



Scientists seek to label whale species

By Steven Profaizer
Sun staff

Patches of pure white splashed on an inky black body. Two-meter-tall dorsal fin slicing through the water's surface. An attraction at SeaWorld. A pack hunter with cunning intelligence and stunning power.

The killer whale, or orca, is one of the most universally known animals in the world. They are also one of the most widespread mammals, second only to humans, and inhabit all of the world's oceans.

Yet scientists are still working to determine how many species of killer whales exist. Only one species is currently recognized, but many people, including researcher Robert Pitman, believe there may be two additional species among the estimated 20,000 to 80,000 killer whales that inhabit Antarctic waters. Pitman is far from the first to believe this: Soviet Union whalers in the early 1980s first observed the killer whales' differences in diet, preferred habitat and coloring. He does, however, hope to be part of the team that finally solves the mystery.

Pitman, of the National Oceanic and Atmospheric Administration, led a team to Antarctica last year on a two-week mission that used sophisticated technology to hopefully gather enough information to finally solve the killer whale controversy. They used several methods, including

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Quote of the Week

"Don't laugh. It's McMurdo Christmas shopping."

— *Man at the store with a basketful of soda and snacks chosen as gifts for local friends.*

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Deep Freeze turns 50

By Emily Stone
Sun staff

Al Hisey spent one of his first nights at McMurdo Station by accident.

It was 1955, and he was ferrying supplies by tractor from Navy ships across the sea ice of McMurdo Sound to the spot on Ross Island where the station was being built. During one of the first trips, there was a major break in the ice between the fledgling station and the ships. The 10 or so men on shore had to hunker down for a few days while the ship repositioned itself, Hisey said.

They needed extra food. So the men walked into Robert F. Scott's hut nearby to look for supplies. Hisey, then 22, remembers that the Cadbury chocolate was still good.

"When we went up to the hut, we knew we were the first ones to be there in a long time," he said.

It has been a similarly long time since Hisey and his fellow Navy men were here. In fact, Scott's trip to the South Pole was a less distant memory to those men than their trip to McMurdo is to us today.

This month marks the 50th anniversary of Operation Deep Freeze's arrival in Antarctica. Deep Freeze I, which is how the

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TIME LINE

U.S. Antarctic moments from Deep Freeze to the present

1953

The oldest tractor still operating at McMurdo is built by Caterpillar, Inc.

1955

The U.S. Navy's Operation Deep Freeze begins. Its goal is to build seven U.S. scientific stations on the continent in two years.

Dec. 18: Deep Freeze ships arrive at McMurdo Sound.

1956

Feb. 19: McMurdo Air Operating Facility renamed Williams Air Operating Facility after Richard Williams, who died in a tractor accident a month before.

Oct. 25: First cargo air-dropped at the South Pole.

Oct. 31: Gus Shinn lands first plane at the South Pole.

Nov. 20: First construction crew arrives at the Pole.

1957

First International Geophysical Year begins and runs 18 months. Scientists from 67 countries conduct research at 65 stations.

Navy comes to build first bases



Dave Grisez / Special to *The Antarctic Sun*



U.S. Navy photo / Special to *The Antarctic Sun*



Dave Grisez / Special to *The Antarctic Sun*

Top, the Seabees established a base camp in 1955, known as "Tent City," to live in while building McMurdo's permanent structures. Middle, sled dogs were used during Operation Deep Freeze. Lieutenant Junior Grade Jack Tuck drives a sled in 1956. Bottom, Seabees erect a Clement's Hut at McMurdo. The prefabricated huts snapped together quickly, enabling the crew to build an entire town in a few weeks. Some of the seabees practiced erecting the huts at an Army cold weather room in Detroit.

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operation's first year is known, brought 1,800 men here to start building the modern era's scientific stations on a continent that was still largely unexplored. The mission was to have seven stations ready for the International Geophysical Year, which began in 1957.

The first wave of construction started in 1955 at McMurdo Station and Little America V. McMurdo was not originally intended to be a major scientific base in its own right. It was primarily an airfield for the planes that would fly to the South Pole to establish a base there the following year. Little America V would be the country's primary scientific station, as well as the staging area for the crew building Byrd Station farther inland.

It wasn't until December 1959, when Little America was closed, that McMurdo evolved into the main U.S. station.

The Navy's construction goals and the scientists' research plans might have been lofty, but the men who came here to work that first year saw the task primarily as just another job. It might have been an adventurous one that took them to a remote place, but they didn't see themselves as pioneers or explorers.

"I've never looked at it as anything heroic," said Dave Grisez, who was at McMurdo as a 20-year-old machinery repairman. "It was just part of being in the Navy."

