## SOUTH POLE STATION DAILY NARRATIVE

## Commencing October 13 1956 and ending January 20, 1957

## As written by

LTJG Richard A. Bowers, CEC, USN

Saturday, October 13, 1956 (At McMurdo)

The daily narrative log for the SOUTH POLE STATION will officially commence on Octoer 15, 1956, the estimated fly-in date for VX-6 aircraft, which marks the beginning of the DEEPFREEZE II operations and the beginning of the end for DEEPFREEZE I forces. Prior to this date, the following general work was accomplished.

For planning purposes, a draft of the proposed concept of the establishment of the SOUTH POLE STATION was presented to RADM DUFEK while aboard the EASTWIND prior to her departure in March 1956. Based on this broad concept, general preparations began to take shape, as time allowed, in the following form.

SOUTH POLE STATION construction personnel were selected, including alternates. A total of thirty-five possible personnel were selected.

General work assignments were established.

A general system of material packaging and marking was established.

Building priorities were established.

Weekly meetings were set up and held throughout the winter.

The concept of Construction-Survival teams was established. Personnel were divided into fourman teams, each to be self-sufficient during initial setup at the SOUTH POLE. Each team would carry its own equipment and material necessary for the survival of the team for forty days or survival under intense labor for fifteen days.

All survival gear available at McMurdo was issued to each of the six four-man teams. Each team would be capable of manhauling all of its gear on the basis of each team of four men having two 200# plastic boat-type sleds. The air support requirements and manhauling limitations were emphasized to the survival teams. Survival gear not available at McMurdo was ordered for first air transportation.

The training of personnel began on a survival team basis. Subjects emphasized were navigation, the use of the AN/GRC-9, first aid, preparation of survival rations, and proper wear of cold weather clothing. Overnight camping trips were made to Pram Point.

Under the direction of the Supply Department, material began to be gathered and palletized or put into drop containers for the airdrop at the SOUTH POLE.

More detailed lists were prepared of material to be gathered and prepared for the following broad categories.

Advance Party
Subsequent Personnel
Construction camp equipment and material
Camp material

Support material for DEEPFREEZE II

Clothing available at McMurdo was issued to the SOUTH POLE personnel to be used in the event the special army clothing that had been ordered did not arrive.

Personnel were kept up to date with basic plans.

As much data, as was available, concerning the weather and previous experiences of expeditions on the Polar Plateau was presented to the survival teams.

POL, a major drop item, was broken down into initial requirements and final support requirements. The fuel was prepared for drop by pumping a small amount from each barrel in order to minimize breakage during free fall airdrops.

Plans of construction layout were revised in accordance with our ability to drop and construct various items.

Weekly training lectures were instituted until deferred by runway construction on the bay ice at McMurdo.

Extensive modifications to the Rawin and Aurora Towers were made in order to allow the lengths of the material to fall within the maximum allowable for airdrop. All trusses had to be punched and cut for splice plates.

A site storage plan for POLE STATION material was set up to allow a minimum of double handling of retrieved gear at the construction site.

Final survival teams were selected under the leadership of the following team leaders:

LEASE, W. T., SVC BRISTOL, W. W. PHC SLATON, C. M., CMC HUBEL, E. H., UTC BEVILACQUA, C. A., BUC CHAUDOIN, R. L., YN1

Injuries to certain personnel, and their subsequent rate of recovery, make their availability questionable. These personnel are:

CANHAM, D. W., LCDR LEASE, W.T., SVC WAGNER, C.A., UT1

Grid navigation was taught to all responsible parties.

Physical and Dental examinations were given to all personnel expected to take part in the actual construction of the SOUTH POLE STATION.

Trips, with the dog teams, commenced in order to acquaint personnel with the dogs and life on the trail. A team of dogs will be requested for the Advance Party.

The services of LTJG J. TUCK were requested for the Advance Party.

A very detailed list of all material requirements was prepared by priority from the card file of equipment packed and to be packed. Cards were assembled according to priority.

By October 15, 1956, all but the following material had been assembled for airdrop at the SOUTH POLE:

Lumber for the construction camp Lumber for tunnels Tents and basic gear for Construction Camp Emergency cache of 600 man-day rations and fuel Knockdown cab for the D-2

Chief SLATON was designated Leading Chief, SOUTH POLE STATION and delegated the responsibility for all equipment and retrieving of dropped gear.

Chief HUBEL was delegated the responsibility for all construction at the South Pole Station.

Detailed plans for the construction camp were drawn up.

The Air Force decided to pack all parachutes in New Zealand instead of at McMurdo which alleviates the pressure on the supply department at McMurdo a great deal.

Remaining critical items not yet received at McMurdo include Jamesway Huts, Army Clothing, Survival Tents, Splice Plates, etc.

Sunday, October 14, 1956

Word was received that CTF-43 planned to fly in prior to the original date scheduled with the C-124s. A message was sent saying that facilities for the C-124s were inadequate until approximately October 22<sup>nd</sup>. Mr. HANESSIAN of the IGY will arrive on one of the C-124 flights to take Mr. WESSBECHER's place. At this time, the 200 x 5000 foot strip has been completed, but turning circles and additional parking area are required. CAPT CASSIDY, USAF, has ordered WILLET back to New Zealand on one of the first aircraft for a conference on the packing of airdrop material. The Air Force intends to fly about six logistic flights into McMurdo before starting the SOUTH POLE air drops.

Monday, October 15, 1956

Chiefs HUBEL and LEASE were relieved of Power House Watches and Runway Construction respectively in order to work on POLE STATION material. Chief HUBEL was given a list of gear to assemble in addition to assembling his own UT equipment. Chief LEASE was given the job of determining the cube and weight of all Pole Station material in order to be able to present an estimate to RADM DUFEK when he arrived at McMurdo.

Analysis shows that the construction camp material is the primary material left to be gathered. Chief BEVILACQUA continues to work on lumber during the night in order to have equipment available. He has completed the foundation lumber, a great portion of the tunnel lumber, and has the construction camp lumber yet to do.

Chief HUBEL completed gathering all of the material for the 500 man-day emergency food and fuel cache. Typical items added or checked on are trail flags, ladders, drum pumps, cots, lanterns, utility tents, etc.

Although the weather in McMurdo Sound was warm, cloudless and calm today, the planes did not fly in as scheduled due to headwinds on course and storms in New Zealand. The runway is now 5000 plus or minus and 200 feet wide. A turning circle was completed at the Eastern end. However, a message was received from VX-6 indicating that 5,000 feet was marginal for R4D aircraft.

Tuesday, October 16, 1956

Chief LEASE continued to work on weight and cube estimates with WILLET, HUBEL, TYLER AND HESS. Builder items and some work on Mechanics gear remains. Carry-in items are being itemized by HUBEL with cube and weight. A long discussion with LCDR CANHAM resulted in the following:

LEASE was eliminated from the POLE STATION PARTY.

Arrangements for whiskey were made.

Ordnance gear was arranged for.

Two one-ton sleds will be obtained from the twelve arriving aboard the GLACIER.

One Weasel will be reserved for the POLE STATION from the two arriving on the GLACIER.

Voting and Social Security changes will be taken care of as soon as possible, prior to the departure of the personnel for the POLE STATION

A further list of items was presented to Chief HUBEL to start lining up equipment. This list included two five-man tents to be furnished by ENS BAKER, cots, lanterns, ladders, drop markers, etc. It is planned to complete all estimates today and to have them typed prior to the arrival of RADM DUFEK scheduled for October 17<sup>th</sup>.

The emergency fuel and ration container was completed.

Wednesday, October 17, 1956

Very little was done on SOUTH POLE STATION preparations in that RADM DUFEK arrived early in the morning and the entire camp rotated about air operations. The list of drop priorities, together with cube and weights were awaiting typing prior to presenting to the Admiral.

The foundation lumber was completed and the construction camp lumber worked on. The Builders should be working on the D-2 knockdown cabs by the end of the week.

Thursday, October 18, 1956

All AirOpFac operations rotated about the fly-in. All VX-6 aircraft had arrived between 0640M and 1230M.

The P2V crashed, resulting in the deaths of four of the crew and was very disheartening to all wintering over personnel. Most of the day, for all personnel, was taken up with the cleaning up of wreckage and caring for the injured.

Of particular interest were the plans for the establishment of the SOUTH POLE STATION held by VX-6 and CAPT HAWKES of the Task Force Staff. It is believed that there will be no difficulty in aligning our plans with theirs as the differences are extremely minor in nature.

A blizzard set in at McMurdo just as the last planes were landing.

The plans for the fly-in to the South Pole of the Advance Party and construction teams, are as follows: An R5D will be sent in over the South Pole six to twelve hours prior to the arrival of the R4Ds. The R5D will orbit and determine the position of the SOUTH POLE. An R4D will home on the R5D and make the initial landing. This should place the group within one mile of the geographic SOUTH POLE. The initial plan has been altered to take in a small team of four dogs instead of eleven as the distance of travel will be small.

Upon ascertaining that the R4Ds are able to take off from the Polar Plateau, the Advance Party will be landed. CAPT HAWKES and LCDR FRANKIEWICZ have already taken off a 29,000 pound R4D with three JATO bottles at 10,600 feet. A camp will then be set up immediately and sun lines taken. Within twenty-four hours, the Advance Party should be located within two hundred feet of the true geographical SOUTH POLE. At this time, the additional construction teams will be called in. The airdrops can commence simultaneously. There seems to be no question that the planes can take off and land at the POLE. There will be a conference tomorrow of the parties concerned.

Friday, October 19, 1956

The only material preparation during the day consisted of BEVILACQUA's crew packing lumber. Planning continued in high gear in preparation for a conference with VX-6 and RADM DUFEK. Organization charts, personnel listings, and agenda for the conference were drawn up.

The weather at McMurdo is still bad.

Saturday, October 20, 1956

A long planning conference was held with RADM DUFEK, CAPT CORDINER, CAPT HAWKES, CDR WARD, LCDR CANHAM and LTJG BOWERS on the Pole Station. The following items were discussed with results as indicated.

Weight and Cube Estimates: All concerned seemed to think the fly-in requirements were reasonable and that the amounts were realistic.

The concept of the dog team with the Advance Party was bought by the Admiral. The Admiral gave full support to every phase. His particular interest was in the total tonnage.

In regard to the Construction Schedule, the Admiral bought LTJG BOWERS' plan for a construction camp. He is particularly anxious to put some sort of structures up as soon as possible in order to get our bid in for that location. The phasing of material drops were bought.

The organization of the camp was presented. Civilians were relegated to the authority of LTJG BOWERS and he was given the authority and the complete responsibility for the construction at the SOUTH POLE STATION.

The Rawin and Aurora towers were presented as questionable items due to redesign and difficulty of erection. RADM DUFEK appeared to place primary consideration on the establishment of the station rather than the functioning of the station during the coming year. A delay in many aspects will not be of primary consideration.

All IGY equipment, except build-in items, were presented as last categories of priority.

A message was sent by RADM DUFEK regarding BEVILACQUA. He asked for the cancellation of the message barring the use of BEVILACQUA at the POLE STATION because of his vision.

The problem of transient personnel was discussed. No transient personnel will accompany the Advance Party or initial operations.

Foreign plans will be discussed with CDR MIRABITO when he arrives at McMurdo.

Major items ordered (tents, clothes and Jamesway Huts) will be checked after the arrival of the C-124s.

All in all, the integration of plans was extremely encouraging. The construction of the SOUTH POLE STATION was given priority over the construction of BYRD STATION . Material loading appears to be reasonable. The attitude of the Staff concerning the amount of work the twenty-four men at the SOUTH POLE can accomplish, was heartening. His backing was encouraging to everyone.

Sunday, October 21, 1956

The entire day was spent with air operations, and the only POLE STATION training received was in the erection of the Jamesway Huts at McMurdo. These same type huts will be utilized at the SOUTH POLE.

A radar deflector was designed for use at the Pole.

LCDR FRANKIEWICZ and LTJG BOWERS talked over Advance flights. BEARDMORE is absolutely necessary. The first flights will consist of three R4Ds and one R5D. LCDR FRANKIEWICZ will inform LTJG BOWERS how much weight the plane can carry and how much weight LTJG BOWERS can carry in with him. Then details of cargo loading will be worked out from the list of necessary cargo which LTJG BOWERS will prepare.

Monday, October 22, 1956

It was determined that 2100 pounds can be carried on each R4D (two) for the Advance Party plus an unlimited (within reason) amount of cargo to bedropped from the R5D. LTJG TUCK is working on the dog requirements. It is intended to split the men and material between the two planes for best survival capabilities.

LTJG BOWERS participated in a press conference when plans for the POLE STATION were presented. One correspondent tried to pin him down on his position with regard to DR. SIPLE. LTJG BOWERS informed him that he and DR SIPLE would have no difficulty in seeing eye to eye on everything and that DR SIPLE would be brought in as soon as accommodations were available. Later in the day, DR SIPLE and LTJG BOWERS had a conference on plans in general. DR SIPLE is checking into housekeeping items which LTJG BOWERS has not yet had too much time to look into.

Tuesday, October 23, 1956

Chief HUBEL started his crew on the construction of radar reflectors and the erection of Jamesway Huts in a site behind the Chapel.

DR SIPLE, Mr. WESSBECHER, LTJG TUCK and LTJG BOWERS had a long talk regarding construction plans. DR SIPLE wants to redesign certain aspects for livability which LTJG BOWERS agreed to. As long as material is available, the base will be built according to DR. SIPLE's wishes. LTJG BOWERS informed DR SIPLE that he thought he should arrive at the SOUTH POLE the same time as the TBW radio gear arrives. This would be as soon as the Jamesway Huts are erected and berthing and messing facilities are available. He would then be there for the initial phases of construction of the permanent camp.

Wednesday, October 24, 1956

LTJG BOWERS and LTJG TUCK had a conference with the Commanding Officer, Executive Officer and Operations Officer of VX-6 on the proposed flight plans for the establishment of the POLE STATION.

Dr. SIPLE and Mr. WESSBECHER are going over all support items to assure their delivery. They are making up the list on the basis that LTJG TUCK will return shortly after arrival and that Dr. SIPLE will arrive as soon as the Jamesway Huts are erected.

Thursday, October 25, 1956

LTJG TUCK went on the flight with VX-6 officers to pick out the site for the BEARDMORE-SCOTT AUXILIARY BASE.

Flight plans for the construction of the SOUTH POLE were presented to the Operations Officer of VX-6 for further presentation to CAPT CORDINER.

The first Jamesway Hut, behind the Chapel, was completed and served as excellent training for POLE STATION personnel.

