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NOVEMBER 1, 1997
Every Two Weeks

The Antarctic Sun

Published during the austral summer for the United States Antarctic Program at McMurdo Station, Antarctica.

150 Days, 175 Ways
So little time, so much to do

by Lynn Simarski

175 That's the number of research projects being undertaken by researchers funded by the National Science Foundation in Antarctica this summer. With projects ranging from astronomy and astrophysics to biology and oceanography it is certain to be a season of discovery and scientific achievement for the United States Antarctic Program.

Discovery beneath the earth's ice, ocean and crust are major thrusts of the program.

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150 Days, 175 Ways *–The USAP has an impressive line-up of science projects on the agenda for this season; but with just 150 days to complete all 175 projects, time is the biggest enemy.*

It's Safe To Drink *–Drink up! Lead levels are down in McMurdo's water and Scott Perkins explains why.*

IGY +40 *–1997 is the 40th anniversary of the International Geophysical Year. Guy Guthridge looks back at events that set the stage for today's Antarctic research.*

Withdraw From Cape Roberts *–A harrowing escape from the Cape Robert's drilling rig leaves scientists and drillers happy to be alive but disappointed with a project cut short by nature.*

Updates *–Station and ship updates from across the continent and around the globe. Highlight: The R/V Nathaniel B. Palmer.*

Perspectives *–Coffee House lattes and plastic glasses of wine are scrutinized as McMurdo's buildings are reviewed for maximum utility and fuel efficiency.*

Profile *–Beyond Wanderlust: A painter by trade, a traveler by choice, Rubin Cashler takes travel and life to a new dimension.*

Antarctica's Snow White:
Not a Disney Character

photos and story by Alexander Colhoun

photo by Alexander Colhoun

Bobbing contentedly in frigid Antarctic waters, Snow White, a Weddell Seal, peers at Dr. Lee Fuiman. Snow White's foraging strategies will be studied using a highly sophisticated recording device attached to her back with a neoprene harness.

Racing through dimly lit waters under eight feet of sea ice, Snow White dives to the ocean floor in search of prey. Insulated in two inches of fat, her torpedo-like torso zips through the icy waters without so much as a shiver.

This Snow White is no Walt Disney creation.

She is a Leptonychotes weddellii, or Weddell seal, and it is the study of her foraging techniques that Dr. Randal Davis, a marine biologist from Texas A&M University, and his team have come to study.

"This feat is analogous to a lion or other large terrestrial predator holding its breath while it locates, pursues and captures prey," explains Davis.

Like the seal's hunt for food, however, Davis' project has not been easy.

Last week's raging storm, complete with 60 knot winds, was just one in a series of challenges thrown in Davis' path. For the last month, Davis and his team have attempted to isolate a Weddell seal in a sea ice hole —a thirty year old strategy used to observe seals in their natural environment. Surrounded by miles of ice in every direction, the seal is free to dive but must always return to the hole. Powerful in its simplicity, the theory is not foolproof. The first two seals Davis put in the hole made cunning escapes.

"It looked like they were navigating off (Mount) Erebus," said Dr. Terrie Williams, a University of California Santa Cruz researcher

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150 days...

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Three major projects will drill for core samples that scientists hope will reveal clues about the Antarctic past.

In a joint U.S.-Russian-French venture, scientists will complete drilling of the world's deepest ice core this season at Russia's Vostok Station. Drilling stopped in January, 1996 at a depth of 3,350 meters. Covering more than 400,000 years of snowfall, this core spans four glacial-interglacial cycles, furnishing an archive of information on past climate history. This season drillers will complete the project, plumbing about 175 more meters of ice and stopping 50 meters above Lake Vostok so as not to contaminate the body of water sealed beneath the ice sheet.

In a major international effort the United States Antarctic Program and five other nations planned to extract two cores from the floor of the Ross Sea, placing the drill rig on sea ice off Cape Roberts, about 70 miles north of McMurdo Station.

Unfortunately, unstable ice conditions due to a major storm on the Ross Sea, stopped the drilling for this season. Although this development was disappointing, early core samples from Cape Roberts fill a gap in previously recovered sedimentary records.

The Cape Roberts Project will continue next season with hopes of collecting cores that will reach 30-100 million years back in time. Scientists believe these cores will shed light on the stability of Antarctica's ice sheets during this time.

During the three-year project, a joint venture between the United States, New Zealand, the United Kingdom, Australia, Germany, and Italy, will analyze the cores at McMurdo Station as they emerge, with a preliminary report available at the field season's end.

In yet another drilling project, a 1,000-meter core will be extracted from West Antarctica's Siple Dome, a mound of ice that rests between two fast-flowing ice streams. These streams drain the West Antarctic ice sheet and are critical to its stability.

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Editor: Alexander Colhoun

Publisher: Valerie Carroll, ASA.

Contributions are welcome. Contact The Sun at sun_news.asa@asa.com. In McMurdo, visit our office in Building 155 or dial 2407.

Web address: http://www.asa.org

Scientists believe West Antarctica's ice may be the most vulnerable to melting, thereby raising global sea levels. Current changes in the ice sheet could be on-going responses to the end of the last ice age, pointing to rapid melting, or they may only be local effects. Study of the annual layers of ice from Siple will yield answers to these questions and should ultimately improve predictions of climate change.

Improved understanding of climate models will also come from another project, but this one will be sea-bourne. The growth and shrinkage of the sea ice around Antarctica may be the greatest seasonal event on Earth. Scientists aboard the Nathaniel B. Palmer, NSF's ice-breaking research ship, will compare ice and snow on the surface with how they appear in satellite images. Actual observations of ice on the surface help to validate computer models of climate by making simulations of sea ice more accurate.

While sea ice and ice caps are studied, other scientists will turn their attentions to the heavens above. Antarctica's summer weather provides a stable ride for instruments tethered beneath research balloons. These cost-effective monitors sail miles above Antarctica, providing a cheaper way to get scientific experiments into space. This season a spectrometer will float for 10 days around the continent, tracking gamma rays emitted by neutron stars, black holes and other features in the galaxy.

Balloons soaring above will rise through the ozone, more than half of which disappears each spring. This ozone hole permits the sun's ultraviolet-B (UV-B) radiation to penetrate the earth's surface and the sea.

Scientists will study how UV-B affects the embryos and larvae of three key invertebrates living in shallow waters off the U.S. Palmer Station on the Antarctic Peninsula.

While Palmer scientists study shallow waters, scientists at the South Pole will be looking a bit deeper. The Antarctic Muon and Neutrino Detector Array (AMANDA) is a telescope buried in the ice cap at the South Pole. AMANDA looks downward into the earth for telltale traces of neutrinos.

Leading the nascent field of neutrino astronomy, AMANDA studies the ghostly subatomic particles emitted from such sources in space as supernova remnants, pulsars, neutron stars, or active galactic nucleii. The neutrinos pass right through the North Pole, on through the earth, and occasionally strike AMANDA's detectors.

In addition, scientists will install a new telescope at South Pole called VIPER, which will observe cosmic background radiation left over from the big bang.

Other major changes are afoot at the South Pole. In early December, NSF will formally begin constructing a new station at the South Pole. During the first phase of construction a new garage and shop, fuel storage system, and power plant will be built. The new Atmospheric Research Observatory will be dedicated in January, replacing the overcrowded and aging Clean Air Facility. The ARO will offer twice the space of its predecessor for research on climate, ozone, ultraviolet light, and other atmospheric studies.

These are just a sampling of the projects that will be undertaken this season. But with an all-too-brief summer season of 150 days to get their work done, scientists in Antarctica surely have their hands full.