That doesn't mean the men didn't enjoy the job. They worked hard, but they had their fun, whether it was playing poker and pinochle, staging a reenactment of the marriage of Grace Kelly, complete with gowns and bridesmaids, or enjoying perhaps a bit too much "whiteout punch."

Even 50 years later, many of the men say they never worked with a closer group of people than the Deep Freeze crew and still consider them their best friends.

"There was some cold weather, but we had a good time," said Grisez, who gets together regularly with Hisey in Indiana, where both men live. "I got home safe. I've got a lot of good memories."

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1957 cont.

March 11: Adm. Richard Byrd dies at the age of 66

Oct. 15: First commercial plane lands at McMurdo. The Pan Am jet was chartered by the Navy for deploying Seabees and VIPs. Female flight attendants onboard become first women to visit McMurdo.

1959

National Science Foundation takes over the Antarctic program from the National Academy of Sciences.

First permanent laboratory, the predecessor to what is now the Crary Science and Engineering Center, is built at McMurdo.

U.S. turns over Wilkes Station to Australia and Ellsworth station to Argentina.

The 12 leading member nations of the IGY sign the Antarctic Treaty, which pledges that the continent "shall continue forever to be used exclusively for peaceful purposes."

Dec. 31: Little America V is closed.

1960

Twelve C-130s, equipped with both skis and wheels, start flying Antarctic missions.

Little America to be primary station

By Emily Stone

Sun staff

Traveling to Antarctica was an adventure in an unknown land for most of the men in Operation Deep Freeze. For Rear Adm. Richard Byrd, it was a homecoming.

Byrd had been to Antarctica four times already. In 1929, he completed the first flight over the South Pole. He returned three more times to lead scientific expeditions. During each visit, he established a base on the Ross Ice Shelf, which he named Little America I through Little America IV.

It followed, then, that in December 1955 he would return to the same spot to establish Little America V. About 725 kilometers away, another Deep Freeze contingent was building McMurdo Station.

Despite the fact that McMurdo was on solid ground while Little America V sat on an ice shelf moving steadily toward the ocean, Byrd decided that Little America V would be the primary U.S. scientific station for the upcoming International Geophysical Year. Little America was also the staging area for the crew building Byrd Station, 1,000 kilometers inland.

The station served its purpose. It was closed at the end of 1959, and McMurdo became the main U.S. Antarctic station. Today, Little America no longer exists. It has fallen into the ocean, joining the previous Little Americas that calved off the edge of the ice shelf.

"We disappeared," said Ed Ehrlich, the doctor at Little America that first year. "There's no remnant to really maintain any kind of memory of what we did."

Building starts

Byrd intended to build Little America V next door to his previous camps at the Bay of Whales, the same spot where Roald Amundsen launched his trip to the South Pole.

But when the Deep Freeze ships arrived, they found that iceberg calving had ruined the bay. The group traveled about another 50 kilometers to Kainan Bay, where they found a suitable spot.

The men started transporting cargo several kilometers from the ships to the station, which required bridging two large crevasses. Some of the crews slept in unheated buildings instead of returning to the ship at night to save time.

Byrd formally commissioned the station, which



Jim Waldron / Special to *The Antarctic Sun*

Men stand outside the operations building at Little America V in 1957, with the Air Traffic Control tower in the background. Little America was built to be the main U.S. Antarctic science station during the IGY. Adm. Richard Byrd chose the site, which was near the four previous stations he had built on the continent, named Little America I through Little America IV.

was a jumble of bright orange, prefabricated buildings, on Jan. 4, 1956. The next major goal was to establish a route to Byrd Station.

First attempt at Byrd

A seven-man reconnaissance party set out in mid-January to find a safe route through crevasse fields, leaving bamboo poles every half a kilometer to mark the trail. They traveled about two weeks, calling in for air support each time they reached an impasse so they could reconnoiter by plane. On Feb. 3, after blazing 600 kilometers of trail, they decided they'd gone as far as they could at that point.

A small plane picked up part of the group. But it never returned to station. There was no backup plane, so an icebreaker came from McMurdo with a plane and helicopter to help with the search.

"We didn't know whether we were going to be able to find them," said Ehrlich, who went out in the helicopter to search for the men.

The mostly intact plane was found on the crest of a mountain and the helicopter crew followed footprints until they found the men in remarkably good shape six days after the crash. They had decided to start walking back to Little America.

"Of course, there was a great celebration," said

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"There's no remnant to really maintain any kind of memory of what we did."

— Ed Ehrlich, the doctor at Little America V, on the station's closing

1961

Construction begins on a new Byrd Station, 10 kilometers from the old site.

