The Antarctic Sun
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Success!

South Pole Traverse arrives Dec. 23

By Peter Rejcek
Sun staff

The mission is nearly over, but the journey is only half done.

On Dec. 23 at 2:56 p.m., John Wright parked the last tractor of the South Pole Traverse on a hard-packed snow area near the South Pole Station.

He wearily climbed out of his Caterpillar 95 Challenger, exchanged a few hugs and kisses with a Polie greeting party, and told his crew to form camp and ensure all the vehicles were plugged into electric outlets to keep them warm in the freezing temperatures. "Let's plug 'em in and shut 'em down," he said.

After 43 days and some 1,600 kilometers, the South Pole Traverse had done its job — proving that an overland snow route between McMurdo Station and South Pole

See TRAVERSE on page 12

On the Run: Marathon no mere walk on the beach

By Peter Rejcek
Sun staff

Eric Pohlman spent two hours and forty minutes one recent Sunday on the treadmill at the gym preparing for the McMurdo Marathon. Doing a steady 10-minute mile, it was a relatively easy 16 miles. But he knows race day conditions outdoors won't be a walk on the beach.

Then again, maybe that's exactly what it is.

"I'm preparing myself for a 26.2 [mile] run on the beach, because it's like running in sand, except it's freezing cold," said Pohlman, a hazardous waste management technician at McMurdo Station.

Pohlman will test his theory on Jan. 8 during the annual marathon.

Last year, a dozen runners attempted the marathon or half-marathon. The race is nearly as popular with cross-country skiers, with seven people opting to glide their way across the Ross Ice Shelf in 2005.

One of the skiers was Mary Holozubiec, the only one to finish the 42-kilometer route, in a time of three hours and 39 minutes. This will be the third time the McMurdo retail materials worker will ski the race. She also ran the full marathon in 2001 on

See MARATHON on page 14

This year's winners of the annual Antarctic Photo Contest offer a fresh perspective on some favorite themes, starting on page 7.

Quote of the Week

"I'm a self."
— Person explaining combination of Santa and elf costumes.

Inside

Antarctic explorer dies at 100

From staff, wire reports

Famed Antarctic explorer Norman Vaughan died Dec. 23 just a few days after turning 100 years old.

As a young man, Vaughan explored Antarctica with Adm. Richard Byrd, joining him on his 1928-1930 expedition to Antarctica as a dog handler and driver.

Vaughan continued to seek adventure his entire life. His exploits included finishing the annual Alaskan sled dog race, the Iditarod, 13 times, the last six after age 70. At age 96, 70 years after he competed in the Olympics as a sled dog racer, he carried the Olympic torch in Juneau, passing the flame from a wheelchair.

Vaughan apparently never abandoned his fascination with the seventh continent. At 89, he returned to Antarctica and climbed a 3,145-meter peak Byrd had named in his honor. Neil Conant, who works as a South Pole communication operator, remembers Vaughan's visit to the Pole in 1995.

"He was in really good shape," Conant recalled.

The Alaskan had planned to again climb Mount Vaughan to celebrate his 100th birthday but the expedition fell short of money.

Vaughan was born Dec. 19, 1905, in Salem, Mass. He was the son of a wealthy leather tanner and shoe manufacturer. In 1925, he entered Harvard University but soon left to be a dog musher in Newfoundland for a medical missionary. He left Harvard for good to join Byrd on his expedition. Vaughan was part of a crew that drove dog teams about 2,400 kilometers across the frozen continent to collect scientific samples.

During World War II, Vaughan served as an Army dogsled driver, attaining the rank of colonel and engaging in numerous rescue operations in Greenland. He devised a plan for one such operation to parachute sled dogs to the Battle of the Bulge in an attempt to save soldiers stranded in the snow. While the plan was backed by Gen. George Patton, it was later cancelled due to logistical delays.

On the celebration of his 100th birthday on Dec. 18, he reportedly had a sip of champagne, his first taste of alcohol after promising his mother he wouldn't drink until he turned 100.

To learn more about the famous explorer and his life, visit his Web site at normanvaughan.com.

Cold, hard facts

All-time weather records for USAP stations

South Pole

High: 7.5F / -13.6C, Dec. 1978
Low: -117F / -82.8C, June 1982
Coldest year: 1983 — average temp: -59.8F/-51C

McMurdo

High: 56F / 13C, Jan. 1987 and Dec. 1987
Low: -59F / -51C, July 1960
Maximum 24-hour snowfall: 28 in / 71 cm

Palmer (since 1989)

High: 51.4F / 10.8C, Dec. 2000
Low: -14.8F / -26.0C, Aug. 1995
Maximum wind gust: 103 mph / 166 kph, June 1990

Source: USAP weather station personnel

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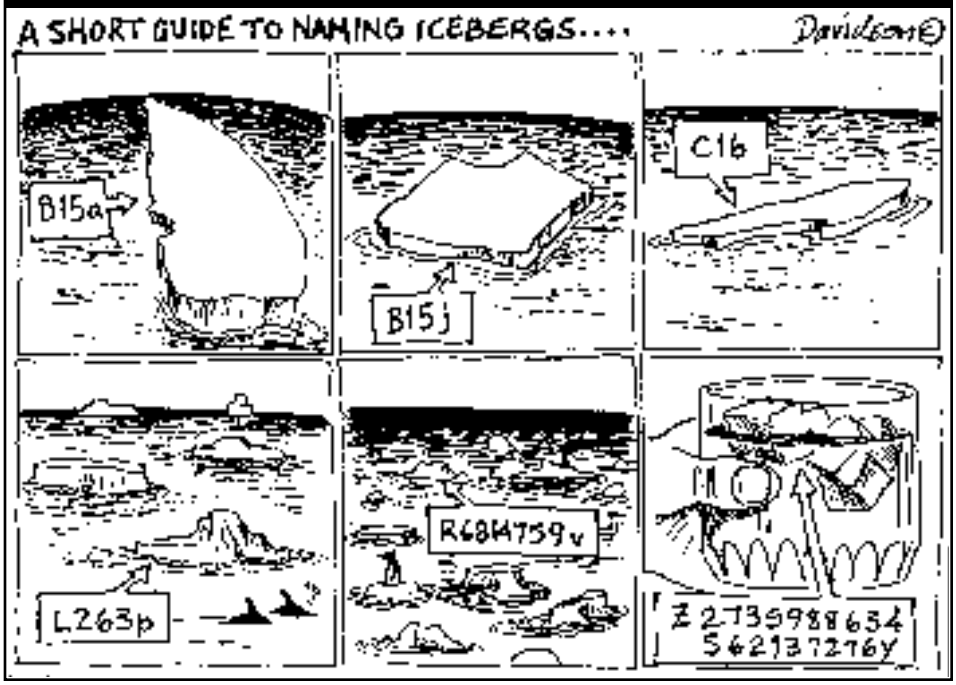
Level 1 Comix **Matt Davidson**



Icebergs offer insight into global warming

By Emily Stone
Sun staff

With its frigid waters, biting winds and chilly temperatures, South Georgia Island isn't the typical picture of a summer wonderland. Except, perhaps, as viewed by an iceberg.