For summaries of all field projects of the U.S. Antarctic Program during the 1997-98 season, request publication NSF 97-167 from pubs@nsf.gov or call 301-947-2722. This document is also on the NSF Web site at www.nsf.gov. ✹

Snow Jobs by Ben Mann

"Oh come on, how hard can it be? Turn left at the third glacier, head past the flags..."

Sea Swell Sidelines Cape Roberts Project

photo by Alexander Colhoun

Cape Robert's scientists were rewarded with their first glimpses at core samples last week. Little did they know their entire project was in jeopardy as a major storm descended on Cape Roberts and the Ross Sea, breaking up ice and leaving the drilling rig and its crew in a precarious situation.

In the end it was a mere thirty millimeters of sea swell beneath the ice that brought the Cape Roberts project to its knees. It doesn't sound like much. End to end the standard door key is twice that long; but sixteen kilometers off the coast of Antarctica, 30 millimeters of movement feels like a trampoline bounce.

The same storm that pummeled McMurdo and Black Island —stripping a Jamesway structure away with it— raced out over Cape Roberts and into the Ross Sea, creating sea swells that worked their way back under the ice.

At 3 a.m. last Friday morning the call came in to project manager and native New Zealander, Jim Cowie's office. The rig was struggling. With each swell the drilling bit lifted off the core, allowing the massive engines to whine in high gear. As the swell decreased the drill bit lowered and found purchase with the core, grinding the engine to a near halt.

The sea swells, at times lifting the ice 60 millimeters, set Cowie's team into action and the crew was quickly evacuated to the Cape Roberts base camp. An aerial reconnaissance of the area after the storm revealed a shocking sight.

"We were in the air and looking westward when lo and behold, suddenly we saw huge open water cracks, just one kilometer away from the rig," said Jim Cowie. "Right then I knew we had a major failure of the fast ice."

These fresh sea ice cracks were just the beginning. From the air Cowie noted massive water surges over the ice that were beginning to refreeze, creating thousands of pounds of extra weight on the ice.

Twenty-four hours later the entire drilling rig had been moved 25 kilometers back to base camp and safety. In the process not a single person was injured. The only loss was the sea-riser system, which sits at the bottom of the sea.

Yet this story could easily have taken a different line. With millions of dollars, six nations and untold prestige on the line, the pressure to continue operations might have been overwhelming were it not for stringent guidelines established months earlier.

"The rules were set and they lived by them," said Steve Dunbar, McMurdo's search and rescue team leader. In this case, living by the rules probably saved lives. "It was a perilous situation," said Jim Cowie, who is certain the right choice was made.

Despite the early withdraw of the rig, scientists can still point to significant achievements. According to Scott Borg, the National Science Foundation science representative in Antarctica, nearly 150 meters of core, some of which has been dated at 17 to 22 million years old, was recovered from below the ocean. Some of these sediments fill a gap in current records and will be important in the overall picture of paleoenvironmental evolution.

"It's a period of time not sampled before near the big Antarctic ice sheet," said chief project scientist Peter Barrett. A team of about 50 scientists at the drill site and McMurdo Station have been pouring over the rock since first recovered on October 17th.

Project leaders had hoped to drill a second hole closer to shore to reach rocks expected to be in the 30-70 million year old range. But after a four-hour meeting at the site on Sunday it was decided this was not feasible due to the condition of the sea ice platform.

Peter Barrett said the project team had worked exceptionally hard to establish the camp through bitter weather, to recover rock from a difficult hole, and then to evacuate the drill site at short notice.

"We have made some significant finds, proven that the technology works in this environment, and built operational and science teams that put us in good stead for next year," said Barrett. Another hole is planned to be drilled in October 1998.

Back at Cape Roberts, after the rig had been safely moved, a feeling of despondency overcame the team. "There was a real air of sadness that we couldn't pull it off," said Jim Cowie. "But our contingency plans worked extremely well, it was an act of nature that got us."

For the most part, however, Cowie was short on pessimism. "There's unfinished business here," he said. "It's as simple as that."

The Cape Roberts Project, 75 miles north of McMurdo Station, involves funding and science collaboration from the United States, Italy, New Zealand, Germany, Britain and Australia. It is managed by Antarctica New Zealand. It aims to determine ancient climactic conditions to support research into predicting the effects on the ice sheet of any future climate changes. ✹

It's safe to drink:
Lead levels Down in McMurdo

by Scott Perkins

It's 6:30 a.m. as you head to the bathroom to brush your teeth. Forcing your eyes open you slowly focus on a sign taped to the sink with silver duct tape: Please Do Not Use. Too early to ask profound questions, you diligently move to the next sink. For that choice, ASA's environmental engineering department, thanks you.

The first sink you chose is part of an experiment. The water in these pipes is being tested for lead. This is an on-going project to understand McMurdo Station's water/lead situation and to decrease any lead levels found.

In a new test implemented by the Environmental Protection Agency, samples of water that sit in pipes for eight to 12 hours –representing a worst case– are tested for lead content. This test was conducted at McMurdo in 1994. Results showed lead was leaching from the lead solder used to connect the pipes during construction many years ago.

Additionally, NSF requested testing to determine how quickly lead levels would drop while the water was running. Tests showed lead levels decrease well below safe levels within 30 seconds of flushing.

Recommendations to flush pipes for 30 to 60 seconds were made to the McMurdo community. This flushing would ensure the water would be safe for even those most susceptible to lead poisoning: females in their first trimester of pregnancy.

"The risk to 99% of the population here is negligible," said Scott Perkins. "The only susceptible person would be a pregnant female. Every once and a while we get that person, and we have to protect her too."

Changes last year in the water treatment process resulted in a 50 percent reduction in lead levels. This was a significant improvement over past years.

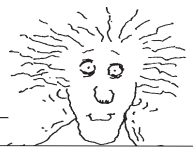
To improve the situation even more, a scale model of the water plant was built and a number of chemical tests were performed to determine how to decrease the water's tendency to pick up lead. Results showed that an increase in calcium hardness, alkalinity and pH in the water plant were needed to minimize the uptake of lead throughout the system.

To accomplish the necessary changes on a large scale, the water treatment process had to be optimized and modified. These modifications were implemented on a part-time basis during WINFLY for testing purposes. They proved to be quite successful and will be implemented on a full-time basis when the necessary supplies arrive on the M/V Greenwave in February.

In the meantime, testing will continue, so please heed the signs posted on various sinks and don't run the taps if they are taped off.

What you should know:

- Flushing the taps is the best way to ensure safe drinking water in buildings 107, 137, 138, 142, 144, 155 (not including the galley), 160, 166, 182, 188, 201, 204, 207 and 208. Flushing is not necessary at any other buildings on station.
- Adults normally pass 97 percent of all lead ingested.
- Lead levels are set by the EPA to protect growing children and pregnant women.
- Lead levels would have to be much higher to pose a health threat to adult males and non-pregnant females.
- For more information contact Scott Perkins, Building 192. Extension 2386. ✹



McMurdo Recreation

Gallaghers - Country Music Night on Thursdays (Bring music).
Tue-Fri 7-11pm, Sat 7pm -1am, Sun 4-10pm.
Day Bar open on Tue & Thu 8am -11am and Sat 8-12am
Southern Exposure - Bingo & Karaoke on alternating Weds.
Tue-Fri 7-11pm, Sat 7pm -1am, Sun 4-10pm.
Coffee House -watch the scroll for Acoustic Nights.
Tue-Fri 7-10pm, Sat 7-12pm, Sun 3-9pm.
Bowling Alley - Sat 7-9pm, Sun 2-5pm.
Ceramics - Thu & Fri 6:30-8:30pm, Sun 2-5pm.
Gear Rental - Skis, Bikes, CDs Musical Instruments, climbing shoes. Call 2443.

