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The Antarctic Sun

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Conducting a movement

Preparing to move McMurdo's runway seven miles from the sea ice to Williams Field, Frank Thompson aligns a Challenger trailer as Brad Johnson pushes it into place with a Cat. The annual switch occurs when the ice gets too soft for wheeled planes to land. The two dozen or so buildings that service the airfields are pulled by heavy equipment across the sea ice convoy-style. Photo by Josh Landis.

QUOTE OF THE WEEK

"It's ironic, drinking warm beer in Antarctica."

- McMurdoite on someone who couldn't wait for her beer to chill

INSIDE

Ears to the Ice

By Josh Landis
Sun staff

Sridhar Anandakrishnan, right, and Don Voigt set an insulated instrument box into the snow near Siple Dome. The seismometer rests on a block of wood that transmits vibrations from the snow and earth below. Photo by Jerry Bowling.

On top of thousands of feet of ice, they are listening. In the heart of the Dry Valleys, they are listening. A network of super-sensitive seismometers placed at different points in Antarctica is helping scientists map the earth below the Ice in greater detail than ever before, and a new wave of them is about to go in.

see Ears on page 4

News In BRIEF

PHI wins contract rebid

The National Science Foundation has awarded a new contract to Petroleum Helicopters Incorporated to provide helicopter support to the United States Antarctic Program.

PHI has held the contract since the 1996-1997 season, its first on the Ice. The operation employs four aircraft, seven pilots and five mechanics.

The Lafayette, La., company has a fleet of more than 300 helicopters and has operated in more than 40 countries, ranging from emergency medical services in the U.S. to various uses in South America, Africa and the former Soviet Union.

"I'm exceedingly pleased that those who made the selection had the wisdom to pick PHI for another five years," said National Science Foundation station representative Dave Bresnahan.

The contract consists of a two-year initial term with three one-year options for renewal. Changes planned for the future include swapping one of the three A-Star helicopters for another Bell 212, bringing the total fleet here to two A-Stars and two Bells. The Bell models are more versatile and carry more weight.

"It's a very warm feeling to be welcomed back," said Jack Hawkins, head of PHI operations on the Ice.

- Josh Landis

National Geographic to feature Antarctica

A writer and a photographer for National Geographic magazine are visiting Antarctica to produce a feature story for 2001 about research on the continent.

Freelance photographer Maria Stenzel and writer Roff Martin Smith are focusing on developments in science since the magazine's last comprehensive coverage of the continent in April 1990.

Smith has written stories and a book for National Geographic. This is his first story for the magazine about Antarctica, but it's his second visit to the continent. In 1994-1995, Smith spent a summer at Australia's Mawson base.

Stenzel photographed Antarctica for National Geographic articles in 1996 and 1998.

The feature Stenzel and Smith are working on will focus on how Antarctica provides a unique view of Earth and of the universe and on how scientific work here offers insight into the past and future, National Geographic editor Lynn Addison said.

"Our readers are tremendously interested in Antarctica," she said.

Smith and Stenzel are scheduled to leave in late December and return in January to travel by yacht along the peninsula and to King George Island.

- Beth Minneci

Mardi Gras Saturday

Summer celebration at McMurdo Station

Mardi Gras always falls on the Tuesday before Ash Wednesday. This year, Mardi Gras falls on February 27, but in the time-honored tradition of changing holidays to fit Antarctica's schedule, Mardi Gras in McMurdo is this week. The two-day celebration kicks off 8 p.m. Friday at Gallagher's with the cutting of the King's Cake. Later that night, the Mystick Krewe of McMurdo will select its King and Queen.

On Saturday, a ball will follow a parade, which will begin at the Chapel of the Snows at 8:00 p.m.

For more information, contact the recreation department.

No one knows the exact origin of Mardi Gras, although it is often attributed to the Romans whose pagan orgies were held during the spring season. The French in New Orleans had private masked balls until the Spaniards took over in 1718, when parties and street dancing were banned. It wasn't until 1827, when Americans took control of the city that masked parties were restored.

In 1857, a group of men formed a secret society called the Mystick Krewe of Comus to protect the future of Mardi Gras. The Krewe of Rex was the first to anoint its own King. The Krewe of Zulu was formed by the blacks of New Orleans to mock the snobbishness of the Krewe of Rex. Zulu's parade would meander from barroom to barroom in junky cars and wagons. If you wanted to see the parade, you had to find the bars that sponsored the floats as they were obligated to pass those bars.

The throwing of trinkets, or "throws", to the crowds was started in the early 1870's and is a time-honored tradition. Other popular throws include bikini underwear, long pearl beads and stuffed animals.

Other traditions include the Mardi Gras Balls and the King's Cake.

Attendance at the older, more aristocratic balls is by invitation only. They are formal affairs for the Krewe. The identities of the King and Queen are a closely guarded secret until the night of the ball. In the States, Mardi Gras season begins on January 6th, the day the three Wise Men visited the Christ Child. As a symbol of this holy day, a tiny plastic baby is placed inside each "King Cake." The cake is decorated in the three Mardi Gras colors to resemble a jeweled crown to honor the Wise Men. The official Mardi Gras colors are purple, representing justice, green, which represents faith and gold, representing power. The Krewe of McMurdo will use the finding of the baby to determine this year's King and Queen.

