



## Antarctica's darkest day

*Erebus tragedy remembered*

By Aaron Spitzer  
*The Antarctic Sun*

Jules Uberuaga was in the communications room at South Pole Station when the tragic news came crackling across the radio. In McMurdo, Jim Collinson was eating a midnight meal in the galley when he heard. Rob Robbins got the somber news while working at the Berg Field Center.

Almost every long-time member of the U.S. Antarctic Program remembers the moment they learned that Air New Zealand Flight 901 had crashed on the slopes of Mt. Erebus, 20 years ago today.

The accident, on November 28, 1979, claimed the lives of 257 people. At the time it was the fourth-worst air disaster ever. More people died in the crash than in the entire history of Antarctica.

"It is a memory deeply etched in my mind," said Uberuaga, now a heavy-equipment operator in McMurdo. After the news broke at Pole, she said, "The National Science Foundation representative had a station meeting and burst into tears, as we all did."

November 29 was supposed to have been a day of celebration. It was the 50th anniversary of Adm. Richard Byrd's flight to the Pole, the first time an aircraft had conquered the vast expanse of Antarctica.

Congressmen and other distinguished visitors were in McMurdo, and special activities were planned, including a ceremonial flight to Pole. When news of the Air New Zealand wreck was released, all other events were forgotten.

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### Easing the surface tension

Neal Pollock relaxes in a dive hole off the shore of Cape Evans earlier this month. Pollock and his research group were collecting foraminifera and red algae from the sea floor. Photo by Aaron Spitzer.

## A fuel primer

By Josh Landis  
*The Antarctic Sun*

Like blood coursing through veins, fuel keeps the U.S. Antarctic Program alive. It is the liquid that gives us heat, generates electricity, sends Sprytes and Ski-Doos scooting across the snow and keeps planes and helicopters in the air.

As the hub of most Antarctic operations, McMurdo Station has the biggest need for fuel. Now it also has an upgraded system which can handle it more safely and efficiently. Two new 2-million gallon fuel tanks are close to completion at the base of Observation Hill near the road to Scott Base. In addition to the tanks that have gone up in previous years, they will give McMurdo its largest holding capacity ever—12 million gallons.

The new tanks will help carry the load of the old, Navy-built tanks on the hill above the ice pier. The aging containers are being taken offline primarily because they have no containment areas, and a spill could pollute the surrounding hillside.

This season's construction started in early November, and it's almost complete. Standing in one of the topless tanks, loud noises reverberate around the giant

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**A different kind of solar system/Page 4**

**Big bird goes bad / Page 7**

**Running the runway / Page 8-9**

**Rollin' on the ice road / Page 12**

## The big wind chill: a history


By George Howard  
Special to the Sun

Beyond the everyday practical tie between wind chill temperatures and Antarctica, there lies an interesting historical link. In his 1939 doctoral dissertation titled "Adaptation of the Explorer to the Climate of Antarctica," noted scientist and explorer Paul Siple first proposed the use of a measure to quantify the severity of cold environments. He called it "wind chill."

On his third expedition to the continent in 1941, Siple and fellow explorer Charles Passel extended earlier work by conducting experiments to specify such a measure. The two of them timed how quickly plastic containers filled with water froze at various temperatures and wind speeds. They then determined the corresponding temperature, under calm conditions, that froze the water in the same amount of time.

Siple used those observations to describe the relationship between the wind chill temperature and the contributing wind speed (in miles per hour) and temperature (in degrees Fahrenheit). We continue to use Siple's equation today to help us understand how much colder we feel when the wind begins to blow.

Does it make any sense to equate how cold we feel to the rate at which water freezes in plastic containers? Not really. Wind chill temperatures don't take into account factors such as how active or well-clothed we are. But even with its limitations, the calculated wind

chill temperature can give us an idea of how warmly we should dress and how cautious we should be in our outdoor activities. 

