DEEP FREEZE I AND DEEP FREEZE II, 1955 - 1957
A MEMOIR
BY
Patrick “Rediron” McCormick

INTRODUCTION

I am very proud and consider myself privileged to have taken part in Operation Deep Freeze I which occurred nearly a lifetime ago. This memoir is intended to convey my personal observations and involvement in that adventure. I have concentrated on the life and efforts at McMurdo Station and The South Pole Station because I was a Seabee and that’s where I was. McMurdo Station was then known as Williams Air Operating Facility (WilliamsAIROPFAC), The South Pole Station is now known as Amundsen-Scott South Pole Station. Those stations were and are commonly referred to as McMurdo and The Pole. Although I have entitled this my memoir, it really is the memoir of all ninety-three members of the 1956 McMurdo Station winter-over party, the finest group of men I have ever been associated with.

This memoir would not be possible without having access to the *Narrative Log Williams Air Operating Facility McMurdo Sound, Antarctica as written by LCDR David W. Canham Jr., USNR and Robert L. Chaudoin, YN1, USN* and *the South Pole Station Daily Narrative commencing October 13,1956, and ending January 20,1957, as written by LTJG Richard A. Bowers, CEC, USN.* Both documents are available and can be viewed on *The Antarctican Society* website. According to proper U. S. Navy protocol all officers below the rank of Commander are addressed as Mister followed by their last name. Mr. Canham, the Officer in Charge at McMurdo Station, and Mr. Bowers, the Officer in Charge at South Pole Station, were highly respected and well liked by the entire crew. My sincere thank you to all the U.S Navy photographers and crew-mates for providing all the photographs.

LCDR David W. Canham Jr.
Officer in Charge
Williams Air Operating Facility
(McMurdo Station)

LTJG Richard A. Bowers
Officer in Charge
South Pole Station

YN1 Robert L.
Chaudoin

The International Geophysical Year (IGY), a global program of multiple scientific studies, with particular interest in Antarctica was scheduled to begin in early 1957. Those wide-ranging studies were originally planned to last two or three years. Who could have imagined then that the studies in Antarctica would not only endure, but would expand and become more sophisticated with apparently no end in sight. Most places around the world where those studies took place had ready-built infrastructures: not so in Antarctica, those infrastructures had to be built from the ground, or in this case the ice, up----thus the birth of Deep Freeze I.

Deep Freeze I was military in nature, but most traditional military discipline was relaxed considerably. The U.S. Navy, under the umbrella of Task Force 43 commanded by Rear Admiral George Dufek, was assigned the ambitious endeavor of building seven stations and getting them reasonably functional for the IGY scientists upon their arrival in late 1956. The Geographical South Pole was the priority Station, the United States wanted to be there before the Russians for political reasons, after all, the Cold War was on. The task force consisted of several U.S. Navy and U.S. Coast Guard ships, U. S. Naval Air Development Squadron Six (VX-6), U.S. Naval Mobile Construction Battalion (Special) [MCB (Special)], and other smaller but vital support groups. Near the end of Deep Freeze I and at the onset of Deep Freeze II, The Eighteenth Air Force Fifty-Second Troop Carrier Squadron participated by airdropping most of the building material and supplies needed for construction and supplies need for the 1957 winter-over crew at The Pole.

Rear Admiral George Dufek
Commanding Officer
Task Force 43

I was a carpenter, technically a Builder Third Class Petty Officer, BU3, attached to MCB (Special) when it was commissioned at U. S. Naval Construction Battalion Center, Davisville, Rhode Island on August 18,1955 with CDR H. W. Whitney as Captain and a complement of about three hundred officers and men. I advanced to Builder Second Class Petty Officer, BU2, while on the Ice. MCB (Special) was an ad hoc battalion made up primarily of Seabees, but enhanced by personnel with particular and unique specialties not available in normal Seabee disciplines. Those personnel came from several branches of the military. The majority of those who participated in Deep Freeze I were volunteers with well defined specialties and superior service records. As far as I know there were no military women involved at any of stations in Antarctica during Deep Freeze I.

BU2 Patrick McCormick
"Rediron"

After extensive prior planning Deep Freeze I began in earnest in early 1955 when volunteers solicited from the entire U.S. Military reported to their units, specialized training was undertaken, building material, and supplies were gathered and loaded aboard ships before departing from various ports. Gathering the material, supplies, and creature comforts was a huge undertaking. When we arrived on the "Ice," as most Antarctic veterans call Antarctica, if something had been forgotten we went without since there were no leftovers from previous seasons and no shopping malls or Home Depots.

Weasel on display for the public,
Davisville, R.I. summer of 1955

D-8 Caterpillar tractor and air compressor on display for the public, Davisville, R.I. summer of 1955

Nine ton rollers on display for the public
Davisville, R.I. summer of 1955

Departing Ceremony, Norfolk,Virginia
November 14,1955

THE VOYAGE SOUTH

With all the ships heavily laden with supplies MCB (Special) personnel destined for McMurdo were taken aboard the USS *Edisto* (AGB-2), an icebreaker, the USS *Glacier* (AGB-4), an icebreaker and the USS *Wyandot* (AKA-92), a cargo ship. The *Edisto* departed Boston, Massachusetts on October 31,1955 and the *Glacier* departed Norfolk, Virginia on November 1,1955. I was aboard the *Wyandot* when we departed Norfolk, Virginia on November 14,1955. The *Edisto* and *Glacier* carried most of the advance party and their supplies and each ship towed a small port tanker ship to be used for fuel storage at McMurdo.

Immediately upon boarding the ships most of the Seabees were incorporated into the ships company for work details, mostly chipping paint, or stood regular watches. I was assigned to stand a regular watch in the boiler room. Higher command must have thought it wasn't much of a stretch for a carpenter to instantly become a stationary engineer. Some of the Seabees made flags of split bamboo to be used as trail markers or prepared equipment for use when we reached the Ice. The three ships passed through the Panama Canal impressing me with its beautiful scenery and marvelous engineering. We stopped for a short liberty in Panama City then continued on to Port Lyttleton, New Zealand.

Entering a lock in the Panama Canal

An electric locomotive towing the ship through the lock

An islet in the Panama Canal

Waiting for liberty in Panama

During the voyage between Panama and New Zealand we "Polliwogs," those who had not yet crossed the equator, endured rigorous initiation rites and were granted entry into the "Ancient Order of the Deep" by the "Shellbacks," those who had previously crossed. Those rites included: striking the American flag and flying the Jolly Roger, a breakfast of one bean and a one-half inch cube of cornbread, heads being shaved, crawling through the previous day's galley garbage, being dunked backward into a pool of saltwater, running a gauntlet of paddle wielding Shellbacks, being forced to drink water heavily laced with quinine, having your body smeared with an indelible dye that had to be worn off, and kissing the baby's belly, better defined as being pulled vigorously into the axle greased stomach of the fattest Shellback. As our voyage continued it was duly noted in our military records and we were given certificates stating we had indeed crossed the Equator, the International Date Line, and the Antarctica Circle.

Crossing the equater rite of passage

Swim call in tropic waters

The ships reached Port Lyttleton on December 12,1955, and we were granted open gangway shore leave, meaning we did not have to report back to the ship until departure, planned for seven days. Most of us spent our time in Christchurch, New Zealand, a beautiful little city a few miles inland from Port Lyttleton, but a few men were given permission to venture farther into the countryside. We were the first American naval ships there since the end of World War II, (WW2) and the people welcomed us with open enthusiasm and hospitality. Many parties and receptions were held and it was nearly impossible for an American Sailor to buy a drink in a pub. Television, radio and newspaper reporters interviewed us and ran stories about us in just about every show and issue. I vividly remember being stopped by a very nice elderly lady while walking along a street. She introduced herself and invited me to tea, which means a large meal there. I inquired why she would want to do such a thing and was astonished when she

Entering Port Lyttleton, New Zealand

replied in her English accent, “You must understand, if it weren't for you Yanks we'd be Japanese now.” I politely declined, but most New Zealanders had the same attitude toward us. To our great disappointment we were recalled to the ships by the Admiral earlier than anticipated because perimeter ice in Antarctica was rumored to be breaking up. The recall was broadcast over local radio only six or eight hours before the new departure time, but with the help and goodwill of the great people of New Zealand everyone made it to their respective ships on time. The New Zealanders enthusiasm and well wishes for us was as if a national holiday had been proclaimed with hundreds of people crowding the pier as we departed at 2:00 P.M December 16,1955. This was our last personal contact with members of the outside world until we arrived in Auckland, New Zealand on February 20,1957. The departure was with mixed feelings, regret for having to leave such great hospitality yet with an eagerness to confront the unknown and to accomplish the tasks that lie ahead.

Departing Port Lyttleton, New Zealand

A small iceberg

An island surrounded by pack ice

Mount Erebus
The world’s southern most active valcano

REACHING THE ICE

The *Glacier* and the *Edisto* had departed Port Lyttleton on December 10 and 12,1955, respectively, leaving the port tanker ships there. On December 18,1955, the *Glacier* reached a point some forty-five miles from Hut Point where McMurdo Station would be built. The *Edisto* joined her there on December 20,1955, and the *Wyandot* joined them on shortly thereafter. The ships were greeted by the comical Adele Penguins Weddell Seals and Skua Gulls. They were also greeted by a storm with high winds and blowing snow that lasted several days.