One event that's become popular in recent years is the baring of women's breasts in order to "earn" Mardi Gras beads. The earning of beads in this manner is not a true Mardi Gras tradition and doesn't take place during any of the official Mardi Gras events. After the parades, throngs of drunken tourists invade the French Quarter and it is there that women have this dubious opportunity. It would be worth noting, as McMurdo's Mardi Gras celebration nears, that, traditionally, beads are given to parade spectators of both genders as a reward for their smiles and enthusiasm and that flashing is never a requirement. ■

- Robert Lafaye and Robin Krumm

web sites of the week

News from the Arctic

- http://www.arcticculture.about.com/culture/arcticculture/cs/newspapers/
  A portal for Arctic newspapers from Alaska to Iceland to Russia.
- http://www.polarnews.com/
  A gathering point for news about the polar regions, with links to Arctic news sources.
- http://www.nunatsiaq.com/
  The newspaper of Nunavut, a new Canadian territory that was created in 1999. It's also the place where former Antarctic Sun editor Aaron Spitzer now works.

The *Sun's* new staffer

Kristan "Stan" Hutchison Sabbatini, left her cat, husband, and a job at Alaska's *Juneau Empire* to become a janitor at McMurdo. After three weeks cleaning toilets, she's turning in a mop for a pen again. As of Monday, she will become a member of the *Sun* staff. Stan has a master's degree in political science from Bard College in New York and 10 years with newspapers in Washington State, Alaska, and Washington DC.

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Opinions and conclusions expressed in the Sun are not necessarily those of the Foundation.

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Contributions are welcome. Contact the Sun at AntSun@polar.org. In McMurdo, visit our office in Building 155 or dial 2407.

Web address: www.polar.org/antsun

Last Sunday's 5K Turkey Trot – top finishers and their times

	Women 39 and younger	Women 40 and older	Men 39 and younger	Men 40 and older
1	Lisa Farber 24:51	Karen Joyce 30:55	Steffan Freeman 19:41	Jeff Rein 23:25
2	Stan Sabbatini 26:30	Peggy Malloy 35:24	Hiram Henry 19:43	Tracy Prouty 28:34
3	Meg Flanigan 29:30	Gloria Oswald 37:44	Steve Kupecz 21:29	John McGoff 29:13
4	Sara Smolenack 31:27	Ann Dal Vera 40:48	John Hoppe 22:15	Joe Baros 45:59
5	Carrie Block 31:59	Nancy Ferrel 50:49	Benny McLean 22:53	

Calling all readers...

The Sun's *Annual creative writing festival*

Poetry (Maximum length 30 lines.)
Fiction (Maximum length 500 words.)
Finish this story... (Maximum length 500 words. Scenario available at the Sun office.)

Entry deadline: 6 p.m. Dec. 24
Enter via e-mail to AntSun@polar.org, or at the Sun office in McMurdo's Building 155.

the week in weather

around Antarctica

McMurdo Station
High: 38F/4C
Low: 14F/-10C
Windchill: -15F/-26C
Wind: 37 mph/59 kph

Palmer Station (Saturday)
High: 40F/5C
Low: 25F/4C
Avg. temp: 32F/0C
Wind: 26 mph/43 kph

South Pole Station
High: -12F/-25C
Low: -26F/-32C
Avg. temp: -19F/-28C
Wind: 28 mph/45 kph

around the world

Saturday's numbers

Kabul, Afghanistan
High: 55F/13C
Low: 20F/-7C

San Jose, Costa Rica
High: 85F/29C
Low: 64F/18C

Tallinn, Estonia
High: 42F/6C
Low: 38F/3C

Gulfport, Miss.
High: 66F/19C
Low: 51F/11C

Hollywood, Calif.
High: 65F/18C
Low: 56F/13C

Juneau, Alaska
High: 26F/-3C
Low: 17F/-8C

Ears From page 1

"This is the instrument that measures the Earth's movement," said Sridhar Anandakrishnan, a geophysicist with the University of Alabama. He pulled a dull, gray cylinder out of a snug, foam carrying case. It looked more like a water meter than a vibration detector capable of being set off by a person's voice. But inside the seismometer, delicate plates respond to the slightest motion, and a nearby computer hard drive records it all.

Thousands of independent seismometers around the world are constantly listening for the sounds of tremors and shakes that ripple through the core of the earth. The changing characteristics of these sounds over the distances they travel allow scientists to reconstruct the properties of the Earth's mantle and crust, or the regions closest to the surface.

"We're trying to get a high-resolution picture, rather than broad brush strokes."

- Sridhar Anandakrishnan, geophysicist

Antarctica is a unique outpost, with little known about the layer of earth right beneath the ice. Anandakrishnan and fellow researcher Doug Wiens are on a mission to listen as closely as they can. There are already a number of seismometers on top of the East Antarctic Ice Sheet, at four Automatic Geophysical Observatories. Six instruments have also been installed on the West Antarctic Ice Sheet. They plan to set up eight more this year, including spots in the Dry Valleys and at Arrival Heights above McMurdo Station.

That's just the start. By the end of next season, they hope to have 52 seismometers working around the continent. That will be a grand total from two separate science events, but all the data will be pooled and analyzed for signs of the Earth's changing surface under the ice.

Anandakrishnan says the idea behind the technology is a lot like the medical tool, Magnetic Resonance Imaging (MRI), on a global scale. As different energy waves travel through the crust and the mantle, they are affected by the properties of the matter they pass through. By examining the time it takes for a wave from an earthquake in Asia to reach Antarctica, for example, geophysicists can determine the forms and densities the wave traversed.