*George Howard is the meteorologist for McMurdo Station.*

## The week in weather

### Palmer

H/43 F

L/29 F

Min Wind Chill: -5 F

Max Wind: 60 mph

### South Pole

H/-35 F

L/-40 F

Min Wind Chill: -80 F

Max Wind: 18 mph

### McMurdo

H/28 F

L/ 5 F

Min Wind Chill: -35 F

Max Wind: 49 mph

### "Erebus"—from Page 1

The crashed plane had been an Auckland-based DC-10, on a then-routine tourist flight over Antarctica's Ross Sea region. For nearly a day after it fell out of radio contact, search-and-rescue flights had been sent up into the cloudy skies around McMurdo, scanning Ross Island and the sea ice for signs of the craft.

As the hours passed with no word from the plane, optimism dwindled. The craft would have run out of fuel if it had still been flying. The best possible scenario was a forced landing somewhere on land or fast ice.

According to Rob Robbins, who is now McMurdo's diving coordinator, "I don't think there were many people in town who held out much hope." The chapel overflowed with McMurdo residents offering prayers for the passengers on the plane.

Finally, a U.S. C-130 spotted the wreckage near Gang Ridge on Erebus' northeastern slope. Not long after, an Ameri-



*Father Bede Haughey, helicopter pilot Richard Dipboye and Scott Base manager Peter Brookman lay wreaths on Mt. Erebus Thursday in memory of the Air New Zealand crash. Photo courtesy of Peter Brookman.*

can Huey helicopter dropped three mountaineers from New Zealand's Scott Base onto the ridge.

The mountaineers radioed back the final word: There were no survivors.

According to a Wellington newspaper published the next day, "Charred, mangled wreckage and bodies strewn across clean white snow greeted the first men to reach the site."

The crash site was called a "hell-hole." It was a 2,000-foot-long swath of blackened debris smeared across a 30-degree slope, about 1,600 feet up the mountainside. Only a 20-

foot section of the tail was intact. The plane appeared to have exploded upon impact, and all passengers seem to have died instantly.

In New Zealand, the tragedy was felt by nearly everyone. "I have lived in New Zealand for years and people are still

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reminded of it," Uberuaga said. "It was a catastrophe unparalleled in a small, proud country."

The recovery of bodies was the first priority, the task of special police units sent down from New Zealand. But even getting to the area was a challenge. The crash site was steep, snow-covered and crevassed, and the first crews on the scene had to build a landing pad so U.S. choppers could set down.

According to Robbins, he and other general field assistants were put to work at the ice runway, building a Jamesway that would serve as a temporary morgue. For six days, corpses were carried by helicopter from the mountain to the runway, where they were loaded aboard planes and returned to New Zealand. Only 213 out of 257 bodies were recovered.

For researchers and support staff, the crash affected the entire summer season. Jim Collinson was a geologist waiting to fly out to the Ellsworth Mountains when the accident occurred.

"It really screwed us up," he said. "My field season was only effectively a week, and we were supposed to be

out for a month. But it was nothing that we griped about."


In New Zealand, investigations into the cause of the crash dragged on for years. It was finally determined that a combination of pilot error and faulty programming of navigational instruments led to the accident.

Based on recordings from the flight data recorder, it appeared that even the pilots never saw the mountain until instants before the wreck. Flying through thick cloud-cover, the plane hit the mountain at more than 300 miles per hour.

The crash caused Air New Zealand to permanently discontinue flightseeing trips to Antarctica. Qantas, Australia's major airline, also halted flights to the Ross Sea region, though flights over the East Antarctic coast were reinstated in 1994.

Today, the Erebus crash site is designated a Special Protected Area under the Antarctic Treaty, to be preserved as a tomb for those bodies that were never recovered. At the edge of the area has been erected a stainless steel cross.

In a helicopter trip to the site Thursday, Father Bede Haughey, Scott Base managers Peter Brookman and Pete Cleary and helicopter pilot Richard Dipboye laid two wreaths and read a short memorial service and messages from the New Zealand government.

Another memorial service will be held at Scott Base flagpole today at 2 p.m. All are welcome to attend. 



*Researchers from around the Dry Valleys gathered Thursday for a Thanksgiving feast and group photo at Lake Hoare. Photo courtesy of Neal Pollock.*

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closed Sunday,  
November 28.*

# Speaking of Science...

## Where the sun always shines

By Joe Yarkin  
Special to the Sun

In the land of the midnight sun, solar electricity plays an important and growing role in assisting communications and research. This year several new solar electric systems will be installed in the deep field summer science camps and remote sites around the continent. Solar energy also plays a critical role supplying power to communications equipment around Antarctica and on to the rest of the world.