Did You Know...

by Brenda Joyce

The South Polar Skua is found farther south than any other bird in the world? Some have been observed by explorers on the ice sheet, and even at the geographic South Pole. The skua has a strong homing instinct. Five nesting birds were tagged, flown to the South Pole and released. Ten days later one of these birds had returned to its nest after an 800 mile flight over a barren, featureless terrain.

McMurdo has a winter garden?
Salads were served every lunch and dinner from March through September from this oasis. The winter population of 155 people missed only 5 days of home-grown "freshies". A crop of 680 lbs. of lettuce, 70 lbs. of tomatoes, 51 lbs. of cucumbers, 62 lbs. of peppers and 25 lbs. of herbs were grown without soil. A nutrient-rich solution produced a constant harvest in our hydroponic greenhouse.

Antarctica maps were drawn three centuries before its "discovery" in 1818. Piri Reis' map, painted on a gazelle skin in 1531, was rediscovered in the Old Imperial Palace's library in Constantinople in 1929. Reis, in his own writing on the chart, noted he was not the originator of the map, but had copied from ancient sources. The Oronteus Finacus map of 1531 was included in Mercator's Atlas of 1569. In 1737, Philipp Buache published a map showing dimensions beneath the ice not verified until 1958, when a comprehensive seismic survey was completed during the International Geophysical Year.

Paul Siple first came to Antarctica as a Boy Scout? Winner of a nationwide Scouting contest, he was 19 years old during Byrd's 1928 expedition. His skills with dog handling persuaded Byrd to allow him to join the winter team. Trained in taxidermy, Siple skinned seals on the mess table, providing meat to the cook for dinner, and sent the pelts to the American Museum of Natural History. Losing his first flock, he kept 14 Emperors and 6 Adélies alive for American zoos on an experimental diet of seal meat and blubber.

Weddell Seals

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and one of four principal investigators on the project. "They took a bead on the volcano and were gone."

While this 'seal reconnaissance' concept is only theory, Williams and the team chose to err on the side of caution and erected a plywood blind around the third isolation hole to prevent this kind of seal reconnoitering.

The effort appears to have paid off. Snow White, the third seal, now calls a five foot diameter hole in the Ross Sea her home. But this success is only the very beginning of this project, scheduled to be carried out over three years.

Back in McMurdo, Dr. Davis' Crary Lab room looks more like an electronics pawn shop than a biology laboratory. Boxes, wires, disassembled computers and gadgets of every imaginable size are spread out in disarray as he and his team organize gear headed for the ice hole.

Past seal researchers, including Davis' own mentor, Dr. Gerry Kooyman, have attached time depth recorders –simple but accurate instruments that etched scores on gold leaf plates– to their subjects.

In contrast, Davis' team has an array of electronics gear that would make James Bond envious, including a plastic-coated stomach pill that will relay messages to the Weddell-board computer as she jets through the water.

In addition, recognizing America's call to science: do more for less, Shane Collier, the computer systems leader of the project, is using a 100 megahertz laptop PC and internet tools anyone with a modem can download in minutes.

But the primary research tool is a technological marvel that reaches beyond gadgetry, linking a range of cutting edge technologies from computer enhanced 3D imaging to high speed computer graphics. Known as a Video Data Acquisition Platform, or VDAP III, the black, football sized electronic apparatus looks like a modified VCR in disguise.

Hovering above it as he speaks, Collier secures the last fittings on the high-tech devise before its first Antarctic test run. "We'll be using JAVA tools, a basic internet program, to navigate through our virtual ocean."

Not that there isn't plenty of ocean around him. What Collier is talking about is the 3D rendition of the ocean he will create to trace Snow White's path as she plunges, accelerates and glides through the ocean depths in search of food.

In fact, the VDAP III can monitor sensory information on several fronts with both an audio and a video channel. "Our model will show the seal's depth, bearing and speed," said Collier. Combining this data with the seal's EKG rhythms, stroke frequencies, audio information, and running video, the team will have volumes of information to combine into what will be the first natural view of a Weddell seal's hunting behavior.

photo by Alexander Colhoun

According to Dr, Randy Davis, Snow White appears to have adjusted will to her new surroundings. "She's fishing and hunting," said Davis. "These are hallmarks she is settling into the hole."

"We're getting information no one has ever seen before," explains Dr. Lee Fuiman, a University of Texas-Austin biologist. "Using a 3D picture we'll see if the seal has a hunting plan." Other questions Fuiman hopes to answer include how the seals locate prey, how often they miss, and how long they handle the prey they do catch.

In addition to the depth, bearing and speed recordings, the team will know when the animal has successfully captured prey. Remember the plastic coated pill? When a cold fish is caught by the seal and enters the stomach the pill sends a signal of decreased temperature to the computer.

But why have these researchers chosen the Weddell seal? One answer is deceptively simple: they are docile. With few predators under water and none above the ice, Weddells are people friendly and will tolerate the interaction required to change the VDAP III –attached on her back to a neoprene vest that slips around her girth– on a regular basis.

Thus far, Snow White appears to be adapting well to her new environment, an adjustment that begs the question: how does the seal feel about all this research?

"We've tried to make the device hydro-dynamic and neutrally buoyant," said Davis, who with Williams tested previous VDAPs on Navy-trained dolphins. "Today she seems relaxed. She is not frightened when we stand by the hole" said an encouraged Davis. "She's fishing and hunting. These are all hallmarks that she is settling into the hole."

In the weeks to come a small field camp will be established around the site, and a Jamesway will be erected over the hole. To collect gas intake and exhalation information, yet another plastic cover, much like a skylight, will be placed over the hole.

The research will continue day and night through mid-December, or until the sea ice begins to weaken. Meanwhile, Davis hopes Snow White will grow more and more accustomed to her new environment and the scientists.

As she looked up into Williams' camera on a sunny afternoon not long ago, Snow White seemed to be doing just fine. Releasing a long, hollow breath of warm moist air, she covered the camera lens with a fine salt water spray. Then, with a wink and a long pull of dry Antarctic air, Snow White plunged into the depths of the Ross sea. ✹

Don't miss
Observations
From the OB Tube
on page 12.

UPDATES

from Antarctic stations and ships

FOCUS:

Research Vessel

Nathaniel B. Palmer

by Otis Tavlin, Marine Tech

This month has seen a lot of action for the Nathaniel B. Palmer. We had an easy crossing of the Drake passage on our way to set up the Copa Cabana camp on King George Island –an observation hut staffed with three scientists who will remain five months to study three different species of penguins, and to drop off the new crew at Palmer Station.

The Copa landing went off without a hitch thanks to the excellent planning of marine projects coordinator Al Hickey and human dynamo John Evans, who makes the Energizer Bunny look geriatric.

We continued to Palmer and had to plow our way through solid ice all the way into the bay. To facilitate landing and loading operations, Capt. Joe Borkowski and crew spun the NBP around and used the ship like a giant Waring blender to blast a passage through the ice.

The inlet looked like one huge margarita.

Our return passage was uneventful, except during departure loading operations when gale force winds flung a piano-size crate off a flat bed truck and into the water between the ship and the dock. Thanks to an alert response from Chief Mate Lee Crowe and the Edison Chouest offshore crew, as well as from our own marine techs, disaster was averted. The crate was saved with no damage to equipment or crew.

Science projects and data-gathering during our passage to New Zealand are going smoothly, thanks to the team efforts of Chief Scientist Nancy Bowers and computer techs Rich Iszard-Crowley and Paul Huckins.