"Summer never ends by Antarctic standards when you get up to South Georgia Island," said Ted Scambos of the University of Colorado's National Snow and Ice Data Center.

Giant icebergs floating north from the Antarctic Peninsula generally reach their breaking point around the island because temperatures are so much warmer than what the bergs are used to. Scambos is hoping to track an iceberg next year as it makes this voyage to see how it melts and falls apart. Studying what higher temperatures do to a sliver of Antarctica will tell scientists about what global warming could do to the continent itself.

Icebergs follow a fairly predictable path when they leave the area around the Antarctic Peninsula. Currents fling the icebergs north and west, past Elephant Island and up to South Georgia Island. It's basically the same route that Ernest Shackleton and his crew took after their ship got trapped in the Weddell Sea.

The water temperature at South Georgia Island is between about 2 and 4 degrees Celsius, compared to just below zero at the icebergs' home along the Antarctic ice shelves, Scambos said. While this might not seem like a lot, it makes a big difference to an iceberg.

"By this time next year, it will probably be fighting for its life," Scambos said of the group's intended target, iceberg A-22A.

The 1,500-kilometer trip from the peninsula to the island generally takes about four or five months, Scambos said. The bergs start their voyage by passing near the Argentinean station of Marambio, where Scambos and his team are basing their project, in conjunction with the Argentineans.

The group will spend about a month there in February and March, waiting for the right moment to fly out to the iceberg. Their goal is to set up a slew of instruments, including a weather station, satellite tracking devices, sensors that monitor the iceberg's thickness and temperature, as well as movable and fixed cameras. The instruments will send data back to Scambos via an Iridium modem a few times a day.

Photos by Ted Scambos / Special to *The Antarctic Sun*

Researchers at the University of Colorado in Boulder set up the tower that will hold their equipment to monitor the melting of an iceberg as it drifts north this winter. Below, an iceberg floats off the Antarctic Peninsula. The tower will go on a similar iceberg.

The electronics might seem complex, but it was Mother Nature that proved the most difficult to deal with. For a while, it looked like the group might not get a good berg to study. And they're still a bit worried that A-22A will skip town too soon.

The group originally focused on an iceberg that calved off the Ronne Ice Shelf in 2000. But it got stuck on a shoal and didn't make it around the peninsula this year, Scambos said.

"We thought we were really in trouble," he said.

They started watching satellite images for another potential candidate, and A-22A suddenly appeared.

"It moved like a rocket by iceberg standards," traveling about 1,000 kilometers in eight months, Scambos said. "It drifted right into the perfect position."

Now they hope it stays put so the group can reach it before it moves too far from Marambio. The berg is about 40 by 60 kilometers and 300 meters thick, with about 40 to 50 meters above sea level. It had been hanging around in the Weddell Sea since it calved off the Ronne Ice Shelf in 1986.

Scambos' project is using much of the same technology, and some of the same team members as Doug MacAyeal's University of Chicago group does out of McMurdo Station. MacAyeal has been studying the drift patterns of giant icebergs that calve off the Ross Ice Shelf.

The advantage to tracking bergs off the peninsula is that they tend to speed north much faster than their counterparts near McMurdo, which often get stuck in the "iceberg graveyard" near the French station Dumont D'Urville. At Marambio, Scambos is more certain of seeing the bergs quickly reach warmer waters.

He wants to see if the berg is more affected by rising air temperatures or water temperatures. If the air temperature is the bigger factor, the berg will develop melt pools on top. That water sinks into cracks in the iceberg and freezes, which acts like a wedge and breaks the berg apart.

If the seawater is the main force, the berg will start melting from the bottom up. Scambos said bergs appear to reach a critical point at around 125 meters thick when they suddenly become weak. A berg that started at 300 meters thick and retained basically the same shape for years will start losing several chunks a week, he said.

Understanding these processes will help scientists predict what will happen to Antarctica's ice shelves if temperatures here rise. The idea, Scambos said, is to "watch [the iceberg] while it goes through a fast forward climate change."

NSF-funded research in this story: Ted Scambos, University of Colorado National Snow and Ice Data Center, www.nsidc.org/icetrek/index.html

Perspectives

Return to Pole a warm reunion

By Peter Rejcek
Sun staff

Throughout my year as a Polie, we would all ask each other the same question: Are you coming back?

My reply never wavered, "No. Never."

It's not that I didn't enjoy the 12 months at the Pole, from Oct. 31, 2003 to Nov. 1, 2004. It's a life experience you can't regret, and not just because of all the neat statistics that go along with wintering at the bottom of the world. My favorite: More people have climbed Mount Everest (more than 1,900 at the end of the 2003 season) than have wintered at the Pole (unofficially, 1,110). For a brief while, we had the largest winter crew ever at 75 people. This past season they eclipsed us with 86 wintering.

But it's a long year — a very long year. At a certain age, you begin to measure your values — what's important to you — in increments of time. At age 22, I could see the appeal of knocking off five winters in a row (the current record). At 32, the age I was when I left the Pole, I couldn't help wonder about the sunsets I had missed, the countries I had hoped to visit by then but hadn't.