Adele Penquins

Adele Penquins inspecting the mooring line

Weddell Seals basking in the sun

Skua Gulls with a chick

After the ships maneuvered through the pack ice, on December 20,1955, the Advance Party set out in the storm to traverse thirty-five miles of ice using Weasels, small tracked amphibious vehicles, and sleds to reach Hut Point on Ross Island. During the trek it became apparent the ice was indeed breaking up. Upon arrival four men began erecting tents and established the

Advance Party Camp near Scott's Hut, now known as Discovery Hut, while others of the Advance Party began reconnaissance to determine a site for the permanent station. The Advance Party Camp acted as a communications center during the early stages of supply transfer from the ships to the building site. The men subsisted on WW2 C-4 rations until December 23,1955, when the first meal of bacon and eggs was prepared and served in the mess tent.

Some Advance Party personnel waiting for a ride

The Advance Party Camp galley/mess-hall

The Advance Party Camp

In the early morning of December 20,1955, with favorable winds forecast several VX-6 aircraft departed Christchurch for the initial Antarctic fly-in. However, due to a faulty weather forecast, confusion interpreting radio communications, and navigational problems, continual problems throughout the operation at the time, some of the planes were forced to return to Christchurch. At approximately 10:00 P.M. December 20,1955, two R5Ds, four engine cargo planes, and two P2Vs, four engine reconnaissance planes, landed on the ice of McMurdo Sound approximately five miles from the Advance Party Camp. The planes, nearly out of fuel, remained on the ice until aviation gasoline could be carried in and they could be refueled. The planes had enough fuel to operate their radios at brief intervals and act as a communications relay station between the Advance Party Camp and the ships until more powerful radio equipment was installed. The plane crews were forced to live in the planes or makeshift camps on the ice near the aircraft.

During the summer season of 1955-56 VX-6 aircraft conducted daily reconnaissance and mapping flights over the interior of the continent in conjunction with flights back and forth to Christchurch for maintenance and to bring back sensitive supplies, spare parts, and equipment. Shuttle flights transferring personnel and supplies to and from Little America V, located on the Ross Ice Shelf some 450 miles from McMurdo, were also being made.

A P2V near the Advance Party Camp and Scott's Hut

An R5D on the ice and a P2V landing in the shadow of Mount Erebus

A P2V in the shadow of Mount Erebus

A helicoptor and a DeHavilland Otter near the Advance Party Camp

THE TRANSFER OF SUPPLIES

Transfer of supplies from the ships to the building site began almost immediately and continued until mid February 1956. All the supplies needed to build and sustain McMurdo for the winter of 1956 and most of the building material and supplies for The Pole construction scheduled for the following summer had to be transferred. The ships being tied up so far from the building site combined with fear of the ice breaking up made the transfer of supplies a daunting and dangerous operation. Constant vigilance by the tractor operators was needed to detect cracks in the ice, some so wide they had to be bridged with timbers. The cargo was off-loaded from the ships onto large sleds then several sleds were coupled and towed by tractors along the pre-marked trail to the building site. Eventually the *Glacier*, the *Edisto* and the U.S. Coast Guard icebreaker *Eastwind* (WAG-279) opened a channel that allowed the icebreakers to ferry the cargo to within five miles of the building site. As the supplies reached the building site they were placed in a supposedly logical and categorical order so when needed during the winter we knew where to dig them out of the snow.

Offloading supplies from an icebreaker

Hauling supplies to the supply yard

Hauling supplies past Dehavilland Otters in the shadow of Observation Hill

The supply yard

Mishaps were more numerous than we would have liked

Tragically, on January 6,1956, while transferring supplies Richard Williams was drowned when the tractor he was driving broke through the ice of McMurdo Sound. His body was never recovered. The station was named in his honor and the winter-over crew built a shrine dedicated to Our Lady of the Snows on Arrival Heights in his memory.

The shrine dedicated to Our Lady of the Snows in memory of Richard Williams

I was transferred with four or five others from the *Wyandot* to the building site by way of icebreaker and a tractor train a day or two after Dick Williams was killed. This took several hours and upon arrival we reported to our crew chief who assigned us to a work crew. We worked erecting a building for ten or twelve hours until the chief told us we could quit for the night. When we ask him where we could sleep, he pointed to a tent still bundled in shipping bands saying something like, "There's your tent," then told us when to report back to work and walked off. It took a couple of hours to pitch the tent, set up a small primus camp stove, find sleeping bags and shipping pallets we used for mattresses. We had been up about twenty hours and had to be back at work in about four. So, our first night on the Ice we managed to get about three hours sleep after allowing an hour or so to have some canned beef stew for breakfast. Welcome to the Ice in early January 1956.

Personnel being transfered via the rapid transit system

During the first couple of months we at McMurdo slept in sleeping bags laid on shipping pallets in unheated tents and ate mostly canned beef stew prepared in a field galley from mess kits getting bread and pastry only when the goodhearted souls aboard the *Easwind* sent it over. The only source of water in Antarctica is melted snow. We melted snow in discarded cans from the galley over small camp stoves to get enough water to brush our teeth and wash our faces, hands and feet. We worked a minimum of twelve hours a day seven days a week and before the hard winter set in approximately thirty-eight prefabricated buildings had been built on the bare rolling hills of frozen volcanic ash and rocks produced by past eruptions of Mt. Erebus, the world's southernmost active volcano.

Tent City with Observation Hill in the background

CONSTRUCTING THE STATION

Clearing and grading the site

All the buildings were prefabricated with foundations of 6” x 8” x 5’ timbers cribbed up and shimmed to achieve level floors, it was nearly impossible to dig into the volcanic permafrost. The berthing huts, galley and mess hall, powerhouse, garage, latrines, photo lab, air operations building, meteorology building, radio shack and library were Clements Huts consisting of 4' x 8' insulated plywood interlocking tongue and groove panels lined inside with a sheet of aluminium acting as a moisture barrier. Most of the Clements Huts were about 24’ wide, 48’ long and 8’ high, the latrine were smaller and 12 feet high, and the garage and powerhouse were and much larger and 12 feet high. The remainder of the buildings were Quonset Huts, Jamesway Huts and Atwell Huts. Quonset Huts are small steel arched structures with a corrugated steel outer shell, insulated fiberboard interior walls and plywood floors. Jamesway Huts and Atwell Huts are similar to Quonset Huts, but smaller with wooden arches covered with insulated canvas. The Quonset, Jamesway and Atwell Huts were all about 20’ wide, but varied in length depending on their use. Erecting these various building types daily for several weeks made us experts quickly. When one building was completed another was immediately started.

Site layout

Williams Air Operating Facility, circa early January 1956

Building a Clements Hut

Setting foundation piers

Setting the sills

After floor installation the walls go up

Seating a wall panel into the floor

Installing a gravity feed water tank before the roof goes on

Installing the roof

Quonset Hut under construction

Installing a radio antenna pole

Building fuel tanks

Building fuel tanks and installing fuel bladders

There was one building that wasn't exactly in the original plan. The Chaplain, LT Father John Condit, universally known as Father John was a free spirited and very persuasive soul began to accumulate and stockpile “scrap” building material at end of the street near the base of Observation Hill. It was only a matter of time until he began recruiting, practically under threat of court martial, “volunteers” on their off time to put this “scrap” together to form a small Quonset Hut. Work began in mid February with some work, much to the chagrin of Mr. Canham, done on Navy time, but it was well into winter before completion. We had no plans, but with “Seabee Ingenuity” and “Can Do” spirit it turned into a chapel complete with altar, confessional, storage closet, steeple and belfry. After the port tanker ships had reached their winter berths, a bell from one of them somehow made its way up the hill to its place in the belfry. On May 6,1956, the Chapel was consecrated to Our Lady of the Snows and the bell consecrated to Saint Dismas, the good thief.

The Chapel

During the early days of construction the generators would produce power surges or fail altogether. Electrical wires were laid on the ground, so tractors and sleds ran over and broke them, there were errors in the manufacturer's instruction manuals, inevitable human errors and other equipment failures. The technicians spent much time, effort, and head scratching sorting things out. Eventually traffic patterns were established and barriers installed to prevent equipment from running over the wires, but the problems persisted well into the winter before being solved. Radio communications were marginal during that time, but became much more reliable when the electrical problems were solved. At times during the winter we were subjected to radio blackouts sometimes lasting for days caused by atmospheric conditions over which there was no control or fixes.

Repairing broken electical wires

The berthing huts, galley and mess hall, latrines, photo lab, admistration/sickbay, library buildings, and Quonset Hut transient visitors quarters were clustered in a central area. The helicopter hanger, various workshops, powerhouse, garage, parachute rigging loft, radio shack, dog shelter, air traffic control building, and storage buildings were dispersed around and some distance away from the central area of the station on random sites suited to their needs. Many of the buildings were equipped with fire alarms, carbon monoxide detectors, dry powder fire extinguishers and intercom systems, but there were no smoke alarms as they had not yet been

invented. This dispersement of buildings was done purposely to eliminate noise and fire hazards from the more populated central area of the station. Not all of these buildings were in place when our summer support left in early March 1956, but most were complete when our replacements arrived the in late December 1956.

Williams Air Operating Facility, circa mid March 1956

Between February 10,1956, and February 18,1956, the USS *Nespelen* (AOG-55), a tanker, and the *Eastwind* pumped 250,000 gallons of aviation gasoline, 10,000 gallons of automotive gasoline, and 100,000 gallons of diesel fuel through a temporary over-the-ice pipeline into previously constructed tanks and bladders.

Constructing the over-the-ice pipeline

The over-the-ice pipeline

On the morning of February 16,1956 the first meal was prepared and served in the permanent galley and mess hall, a definite boon for the cooks and absolute delight of the entire crew. The interior of the building and installation of some equipment wouldn't be completed for a month or so, but the cooks had a decent stove, were off a dirt floor, and we were eating at tables out of the wind and cold.