On loan from Columbia University, head SeaBeam technician Suzanne O'Hara is also serving as resident cook, aerobics instructor, and den mother. She sometimes answers to "Julie McCoy, cruise director." Give that girl a clipboard and a whistle and watch her go!

While weather was a little rough the first ten days with winds up to forty knots and waves up to 18 feet, midpoint conditions have abated somewhat and we've enjoyed calm winds, smooth seas and sunny skies have allowed us to get a lot more work done and spend quite a bit of time outside. Marine Tech Herb Baker even found time to put out his trolling lure, but so far the only thing he's pulled in has been a pair of men's underwear.

...the NBP arrived in Port Lyttleton on 28 October and is scheduled to depart on 5 November.

South Pole Station

by David Fischer

South Pole's winter crew is anxiously awaiting arrival of the incoming summer crew. Flights have been delayed due to extremely cold temperatures for this time of year. All will be busily preparing for main station opening next week, finishing snowclearing around summer camp and completing final preparations of the skiway. Within the next few weeks South Pole will be up to its maximum population of 183 for the season.

Palmer Station

by Ron Nugent

Storms that brought high winds, snow, and rain allowed only one day of boating operations. After the weather eased, brash ice blew in that will take another major storm to break up. Elephant and Crabeater Seals, Giant and Snow Petrels, Blue Eyed Cormorants and Adelie and Gentoo penguins can be seen.

Due to the delayed delivery of the R/V LAURENCE M. GOULD the station will receive limited incoming cargo and will not send cargo until February. Passengers and limited cargo will arrive on three tour ships and a NOAA chartered vessel.

McMurdo Station

by Stan Wisneski

McMurdo was slammed with a three day storm on 22 to 24 October, that caused visibility to deteriorate to the point that you could not see two feet in front of you. McMurdo was placed in Condition One (all movement is restricted) for approximately 24 hours. South Pole personnel have arrived in McMurdo and are hoping to get to South Pole on 29 October. Siple Dome personnel are heading out 28 October to open the camp. McMurdo population continues to climb towards the 1,000-person level and will continue to rise for a few more weeks. It's getting very cozy.

Christchurch, NZ

by Brian Stone

Coinciding with the NBP port call, the Lyttleton Harbor Board has scheduled an "Open Day" for 2 November, in which the NBP will be prominently featured. Recent communications from Moscow indicate ten personnel from the Russian Antarctic Program will arrive in Christchurch on 11 November. As in the past, the Russians have asked the NSF to procure food and other supplies to be shipped to McMurdo to support the opening of Vostok Station in November.

Research Ships

by Jon Alberts

As part of the Joint Global Ocean Flux Study (JGOFS), the R/V ROGER REVELLE arrived in Lyttelton, New Zealand on 14 October 1997 to test and set up equipment from 16 universities represented by 34 scientists for the Southern Ocean SURVEY I cruise. The ship is operated by the Scripps Institution of Oceanography in La Jolla, California and will be involved in four cruises as part of the JGOFS program. It will be focusing on the area known as the Antarctic Polar Frontal Zone at the ice edge while the R/V NATHANIEL B. PALMER will continue with the JGOFS work further south.

Field Support

by Jill Ferris

Two field camps officially opened this week. R. Spain, M. Mellon and B. Miller, three well-seasoned field camp construction personnel, went to the Dry Valleys for several days to open the Taylor Valley camps and were out for almost a week due to bad weather. Lake Hoare camp opened for the season and P. Adkins is back for another season as the camp supervisor. The Siple Dome camp staff and science construction crew were put into the deep field on 28 October. Reports from the field indicated that four Jamesways left up for the winter held up well and that heat was on shortly after the crew arrived. K. Killilea will supervise a crew of ten ASA folks to support operations at Siple Dome.

ASA, Denver

by Ron Koger

ASA launched its second Internal Panel. In addition to looking for ways to reduce costs, the panel will work to identify areas for performance improvement and also areas that irritate and have an adverse impact on employee morale. Linda Harber is the chairperson of the ten-person panel. Anyone can send email suggestions to *INTERNAL PANEL (listed under DENVER_GROUPS). Harber will be the only person retrieving these messages.

Several employees including the project director and deputy project director completed two days of training on Critical Incident Stress Management, an approach for the reduction and control of harmful aspects of stress in emergency services. ASA intends to develop a CISM pro-

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IGY+40

a five-part series by Guy G. Guthridge
Manager, Antarctic Information
National Science Foundation, Polar Programs

Forty years ago 60,000 scientists from 66 nations took part in what has been called the greatest peacetime activity in history –the International Geophysical Year, from July 1, 1957 to December 31, 1958. One of the IGY's most prominent achievements was the opening of Antarctica to modern science. In this first segment of a five-part series, Guy G. Guthridge looks back at events that set the stage for today's antarctic research.

From Montparnasse to McMurdo

An international conference in 1955 near the summit of Montparnasse in Paris, France, set in motion a sequence of actions that determined the scientific and political fate of an entire continent. The meeting assembled scientists from 11 nations planning IGY research in Antarctica, and their job was to decide where each nation would place its research facilities.

A dramatic event was selection of the nation to build and maintain a research station at the geographic South Pole. Vladimir Beloussov of the Soviet Union created a sensation by saying his country would place a station near the Pole. Laurence M. Gould, the U.S. delegate, had made it known the United States had a similar intention.

Sensing an opportunity to retain the prestigious location for Western researchers, the French chair, Georges Laclavère, pointed out a vast cavity in IGY coverage in East Antarctica. Behind-the-scenes maneuvers are said to have occurred. When Beloussov next took the floor he said, "We do not insist on the geographic pole." The Soviet Union took responsibility for the geomagnetic pole in East Antarctica; Vostok Station remains active there today.

The United States committed itself to the geographic South Pole.

The work planned for Antarctica was unprecedented. Before the IGY less than half of Antarctica had even been seen, and as late as 1955 only 179 people wintered at 20 small coastal stations operated by four nations. For the IGY, 912 people would winter at 48 stations of 11 nations, and the summer population would reach 5,000 –more than today.

Besides the South Pole, the Montparnasse meeting awarded five other research locations to the United States. Four were to be coastal stations –Ellsworth on the Filchner Ice Shelf, Wilkes below Australia, Hallett (to be operated with New Zealand) in Victoria Land on the Ross Sea, Little America V at Kainan Bay on the Ross Ice Shelf. The fifth was to be inland –Byrd, in the center of West Antarctica.

In America the National Academy of Sciences planned the science while; financial support was through the National Science Foundation. Unlike today's central management at NSF, Congress directly funded the U.S. Navy to provide all logistics and support.

Rear Admiral George J. Dufek, Commander of the Naval Support Force Antarctica, was confident he had enough ships and icebreakers to establish the coastal stations using fairly normal sea-based procedures.

Byrd Station and Amundsen-Scott at 90°S, the South Pole, were another story: they needed special approaches.

Dufek realized he would have to establish logistics and supply depots for the two inland stations before the close of the 1955-1956 austral summer. He decided one of the planned research stations, Little America V, would be the staging base for Byrd. A logistics center to be called Naval Air Facility McMurdo, on the southern tip of Ross Island, would be established as the coastal base for South Pole.