First winter medical evacuation completed when a scientist is flown out of Byrd Station with an undetermined stomach ailment.

McMurdo bowling alley opens.

1962

Nuclear power plant built at McMurdo. It is decommissioned 10 years later.

The first dedicated research vessel, *Eltanin*, joins program.

Jan. 12: Williams Air Operating Facility is officially renamed McMurdo Station.

Feb. 13: The second Byrd Station is dedicated.

1963

New Zealand instructors hired to teach the outdoor survival training program at McMurdo.

Anvers Island selected as site for Palmer Station.

Dec: South Pole residents find out that President Kennedy was killed 20 days after the fact, due to problems with communications equipment.

Winter crew of 73 hunker down

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Ehrlich, now 77 and living in Wisconsin.

The station wasn't as lucky the following month. Another tractor train set out to leave fuel caches along the reconnaissance party's route to prepare for the trip the following summer. On March 5, a tractor fell into a crevasse, crushing and killing driver Max Kiel.

"That was devastating," said Bill Stroup, chief construction electrician at the base. Stroup said Kiel had taught him how to drive a tractor when the ship was being unloaded, and Stroup learned that Kiel's father had been killed in an equipment accident.

Winter

The 73 men who spent the winter at Little America continued with the station construction. They also organized the cargo for Byrd Station, and kept their winter supplies within easy access. Temperatures dipped down to negative 61 degrees Celsius.

Ehrlich said he had few doctoring duties, though he did perform what he believes was the first appendectomy in Antarctica.

"Basically, we were dealing with a healthy group of people," he said. So he helped out with whatever was needed.

One of those jobs was handling the liquor rations. Ehrlich was supplied with about 20,000 tiny bottles of brandy and some other "medicinal" alcohol. One officer suggested that they refuse to give the men the drinks. Ehrlich argued that the men should get them.

"I said, 'you better do it, or we're going to have a mutiny,'" he said. The decision was against regulations, but there were no consequences. The men could also buy beer. The cases — enough for about 50 per man — ran out after six months, he said.

Little America's chaplain didn't organize entertainment the same way McMurdo's chaplain did, so the men were left to find their own fun. They played poker and ping-pong, watched movies, talked and read during the long winter, and had parties with the doctor's doled out supply of liquor. They managed to keep



Photos by Jim Waldron / Special to *The Antarctic Sun*



Above, a group of tracked vehicles prepares to depart Little America V for a trip on the Ross Ice Shelf in 1957.

Left, an aerial view of Little America V in 1957. The station was built on the Ross Ice Shelf, and therefore had to be abandoned after only a few seasons because the moving ice shelf was burying the station under snow, and would eventually send the station out to sea.

themselves busy until late October, when the first plane carrying precious mail arrived.

Stroup, who at 28 was one of the older men on station that winter, said the average age of the enlisted men was about 21. The young crew did great.

"They met the challenge," he said. "We had some [challenges] and we had some personality clashes. But nothing ever interfered with the job."

Traversal to Byrd

With summer underway, a second reconnaissance party set out to find a suitable route to the location for Byrd Station.

They radioed back on Dec. 4 that they'd found a good path, and the 19-person tractor traverse team set out. The United States wanted to build a station there because scientists believed the spot was

See DANGEROUS on page 12

1964

Original Palmer Station opens in the summer.

March 6: Fire destroys a science building at Cape Hallett Station. This marks the last winter use of station. Summer U.S. penguin studies continue there.

Sept. 30: First winter airdrop, with mail and freshies, made at Pole.

1965

Nov. 17: First commercial flight over Pole.

1966

Construction of McMurdo's largest building, Building 155, begins.

U.S. Air Force begins C-141 flights to McMurdo.

Feb. 14: First fatality at South Pole when Andrew Burl Moulder is crushed between a cargo sled and airplane.

1967

June 18: First winter flight to McMurdo.

Sept. 2: First "winfly" flight to McMurdo. A third, short season between winter and summer, known as winfly, is added to the calendar.

1968

The *Hero* research vessel launches.

Nations build stations for '57-8 IGY

By Emily Stone

Sun staff

The modern age of Antarctic research was only supposed to last 18 months. Fifty years later, we're still here.

The era began with the declaration of the first International Geophysical Year, slated to coincide with peak sunspot activities from July 1957 through the end of 1958. The IGY was an outgrowth of two previous International Polar Years in 1882-83 and 1932-33. While the IPYs focused exclusively on research at the poles (primarily in the Arctic), the IGY included researchers across the globe.

The United States built seven Antarctic stations between 1955 and 1957 in preparation for the IGY. The most ambitious was at the South Pole.