The galley

The mess hall

February 25,1956, was my twenty-first birthday and the date of my baptism into the Catholic faith, reputed to be the first Catholic baptism on the Antarctic continent, but I can't prove it. The construction camp, dubbed "Tent City," was struck and stored, which meant the ninety-three man winter-over crew consisting of ten officers and sixty-nine enlisted men from MCB (Special); three officers and six enlisted men from VX-6; three enlisted men from the U.S. Air Force; and two civilians had moved into permanent berthing quarters, and on March 5,1956 the showers and laundry facilities in the powerhouse were completed. We were now eating from normal military trays, had electricity, could change into clean clothes, and could a get a short shower once a week whether we needed it or not. Things were definitely looking up as we began to settle into a normal routine. The last of the summer support personnel left on March 1,1956. A short meeting and a small party was held for the winter-over crew with rations of beer, whiskey, brandy and a movie.

The laundry and shower room

The sink in the head/latrine

The *Glacier* and *Eastwind* retrieved the now fuel-laden port tanker ships from Port Lyttleton and on March 6,1956 towed them through a channel opened by the icebreakers to the foot of Arrival Heights where they were secured and winterized by March 8,1956.

The USS *Glacier* breaking the channel for the YOGs

The YOGs moving into thier berthing spaces

A frozen in YOG

Before the onset of winter seals were killed, cut up and stored to feed to the twenty-five or more dogs cared for by the survival specialists. The dogs were not pets, but working dogs to be used in teams to pull sleds the survival specialists would use in the event a rescue was in order. Throughout the winter the dogs were frequently taken on training runs to be in shape in case of need. Fortunately, the dogs were never needed, but taking care of them was a great deal of work.

Harvesting seal for dog food

Dog team on a training run

On March 9,1956, Admiral Dufek paid us a visit, wished us well, and departed on the *Glacier* as she and the *Eastwind* departed for the United States. It was bittersweet knowing we were really on our own now with no possibility of help if catastrophe, fire being the biggest fear, were to strike, but with a sense of accomplishment so far and looking forward to the challenge of the winter and construction at The Pole. Our work schedule was reduced to ten hours a day, six days a week

THE WINTER AND OUR PERIOD OF ISOLATION

All winter-over personnel at McMurdo did so on a volunteer basis, we were not coerced or ordered in any way. The ninety-three winter-overs were selected by Mr. Canham, but the decision to stay or go home was ours alone. It was the same for The Pole construction crew, who were all selected from the McMurdo winter-over crew, but the final decision to go or not to go was ours. As it turns out, those of us on The Pole construction crew volunteered three times, first to go to the Ice, second to winter-over at McMurdo and third to go to The Pole.

THE WINTER-OVER PERSONNEL

OFFICERS

LCDR D.W. CANHAM JR.....	Officer-in-Charge
	Air Operations Officer
LT J.H. BERGSTROM.....	Ass't Officer-in-Charge
	GCA Officer
LCDR D.E. NASH	OinC VX-6 Wintering Group
	Aircraft Maintenance Officer
LCDR I.M. TAYLOR.....	Medical Officer
LT F.C. JORGENSEN.....	Aerological Officer
LT D.J. KNOEDLER.....	Dental Officer
LT J.C. CONDIT	Chaplain
	Education Officer
	Public Information Officer
	Mess Manager
LTJG R.A. BOWERS.....	Base Construction Officer
	Prospective OinC Pole Station
	Industrial Safety Officer
LTJG N.D. EICHHORN	Prospective OinC Beardmore Base
	Navigation Officer
	Barracks Officer
LTJG J. TUCK JR.....	OinC, Sledging Contingent
	Ass't Administrative Officer
ENS D.E. BAKER.....	Communications Officer
	Survival Officer
	Classified Material Control Officer
	Registered Publications Custodian
CWO H.C. FISHER.....	First Lt. & Security Officer
	Small Craft & Ship's Operations Officer
	Ass't Navigation and Air Operations Officer
	Ordnance Officer
CWO B. SINGER	Photographic Officer
	Special Services Officer
	BOQ Officer

CIVILIANS

MR. ELMO JONES.....	Walt Disney Representative
MR. HOWARD WESSBECHER....	U.S. Weather Bureau (IGY)

ENLISTED PERSONNEL

ALMOND, S.H., CS3
ARMISTEAD, S.G., CM1
BARGER, P.K., ETCA
BARONICK, M., AOCA
BEDSOLE, H.C., CM2
BEVILACQUA, C.A., BUCA
BICKNESE, N.W., CD3
BRISTOL, W.W., PHCA
BROWN, J.E., YN2
CHAUDOIN, R.L., YN1
CLAY, M.M., CM3
COPPOLA, A.E., AD3
DOLLEMAN, H., MSGT USAF
DORE, J.C., ADC
EMERICK, P., CS2
FLANAGAN, W.B., ATC
GARRETT, A.B., RMC
GOODWIN, W.R., AE3
GORITY, R.L., A/2C, USAF
GRACZYK, R.L., AG1
GRISEZ, D.N., MR2
HAINES, G.F., HM2
HESS, W.T., SKC
HILL, R.J., PH2
HISEY, H.A., BU2
HORNER, W.K., JR., AG1
HUBEL, E.H., UTCA
HURD, H.D., CD3
JACKSON, D.H., AD2
JEFFUS, M.E., ET1
JUSTICE, L.E., AD2
KEMP, D.F., SW2
KENNEDY, C.J., SWCA
LEASE, W.T., SVCA
LEDVINA, R.F., AB2
LINDNER, E.R., AG2
LUNDY, H.D., MM1
LYNCH, C.S., CECA
MARINO, F.J., RM1
MC CORMICK, P.D., BU2
MC COY, J.M.JR., AC1
MC CRILLIS, H.G., CE2
MONTGOMERY, T.T., RM1
MYERS, C.M., CD1
NASON, N.N., SW1
NIEMEYER, J.J., BU1
NOLEN, J.L., AG2
OLIVER, C.L., JR., AB3
PASTOR, S.F., CD2
PATTERSON, H.F., UTCA
PITTMAN, R.L., RM2
POWELL, D.L., RM2
PRESCOTT, R.J., BU2
RANDALL, J.A., CM3
RIGG, L., AC1
ROBERTS, C.H., SW3
ROONEY, J., AD3
ROTHE, J.A, RM2
SELMAN, W.R., AD2
SCOTT, D.J., JR., UT3
SLATON, C.M., CMC
SPAINHOUER, F.P., PHCA
SPIERS, R.R., CS1
STITH, C.E., BMC
STREIT, R., AK3
SWARTWOOD, B.K., JR., AC1
TALLON, J.C., AD3
TYLER, G.C., AD3
UPTON, H.D., CSCA
WAGNER, C.A., UT1
WEEMS, A.O., AM3
WEHNER, V.L., SK1
WHITMER, R.D., CE1
WILLETT, H.E., TSGT, USAF
WILLIAMSON, H.R., BU1
WOODY, F.A., HM1
ZEGERS, J.E., RM2
ZIKELI, G.A., JR., RM1

During winter we soon fell into a daily routine with the work schedule reduced to about forty hours a week. Those of us who worked outside grew accustomed to the harsh conditions, we had signed on for outdoor work and we weren't disappointed. We took breaks to warm up when needed and watched each other for frostbite. The building trades people continued outdoor construction and completed the interiors of the various living quarters, galley and mess hall and refined the workshops for better efficiency.

All the supplies for The Pole construction and most of the supplies for the 1957 South Pole winter-over crew were gathered, categorized, packed and rigged for parachute drop. The parachute rigging loft was a very popular place with all the building trades people, cooks, radiomen, store keepers, parachute riggers and other interested participants there making sure they were going to get their stuff to The Pole in proper order, on schedule and undamaged. Some of this activity became an exercise in futility as we learned during the early days of The Pole construction.

Digging out Pole supplies

Organizing Pole supplies

Digging out fuel for the Pole

Packaging Pole building panels

Packaging Pole building panels

Rigging supplies for Pole parachute drop

By far the highest priority, the most difficult and the most aggravating project during the winter was to build a runway on the ice of McMurdo Sound. It was imperative get to The South Pole and build a station there or Operation Deep Freeze would be a failure and the runway was the primary element in that plan. The runway had to be complete and operational as early as possible in the austral spring of 1956 to accommodate not only the smaller US Navy VX-6 aircraft, but the much larger USAF 52nd Troop Carrier Squadron's C-124 cargo planes used to supply The Pole. The C-124s would parachute or free-fall the building material needed for construction in addition to all the supplies needed to sustain the 1957 winter-over crew at The Pole. With only one D-8 Caterpillar tractor and the smaller equipment constantly breaking down, the very difficult and time consuming work of building the runway continued throughout the winter. Selecting a good site involved taking and analyzing ice cores, monitoring ice buildup, removing snow to expose the ice, and construction of the air traffic control systems.

The runway was not an enviable place to work, it was always much colder and windier on the ice than at the station. At the station the average annual temperature is 0°F, with temperatures reaching as high as 46°F in summer and plunging to -58°F in winter. The average annual wind is 14 miles per hour with winter winds averaging between 20 and 40 miles per hour, but at times exceeded 100 miles per hour. At the station low temperatures didn't stop outside work, but high winds did, the risk of loose debris being blown around made it too dangerous. Work on the runway never stopped, temperatures sometimes reached -60°F and winds of 80 miles per hour were not unusual, but those who worked on the runway continued their endeavors throughout the harshest conditions. Fortunately, I never was assigned runway work.