The more listening devices, the more detailed the picture. Once all the different data are compiled, a three-dimensional picture emerges. But instead of bones and organs, as with the MRI, scientists get ideas of the rocks and magma beneath the surface

One of the puzzles they're trying to solve is how East and West Antarctica fit together geologically, how they formed and how the two parts of the continent are changing.

"They are very different beasts," said Anandakrishnan. "We want to know the form of the mantle underneath the crust."

The thousands of feet of ice the instruments rest on do not pose a problem. Researchers know the density and properties of the ice and account for it in their measurements.

Don Voigt, bottom, and Sridhar Anandakrishnan work on the wind generator at the Siple Dome site. A combination of solar and wind energy powers the equipment and keeps it warm enough to function.
Photo by Jerry Bowling.

There are two major challenges to gathering seismic data 24 hours a day, 365 days a year. They are keeping the equipment powered and keeping it warm. During the austral summer the constant supply of sunlight helps. Solar cells stay bathed in light and, combined with wind-generated power, that electricity can keep the unit running and warm. But in the winter, when solar energy is taken out of the equation, it's all dependent upon wind power. In West Antarctica the winds can be very low and the temperature very cold.

"When the temperature reaches a certain point, the system shuts down," said Anandakrishnan. The hard drives that record the vibrations can't operate and the down time is dead time for seismic data. Fortunately that doesn't happen too often, as the instruments are situated in an insulated box buried beneath the surface of the snow. If they ever do fall silent, a satellite uplink tells anyone monitoring the site what went wrong.

"The ultimate goal is to derive a picture of rock layers under the ice, and get a better view of what's there," said Anandakrishnan. "We're trying to get a high-resolution picture, rather than broad brush strokes." ■

South Pole DISPATCHES

By Tracy Sheeley
Sun contributor

■ Power plant construction, solar system studies, Friday night slushies

It's a crowded time at the Pole. Amundsen-Scott South Pole Station has reached a record population of more than 220 people, and will keep its numbers high for the rest of the season. The station's summer season began Oct. 23, with about 80 people arriving on the first flights south.

Construction

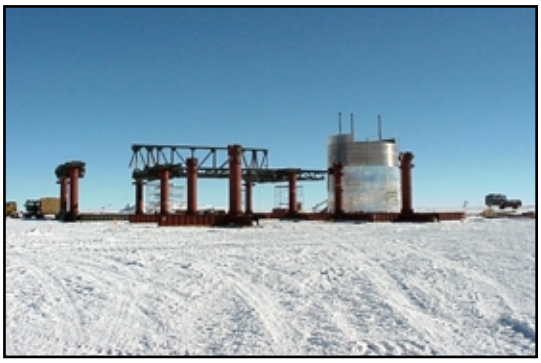
The high numbers are the result of an ambitious science and construction schedule to keep each and every one of those bodies busy through the end of the summer season, in mid-February. Workers spent the winter getting the new power plant ready to go. Work continues now, and the switch is scheduled to be flipped Jan. 17.

It is an exciting summer for construction as work has begun on the actual "pods" of the new, elevated station. The first pods will house the new food service/dining and winter berthing rooms. Columns of steel to support the structure are in place, and crews are working around the clock on this project. The continuation of the water and sewer tunnel work (1,800 feet long and 40 feet below the surface) is under way, with completion scheduled for this summer. The ground shield has also been installed around the DASI telescope to enhance the sensitivity of the instrument. As we continue to receive construction materials, a terminal for the GOES/MARISAT project will be built. The project will make use of a satellite system to vastly increase the amount of data that can travel to and from the Pole.

Poor weather conditions and cancelled flights have affected the delivery of building materials. As of this week, more than three million pounds of cargo are waiting at McMurdo Station to go south.

Science

In science news, there is a diverse collection of groups visiting this season. A group from the Cold Regions Research and Engineering Laboratory (CRREL) completed a micrometeorite collecting campaign in the South Pole Rodwell, the main source of potable water on station. The Rodwell extracts water from the plateau by creating a large cavity in the ice about 350 feet (107 meters) deep. As the water is melted and pumped out for people to use, micrometeorites that fell into the snow over the past 1,000 years fall to the bottom. CRREL developed a robotic vacuum cleaner that is lowered into the well and collects the tiny particles. Over 100,000 micrometeorites were collected in sizes up to 1 millimeter in diameter. They are fragments of asteroids and material from comets.



The future of the South Pole is beginning to take shape. Construction crews have put up the columns that will support the first pod of the new, elevated station. The silver cylinder on the right has been nicknamed "the beer can." It will connect the station to the sub-surface facilities such as the garage, power plant and cargo storage area.