Another meeting was held with RADM DUFEK upon the return of the BEARDMORE flight. CAPT CORDINER located what might be suitable for the BEARDMORE station. One is at the Eastern side of the BEARDMORE GLACIER and the other is located about 140 miles further to the East. Many new glaciers were found.

RADM DUFEK still wants to make an initial flight to the POLE. He is worried about the ice in McMurdo Sound and also the fact that the Russians might get to the SOUTH POLE before us. After much discussion, the following plan was evolved:

Five or Six R4D flights would be made to Little America to support CDR FRAZIER and his trail party to BYRD STATION. This would tie up two R4Ds for several days.

At the same time, two R4Ds would commence the construction of the BEARDMORE station, to be set up by LTJG EICHHORN on a survival basis.

After the third R4D flight to BEARDMORE, a group would take one R4D and one R5D to the POLE and make a trial landing and takeoff. This would presumably stop the Russians.

After the flight to the POLE, the BEARDMORE would be completed with the help of the Air Force.

When the BEARDMORE station is completed, the SOUTH POLE STATION would commence. The Air Force would drop material as fast as possible as long as the construction personnel can keep from losing it.

Friday, October 26, 2956

BEARDMORE operations commenced in detail. LTJG EICHHORN and his crew had three R4Ds loaded by evening. But, due to several unforeseen maintenance problems, the planes did not leave today for the BEARDMORE site. This pushes the schedule for the POLE STATION up a few days as, after these few flights, one flight to the POLE, and two C-124 flights to the BEARDMORE, operations will commence on the SOUTH POLE STATION.

LTJG BOWERS had a meeting with all South Pole Station personnel and outlined the following:

With twelve hours notice, all personnel are to be ready to move out by Tuesday evening, October 30<sup>th</sup>.

LTJG BOWERS checked with each individual to assure that each had proper clothing.

LTJG BOWERS made changes to the Advance Party.

CAPT CASSIDY outlined plans for air drops and demonstrated the demolition type quick disconnects.

GEN MC CARTY took a planeload of press and some MCB(Special) DET ONE personnel for a flight over the SOUTH POLE. He dropped eighteen barrels of diesel and a Grasshopper weather station that did not work.

LTJG BOWERS made arrangements with CAPT CASSIDY to take a list of material back to New Zealand to see if he couldn't push some of the items for the first flight next week. This will be the last flight before the planes take off with the Advance Party for the POLE STATION. The items requested were ones that had been previously requested for first fly-in, but had not been received.

Saturday, October 27 and Sunday, October 28, 9956

The main emphasis of DEEPFREEZE II is now on the construction of the SOUTH POLE STATION. BYRD STATION and all other projects have been relegated to a secondary position.

By Sunday evening, two R4Ds had landed at the base of MOUNT DUNCAN, the site of the BEARDMORE station with AOC BARONICK placed in charge of the station due to the illness of LTJG EICHHORN. Others on the flight were BU2 PRESCOTT, PH2 HILL and RM2 ZEGERS to set up that camp.

After three more R4D flights and two or three C-124 flights, the POLE STATION will be on its way.

CWO FISHER spent these two days getting the BEARDMORE material together so that SGT SMITH and SGT WILLET could prepare it for airdrop.

The POLE STATION Personnel are going ahead full swing, packing their gear, and packing their sleds.

CAPT CASSIDY arranged for more Jamesway Huts to be flown in to McMurdo.

The POLE STATION Personnel are pretty well set for clothing and, in general, the Tuesday deadline set for departure should be met with little difficulty.

Dr. SIPLE, Mr. WESSBECHER, and Mr. HANESSIAN continue to go over the material lists in detail. They are gratified that they have this chance to double-check the cargo and that they are finding so little missing.

Monday, October 29, 1956.

POLE STATION plans continue in full swing. A long meeting was held with all Pole Station Personnel and Dr. SIPLE gave a short talk on the scientific program, emphasizing the reasons behind the many construction features of the station. LTJG BOWERS talked on the problems of preparation and emphasized the difference in the approach to the POLE STATION as compared to the approach last year to the Naval Air Facility.

All survival sleds will be prepared by 1600M, October 30<sup>th</sup> and personal seabags turned in to WILLET.

Tuesday, October 30, 1956

All priority airdrop lists were thoroughly reviewed by LTJG BOWERS and Chief HESS and drop priorities were assigned. LT CAVENDISH arrived at McMurdo which allows LTJG BOWERS more freedom in final preparations for the construction of the station.

Three R4D and two C-124 flights were scheduled for BEARDMORE today. The C-124s dropped a lot of gear to the ground party and scattered it widely. The BEARDMORE Party requested the Sno-kitten as soon as possible to help retrieve the dropped gear.

RADM DUFEK briefed LTJG BOWERS on plans for the next several days.

After the C-124s make the drop at BEARDMORE, they made a flight over the South Pole and reported very rough surface conditions.

Personnel from MCB ONE arrived from the GLACIER and took over the trail party offloading operations, relieving the Pole Station personnel of much work in that regard.

Wednesday, October 31, 1956

LTJG BOWERS met with LCDR CANHAM to discuss details of the POLE STATION personnel departure. They should be leaving very shortly as the trial landing should be made today. RADM DUFEK emphatically stated that only Navy personnel would make this initial flight.

It was decided that the following reports would be maintained at the SOUTH POLE STATION:

Monthly feeder reports on flight time for LTJG BOWERS and PHC BRISTOL would be sent by message to NAF MCMURDO.

Monthly report of sick would be sent by message to NAF McMurdo.

Arrival and Departure reports of aircraft would be sent to NAF McMurdo.

Weather synops would be sent to NAF McMurdo as required.

A daily communications schedule would be set up at an optimum time.

Daily brief SITREPS would be sent by message to NAF McMurdo.

A daily log would be kept of all manpower expenditures and work accomplished.

The major event of the day was the successful landing and takeoff of R4D 418 at the SOUTH POLE. The aircraft was piloted by LCDR SHINN and CAPT CORDINER. CAPT HAWKES and RADM DUFEK were observers. This means that the construction of the POLE STATION will be commenced tomorrow or the day following, weather and plane availability permitting.

Thursday, November 1, 1956

This was a very interesting day, yet frustrating. It started with the details of yesterday's POLE flight. First, the plane found the granular snow tough to taxi on and froze fast after forty-nine minutes on the ground. Secondly, the minus fifty-eight degree temperatures startled the crew. The altitude got the worst of them, especially considering the cold.

A conference was held with RADM DUFEK and CAPT CORDINER. LCDR SHINN had damaged the tail of his plane on takeoff from the POLE. This leaves us with two good R4Ds and two damaged ones. We also have two semi-up R5D aircraft. One had to return from the POLE flight yes-

terday with engine trouble. The R5Ds will probably be used exclusively for photo and reconnaissance work now.

The R4D with the bent wing will go to LITTLE AMERICA to stay and two R4Ds will probably be used for the BEARDMORE and POLE flights. The concept of the use of dogs at the POLE was changed as soon as it was found out that C-124s would cover all future R4D flights.

The Weasel is being prepared for airdrop to the Advance Party. LTJG TUCK is naturally disappointed that the dogs will not be used at the POLE, but realizes the reason for the decision, i.e. speed, ease on men, cold, capabilities of towing, all add up in favor of the Weasel. One big advantage is that a radio is being built into the Weasel. This change in plans will necessitate only one change in personnel – RANDALL for WILLIAMSON on the Advance Party.

The most shocking occurrence of the day was RADM DUFEK's postponement of POLE STATION operations one to two weeks due to the extreme cold at the POLE.

LTJG BOWERS spent several hours with Air Force personnel and Chief HESS on the POLE STATION priority of loading. This is a most difficult job as all LTJG BOWERS can do is set up a general order in which he desires the drops to be made. HESS must have the authority to fill up the odd spaces as he sees fit at McMurdo.

Friday, November 2, 1956

LTJG BOWERS had long talks with various pilots and came to the conclusion that what worries the Staff most concerning the POLE operation, is not so much the affect of the cold on the men, but that the R4D's proved to be much less capable of high altitude, low temperature performance than had been anticipated. POLE STATION PERSONNEL are continuing to gather material for the drops and organizing it by the plane loads. The blizzard which started last night is hampering the work.

The present Pole Station Personnel are practically all relieved from their duties, but are busying themselves with the following work:

LTJG BOWERS – Planning and odd construction jobs

LTJG TUCK - Dogheim

SLATON – Repairs and maintenance at Garage

HUBEL – Pole material preparation

BRISTOL - Photo Lab.

BEVILACQUA – Pole material preparations and the building of Jamesway Huts.

MONTGOMERY – Preparation of radio and antennae gear

CHAUDOIN - Continues station office work.

WOODY - Sick Bay

WHITMER - Assisting electricians and Power House

SPIERS - Cooking

WAGNER - UT'S

WILLIAMSON - Bevilacqua's crew

HISEY - Mess Cooking

NOLAN – Aerography

MC CRILLIS - Assisting electricians and work on the YOGs

POWELL – Assisting Montgomery

ROBERTS - MAA detail

RANDALL - Garage

SCOTT – Assisting Chief HUBEL

GOODWIN - Garage

MC CORMICK - Bevilacqua's crew

TYLER – Assisting Chief HUBEL PATTON – Rigging parachutes for the Air Force.

After more consideration and conversations with pilots and Dr. SIPLE, LTJG BOWERS believes that the STAFF fears that a basic planning mistake was made in considering the R4D aircraft capable of high altitude operation in temperatures of minus fifty degrees. We wonder why they blame this on the men. Why say the men cannot work at minus fifty degrees. We can. It is the equipment that failed.

Chief HUBEL and a small crew gathered equipment for the first flight so the Air Force could continue rigging them.

The cab for the first Pole tractor is practically finished.

Saturday, November 3, 1956

All Pole Station personnel were given either to HUBEL for material preparation or to BEVILAC-QUA for camp construction (Jamesway Huts and Atwell Huts) or are continuing to work at reduced schedules at primary AirOpFac jobs.

Sunday, November 4, 1956.

The props were kicked out from under the POLE STATION PERSONNEL as everything came to a screeching halt. The Air Force moved all of their personnel back to New Zealand, taking ten of our wintering personnel with them for ten days R&R. The rest of the camp immediately fell apart at the seams. Due to a virus infection, RADM DUFEK returned to New Zealand with the C-124s.

LTJG BOWERS had a conference with RADM DUFEK prior to his departure and the following points were stressed:

The morale of the POLE STATION PERSONNEL is low after the letdown by the postponement of POLE operations.

The personnel should be up on the plateau as soon as possible, even if they just lie in their sleeping bags for several days, just sending out weather. The cold and/or altitude is serious, of course, but have to be beaten.

The POLE STATION PERSONNEL could walk out with the dogs if necessary.

RADM DUFEK made the following points:

The reason for the postponement of POLE STATION OPERATIONS was mechanical (aircraft) and not due to any failure or deficiency in the POLE STATION PERSONNEL.

In about one week, he will send two R4Ds to the South Pole; this time, they will be dropped off with the dogs amd the Weasel. He said that he wished he had taken the Advance Party with him on the first flight on October 31<sup>st</sup>.

He said that he understood the morale problem, but the delay was necessary because of the deficiencies in the aircraft.

These facts made everything look a little brighter as a one week delay will give the personnel a chance to rest up after being so keyed up about going for so long. It will also give LTJG BOW-ERS time to once more build up their interest. Only four of the personnel accepted the chance to return to NEW ZEALAND for R&R. All of them are anxious to go home, but most feel that, when they leave, they want to have finished the job and leave for good. None of the Advance Party

returned to New Zealand. SLATON, ROBERTS, HISEY and TYLER are returning for R&R. Chief SLATON is going mainly to keep an eye on the crew and to try and procure some urgently needed items in New Zealand. LTJG BOWERS feels that the personnel will bear out this delay alright and has put them all in low gear.

The ten day respite will be put to good use with equipment repair, offloading the GLACIER (almost completed), cabs for the Pole Cats, finish the construction of the Jamesway Huts etc. The runway has to be maintained and parking ramp enlarged. Fuel must be pumped into nested tanks.

Monday, November 5, 1956

Very little done concerning POLE OPERATIONS today as the main effort was on camp details; construction Jamesway Huts, pumping fuel into the power house nested tanks, clearing parking areas, equipment repairs etc.

LTJG BOWERS checked the infrared lens he had LUNDY make for the T-3and found it caused too much refraction, so he will use the small lens of welding glass he had made for the eyepiece.

LTJG BOWERS had a long talk with Dr. SIPLE during the evening and covered such topics as the walkout plans, possible de-emphasis of POLE STATION location and the effect of CDR WHITNEY's message to not change any of the plans. Dr. SIPLE feels that there may be a big push to locate the Station elsewhere and blame it on equipment failure. He would then call in RADM BYRD and the IGY if this should occur.

Tuesday, November 6, 1956

Pole Station personnel are getting more and more frustrated as they are delayed longer and longer. There is still only one R4D in shape for any kind of polar flights. A minimum of two are necessary for the first flight with the Advance Party and a minimum of three are required for subsequent operations.

This was another beautiful day and there is much rumor about that VX-6 will not have sufficient planes to conduct the operations. It looks as if the personnel will be lucky to get a dog team operation started.

Wednesday, November 7, 1956

POLE STATION preparation is at a standstill. All personnel have returned to their departments and are standing watches. The only thing accomplished was to gather library books for shipment to the Pole Station.

Thursday, November 8, 1956

LCDR FRANKIEWICZ assured LTJG BOWERS that the necessary planes will be ready for commencing the South Pole operations on November 15, a week from today. This was a big boost to morale. LTJG BOWERS wants to again start getting the men prepared mentally for this operation. Now, what at first seemed to have been an indefinite delay will probably be much shorter than anticipated.

The BEARDMORE Station is coming along fine. As soon as the AvGas is taken in, POLE STATION operations will be ready to roll.

Friday, November 9, 1956

No South Pole work was carried on today.

WHITMER, CE1 was dropped from the list of Pole Station Personnel due to a respiratory ailment and Dr. TAYLOR's recommendation that he not go.

LTJG TUCK is preparing a final survey of Advance Party material.

Saturday, November 10, 1956

SOUTH POLE operations are still at a standstill. The R4Ds are making shuttle runs to BEARD-MORE with AvGas. VX-6 is trying to get about 3,000 gallons in to the BEARDMORE camp prior to the Admiral's return to McMurdo on November 14<sup>th</sup>. The BEARDMORE station is actually located to the west of Mount Betty and about four miles north of what LTJG EICHHORN thinks is Betty Glacier. They are located right on the ice shelf.