Many hours of trial and error engineering obtaining a smooth and reliable surface of good ice. The runway was nearly complete in anticipation of the first aircraft from New Zealand in mid-October. Unfortunately, in mid-September the worst blizzard of the entire winter came roaring off the polar plateau, lasted several days and completely destroyed the nearly complete runway. It was a major disappointment to the whole crew, but for the men who had worked so hard and long under such harsh conditions it was devastating. The number of crewmen was increased and true to Seabee "Can Do" spirit they went back out and literally lived there. Working around the clock in twelve hour shifts and though some aircraft parking areas were not yet complete, they were able to get it long enough to be usable and the scheduled the fly-in date of October 15, 1956 was achieved.

Blizzard obscuring all but the the galley vents and chimneys

Boring holes to access water

Using water to fill cracks and level the ice

Runway ice monitering

D-2 tractor and planer moving snow, the grader was constantly breaking down

Building an air traffic control unit

An air traffic control unit

Hoisting a radar antenna atop the Air Operations Building

Boring more holes to access water

The runway pump house

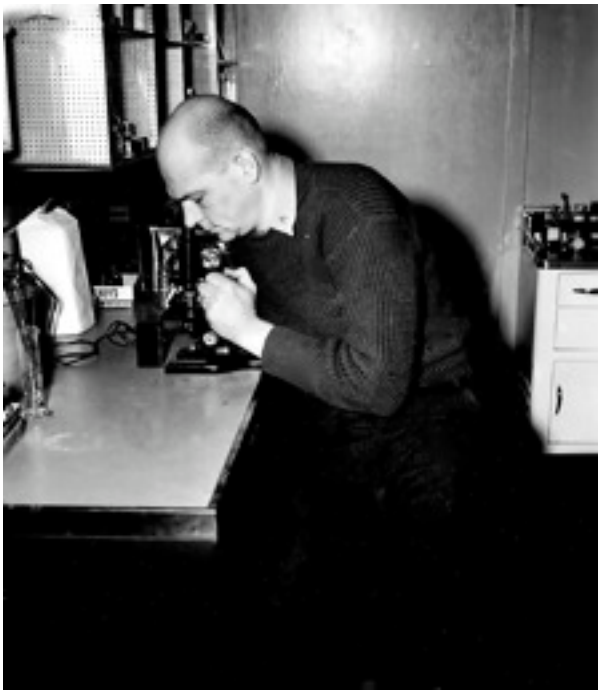
The runway warm-up shack, AKA Bill's Tap

The runway and Royal Society Mountains as seen from atop Observation Hill

Generally, everyone was doing what their job description entailed on a regular basis although at times when help was needed elsewhere we helped each other, for example, a mechanic may become a bulldozer operator, or a carpenter may help the radiomen put up an antenna. It definitely wasn't a union shop and we were an industrious, talented, and adaptable group.

Sick bay

Administrative work



The doctor's office

The dentist office

The machine shop

The steel workers' shop

Generator maintenance

The mechanics' shop

The radio shack

Water was never in ample supply and not to be wasted, it took too much time and energy to manufacture. In the powerhouse were two 100 kilowatt electrical generators each powered by a D-8 Caterpillar diesel engine. Next to the generators were two large containers commonly seen on construction sites to heat roof sealant. These containers were adapted so the hot exhaust from the generator engines circulated under the containers to melt snow. The water was then stored in several tanks in the powerhouse. The snow was replenished as needed from the snow field which was off limits to everyone except the people operating the only front end loader allowed there and never anywhere else. This was an effort to maintain the snows' purity and prevent contamination. The purity of the water was regularly tested by the medical department. There were also some smaller generators used in selected buildings and shops so as not to over burden the main generators. The garage housed the heavy equipment repair, machinists, steelworkers, carpenter and other shops.

Water storage tanks, with generators in background

The garage

With the exception of officers we all took our turn on a detail that included supplying fresh water from the snow melters to the galley, latrines and other buildings where it was needed. The detail also included disposing of all waste and waste water along with supplying every building with fuel. This was not desirable work, but it had to be done. Everyone including officers had his turn at mess-cooking in the galley and mess hall which entailed washing pots, pans, trays, and eating utensils along with keeping the floors, tables and such clean. This wasn't bad duty because you were inside out of the cold and wind for a week or so.

The fuel and freshwater distribution and waste water disposal systems

Digging out a hut fuel tank

Refueling a hut, some huts were easier than others

Pumping water from an indoor tank into the tank on the sled

The food throughout the winter was good and plentiful even though the cooks were limited in the ingredient department. All the food stores were canned, powered, dehydrated or frozen. There was absolutely nothing fresh, but the cooks were industrious and creative managing to keep all of us well nourished and most of us happy. We ate plenty of roast beef and steak, but I don't remember much chicken, veal, lamb or ham. I don't recall much rice or pasta, but powdered mashed potatoes and gravy was almost routine, canned vegetables, canned bean salads etc. were served as sides. Fresh bread and desserts of pie, cake, and other pastries were baked every night. There was powdered milk, hot chocolate, tea, and coffee by the gallon. The only thing that was almost universally condemned were the WW2 canned C-4 Ration hamburgers, disguised as "Hamburgers and Cheese Sauce" on menus, that were awful and should have been fed to the dogs although it's doubtful they would have eaten them. There was not much reason to complain even though the menu was limited. The cooks did an excellent job under difficult circumstances.

BREAKFAST

Oatmeal - Milk - Dry Cereal
Minced Beef on Toast
Fried Potatoes
Apricots
Bread Butter Jam
Coffee Tea Cocoa

DINNER

Soup - Crackers
Rib Roast
Mashed Potatoes
Buttered Lima Beans
Brown Gravy
Fudge Loaf Cake
Bread - Butter
Coffee - Tea

SUPPER

Hamburgers and Cheese Sauce
Lyonnaise Potatoes
Buttered Mixed Vegetables
Boiled Navy Beans
Fruit Cocktail
Coconut Drop Cookies
Bread - Butter
Coffee - Tea

BREAKFAST

Farina - Milk - Dry Cereal
Hot Cakes-Syrup
Fried Sausages
Plums
Orange Juice
Bread-Butter-Jam

DINNER

Soup - Crackers
Sauerbraten
Mashed Potatoes
Buttered Corn
Vegetable Gravy
Peach Shortcake
Bread - Butter
Coffee - Tea

SUPPER

Hamburgers
Fried Potatoes
Onion Gravy
Creole Lima Beans
Buttered Cauliflower
Ice Cream
Bread-Butter
Coffee-Tea
Lemonade

BREAKFAST

Farina - Milk - Dry Cereal
French Toast and Syrup
Fired Bacon
Plums
Orange Juice
Bread - Butter - Jam
Coffee - Tea - Cocoa

DINNER

Soup - Crackers
Baked Meat Loaf
Mashed Potatoes
Tomato Gravy
Buttered Peas
Mincemeat Pie
Bread - Butter
Coffee - Tea

SUPPER

Turkey Ala King
Mashed Potatoes
Buttered Green Beans
Buttered Cauliflower
Ice Cream & Chocolate Sauce
Bread-Butter
Coffee - Tea

BRUNCH

Soup - Crackers
Fried Chicken
Candied Sweet Potatoes
Buttered String Beans
Buttered Corn
Ice Cream
Chocolate Sauce
Bread - Butter
Coffee - Tea
Grape Juice

SUPPER

Yankee Pot Roast
Mashed Potatoes
Buttered Brussel Sprouts
uttered Mixed Vegetables
Devils Food Cake
Bread-Butter
Coffee-Tea

Typical menus

Those were the days before satellites so, after the summer support personnel left we were completely isolated from the rest of the world for more than seven months which meant no mail, no radio, no television, no newspapers, no telephone, no internet, or global positioning systems (GPS). We did have a ham radio the radiomen would operate on their own time. When your name came to the top of the list you could talk through a ham operator and phone patch in the states to someone back home, I was able to talk home twice. Jules (Julius) Madey, a sixteen year old high school

The ham radio

student in Clark, New Jersey was our main source. Just about anytime the radiomen turned on the ham radio they could contact him. He was very faithful to us and so admired he was later taken to the Ice as a guest of the U.S. Navy.

There was also a group of Red Cross volunteers in Syracuse, New York that ran a program providing telegraphic communication similar to Western Union, we called it "Class Easy" or "Ham Gram." I don't recall exactly how it worked other than we could take a limited message of 10 or 20 words to the radio shack and they took care of getting it out and would alert us to any incoming messages. It was limited and free of charge, at least for us, and very much appreciated especially on holidays and other special occasions. Thank you very much radiomen, Jules and Red Cross.

There were five Clements Huts used for berthing quarters. Each was given a colorful name that meant something at the time, but I now don't have a clue what those reasons were. The officers lived in "Ye Olde Sack Inn," the Chief Petty Officers in "The New Wellington," the lower rated men in "Suite Sixteen," "The Beverly Hilton," and "Hotel Temporary." The enlisted men's huts were occupied by a hodgepodge of men with no particular attention paid to status such as rank or authority.

Each hut had a Captain, usually the senior petty officer, who maintained order and assigned duties as needed. We were allowed to arrange and decorate as we desired as long as the majority agreed. Most of the interior add-ons, decorations and arranging was done on our off time. A member of the each hut would perform on a rotating basis compartment cleaning duty which involved sweeping, taking out trash and so on for a week at a time. Each man was responsible for his own area as far as laundry, bunk making, clothes and personal item storage.