Recreation

Of course, Pole residents have squeezed in some recreation as well. South Pole traditions live on, such as Friday night slushies at the Clean Air Building, made from the cleanest snow on earth and blended with a choice of mixers. Yoga sessions take place weekly. Athletic prowess (or the idea of it) has been celebrated in Sunday football and soccer games. Dart and pool tournaments are upcoming. We ate our way through Thanksgiving in marvelous style, with many on station volunteering extra hours to peel potatoes, bake pies and wash countless dishes. ■

Highway One

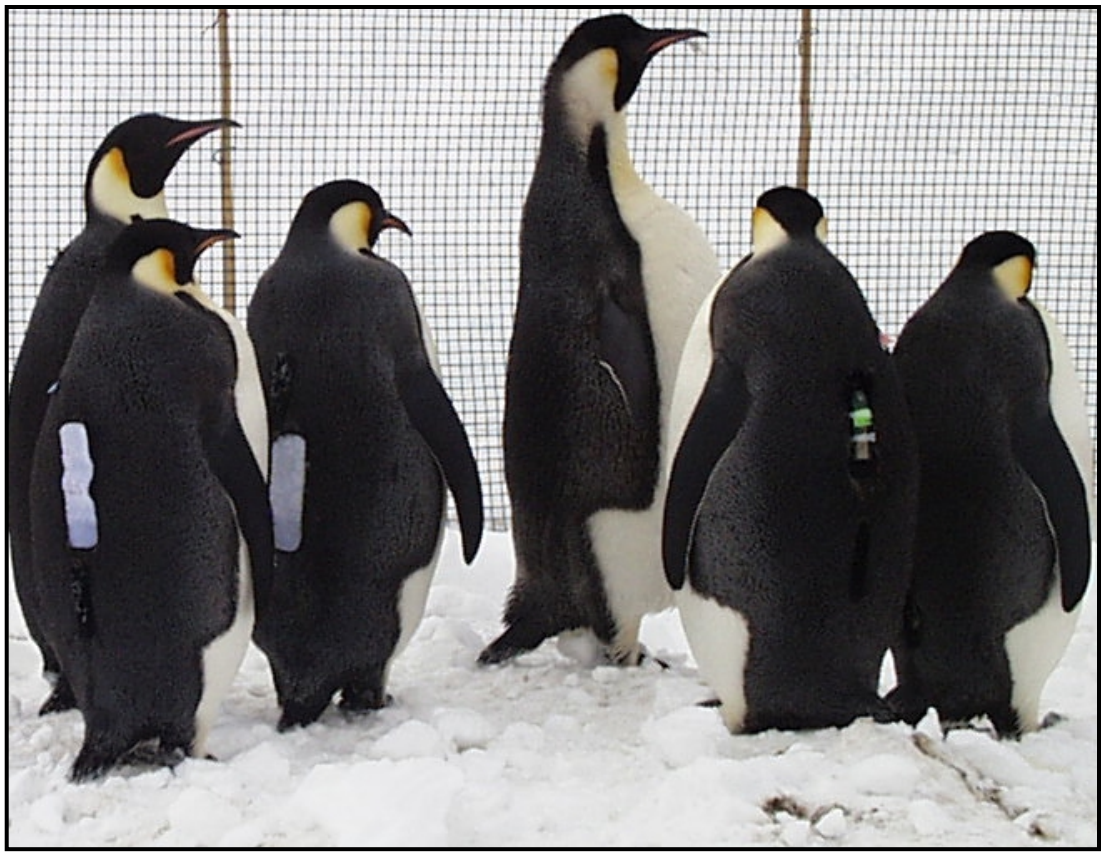
The summer season is about half over.
What do you miss about home?

"The wife, kids, neighbors and friends. Family-style living"
Zellard Lemon
boiler technician

"Privacy. I can deal with just about everything else here."
Janice Zeller
nurse administrator

"A lot of different varieties of chocolate."
Laura Hamilton
FEMC administrator

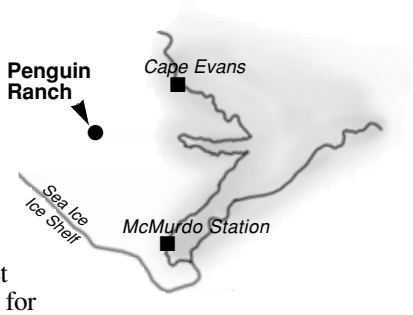
Below: Marine biologist and anesthesiologist Paul Ponganis welcomes guests to his Penguin Ranch. Photos by Beth Minneci



Above: Velcro strips glued to the penguins' feathers can carry electronic recording instruments that transmit information about their diving habits.

Welcome to THE RANCH

By Beth Minneci
Sun staff



The name conjures images of dust swirling across dry land, lassos circling overhead and black and white birds grazing behind wooden fences.

At Penguin Ranch, 20 miles off the coast of Ross Island, in the middle of McMurdo Sound, a dozen emperor penguins live behind a metal pen referred to as "the corral."

A few feet away, behind a window in a warm hut, scientists watch penguins dive through ice holes carved in the corral floor. With stopwatch, pencil and notebook in hands, the tenacious observers record the habits of penguins they've marked with colored tape.

They're looking for clues telling how the birds can dive for dizzying periods of time after taking only a single breath, and just what penguins do while under water so long.

Emperors, at up to 4 feet and weighing as much as 90 pounds, are the largest, strongest and the deepest diving of the 17 penguin species. They can dive for 22 minutes, to depths of 2,000 feet.

The average person, in contrast, can dive about 35 feet with one breath and stay under for less than a minute, said penguin researcher Paul Ponganis, who is an anesthesiologist in California when he's not studying penguins here.

At the ranch, the birds typically dive over 12-hour periods, starting early, with their activity level waning during the day. By 3 p.m. the penguins are tired and full from eating fish. The hunched birds waddle across the sea ice, flopping in and out of the water. Some lay flat where they land on the ice.

"The way they move, they remind me of Charlie Chaplain," said researcher Katherine Ponganis, laughing.