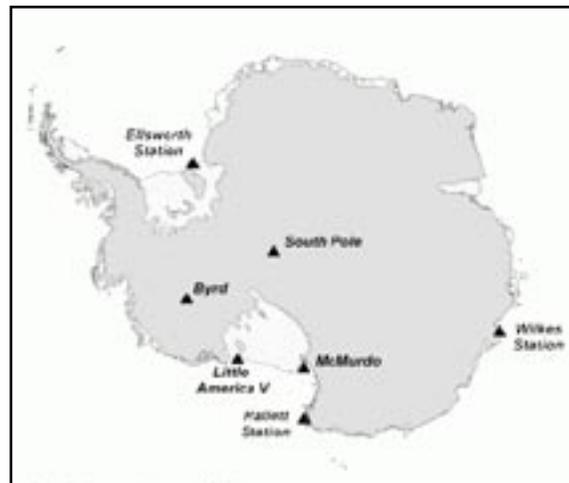
Organizers had wavered on whether a station at the Pole was logistically desirable. Once they heard that the Soviet Union was interested in establishing a station there, the Americans decided they were up to the task. The Soviets ended up at the magnetic South Pole, where the Russian Vostok Station still operates.

In total, 67 nations conducted scientific research in Antarctica during the IGY at 65 stations built by 12 of the participating countries.

The U.S. Navy undertook Operation Deep Freeze to build the American stations. The first year it built Little America V on the Ross Ice Shelf, which was to be the main scientific center, and a station on McMurdo Sound whose primary purpose was to provide a runway for planes that would fly to the Pole.

President Eisenhower became alarmed at the ballooning cost associated with the increasingly ambitious plans for Antarctic exploration. In 1956, he reminded the IGY organizers that they were only funded to stay for 18 months.

Two years later, Congress was convinced to continue the program. The IGY scientists made major breakthroughs in understanding the upper atmosphere and weather forecasting. They had measured



Jess Walker / Special to *The Antarctic Sun*

The United States built seven Antarctic stations for the International Geophysical Year. U.S. Navy Seabees built McMurdo and Little America V in 1955-56. The rest were constructed the following year. Of the original stations, only McMurdo and South Pole are still used by the U.S. Antarctic Program. The other stations were either closed or turned over to other countries.

the thickness of Antarctica's ice and learned that the weight of the ice pushed the bedrock in parts of Antarctica below sea level. Fossil tree trunks were found in the Horlick Mountains about 500 kilometers from the Pole.

Scientists had studied penguins and seals, as well as human's reaction to the extreme cold and isolation. During the 1955-56 summer season alone, pilots had flown over more than 1.6 million square kilometers of the continent that had never before been seen.

After an appeal by the National Science Foundation in 1958, Congress agreed to keep the stations open so that scientific research could continue uninterrupted, as it does today.



The reddish-orange structures on the left are the first buildings that went up in early 1956 at what is now McMurdo Station. The rest of the objects are construction supplies.

Dave Grisez / Special to *The Antarctic Sun*

1969

Four women from Ohio State University come to McMurdo in the summer as the first U.S. Antarctic Program women scientists on the continent. The four, plus a woman from New Zealand and a journalist, visit the South Pole, becoming the first women at that station.

McMurdo, Byrd and South Pole stations change from U.S. time to New Zealand time.

Extra fuel storage tanks at McMurdo make this the first year only one fuel tanker needs to come to station.

1970

New Palmer Station opens.

Blasting accident sends boulder through the roof of a Palmer Jamesway building, injuring Lt. Harry Anderson.

Jan. 30: The first meal is served in Building 155 dining hall.

Oct. 8: C-121J "Pegasus" airplane crashes at McMurdo, but no one is injured.

1971

Chicago Tribune reporter Louise Hutchinson becomes first woman to spend the night at the South Pole due to flight delays.

Dangerous tractor traverse a success

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crucial in understanding weather patterns in Antarctica and much of the Southern Hemisphere.

Chief Petty Officer Stroup was part of the traverse team. Now 78 and living in Mississippi, Stroup remembers spending much of the ride helping the cook and keeping snow melted for water.

Ingenuity was key on the trip, he said, as it was at the stations.

Like the time when a push rod on a tractor broke. Bad weather at Little America meant no plane could fly in with a replacement part for a few days. A mechanic with the group noticed that the stove, which was the type used on ships, had a rod on it to keep the pots from falling off. It looked an awful lot like a push rod.

"It was a perfect fit," Stroup said. The party continued on its way.

On Dec. 23, the traverse stopped, and the surveyor checked his measurements.

"He said, 'it looks like this is about where we're going to be,'" Stroup remembers.

The group started assembling the camp's four buildings. It only took a few weeks, helped in large part by the practice they'd had putting up buildings at Little America.