I worked that year as a carpenter helper, a detour from my regular profession as a journalist and freelance writer. I must admit, the transition was difficult. It wasn't simply the physical demands I found hard to meet at first (though office life certainly doesn't build stamina to haul loads of sheetrock around). It was my first real experience on a construction crew, when my schedule wasn't my own to determine, living the twilight existence of the swing shift. The day was detailed to the last minute, from lunch hour to quitting time. It was a year of firsts — bleeding from raw knuckles, blinking though scratched safety glasses, itching incessantly from fiberglass insulation. I also built my first wall, ran around the world, and played kickball on New Year's Day in negative 20 degrees Celsius temperatures. As a buddy of mine is prone to saying, "It's all good."

Fast forward to Dec. 22, 2005. I'm now a journalist with *The Antarctic Sun*, about to touch down at the South Pole. The assignment: Grab all the stories and pictures you can in the next 48 hours. I was the natural choice for this hit-and-run style of journalism thanks to my previous experience working at the Pole; I knew where to go and whom to interview.

Photos by Andrea Dixon / Special to *The Antarctic Sun*

Peter Rejcek spent a year at the South Pole as a carpenter helper from Oct. 31, 2003 to Nov. 1, 2004. Little did he realize that he would return to the bottom of the world, this time as a journalist for The Antarctic Sun.

Of course, the quantum leap from sea level to a physical altitude of about 3,000 meters is not unlike scuba diving at 30 meters — you're moving slow, and feeling a bit stupid and giddy no matter how many times you've done it. On top of that, I wasn't prepared for the sheer wonder of returning to a place I vowed never to see again, as resolutely as breaking off an affair you know can only end badly.

But where a year is marriage, two days is a honeymoon.

Since I left, the last two pods of the new elevated station, a summer berthing wing and the gym, have been built and are already nearing completion. The new communications room, the station operations center, looks like mission control at NASA and was fully transitioned this week. All the rooms my crew built are occupied with new faces, and I couldn't help but intrude on one poor guy reading in his room to boast that I had built the four walls he called home. (He seemed pleased with the results, even if he could stretch both arms out and touch two walls.) I even ran a critical eye down the hallways looking for defects; I cringed once or twice but mostly nodded in satisfaction.

Even more impressive to me is that the new station is starting to lose its sterility. It's still far from homey — and no one will ever understand the aesthetics behind the Italian-made floor mats on the walls — but the dining hall is plastered with announcements and pictures as the new occupants assert their right to work *and* live there. The converted meat locker that serves as the new greenhouse (which I helped build) is as lush as a jungle. The B1 wing's recreation and lounge areas are simply luxurious and spacious compared to the cramped and deteriorating conditions under the Dome. And there are windows — dozens of windows.

The Dome. Not a veteran Polie, my attachment to the old station is superficial at best, lamenting good old days I never really knew. Still, it was surreal to see it for the first time, with the old biomed and dining hall buildings gone, like watching a picture slowly fading. In another year, the Dome will probably be empty but for boxes and crates. The Skylab building, home to much of South Pole science for decades, is empty and surrendered to the cold.

The hospitality at the Pole, of course, is anything but chilly. Though there were many new faces after only a year away, I still recognized a lot of friends and even made a few new ones during my brief stay. The Polie attitude is famous among U.S. Antarctic Program participants — a frontier spirit that's sometimes mistaken for arrogance.

It's not hubris that drives the South Pole, but hard work and imagination. Sure, modernity has infiltrated life there as it does everywhere, but conditions are still tough at 90 degrees south. I knew that, but I had forgotten just how welcoming and warm it could be as well.

Do I regret my year at the South Pole?

"No. Never."

around the continent

SOUTH POLE

Racing around the world

By Amnesty Kochanowski
South Pole correspondent

Not many people from the United States celebrate Christmas in summer, and even fewer enjoy the holiday at the South Pole.

We had 257 people at Christmas dinner, including seven members of the South Pole Traverse team, and enjoyed beef Wellington, crab legs, mashed potatoes, asparagus, and delectable homemade chocolates. The feast was served over three seatings in the merry dining hall. A fourth seating was added for some IceCube drillers who had to work the full day.

Many people helped prepare fresh vegetables and desserts. The galley staff selflessly served dinner and worked during the two-day weekend so others could enjoy time off. An appreciation dinner will be served for the staff this weekend.

On Christmas morning, people ran, biked, skied, rode and walked a circle around the ceremonial South Pole during the annual "Race Around the World." It was overcast, with winds less than 13 kilometers per hour. The course was about two kilometers long, run in two loops.

The top female competitors were Sara Boaz (12 minutes and 20 seconds), Adrianne Gass (12:21) and Kari Nester (12:58). The overall winner was Joey Hockett (9:05). Second and third place finishers were Philip Clarke (9:26), and Ben Dobrovolny (9:55), respectively. At times, it seemed like a cold parade: a man on stilts, snowmobiles and PistenBullys pulling floats, and Santa Claus were all thrown into the mix.

Mail was received just in time for the holidays. There have been over 140 flights to date. On Dec. 23, about 1,800 kilograms of package mail came to the Pole.

The perfect ending to Christmas day was snow! A light snow started in the evening and fell throughout most of the night.

John Fonseca / Special to *The Antarctic Sun*

Runners compete in the annual Race Around the World on Christmas Day at the South Pole. Runners, skiers, bikers and others race around the ceremonial pole.

PALMER

Understanding icebergs

By Kerry Kells
Palmer correspondent

The past week saw the return of the *Laurence M. Gould* research vessel to station to pick up cargo and take four community members home. Sections of the sea ice have departed; however, a fairly large iceberg dogged the station for a few days earlier this week.

We had two science lectures this week. The first one was presented by Kristen Gorman, who is a field team member of Bill Fraser's seabird research group and is new to Palmer this year. She presented a talk on graduate level fieldwork she conducted in western Alaska on the greater scaup.

The greater scaup is a coastal-nesting duck found in western Alaska, the Great Lakes region and northern Canada. For the study, Gorman worked at the Yukon Delta National Wildlife Refuge, one of the largest refuges in the United States, covering an area of 22 million acres. The area is populated by 35 Yu'pik Eskimo villages (about 25,000 people). Her study site was a camp on the mud flats of the Kashunuk River.

The second science lecture was presented by principal investigators Ken Smith, John Helly, Maria Vernet, Bruce Robison, Ron Kaufmann and Tim Shaw, who were all on board the *Gould*.