The big-bellied, flightless birds are providing piles of data as well as loads of entertainment for the academic

continued on next page

from previous page

audience behind the window.

An adoring smile resurfaces on Kathy Ponganis' face while she works. "I think they're totally charming."

To the Ponganises, the penguins' super-athletic ability is scientifically intriguing.

Though the birds appear awkward and slow on the surface, they are frisky and free underwater, smooth and direct as a launched torpedo. Their oval body shape appears to inhibit movement on their feet, but in the water, they use their wings, and move as fluidly as a bird does in the air. Penguins can swim 23 feet a second and are agile enough to turn right angles underwater.

Almost every summer since 1987 Paul Ponganis has returned to Antarctica to study penguins at the ranch. This year his chemist wife, Katherine, accompanied him.

In addition to manual record-keeping, the Ponganises have attached small electronic devices that record body temperature, heart rate and diving depth every second for up to five days. The instruments are about the size of a large Christmas bulb.

They've also harnessed tiny cameras to some of the penguins. This technology sends underwater scenes to the hut and is a new part of Ponganis' research.

The camera, named the Crittercam, weights about two pounds, yet is too big to put on birds at sea. The camera would slow down the birds in the open ocean, and make them more vulnerable to predators. The ranch is the perfect laboratory. The corral is far enough from the ice edge to ensure the birds return for air.

In the past, Ponganis had noticed that penguins gain 3 1/2 to 4 1/2 pounds in four or five dives.

"We knew they were eating, but we didn't know how," he said. An observation tube lowered 10 feet into the water next to the corral is a platform from which penguins can be seen jumping in and out of the water. But researchers weren't able to follow the penguins' feeding habits.

"The penguins would disappear into the darkness, that's it," Paul Ponganis said.

This year the Crittercam filmed penguins on the hunt, diving 100 to 175 feet, dashing back to the surface to eat fish, and then returning to the deep. Just a few feet under the surface, light shines through the ice.

"The penguins appear to be very efficient little fish catchers," Paul Ponganis said. "They have a very easy time."

The biggest penguins wear the camera, for about an hour a day. They were trained

with just the harness, then small dummy recorders. It's strange to see what looks like scuba tanks on an aquatic animal. He said the penguins don't seem to mind the Crittercam. Except for one penguin that pecked and squawked at its reflection in a lens, the penguins don't pay them attention.

"They tolerate it fine," Paul Ponganis said.

In the water penguins are vulnerable to predators, such as Orcas and leopard seals, and so primarily dive only to eat.

At the ranch the birds are safe. In the corral, the penguins lie on the ice just inches from the dive hole, unconcerned about predators. Ranch penguins are so at ease, some of them miss the ice when jumping out of the water, falling back into it. Outside the ranch, penguins will run 20 feet away from a dive hole as soon as they hop out of the water.

"In the open, if they fall back in, they're a target for a seal," he said. "Here, they've figured it out."

The penguins were caught off-guard recently when a seal popped its head through a corral dive hole. The penguins didn't immediately know that the seal was a Weddell, which won't eat a penguin.

"They just panicked," Kathy Ponganis said.

The physiological studies, the second and ongoing part of Paul Ponganis' work, are particularly interesting to him, a physician and a marine biologist.

The key to diving for long periods, he said, is to conserve oxygen or tolerate a lack of it. And penguins appear to tolerate very little oxygen.

"These penguins push themselves to levels where even a healthy person would just pass out," he said. "I'm interested in how these birds can push themselves to this limit. It could someday be relevant to human medicine."

Just before plunging into the water, the penguins stretch and take big breaths. Human swimmers and divers do that to fill the body with oxygen.

When penguins swim, their heart rates are at or below resting rates. In humans, the heart pumps faster with activity to pump blood and oxygen to muscles. Our bodies wouldn't work otherwise.

"These animals are able to do things they shouldn't be able to do. It's things like that that excite people about the physiology of diving."

The Ponganises set up camp in less than three weeks in October with birds they captured at the ice edge. On Thursday the corral was dismantled and the birds walked away. The Ponganis' peeled the Velcro off the penguins' backs and set them free. Any leftover glue will shed with the penguins' feathers in January.

Paul Ponganis will be back at the ranch next year.

"We still don't have an explanation for why they can dive as long as they can," Paul Ponganis said. ■

Photo courtesy of Dave Levenson

Left to right: A Crittercam is harnessed to an emperor penguin; penguins between dives at the ranch; Kathy Ponganis records their diving habits in a notebook.

our Antarctic week

10 *Science Lecture "Local Environmental Impacts of Science and Operations," McMurdo Station, by Andrew Klein, 8:15 p.m., galley*

11 *Slide show, "Thailand and Cambodia," by Mark Eisinger, 8 p.m., galley*

12 *Trivia or Pictionary, 8 p.m., Scott Base*

13 *Karaoke, 8 p.m., Gallaghers*

15 *Mardi Gras: King and Queen selection and cutting of the King's Cake,8 p.m., Gallagher's*