The benefits of using the sun's clean and quiet energy to make electricity are the savings in expensive fossil fuel as well as improvement in the quality of life and environment.

"Science groups have been enthusiastically inquiring about being supplied with solar electric systems," said Mark Begnaud, the MEC supervisor, referring to the \$92,000 grant he was awarded from National Renewable Energy Laboratory. The money will be used to purchase ten new stand-alone solar power stations, which will be shipped out to summer field camps. Each unit includes solar electric panels mounted on top of an insulated battery box and inverter that produces 120-volt AC power. The ten units are arriving on the resupply vessel at the end of this summer season and will be available for field installation next year.

This summer season Byrd Surface Camp is installing solar electric panels to supplement its generators that power the camp.

"Whenever our electric loads are low we will be able to shut off the noisy generators and run the solar power," said Amy Dahl, manager of Byrd camp. The put-in construction crew will install ten 55-watt solar electric panels across the top of the camp's Jamesway. The power generated will charge gel cell batteries located inside the hut. The battery bank will then feed into an inverter capable of producing 2,500 watts to supply power to any loads needed.

"Field camp fuel is expensive and generators demand maintenance," said Tracy Dahl, field camp mechanic and designer of the Byrd system. "The Byrd system should demonstrate how solar energy can save time and energy for summer science camps, all the while making them a nicer place to study science."

In the extreme deep field there are five unattended science stations known as Automated Geophysical Observatories (AGOs) that collect data year round. This year each one will be fitted with solar electric systems to supplement summer

power needs in a general upgrade that will "increase reliability and offset the use of propane," according to Remy Fourre, engineer for the AGO project.

Solar energy is widely used across the continent for communications as well. "Anyone who has communicated to or from McMurdo in the summer has taken advantage of solar energy," said Bill Nesbitt, director of field communications.

Black Island, located across McMurdo Sound, houses the continent's largest solar array. All of McMurdo's phone, television, and radio information is relayed between Black Island and a satellite on the northern horizon.

ASA's communication department has installed and maintained 16 small radio and OptaPhone repeater stations located on mountain tops, providing solar-powered pathways for communications from field camps to McMurdo. Several of these stations are supplemented with wind power as well.

The department also supports three science groups with seven year-round remote monitoring stations located in the coastal mountains of West Antarctica. They happen to be some of the "world's most extreme environments," explained Nesbitt, referring to the long periods of 150-knot or higher winds many of the sites must endure.

These remote stations record and transmit information to satellites. "These stations use exclusively wind and solar power because it's simply the most practical and cost-effective for the small continuous-load situations," said Nesbitt.

There are several more camps and equipment sites expanding their use of solar energy on the continent this season that help demonstrate the advantages of solar energy in Antarctica.

Solar product reliability and cost has been improving steadily while solar energy industries grow, expanding the niche where solar energy is the most cost-effective, reliable and environmentally friendly energy option. The high cost of fossil fuel in Antarctica and the further realization of the NSF's environmental commitment ensure a growing role for solar energy on the Earth's most pristine continent. ✨

*Joe Yarkin works for Information Systems as an antenna rigger. He is a solar electrical contractor in his home state of New Mexico.*



*A bank of solar panels soaks up the sun on Black Island. Photo by Frank Howell.*

# SPIREX scans the heavens

By Aaron Spitzer  
The Antarctic Sun

Standing atop a 30-foot platform overlooking the blinding-white sweep of the polar cap, astronomer Charlie Kaminski pointed out the features of the telescope he had operated over the long Antarctic winter.

The telescope is SPIREX—the South Pole Infrared Explorer—and on that day in mid-November the device was being dismantled. “It was a sad day for me to flip the switch,” Kaminski admitted.

After a successful winter of scanning the Southern skies from its perch at the South Pole’s observatory, SPIREX’s work is done. It is being decommissioned to make room for a new telescope, DASI, being installed this summer.

