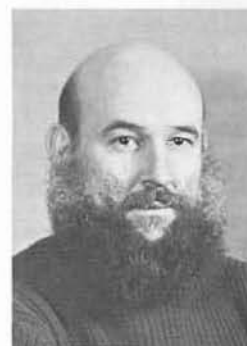
R. S. MEYER, CS2



J. E. OLIVER, SH1



C. E. TRACEY, SK3



D. E. ARNOLD, CS2



J. J. MORRISON, CS2

VX-6 DET ALFA



LCDR R. L. DALE



LCDR D. E. BARCK



LT B. F. HOOPER



LTJG J. W. WEEKS



ENS C. J. HAGERTY



J. W. CAREY, AMCA



E.E. TETRAULT, AM2



M. F. FLOWERS, AM2



J. M. MINER, AM3



F. K. LOSKAMP, AM3



C. A. HOCK, AT1



D. V. MALONE AT2



M. D. HALES, AT3



W. J. STASKEL, PN2



RUFUS, FE3

PUBLIC WORKS cont.



R. T. BLAINE, CECS



C. L. FERGUSON, CEW2



K. J. KNAPP, CEP3



P. J. CUMMINGS, CEP3



T. D. MC CABE BU1



J. R. HOWARD, BUH2



D. B. BRAKKEN, BUL3



J. D. HEATHCOCK, BUL3



R. E. CLARK, MR1



M. H. ALLSHOUSE, SW1



F. D. BAILEY, BUH3

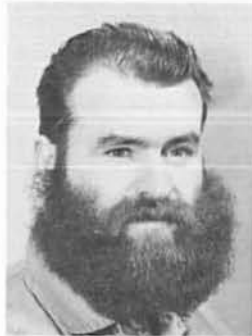


A. MACLEOD, CN

PUBLIC WORKS cont.



L. D. FAIRBAIRN, EOCA



J. B. WOJTOWICH, EO1



T. H. DEBORD EO1



A. W. LEWIS EO1



N. W. BICKNESE, EOH2



H. STEINER, EOH2



R. L. HALL EON2



G. A. GOLDEN, EOH3



C. A. WAGNER, UT1



L. D. MC WILLIAMS, UTP3



B. E. JANISZEWSKI, UTPCN



W. T. ENFINGER, CN



D. A. MASER, CN

PUBLIC WORKS



C. M. FELKE, CMCA



R. C. MC INTRYE, CM1



J. E. MORRISON, EN1



CWO W. C. JACKSON



B. G. JACKSON, EN2



J. NEMETH, CMH2



R.G. SIMPSON, CMH2



W. E. CUNNINGHAM, CMH3



K. G. GLEISSNER, CMA3



F. W. MORRISON, EN3



M. F. MEDLIN, CMH3



J. R. DOUGLAS, CMA3



R. E. DAVIS, CN

VX-6 DET ALFA cont.



A. W. ALLEN, AE1



J. R. KIELKOPF, AE2



C. E. FULLER, AK2



G. G. BELL, AK2



B. M. ANDERSEN, PH1



D. L. FOREMAN, AD1



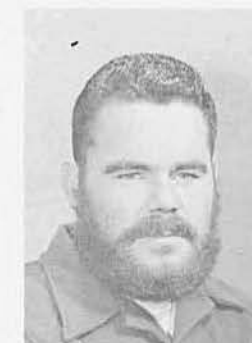
B. J. JONES, AD1



R. I. SWANNER, AD1



G. S. KOECH, AD2



D. P. MAGUIRE, AD2



C. O. STEVENS, AD2



J. M. MILLER, AD3



J. B. FARNELL, PR2



J. C. HARRIS, AB2



J. D. COLE, AN

AMUNDSEN-SCOTT-SOUTH POLE STATION



LT C. C. DUMAIS, OINC



B. A. LEKANDER, CMCA



W. D. O'QUIN, ETCA



B. W. WILCOX, RMCA



J. A. BLAKER, JR., CECA



E. C. ALLISON, RM1



C. A. BELL, UT1P1



T. J. MILLER, CS1



W. H. SHELDON, E1H2



F. T. DODD, BUR2

BYRD STATION



LT. E. F. BARTLETT, OINC



W. L. DAVIS, CMCA



E. A. MARTENS, RMCA



T. M. OSBORNE, BU1



S. E. PASTOR, EO1

BYRD STATION cont.



L. G. FIEDLER, CE1



J. T. SAUNDERS, ET2



S. F. MAHAN, RM2



M. RADFORD, JR, CS2



R. M. MANKE, UTA3

HALLETT STATION



LT W. J. TOWLES, OINC



W. K. BACKER, CMCA



J. W. HARTZELL



T. C. SHELIN, ET1



R. B. SMITH, CSI



R. G. WHITE, RMI



R. H. KITTLE, AG1



E. G. VELIE, JR, AG2



F. J. LAURIN, CEP2



J. G. MC CALL, RM2



C. H. LINDAU, UTP2

U.S. ANTARCTIC RESEARCH PROGRAM

NAF McMURDO



H. NEUBURG



W. L. TRESSLER



A. M. OMMUNDSEN



E. S. ROBINSON



J. B. LONG



S. B. HAVEN



S. EV TEEV



E. FLOWERS



H. MOROZUMI

AMUNDSEN-SCOTT SOUTH POLE STATION



A. ANDERSEN



H. F. THOMAS



J. H. MALONEY



M. L. GOODWIN



C. G. HAAS



O. C. MORSE



J. A. WALLACE, JR.

BYRD STATION



L. ALDAZ



J. BENNET



D. R. REED



P. E. PARKS



W. R. FEYERHARM



J. E. MC CARTHY



H. ROSENTHAL



R. L. URBANK



P. O. TUNING



G. WIDICH



F. IVERSON

HALLETT STATION



R. B. THOMSON



C. F. TRAINER



O. W. FARMER



R. F. BROWN



M. A. GORDON



D. L. FOSTER