The icebreaker *USS Glacier* arrived in McMurdo Sound on 18 December 1955, just five months after the planners at Montparnasse concluded their meeting. The arrival signaled the beginning of U.S. readiness for the IGY and commenced a continuous American presence on Hut Point Peninsula that continues today. ✹

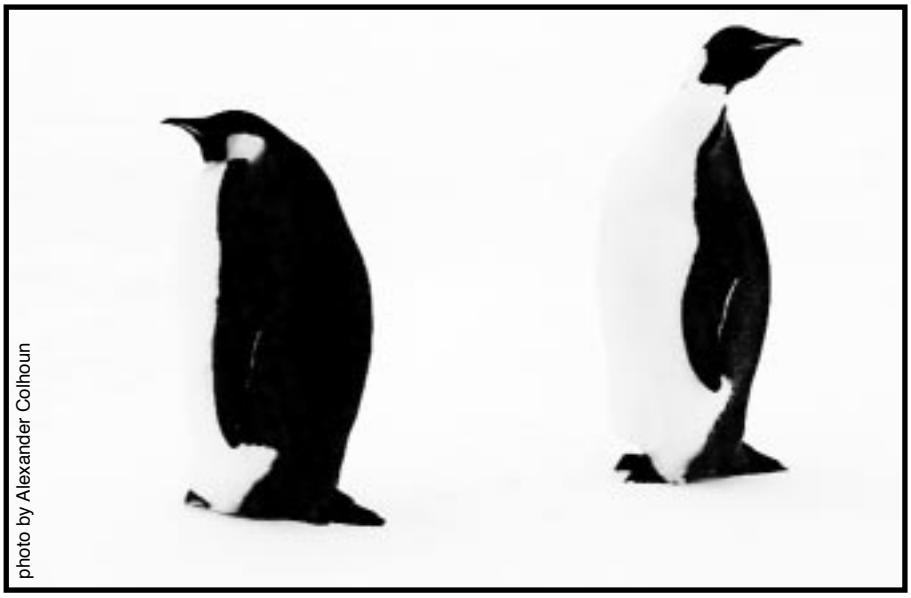


photo by Alexander Colhoun

The two juvenile Emperor Penguins made their way around McMurdo last week. Starting with a morning inspection of the sea ice training class, they proceeded to the ice runway for an afternoon review of operations there before disappearing across the ice.

The Crud

by Anne Vick

It starts with a sore throat, aches, a runny nose and maybe even a headache. Together these symptoms make you feel like a candidate for a Sudafed commercial. As one surviving mechanic describes it, "Your body feels like it's got an overfilled crankcase with 90 weight oil at 40 below."

Everyone in McMurdo knows these crud symptoms and at some point in his/her ice career has probably caught it, but what exactly is The Crud?

According to Dr. Gerald Katz, a physician advisor for ASA, The Crud is an upper respiratory infection that usually lasts seven to fourteen days. Symptoms can resemble those of mild influenza.

Although the exact infectious agent is unknown, it presents itself as an upper respiratory illness and is most likely spread through respiratory transmission, such as sneezing and coughing, which launches viral or bacterial particles into the air. As for avoiding these unpleasant particles, there's not much that can be done in such close quarters short of surgical masks and isolation.

So if you're one of the 15-25 percent of the McMurdo population who has succumbed to the crud, the question becomes: how is it treated? For the most part, over-the-counter medications such as Ibuprofen, Tylenol, decongestants, and cough syrups, which are available at both Aurora Storealis and the medical clinic, will do the job. Occasionally, a prescription for antibiotics is necessary. It may also involve a day or two in bed.

If last year's records and this year's experiences are any indication, Dr. Katz predicts that cases of The Crud will decrease one month after mainbody arrival. So if you have yet to feel like the overfilled crank case, you may be one of the lucky who avoided the Crud –at least this season. ✹

Photo by Dave Martin

Frosty Wooldridge battled the McMurdo crud for five days. "It's the worst cold I've had in 20 years," said Wooldridge. "I feel like a used rubber tire."

Ask Aunt Arctica

. . . advice for staying healthy on the Ice

Aunt Arctica is written by a clinical psychotherapist from Washington state with eight years experience working in individual counseling, specializing in cognitive and transpersonal psychologies for personal growth. Please write with any questions you may have. You need not include your name. All queries will be confidential.

Question: I've just arrived at McMurdo. I'm here for the first time and have contracted to work for the summer. I was thrilled at first to be here, but I'm finding that this excitement is waning, as I am in a job that keeps me indoors all day. This does not fit the image I had of seeing Antarctica. I'm wondering what I can do to adjust to being here and keep myself feeling in good spirits. It's a long haul between now and re-deployment, and I'm already missing home.

Psychologist Albert Ellis once said that experience is the only thing we are guaranteed in life. Remember that *your* perspective of your experience is everything.

All of us came here as part of some individual journey, maybe with expectations that may not fit the reality you are now experiencing. It is important to acknowledge the reasons you came here and to keep those goals in mind.

Meanwhile, it is equally important to let your experience happen. Allow yourself the flexibility of exploring what other levels of meaning you can bring to this for yourself.

Whether you're wintering, or here for the summer season, it is important to develop some strategies for taking good care of yourself while you're here.

Begin with acknowledging the enormous transition you've just made. Some of us live more transient lifestyles than others, but all of us have dismantled some major pieces of our lives to be here. With that, we said goodbye to the friends and family back home that form our individual support systems.

These relationships keep us feeling cared for and belonging to something larger than ourselves.That sense of belonging is vital and fundamental to the well being of all human beings.

Most of us are striving for a happy and meaningful life, whether here or at home. Balance is needed to achieve and maintain such a life. Balance means that you avoid building a life around one person or one thing, no matter how wonderful it may seem.

Sigmund Freud considered work, play, and love to be the three major parts of life. They are the building blocks for creating a balanced, full life. If we ignore any one of them, we ask too much of the other two. It is like sitting on a stool with only two legs - you may find yourself on the floor.

Here's my list of ways to keep life balanced. Add or delete, until you find what works for you. The formula is Mind, Body, and Spirit.

1) Exercise. Not only does it ensure you will remain healthy and enable your immune system to fight the dreaded crud, it significantly reduces the opportunity for depression. Get outside as often as possible. Even if it's for a short walk, there are a variety of places to explore nearby.
2) Learn something new. You've got a lot of time on your hands to explore some new ways of expressing yourself. Find a tutor for music, language, art, or science. Attend the science lectures presented by NSF.
3) Build community. Periodically ask yourself this question: "In what way can I contribute to the creating of this community?" Then imagine that the experience is over: what would you want the people you've been here with to say about their experience of you?
4) Meditate or make time to relax and get quiet each day. Journal these thoughts, they will help you stay in touch with your emotional and spiritual reasons for being here.
5) Remind yourself frequently of the enormity of this experience. It is human nature to normalize even the most remarkable event. Few people will ever know the remarkable beauty of this vast continent. ✹

Your Turn–

Your questions and comments are welcome here. We'll publish responses in each issue. Contact us at Sun_News.asa@asa.org.

by Susie Brown

During the 1997-98 year, McMurdo residents will consume approximately 6,900 cases of beer –sending 165,600 empty bottles or cans back to the U.S. Would a local microbrewery be more economical?

"If it could be done safely and with all regulations fulfilled, we could present it to NSF" said ASA Resident Manager Stan Wisneski. The microbrewery enterprise was researched in the early 90s, and issues such as location, staffing, sanitary conditions and inspections, materials costs, water supply, and waste were analyzed. From what Wisneski could recollect, the main problem with the project was the amount of work involved –it would require a full-time person just to oversee the bottling or kegging process.

In addition, the brine and water residuals from beer production would need to be shipped out of Antarctica because they are not part of its natural environment. These additional food waste containers may exceed fleet capacity, resulting in a much larger shipping expense than that incurred in shipping bottles and cans (not to mention the loss of a potential aluminum recycling credit of close to $5000). Sterilization of glassware would create even more waste water, and the sanitation necessary to the brewing itself would create liabilities should anyone get sick from the beer.

Finally, funding for the microbrewery project would have to be obtained through NSF, just as science projects are presented.