All the Clements Huts had flat roofs and when high winds occurred, which was often, and passed over the roofs the reaction was much like air passing over an airplane wing lifting the panels off the steel ceiling trusses. We bolted the panels down to prevent them from flying off and secured a canvass tarpaulin over the outside top to prevent water caused by snow melt from migrating through the seams. We also constructed after market vestibules on some buildings to prevent warm air from escaping and cold air from entering when the door was opened. The door of the vestibule had to be closed before the door of the hut could be opened creating an air trap that worked

Hotel Temporary (with vestbule)
The sign reads:
Welcome to McMurdo Heights Summer Resort
Good People - Low prices
Air Cooled Rooms - Continental Cusine
Baths Forbidden (Air Wick Available Upon Request)
No Women Allowed

quite well. Linoleum was installed on the floors of some buildings for sanitary purposes, particularly the galley, mess hall and berthing huts.

I berthed in Hotel Temporary and I do remember how it got its name. It seems that during the very early days of construction practically everything was only temporary and the name rubbed off. It was divided into cubicles and a communal area with a table and chairs where we played board games, cards, drank our beer, shot the breeze, solved world problems and otherwise entertained ourselves. The cubicles contained two bunk beds and four lockers resulting in four men per cubicle. The huts were heated with two space heaters, normally only one was used, with fuel being drawn from an outside tank. Because it's so dry on the Ice we kept a bucket of snow and water on each space heater to get moisture into the air and make it more comfortable. It worked quite well and was also quite handy for thawing frozen beer.

A typical bunk

The communal area, must be beer ration day

Relaxing in the communal area

An impromtu hut party

I shared a cubicle with Dick Prescott, a carpenter, Don Scott a plumbing and heating specialist and Dave Grisez, a machinist and we became lifelong friends. Dick, Don, and I were members of The Pole construction crew, but there wasn't much need for a machinist at The Pole then so we left Dave to maintain the generators in the powerhouse and to fend for himself among the influx of summer support personnel, our replacements and tourists. Dick is my Godfather, we were best men at each other's weddings and we share Godchildren. Generally, the winter-over crew became a close fraternity and many lifelong friendships were developed. Many of us still communicate and visit each other. More than half of us have passed on and the youngest of us are now nearly eighty. Now in my old age, I find it comforting and somewhat special to have attained such lasting relationships.

Dick Prescott

Don Scott

Dave Grisez

There was a library arranged much like a den at home with sofas, stuffed chairs and end tables with lamps. There was a limited selection of reading material and a high fidelity record player, high tech stuff at the time, with a limited, but varied selection of music. It was quiet, peaceful, and a good place to relax and get away from the usual hubbub and more exuberant activity in the mess-hall or berthing huts.

The library

Of course, there was the time-honored obligatory midwinter gala. The following three paragraphs are copied from Mr. Canham's daily narrative as he described our midwinter celebration.

Friday, June 22, 1956

A special dinner was held with the cooks going all out preparing Pizza, along with an excellent spaghetti meal, supplemented by wine through the courtesy of the CHAPLAIN. Each table had several candles on it with appropriate decorations and the CHAPLAIN, WESSBECHER aided by TALLON at the drums, serenaded the group with music throughout the meal.

The "All Hands" meeting was short, but included a discussion of qualifications for applying for Warrant Officer status and the plans for submitting requests for specific choices of duty following detachment from Mobile Construction Battalion (Special).

Immediately following the movie, the special party began and the main item of drink was a concoction put together by DR TAYLOR and the Medical Department, consisting of fruit juice and grain alcohol. It was very good and somewhat over twenty-five gallons were consumed, along with a dozen cases of beer. The party lasted well into the morning and sort of an official end was put on it at 0300. Most all hands were exceedingly well mannered and there were few visits to DR TAYLOR for professional treatment.

The spaghetti, pizza and wine were rare and special treats. John Tallon was a Naval airman attached to MCB (Special), but worked as a cook, Howard Wessbecher, our only scientist, was a civilian weather observer on loan to the IGY by the U. S. Weather Bureau and LCDR Isaac Taylor, or as we called him Doc Taylor, was our medical doctor. His concoction of fruit juice and grain alcohol was known locally as "Whiteout Punch." We were also allowed to play some poker, blackjack and to shoot some craps, normally strictly forbidden games of chance. Doc Taylor was one of the most unforgettable men I have ever met and the father the now-famous singer/songwriters James and Livingston Taylor. I, fortunately, have met and and spent a couple of hours with both James and Livingston. They are both as gracious, approachable and down to earth as he was.

The mid-winter celebration

We were allowed buy a twenty-four-can case of frozen beer once every two weeks. There was normally a “Happy Hour” on Saturday night with rations of beer, whiskey, brandy and on special occasions Whiteout Punch provided by the Navy. There were a few, very few, minor arguments and scuffles brought on no doubt as the result of a little too much Whiteout Punch. Movies were shown every night and by the time winter was over we'd seen them all several times, but we still went. We were creative with the movies too, such as cutting the cartoons from all the movies and splicing them into one continuous reel for viewing. We would also cut a favorite scene, usually provocative, from one movie and splice it part way through and completely out of context into another film.

The members of each berthing hut at least once during the winter presented, with the encouragement of and practically a threat of court marshal by Father John, some sort of show complete with home made costumes for the entertainment the rest of the personnel. The shows ranged from a re-enactment of Grace Kelly’s recent wedding, a minstrel show, something about the Knights of the Round Table and other inane ideas he dreamed up. These occasions were usually followed by a Happy Hour.

A re-enactment of Grace Kelly’s wedding by Ye Olde Sack Inn

A minsteral show by Suite Sixteen

The Knights of the Round Table by Hotel Temporary

St. Patrick's Day show by enlisted men

A portion of the crew enjoying a show

Portion of the crew at Happy Hour

Happy Hour

Some get happier than others

We had a ships store where we could buy toiletries, candy, cigarettes, our two week ration of beer and other personal items. The beer was sold every other Wednesday and only one case per man, but if you had a buddy who didn't drink, and there were some, there was no rule saying you couldn't buy his, ninety-three cases of beer were always sold every other Wednesday.

The ship's store

A daily one page newspaper entitled AiropFacts, the name was later changed to The Antarctic Bulletin when it went weekly, was published by the administrative department. It contained limited news and sports scores gleaned from wire services via the teletype machines, weather reports from other bases on the Ice, the menu, upcoming movies etc. I still have most of those publications.

Upon arrival on the Ice it was difficult and time consuming getting enough water to shave so most of us grew or at least tried to grow a beard. Most of us soon discovered beards were difficult to keep clean and trimmed, hoar frost would form on them and they didn't keep you much warmer. As time went on and water became more available the beards began to disappear and soon most us were clean shaven. There were a few who kept them and I know one man who still has his

As mentioned previously, when the supplies initially came off the ships they were stored in a somewhat logical and categorical order so they could be found later. It worked in most cases, but not in all. While gathering supplies and material required at The Pole the storekeepers found a pallet of beer that should have been in the secured beer storage hut. Their first inclination was to take a case or two for their own use, however, after weighing the consequences of higher command if two or three cases were found missing from the pallet of fifty or sixty it made them readjust those thoughts. Being Seabees, they took the entire pallet as if it never existed and shared it with the rest of the enlisted men. It wasn't exactly stealing, higher command never found out and/or chose not to reprimand those involved and what could they have done? Confine us all to quarters or send us back to the States? Fat chance of that! The incident made for a good laugh and created a great boost in morale. However, there was some hell to pay when Mr. Canham found some sort of moonshine making device in "Dogheim," the dog shelter. I still don't think those involved in building it wanted the booze so much, but rather to see if they could do it.

There was a strange epidemic we called "Big Eye" that occurred only during the period of total darkness. We would all go to bed at lights out and sleep for two or three hours then wake up and not be able to get back to sleep. We would get up, dress, and go to the mess-hall for a

refreshment and find half the people on station there with the same condition. So, we would sit around and talk or play cards for a couple hours then go back to bed. It happened to almost everyone, occurred often and made for a tough day at work the following day.

Another strange event occurred periodically, usually on Sundays. You would lie down for a nap in the afternoon and wake up to find the hut very quiet, in total darkness and no one there. By looking at your watch it indicated it was the time for the evening meal, movie, or if you had slept all night, breakfast. All those events occurred daily at about the same time so you knew everyone was in the mess-hall. It was a gamble on whether to put on work or casual clothes and if you put on the wrong set you became the laughing stock of the station until it happened to someone else.

Two incidents occurred causing some concern for me only a couple of weeks before I left McMurdo to go to The Pole. The first was that I developed a boil on my back under the belt that had to be lanced. Local anesthesia was not used fearing the infection could spread causing more problems. Doc Taylor was sitting and I was standing when he started cutting and I nearly wound up in a heap on the floor, with him saying something like "probably I should have stood and you should have sat." He then told me unless it healed quickly he would not clear me to go to the Pole. I was at first very disappointed, but it did heal quickly, he cleared me and I became a proud member of the first South Pole Construction Crew. The second was rather nonchalant and casual. Father John and I became very close friends and one evening as we were talking about The Pole operation he remarked that higher command was quite sure they could get us to The Pole, but there was some concern whether they could get us back out. I don't recall responding or in any way reacting negatively, but I did pray the rosary more often and attended a few extra masses before leaving McMurdo.

On the morning of October 17,1956, Admiral Dufek arrived at McMurdo on an R5D ending our period of isolation. However, what was more important for us was that the plane brought MAIL, NEWS, and FRESH FOODS from Christchurch that caused morale to soar. The morning was declared holiday routine, and the berthing huts and mess-hall were as quiet as I'd ever heard them as members of the winter-over crew read letters, last year's Christmas cards, eight-month-old hometown newspapers and opened care packages sent from home. Unfortunately, we had to go back to work in the afternoon, but it was a joyous and memorable day.