Sunday, November 11, 1956

In the evening, a conference was held between LTJG BOWERS, CAPT CORDINER, CDR WARD and CDR JORDA, to talk over plans for the Advance Party. Communications seems to be the biggest problem and homers and frequencies were subjects of the conference. Visual and electronic navigation aids to assist the first planes in finding the ground parties were discussed – flares, smoke signals, dragging the area, mirrors, signal panels, AN/GRC-9, VHF, walkie-talkies, etc.

Monday, November 12, 1956

LTJG BOWERS and LTJG TUCK looked over the R4Ds to find out the weight and cube capabilities. The dogs will pose the toughest problem. LTJG TUCK also went over the survival gear with LCDR SHINN.

All personnel of the Advance Party were notified that they would load R4D 418 and R4D 163 on Wednesday.

A conference was held between LTJG BOWERS, CDR WARD and MONTGOMERY on communications.

In the evening, a meeting with the Advance Party was held in the Library to talk over final plans. The Advance Party will consist of:

LTJG BOWERS Officer in Charge, Navigator

LTJG TUCK Survival, Dogs
BRISTOL, PHC Photography
MONTGOMERY, RM1 Communications
WOODY, HM1 Medical Corpsman

NOLEN, AG2 Aerology RANDALL, CM3 Mechanic

POWELL, RM2 Communications

Clothes, equipment, gear, radio equipment, aerology, Weasel, POL, dogs, photo and medical were discussed. Changes to plans were fully discussed later with Dr. SIPLE. Final packing will take place tomorrow.

Tuesday, November 13, 1956

As the time grows nearer for departure for the POLE, the morale of the personnel, particularly the Advance Party, grows rapidly. In the evening, the Advance Party spent several hours in thoroughly checking its four sleds of equipment, erecting and inspecting the three trail tents, and discussing final plans. All of this was done at Dogheim. The atmosphere was pleasant, but behind each person's face existed a downright apprehensiveness. After all, the Advance Party of eight men and the entire SOUTH POLE CONSTRUCTION PARTY of twenty-four men, will go where only seventeen men have ever been before. (Amundsen 5, Scott 5, and Dufek 7). Two months will be spent in working and erecting a camp at that Godforsaken place. The youth of some of the men is amazing considering the men before them, but each has proven himself, each wants to finish the job and get home.

Each of these men has been working toward the POLE STATION for over eighteen months as have the rest of the Pole Station personnel and none of them has stars in his eyes.

After the sleds were finished, a trial run was made to test the homing capabilities of the VX-6 aircraft with the PRNC-17 Transceiver (VHF-UHF). The test was satisfactory which shows that VX-6 aircraft can home in on this equipment as well as the Air Force aircraft.

The final flight plans were reviewed and presented to LCDR CANHAM in order to acquaint him with the operation. The first two C-124s and first four R4D flights must be rigidly adhered to. The remaining flights can be altered in order to meet weight and cube requirements as long as the general order of the material drop file is retained.

Wednesday, November 14, 1956

LTJG TUCK spent the entire day with the Advance Party in getting the dogs and sleds of gear out to the runway to load on the R4D aircraft. The loading was delayed somewhat due to maintenance checks on R4D 163.

The tentative plan for November 15<sup>th</sup> is to put an R5D in the air at 0500M, followed by the two R4D's at 0900M, and the C-124 at noon. The R5D would orbit the POLE and check the weather. The two R4Ds would carry the Advance Party and the C-124 would carry the Weasel, fuel, extra survival gear etc.

A conference was held between LTJG TUCK, LTJG BOWERS and CAPT CORDINER, and the following was decided:

If any of the three initial planes, C-124 or two R4Ds were to have to turn back, the others could go ahead and deposit personnel and equipment without jeopardizing personnel. It is imperative that we get a foot in the door. LTJG TUCK had to add a small tent to his equipment but, otherwise, the planning by teams has paid off.

If the two R4Ds make the trip with no damage, CAPT CORDINER wants to make four trips instead of two with the remaining sixteen personnel. CAPT CORDINER will make this decision after the first landing and takeoff.

The Pole Station Personnel would have to be shown how to break a plane loose from the ice when the skis stick so that the plane crews would not have to get back into a moving aircraft.

A conference was held with LTJG BOWERS, COL CROSSWELL, CAPT CASSIDY, MAJ LE-VACK, Chief HESS and Chief HUBEL and the following points were emphasized:

The first four (six R4D) flights and the first two accompanying C-124 flights are the most important. The cargo for these is prepared and the first C-124 is already loaded.

After the initial flights, the plan is flexible, setting up a general priority system and authorizing HESS to adjust the loads to keep the payloads at a maximum.

A listing of general items was gone over with Chief HESS, indicating the types and amounts of gear that could be dropped by the Air Force to the Advance Party even though they had only eight men on the ground. This is assuming a possible delay in delivering the remaining sixteen men due to mechanical difficulties with aircraft. This material is determined primarily by the capabilities of the Weasel and of the manhauling capabilities of the personnel.

For the past several days, an R5D has been sent to the POLE as a weather observer. Yesterday, a temperature of minus thirty-five degrees Centigrade was reported at about 2600 feet above the plateau. Radiosondes were dropped, but not too successfully as they did not have a chance to gain equilibrium prior to hitting the ground. Temperatures were much warmer, however, which is encouraging. If the present warming continues, the Pole Station personnel should have little difficulty. The results of today's weather reconnaissance is anxiously awaited. By the day's end, the planes were delayed by nine hours so that two R4Ds are scheduled for 1600M, the other planes before and after accordingly.

Thursday, November 15, 1956

The scheduled departure for the south Pole was delayed today, not by weather, but by a communications blackout. One R4D was loaded.

Chief SLATON returned to AirOpFac from New Zealand, bringing all the necessary parts with him to get the D-4 back in operation. The tentative schedule now is for a weather plane to leave at midnight and the R4D's to follow at 0600 in the morning.

Mr. JONES took many pictures during the loading operations.

LTJG BOWERS briefed Chief SLATON and Chief HUBEL as to what would be expected of them after he and LTJG TUCK departed for the POLE.

Chief BEVILACQUA was directed to put his paperwork in order.

Chief HESS has everything in order for the first two air drops and the members of the Advance Party secured for an early start in the morning.

Friday, November 16, 1956

Again, the planes were delayed by the communications blackout. CAPT HAWKES wants to go ahead regardless, but LTJG BOWERS agrees that CAPT CORDINER is right in this case.

Chief SLATON is getting his equipment together and the Air Force continued to rig material for future loads, so the time is not wasted altogether. The delays are cutting the construction time down to nothing. We have until the fifteenth of January. After that time, it is feared that the weather will worsen rapidly. A survival movie was shown after the regular movie in the evening, especially for the POLE STATION PERSONNEL, but many others attended. The title was "Survival on the Ice Cap."

Saturday, November 17, 1956

Among other discussions held while the weather further delayed flights, was one injected by COL CROSSWELL on the possibility of landing C-124s at the SOUTH POLE. Dr. SIPLE and LTJG BOWERS advised that they could gather data for this possibility. The advantages of C-124s landing at the South Pole are:

Increased load capability
Cost of chutes
Better mechanical ability at low temperatures
All year round usability
Evacuation capabilities of aircraft.

Dr. SIPLE wondered how far down he would have to go for dense enough ice. The discussion was theoretical and introduced many possibilities if landing capabilities could be constructed at the POLE.

Chief HESS is doing a great job in getting the material packed. He already has five complete C-124 loads packed.

Sunday, November 18, 1956

Again the SOUTH POLE STATION ADVANCE PARTY is being delayed by weather, Pole Station personnel spent an hour or so in the afternoon with Mr. Pat TRESE and Mr. HARTIGAN – Pictures were taken of the entire Pole Party, both group and individual with some tape.

Since the Admiral returned early this morning, a definite push is being felt by all, as flights are scheduled for the moment the weather breaks. Already, two R5D flights have been cancelled today.

All twenty-four personnel are taking the ups and downs as they come. The morale is excellent considering what each has been through and what each has to look forward to.

Monday, November 19, 1956

An R5D took off about 1100 as a weather reconnaissance, but had to come back about 1300 with one engine feathered. A C-124 was off twenty-two minutes later. The schedule for the Advance Party immediately became

2 R4Ds off at 1600-1700 Load dogs in time – Crews leave at 1600

CBS took a long movie of the Advance Party at Dogheim.

CAPT JUMPER and LTJG BOWERS went over drop plans so that they could coordinate via VHF over the PRNC/17.

Last minute details of messing, rations, transportation etc. were arranged. LTJG TUCK picked up a periscopic sextant so that the can act as an isolated unit in case the other R4D is forced back.

At 1700, the two R4Ds took off with passengers and cargo as scheduled without incident. The four dogs in R4D 418 and the seven in R4D 163 behaved well. The planes were heavily loaded. They arrived at the BEARDMORE Station around 2010M. The weather proved particularly calm and clear at the BEARDMORE.

The air temperature at 2000 feet was minus four centigrade. The aircraft had slight tail winds to the BEARDMORE which helped in time and fuel consumption. The Weather Plane reported clear sailing all the way to the POLE.

It took the R4D's forty-five minutes to climb to 10,000 feet up the BEARDMORE, using about 220 gallons of AvGas (twice the normal usage for R4Ds). It was quite a climb and the dogs showed a little discomfort. The temperature at the top of the glacier at 10,000 feet was minus eighteen centigrade.

At the top of the BEARDMORE and NEILL Glaciers, the crevasses are prominent just as Scott reported. The climb up the BEARDMORE is a breathtaking experience. How Scott made it manhauling is hard to imagine. Literally, I looks as if it would be impossible.

At 2230, there appeared to be little wind. Sastrugi for the strongest winds appeared to be coming from Grid Northwest. The R4Ds were estimating the POLE at 0100M, and would have tail winds to the BEARDMORE for refueling. The R5D estimates the POLE at 0015M and the C-124 at 2345M. The R5D carries observers and RADM DUFEK. The C-124 carries the first load of air drop supplies – a Weasel, POL, rations, sleds, etc. The temperature at 2300M at 11,500 feet was minus twenty-eight centigrade.

Tuesday, November 20, 1956

At 0045M the first R4D landed at what was supposed to be the SOUTH POLE. The two R4Ds had to blast off with all of their Jato to get moving again.

The Advance Party spent from 0045 until 0630 pitching tents, retrieving the dropped gear and tying everything down. The temperature was minus twenty with about five knots of wind. It was a beautiful day.

WOODY suffered extremely from anoxia and the remaining members of the party suffered slightly. However, they all worked until everything was safe. They pitched three tents, one double and two single.

The Weasel transmission is down with a cracked bearing cage. Perhaps this happened during the drop – perhaps not. The eight personnel in the Advance Party went to bed exhausted, some with minor cases of frostbite.

Wednesday, November 21, 1956

At approximately 0600M, Major LEVACK in C-124 980 arrived at camp with the material that had been requested to repair the weasel, an excellent example of the cooperation rendered. He dropped the gear, but one package fell from the plane prematurely, falling 25 degrees grid about two and a half miles from camp.

He then dropped AvGas, MoGas and three drop containers at 90 degrees South which was determined to be eight miles from the initial landing site. This drop will mark the approximate location of the Polar Camp.

The two R4D flights were postponed until tomorrow. They were due at 1700 today.

A schedule was set up on 6708KCS for 1600M tomorrow, November 22<sup>nd</sup>.

LTJG TUCK, with MONTGOMERY and NOLEN and the DOG TEAM departed camp at 0930.M to retrieve the batteries and transmission case dropped by the C-124. Those remaining in camp attached prefabbed skis to the plastic sleds and loaded the two one-ton sleds for transport.

At about 0800M, a very great tremor was so great that all the personnel sprang from their tents thinking that the C-124 had crash landed adjacent to the camp.

LTJG TUCK and party returned to camp about 1050 and noted that the batteries and transmission must have free-fallen as they had penetrated the snow almost six feet. They went back and dug out the one good battery out of the four that had been dropped, and the complete transmission.

RANDALL worked all afternoon to get the Weasel running. After repairing the transmission, it was found that the batteries would not turn the engine over. The Weasel is okay except for the batteries. The following message was drafted but was not received at McMurdo by midnight: Four men and dogs would depart early Thursday, November 22<sup>nd</sup> for the POLE. We also requested more batteries.

Thursday, November 22, 1956

The camp arose at 0115 and started packing for the jaunt to the POLE. The party consisted of LTJG BOWERS, LTJG TUCK, PHC BRISTOL and RM2 POWELL. It was a most grueling trip but, thanks to the dogs, the POLE was reached about 1100M and a camp was set up adjacent to the material that had been dropped Wednesday morning. The only hurry to get to the POLE was that two C-124s and additional personnel were scheduled for 1700M and LTJG BOWERS wanted them to arrive at the POLE, and not eight miles away from the POLE.

C-124 983 delivered some cargo to the camp at 1600M under adverse conditions. Two critical chutes streamed in – one Jamesway section and one Aurora section.

Friday, November 23, 1956

The party at the POLE is still located 7 tenths of a mile from the POLE according to the last sunshots and the remaining personnel are still eight miles from the Pole with the Weasel.

POWELL was feeling much better from yesterday's hike. He seemed to suffer from it more than anyone else.

LTJG BOWERS, LTJG TUCK and BRISTOL went out to check and flag the air dropped material. They found the Aurora in pretty good shape. There is little the personnel at the site of the POLE can do except wait for the additional personnel and air dropped cargo, plus the weasel from the first camp. Then, with a two-day drop free holiday, they can set up their construction camp.

At 1230, C-124 207 arrived with a load of gear and news that the personnel and other C-124 were on their way. One load of gas and an A-22 container streamed in. The greatest problem was one of survival gear. The personnel were separated from their gear and one of HUBEL's sleds did not arrive. This has always been the fear, separation of men from their gear.

By 1800, it seems that weather or other difficulties must have prevented the additional planes from coming.

LTJG TUCK and LTJG BOWERS took the odometer out to the computed location of the POLE and put in several trail flags which will denote the spot. It is believed that it is accurate within three hundred feet.

The personnel looked over all the material that had been dropped recently. It is believed that the primary item lost was the fuel which must have been buried at least twelve feet under the snow. The other container that streamed in was a load that can be salvaged.

Once the Weasel receives its batteries and moves to the POLE site, the material can be retrieved readily and easily. At present, there is little chance of doing anything except keeping a record of

the material dropped. The personnel picked up some meat out of the food that had been dropped, which varied the diet a little.