Stan Wisneski, McMurdo Area Manager, ASA

How do I sign up for a boondoggle lottery?

The process for winning a trip off the station is the same as it has been for the last two years. Each work center will provide its employee names to ASA management, including the number of seasons each person has spent on the ice and whether or not he or she has been to the South Pole. Each name is entered into a spreadsheet, weighted by each season completed. A computer then randomly picks approximately 30 ASA names for each South Pole boondoggle as well as 10-20 alternates –none of whom have made the same trip before. The number of South Pole trips (there were three last year), as well as any Coast Guard or snowmobile trips, depends on schedules, availability of resources, and weather and ice conditions. The trips start in late November.

Stan Wisneski
McMurdo Area Manager, ASA

Navy News...

Provided by Chief Jacqueline Kiel

Pay Change Takes Effect In February

The Navy will switch to the Defense Joint Military Pay System (DJMS) beginning January 1998, a move that is expected to improve pay delivery and reliability.

The change, which will begin with the 15 February 1998 payday, will standardize all military pay systems. This will mean better and more responsive pay support for joint missions in the field.

To enhance pay delivery, pay will be computed on a daily basis instead of the current method of twice a month. This will make payments, such as pay to date and advance pay, much quicker, easier and more accurate to calculate.

The new system will also change the excess leave policy.

According to Petty Officer Jim Foster, a personnelman for Antarctic Development Squadron 6, any time excess leave is taken, the money to cover that day or those days will be deducted from the member's next paycheck.

Foster pointed out that being "in the hole" is different from excess leave. So long as the member has enough leave in his or her balance to the end of obligated service, no pay will be taken. In addition, a negative leave balance will no longer be carried over for an extension or reenlistment.

Because of the new excess leave policy, military members need to be mindful of how much leave they have and how much they have used.

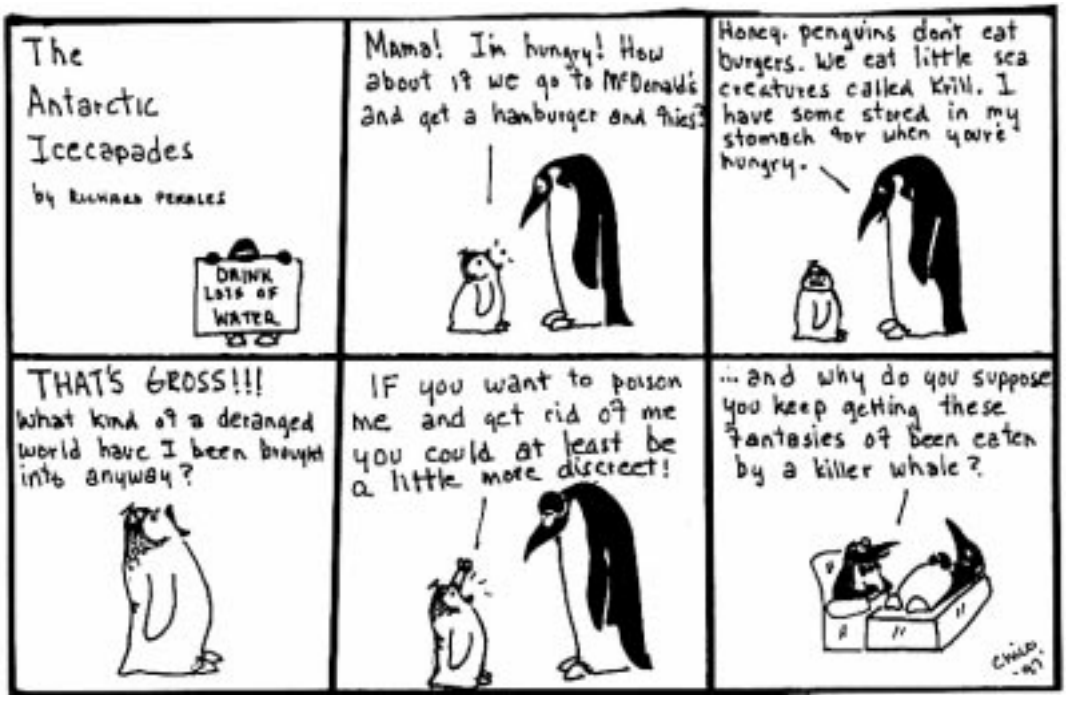
Personnel currently in an excess leave status will not be affected. Also, Sailors can reenlist or extend until 10 January 1998, with excess leave and not be affected by the changes.

The split pay option will now only be available to forces afloat. This option allows members to have part of their pay disbursed to a disbursing office controlled ATM on board ship, thus giving them access to money without having to write checks.

A final change will be in the way members are notified of their pay. Direct deposit slips will no longer be used. Instead, personnel will receive a Leave and Earning Statement (LES) at the beginning of the month, reflecting last month's payments which will include the first of the month payment amount.

Finally, don't be surprised to receive a net pay advisory (NPA). Similar to the LES, the NPA is simply the mid-month pay notification.

Further information on DJMS can be obtained from NAVADMIN 236/97.



WEATHER...

More Misguided Storms

by George Howard, MAC Weather
McMurdo Station, Antarctica

Two weeks ago I described the storm of October 11th, thinking it would be the worst of the spring and summer. Little did I know we were in for another beating.

Between October 21st and 24th, five storms struck McMurdo Station in rapid succession. Steered by unusually oriented upper-level winds, the storms screamed westward across the Ross Ice Shelf at speeds as high as a mile a minute!

Taking a bead directly on Ross Island, the most powerful winds struck on Thursday the 23rd, reaching 78 miles per hour in town and 112 at Black Island! Visibility was less than 100 feet in blowing snow, warranted setting Condition One during summer business hours in McMurdo for the first time in recent memory.

As the last of the storms waned, cooler than normal temperatures rebounded toward normal. Town residents also enjoyed clearing skies and diminished winds.

Now that the storms have passed, how long do you have to wait for those tanning rays? Answer: not long. Here's a look ahead at your spring and summer.

photo by Alexander Colhoun

Snow swirled and danced through McMurdo last week, powered by gusts of wind that maxed out at 78 miles per hour in town and 112 piles per hour at Black Island. "If this happened in the US it would be a national or international story," said Rick Pierce of the storm. "But I think it's great!"

McMurdo: Average High (deg F)	McMurdo: Average Low (deg F)		South Pole: Average High (deg F)	South Pole: Average Low (deg F)
+4	-9	October	-54	-64
+20	+9	November	-33	-39
+30	+21	December	-15	-20
+31	+22	January	-14	-13
+21	+11	February	-35	-44

Research Vessel Laurence M. Gould

A new 230-foot ice-strengthened research vessel, chartered by Antarctic Support Associates for the National Science Foundation, was dedicated October 9th at North American Shipbuilding Inc. in La Rose, Louisiana. After a 22-day transit in November from Louisiana to Punta Arenas, Chile, the ship will support research and the transport of passengers and cargo, particularly between South America and Palmer Station, Antarctica. It replaces R/V Polar Duke, which served from 1984 to 1997.

Obituary

Meredith Frederic "Pete" Burrill, who in 1943 established the organization that became today's Advisory Committee on Antarctic Names, died 5 October at the age of 94.

His leadership in the early development of Antarctic names policies and principles was instrumental in establishing international uniformity in the geographic nomenclature of the Antarctic. Mount Burrill in Victoria Land, Antarctica, is named in his honor.

A world geographer, Dr. Burrill was executive secretary of the Board on Geographic Names, a Federal body that standardizes names for use by the U.S. government and others. He directed a staff of 175 linguists, geographers, and cartographers who identified more than 2 million place names.