The Admiral is aboard and he brought fresh eggs

On October 18,1956, a P2V, an R5D and five R4Ds, two engine cargo planes, arrived carrying more mail and fresh food. In near-whiteout conditions the R5D and R4Ds landed safely, but the P2V crashed on McMurdo Sound, instantly killing David Cary, Marion Marze, and Charles Miller. Rayburn Hudman died from his injuries a few hours later. Four others, Richard Lewis, Clifford Allsup, Kenneth Mac Alpine and Robert Spann were severely injured. The news of the crash spread quickly throughout the station, immediately turning the elation and joy of the previous day very sullen. Nearly 100% of the winter-over crew responded to the call for blood donors and blankets. All casualties were returned to the United States as time and conditions permitted. With the exception of the death of Dick Williams that crash, at least for most of us, was absolutely the worst experience of our entire stay on the Ice.

Also, on October 18,1956, several U.S. Air Force C-124 Globemaster cargo planes began operations on the Ice, initially making six round trip flights from Christchurch bringing in supplies and summer support personnel. Both VX-6 and the Air Force continued their air operations through the austral summer of 1956-57.

C-124s landing on the ice runway

THE SOUTH POLE, 90° SOUTH LATITUDE

The South Pole is some 850 miles inland from McMurdo with the very high Transantarctic Mountains and rugged glaciers between. At the beginning of The Pole operations R4Ds were the primary aircraft for transferring personnel and sensitive equipment between McMurdo and The Pole, but they could not carry enough fuel for the round trip, so the Beardmore-Scott Auxiliary Station was established on the Liv Glacier to act as a refueling, weather, and communications station.

On October 28,1956, two R4Ds took seven hours to fly approximately 450 miles into a strong headwind and blowing snow to reach their destination. The planes' engines remained running during the seventeen minutes it took to unload the supplies. In an article written by a *New York Times* reporter and sent from McMurdo dated October 29,1956, the pilot of one of the planes was quoted, "It broke your heart to leave those guys there, we just had to push them out with their gear and takeoff. They had a little bit of that grim look of men going into combat." The station was originally planned to have a crew of eight, but was reduced to six due to illness and other duty commitments. An Atwell Hut served as galley and mess hall, berthing quarters and radio shack. It was tough and unenviable duty with all hands participating in retrieving supplies, manhandling containers of aviation fuel from supply planes, refueling the planes, and grooming the makeshift runway with a Snow-Kitten, a small tracked vehicle. Deep Freeze II personnel relieved two of the crew on January 9,1957, and the remaining four were relieved by Deep Freeze II personnel on January 19,1957, just in time for them to board the ship that would take us home.

On October 31,1956, history was made when an R4D named *Qea Sera Sera,* with a crew and observers totaling seven men, accomplished the first landing of an aircraft at The Geographical South Pole. These courageous men were the first to reach the Pole since Roald Amundsen's party of five and Robert Falcon Scott's party of five reached there during the austral summer of 1911-12. The plane's skies froze to the surface during the forty-nine minutes they stayed inspecting the snow and recording atmospheric conditions, the temperature was -59°F. The plane was equipped with fifteen jet-assisted takeoff (JATO) bottles; eight were used to break free from the surface and the remaining seven for takeoff. During takeoff the tail was damaged, a radio antenna was broken, and during the flight other malfunctions developed causing some concern. Landing at Beardmore-Scott Auxiliary Station they refueled, inspected the plane, and made repairs that allowed them to safely return to McMurdo the following morning.

R4D Que Sera Sera

With permission from Mr. Bowers I copied this quote from his *South Pole Station Daily Narrative*.

> 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.

The statement was made following an Advance Party training exercise in preparation for The Pole operations. I believe it shows his confidence in each man he was about to lead on this difficult endeavor. I also believe those of us who followed him had the same confidence in him and in each other. He was a fine leader, a good man and is a great friend.

I find this remarkable insight from a man only twenty-eight years old, not long out of college, on his first deployment out of the states and leading several men who were much older. Many of the higher rated petty officers were veterans of WW2 and the Korean War with the rest of us being as old or nearly as old as he.

As noted in Mr. Bowers' quote of November 13,1956, twenty-four men from the winter-over crew had been selected and in turn volunteered for The South Pole construction crew. Unfortunately, one man inexplicably decided against going not long before the scheduled November 19,1956, departure of the advance party. This caused some problems because he possessed the essential discipline of celestial observations that no other man on station possessed. Mr. Bowers, a civil engineer and obviously a fast learner, had received a smattering of instruction in that discipline during college, but was forced to become an expert on finding precise locations on the earth by means of solar observations very quickly. This also reduced the construction crew to twenty-three men.

On November 19,1956, two R4Ds carrying the eight man advance party departed McMurdo bound for The Pole, but due to an engine malfunction the planes had to turn back. Upon landing at McMurdo they immediately transferred the supplies and dogs to other planes and restarted and on November 20,1956, the advance party, a team of dogs and supplies reached a point thought to be the Geographical South Pole**.** It was, according to Mr. Bowers' narrative, "A beautiful day -20º F with a five knot wind," and by Pole standards it was. Fearing they would not restart, the

engines of the two R4Ds on which they arrived remained running and several men developed minor frost bite as the wind created by the propellers washed over them while the supplies were unloaded. A C-124 cargo plane accompanied the R4Ds and parachuted a Weasel and other supplies to them.

Immediately, the men were confronted with many problems. Solar observations determined they were about eight miles from The Pole and the parachuted Weasel made a hard landing causing the transmission housing. The elevation on the Polar Plateau is nearly 10,000 feet above sea level and some of the men, deprived of oxygen, suffered from mild anoxia. The men retrieved and secured the airdropped material, set up a tent camp, had a meal of trail rations, and sent a message to McMurdo requesting repair parts for the Weasel before turning in for some much needed rest.

The following day, November 21,1956, a C-124 cargo plane parachuted in the repair parts. However, the container was dropped prematurely and the parachutes hadn't opened properly causing another hard landing and buried the parts in six feet of snow about two and a half miles from the temporary camp now dubbed “Eight Mile Camp.” Three men dug out the parts and with help of the dog team returned them to Eight Mile Camp where the mechanic spent several hours replacing the transmission only to find the battery was ineffective and the engine wouldn’t start.

Men were urgently needed at the building site at The Pole (90° South latitude) to mark and record the locations of supplies that were being airdropped so on November 22,1956, Mr. Bowers and three other men packed a sled with supplies and with the help of the dog team set out to make the eight mile trek to The Pole. Not being accustomed to the thin air in combination with ankle deep snow made for a long and toilsome trip of approximately ten hours including the time it took to load the sleds. How did Amundsen and Scott manage more than eight hundred miles in these conditions?

Upon arriving at the point where the airdrops of the previous day had been made solar observations were taken and it was determined they were about seven-tenths of a mile from The Pole. After leaving the Navy I became a professional surveyor and know from experience the sun is the least reliable celestial object to determine latitude and longitude. The sun and a theodolite not especially suited for this type of work was all Mr. Bowers had to work with. Many more observations were taken by his successors, who didn’t have to worry about retrieving airdropped material or getting buildings up, were allowed more time, the luxury of darkness while observing several stars, and stricter control over much better equipment through the following winter. The subsequent observations produced substantially better reliability and it was ultimately determined by the National Academy of Sciences the station was well within a quarter mile and perhaps one or two hundred feet from the Geographical South Pole. In my opinion Mr. Bowers did a remarkable job considering his limited experience in this field.

The three days from the time Mr. Bowers and his men reached The Pole until the men in Eight

Mile Camp reached The Pole were tenuous. They were all living in tents, eating trail rations, and airdrops were continuing at The Pole. There was a high percentage of the continuing airdrops where the parachutes weren't opening or the quick release mechanisms were releasing prematurely producing what we called these "streamers" and causing the packaged material to be buried, broken open and damaged. Several barrels of gasoline, aviation gasoline, some food, building material and other supplies were lost forever. With no equipment to retrieve the material the only thing they could do was identify the bundles and mark their locations. By this time material was scattered all over the Polar Plateau. The four men at The Pole managed to find some meat and other groceries in the airdropped material that varied their diet a little from the trail rations. Mr. Bowers was very concerned about the many streamers and requested that airdrops be stopped until the men, the Weasel, and other equipment at Eight Mile Camp could catch up and at least get a start on the construction base camp. It was important to get a field galley set up and for the men to get out of the tents and into better living conditions. The request to stop the airdrops was denied, but use of the quick release mechanisms was discontinued.

On November 25,1956, SSGT Richard "Dick" Patton, a U.S. Air Force loadmaster/parachute rigger, parachuted into Eight Mile Camp carrying a battery for the Weasel literally in his hands. A heater was also parachuted which allowed the Weasel to be warmed and started, the remnants of Eight Mile Camp were loaded onto sleds, and the five men were soon on their way to The Pole. Dick Patton's expertise was needed to determine why the parachutes weren't opening or were disconnecting prematurely and to coordinate airdrops. Dick's parachute jump was the first ever on the Polar Plateau and he didn't have to do it, but we all had our "firsts" at The Pole and that was his. My "first" was to peel and eat an orange there, at least I think I was the first. Dick had not wintered with us, but we made a Seabee of him in short order and he willingly helped us in any capacity we asked of him. We were again a twenty-four man crew. Dick must have determined the reasons for the streamers because they were far less frequent after his arrival.

Unfortunately, there are no photographs chronicling of the events between November 20,1956 and November 25,1956.