16 *Mardi Gras celebration continues with parade and ball, starting at 8 p.m.*

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COLD HARD FACTS

Emperors having chicks

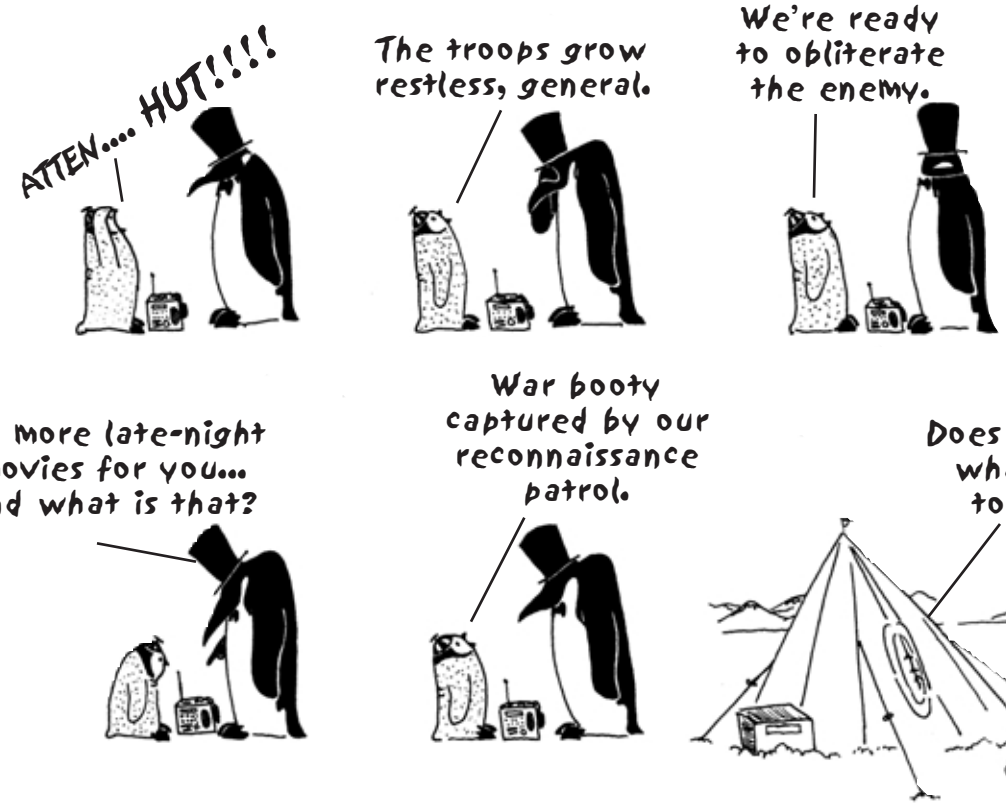
Emperor penguins are known for their unique breeding cycle and the degree to which the males help out.

The female lays a single egg at the start of winter, in May or June, then walks to eat at the sea, which could be 100 miles away. The male stays behind, balancing the egg for 65 days under its warm stomach and on top of its feet to prevent the egg from freezing. During this time the male doesn't eat.

To keep warm in temperatures as low as -70F, the male penguins huddle together tightly, moving constantly across the ice. The birds at the center of the scrum are pushed out by others from the edges in a slowly circling whirlpool. Inside the huddles, the temperature is much higher.

In mid-July, the female returns just before the chick hatches. Then it's his turn to walk to the open water to eat.

Ross Island Chronicles — By ChicO



Eric "Homer" Holm, left, and Mark “Commander” Melcon install the insulated floor of a new building at Lower Erebus Hut, about 11,500 feet in elevation. The top of Mt. Erebus spews gas and vapor in the distance. The crew of three (including Bo Baumgartner, not pictured) spent several days acclimatizing at a lower point on the volcano before starting the high-altitude construction. Photo by Josh Landis.

Power struggle

Two electricity failures hit 155 in one week

McMurdo Station’s main building, 155, suffered a power outage on Monday that took nearly 13 hours to fully restore. A key transformer in the building had failed in the early morning. The piece of equipment, dated 1965, was damaged beyond repair.

“They got their money’s worth out of it, but it was a significant failure,” said power and water plant supervisor Allen Richter. He got the call while he was in the shower and ran to the plant so quickly his wet hair froze on the way.

Because all electricity for the building had coursed through the failed piece of equipment, linemen weren’t able to restore power until they could bring another transformer online. They were able to use a temporary, outside unit, which is not a full replacement, but continues to do the job.

The outage hit 155 hardest, but it affected other locations as well. When the failure first occurred, an electrical surge tripped circuit breakers at the power plant. As a result, power to other buildings, including dorms, also went out. The loss was brief, but enough to reset a lot of electronic alarm clocks, and cause some people to oversleep.

The biggest impact of the outage took place in the dining facility, which still had to feed nearly 900 people without the aid of electricity. Emergency lights went dark after about an hour, when their batteries were drained. Cooks and dining attendants worked with meals that required less energy.

A small generator helped supply replacement lighting, and a coincidence in meal planning lessened the impact of the blackout.

“It wasn’t that big of a deal. Our menu that day happened to make it easy to make the switch,” said production cook Laura Belval. Free meals for everyone at the Burger Bar also softened the blow.

Another failure hit 155 Friday, but was unrelated. An air valve in one of the generators malfunctioned, shutting down the engine. A standby generator was online six minutes later. ■

Skua (the verb)

By Kristan Hutchison Sabbatini
Special to the Sun

When Janet Huddleston wants a new pair of shoes, she checks the trash. That's where she found the bright red boots she wears with jeans and a lavender shirt.

"Everything I'm wearing is skua, except my underwear and my jewelry," Huddleston said. "I do have limits. Underwear only in the package."

Dumpster diving is a long tradition at McMurdo, going back before waste management set up separate "skua" bins for items that can be reused. Along the way the practice took on the name of the scavenging gull.