Sunburn became a problem today.

MONTGOMERY seems to be having good luck with his radio, although sporadic.

Some time was spent in taking additional sunshots to further justify the position of the South Pole.

Saturday, November 24, 1956

The personnel arose about 0800. After breakfast, LTJG TUCK, LTJG BOWERS, and BRISTOL, PHC spent the morning digging up Aurora Panels, Jamesway sections and a few bundles of food that fell out of containers. The personnel are still waiting for the personnel and additional aurora and Jamesway sections to arrive and the batteries to be dropped by the Weasel at the original camp so that all the personnel can be together again.

Around 1330M, C-124 980 came over with the following news:

The R4Ds and one C-124 were delayed again by weather. Only one C-124 got through. The C-124 that had to turn back had the Aurora panels, Jamesway sections and batteries on it.

SGT PATTON was also on the plane that had to turn back. He was to jump in. LTJG BOW-ERS tried to persuade the pilot that this was not necessary and that he wanted his desires made known to the Admiral. It is expected that only one important planeload of supplies will arrive prior to, or with, the personnel and there is no need of having PATTON at this camp prior to the arrival of the remaining personnel.

LTJG BOWERS asked the pilot to pass the following information:

Give a message to MONTGOMERY to pick up all the flags on the trail when they depart their camp for the POLE.

Tell McMurdo that, after the Jamesways and Aurora panels arrive and the remaining personnel, there are to be no more drops until the construction camp is set up – a delay of two or three days.

Tell McMurdo that we are concerned about the many streamers. Many items can not be replaced. So far, the following material has been lost: One 24-barrell pallet of MoGas, One A-22 container of gasoline, One A-22 container of miscellaneous POL, AvGas and lumber from the drop prior to personnel arriving at the actual POLE, one A-22 container of food (later salvaged), one bundle of Aurora panels (six of the ten panels were salvaged) and one bundle of Jamesway sections.

Tell McMurdo that the personnel are prevented from doing anything until the Weasel is fixed. It is realized that there is a shortage of equipment at McMurdo, but another Weasel at the POLE would speed up operations considerably.

Tell McMurdo that the following replacement material is requested.

2 R7

1 R6B (From Aurora bundle #3)

1 R7A

2 Sections of Jamesway Hut (outer only) if available.

## Ask McMurdo to drop us an AN/GRC-9

In the course of communication, the pilot stated that they were having trouble with the quick disconnects and that he thought they would discontinue their use in the future.

LTJG TUCK and LTJG BOWERS salvaged a container of food that streamed in and BRISTOL and POWELL gathered the radio gear together that had been dropped for SGT PATTON. Among the salvaged gear, goodies were found and put to good use – hamburger, apricots, tomato juice, orange and pineapple juice and crackers.

Literally, there is gear scattered over twelve square miles. It is no use doing much of anything without equipment.

Since arriving at the POLE on the twentieth, most of the winds have been from the grid North and very mild. Each day has been relatively clear with little cloud cover except for the 22<sup>nd</sup> which had heavy overcast skies. The temperature has been minus twenty-five constantly except for today, when it dropped to minus thirty-two with grid Easterly winds. The plateau, so far, is much less windy than would be expected. The snow is beastly soft, making it hard to walk in, but definitely an aid when parachutes stream in with their loads. The personnel of the Advance Party are fairly well adapted to the altitude and cold. The tent is comfortable, although cold. The personnel are hardly ever out of their parkas and windproof pants except when retiring.

Sunday, November 25, 1956

LTJG TUCK, LTJG BOWERS, and BRISTOL PHC dug out the last known streamer before noon. It consisted of advance base construction lumber. After lunch, COL CROSSWELL in C-124 992 and BESCHE in C-124 983 came in and delivered the goods - - the batteries for the Weasel, Herman Nelson, and SGT PATTON, who dropped in to the old camp.

Before 1700M, word was received over VHF PRNC-11 that the weasel was hot and the personnel at the original camp should be on their way shortly. They should arrive at the POLE by midnight.

The news that the R4Ds should be on their way was gratifying as the two C-124's dropped all the remaining gear to get the construction camp in operation.

The other two Aurora panels streamed in, so it was decided to forget the Aurora building for awhile and get the three Jamesway Huts together so that by the time MONTGOMERY and his group, SLATON and HUBEL and the fourteen remaining personnel arrive, there will be a good warm shelter for them.

COL CROSSWELL will start to delivery POL for three days to allow the personnel to catch up on the construction camp and also to make maximum utilization of the aircraft. Time is important, considering the airfield at McMurdo.

Chief HESS WAS ABOARD c-124 992 and talked at length regarding the cargo delivered. Chief HUBEL will bring all the paperwork with him. SGT PATTON brought LTJG BOWERS' card file with him when he parachuted.

Future plans are as follows: Two tents will be put up at the POLE. LTJG TUCK will take the dogs and gather all the survival sleds that have been dropped so far (five). He will also set up the tents at the POLE. As soon as the Weasel arrives, the Jamesway Huts will be gathered up and the job of constructing them will be given to the new arrivals instead of having to set up their tents.

After supper, LTJG TUCK pulled all the survival sleds to the site of the construction camp which is just a little West of the POLE site. POWELL and LTJG BOWERS put up the two tents that were dropped today. The weather became overcast after supper.

At about 2200, the Weasel and crew from the eight mile camp arrived. These personnel were RM1 MONTGOMERY, SGT PATTON, USAF, HM1 WOODY, CM3 RANDALL and AG2 NOLEN. They had little news and were sent to the POLE site to camp for the night.

At 0030M, C-124 980 arrived in company with R4Ds 418 and 246 and the following personnel:

In R4D 418 In R4D 246
HUBEL, UTC SLATON, CMC
WAGNER, UT1 BEVILACQUA, BUC
PRESCOTT, BU2 WILLIAMSON, BU1
GOODWIN, AE2 HISEY, BU2
SPIERS, CS1 SCOTT, UT2

The arrival of the additional personnel immediately made a change in plans. LTJG TUCK broke the camp at 0.7 miles. C-124 made a drop and streamed in some MoGas.

SGT PATTON has taken over as Drop Zone Controller and made several observations for chute failure - - disconnect breaks at thread, skirt hesitator fails, harness fails. There have been failures of each type.

The crew turned to and put up the first Jamesway Hut.

Sunday, November 26, 1956

The first Jamesway Hut was completed by late morning so that the crew turned in about normal breakfast time. Chief SLATON turned a few men to work in bringing in material for the Jamesways, stoves, lumber (dug out yesterday), panels, etc. It was a wonderful feeling to show some progress. At 0800M, the first Jamesway Hut (32 x 16) was completed. All Hands, now numbering 19, turned in for a well deserved rest.

Fortunately, the additional men came in during a calm, relatively warm, day. All agreed that they were really "living" compared to tent life. It is very gratifying that the planning and experience has paid off so well. It seems slow and difficult at times, but that is the way the ball bounces.

Some personnel arose at 1300. It was too hot to sleep in the Jamesway, which is ironic to say the least.

LTJG TUCK has been asked by RADM DUFEK to be the Officer-in-Charge of the military personnel at the POLE STATION this coming year instead of going to the Knox Coast as he had requested. It is felt that this would benefit him and the Navy in all respects. He wants to continue this work, so a winter night at the South Pole would be excellent. Dr. SIPLE wants someone who will be here from the beginning. It will take a load off of the shoulders of LTJG BOWERS for the transfer of the station. It is believed that things will move along pretty fast and maybe the personnel will be able to do even more than anticipated by the January 15<sup>th</sup> deadline.

The first mail arrived today.

Although some of the personnel got up about 1300M to watch COL CROSWELL in C-124 207 drop a load, the majority of the personnel in camp slept until 1700. They are very tired, the events of yesterday and the altitude having caught up with them. It is planned to have the galley in operation by tonight, but by 2100, the elements had just been gathered – food, stoves, etc.,

next to the Jamesway Hut. The personnel had to settle for canned foods of various sorts, gathering the food from all sorts of nooks and crannies.

Some work was accomplished. A builder's tool tent was erected. A Head tent, with two holes, was erected, one bundle of Aurora panels was dug out (practically), the galley equipment, radio gear, and many other items were dragged in by the retrievers (Chief SLATON and his crew).

NOLAN was instructed to start systematic weather observations in lieu of the spasmodic observations thus far. Tomorrow, it is hoped that the base will begin running on a routine basis – reveille, finish Jamesway #2, get the tractor running which will be dropped tomorrow about 1730, and regular meals.

LTJG BOWERS talked to COL CROSSWELL again at some length and asked for 10-amp fuses for the AN/GRC-9, three more Jamesway sections, a Waukesha to replace the one that streamed in yesterday, etc.

All Hands had some soup and went to bed, looking forward to getting a lot done tomorrow. They have to be constantly reminded to have patience as the altitude and the cold are hard on the men, even as good as they are.

Tuesday, November 27, 1956

Reveille was held at 0800M. By the time the Jamesway Hut was rearranged, the field range set up and breakfast served, it was 1000M

The men went to work right away on the hut. RANDALL and SLATON rebuilt the Weasel transmission which had burned out a bearing. HUBEL worked on setting up the galley.

MONTGOMERY tried to get a message through to RADM DUFEK, informing him that LTJG TUCK would like the job as OinC of the POLE STATION. No dice. Hand cranking the generator is no fun and the Weasel dynamotor is not operating for lack of fuses.

It is expected to make the move into the new hut by evening when the second Jamesway will be finished. LTJG BOWERS will stay in the first Jamesway with Dr. SIPLE when he arrives. LTJG TUCK is preparing to return to McMurdo on the first R4D to arrive.

MONTGOMERY did hear aircraft in the air, but could not tell if they were coming here. PATTON, with the assistance of MONTGOMERY and POWELL worked on setting up the VHF radio for ground control.

After a good supper and all personnel had moved into Jamesway #2, word was received that two C-124s would come in about 2200M for drops. One would drop the cat and all looked forward to this drop. Everything has gone so well today that it is hard to believe that everything can go right.

The morale was so high after getting settled and the galley in operation and the men in their comfortable spaces, that each washed and had a beer or so.

LTJG TUCK, LTJG BOWERS and WILLIAMSON partitioned off a living space for LTJG BOWERS and DR SIPLE in Jamesway #1.

MONTGOMERY and POWELL insulated the deck adjacent to the radio and hauled in all the radio gear.

At 2130M, C-124s 207 and 983 arrived for their drops. No. 983 dropped the D-2 and all accessories. The D-2 turned on its side when it landed, but no damage was incurred. Chief SLATON

had it righted and running in very short order. No. 207 dropped two platforms of fuel and one streamed in.

The following messages were passed back to McMurdo via No. 207:

Bulk lumber was requested to replace the lumber dropped by LEVACK on the 21<sup>st</sup>. Only one of the two bundles was ever found.

A Weasel was requested in lieu of the second D-2.

A weasel transmission was requested.

A seal for the Weasel universal was requested.

Five cots were requested

A list of the required aurora panels from the last streamers was submitted.

LCDR CANHAM was on No. 983 and the following items were discussed.

He wrote letters home for each individual in the POLE PARTY, explaining the mail situation.

McMurdo Situation - complex so that his demands will have to determine flight schedules.

Aurora and Rawin Tower modifications - KENNEDY is being sent to Little America

LTJG TUCK as Officer-in-Charge for the wintering group at the POLE STATION.

LTJG BOWERS gave LCDR CANHAM a SITREP – second building complete, galley in operation, expect to start radio gear shortly. LTJG BOWERS was told that bundle #140, containing the TBW antennae had been dropped, but the personnel were not able to find it.

LCDR CANHAM expects to ship POLE WINTERING PERSONNEL in to the POLE STATION about three days after their arrival on December 15<sup>th</sup>. The men here will be sent out in stages as the others arrive.

CAPT CORDINER sent a message to mark out a landing strip free from dropped obstacles. This will be done in the morning. CAPT HAWKES is going to New Zealand as CTG 43.5.

Thursday, November 28, 1956

No aircraft today. Numerous attempts to contact McMurdo failed although BEARDMORE was contacted several times.

The primary jobs done today were the wiring of the Jamesways, putting the vestibules on the Jamesways, getting the D-2 in operation, dragging and laying out the runways for the R4Ds – nothing fancy, but at least the bumps are gradual – getting the RKW set up in the partial Aurora building, and retrieving a great deal of material.

All of the files and drawings are in order.

BEVILACQUA and his crew had to remake a lot of the panels, so that only 12 of the 24 feet for our temporary panel building was completed. This is the Aurora Building to be used as generator and wash house.

Chief SLATON changed tracks on the D-2 and had this piece of equipment in operation by 1300 and made a drag for the runway out of a drop platform.

MONTGOMERY worked on radio gear all morning and will start the antennae tomorrow to be ready for the TBW when it arrives. The AN/GRC-9 works well in the Weasel which is, in effect, a portable radio shack. The fuse had arrived last night.

It is hoped to spend tomorrow primarily in retrieving gear as there is no more building work to be done until more material arrives by air.

The galley is now in good shape as WILLIAMSON erected three large tables and benches which the Builders had prefabricated back in McMurdo. SPIERS has dug most of his gear out so that he and WOODY are quite well prepared.

Several more sunshots were taken which, again, did not plot out well and would put us a little less than one half mile from the POLE. This is hard to understand as they do not check out with the sun shots taken previously. Later in the evening LTJG BOWERS found that the sunshade he had made for the T-3 eyepiece was on crooked which might have thrown a great deal of refraction into the shots. The shots at 201145Z and 282100Z plotted out a lot better and put us much closer to the POLE

If no planes arrive tomorrow, personnel will be caught up.

Chief SLATON, RANDALL and GOODWIN worked on the runway until midnight and finished the two strips. They used the Weasel and the D-2 to good advantage.

Friday, November 29, 1956

Today, the construction camp is virtually complete.

Primarily, Chief SLATON worked all day in retrieving gear, trying to clean up the yard prior to further air delivery.

C124 955 delivered two platforms of POL in the evening but, other than that, there were no other deliveries during the day.

Everyone is anxiously awaiting the other two R4Ds and our remaining personnel, especially now that the two landing strips are ready.

The blade for the D-2 was retrieved and Bundle 140 was finally located.

The excavations required to put the level of all roofs on the same level were completed. This means going down 2'6" for the Power House and 4' for the Latrine.

All of the survival gear is being gathered by PRESCOTT and HISEY in order to inventory it and put it in order in case of emergency.

MONTGOMERY and POWELL started erecting the antennae for the TBW. Everything should be ready when the TBW gear arrives.