In astronomical circles, SPIREX’s telescope was low-tech. With only a 24-inch diameter, it was oriented toward surveying broad swaths of the heavens.

“I know amateurs who have better telescopes than this one,” Kaminski said. “It was designed because it was relatively inexpensive to build for what we needed. It was a test bed.”

What was special about SPIREX was its “instrument”—the camera that connects to the telescope and takes pictures of the sky. Called “Abu,” it featured a state-of-the-art, million-pixel Aladdin chip, one of the most powerful found in astronomy.

Because SPIREX searched the sky in thermal infrared, it peered through the veils of gas and dust that shroud newborn stars. It also observed dying stars, gamma-ray bursters, X-ray novas and quasars on the opposite side of the universe.

“One of the last things I looked at was the area around the galactic center,” about 30,000 light years away, Kaminski said. “No other instrument in the world could look at

“Location, location, location,” Kaminski said. “We want it cold, we want it dry and we want it dark.”

During the long winter night at the Pole, SPIREX got 24-hour exposure to parts of the sky that elsewhere are hidden behind the horizon for part of each day.

SPIREX also took advantage of the Pole’s supercooled atmosphere, which dramatically reduced interference with its heat-sensing infrared detectors.

Moreover, the near-absence of water vapor in the polar skies means fewer clouds to obscure the telescope’s vision.

Or at least that’s how it was supposed to work. According to Kaminski, the past winter was actually unusually cloudy at Pole, significantly reducing the amount of



Researcher Charlie Kaminski stands before SPIREX, the South Pole Infrared Explorer, which he used to search the cosmos throughout the polar winter. Photo by Aaron Spitzer.

that much of the sky in infrared.”

And that was Kaminski’s task—to look at as much of the sky as possible.

To test the capacities of SPIREX, the Center for Astrophysical Research in Antarctica last winter opened up the telescope to the international astronomical community. Researchers around the world sent in requests, and Kaminski served as a sort of gun-for-hire, going through the targets from one cosmic coordinate to the next.

“Every time I took a picture it was four megabytes of data,” he said. The images were then disseminated to the researchers who had requested them.

But why come all the way to the South Pole to peer at the cosmos in infrared?

time the telescope could function. Adding to his frustration was airborne “diamond dust”—tiny ice particles that would settle on the telescope lens and freeze until he melted them off.

Still, said Kaminski, “This was the best infrared season the South Pole has ever had. It was kind of a linchpin.”

So much so, in fact, that even as SPIREX comes down, proposals are in the works to build a much larger infrared telescope at Pole, with a barrel nearly eight feet in diameter.

And in the interim, will the demise of SPIREX leave a gap in astronomy at the South Pole?

“It won’t be a big hole,” said Kaminski. “But it’ll be a hole.” ✨

"Fuel"—from Page 1

cylinder like laser beams in a Star Wars movie.

"We usually wear earplugs around here," noted welder Jim Veele.

The crew from California-based ITEQ is putting up the new tanks, and plans to be done in mid-December.

"These guys are great," said Dorian Smithy, construction coordinator and welding inspector. "They've been working like crazy and doing a great job."

Two teams are working around the clock and keeping construction at a pace that even surprises veterans of the trade.

"You're used to leaving a job, coming back the next day and finding everything pretty much the way you left it," said welder Jim Veele. "Here you come back ten hours later and there's a new ring on, the scaffolding is up a level, it's pretty amazing."

Double shifts get the work done faster, but bad weather here can have the opposite effect.

"If it's too windy it can be a bit tricky," said foreman Rusty Baron. "An 8 by 40 foot sheet (of steel) makes a good-sized kite. If it's too wet it doesn't agree with welding, either. It has to be pretty dry and clean."

McMurdo stores and uses three



Rusty Baron guides a structural support into place for a new fuel tank as John Bray, Jr. and Tom Ehmstrom (seated above) get ready to fasten it in place. Photo by Josh Landis.

grades of fuel. JP-5 is a common-grade diesel, used for vehicles, electric generators and fuel heaters. AN-8 is an aircraft-grade fuel specially formulated for use in Antarctica. "Mogas" is unleaded gasoline identical to the kind pumped at gas stations throughout the U.S.