The goal of their research cruise in the Weddell Sea was to investigate how free-drifting icebergs impact the biological characteristics of the surrounding waters. Two specific icebergs were studied during the cruise, the smaller W-86 and larger A-52.

Investigations included remote sensing and imaging of the icebergs; research on the phytoplankton and zooplankton communities in the water; the distribution and abundance of seabird communities in relation to the iceberg's ecosystem; and research on the icebergs themselves, such as how dust and other materials trapped in the icebergs contribute to the nutrient supply of the surrounding waters.

Each iceberg was tracked for about a week. The characteristics of the communities near the icebergs included elevated biomass, denser zooplankton communities and larger krill populations.

We celebrated the holidays with our annual Christmas gift exchange.

See CONTINENT on page 6

the week in weather

McMurdo Station
High: 43F / 6C
Low: 25F / -4C
Max. sustained wind: 35mph / 56kph
Windchill: -2F / -19C

Palmer Station
High: 43F / 6C
Low: 25F / -4C
Max. sustained wind: 37mph / 59kph
Precipitation: 4mm

South Pole Station
High: -8F / -22C
Low: -15F / -26C
Peak wind: 17mph / 27kph
Max. physio-altitude: 3,080m

Continent

From page 5

Participants drew a number, and as their number was called, they could either pick a gift from under the tree or "steal" a gift that someone else had already opened. Some gifts exchanged hands many times.

Many presents were handmade, including paintings, framed photographs, a treasure chest box, a mosaic of Antarctica, knitted hats and socks, a blue jean quilt and many more.

SHIPS

LMG

Compiled from reports
by Stephanie Suhr Sliester
Marine Projects Coordinator

We did not think it was possible for the weather to get any better, but on the morning of Dec. 19 the water surface looked as clear as glass.

The day started with finishing up the deep conductivity, temperature and depth (CTD) casts, after which the Biosonics sonar was deployed again to image the subsurface area of iceberg A-52. This was our first really successful attempt at this operation, resulting in great data. More CTD casts were completed before breakfast, followed by deployment of the remotely operated vehicle (ROV) for two hours. Again, gobs of algae and associated organisms — and even rocks — were successfully scraped off the lower subsurface area of the iceberg using an improvised plankton net mounted to the ROV frame.

The next day was our last day on site, and finally, our incredible luck with the weather left us. Increasing swells and wind gusts made our work difficult, and we made our way around A-52 to a relatively sheltered bay on the side of the iceberg. Here we managed to deploy the ROV one last time and got some more impressive footage. We left the area for Palmer Station after the weather got too rough to do much of anything.

After a very smooth and fast transit, we arrived at Palmer Station before noon on Dec. 22. We immediately started the transfer of 150,000 liters of fuel to the station, which was running low due to the boomerang of the last *Gould* cruise. The cargo operations took us until well after dinner. We left the next day and headed to Cape Shireff to drop off and pick up personnel.

We arrived at Cape Shireff on the morning of Christmas Eve and did a smooth cargo and passenger transfer by Zodiac. Under way again, people finished making gifts for their Secret Santa, helped bake pies in the galley, and pursued other merry activities. The Secret Santa after dinner was a great success.

Almost everyone began their Christmas Day by getting tossed out of their bunks, literally, thanks to huge waves that had developed. Trying to have a festive breakfast (and lunch and dinner) with 3.5-meter swells is such a bother.

Things finally calmed down the next morning when we came around Cape Horn, and we continued heading for Punta Arenas, Chile, intending to land the following day.

NBP

Compiled from reports
by Harold "Skip" Owen
Marine Projects Coordinator

Good weather conditions continued to prevail on Dec. 21, several days after sailing away from Lyttleton, New Zealand. We had the third in a series of science talks in the morning, then spent the remainder of the day testing various over-the-side equipment.

Cara Sucher / Special to *The Antarctic Sun*

The Laurence M. Gould *sits in port at Palmer Station recently. The ship brings the station's passengers and supplies from Chile, and conducts research cruises as well. The ship was prevented from reaching the station on its last trip because of heavy sea ice in the area.*

A test cast with one of the vessel's conductivity, temperature and depth (CTD) instruments was completed to 1,000 meters, and all systems are functioning normally. We deployed the Trace Metal Clean (TMC) towfish/pump system and operated it throughout the afternoon.

Another day of calm seas and overcast skies the next day, and all instrument deployments went well. Everyone is awaiting the ice edge.

We continued steaming south towards our work area the next couple days, moving at a good pace. On Christmas, the chef and galley crew prepared an excellent midday meal of roast turkey, baked ham, yams, green beans, cold roast beef and smoked salmon, pies and fruitcake.

Continental Drift

What's your favorite Antarctic Tradition?

"Bag drag."

Dainella Nartker,
South Pole
electrician's helper
from Oregon City, Ore.,
second season

"The first annual Dolly Parton Day. There will be more."

Richard Lamanna,
McMurdo dining
attendant from
Seattle, Wash.,
first season

"The holiday stockings at Palmer Station because they are so creative and reflect the jobs and personalities of people on station."

Barb Watson,
Palmer instrument
technician from
Kitty Hawk, N.C.,
fifth season

2005 Antarctic Photo Contest Winners

Wildlife

The Medusa Dance
First Place
McMurdo jetty, Dec. 2, 2005

Steve Clabuesch
Diver with biology group, McMurdo
Olympus C-4000 inside a
Light & Motion Tetra housing

Myers: This category was tough since each of us had strong feelings about the 2nd and 3rd entries, but we agreed that the underwater shot was beautiful.

Mastro: In this case, each of us had chosen a different shot as our top photo, but again we both agreed that the jellyfish was a strong shot. Very striking, and technically well done.

We had a great turnout for this year's photo contest with nearly 150 pictures entered in the four categories. We asked professional photographers Joan Myers and Jim Mastro to be our judges. They conferred, and after what they said was a sometimes difficult decision-making process, they chose the winners and added some honorable mentions.

"Every photographer has different tastes and a different eye, and each photographer uses different selection criteria when judging others' work," Mastro wrote of his and Myers' discussion of the photos. "At times we had chosen some of the same photos to be in the top five, and other times we had selected entirely different photos."

Both judges complimented everyone who entered.

"It was a pleasure to see all the different ways that people see life on the Ice," Myers wrote.