About 10:00 P.M. November 25,1956, the Weasel and men from Eight Mile Camp arrived and about 12:30 A.M November 26,1956, two R4Ds brought in ten more members of the construction crew. The nineteen men immediately began constructing the first of two Jamesway Huts that comprised the construction camp, completing it at about 8:00 A.M. They all got into sleeping bags inside the new Jamesway Hut for a some much needed rest, but most were up by 1:30 P.M. complaining that it was too hot to sleep. On November 27,1956, a second and larger Jamesway Hut was built and the construction camp was complete. One hut served as a galley and mess hall, radio shack, and officer and civilian berthing quarters, the other for enlisted men berthing quarters. The berthing hut was quite bare with rudimentary lighting and bunks of arctic sleeping bags laid on standard military folding cots of wood and canvas. The food was more varied and much better than the early days at McMurdo, but we were again melting snow for our personal use and there was no chance of getting a shower or a change of clothes until we returned to McMurdo.

South Pole Station November 26, 1956

Tents and teathered dogs at The Pole November 26, 1956

Feeding the dogs at The Pole November 26, 1956

South Pole Station November 26, 1956

The Weasel was the only vehicle available and it was used to its full capacity retrieving airdropped material, dragging and smoothing our make shift runway dubbed “Ike’s Pike,” in honor of President Dwight Eisenhower, and as a radio shack. The radio was installed in the Weasel to take advantage of an electrical power supply and eliminate the need for batteries or a hand cranked generator.

The Weasel

On November 27,1956, a D-2 Caterpillar tractor was dropped, the blade and other parts were dropped in separate parcels and it took a few hours to put it together and make it operational. A 4 kilowatt generator was also dropped and put on line after some adjustments to keep it from surging. The radio was moved from the Weasel into the temporary radio shack allowing airdropped material retrieval and runway grooming to be greatly expedited.

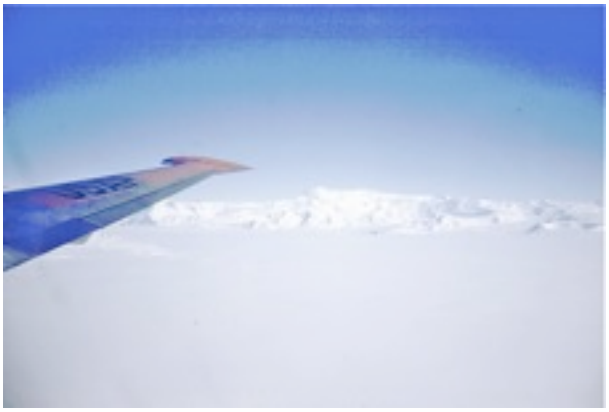
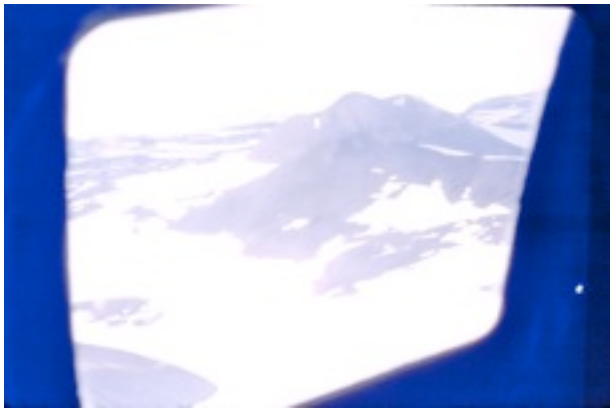
The D-2 tractor

Retrieval of material that hadn't streamed-in was easy, relatively speaking, just drive up, hook it to the Weasel or D-2 tractor, drag it back to the supply area and unhook. It was not that easy though, as the snow was ankle deep, the wind was always blowing twenty or more miles an hour, temperatures ranged from -10°F to -30°F and some of that stuff had been dropped miles from the station. The streamed-in material had to be dug out of five or six feet of snow, each piece individually placed on a sled then hauled to the supply area where each piece was taken off the sled and stored.

Retrieval of material

My five and a half or six hour flight from McMurdo to The Pole on December 1,1956, was with mixed feelings. My mind was running a mile a minute, excited knowing I was going to a place where few men had ever been, but wondering if we would ever be found should we be forced down in that rugged terrain below. I can't say I was frightened, but of the slightly more than a year I spent on the Ice it was the only time I was seriously concerned for my safety. I was flying with four other members of the construction crew, but I don't recall any of us discussing our inner feelings. The aircraft performed well and the flying conditions could have been better, but it wasn't of threatening proportions. The scenery flying over the Transantactic Mountains was beautiful. Looking down we could see high peaks, glaciers, a multitude of large crevasses and on the relatively flat Polar Plateau much sastrugi, drifted snow that looks much like waves on water. Dr. Paul Siple, a noted polar explorer, creator of the "Wind Chill Factor," and senior civilian scientist of the 1957 winter-over crew, arrived at The Pole at the same time I did, but on another airplane. It was very overcast causing some concern regarding the possible lack of depth perception. There were ten or twelve knot winds and normal temperatures of 0°F to -25°F, but we had no problems landing. The affects of the flights to and from The Pole on Don Scott were such that he has never flown again.

Dr. Paul Siple

Scenery between McMurdo and The Pole, the Transantactic Mountains

LTJG Jack Tuck

On December 1,1956, the dogs, having done their job and their handler, survival specialist LTJG Jack Tuck, returned to McMurdo. Mr. Tuck had arrived at Eight Mile Camp with the original eight construction crew members on November 20,1956. He had been a member of the 1956 McMurdo winter-over crew and was returning to New Zealand for some rest and rehabilitation. He returned to The Pole on December 29,1956 to assume the duties of Officer in Charge of the military contingent during the 1957 winter-over.

The MCB (Special) South Pole construction crew was now complete. The crew consisted of the Officer in Charge, one administrative assistant, five carpenters, three plumbing and heating specialists, one electrician, one steel worker, two radiomen, one cook, one hospital corpsman, two mechanics, one meteorologist, one aviation electronics technician, one aviation mechanic and one photographer. With the departure of Mr. Tuck, the addition of Dr. Siple and Dick Patton the total number of men on the construction site was twenty-four. The aviation electronics technician and aviation mechanic had worked with the Seabees most of the previous winter at McMurdo in various capacities. They were hard workers, very adaptable and we Seabees considered them part of us.

The MCB (Special) South Pole Construction Crew
Standing L to R: Bristol, Spiers, Williamson, Tyler, Wagner, Bevilacqua, McCormick, Randall, Patton, Roberts, Goodwin, Bowers.
Kneeling L to R: Scott, Chaudoin, Hisey, Prescott, Powell, Nolen, Montgomery, Hubel, Woody, McCrillis, Slaton.
Dr. Siple took the photo and is not pictured

When I arrived the base camp was complete with the two Jamesway Huts, a two-seater latrine in a tent and the supplies needed for use during our stay stored close by. The weather didn't bother me, having worked in worse conditions most of the previous winter, but the thin air at this high elevation causing a lack of oxygen sapped my stamina for the first couple of days.

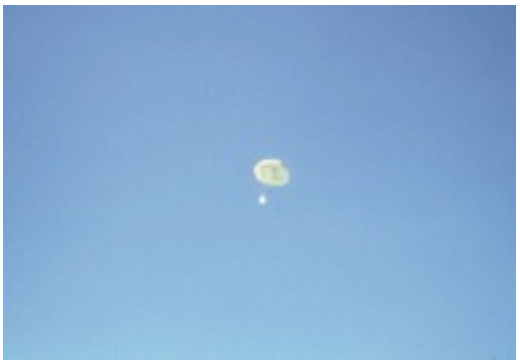
The Pole Station from the air early December1956

As previously mentioned, most supplies were parachuted, but some items such as banded together bulk lumber were dropped from very low altitude without parachutes, we called these free-falls. Personnel and sensitive scientific equipment were brought in by the smaller R4Ds.

There were many problems involving airdrop scheduling due to planes having to turn back with mechanical problems, adverse weather, stream-ins, and difficulty in finding replacement material. We would get roof panels or fuel intended for use by The Pole winter-over crew, but would have to wait for urgent building material such as timbers for building foundations and at times construction nearly came to a standstill. It was very frustrating after all the detailed planning that had taken place during the past year. Much of the material that streamed-in was damaged or broken and had to be repaired or replaced. In the meantime, supplies and material were still coming so we retrieved it, repaired what we could, cleaned up trash, and organized the supplies for our use and the use of the 1957 Pole winter-over crew. It took some time to get back on schedule and Mr. Bowers gives the Air Force and our chief storekeeper at McMurdo high marks for their efforts.

The steel roof trusses for the Clements Huts were too long to get into the C-124 cargo planes causing a minor inconvenience. We knew this in advance so before packaging them for airdrop they were cut in half, splice plates were made and the trusses were bolted back together at The Pole. It was time consuming and a pain in the neck, but it worked and structural failures did not occur until the station became buried in snow many years later.

Construction sequence at The Pole



Parachute drops

Free-falls

Retrieve the material

Grade the site

Build the buildings

Store fuel and supplies before tunnel construction

Construct the tunnels

Overview of tunnels connecting the buildings

Hanging JATO bottles on the stranded P2V

We had some unexpected guests and a little excitement on December 6,1956, when a P2V carrying the Commanding Officer, a Navy Captain, of VX-6 and a crew of five or six landed and couldn't take off again. After several attempts to get airborne, but unable to gather enough speed they stopped trying. The crew came into camp, were fed and bunked down with survival gear in the shell of the latrine where the heating and plumbing specialists set up a stove for them. I think Mr. Bowers and Dr. Siple made room in their quarters for the Captain. I felt sorry for Mr. Bowers as he didn't quite know what to do with an uninvited Captain. The next day the plane crew worked on their engines and took some equipment out to lighten the load. The Seabees helped them attach some JATO bottles and they finally made a rather long, eventful, and hairy takeoff. The problems with landings and takeoffs of the P2Vs were soon solved and they began coming and going on a regular basis.