The second field range was installed in the galley and the meals prepared by SPIERS & WOODY have been excellent.

SLATON even started to bring in the diesel fuel, a job which was planned for the slack period. The Builders dug out some bulk lumber which had been missing.

After supper, the crew turned to in cleaning up the yard. They started pulling in platforms of POL by taking about ten to twelve barrels off the top, then dragging the remaining barrels on the platform behind the camp.

MONTGOMERY found the antennae parts, the Builders found all their lumber, and LTJG TUCK found his dog food. Everything that has been dropped has now been found. By bedtime, everything except several platforms of fuel had been removed from the yard.

A box of pocket books was placed on the shelves that WILLIAMSON built and SPIERS has some new shelves, benches and tables.

Friday, November 30, 1956

A C-124 came in at 0300M and dropped some fuel and then dropped some timbers 2" x 4" x 4' long to see if the bulk lumber would be dropped in this manner.

The estimates of weight and cube are less than actual as was predicted a long time ago. The Air Force is running out of drop equipment. They are also rapidly running out of airplanes. No. 983 landed short at McMurdo on the night of November  $27^{th}$ , after making a drop here. It wiped out the nose wheel and is probably a strike. No. 105, coming in from New Zealand, landed short and wiped out the main gear and is a definite strike. The pilot broke his leg in evacuating the plane which caught fire. It makes one wonder if the Air Force will continue with the drops. This wreckage represents a lot of cold cash.

Reveille sounded at 1000M with breakfast shortly thereafter.

Chief SLATON and Chief HUBEL started retrieving the final fuel with the D-2 and Weasel. It is intended to clear the yard by evening.

BEVILACQUA worked at de-stringing parachutes.

MONTGOMERY erected the first TBW antenna.

The wind shifted to the North last night, and again it became overcast, warmer (-16) and windier (20 knots). The R4D's were supposed to leave about 1000M, but it looks like more delay from this end. Weather was sent out right away as this kind of weather could be disastrous to the R4Ds because of icing, headwinds, etc..

Word was received later that no planes were coming but that one C-124 was in a standby status.

Saturday, December 1, 1956

C-124s 207 and 955 arrived and each safely dropped one platform of diesel. There was very little to do today except odd jobs.

Chief SLATON and his crew put the blade on the D-2 and planed out an area for the head and power house foundation and then retrieved the two platforms of fuel.

POWELL spent the entire day at the AN/GRC-9.

The R4Ds were on their way by 1400 and POWELL had all sorts of aircraft reports.

The weather was overcast with visibility one half to three quarters of a mile and winds northerly about ten knots.

The Builders constructed a thermoscreen for NOLEN and some file boxes.

All tangled, unusable, chutes were disposed of.

The track chain of the D-2 broke about 1600M

LTJG TUCK gathered a lot of material together in preparation for his return to McMurdo.

About 1645M, R4D 163 came in with Dr. SIPLE and the radio gear (TBW).

At 1930M, R4D 246 came in with:

CHAUDOIN, YN1 ROBERTS, SW2 MC CRILLIS, CE2 MC CORMICK, BU2 TYLER, AD3

LTJG TUCK departed on one of these planes for McMurdo.

This completes our POLE STATION CONSTRUCTION FORCES. It was a very bad day for flying. Both R4Ds had to be talked down a good part of the way, using the VHF homer. Long strips of day glo were placed at the end of the runway.

By evening, the D-2 was repaired, and the fuel dropped this morning was retrieved and the new-comers were settled in.

Reveille again depends on whether or not we receive more material by air during the night.

MONTGOMERY and PATTON worked throughout the night setting up the TBW so that we can throw on the generator tomorrow and go on a continuous communications and weather schedule.

It was very fortunate that the planes did have success in landing and taking off here today under such adverse weather conditions. R5D No. 505 covered the R4Ds for their trip.

It was a discouraging day as far as work or building progress goes. There is no construction material yet here to work with. The personnel can only get organized and pull in the material as it comes. The area was excavated for the Head and Garage, but nothing else, but getting all the personnel squared away and the D-2 in good shape is important.

Sunday, December 2, 1956

Reveille was in time for 0900 breakfast, radio schedule and sending out the weather. It was learned that all aircraft returned safely to the base at McMurdo which means that the first phase of this operation has been completed without accident, other than the Air Force planes.

Crews were distributed to clean up camp, finish the setup of the radio and throw power to it, clean up the parachutes and bury the tangled ones, to see if some of the free fall drums could be salvaged, get CHAUDOIN's office squared away with more tables and get him settled with the weather schedule, and square away the food cache.

The first C-124 was due to arrive after 1300M and the message boards were squared away and continuous weather and communications schedules were commenced.

C-124 No. 207 came after 1300 and dropped a generator, six bundles of panels, of which one streamed in, and two A-22 containers of gear. The foundation lumber and trusses are needed worse than anything else as the Builders are again at a standstill. We were again told that they are having transportation difficulties at McMurdo. Perhaps this explains the mix-up in delivery schedules.

Dr. SIPLE made some snow temperature measurements this day and found an isotherm to exist about six feet down with a reading of about minus fifty-four degrees. This means that this temperature is the average yearly temperature for this region. Being considerably lower than Little America's average for this year. This means that a minimum temperature of less than minus one hundred degrees might be expected during the winter.

The generator hit pretty hard on its end when it was dropped, but it is apparently in good condition.

The TBW was working by evening after experiencing 4KW generator trouble and some adjustments.

A mercurial barometer was put up in LTJG BOWERS' room and we are running out of room in the galley. Continuous radio and weather watches will commence as soon as the TBW is more reliable. The weather and radio watches start tonight.

MONTGOMERY contacted McMurdo QSA5 which makes the crew feel great. The carburetor of the 4KW requires adjustment but, otherwise the South Pole Station has a good communications system.

Monday, December 3, 1956

The first C-124 was not due until 1400M, so all hands turned to after breakfast to work on the runway extension per the request of CAPT CORDINER who anticipates starting P2V tests in a few days. Time was spent in staking out and putting in batter boards for the Garage, and routine maintenance.

As usual, the personnel had a heavy breakfast, soup and sandwiches for lunch and a heavy supper.

The C-124 No. 955 delivered a platform of fuel which streamed in, five bundles of panels, and free fell some snow sills. A fairly heavy wind of over ten knots made retrieving and cutting the chutes off of the cargo an immediate requirement.

Chief SLATON and his crew dragged the runway extension and retrieved bundles. HUBEL and crew (per BEVILACQUA) put snow sills down for the Power House.

GOODWIN put the 4KW generator into operation after it had "surged" most of the night. The TBW was on the air all but a few hours. Only about one hour of total transmitting time was not good.

During the day, the 10,000 foot runway was completed. C-124 No. 990 completed a second drop of fuel, panels and lumber.

A message was sent to McMurdo indicating that construction is stopped, pending receipt of trusses and more and larger snow sills. It was indicated that construction would and must pro-

ceed with the air drops if the personnel are to make the deadline. All dropped material was retrieved by bedtime.

During the night watch, MONTGOMERY worked on the installation of ARC-1 VHF Transceiver.

CHAUDOIN typed most of the narrative report to date.

The message index and file were brought up to date.

The Weasel transmission is slowing beginning to deteriorate due to old bearings without replacement when it was rebuilt. A message was sent to McMurdo asking for bearings and other parts to keep this one piece of transpiration in operation.

Tuesday, December 4, 1956

This was another beautiful day, as the wind shifted toward the East with only two to three knots all day.

During the morning, Chief SLATON and his crew worked dragging the airstrip with parachutes to smooth it out. It is hoped that this will keep the aircraft skis from sticking so much, thereby saving on JATO.

Chief BEVILACQUA and his crew put down as much as possible of the Head and Power House foundation and then laid out grades for the Mess Hall.

Chief SLATON AND Chief HUBEL tried to dig out a platform of diesel that had streamed in and succeeded in saving nine barrels of fuel out of the twenty-four. The remaining barrels were smashed. It will be attempted to dig out more of this fuel as time and manpower permit. It took six men almost four hours to do this job and tied up the tractor as the platforms bury themselves about ten to twelve feet.

C-124 No. 955 came over the camp after lunch and dropped one platform of diesel and five bundles of trusses. Now, the Head can be completed. With a few more items, the Power House shell can be completed. This building will require the most work and will give the personnel a good enclosed working space for bad weather days. It is the most essential building to be erected as it will furnish electricity and water to the camp.

LTJG TUCK sent a message authorizing the POLE STATION to retain most of the trail equipment rather than send it back to McMurdo. This is probably the result of talks with Dr. SIPLE in which they plan to make many trail trips next summer.

C-124 No. 955 attempted to free fall some POL with four of the six barrels failing. The altitude from which the barrels were dropped was about 150 feet. It looks as if only the lumber can be delivered by free fall.

As soon as 955 departed, all hands began working to bolt the trusses together. December 8<sup>th</sup> was set as the completion date for the Garage and Head.

By bedtime, all the lumber had been retrieved, the yard cleared and many trusses had been bolted together.

Dr. SIPLE'S Isotherm is now minus sixty-two degrees at twelve feet.

The low frequency homer was tested and heard in McMurdo on 320KCS.

Wednesday, December 5, 1956

After breakfast, Chief SLATON and GOODWIN began marking the runway. WAGNER, ROBERTS, MC CRILLIS and CHAUDOIN bolted floor trusses together. BEVILACQUA and his crew worked on the foundation of the Power House and Head.

After lunch, C-124 No 955 came over and dropped all lumber, 24,000 pounds of it. Then C-124 No. 990 came in and dropped roof trusses, two A-22's, panels and stoves, etc. By evening the Garage-Power House floor had been laid. Most of the lumber had been retrieved as dropped by No. 955. C-124 No. 992 came in at 1800M and dropped panels and trusses.

Constructionwise, the garage is the most difficult building as it requires the most foundation. BE-VILACQUA used broken panels and cardboard to insulate the floor, making use of every piece of gear available to do a better job.

Two bundles of roof trusses streamed in, resulting in the loss of fifteen roof trusses, and four four-foot trusses and four eight-foot trusses for the Inflation Shelter. This will hurt us somewhat as we have only fifty-six of the long trusses. We can get along with thirty-eight plus or minus. Some of the roofs will probably have to be framed with timbers. The Inflation Shelter trusses will be of little concern as there are replacements for them. By some miracle, the twelve foot panels that streamed in were all in good shape. They landed on end with very little damage.

The retrieving crew worked very late and pulled in all cargo. The Builders worked until 2130, preparing the panels and trusses for Garage and Head erection tomorrow. The Saturday, December 8<sup>th</sup>, deadline for these two buildings is still effective and it looks as if it will be met.

PRESCOTT and NOLEN worked throughout the night and put fourteen roof trusses together. This will allow the Builders to start right in erecting the walls and roof of the Power House and Head in the morning.

During his night watch, MONTGOMERY put in all the deadmen for the second TBW antenna.

RADM DUFEK and CDR WHITNEY are in McMurdo and will be visiting the SOUTH POLE STATION SOON.

Thursday, December 6, 1956

A late reveille after a late work day yesterday.

HUBEL and WAGNER completed all the trusses for the Power House and Head started by NO-LEN and PRESCOTT last night.

BEVILACQUA and crew worked on the Head foundation and completed it before lunch.

RANDALL rebuilt the Weasel transmission late last night so that the retrievers got a late start.

All of the panels for the Power House were laid out, but we are missing one W-1 panel.

LTJG BOWERS and Chief SLATON made TSM Hardness Tests and found a hardness index of 30 to 45 on the dragged strip for the first thirty or forty centimeters, but the average harness for all the unprocessed snow was between ten and thirty. The profile does show this light stratification at about 100 centimeters

Down in Dr. SIPLES hole, tests were made to minus eighteen feet which showed a maximum hardness of 180. Dr. SIPLE will incorporate these readings with his report on the snow. One

interesting fact concerning this temperature reading is that he has hit a warmer temperature of – 57 as opposed to -82 degrees at minus fifteen feet. Perhaps it is the true isotherm. Perhaps it is due to friction heat from driving the ramrod in.

By supper time, BEVILACQUA and his crew finished the Head shell. Definite progress is now shown.

By supper time, Chief SLATON and his crew had practically retrieved all of the gear dropped by C-124 Nos. 955 and 990, consisting of one successful platform of POL and twelve bundles of building panels.

After supper, the crew prepared to receive the P2V7 and one other C-124. While waiting for the C-124 to drop its load and the P2V7 to land, BEVILACQUA's crew completed the walls and trusses of the Garage/Power House.

The weather closed in considerably, giving us much concern for the P2V-7 which will deliver some cargo.

C-124 No. 992 dropped a platform of diesel and six science building panel bundles. One streamed in but all of the panels are okay.

P2V-7 No. 463 came in about 2200. CAPT CORDINER visited the base. Then, when attempting to take off without JATO, they found they could not leave the ground. After several attempts to taxi, several of the base personnel turned out to help rig fourteen bottle of JATO on the plane. Then one jet pod had trouble so the entire crew, exhausted, turned in for rest in the barracks.

CAPT CORDINER was put in the VIP Quarters. All Hands turned in about 0430M on December 7th

Friday, December 7, 1956.

The VX-6 plane crew (P2V-7 No. 436) was bedded down about 0500M. Practically all hands were up again at 1030M.

BEVILACQUA'S crew went ahead to complete the Garage/Power House.

Chief HUBEL took over the retrieving job, fixing up the head for use as quarters for the plane crew in case the P2V-7 could not take off again today. Chief SLATON worked with VX-6 to give them any assistance possible.

At about 1130M, the VX-6 crew departed camp for the aircraft to tear down the starboard jet to ascertain the trouble. After this is known, definite plans can be made.

Chief BEVILACQUA and his crew completed the Garage/Power House shell (except doors) around 1600M and immediately went to work on the Mess Hall foundation.

Chief SLATON and Chief HUBEL spent most of the day chasing down missing bundles some distance from camp and that had been reported by plane crews.

Later in the afternoon, the P2V-7 plane crew found a frozen pump in the jet engine. It was removed, brought back to camp, repaired and replaced in the engine. The crew then prepared the plane for takeoff. Although they thought they could get the plane in the air, the fuel control valve and fuel pump were still giving them trouble after midnight and they all turned in for a night's sleep in the Head in which Chief HUBEL, WAGNER and SCOTT had installed a stove.

As yesterday, three C-124 loads of cargo were delivered today and the retrieving crew worked late into the night and had all the material in camp before securing.

BEVILACQUA and his crew also finished the foundation for the Mess Hall before they secured.