Congratulations to the winners and to everyone who submitted photos.

— The *Sun* staff

McMurdo Sound Weddell Seal
Ed Stockard
Second Place
Member of a McMurdo science group
Near Big Razorback Island, Nov. 5, 2005
Canon 20D

Skua in Flight
Jacob Sullivan
Third Place
McMurdo plumber
Snow school, Nov. 18, 2005
Olympus C-740

More winners on page 8

Scenic

Underwater
First Place
McMurdo Sound, 2005

Steve Clabuesch
McMurdo diver with a biology group
Olympus C-4000 inside a Light & Motion Tetra housing

Myers: We both loved this shot of the Antarctic under water, a world very few ever see.

Mastro: All three top shots in this category showed a clear sense of composition and design. It was tough to choose, but Joan and I both agreed that the underwater shot had strong qualities: good composition and excellent technical quality.

Don Juan Pond
Glen Snyder
Second Place
McMurdo research scientist
Don Juan Pond, McMurdo Dry Valleys, Dec. 8, 2005
Canon Powershot S1 IS

Erebus Ice Tongue
Christopher Dean
Third Place
McMurdo helicopter pilot
Erebus Ice Tongue, November 2005
Canon SD400

More winners on page 9

People

The Pinsetter
Andre Fleuette
First Place
McMurdo firefighter
McMurdo bowling alley,
Nov. 16, 2005
Olympus Evolt E-300

Myers: This is an unusual portrait, and we liked the lighting, the colors, the woman's pose, and most of all, her socks!

Mastro: The composition was excellent. This was an easy one to agree on, though again the others in the top three all had winning qualities.

Delaney at the Window
Erin Popelka
Second Place
McMurdo prep cook
Long Duration Balloon drop-off point,
Nov. 16, 2005
Konica-Minolta Z5

South Pole Santas
Bill Jirsa
Third Place
McMurdo computer trainer
Snow Mound City, Dec. 25, 2004
Minolta Dimage G500

More winners on page 10

Other

Andre Red One
First Place
McMurdo sea ice runway, Oct. 31, 2005

Andre Fleuette
McMurdo firefighter
Olympus Evolt E-300

Myers: This category had many good choices, but we were struck by the imaginative collage used for this portrait.

Mastro: I have to agree; there were many good choices here, but the creativity of the collage won us both over.

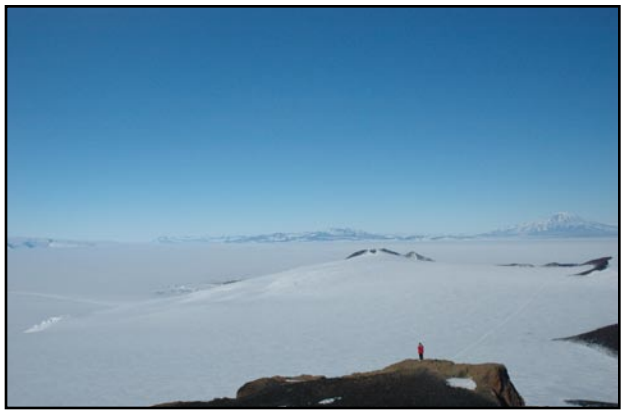
McMurdo Uppercase Dorms at the End of Winter
Zondra Skertich
Second Place
McMurdo material requisition specialist
McMurdo Station, Sept. 9, 2005
Nikon D70

Seventeen Sky
Andre Fleuette
Third Place
McMurdo firefighter
McMurdo sea ice runway,
Oct. 31, 2005
Olympus Evolt E-300

More winners on page 11

Honorable Mentions

Scenic
Erebus Crater
Christopher Dean



Scenic
Untitled
Tim O'Connor

For a downloadable 2006 calendar featuring the top 12 photos, visit *http://antarcticsun.usap.gov* and hit the "Extras" tab on the Web site's homepage.

Wildlife
Skua Nesting
Erin Popelka

Wildlife
Silhoutte
Rob Jones

People
Arrival
Andre Fleuette

Other
Spine Ridge
Andre Fleuette

Other
Footprints
Peter Somers

People
Untitled
Charles Kaminski

The judges

Jim Mastro has been a published photographer since 1978, with photographs in major national magazines such as *OMNI, International Wildlife, Skin Diver, Discover* and *Outside*. He has spent 71 months in Antarctica, including two winters, culminating in the pictorial memoir, "Antarctica: A Year at the Bottom of the World." He teaches photography at Granite State College in New Hampshire.

Joan Myers received a National Science Foundation's Antarctic Artists and Writers Program grant for the 2002-2003 season. Her photographs will be shown in an exhibit entitled, "Wondrous Cold: An Antarctic Journey," opening May 17 at the American Museum of Natural History in D.C., and accompanied by a book of the same title.

People
Untitled
Tim O'Connor

Photos by Peter Rejcek / *The Antarctic Sun*

The South Pole Traverse makes its final approach to the South Pole between cargo snow berms. In the lead is a PistenBully using a six-meter-long boom outfitted with ground-penetrating radar for profiling the ground ahead in order to spot crevasses.

Traverse encounters 'swamp' en route to Pole

From page 1

Station is feasible. The arrival of Wright and his seven-member crew is the culmination of a four-year field project. The team had safely avoided innumerable crevasses and plowed through soft snow to accomplish a feat not seen since Sir Edmund Hillary crossed the continent to the Pole in 1958.

National Geographic cinematographer Michael Single, who is at the South Pole working on a documentary on the station, asked Wright his feelings only moments after reaching the bottom of the world.

Wright, staring into the camera and breathing heavily from relief and effort, told him, "I have no great words to say to you, no great emotions to share.

"It is a good day to be alive," he said, his voice thick with emotion. "It's great to be here."

The moment of success was brief as the traverse field team went about the mundane task of making its camp. The seven men and one woman, their Carhartt overalls and jackets blackened with oil and grease, then went through the rigmarole that all new U.S. Antarctic Program visitors must: They gathered in a Jamesway building lounge, to watch an orientation video that discusses safety and other unique issues that face those living at the station.

Liesl Schernthanner, the South Pole winter site manager, noted that not all the video information would apply to the crew. "You arrived a little differently than everybody else," she said.