A native of Maine, he was a geography graduate of Bates College and received master's and doctoral degrees from Clark University. Over the years he became one of the world's leading authorities in toponymy, the geographic study of place names.

The 1947 publication Geographical Names of Antarctica, which describes 1,400 place names, was his. It showed the way to the 1995 Geographic Names of the Antarctic, Second Edition (NSF 95-157) with 12,710 names—Antarctica's most complete gazetteer.

Updates

...cont. from page 6

gram prior to the 1998-99 season.

Approximately 600 mainbody deployments were completed by the end of October. Purchasing for the month saw the highest level for this timeframe since our contract began in 1990. Orders processed during the month totaled 1,034 with a dollar value of $8,980,517. The increase was due to annual resupply vessel orders and South Pole projects.

National Science Foundation,

Office of Polar Programs

by Altie Metcalf

An appropriations bill that contains $70-million for rebuilding South Pole Station passed the Senate October 9 after being passed by the house the previous day. The Senate's action cleared Congressional action on the bill, which establishes fiscal-1998 funding for the National Science Foundation, and the President signed it into law on October 27. The money is over half the $128-million required for the eight-year project to modernize South Pole facilities.

The design of the new station evolved this past year and now reflects recommendations made by the U.S. Antarctic Program External Panel chaired by Norman Augustine (former Chairman of the Board and CEO of Lockheed Martin Corporation). The 11-person panel visited McMurdo and South Pole last season. ✹

photo by Alexander Colhoun

A new TERA SCAN satellite weather imagery system was installed in McMurdo last week. "It'll give weather forecasters and pilots better weather imagery between here and Lyttelton [New Zealand]," said Jim Johnson, assistant data systems manager in McMurdo.

The Antarctic Sun

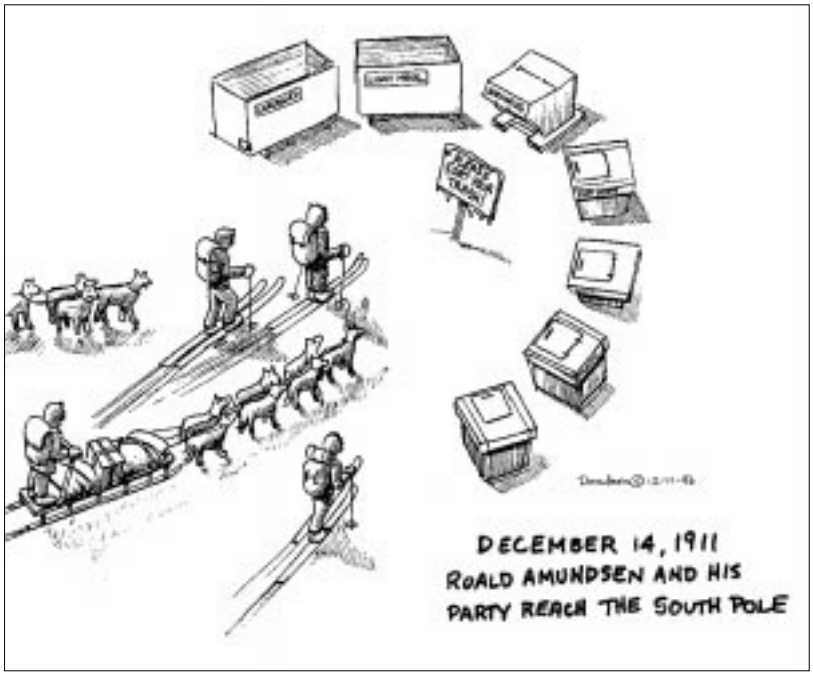
This paper is available on the web at: www.asa.org –tell your family and friends!

Contributions and Ideas are Welcome

Email *to* Sun_News.asa@asa.com

In McMurdo, visit our office in Building 155 or dial 2407.

After everything is said and done, more is said than done. —unknown



Observations from the OB Tube

by Dave Breitenfeld

photo by Alexander Colhoun

Carla Carlson, a Minnesota native, clambers out of the sub-ice observation tube. "It's pretty cool," said Carlson. "it's like some kind of winter wonderland down there."

Silence. Solitude. Darkness broken only by the light seeping in through the six small windows of this cold, damp, tiny chamber, hardly large enough to turn around in.

Breath turns to vapor and fogs the thick ice-framed panes of glass that face out into a frigid, alien environment seen in shades of blue as if illuminated by a cobalt sun. Vague non-identifiable shapes can be seen in the distance, while closer, grotesque creatures unseen on earth float slowly by.

Suddenly, a racket reverberates through the steel walls of this inverted tower, and the interior is flooded with light. Overhead a portal opens revealing the silouhette of a hooded figure backlit by a grey sky. A voice echoes from above, "Hey! You gonna spend all day down there, or what? It's cold out here!"

The under-ice observation chamber, or "obtube" as it is often referred to, was a popular attraction for workers at Mc Murdo Station this season. The steady stream of visitors peaked at nearly seventy in one day.

Built by Alpine Geophysical Associates, Inc., the obtube was first used in the 1963-64 season by Dr. Carlton Ray. Since then the tube has been used to study all aspects of marine life, especially seals.

One study, conducted in the 1970s by Donald Siniff, attempted to correlate the behavior of seals with the sounds they make, in an effort to discern whether there is any pattern of vocabulary. This project used the obtube in conjunction with a hydrophone, or underwater microphone, to simultaneously record seals vocalizations while observing their actions.

Using the observation tube to assist in scientific data gathering has definite advantages. "You can only spend half an hour to forty minutes diving, but you can spend hours down in the obtube," explained Rob Robbins, the scientific diving coordinator at McMurdo.

From the chamber one can look up and see brine columns –hollow cones of ice formed by super-cooled water, the result of salt being discharged from the sea water as it forms into ice crystals.

Among the marine life spotted from the chamber were large jellyfish of the species desmonema, that have tentacles trailing up to twenty feet from their mushroom-shaped bodies.

As these translucent creatures moved through the water, their bodies, or bells, pulsate, doubling in diameter. Also seen in abundance were tiny pteropods that resemble miniscule water angels as they paddled about, and small fish that came right up to the windows as if posing for underwater tourists. A few obtube vistors were lucky enough to watch divers as they collected specimens from the sea floor for research, while others watched seals swim lazily by.

Last week the observation chamber was closed to the public to move it six miles west of McMurdo for Weddell seal studies conducted by Dr. Randal Davis. ✹

from The Polar Record, May 1965

The OB tube chamber for use under sea ice, manufactured by Alpine Geophysical Associates, Inc., is seen here arriving in McMurdo in 1963.

Aurora Storealis

Hours

Sunday	11-2		
Monday	closed		
Tuesday	7-8:30	11:30-1	5:30-7:30
Wednesday	11:30-1	5:30-7:30	
Thursday	7-8:30	11:30-1	5:30-7:30
Friday	11:30-1	5:30-7:30	
Saturday	4:30-8:30	5:30-7:30	

TV and Radio Line-up

CH 2	American Forces Network, Pacific: sitcoms, soaps, drama, game shows and movies
CH 4	Weather with FM93.9 audio
CH 6	Information Scroll with FM 104.5 audio
CH 7	Transportation Updates with NPR and Sports audio
CH 9	Movie Channel
CH 11	News and Sports, CNN, ABC, NBC, CBS
CH 13	The Spectrum Channel, a variety of programs

Detailed schedules are available outside the TV station in B-155.

-- EDITORIALS --

Our **"Sick Bay No More"** story received several letters of correspondence. We don't really know what caused all the racket. Navy and civilian hospitals are different. That's a fact. But neither one is better than the other. We regret that, due to space constraints, we cannot print letters in their entirety. We welcome your thoughts at The Antarctic Sun.