When the U.S. Coast Guard

Icebreaker Polar Star plows through the sea ice this season, it will clear the way for a tanker to bring nearly 8 million gallons of fuel—one of the largest shipments ever. The fuel will be pumped into the new tanks, where it will wait until it's needed somewhere else.


One of those places is Williams Field. The runway on the Ross Ice Shelf will be used after the sea ice runway closes down in December, but the seven-and-a-half-mile hose is already in place, filled up and ready to fuel.

"We really rocked and rolled in one week," said fuels department foreman Bob Gilmore. "We got it done in record time."

When full, the hose alone holds 47,000 gallons of AN-8 fuel. Fuelies connected the hose to a new pipeline that was installed last winter. Welders replaced the old, four-inch pipe with a six-inch line and used solid welds instead of flanges.

"The problem with flanges is that they're one more area for fuel to escape," said Gilmore. "We've eliminated

that by welding the sections together. We're environmentally pro-active."

With yearly consumption averaging 6.3 million gallons, McMurdo Station's safe fuel usage depends on pro-active thinking on all sides. 

Faces on



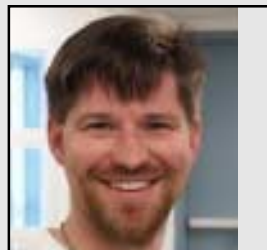
What's the best thing you've ever "skua-ed"?



"A pair of hiking boots."  
**Staff Sgt. Tory Miles**  
Operation Deep Freeze



"A tapestry wall hanging."  
**Kat Locke**  
Hairstylist



"I found a refrigerator before there were refrigerators in every room."  
**Marc Pomeroy**  
Crary Lab



"A bunch of red tulips."  
**Kellie Ellis**  
Crary Lab

# Notes from Never-Never Land

## Terra Incognita: Travels in Antarctica by Sara Wheeler

By Susan Allspaw  
*Special to the Sun*

"Can't help thinking I'm in Never-Never Land," Sara Wheeler wrote to her patron from a tent in the Dry Valleys. A grantee in the NSF's Artists and Writers Program for the 1994-95 summer and again in early spring 1995, Sara Wheeler writes of her travels in Antarctica with the voice of a modern writer and the heart of an old explorer.

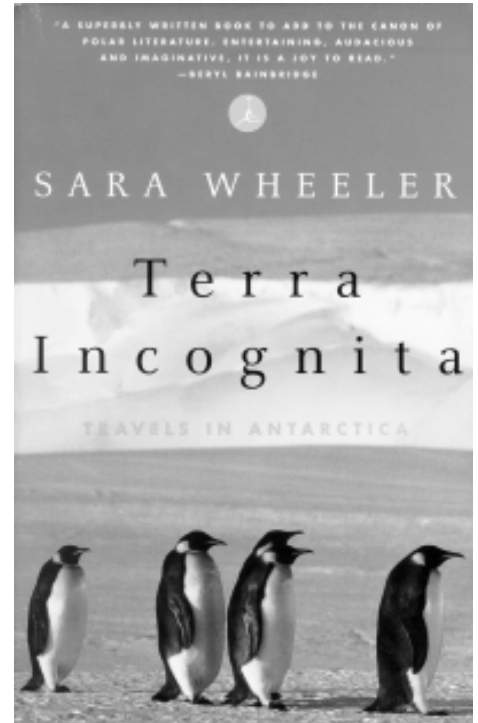
The familiarity of places and people—the galley, Ob Hill, characters who shall remain nameless (she refers to one as "Seismic Guy")—brings the reader much closer to her story. But it can also push away some of those who have been here, making it easy to say, "Hey, that's not what it's like for me."

As Wheeler moves from Christchurch to McMurdo to countless field camps (including one of her own, aptly named "Woolville," just off Cape

Evans), she intertwines narratives and facts from the Heroic Age with her own. She hits all the major players—Scott, Shackleton, Amundsen, Mawson, and Byrd—in well-researched detail. Her juxtaposition of the past and the present is one of the great strengths of this book. The bibliography is a great reference for anyone who wants to find out more about Antarctic history.