The swamp

A few members of the traverse team visited the outskirts of the station the previous day to stage some of its 100,000 kilograms of cargo. The team had encountered deep, soft snow along the polar plateau, requiring it to shuttle cargo as tractors continuously bogged down along the dwindling kilometers.

"We call it a swamp," said Greg Feleppa, a member of the field team, of the barren landscape leading to the Pole. He and Tom Lyman, a mountaineer who works in the McMurdo field safety training program and is part of the expedition, led the traverse in a PistenBully. The tracked vehicle is outfitted with about a six-meter-long boom sporting ground-penetrating radar to snoop out crevasses.

"To us, it's been a hell of an adventure," said Feleppa, referring to himself and John VanVlack, the freshman members of the crew. The average age of the field team members is 51.5 years, according to Wright.

VanVlack, a mechanic with

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Hugs all around for the South Pole Traverse field team from representatives at South Pole, including Jerry Marty with the National Science Foundation, center, and South Pole Area Director BK Grant, third from right.

John Wright, leader of the South Pole Traverse field team, steps down from his Caterpillar 95 Challenger moments after reaching the end of a 43-day, 1,600-kilometer trip from McMurdo Station, proving a snow route is possible between the stations.

Science cargo one option for a future traverse

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the McMurdo vehicle maintenance facility, said parts of the polar plateau — the final 450 unmapped kilometers of the snow route — were covered in soft snow and uneven sastrugi more than two meters high. He said at one point along the route he stuck a three-meter-long flagged stick in the snow only to watch it sink all the way down.

The going could be excruciatingly slow, he added. "We had some three-mile days."

The last week was especially difficult, according to Wright, as the traverse tractors were constantly getting stuck in the soft snow. Eventually, the pace required shuttling cargo and equipment back and forth for several kilometers to move one kilometer forward. But the effort of repeated traffic helped compact the snow route over the last 20 kilometers or so, Wright explained.

"That's how you get through the snow swamp — a lot of grind. It's not fun," he said. "It'll be better the next time we go over it because we've compressed it and made it stronger."

The future

It wasn't long before the traverse field team tested that stretch of ground. After taking a couple of days rest at the Pole (though still using the two berthing modules they towed there), the team left South Pole on Dec. 28 shortly after 8 a.m. for the return trip to McMurdo. It will follow its flagged route all the way back to Ross Island with three tractors, a PistenBully, its support modules and fuel tanks.

NSF officials stateside said they were pleased with the results of the four-year field project.

"This historic achievement sets the stage for fuller realization of the scientific potential of the new South Pole Station," said NSF Office of Polar Programs Director Karl Erb.

Dave Bresnahan, NSF systems manager, said the history of the project really dates back to the austral summer of 1994, when work began on devising the initial route.

Photos by Peter Rejcek / *The Antarctic Sun*

The South Pole Traverse is finally at rest at the South Pole. A flag from Silverton American Legion Post #14, from John Wright's Colorado home town, flies from one of two red modules used for berthing and cooking.

"Reaching South Pole safely, and returning to McMurdo over the same track, represents an outstanding accomplishment," Bresnahan said. "Delivering cargo to Pole on this initial traverse is beyond the goals of the Proof of Concept Traverse. The members of the team and all those that supported them are to be congratulated for this accomplishment."

The appeal of moving cargo and fuel on the ground instead of through the air on an LC-130 is obvious, Marty said. The traverse would give the NSF the capability of moving large cargo that can't easily fit into the belly of a cargo plane without first being disassembled.

"The key is to provide options for supporting science like IceCube, the 10-Meter Telescope," he said, referring to the large science construction projects currently under way at the Pole. "You can assemble a lot of that [equipment] and tow it here. That reduces the labor on this end."

The traverse also affords the NSF with the ability to allocate LC-130 missions for scientific research in locations other than South Pole, he added.

By reducing the workload at the South Pole, the NSF can meet its goal of keeping the future station population at 150 people, the full capacity of the new elevated station when completed next year. There were 250 people at the Pole when the traverse train arrived, living in a variety of housing.

BK Grant, the South Pole area director for Raytheon Polar Services Co., said the cargo the traverse field team brought is the equivalent of 11 LC-130 flights. The cargo consisted of several pieces of heavy equipment, including a Caterpillar D-8 tractor and a snow hauler trailer.

"I'm glad to see them," said Jason Medley, the South Pole operations manager, referring to the safe arrival of the traverse team and their much-needed cargo, as he watched them approach Pole.

The past

Over the three previous seasons, the traverse field team has crossed the Ross Ice Shelf, climbed the Leverett Glacier through the Transantarctic Mountains, and made it to the polar plateau just past 86 degrees south. Each excursion from McMurdo Station went farther than the previous year, with the traverse returning to Ross Island at the end of each foray.

The first field season for the traverse was the 2002-03 austral summer. It covered the least amount of real estate over the four seasons, about 200 kilometers, but successfully crossed a 5.5-kilometer area called the shear zone. This stretch of the route, not far from McMurdo Station on the Ross Ice Shelf, was Swiss-cheesed with 32 crevasses, Wright said.

Much of that season was

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Jason Medley, left, the South Pole operations manager, converses with John Wright, South Pole Traverse leader, on the outskirts of the station, seen in the distance.

Dan Simas, second from the right, sticks with the main running group during last year's McMurdo Marathon. The wind was so strong that day the runners drafted off one another to conserve energy. Simas and the rest of this year's participants will hope for better conditions on race day, Jan. 8.

Rachel Murray / Special to *The Antarctic Sun*

Marathon participants hope for good weather

From page 1

a calm, crisp day in 3:38. "Skiing to me is just like a long outing," she said. "It's a chance to get out for a longer period of time."

Weather is a key factor in any race, but perhaps never more so than in Antarctica, where wind and blowing snow can quickly turn any run into a slog. Like last year.

"It was full-on dumping [snow]," said Rachel Murray, recreation department supervisor. "It was like sand."

Holozubiec recalled that the wind was howling so fiercely on the leg between Pegasus and Williams airfields that the runners bunched up in a sort of phalanx, with each one taking the lead for a short while to help others conserve energy.

"It was so windy that they ran in drafting style," she said of the 2005 marathon. "The thing about the marathon is that it's very condition dependent, both for running and skiing."