Here, there's none of the stigma associated with Dumpster diving in the United States. Instead, people take pride in their ability to skua. Huddleston has a reputation as a skua fairy.

"People will come up to me with a wish list," she said. "Within a week I'll usually have it for them, because I'll be looking for it."

For herself, Huddleston mostly skuas clothes and stationary, though the dishes, humidifier, shelf, hooks and chair cover in her room were all skua items. Four of her ten pairs of shoes came from skua shopping, too.

At Skua Central, a 10 by 20 foot building where all the items are stored, a logbook reports the treasures people have found: shirts, tablecloths, pillows, wrapping paper, teddy bears, Christmas trees, spices, stereo speakers, maps, charts, bubble wrap….

"Last year it saved our lives," said Bess Ward, a scientist working in the Dry Valley. Five people on her team forgot to bring towels, but found them at Skua Central.

"That was very, very useful to know about," Ward said.

General assistant Lynn Keating also skuaed some necessary equipment – a sturdy pair of work boots.

"I've been looking 'cause the boots I brought were awful," Keating said. "I kind of thought it was a hopeless effort. I couldn't believe it, but they were my size."

Solid waste supervisor Bill Poulson has seen working televisions, stereo systems and typewriters, but cheaper items are more common.

So are the seamy.

"Smut is very popular," Poulson said. "We put out probably 300 magazines at Winfly."

Waste management staff convinced the National Science Foundation to set aside building 122 for a free exchange of used items in 1995, Poulson said. The staff painted it a bright rainbow of purple, red, orange and yellow. Before that, waste management employees would just hold on to stuff that seemed too good to throw away.

They still do; the best things never make it to Skua Central.

Having first dibs on castaways is definitely a perk of a janitor's job, said lead janitor Dee Miller. She finds items before they've even reached the trash, abandoned in empty rooms by people who left the ice.

"The best that I've found was a triple down white comforter for my bed, flannel sheets and a blow up air guitar," she said

For non-janitors, the secret to skua hunting is to know when and where to look, and then to look often. Most of the best items are found at transition times, when seasonal workers are leaving and others are arriving. People on their way out of McMurdo pile things they don't want in the dorm halls. That's when Huddleston goes skua hunting every night, wandering through the dorms. By the time stuff gets to Skua Central, it's been pretty picked over, Huddleston said.

Jess Barr, another scavenging pro, agrees that the key is to go "straight to the bins, because then nobody's gone through it yet. There's a whole chain of command on going through skua."

For Barr, skua satisfies the urge to shop. At home she frequents second-hand clothing boutiques. Last summer she depended on skua to add glamour to the utilitarian wardrobe she'd packed.

"I just lived off it. I couldn't even go near that building without coming out with a new wardrobe," said Barr, a field coordinator. "It's to fulfill the need for acquiring goods."

Like Huddleston, Barr sometimes skuaed for others. When a friend needed running shoes, she was able to bring him six pairs.

That's six pairs of shoes that might otherwise have been shipped to Washington, where the rest of the trash is disposed. Huddleston gets satisfaction from saving items from a wasteful demise. She even sends skuaed items home at the end of the season. Many people put things back in skua for the next person, though, recycling the stuff yet one more time. After traveling in third world countries and seeing how they reuse everything, even turning soda cans into toys, Huddleston's become more sensitive to the wastefulness of Americans and is even philosophical about her pastime.

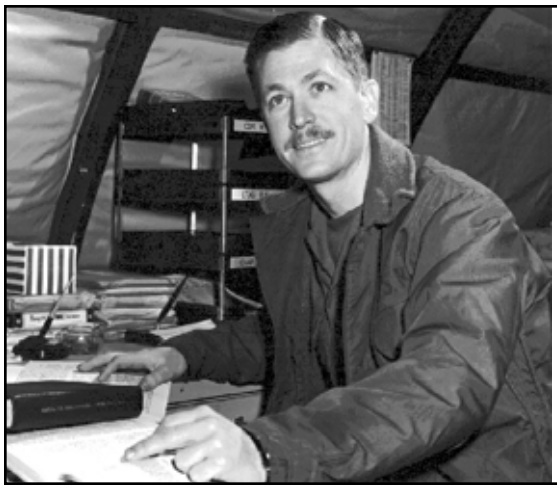
"People throw things away, but when you think about it there is no 'away'. It's got to go somewhere," she said. ■

Perspectives

’50s era pilot still dreams of Flying

mountains glaciers Sea

James Waldron served in Operation Deep Freeze II and III as a lieutenant commander in the Navy.



The author at his office desk in Little America V during the winter months of his 1956-1957 deployment. Photo courtesy of Jim Waldron.

Imagine, after 43 years, I still have dreams of flying over the Antarctic. I seem to be taking off from that old ice runway, struggling to gain altitude because the aircraft is overloaded. I am soon able to clear the white island directly ahead of us by just a few feet. From there I am coasting southward with the mountains and glaciers on my right and a sea of blinding ice ahead.

It all seems real, except that my feet are warm, something that never happened back in ’56 and ’57. The old R4D-5's (C-47's) assigned to our squadron (VX-6) were never designed for the deep cold we faced over the Antarctic ice. They had been improved somewhat at a Jacksonville aircraft repair facility with heaters that made the cabin air temperatures reasonably warm, but the floors of the aircraft were aluminum, and were connected directly to the outside metal of the aircraft. The cold penetrated through our shoes, causing us constant pain in our feet.