"We didn't reinvent the wheel," Stroup said.

Ehrlich points out that while the group sent from McMurdo to build the South Pole station went by plane, the Byrd team had to traverse heavy machinery by land through dangerous crevasse fields.

"Their effort, I think, was at least the equivalent of what was involved in building the Pole base," he said. "And very few people acknowledge that."

At home

The Deep Freeze II crew were at Little America when the men returned from Byrd, and the original men were soon on their way home.

Ehrlich said he gets great satisfaction from his time in Antarctica. But it was not a style of doctoring he wanted to repeat.

The uncertainty of having to treat possibly serious trauma that was beyond the scope of his training



Jim Waldron / Special to *The Antarctic Sun*

On Dec. 4, 1956, a traverse party departed Little America V for Marie Byrd Land. Their mission was to find a safe route through the crevasse area where the Ross Ice Shelf meets the Rockefeller Plateau. The group arrived at the location where Byrd Station was soon built on Dec. 23.

as a young doctor was a constant issue. He went on to become a specialist in endocrinology and is now professor emeritus at the University of Wisconsin. The McMurdo doctor at that time, Isaac "Ike" Taylor, went into academia as well, becoming the dean of the medical school at the University of North Carolina. (Taylor was also the father of singer James Taylor.)

Stroup returned home in February 1957 and met

his 14-month-old daughter for the first time. He stayed in the Navy until 1976, when he retired with the rank of chief warrant officer, W4, after 30 years of service.

He notes that many of the Deep Freeze I

"I don't remember anyone ever saying it was a lousy tour."

— Bill Stroup, now 78, on his time at Little America V as a chief petty officer



men made the Navy their career, earning substantial promotions along the way.

"If they could work under those conditions, they had no problems meeting the challenge of other (conditions)," Stroup said of the training and skills the men got at Little America.

He wasn't surprised to learn that the station had been closed and eventually disappeared.

"We knew that some day Little America V would go out to sea," he said. Still, it was worth it to be part of the station's history.

"I don't remember anyone ever saying it was a lousy tour," he said.

1972

Feb. 19: Second Byrd Station closes.

1973

New Zealand makes first McMurdo winter airdrop.

First McMurdo ice wharf is built.

Nov. 9: Armed Forces Radio and Television TV broadcasts begin at McMurdo.

1974

Mary Alice McWhinnie and Mary Odile Cahoon at McMurdo become the first American women to spend the winter on the continent.

Navy turns South Pole Station over to civilian management.

1975

Jan. 9: New domed South Pole Station is dedicated.

Feb. 3: Lights turned off for good at old Pole station, which was already buried under eight meters of snow.

1976

Nov. 16: First official survey marker placed at geographical South Pole.

1978

First women hired by contractor to work at McMurdo.

First videocassettes arrive at Pole.



Preparations begin in late 1955 to off-load cargo from Navy vessels and transport it over sea ice to what would become McMurdo Station.

Dave Grisez / Special to The Antarctic Sun

Seabees chosen for Deep Freeze

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How it started

In March 1955, President Eisenhower announced that America would participate in the International Geophysical Year, from July 1957 through the end of 1958.

Unlike two previous International Polar Years, IGY scientists would study the entire Earth. Eisenhower appointed the Navy, with its experienced Mobile Construction Battalions (known as CBs or "Seabees") to lead the project in Antarctica, which was named Operation Deep Freeze.

Eisenhower chose retired Rear Adm. Richard Byrd, the most famous American Antarctic explorer of the time, to serve as the officer in charge of Deep Freeze. Rear Adm. George Dufek, who had been to Antarctica with Byrd twice before, postponed retirement to become task force commander.

The IGY, Byrd wrote in a 1956 *National Geographic* article, "is perhaps the most important cooperative effort of scientists in the history of man. From it we are going to learn a great deal about this old world we've crawled around on for so long."

The Navy had about six months to organize the massive effort in order to reach Antarctica by the next austral summer. It sent out a call for Deep Freeze volunteers.

Grisez was aboard an aircraft carrier in the Mediterranean when he spotted the notice on a bulletin board.

"I hadn't been there, so I volunteered," he said. "That's why most of us volunteered. It was someplace we hadn't been."

Grisez and about 300 other men gathered at the Seabee base in Davisville, R.I. to start training. Most were Seabees, but the group also included men from throughout the military and some civilians. About half those men would spend 14 months on the ice, working two summers and a winter before being replaced.

"They said 'you're going to winter-over,'" Grisez remembers. "I said, 'what's that?'"

The men spent the next few months assembling all

the construction equipment, materials and supplies needed for McMurdo, Little America, South Pole and Byrd stations. Some of the men went to an Army cold weather room in Detroit to practice putting buildings together in negative 54 degrees Celsius.