Dan Simas ran the full marathon that year, persevering to finish the race in just under five hours. This year's goal is to improve his time by nearly an hour, possibly a modest goal for a college tri-athlete who had never run a marathon before last year.

"I didn't train," said Simas, a utility tech at the Crary Science and Engineering Center. "I just decided to do it. I had done all the other races that year."

This time the 23-year-old Californian is putting in some extra hours to better last year's time of 4:56. The winning time in last year's marathon was 4:14 by Lance Anderson.

"I'm hoping to break four hours," said Simas, who plans to do an ironman competition in California in the off-season.

Participants' race experiences run the gamut from novices using 14-week online training plans to runners with multiple marathons behind them.

> "The thing about the marathon is that it's very condition dependent, both for running and skiing."
>
> *— Mary Holozubiec, Marathon runner and skier*

Pohlman puts himself squarely in the first category, saying he only wears out his sneakers while in Antarctica as a strategy for staying in shape. It's also a way to run from boredom, he said.

"You don't get much chance to get out and stretch the legs," said Pohlman, 34. "So I just run down here, just to do something."

Facing his first marathon, Pohlman's goals are modest: To finish in less than five hours without stopping or leaving his breakfast on the side of the snow road. He said he's made a point of telling friends about his plans to race, hoping the peer pressure will keep him motivated.

"If I had done it secretly, I probably would have quit by now," he said.

Holozubiec said she's run about nine marathons, including the McMurdo race. She and her husband, McMurdo lead janitor Peter Tucci, decided in 2000 to try and complete marathons on all seven continents. The idea came while she was leading a bicycle tour in Alaska. One of the clients had come to the state to do his 49th marathon in the 49th state.

That kind of goal was appealing. However, doing fifty marathons seemed a bit much, but "seven continents, that's easy, and we can knock off the hardest one first," Holozubiec said. So far, she and her husband have notched off marathons in Antarctica, Australia and North America. They have tentative plans to do South America next year.

"I mainly run trails," added Holozubiec, an outdoor enthusiast. "I run because it's fun, and it's a way to stay in shape."

The McMurdo Marathon isn't the only such race in Antarctica, but it's the cheapest to enter. A Boston-based company runs a marathon and half-marathon tour to the South Shetland Islands off the Antarctic Peninsula. The price for that trip starts at about $5,000. McMurdo race participants pay no entrance fee, enjoy free snacks, and full marathoners get free race T-shirts.

The history of the marathon, of course, dates back to ancient Greece. The name comes from a legend about a Greek soldier who ran from the town of Marathon to Athens to announce the defeat of the Persians in a great battle. The story goes that this messenger died shortly after reaching Athens with the victorious news (despite the fact that the International Olympic Committee estimates the distance he ran at only 34.5 kilometers).

The marathon entered modern history in 1896 with the first Olympic Games in Athens. For nearly 30 years, the distance was arbitrarily fixed according to the individual route. In 1896, the distance was 40 kilometers, but in 1908, it was 42.195 kilometers, which happened to be the distance from Windsor Castle to the Olympic stadium in London. Finally, in 1924, 42.195 kilometers (or 26.2 miles for Americans) became the international standard.

Karen Joyce and Nancy Ford, started the McMurdo Marathon in 1995. Scheduling conflicts that first year kept the field of

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Support for marathon includes water, transport

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contestants small — just the two of them running between Scott Base and Williams Field Skiway. Joyce recalled the conditions that day were extremely windy.

"My God, it was an awful day," said Joyce, the IT manager at Crary.

Today's McMurdo Marathon begins at Pegasus White Ice Runway, runs to Williams Field Skiway, then to the Scott Base transition. But it's not over yet. Runners and skiers must turn around and return to Williams Field, finishing back at the transition area. If you're doing the half-marathon, you forego the roundtrip back to Williams and start the race about five kilometers short of Pegasus.

Joyce said she doesn't like the current route because it's "devastatingly" hard to reach Scott Base only to turn back again to Willy field when there's the refuge of a warm van beckoning. The 50-year-old runner says she'll stick with the 16-mile option, running the full distance from Pegasus airfield to the transition area.

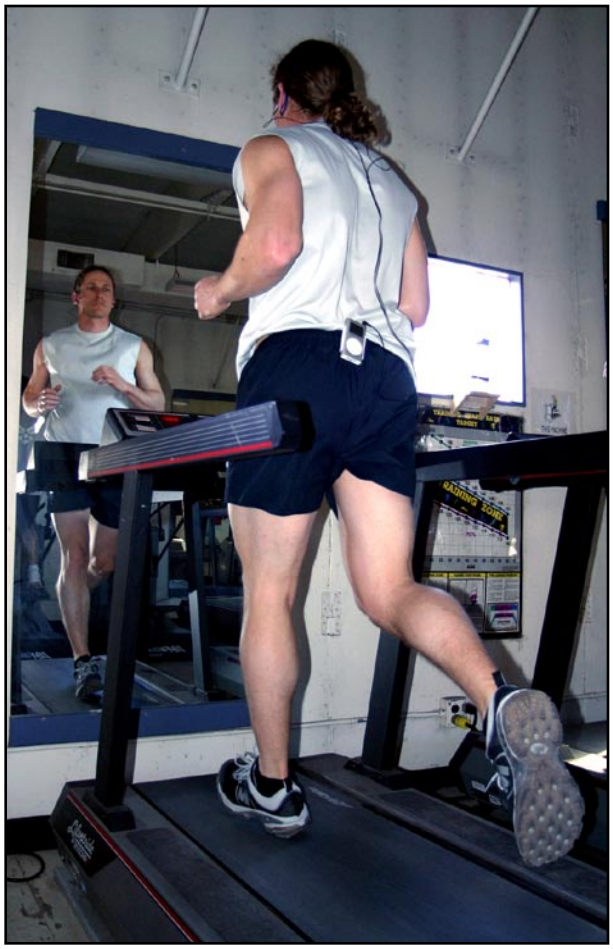
"I don't know how anybody has the iron will to [do the full marathon], with the course being set up as it is these days," said Joyce, who's run upwards of 20 marathons.

The marathon is not only tough for the participants. It's one of the most logistically challenging events put on by the McMurdo recreation department, according to Rachel Murray, the rec supervisor.