Southerly (grid) winds were experienced today for the first time since the arrival of the South Pole Construction forces, but they were of no great force.

Saturday, December 8, 1956

A late reveille was held today. All personnel were very exhausted from a grueling week's work. Breakfast was served at noon.

During the night, MONTGOMERY laid down the counterpoise wire under the Mess Hall foundation and NOLEN connected seven more trusses for the roof of the Mess Hall. MONTGOMERY spent a great deal of time relaying messages for LA5 during the night as one of those freak occurrences happened where we could read and send to almost everyone, but none of the other stations could contact each other.

The P2V-7 took off at 1000M after a very hair raising run down the full length of the two mile runway. They used sixteen bottles of JATO. No only this, but two reciprocating engines and two jet pods burning over full bore. All hands were glad to see the plane take off safely. The crew consisted of CAPT CORDINER, LCDR TORBERT, MAJOR ANTDS, AM1 CARTER, AD2 CRISP, AD1 GANN, AL1 PELLO, AD1 SWYDER, and T/SGT SULLIVAN. It is noted, however, that the capabilities of the P2V were again overrated.

After talks between LTJG BOWERS and CAPT CORDINER, it was decided to commence the delivery, about 18-20 December with R4Ds of the remaining non-airdrop material and of the wintering over personnel/ In order to conserve plane trips, each returning trip would take three or four construction personnel. LTJG BOWERS made up a tentative list of personnel in order of evacuation. Factors considered were personnel requirements and the need to smoothly and effectively turn over the base to the wintering group. CAPT CORDINER hopes to have all hands back at McMurdo by January 15, 1957. This will go well with the crew who are working their utmost.

By time to turn in, all air dropped material had been retrieved and the Mess Hall had been completed. Only two days were required for the construction of this shell.

The primary material airdrops today consisted of utility gear and fuel. A message was sent to discontinue tunnel lumber until more important items were delivered. This was brought about by CAPT CORDINER's disclosure that AvGas and material to rig the cargo for drops were becoming scarce at McMurdo.

The ice runway there will not last forever either. So, the progress of the South Pole Station, although heartening, is not too fast. LTJG BOWERS hopes to have all permanent building shells finished by December 15<sup>th</sup>. This is one month prior to the original estimated date and does not include the barracks building which will arrive in McMurdo via DEEPFREEZE II ships.

Sunday, December 9, 1956

Today was another day of late reveille with breakfast served at noon as our work schedule is determined by the schedule of the Air Force planes.

The Builders started on the foundation for the Science Building and it was practically complete by secure time.

Three C-124s delivered cargo again today and there were quite a few streamers. Five out of seven water tanks and several boxes of radio and IGY gear streamed in. This is somewhat discouraging.

There was some confusion today as to what cargo was dropped by the aircraft as one of the pilots would not take the trouble to give us a complete manifest of the gear he dropped. A lot of cargo from this plane streamed in and it is difficult to check back on missing material or damaged gear unless a complete manifest, by box number, is received that will agree with the paperwork held here at the South Pole Station.

The present plan of the Air Force is to finish delivery of all material to the South Pole Station by the end of this coming week. They will then return to New Zealand for aircraft checks and return to McMurdo when the rest of the material is ready for the additional drops, i.e. food, recreation items, medical gear, antennae gear, etc. coming in by DEEPFREEZE II ships.

The UT's worked at melting out the utility gear received yesterday. This gear had been frozen in a pool of water at McMurdo before being dropped.

SPIERS and WOODY cooked an excellent Italian dinner for the crew, consisting of spaghetti, pizza, and corn on the cob. The airdropped material was picked up following dinner and all of the gear was retrieved and in camp by secure time.

Monday, December 10, 1956

Late last night, while the retrievers were bringing in yesterday's airdrop material, the right track of the D-2 broke. So, after breakfast this morning, the crew worked to change pads on the tractor and replace the chain. The tractor broke down at a good time for us as there is a blizzard at McMurdo and there was little probability of receiving any airdrop material today.

Chief SLATON looked out to the grid North to see if he could find the Mechanics Box #3 that fell out of the C-124 on one of the first days of airdrops. No success.

The surface of the plateau is definitely undulating. Chief SLATON reported this after his Weasel trip. Yesterday, using the theodolite, it was apparent that the area to the grid East is much higher than our height. The area to our grid North is lower than our height. For grid South of us, the horizon is slightly higher and grid West of us, the area is slightly lower.

The Builders continued with the Science Building, although still missing three floor trusses, finished up bolting the roof trusses together and getting them ready for installation tomorrow.

The Utilitymen worked on getting the generators, and tanks, etc. ready for the Power House.

Dr. SIPLE, TYLER and PATTON worked on the inventorying of material that was dropped yesterday. Since the pilots of several planes did not give us a manifest, there was some confusion as to what came and what did not, particularly as to what may have been lost.

The airstrip was dragged, taking out the gullies left by the JATO of the P2V.

By secure time, the foundation for the Science Building was complete as far as trusses would allow and all the panels and trusses were ready to assemble. The large water tank and the snow melter were set up in the Power House and NOLEN and CHAUDOIN sent up their first weather balloon.

Tuesday, December 11, 1956

The primary jobs accomplished today were the completion of the majority of the Science Building. Three missing trusses are required to finish this building. In addition, we completed the bolting of all trusses on hand, retrieved four complete loads of airdrop material, and installed the generators in the Power House.

Several items of interest occurred today. WOODY pulled a tooth that had been bothering HUBEL. BRISTOL, although not improved a great deal, was up and about a little today. DR TAYLOR and DR KNOEDLER sent explicit directions to follow in each case.

LTJG TUCK flew over in one of the C-124s today and he and LTJG BOWERS has a long conversation in which the following points were stressed:

The dogs would stay at the South Pole until LTJG TUCK and CAPT CORDINER could work out details of evacuation.

The R4Ds would not be back here to start evacuation until approximately December 25<sup>th</sup>. AvGas and other requirements at BYRD STATION will limit the R4Ds as far as support at the SOUTH POLE is concerned.

Material discrepancies and shortages were itemized, including antennae gear, radio parts, trusses, Waukesha, Weasel for later use in the season and one-ton sleds.

RADM DUFEK will probably cut the barracks building out of this year's construction due to weight limitations of airdrop material.

Dr. SIPLE is busy inventorying the IGY material which composes the majority of the airdrop material now being received. Two very important containers streamed in today which might curtail the scientific program this winter. This, plus the barracks situation, has discouraged Dr. SIPLE.

Several sun shots were taken today to check the exact location of the SOUTH POLE. It was determined that the POLE lies about 100 feet (plus or minus) East of the flag pole.

The fourth C-124 of the day came in at 2230 to make this a very big day for delivery. The 4KW generator broke down about secure time. Chief SLATON, RANDALL and GOODWIN worked until very late repairing it. By 0300, the radio was back on the air.

Wednesday, December 12, 1956

No aircraft today for some unknown reason. One C-124 went on a round robin flight to BYRD STATION and a message later in the day indicated that AvGas was low at McMurdo. This may be the reason for no flights. LCDR CANHAM also indicated that the one remaining flight for the SOUTH POLE before the NESPELEN offloaded, could not handle all the gear asked for. This means that we can only go so far, as much of the utility and electrical gear is still at McMurdo.

MONTGOMERY and POWELL finished preparing, unpacking and inventorying the radio gear. All of this gear is now laid out in the Mess Hall building where the Radio Shack will be located.

Chief BEVILACQUA and his crew finished the inflation shelter with the exception of the roof. We are still waiting for the short special trusses for this building. Notice was received that the Barracks Building would not arrive until late January which means that it would not be constructed here at the SOUTH POLE probably until next year. This also means that our buildings will be complete as soon as the trusses arrive and the Inflation Shelter and the Science Building are completed.

WAGNER and SCOTT worked on the installation of the galley equipment in the Mess Hall and also had the second Herman-Nelson heater in that building to thaw out equipment iced up from

the superfluous water at McMurdo. They also put all the necessary gear in that building for future installation in the Head.

Chief SLATON started grading for the tunnel system which has been laid out.

RANDALL, GOODWIN and PATTON spent most of the day digging out drums of fuel that had streamed in. They also found a piece of radio gear that had streamed in.

NOLEN and CHAUDOIN sent out their second pibal today.

Thursday, December 13, 1956.

The last plane to fly in for approximately two weeks arrived today and delivered the majority of the construction materials required by us to keep busy during the coming period of airdrop inactivity. The acetylene did not come, nor portions of the Rawin Tower. But, we shall be in business for awhile.

By secure time, all but minor portions of the Science Building and the Inflation Shelter had been completed.

MC CRILLIS has the Head, Power House, and Mess Hall wired for electricity. The UT's have the snow melters hooked up, most of the latrine gear and some of the Mess Hall gear installed.

Chief SLATON and his crew started stacking support fuel next to the Garage where a twenty foot tunnel is to be built.

The field was cleared of all airdrop material and all hands turned to on construction. We will have until approximately the 28<sup>th</sup> of December to finish up the buildings, tunnels, utilities, and to store support material on hand. Then, we'll be out of here as fast as the R4Ds will take us.

Some disconcerting news was received that the McMurdo Wintering Party will depart for the States shortly. Some of the men here were put out by this news. However, there was nothing official about this.

POWELL and PATTON worked on installment of the Collins Radio Gear most of the day. We are missing a few pieces, and the antennae must yet be built. But, progress in that direction has been rapid.

A breather was taken tonight in order to have a Happy Hour. The men have worked unceasingly since their arrival and deserve this small break in routine.

Friday, December 14, 1956

Today was regarded as sort of a partial holiday. No planes were scheduled and some of the personnel suffered from the effects of last night's "Happy Hour" at this altitude.

Yet, quite a bit was accomplished. MC CRILLIS finished wiring the Mess Hall, the Builders finished the Inflation Shelter and the Science Building. The Utilitymen put heat in the Science Building and connected the snow melter in the Power House to the generator exhaust. This was a time consuming job and required a great deal of cutting and brazing. The radiomen finished the major portion of the installation of the permanent radio gear and set up the 2<sup>nd</sup> TBW antenna.

The remaining work is as follows:

Aurora and Rawin Towers Interiors of buildings Storage of materials for winter support Completion of antennae Camp cleanup

Since the tentative plans are to commence more R4D flights when the NESPELE arrives at McMurdo with our reliefs, we should be in good shape for the evacuation of our personnel and the transfer of the base to the wintering personnel. We have two weeks to clean up this work, and any work that is not done by us will be done by our reliefs. We shall schedule our work to get the most important outside jobs done first.

Word was received in the morning that there was enough AvGas left at McMurdo to schedule two more C-124 flights to the POLE prior to the departure of the C-124s to New Zealand where they will await the arrival of the NESPELEN at McMurdo and the offloading of AvGas. LTJG BOW-ERS sent a list of material to be brought in by these flights so that the maximum amount of work can be accomplished in the time remaining.

Saturday, December 15, 1956

The primary construction today consisted of tunnel work and some interior carpentry. BEVILAC-QUA'S crew built a 56' tunnel East of the Mess Hall and WILLIAMSON completed the interior work on the Head. LTJG BOWERS has set a deadline date of Saturday, December 22<sup>nd</sup> for the completion of all tunnel work.

Only a minimum amount of interior carpentry will be done as all partitioning etc. will depend too much on the requirements of the scientists and the wintering crew.

Chief HUBEL's crew continued to set water tanks, stoves, fans, etc. in the completed building shells. The installation of utilities is progressing very well.

C-124 No. 990 came over the camp about 1300M and dropped all the remaining construction material that we will require to complete the station and that we had asked for yesterday. Acetylene was one important item.

After retrieving all of the airdrop material, Chief SLATON and his crew finished storing three hundred barrels of diesel fuel East of the Power House. BEVILACQUA and his crew can now build a wide tunnel over this fuel.

A cleanup detail picked up all the heavy panels and pallets this morning. Each crew also cleaned up and restacked its own gear. A blizzard could cause us to lose a great deal of gear if we allowed it to lie around loose.

CHAUDOIN started work, in the Science Building, on the processing of the philatelic mail.

MCCRILLIS completed the basic wiring of the Mess Hall and is well on the way to completing the basic wiring of the Science Building. By "basic wiring" is meant the main panels, all overhead lights and all wall convenience outlets. As equipment is installed, additional wiring will be required.

The second additional plane, scheduled to bring us supplies, was canceled in that we were able to get our requirements on one plane and BYRD STATION requires a great deal of diesel to be air dropped to them.

Sunday, December 16 1956

The framework for the twenty foot tunnel East of the Head/Power House was completed today. The area East of Jamesway number two was also prepared for a tunnel as well as the area for the long tunnel running the full length of the camp from the Mess Hall to the Science Building. POL was moved into this long tunnel after which the tunnel can be built over it.

MC CRILLIS finished the basic wiring of the Science Building and the Utilitymen put the water tanks, as well as the hot water heater, in the Head. The galley and jet heaters are also progressing well.

CHAUDOIN, with the help of NOLEN and a couple of others, is showing progress with the philatelic mail.

The Rawin and Aurora tower beams were spliced. A patch panel system for the receiving antennae is being fabricated as well as the other wiring for the communications system. MONTGOM-ERY is working on the antennae system at night.

Dr. SIPLE has daily conducted a salvage and cleanup campaign so that the camp remains orderly and all material possible is stacked for eventual usage, if required.

A message was received from LTJG TUCK and Mr. ELMO JONES, indicating that they had purchased the beer for our Christmas. A thank you reply was made.

A message was received from LCDR CANHAM that the Air Force would not drop the twenty foot Rawin trusses. They will be cut for delivery and we will weld and braze as well as possible, retaining the partial tower idea.

Monday, December 17, 1956

The primary work accomplished today was the completion of the framework of the twenty foot tunnel grid West of the Science Building, the storage of another two hundred odd barrels of diesel in the location of the grid North tunnel, installation of a hot water heater and fuel tanks in the Head, installation of waste water tanks in the Head, completion of wiring and check of the 1000W transmitter, cancellation of several more bags of philatelic mail, and the bolting of Rawin and Aurora beams.

The 4KW generator gummed up on bad gasoline again, so a line was run from the 30KWs and one 30KW is now driving our power system.

A message was sent indicating that LTJG BOWERS is against not sending the third 30KW generator to the POLE.

The men wrestling diesel drums were extremely tired at the end of the day.

MC CRILLIS finished the basic wiring of all buildings.