Next to being cold and in pain when airborne, the next thing that made Antarctic flying difficult was the extreme length of some flights. Round trips to the South Pole took about eight hours, but sometimes we were diverted to Little America to pick up mail, adding another four hours to our flying time. Sometimes when operating out of Little America Five we would fly from breakfast time until two or three in the morning, with short crew rest breaks while the aircraft was being refueled. When the weather was good, the main limit to our flying hours was the ability of flight crews to keep going.

In most parts of the world humans on the ground maintain radio contact with airborne flight crews and search and rescue teams are ready to bring help if a crash occurs. I am frequently amazed that during so many of our polar flights, when we were 400 to 800 miles from anyone who might help us, our only contact with our home base hung on that noisy short wave radio signal and the skill of our radioman who transmitted all our messages in Morse Code.

One time we couldn't get back to our home base because of bad weather and were forced to land on the ice cap. We spent 18 hours in that windy and minus 35F cold before an aircraft was able to find us and refuel our plane. We found that we could cope with the cold, but it took a toll on our bodies. A few more days would have made us desperate.

To sum it all up, I guess that my Antarctic experiences have left an indelible mark on my psyche because even after all these years the memories still invade my dreams. I am still able to soar over that Antarctic plain, view scenery grander than anywhere else on earth and even land where no human has ever set foot. I can do all this, and still have warm feet beneath me. ■

Profile

Night watchman

Madison Hall

By Beth Minneci
Sun staff

With four words Madison Hall tells why he works winters and prefers working nights any time of the year. "Less people. Less hassles."

Hall, 61, works 12-hour night shifts alone at the power plant, an example of his independence. But he's also a very social person, as anyone who has ever spoken to him knows.

Each hour, Hall monitors a room in which the numbing rumble of 16-cylinder engines drowns out all other sounds. He checks the oil, pressures and temperatures of five truck-size engines and watches gauges on ceiling-high pipes.

Outside of the engine room, nights are usually quiet.

Except when something breaks.

The pace became hectic Monday when a transformer died and shut down power in the galley and in the rest of the station's central building.

The power failure happened at the end of Hall's shift. "You can sit around for 11 hours and 45 minutes and nothing, then there's 15 minutes of terror," he said, describing some nights.

Many nights Hall reads through books about one of his hobbies: paragliding, skiing, ham radio and American and Antarctic history.

"Madison is a pretty well-rounded individual," said his boss, Al Richter.

Hall helped start the McMurdo Historical Society and is a member of the New Zealand Antarctic Society and contributes stories to the Society's journal.

Hall met one of his heroes when he visited Sir Edmund Hillary at his Auckland home to interview him about the start of Scott Base in 1955.

"I was so very happy to meet the man. He's a very gentle man who makes you feel at ease. I called him Sir Edmund Hillary. He said, 'Just call me Ed.'"

For the New Zealand society's magazine, Hall has written articles about current life on the Ice.

He said he prefers working full-year contracts over seasonal because it allows him to save more money. And he likes working winters.

The winter in Antarctica isn't the destitute place that people who haven't lived it might imagine, Hall said. When McMurdo Station's population shrinks from about 1,000 to 150 or 200, people develop close friendships. Only a few withdraw, said Hall, who likes camraderie and the solitude winter gives him. "It seems like you get more work done in the winter."

One winter, he volunteered to help charter a McMurdo Station Toastmaster's International Club. He didn't know exactly what the club was about, but joined because it offered something new. "All the other clubs around here had something to do with drinking."

The club has made the soft-spoken man become comfortable and more articulate in front of groups, he said.

Hall remembers that before airplane drops were discontinued in 1995, July was a winter high point. Residents would celebrate, bringing out a Christmas tree, lights, decorations, singing carols and dressing in costumes. "We even would have a gift exchange."

In the last several years, Hall said, McMurdo's atmosphere has shifted from close to rough to approaching refined.

Recently he awoke to what sounded like an animal scratching a dorm wall. A janitor was scrubbing a decal off a door.

"Sanitizing. That's what's happening. Sanitizing is a good word for it."

Hall said he's not complaining, just observing some changes that he has noticed.

"It used to be like a construction camp, with a lot more parties, a lot more fights, fewer women." More women softened McMurdo, he said, which is OK, if you ask him. "I think women are the best thing that God ever made, and you can quote me on that."

Hall moved to Colorado from Ohio in 1982 to escape a slump in Akron's job market. In Denver, construction work wasn't hard to find. A few years later, tired of building things, he took a job with a water and sewage treatment plant.

In 1991, he became a general assistant in Antarctica, working his way up to the utilities department, the water plant and finally, the power plant in 1996.

During his first interview with the Antarctic Program, he gave three reasons for wanting the job: adventure, travel and money. He hopes to retire in six years, so his priorities are now money, then adventure and travel.

He plans to move back to Akron when he's not in Antarctica, to be near his children. But he feels drawn to the Ice, too.

The works quietly and competently. Until the lights go out, people don't consider that someone is there to keep the electricity on all night, Richter said.

"It's a lot of responsibility," he said. "By working by himself, he has to be able to deal with anything that may arise. He's got to know what he's doing."

You've also got to have patience and a sense of humor. When the electricity fails, people call the power plant to let them know. But at the plant, instrument panels have already indicated when something is coming. ■