"It was a very hectic time," remembers Dick Bowers, who was a 27-year-old junior lieutenant.

In November, the Deep Freeze fleet of three icebreakers, three cargo ships, a gasoline tanker and two gasoline barges set off for New Zealand loaded with tractors, forklifts, cargo sleds, jeeps, Sno-Cats, 1,800 men, 30 huskies and 1,100 kilograms of mail for collectors eager for an Antarctic postmark. Fifteen airplanes from the Air Development Squadron VX-6 also gathered in New Zealand.

After a brief stay in Lyttleton, New Zealand, where the men said they were treated like kings, the ships set off for Antarctica. The state-of-the-art ice

See SEA on page 14



Dave Grisez / Special to The Antarctic Sun

The chow line in the mess tent at McMurdo Station in the summer of 1955-56. A permanent building was built for the kitchen that summer, allowing the men to eat free from the wind and cold.

1978 cont.

Aug. 22: Fire destroys McMurdo Chapel of the Snows.

1979

Dr. Michele Raney becomes first wintering female at Pole.

1981

Dec. 1: Malfunctioning electric toilet causes major fire at McMurdo vehicle repair shop.

1985

Polar Duke replaces the *Hero*.

1986

109th Air National Guard makes first Antarctic deployment to McMurdo.

1988

First tourists arrive at Pole in Twin Otters from Patriot Hills.

1992

Nathaniel B. Palmer research vessel joins the program.

Phone calls to the States possible from McMurdo. Previously, people could make calls from Scott Base, patched through New Zealand to the States.

1996

Last routine mid-winter McMurdo airdrop takes place.

1997

First ATM is installed at McMurdo.

Sea ice causes problems, takes a life

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breaker, the *Glacier*, was the first ship to pull into McMurdo Sound, arriving on Dec. 18, 1955.

First summer

"It's beautiful, but you never saw so much nothing."

That's Patrick "Rediron" McCormick's stock answer when people ask what Antarctica was like.

McCormick earned his nickname after spending many hours doing the thankless job of nailing corrugated steel sheets onto the frames of the Quonset Hut buildings. He hit his thumb and index finger often enough so they resembled "a swollen glob of hamburger." The other guys began calling him Rediron — and still do — after the metal channels where the nails went, which were painted red.

All the buildings at McMurdo were pre-fabricated structures. The men lived in "Tent City" while the buildings were being assembled.

McCormick, who recently wrote an account of his time on the Ice at his family's request, remembers the cooks preparing their first meal in the mess building instead of a tent in February, allowing the men to eat shielded from the wind and cold.

"All of the food stores were canned, dehydrated or frozen, absolutely nothing fresh but the cooks were industrious and creative and managed to keep most of us well nourished and happy," wrote McCormick, now 70 and living in Rhode Island. Of all the advancements that he's heard about at McMurdo in the last 50 years, he said he's most struck by how much the kitchen and food supply has improved.

After many weeks of hard work, Grisez said the men were treated to their first movie. About three minutes in, the sound went out. Chaplain John Condit got up and said he'd seen the film and would narrate for the disappointed crowd. A few minutes later, a young cook stood up and said he'd seen the movie, too, and would take over the dialogue. It became a much bawdier film after that, Grisez said.

The sea ice caused problems for the men. Sixty-five kilometers of it kept the ships far from the spot on Ross Island where they wanted to build the station. The ice breakers did their best, but for a while it seemed like the station would have to be built farther north at Cape Evans. Finally, the *Glacier* was able to get within about 15 kilometers of Hut Point, where Scott's 1902 Discovery hut stands, and the station was built on its current site.

The ice also claimed lives. Six men died at McMurdo during those first 14 months. The first was Richard Williams, who was driving a D-8 tractor across the sea ice when it fell into a crack. The doors were wired open, but Williams couldn't escape.



Courtesy of Dave Grisez / Special to *The Antarctic Sun*



Elaine Hood / *The Antarctic Sun*

Above, Dave Grisez, a Navy machinery repairman, stands next to a D-8 Caterpillar tractor in 1956. Grisez said the assignment in Antarctica was better than being stuck on a cramped ship. Like many of the men, Grisez didn't consider himself to be a pioneer by building the stations. It was just another job.

Left, Grisez, at the 50th anniversary celebration of Deep Freeze in May in Biloxi, Miss.

The base was temporarily renamed Williams Air Operating Facility. One of the station's current runways, Williams Field, still bears his name.