The statement, "One of the biggest changes will be the availability of the doctor who will see any patient that wants his input." implies that our Navy doctors (usually three) either weren't available for the whole community or they were less than receptive. Not true, Sandy. We in McMurdo have had the luxury of some of the very finest Naval physicians available; talented, caring professionals, who just happened to be trained to operate within the confines of Naval Medical regulations. They all truly cared about McMurdo's community and provided care without exception... but within the confines of regulation.

Tom Streeter
Master At Arms First Class

The style of care, rather than the quality, has arguably been the main issue of civilians treated at McMurdo Clinic. Whereas military systems often utilize physician extenders as primary care providers, the civilian sector is more familiar with a system that involves direct physician-patient contact. Currently, Navy and civilian medical personnel are working together to blend our strengths to provide an improved medical service. The result will be a continued vigilance toward Emergency Services, augmented by a more relaxed atmosphere within McMurdo clinic.

Gerald Katz, M.D.
Physician Advisor, ASA

Perspectives

by Susie Brown

Coffee House Considered

photo by Alexander Colhoun

John Harty, left, and Tom Rebold relaxed in the Coffee House last week. "The coffee house is cool," said Rebold. "It's a hip place to unwind with your dudes."

With old time sledges and wooden skis hanging on the walls, the McMurdo Coffee House feels more like a Swiss ski lodge than a Jamesway set up on the coast of Antarctica. Unfortunately, while the Coffee House may have a sentimental ambiance, it is also an inefficient relic that is expensive to operate and maintain.

As a result, like many other buildings in McMurdo, the future of the Coffee House is in limbo. "We are considering closing any building that is underutilized," said Al Martin, NSF Station Manager.

The Coffee House has two furnaces and a bathroom to maintain –that's not cheap when compared to newer, more fuel efficient buildings. The NSF is obligated to manage McMurdo in the most cost effective way possible, and heating an underused building does not fit the bill.

While the concept of a Coffee House is very popular among residents here, the statistics tell another story. The Recreation Department has been monitoring numbers in the bars since last summer, and they estimate an average of 5-8 people at the Coffee House on a typical evening.

In comparison, *Southern Exposure*, the other non-smoking bar at the station, caters to 10-15 people most nights of the week. Although the two establishments have a different atmosphere, one option that will be presented to the NSF is to move Coffee House amenities to Southern Exposure. "There's a certain practicality involved in combining the two," Al Martin said.

At the same time, some McMurdo residents feel strongly about retaining the identity of the Coffee House. "It's beneficial to the physiological health of everyone here to have an alternative gathering place to the typical bar," said Kathy Keys, a second-season ASA employee. "The Coffee House provides that with its quaint, ski-lodge atmosphere. You don't want crowds."

On a recent tour of the Coffee House Al Martin pointed out ripped canvas, insulation sprouting from the roof and tears in the siding of the Jamesway –the section of the Coffee House that contains the pool and foosball tables. Another option that Martin will recommend to the NSF is simply to remove this section of the Coffee House.

In an effort to reduce our footprints on the ice, Martin said several other buildings in McMurdo will be torn down over the next few years, with hopes of reusing the buildings in other ways.

This is nothing new in McMurdo.

Reusing buildings has become a trademark of improved Antarctic efficiency. The Chapel was built from two old buildings (T5 modules) that were torn down and reutilized. Parts of Building 87 have already come down and the plan is to reassemble its infrastructure somewhere else in town.

"People don't generally like change, but we have to look at the long-term," said Martin. "There is often an initial uproar when change occurs, but people eventually adjust." For the time being, however, the fate of lattes and plastic glasses of French wine served at the Coffee House remain unchanged: they will be enjoyed. ✹

Profile

A handlebar moustache seldom gets in the way of Ruben's painting work, but you'll never see him drinking beer from a can. "I usually only drink beer from a bottle," says Cashler. "It's just easier with this beard."

Beyond Wanderlust: Ruben Cashler

story and photos by Alexander Colhoun

Deep in the heart of the Rockies, just below Mount Yale, along the banks of the Middle Cottonwood River lies a small kerosene lit wood cabin. On summer nights when the full moon shines through the Aspen trees you're likely to find Ruben Cashler resting silently on the front porch, watching the evening pass by.

Cashler has plenty to ponder. "I've basically worked and traveled like a gypsy family," explained Cashler. "I'm pretty much committed to travel, that's what I do."

For six months each year Cashler hits the road. Since the 1970s his travels have taken him from Mozambique to Mongolia, from refugee camps in Pakistan to Aztec ruins in Mexico and Honduras. "I'm addicted to the newness and freshness of travel. Each time I get off the plane the encounter is fresh, like coming to Antarctica." In fact, landing on Antarctic sea ice three weeks ago in a C-141 Airforce plane was small change on Cashler's travel list.

Covered from head to foot in a shawl and Afghan sandals, Cashler recalls sneaking into the village of Darra, 100 miles outside Kabul, Pakistan, just months before the Mujahudeen offensive.

"We got through the check points in vans, covered by some of the locals who pretended like they were sleeping on top of us," said Cashler. Later, for a mere fifty bucks, Cashler and his friend were offered a chance to fire AK-47s and RPGs –rocket grenades. "We just weren't into that," said Cashler.

Which isn't a surprise. Cashler was a Vietnam war protester. "We united people behind a common cause," Cashler explained. "We had a fulcrum, a wedge of power and we closed the campus. It was a colorful period."

"It's challenging living here," said Cashler while relaxing in the paint shop. "It's just a dot on a hillside in the middle of a massive landscape... but I love it."

But Cashler is far from the radical hippie he could easily have become.

Gregarious and quick with a smile, his nature is at once disarming –even the staunchest conservative would appreciate his easy-going manner.

As Cashler stopped to recollect wartime experiences his hands moved gently across his forehead with a well-versed, natural rhythm as he wrapped long brown hair back into a pony tail, disclosing a freckle-dappled face that somehow belies his 46 years. A closer look revealed strands of gray running through the thicket of a mustache pouring over his chin. A wiry face, a sharp nose and black dancing pupils all lend to the aura of a man who has chosen to defy age with a youthful lifestyle.

Not that he hasn't packed experience into those years. "I've never married but I've been twice divorced," said Cashler, also the father of an adopted Guatemalan daughter, Micol. Now 21, Micol lives just down the road from her father in Buena Vista, Colorado. "All streams of love follow the same trail," said Cashler of his experience as a father. "I help Micol sort out her life and she helps me sort out mine."

A lifetime spent as a painter may have something to do with Cashler's thoughtful nature. Working four to six months a year painting the exteriors of condominiums in Breckenridge, Copper and Vail, Colorado, Cashler spends the rest of his time on the road.

Proud of the fact he was breaking trails in Guatemala long before the advent of Lonely Planet guidebooks and backpacker's guesthouses, Cashler recalls the good old days. "Back then everything was word of mouth. You could camp in the jungles and in the Mayan ruins."

Cashler's been traveling so long, he seems to have moved beyond wanderlust to a nether-realm of travel living. His curiosity pulled him all the way to Antarctica to work as a painting foreman in McMurdo. Here, Cashler revels in the frontier atmosphere and the challenges of living in a tightly knit community. "Everyone here has to be a team player," said Cashler. "We're all motivated to do our best and have a good attitude. I like that."

Cashler also likes looking out on the Antarctic landscape, and when he does, he sees more than sea ice. He sees a world waiting to be explored. Even so, you can be certain Cashler will retreat soon enough to an even quieter locale –his cabin in the woods. It is a way of life, and by the looks on Cashler's face, it's serving him well. ✹