"Supporting the marathon takes a lot," she said.

This includes monitoring five water stations to make sure supplies aren't blowing away in the wind or that the water hasn't frozen. A van continuously patrols the route, carrying warm beverages, ensuring the participants are OK, and helping with gear as runners heat up and shed layers. Back in the days before iPods, Murray said the support van would carry extra batteries for the runners' Walkmans as they lost power in the cold.

"We have to be driving constantly," she said, "but it is a favorite to support just to see the racers at the end."



Peter Rejcek / *The Antarctic Sun*

Eric Pohlman trains on a treadmill in the aerobics gym Dec. 29. The McMurdo Marthon will be his first marathon. He said he decided to do it as a way to keep busy.

NSF South Pole rep: Traverse makes history

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spent identifying crevasses in the shear zone and plugging them up with snow — a job much harder than it sounds.

"Finding snow in Antarctica is not a difficult proposition," Wright noted, "but finding snow in a crevasse field that you can maneuver to the brink of the crevasse you want to fill, is."

The next season, soft snow and flaws in sled design slowed the traverse, though it blazed an additional 475 kilometers despite less-than-ideal conditions. Last season, the traverse did a blitzkrieg past its farthest south point and then up the Leverett Glacier, even while encountering another major crevasse field. After gaining a foothold on the polar plateau, about 1,180 kilometers from McMurdo, and farther than its original goal for that field season, the team safely returned to McMurdo.

Wright said the route is now safe and repeatable, a criteria of proving the route. Only a few months ago, that was still in doubt.

"It was a question back in October," he said. "It is a question no more. We are here."

The last words

While the future of an overland traverse is still up for debate, the significance of last week's accomplishment is without question.

Of watching Wright climb down from his tractor at Pole, Marty said proudly, "This was historic."

Judy Goldsberry, a McMurdo fleet operations heavy equipment operator who is a member of the traverse, said, "This wasn't for us. This was for the world."

Finally, Wright, speaking of the adventure to a roomful of Polies the night he and his crew arrived, said of the venture, "It was never easy. You never know what you're going to get into."

Peter Rejcek / *The Antarctic Sun*

National Geographic videographer Michael Single visits with John Wright on the outskirts of South Pole Station.

Profile A different spin on the Ice

By Steven Profaizer
Sun staff

It's easy to stop looking around.

The Antarctic beauty that halts people mid-stride in the beginning of the season often goes unnoticed by the end.

Not so for Robert "Red" Howard. He worked throughout his two-month stay here with the excitement of someone who had just stepped off the plane. He could regularly be found staring off toward the Royal Society Mountains, racing through stories about his day, and riding a bike around on the sea ice.

"It's been an adventure physically, scenically and intellectually," Howard said.

A silver-bearded, 55-year-old anesthesiologist, Howard worked here as a "ranch hand" for Paul Ponganis, the principal investigator of a science group studying the diving physiology of emperor penguins. The group worked out of a field camp located on the sea ice in McMurdo Sound, dubbed Penguin Ranch.

He admits that life on the continent was tough on his body, but it has also given him a chance to add yet another job to his already diverse resumé.

Howard has earned a bachelor's in physics, a master's in business administration, a Ph.D. in oceanography, a law degree and a medical doctor's license. He has worked as everything from an experimental diver — being the first person to be compressed to 330 meters in less than 15 minutes — to his current position as an anesthesiologist and member of the residency teaching faculty at the Naval Medical Center in San Diego, Calif.

While he spent most of his time in Antarctica mending fences and caring for the birds, his varied educational and professional background allowed him to serve as a stand-in for Ponganis on several occasions.

Despite his excitement about his latest adventure, Antarctica gave Howard an especially tough welcome.

Howard reached McMurdo in early October and was immediately sent to Happy Camper School, the cold-weather survival class that includes an overnight stay outdoors.

As the day progressed, the weather deteriorated, and the class found themselves facing strong winds, blowing snow and whiteout conditions.

The storm proved a worthy adversary and fought the group for control of the tents, as they struggled to set them up.

"There was some reconsideration that night," Howard said.

Ed Stockard / Special to *The Antarctic Sun*

Red Howard rides a mountain bike around a field science camp nicknamed, "Penguin Ranch." Howard spent two months helping to support the scientists studying emperor penguins there.

Howard made it through the night, but in the morning, word quickly began to spread around camp about something that hadn't made it: Howard's camera.

"I brought my brand new and first digital camera to Happy Camper School and had it neatly tucked in my pocket," Howard said. "I went to the outhouse, and as I fumbled around … the camera fell right into the outhouse hole."

After his harrowing night at Happy Camper, Howard expected Penguin Ranch to be similarly primitive.

"It wasn't what I thought it would be like, I imagined it much more like Happy Camp," Howard said. "Instead, there would be two people in different huts at Penguin Ranch, and they would be communicating [to each other] via e-mail."

Howard had several jobs in the lab that made use of his technical skills, like preparing devices that measure oxygen levels in the penguins' blood. But the bulk of his work was more physical than technical.

"You truck ice out of the dive holes in the morning and bring snow in to cover up the guano in the afternoon," Howard said. "The penguins may not eat every day, but they sure do make guano."

After long days of working mostly outside, he often spent time reading about Antarctica from a small stack of books from the McMurdo library or from one of several he brought from home.

An avid road and mountain biker, Howard said he had hoped his body would stand up to the rigors of working in Antarctica. Instead, he said he's never felt older in his life.

"The cold, they tell me, can preserve you and can make things last a long time," Howard said. "And that may be true — once you're dead it may preserve you a long time. But to me, it sure accelerates your process of getting there. Suddenly, ibuprofen has become a multivitamin. It's been quite a shock."

Howard works at a training hospital for Navy doctors, and he hopes he can now better explain the value of the opportunity his students have to get involved with Ponganis' work here.

"It makes you a better physician, it encourages you to [become a better scientist] and, all in all, it just makes you a better gentleman," Howard said. "It is all around what education is all about."

Howard said his few months in Antarctica were over far too quickly. He wasn't willing to rule out the possibility of a return trip one day.

"I'm a better person for getting to come down here," Howard said. "I don't think I have a single bad story from my time down here. Even losing the camera in the outhouse has a bit of a ring to it."