Wheeler has been criticized for her portrayal of life in McMurdo and at other bases (Rothera, Terra Nova, etc.), but her story is told how she sees it. Personal perspective is one of the main reasons why we love reading travel narratives in the first place.

Terra Incognita is a must-read for the modern Antarctic traveler. Not only does Sara Wheeler show us one woman's travels all across the continent—she highlights a wide span of Antarctic history.



## Revenge of the bird: Killer skua strikes McMurdo

By Tobias Schunck  
*Special to the Sun*

McMurdo Station, Antarctica—As residents of the United States Antarctic Research Station left the Thanksgiving banquet on Saturday, they were thinking about swing dancing, sleeping, going to the bars and socializing. They suited up in their bright red parkas and white bunny boots and braved the cold Antarctic winds.

But as three unsuspecting contract employees walked toward the chapel, they were surprised by a large, carnivorous skua. The animal, about eight feet tall, attacked without warning and killed its first victim with a single strike of its sharp beak. The second victim was able to run across the road, but the skua caught up to him after devouring the first victim. The last victim managed to get a photograph of the vicious animal before he, too, was attacked and eaten. After the initial investigation, the National Science Foundation released a picture of the suspected skua.

A noted avian psychologist said the attack may have been provoked by "homicidal sympathetic turkeynosis," a condition that may have arisen after the bird spied scores of Antarticans feasting on its feathered cousins for the holiday.

In response to the incident, all members of the station are confined to their quarters. Tensions have been running high as there are no firearms on station. ✨


# Ambling through Ice Town

*Story and photos by Jeff Inglis  
The Antarctic Sun*

Three miles out onto the sea ice from McMurdo Station, a few small buildings are clustered together in two rows. Radio antennas are perched atop rooftops; vehicles come and go constantly. Bulldozers and graders clear runways, roads, and loading and fueling areas.

It's sometimes called "Ross Island International Airport," but more often it's "the ice runway."

As the staging area for cargo and passengers coming to and from Antarctica and moving around the continent, the ice runway (and later in the season, Williams Field) is a vital area for successful seasons at McMurdo, South Pole and the field camps.

It's easy to think an airport is just about pilots and air crews, but there is much more behind the scenes. People who don't fly at all have key roles to play in the process. 



*Fire Lt. Amber Burton watches an LC-130 take off. Firefighters stand by at every takeoff and landing, in case a problem occurs.*



*Tech. Sgt. Dave Black fills an LC-130 with fuel before it takes off for Siple Dome and the Ford Ranges.*







Kim Wright and Paul Sutherland (from left), of "Kiwi Cargo," assemble a pallet storage sled in the cargo yard. They stage and package the cargo for flights to Christchurch, South Pole and field camps, as well as receiving inbound cargo for McMurdo.



Brooke Grant checks the level of fuel in a tank as it refills. On an average flying day, the planes use about 50,000 gallons of fuel. Fuel is piped from the large tanks in McMurdo down to the ice runway to keep the planes supplied.



Kaci Kurtti, the cook at the ice runway galley, laughs with a friend on the other side of the serving line. The galley feeds between 50 and 60 people each lunchtime, saving time for the workers, who would otherwise have to return to McMurdo for meals.



Loadmaster Staff Sgt. Carmelo Modesto directs a pallet into the cargo bay of an LC-130. Using only hand signals, he is able to tell the forklift driver to move the pallet up or down even fractions of inches to get the load just right.



## Our Antarctic Week

### Today

Turkey Trot 3-mile fun run—noon, the Chapel  
Tours of Scott's Discovery Hut—2-4 p.m., Hut Point

### Monday

Slide show: Climbing in Tibet—8:30 p.m., Galley

### Tuesday

Ballroom dancing lessons—6:30 p.m., Gym

### Wednesday

December Birthday Bash—8 p.m., Coffee House (bring ID)

### Thursday

Video presentation: "Antarctic Graffiti"—8:30 p.m., Galley

### Friday

Poetry reading, art exhibit, wine—8 p.m., Library

### Saturday

"New York, New York": Air National Guard party—8 p.m., Gym

### Sunday

Firehouse open house—1-5 p.m., Firehouse

*If you have an item for the weekly calendar, e-mail us at [sun\\_news@mcmurdo.gov](mailto:sun_news@mcmurdo.gov), call 2407, or drop by our office in Building 155.*