The long hours spent off-loading the ships and erecting buildings continued through the summer. Bowers remembers being puzzled from time to time when men or supplies from a certain project turned up missing. He eventually figured out that Chaplain Condit was pilfering parts and people to build a chapel. Bowers knew not to complain too loud, since the chaplain was well loved and the project was a morale boost to the men.

Meanwhile, the VX-6 aircraft flew across large swaths of the continent that had never before been seen. Between Jan. 3 and 14 alone, 1.3 million square kilometers of new ground were covered.

In all, 84 buildings were constructed at McMurdo. All this was geared toward the station's real purpose of establishing a 9,700-meter runway on the McMurdo Sound sea ice — a job that would happen over the winter.

The winter

The ships left McMurdo Sound in March 1956, leaving 93 men at McMurdo Station for the winter. The winter crew celebrated their impending isolation with a party. Then they got back to work.

They had to slaughter seals as food for the sled dogs, which were there to help with search and rescue operations. They repaired machinery and continued putting buildings together. Others organized the South Pole cargo to ready it for airdrops in the summer.

Men did whatever tasks were needed, often those that would normally be considered beneath their rank.

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Men build ice runway in winter

1997 cont.

Oct. 18: First issue of *The Antarctic Sun* is printed, replacing the Navy's *Antarctic Sun Times*.

1998

The *Laurence M. Gould* joins the program.

1999

The last Navy contingent at McMurdo departs when the pilots with the VXE-6 Squadron fly back to New Zealand for the last time.

2000

Construction begins on new elevated South Pole Station.

2002

C-17 airplanes begin routine flights between McMurdo and New Zealand, phasing out the C-141s

First winter residents move into new South Pole Station.

2005

Feb. 4: Last C-141 flies from McMurdo to New Zealand.

Sources: *Bill Spindler, Billy-Ace Baker, Elaine Hood, Val Carroll, "Reader's Digest: Antarctica," NSF, Robin Burns, Colin Bull, Al Sutherland, Rae Spain, Susan Lee, Alan Schoenwald, Gerald Crist.*

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"You did what you had to do," said Jim Bergstrom, who was a lieutenant in charge of setting up the airfield's ground-controlled approach equipment. He helped out in the mess tent.

The runway builders first needed to pick a spot as far south as possible so the ice would last well into the summer. The planes that had previously flown to the station were much smaller and lighter than the ones coming the following summer. Those new planes would airdrop cargo at Pole and then deliver the men to build the station. They needed a full runway.

It took more than 100,000 man hours to clear 16 kilometers of snow from the ice and then smooth out and maintain the runway, according to a *National Geographic* article from 1957. A huge floodlight on top of Observation Hill guided the men back into town during winter days spent working on the sea ice.

The men's only contact with the outside world during those eight months was occasional ham radio calls that were patched through to their families. Otherwise, they were on their own.

McCormick describes how each of the berthing huts had a small area with a table and chairs. "We used the open area to play cards, drink our beer, shoot the breeze, solve world problems and otherwise entertain ourselves."

They watched all their movies so many times that they started running them backward, just to shake things up.

Chaplain Condit organized a lot of the entertain-

ment, including a re-enactment of Grace Kelly's marriage to Prince Rainier.

"I was a bridesmaid," said Bergstrom, now a retired Navy captain living in Virginia. "I was wearing a Swedish flag on me as my gown. ... That was what we did on Saturday night — had fun."

Condit came through for the men again on June 21, mid-winter's day. He had bolts of cloth with him and fashioned gingham curtains and table cloths for the mess hall. The men dined by candlelight on spaghetti, meatballs, pizza and wine. This was followed by a movie and party, with the obligatory whiteout punch, a combination of grain alcohol and fruit juice mixed by the station's doctor, Isaac "Ike" Taylor.

Grisez wrote in his diary: "A few fights, but I had fun singing."

Many of the men suffered from a winter affliction that the group called "big eye." They'd wake up in

the middle of the night unable to sleep, wander into the mess hall and find half the station there with the same problem.

By early September, despite temperatures as low as negative 50 degrees Celsius, the men had basically completed the runway — just in time for a huge storm to blow through town and trash their work. The entire project had to be redone in a month. The men came through, and the runway was completed and ready when the ships and planes returned in October.

"They turned out to be a group of very, very talented people and very dedicated," Bowers said of the crew. "They just worked relentlessly."

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"They just worked relentlessly."

— *Dick Bowers, a junior lieutenant at McMurdo, of the Seabees who built the station and runway.*



Elaine Hood / Special to *The Antarctic Sun*

Above, Jim Bergstrom, a lieutenant at McMurdo, at the Operation Deep Freeze 50th anniversary celebration in Mississippi in May. Left, Chaplain John Condit organized a re-enactment of Grace Kelly's marriage to Prince Rainier. Bergstrom is the first bridesmaid on the left. Condit arranged for much of the station's entertainment.