Tuesday, December 18, 1956

The primary work accomplished today was the storage of all diesel fuel in tunnel locations, completion of tunnel framework West of the Power House and Latrine, commencement of work on the long Northern tunnels, cancellation of philatelic mail (2/3 of it is now completed), running the pipes for the Head, which is now practically complete, and regular camp maintenance.

A great deal of difficulty is being met in running pipe in the Head as we are still missing one box of pipe fittings. LTJG BOWERS looked through all of the supplies received and could not find these fittings. All pipe, then, must be run with odd fittings on hand, using a lot of brazing to make them fit.

The three transmitters in the Mess Hall building and the receivers are now wired. With the completion of the antennae and the running of power lines from the Power House, the radios can go on the air.

McMurdo indicated that it would take HAM GRAMS from the Pole Party to try to delivery them for Christmas.

The ships of DEEPFREEZE II are now approaching McMurdo and are estimating there tomorrow at 1900M. After the ships are offloaded, we will again start to receive air delivered material and will commence the evacuation of personnel.

Dr. SIPLE's primary concern should be:

What happens if the Air Force cannot return to McMurdo, after the ships are offloaded, to deliver wintering over support material which totals approximately 130 tons, including food, additional IGY material and 300 odd drums of diesel fuel.

Will his personnel be able to take care of this airdrop material and the completion of the base.

To answer the first, LTJG BOWERS believes that the runway at McMurdo will be satisfactory by late January to take C-124s. If the runway continues to soften, and is not usable in early January, the support material could be delivered then, by R4D. There is enough food on hand to carry all personnel through the end of January, particularly since the total number of personnel here will never be more than twenty-five.

To answer the second, they will be able to handle the airdrop material by phasing the evacuation of construction personnel by ratings and this will transfer necessary information to the wintering group.

The above fears, particularly the second one, is well justified inasmuch as a message was received from CAPT CORDINER late in the evening stating that he intends to start evacuation prior to December 26<sup>th</sup>, using the P2Vs and R4Ds.

Wednesday, December 19, 1956.

The following work was completed today: All POL, other than diesel, was stored either in the tunnel system or adjacent to the inflation shelter, where MoGas and AvGas will be used in the heater, the Northern tunnel framework was completed, the 8<sup>th</sup> of the 9 bags of philatelic mail was sorted, stamped and tied up, the utilities in the latrine were completed as far as parts and equipment on hand would allow. Valves are holding up the piping and part of the shower is not here.

News that PRESCOTT, BU2, had won an automobile in a contest in the States, provided some excitement among the camp personnel.

A message was received from LCDR CANHAM indicating that he would like Chief SLATON and YN1 CHAUDOIN back at McMurdo among the first evacuees. LTJG BOWERS answered that he would like to keep them until the CM and Mail Clerk arrive in order to more efficiently transfer the base functions to the new inexperienced wintering personnel and also to maintain 24-hour weather observations. However, after explaining his desires, not knowing the situation at

McMurdo, and knowing that LCDR CANHAM has his problems, LTJG BOWERS indicated that he would send SLATON and CHAUDOIN back on the first flight at LCDR CANHAM's discretion.

The ships are due to arrive at McMurdo at 1600Z tomorrow but which ships are not yet known. However, we are sure that wintering personnel for the POLE STATION are aboard the NESPELEN. It is hoped that these personnel can be transferred to the POLE as early as possible.

Thursday, December 20, 1956

The primary work accomplished today was the completion of tunnel framework West of the Mess Hall and adjacent to the Inflation Shelter, completion of the processing of philatelic mail, completion of the storing of all POL products in the tunnel system, dragging the 10,000 feet and 3,000 feet runways, raising the flag which included a brief ceremony and many photographs. This was the first time the group as a whole has been assembled. The Aurora Tower on top of the science building was started and the raising of one antenna pole of the permanent triad was accomplished.

The ships arrived at McMurdo today so that we are without communications, the circuits being so busy with ship traffic.

The antennae poles are being rigged by MONTGOMERY during his night radio watch.

The Utilitymen now have the Head complete. Many men in camp enjoyed a shower today, another first for the South Pole.

Friday, December 21, 1956

The primary work accomplished today was that the runways were again dragged with a new, improvised, drag, having a wider sweep. This drag has proven better in leveling the strips. The framework of all the tunnels, except approximately 100 feet which will have to be finished after the final air deliveries. The Aurora Tower was put up on the North end of the Science Building. After the tower is guyed, the Aurora Building can be placed on top of it. The second and third poles for the triad antenna were raised. This antenna can be completed readily when the copper wire arrives as it is a ship delivery item. The Galley is rapidly becoming operational. The range, hot water heater, sinks, piping etc. were installed today, including some partitioning and cabinet work.

SLATON's crew started a storage campaign to get building and equipment supplies in the Garage and tunnels.

Saturday, December 22, 1956

The primary accomplishments today were the installation of a 35' whip antenna on to of the Mess Hall building for the Ham Radio gear. Attempts are being made to get the radio on the air prior to the departure of the Pole Station Construction crew. Chicken wire was stapled to the tops of all tunnels in preparation to covering them with burlap. Utilities in the Galley were completed and the Galley is completed except for some more carpentry. A jet heater was installed in the Science Building. A set of as-built drawing for the station were completed. The Aurora Tower was guyed and the deadmen were put in for the lonosphere Antenna.

The Aurora Building, which was being used as a parts storehouse and generator shack, was cleared out so that the building can be dismantled in the morning and erected on top of the Aurora Tower.

Both the Weasel and the D-2 tractor were completely serviced today. The D-2 will not be lit off again until required. This is an attempt to conserve fuel.

A message was received indicating that the P2V and the R4Ds were loaded at McMurdo with non-drop IGY cargo. This indicates that personnel would not be brought in first as requested.

A letter was prepared by CHAUDOIN to the Naval Postal Section of CNO, enclosing, for disposition, all the philatelic mail that could not be cancelled here at the SOUTH POLE STATION for various reasons.

The Airstrip which SLATON dragged last night is now as smooth a McMurdo's strip, thanks to the drag that the mechanics had improvised.

The electrical system is now complete with electricity in all buildings and the wiring in each building is basically complete.

The radio receivers in the permanent radio shack are working well. A voice conference from McMurdo to the States over the Ham Radio was overheard, indicating that the plans for flying the wintering party out to the states are materializing.

Sunday, December 23, 1956

We anticipated the arrival of the P2V and two R4Ds most of the day, but the weather at McMurdo postponed their arrival until the 24<sup>th</sup>. Since eight of the construction personnel will be leaving tomorrow, it was decided to have our Christmas Party tonight and holiday routine tomorrow instead of Christmas Day as originally planned. The amount of work accomplished today further justifies this decision.

The Aurora Building shell was completed. Early in the afternoon, our temporary generator shack, containing the majority of the Aurora panels was torn down. By supper, it had been re-erected on top of the Aurora Tower.

The Rawin Tower was also erected and guved by supper.

The airstrip was remarked to provide greater navigational aids.

The majority of the utility gear was broken down and put inside the tunnels.

The HAM radio gear was put on the air, using the whip antenna. We know we reached Argentina, but reception on our end did not allow contact with the States.

Dr. SIPLE continues storing IGY gear and has only a few more containers to complete of the material dropped so far.

A message received from LCDR CANHAM indicated that CHAUDOIN's services are required at McMurdo, so he was scheduled for the first flight out instead of PRESCOTT.

A small shack was built on a platform and towed to the geographic South Pole, a distance of 0.4 miles @ 125 degrees Grid from our station. This inaccuracy is due to several reasons, including the fact that airdrops started while we were eight miles from the POLE, that the first building was put up while we were camped almost a mile from the POLE, that corrections for refractions as given in the Solar Ephemeris are not correct for this altitude and temperature, and that, invariably, the skies would become cloudy in the early morning, prohibiting 24-hour observations.

Fire extinguishers were distributed to all buildings not having them.

Monday, December 24, 1956

Today, all hands spent the majority of their time recuperating from hangovers. The party started last evening broke up at 0800 this morning. The construction party made up for one month of abstinence.

Three aircraft arrived in the late afternoon, delivering non-drop IGY cargo. R4D 246, piloted by SHINN, departed with HISEY and SCOTT. R4D 276, piloted by FRANKIWEICZ departed with CHAUDOIN and ROBERTS. P2V 436, piloted by TORBERT, departed with GOODWIN, WILLIAMSON, TYLER and PRESCOTT. Thus, eight of our original construction personnel have returned to AirOpFac, McMurdo.

CAPT CORDINER arrived in the P2V and indicated that no correspondents would be coming to the South Pole Station. He stated that he would start bringing in wintering-over personnel as soon as possible. He indicated that our runways were excellent, much harder than before. The aircraft hardly made any tracks at all. He said that the reason he did not bring personnel before cargo is that he wanted to further test the P2V capabilities. The aircraft had little trouble in taking off today, which added much to the comfort and morale of the troops remaining. The possibility of receiving the barracks building this year was discussed and CAPT CORDINER advised that hardware for drops is critical and would determine the decision.

MONTGOMERY contacted K2KGL (Jules in New Jersey) and W2KCR in Syracuse for the first two stateside contacts from the South Pole. We will continue to operate the HAM Gear, endeavoring to contact all dependents of the construction personnel prior to the return to McMurdo.

Tuesday, December 25, 1956

The entire day was spent in an all hands evolution to finish stowing support material in the tunnels and to progress with tunnel covering. By day's end, the majority of material was dragged from outlying depots into the tunnel and segregated. Only construction material remains outside.

Also, the northern tunnel and the tunnel to the inflation shelter were covered with chicken wire. To date, all tunnel roofs and these tunnel walls are covered.

Today was the worst day experienced thus far as far as weather is concerned. Northerly winds, not too strong but persistent, carried light snows all day long. This is the nearest thing to a blizzard we've seen, but nothing compared to the blizzards experienced in McMurdo.

MONTGOMERY worked the HAM gear all afternoon while the amateur bands were good and LTJG BOWERS, SLATON and BRISTOL were able to talk to their wives. Also W2KCR of Syracuse took eight HAM messages for relay to dependents This chance to speak and send messages to our dependents was sincerely appreciated by us all this CHRISTMAS Day. The HAMS are quite anxious to get QSL cards which makes all the circuits jammed.

The visibility became so bad late in the evening that RANDALL ran the Weasel into a low ditch and turned it over. No harm was done and it was quickly righted by the D-2.

We were able to talk to McMurdo at length over the HAM band. Very little news of interest. Offloading of ships is being delayed by Northerly winds which jamb the bay with ice. The ships cannot tie up to the ice edge. Our military reliefs will be brought in by the next aircraft. MC PHEARSON, the RM1 that will be relieving MONTGOMERY, is now working in the radio shack at McMurdo, picking up a great deal of information that will be of assistance.

Wednesday, December 26, 1956

An all out effort was made today to progress as far as possible with the tunnel covering. By day's end, all the tops or roofs of the tunnels had been covered with burlap and the walls of the windward, grid North, tunnel were covered. The runways were dragged again and a lot of small, but important, utilities were installed - - fans, vents, etc.

SPIERS set up the tables and several galley items in the permanent Galley. MONTGOMERY and POWEL worked most of the day with HAM gear and managed to get a phone patch through to San Diego for WOODY.

Early in the afternoon, a voice conference was held between McMurdo and the Pole Station. A Japanese reporter and DON GUY, UP reporter, asked some questions of Dr. SIPLE and LTJG BOWERS, the answers of which were taped.

SLATON and PATTON flagged the streamers so that they might be found if an emergency caused a requirement for some buried items. POL, in particular, is susceptible to streamers.

Thursday, December 27, 1956

All Hands turned to on covering the tunnels today so that by secure time, burlap had been stapled to all tunnels except those that must be finished when the remainder of the material is delivered.

News was received that P2V 436 would make another flight tomorrow and evacuate more of these personnel. The personnel selected are SLATON, WAGNER, WOODY, MC CORMICK, POWELL, MC CRILLIS, PATTON and NOLEN. Keeping the transfer of the station in mind, several of these people are important, but by making adjustments here and there, little confusion should result.

MONTGOMERY will pick up NOLEN's job of weather observations to assure weather while flights are being made. SLATON, who has picked up a slight case of snow blindness, assures LTJG BOWERS that RANDALL can convey all important data to the mechanic coming in. Dr. TAYLOR will be among the arrivals and can relieve WOODY. HUBEL should be able to take care of the few remaining utilities problems. POWELL will be relieved by an RM and an ET. MC CRILLIS has finished all wiring jobs. PATTON's return was requested by the Air Force. This leaves seven men of the original twenty-four, LTJG BOWERS, BEVILACQUA, BRISTOL, MONTGOMERY, SPIERS and RANDALL.

HAM contacts today were made by WOODY, WAGNER, Dr. SIPLE, POWELL and BEVILAC-QUA. It is hoped that all construction personnel will be able to talk to their families prior to their departure.

Evening found the eight returning men packing and making preparations for the men arriving tomorrow.

A fuel and food inventory was prepared and sent to LCDR CANHAM and RADM DUFEK per their requests.

The "house" previously put at 125 degrees, 0.4 miles from camp, as being the actual geographic South Pole, was moved to 132 degrees, 0.2 miles from camp as the result of the conclusion of 24-hour solar observations over the past three days by LTJG BOWERS. The orientation of camp was determined to be 6 degrees, 20 minutes East of Grid North for the short axis, and 96 degrees, 20 minutes for the long axis. The prevailing winds are slightly East of Grid North.

A comprehensive list was started to pass on to LTJG TUCK, indicating work to be done by the forces after the departure of all construction personnel.

Friday, December 28, 1956

All men spent the entire afternoon waiting for the P2V to arrive which would carry out eight of our personnel and bring in eight of the military wintering personnel. We have not had communications with McMurdo since 271200Z and did not know if the P2V was coming. Finally, about 1700M, by calling HAM to an amateur operator in New Jersey who was in contact with McMurdo via NLA, we found out that the P2V was not coming. This was a roundabout method, but it worked. McMurdo was in a partial blackout and a storm which delayed air operations.

Every man at the POLE STATION has talked with his family except HUBEL and SPIERS. Today, several were able to talk, The reception was clearer than experienced so far.

After supper, all hands turned to on the Rawin Tower and platform. This structure was completed by secure time. A great deal of timber framing had to be done as we were missing twelve trusses that would not be dropped until late January. This was the last major job to be done by present construction forces.

Several minor jobs were finished. Burlap doors for opening on the windward side of camp and steps to all building requiring them were finished.

The P2V is scheduled to depart tomorrow, weather permitting.