We also had to deal with philatelic mail, a program that provided first day stamp cancellations when the United States Post Office was established at The Pole on December 15,1956. It seems stamp collectors from around the world got wind of it and sent self addressed stamped envelopes or post cards in larger packages. The administrative assistant was designated temporary postal clerk and he was nearly overwhelmed with bags full of it. He spent several days opening the packages and canceling nearly a quarter-million pieces of mail then returned them to their origin.

During Pole construction beer was rationed sparingly, but after work on December 23,1956 a meal of steak with all the sides the cook could find was served and a very memorable Christmas party was held with a Christmas tree donated by the state of Oregon, beer compliments of the 1956 McMurdo winter-over crew, and Doc Taylor sent an abundant supply of "medicinal brandy" compliments of the U.S. Navy. The party broke up at 8:00 A.M. December 24,1956, and the day was declared a holiday, our only day off while there. However, we did have to unload two R4Ds and a P2V that arrived late in the day with non-drop scientific equipment to be used by the IGY scientists during the 1957 winter-over. Eight members of the construction crew returned to McMurdo, but not before a group picture was taken.

In the galley helping the cook prepare the Christmas meal

The Christmas tree

A swarm of Seabees at the Christmas party

On December 29,1956, seven other members of the construction crew and I returned to McMurdo and on January 4,1957, the last seven members of the construction crew returned to McMurdo. The entire construction crew returned on P2Vs. With some trepidation, I boarded the same P2V that became stranded on December 6, 1956, but with the help of a few of those one ounce bottles of "medicinal brandy" left over from the Christmas party I managed to make it to McMurdo just fine. Mr. Bowers made certain all members of the construction crew had talked through ham radio and phone patch from The Pole to someone at home before returning to McMurdo. We were relieved by the seventeen-man 1957 South Pole winter-over crew in three

intervals, as the winter-over personnel arrived construction crew members would return to McMurdo on the same planes.

South Pole Station, circa mid-December 1956

During our stay at The Pole five reasonably functional Clements Huts with rudimentary electricity, heat, and plumbing with tunnels connecting them had been built. A tower housing a radar unit for tracking weather balloons and tower for studying the aurora were constructed on top of two separate Clements Huts. The interiors were left to be completed by and to the likes and needs of the winter-over crew. The tunnels were stick framed using conventional framing lumber then covered with chicken wire and burlap designed to keep blowing snow from infiltrating. The construction base camp berthing hut was incorporated into the station and used for recreation and berthing. The smaller Jamesway Hut used for the construction camp galley and mess-hall was moved some distance from the main complex and stocked with supplies in the event of fire or other emergency during periods of isolation. We also had properly stored many of the supplies and fuel needed for the 1957 winter.

The South Pole Station, January 4,1957

BACK TO McMURDO AND THE TRIP HOME

Upon returning to McMurdo we all did the same kind of work we had done upon arriving a year earlier. The operation was well into Deep Freeze II and McMurdo was nearly overrun with summer support personnel, our replacements, mass media correspondents, civilian dignitaries and high ranking officers, we veterans called them all "tourists." Of course, tons more of supplies were being transferred from the ships to the station. Perhaps, because I was not accustomed to being among so many people it seemed to be much more hectic and disorderly than the previous year.

In December 1956, near the end of Deep Freeze I and the onset of Deep Freeze II, U.S Naval Mobile Construction Battalion One (MCB 1) arrived on the Ice and built Hallet, Wilkes, and Ellsworth Stations.

Another major disaster occurred on January 14,1957, when a Weasel carrying a crew of six men working on an over-the-ice pipeline pumping fuel from the ships to McMurdo broke through the ice into about thirty-five feet of water near Hut Point. Five men managed to get out, but Ollie B. Bartley, a summer support member of MCB 1, went down with the Weasel and drowned. His body was recovered and sent back to the states.

The recovery of Ollie B. Bartley's body

I do not know much about Little America V other than most of the personnel and supplies had been transported there aboard the USS *Arneb* (AKA-56), a cargo ship, and construction began at approximately the same time as at McMurdo. Several members of the seventy-three-man winter-over crew forged an overland tractor and sled route some 450 miles into Marie Byrd Land and built Byrd Station. That operation was not a Sunday afternoon drive from what I've been told by those who participated. While breaking the trail from Little America V to Byrd Station Max Kiel was killed when the tractor he was driving plunged into a crevasse. His body was never recovered.

Between January 21 and 23,1957, most the 1956 McMurdo winter-over crew were taken aboard the USS *Curtiss* (AV-4), a seaplane tender, and departed McMurdo on January 28,1957 for the trip home. Although the Captain of the *Curtiss* was adamant about incorporating us into the ship's company for work details Mr. Canham fought long and hard against it. The Captain and Mr. Canham settled for no mess-cooking, no dirty jobs such as chipping paint, any work detail

was limited to six hours a week, and absolutely no watches making the cruise home just that; a cruise. It wasn't officially rest and rehabilitation, but it might as well have been. We were nothing more than passengers laying on the teak weather deck and basking in the sun for the entire trip. We stopped for fourteen days at Little America V transferring supplies and equipment and picked up the winter-over crew then cruised around the continent stopping at various stations transferring supplies and personnel, finally departing the Ice from Cape Hallet on February 12,1957, headed for home.

The USS *Curtiss*

Life aboard the *Curtiss*

Off-loading activity at Little America V

A fairly large iceberg

Scenery along the Antarctic coast

An Island off the Antarctic coast

We made short stops in Port Lyttleton and Wellington, New Zealand, but darn it, there was no liberty until we reached Auckland at 8:00 A.M. February 20,1957 and all the Seabees were ashore by 10:10 A.M. local time and we certainly drank our share of the plentiful beer and liquor while mingling with the young ladies. There were a few minor infractions that were overlooked by local authorities and higher command. We departed Auckland at 10:15 A.M. February 25,1957, with all personnel aboard. The standard feeling among the winter-over personnel was that the liberty in Auckland had been on a par with, if not superior, to that enjoyed in Christchurch with the citizens being every bit as gracious.

We arrived in Sydney, Australia at 11:00 A.M. March 1,1957. The city of Sydney provided free tickets to theaters, sporting events and transportation on any public conveyance for men in uniform, very generous gestures indeed. Two men from the McMurdo winter-over crew married girls they met in New Zealand on their way to the Ice with the weddings being covered by local TV and other news media. On the evening of March 5,1957, a large hall was obtained by Father John and in a short time he had organized a Seabee Birthday Ball, complete with orchestra, bar and all the trimmings. He even recruited local girls for dancing, as if we couldn't get our own. He certainly knew how to throw a party. Everyone aboard the *Curtiss,* including the ships company, was invited and many attended. The festivities continued throughout the night and morning at various places in the city. When we departed on the morning of March 6,1957, the docks and adjoining areas were jammed with friends we had met during our days of liberty. Colored paper streamers where thrown by civilians and strung over the ship, personnel, and docks. All the Seabees were aboard at sailing, but the ship left two of their crew.

Approaching Sydney, Australia

The Sydney Habour bridge

Sydney's famous Bondi Beach

Scenery from near the Sydney Harbour bridge

Between Sydney and San Diego, California we again crossed the equator and full fledged rites of passage into "Royal Order of the Deep" were conducted for the eight Pollywogs aboard, flying across doesn't count. Most of the Shellbacks didn't participate, but the ceremonies were enjoyed by all who watched. Father John staged a musical production of *Southern Memories,* featuring primarily Seabees and Marines for the enjoyment all those aboard and it was a tremendous success. Boxing smokers were held featuring anyone willing to participate and those too were very successful.

Crossing the equator rite of passage

The musical production of
Southern Memories

We arrived in San Diego on March 25,1957, and were greeted by the Seabee Queen, the Commandant of the Eleventh Naval District, other very high ranking Naval personnel and the Mayor of San Diego. Several Seabees were interviewed and appeared on national radio and television shows. We all departed the ship with leave papers and orders to our next duty station and MCB (Special) was disestablished on March 26,1957. How lucky can a man be? I came out of Bermuda to join MCB (Special) and was deployed to Barbados for the remaining seven months of my naval career. Not a bad four year ride for a naive kid fresh off a farm in small town America.

I'm frequently asked how I got the moniker Rediron and the answer is not a pleasant story for me to tell. We built numerous Quonset Hut at McMurdo consisting of galvanized corrugated steel sheets nailed into a steel arched framework. The arches are two steel channels spot welded together back to back leaving a small gap to receive the nails then painted with red lead to prevent rusting. Having to drive nails through the steel sheets into this gap in the red arches is not an easy task under the best of conditions. Having to wear heavy gloves made it much more difficult and I evidently wasn't as blessed with the required hand-eye coordination as the others. After many hours of hitting myself with a hammer the thumb and index finger on my left hand began to look like swollen globs of raw hamburger. I was not a pleasant person to be around and let my disdain for Quonset Hut be known to all. One of the men, referring to the red arches, began calling me Rediron in a mocking manor, the rest of the crew picked it up and it has stuck

to this day. When my wife answers the phone and someone asks for Rediron without hesitation she hands the phone to me saying, “It’s one of your Antarctic buddies.”

I take great pride in knowing that when we, and I include all who participated in Deep Freeze I, went to the “Ice” there was nothing but ice; but when we left everyone who has followed, immediately upon arrival, has a place to get a decent meal, is able to sit at a table to eat it, and has a warm place to sleep.