Deep Freeze men remain close group

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Building the South Pole

The first flight of that second summer arrived on Oct. 16, 1956.

Adm. Dufek was onboard, but more importantly for the men, so were eight months of letters, care packages and hometown newspapers. McCormick remembers hearing his first Elvis Presley song, carried in on that plane.

The next day, disaster struck when a plane caught a wing in the snow and crashed. Three men died instantly and a fourth died in the sick bay.

But the Deep Freeze planes kept flying. Pilot Gus Shinn made history on Oct. 31 by landing the first plane at the South Pole. It stayed on the ground for 49 minutes, long enough for Dufek and his men to inspect the snow surface and record some atmospheric conditions. The stage was set to start building a station at Pole.

Twenty-four men from the McMurdo wintering crew, led by Bowers, were selected to go to Pole. Al Hisey was in the group. He remembers training every couple weeks during the winter by man-hauling sleds seven or eight kilometers, setting up a radio with a hand-crank generator, eating pemmican and sleeping in a tent.

Bowers and an advance party landed at the Pole on Nov. 20, and the rest of the crew followed shortly. Hisey remembers the first day that a scheduled plane didn't arrive because a runway problem in McMurdo kept it grounded. He thought of those many nights in a tent near McMurdo.

"That's when I think we came to the realization that maybe that training might come in handy," he said.

The men had learned a lot building McMurdo, and constructing the South Pole Station turned out to be an easier task, Bowers said. Construction was finished just after New Year's, and the crew returned to McMurdo. They turned the station over to Lt. Jack Tuck, and Paul Siple, the South Pole science leader who started his Antarctic career as a Boy Scout with Byrd on his 1929 expedition.

By the time the group returned to McMurdo, a new round of ships and men who were part of Deep Freeze II were taking over operations from the original crew. For most of those 93 men, their Antarctic adventure was over.

"We went down there and had good leadership. We did what we were supposed to do and had pretty comfortable quarters. I really didn't look at it as any hardship," said Grisez, who said the bunks beat anything he would have had on a cramped ship. "Nobody was shooting at us. ... It wasn't a bad deal, really."

Reminiscing

Hisey said he arrived at McMurdo as a "kid who didn't know much about anything except how to get from bar to bar."

He echoes many of the Deep Freeze men, when he says he left Antarctica with an understanding of how to get along with people, a sense of self-sufficiency, and lifelong friendships.

"I was probably closer to that one group than any group of people I've ever gone to school with or worked with or anything," he said. He retired from the Navy 21 years later as a lieutenant.

Many of the Deep Freeze veterans have remained close and gather for reunions every two years.

"We reminisce a lot," said Hisey, now 72, and tell "lots of lies."

The group had their 50th anniversary reunion earlier this year.

"That was fun," Bergstrom said, "also sad because a lot of our compatriots were just not around. They had passed on."

He's looking forward to the next reunion in 2007, which will be the 50th anniversary of the IGY, the event that spurred the modern Antarctic program. The year will also mark the celebration of



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Photos by Elaine Hood / Special to *The Antarctic Sun*

Top, Dick Bowers, Al Hisey and Patrick "Rediron" McCormick at McMurdo Station during Deep Freeze I. The men remain close, and they all attended the Deep Freeze 50th anniversary celebration in May in Biloxi, Miss., as seen in the bottom photographs in the same order as above.

another International Polar Year.

"We were the guys who laid the foundation," Bergstrom said.

Grisez returned to McMurdo in 1995 for a chance to see what had been built on that foundation. He spent the summer working in the machine shop, this time with female co-workers, and modern communications, vehicles and buildings.

"It just blew my mind," he said.

He'd be working here again if his wife would agree to come, he said. When people ask why he wants to return, he tells them about the ice and mountains.

"There's a beauty to it," he said.

Which is how Adm. Byrd felt.

Deep Freeze I was Byrd's fifth and final trip to Antarctica. He died in 1957.

"People ask me why I keep going back to Antarctica again and again," he wrote in his 1956 *National Geographic* article. "Well, I like it there. I like the endless reaches of wind-rippled snow, the stark peaks, the awesome glaciers.

"I like the clatter of tractor trains, the whirl of helicopters, and shouts of men wrestling with vehicles and gear. ... I like the symbols of life's triumph in a lifeless land: the squawking skua gulls, the comical penguins, seals wheezing at their blowholes, the arching backs of whales.

"Most of all, I guess, I like the challenge of it, for Antarctica still plays for keeps. And I believe, as the scientists do, that the things we can learn there will have a profound effect upon the lives of us all."