Saturday, December 29, 1956

The majority of the day was spent in waiting for P2V 436 which arrived about 1700M after being lost for over two hours. The following wintering personnel were aboard:

LTJG JACK TUCK, USN 536348 LT HOWARD TAYLOR, MC, USNR 606461 SEGERS, Chester W., CS1, 784 34 51 DICKEY, Clifford R., Jr., ET1, 568 22 90 MC PHERSON, William C. Jr., RM1 718 31 98 BROWN, Martin L., CMD1, 351 48 90 WALDRON, Kenneth L., CE2 319 32 99 JOHNSON, Earl F., UT2 971 84 54

Most of the evening was spent in getting these men squared away, getting JATO and AvGas to the plane (we had five drums to give them) and seeing eight more of the construction personnel depart for McMurdo. The following men returned: CHIEF SLATON, WAGNER, PATTON, MC CRILLIS, POWELL, NOLEN, WOODY and MC CORMICK.

A meeting was held in the Mess Hall at 2100M to advise the new men of meal hours, food shortage or situation, what is expected of them, etc. After the meeting, the new personnel were indoctrinated in the art of getting snow for the snow melter.

The sincerity and purpose of the incoming personnel was inspiring. The fact that they will live with the base accounts for this. Each seems to appreciate the fact that we did not complete the individual compartmentation, but concentrated on the basic buildings, letting each wintering person decide for himself how to arrange his spaces to his own liking. For instance, the radio gear was set up, but the Radio Shack was not installed. This is MC PHEARSON's job and problem. The Galley utilities were set up, but the general arrangement will be left to SEGERS.

Sunday, December 30, 1956

The new crew, augmented by our few remaining personnel, turned to on schedule. MC PHER-SON and DICKEY worked on the Radio Shack all day, putting up partitions, checking our low frequency homer (cannot find any discrepancies), and working with MONTGOMERY in checking spare parts and stowing them.

SEGERS has his galley practically in operation. Partitions, shelves, counters etc. were set up today with the help of BEVILACQUA. JOHNSON worked with HUBEL the entire day becoming thoroughly familiar with all sorts of minor repair and installation jobs, particularly the snow melter.

RANDALL and BROWN plowed out a salvage area South of the Science Building for Dr. SIPLE after which RANDALL again dragged the airstrip as he had to stop last night due to poor visibility, and BROWN, Dr. SIPLE and Dr. TAYLOR cleaned up North of Camp. Dr. TAYLOR had most of his Sick Bay, adjacent to the Galley) partitioned by secure time.

LTJG BOWERS, LTJG TUCK and RANDALL caulked all roofs in camp with caulking guns and taped the interiors to prevent mastic caulking from dripping through. In addition, BEVILACQUA and WALDRON assisted in putting up partitions, putting doors on the large opening on the roof of the Inflation Shelter, etc.

CDR MIRABITO sent a message this PM indicating that he was concerned that there is no "trained weather observer" at the South Pole and that 24-hour observations must continue. Dr. SIPLE volunteered to assist MONTGOMERY by taking observations during the day as MONTGOMERY is on the night watch.

BEVILACQUA approached LTJG BOWERS with the idea that he remain here until after the BU arrives so that he can assist LTJG TUCK and also indoctrinate OSBOURNE, the BU. A message was sent indicating that BEVILACQUA would remain here as long as he was not required at McMurdo and if air transportation would be available later.

Long lists of material were prepared to accurately reflect support requirements here, keeping limited air transportation in mind.

Monday, December 31, 1956 \

The weather turned bad today with minus ten degrees and winds of 25 knots. Most of the work done today was inside work. BEVILACQUA, WALDRON, BOWERS, BROWN and RANDALL spent the entire day framing the front of the garage for vehicle parking. The punching and bolting of tunnels took the greatest amount of time. Roof trusses were incorporated in order to give an unrestricted area of twenty by twenty feet.

SPIERS continued to cook while SEGERS set up the permanent galley in the Mess Hall Building.

HUBEL and JOHNSON worked on getting snow to make water for the galley tank. They also have distributed all fire fighting equipment.

DICKEY and MC PHERSON are getting the radio shack in shape, working with the 300 watt transmitters, storing spare parts, etc. MONTGOMERY concentrates on weather and on radio watch only. It is believed that high voltage was the cause of the 1000 Watt transmitter's recent failure. Generator output has been reduced.

LTJG TUCK and Dr. SIPLE continued to work with sketches and designs to try to fit all personnel into the available berthing spaces, as the outlook for the barracks building becomes dimmer daily.

Dr. TAYLOR has his sick bay practically set up. This is important to all hands and Dr. TAYLOR has proven himself a capable carpenter as well as physician.

Tuesday, January 1, 1957

After a small New Year's celebration in the Mess Hall last night, all hands turned to with remarkable enthusiasm this morning.

The Utilitymen made water most of the day, the purpose being to allow SEGERS to start cooking in the permanent Galley tomorrow. SEGERS spent the day breaking out cooking utensils, storing his cooking spices, etc.

BEVILACQUA, RANDALL and WALDRON spent the entire day hanging the garage doors. An accordion arrangement was selected to save space. Two of four doors were hung by evening, and the other two were ready to hang.

The Radiomen were kept busy all day storing their spare parts in overhead of the Radio Shack. MONTGOMERY was able to put through several phone patches, SPIERS being the primary objective as he had not yet talked to his wife.

DR TAYLOR continued to work on his office which is rapidly becoming operational.

In the evening, after supper, LTJG TUCK took a time capsule out to the small observation shack located at the POLE. The capsule was furnished by the City of Peoria, Illinois, and is to be opened in the year 2000AD.

Wednesday, January 2, 1957

Although the remaining seven construction personnel anticipated the arrival of an aircraft to evacuate them, an aircraft did not arrive. Evidently, weather is not good at McMurdo. Certainly, to-day would have been a bad day here because of whiteout cloudy conditions all day.

BEVILACQUA and RANDALL, with a little help from LTJG BOWERS and LTJG TUCK completed the hanging of the garage doors. The outcome was very successful. RANDALL also leveled the site between the Science Building and Garage to make ready for the Jamesway which will shortly be moved into that space. This same crew framed another tunnel section in front of the garage in the evening.

Dr. SIPLE, Dr. TAYLOR, and BROWN continued to clean up North of camp and store the picked up gear by the Inflation Shelter and South of the Science Building.

WALDRON started to ground the inflation shelter walls, hydrogen to the MI cable covering, to prevent sparks.

We ate our first meal in the permanent galley today. Also several people were able to talk to their families over the HAM gear.

Thursday, January 3, 1956

Again, the construction personnel awaited the arrival of aircraft to evacuate them. Today, one P2V and 2 R4Ds took off for the POLE with IGY non-drop supplies and four additional wintering personnel, but were turned back on the advice of LTJG BOWERS due to weather. About noon, the skies switched from cloudless to complete overcast and whiteout. All were disappointed, but the decision proved to be a correct one as the weather remained foul all day.

In order to make some progress, a full crew started the erection of the Rawin Dome and, by secure, had set up seven of the eight sections. The dome is not complete by far, but the meteorologists can complete it without any heavy labor, just bolting the pieces together.

RANDALL dragged the short strip as soon as we heard that R4Ds would accompany the P2V.

SPIERS injured his hand while moving the GMD into the Rawin Dome and was out of action most of the day. BRISTOL is feeling a little worse as the chest pains seem to have become more intense than before. He managed to fill out his story by taking shots of the Rawin Dome erection.

The Radiomen still worked hard in trying to get the 30K5 transmitters on the air, but without success so far. A long wire was laid out for the low frequency homer in order to improve our range.

BROWN, on light duty due to a back injury, laid more oak decking in the garage.

Friday, January 4, 1957

Today is the last narrative report concerning the establishment of the SOUTH POLE STATION by DEEPFREEZE I construction forces, as today the remaining seven construction personnel were evacuated to McMurdo.

A major policy change was made by RADM DUFEK in that no more personnel would be delivered to POLE STATION until food for personnel there was on hand for the entire year. Therefore, the three planes scheduled yesterday, unloaded their passengers and put eight tons of food aboard.

All three aircraft – two R4D and one P2V arrived at the POLE about 1400M and each had offloaded, loaded, and taken off again shortly thereafter. All planes were back at McMurdo by 2200M. The following personnel were aboard: LTJG BOWERS, BRISTOL, BEVILACQUA, HU-BEL SPIERS, MONTGOMERY and RANDALL.

The Pole Station was turned over to LTJG TUCK upon the departure of LTJG BOWERS.

Saturday, January 5, 1957

While the personnel at McMurdo continue to offload the TOWLE, VX-6 is repairing the second P2V that arrived yesterday from New Zealand in order to take more food and men into the POLE in the near future. Mr. WESSBECHER continues to go over Pole material lists in order to arrange material in priority categories just in case the C-124s cannot return to McMurdo if the runway does not harden up in time or if the ice should go out. A list of food was prepared by CDR KENT in order to provide the necessary one year's supply to the POLE personnel.

Sunday, January 6, 1957

No flying today as every effort was being made to get the second P2V in the air. Both planes were loaded with food and, if all goes well, both will depart with food and three civilians tomorrow. Mr. WESSBECHER sent a message to RADM DUFEK, indicating confusion on the part of IGY. The message resulted in an invitation to dinner by RADM DUFEK whereby the following conclusions were reached.

The Air Force is committed to this operation until April 1957

The Air Force will return to McMurdo prior to that time to complete airdrops.

Meanwhile, VX-6 would continue to fly food, men and minimum gear into the POLE. The exact amount of future flights was not specified, but figures indicate that about ten tons total would

put them in business for a complete scientific program. Mr. WESSBECHER wants VX-6 to continue flying until these minimum amounts are delivered just in case the ice should go out without the Air Force return of the C-124s.

Using one of Ponting's glass photographic plates found at Cape Evans, a photograph was taken of the majority of the Pole Station Construction personnel with RADM DUFEK. It should be an historical shot. It was taken down by Scott's Hut.

Monday, January 7, 1957

About 1100, P2V 436 took off for the POLE with two scientists, GUERRO and FLOWERS, plus five thousand pounds of food. P2V 434 followed after lunch with HOUGH and five thousand pounds of food.

P2V 434 had to turn back due to prop pitch control, but 436 arrived, deposited cargo and returned at approximately 2230.

A luncheon was attended by LCDR CANHAM and LTJG BOWERS upon invitation of RADM DUFEK. The following points were stressed by RADM DUFEK. Food and men were first priority for POLE STATION, then food and men for BYRD STATION. In case the C-124s did not return, men at these bases could survive. Then, basic scientific and construction material required to start scientific programs at each base would be delivered and then the remaining fuel and food to bring stocks up to a two year supply for each base. Finally, all other desirable items would be delivered.

The concept of next year's operations was discussed, based on the possibility of the ice going out and limiting C-124 operations. RADM DUFEK stated that this was the reason for two years supply of food and fuel this year at the Pole and Byrd Stations. Men and minor material can be delivered by Navy aircraft, but not fuel.

Tuesday, January 8, 1957

A voice conference with LTJG TUCK, today, indicated that the Pole Station personnel were as confused about what was happening as we are here at McMurdo. LTJG BOWERS told him that BYRD STATION was going to be completed now. One more plane load of food, equipment, and Mr. HOUGH was delivered this evening. P2V 434, LCDR OTT, pilot, flew into the POLE, arriving about 2200M. One P2V is returning to New Zealand tonight to pick up an ice expert from SIPRE, an Admiral, a Caterpillar representative and one scientist. When P2V 436 returns from New Zealand, the planes will go to Little America to get BYRD STATION on the way.

BEVILACQUA is getting lumber together, MONTGOMERY, radio supplies, and MCCRILLIS electrical supplies.

The TOWLE is about 50% offloaded as of this evening. Much of the gear coming ashore must be sorted due to the inadequate paperwork covering contents of boxes and no references what-soever to our messages ordering the gear.

Total personnel at the POLE STATION now are 8 military and 4 civilian.

Monday, January 9, 1957

Early morning excitement was caused by a ski failure of P2V 436 after takeoff for New Zealand. Upon TORBERT's burning off all of his fuel, a process which took several hours, the plane was landed safely to the comfort of all men in camp who turned out for the event.

Little was done on Pole Station today as all aircraft, including LCDR OTTI's P2V 434, which returned from the POLE early this morning, had to have extensive repairs. From the messages, it is doubtful if any more fights will be made to the POLE until the C-124s return from New Zealand.

Chief HUBEL went to the TOWLE with a list of gear which he will attempt to obtain for LTJG TUCK at the Pole Station.

Thursday, January 10 thru Friday, January 11, 195

No work was done on Pole Station.

Saturday, January 12, 1957

A definite effort was made today to prepare for the possibility that our DEEP FREEZE I personnel might depart McMurdo prior to the return of the C-124s from New Zealand.

Mr. WESSBECHER, Chief HESS and LTJG BOWERS had a short conference laying out the basic plan. Mr. WESSBECHER and Chief HESS will type up lists of what has been delivered and what must be delivered before securing flight operations. Definite BRAVO wintering personnel were designated to gather material that has not yet been gathered or has not been delivered from the ships to McMurdo. Chief HANSEN will take care of automotive parts; MARTIN, radio and antennae parts; Chief BEVILACQUA will get all available lumber ready; Chief MC CONNEL will take charge of overall loading problems.

The material will be stockpiled in one or two places for the convenience of the BRAVO personnel.

Sunday, January 13, 1957

P2V 434 left for the States via New Zealand so that P2V 436 and the R4Ds are all that is left in the Antarctic.

Main emphasis will be directed to offloading ships in the McMurdo area. Material continues to be gathered by personnel in camp. This material is being broken out and sorted for eventual packing and delivery to the POLE STATION. Chief PATTERSON has the Pole station pipe fittings and valves and radio personnel are breaking out all the new spares. We have found that the majority of spares we ordered were procured by COMCBLANT. The question arises as to whether the material was received.

Monday, January 14<sup>th</sup> thru Saturday, January 19, 1957.

Little work was done on Pole material during this period.

Mr. WESSBECHER completed a list of IGY items that remain to be delivered to the POLE STATION. WEHNER is working on a similar list of construction items.

We ordered and packed a few odds and ends that LTJG TUCK had sent messages about.

The material lists for equipment to be delivered this year to the SOUTH POLE were finished and Mr. WESSBECHER went over the manifest of material delivered and weeded out nonessential items in order to eliminate duplication.

It was learned that a replacement for BROWN, CMD1 will be sent in with the remaining scientists.

Sunday, January 20, 1957

All POLE STATION material records were turned over to Chief MC CONNEL, QMC, who will take care of material loading upon our departure.

THE END