## Did You Know.....



*Brought to you by the Waste Department*

- **400,000 pounds of food waste was shipped off the continent last season. (420 tri-walls in 21 refrigerated mil-vans)**
- **33% of galley food waste is produced during preparation and 64% is due to consumer waste.**
- **Last year's food trays were replaced by plates in an attempt to cut down on post-consumer food waste.**
- **Studies show that Americans waste more of a particular food item when that item is scarce. (Do you take home freshies when they're available, only to later have them spoil?)**
- **Galley meals are on a 35-day rotation system. If a dish is popular, you are likely to see it 35 days later. Unpopular items are substituted with another dish in the next rotation. (Yeah! That means more crab legs around December 20!)**

## Ross Island Chronicles

by Richard Perales

### THANKSGIVING IN ANTARCTICA



# Gas, food, lodging (and cargo)

By Jeff Inglis  
The Antarctic Sun

*Marble Point serves up warmth and good cheer*

Flying into Marble Point there's not much to see from the air. It's about five buildings, dwarfed by fuel tanks. It's all tucked away into the loose gravel of a spit of land between the glacier and the sea.

But upon exiting the helicopter, you discover another world. A man waves and shouts hello from across the landing area. Even the fuelie smiles as she drags a hose toward the thirsty vehicle. A woman waits in the warm house, ready with hot chocolate, tea, and coffee.

They are James Raml, Meg Flanagan and Diane Bedell. They are the real Marble Point. McMurdo's still the big town, but this is civilization, Antarctic style.

Helicopter pilots know Marble Point well. They fly into and out of the Dry Valleys through the area. The Cape Roberts pilots also stay here, on the west side of McMurdo Sound, to be able to fly the morning shift change even if there's weather in McMurdo.

Raml describes the place simply. "It's gas, food, lodging and cargo."

For four seasons, he's been the site manager, the telecommunications technician and general handyman. If it's been built or repaired around Marble Point, he's worked on it. There's almost nobody else, and not much in the way of materials.

He took a Wannigan structure when Williams Field got rid of it. It was leaning over and pretty well beaten up. That was a couple of years ago. Now it's upright, with a new floor and a new coat of paint on the inside. It sleeps eight and includes a furnace that's as clean as a new one. All of that was done with materials left over from other projects, including work done at McMurdo or the South Pole.

There's always more to do. Among the tasks: Cleaning up the site from decades of messy Antarctic operations, getting cargo ready for transport to the Dry Valleys, getting waste and cargo ready to return to McMurdo, and then—oh

yes—the normal stuff to support life.

Even in just a short 10-minute tour of the place, Raml comes up with a list of about a dozen things he intends to work on now or in the future.

"Every year I try to get a few things done," he said of his "spare-time" projects.

In addition to helping Raml with the cargo and life-support jobs, Bedell makes sure the guests are at home in their well-maintained surroundings. "We try to run it basically as a bed and breakfast," she said.

She makes an excellent quiche, ensures that everyone has more hot drinks than they can hold, and is the weather observer, medic, and doer of anything Raml doesn't do—except fuels.

She is very relaxed, though, even with all that on her plate. She'll sit with you and talk if you're in the mood, or let you be.

Raml and Bedell make an excellent team. They have anywhere from one to 12 guests on any given night. The camp can sleep 17, and while the table is not quite big enough for everyone all at once, there's plenty of room for eating in shifts.

The other member of the team is the refueling technician. Fuelies rotate every three weeks, which is a nice break from town, but is no picnic. Helicopters fly 24 hours a day for large portions of the season, and there's always another one coming in.

It means all three are going all day long, stealing time "off" whenever there's nobody visiting and no helicopter on the way.

The beautiful setting is just part of the payoff for being the first field camp put in each season, and the last to be pulled out. For all of them, it's the appreciation on visitors' faces when they realize this is a special place and that they're as welcome as can be. ✨



*Meg Flanagan hands a fuel sample to pilot Richard Dipboye at Marble Point. It's the first welcome of many at the remote camp. Photo by Jeff Inglis.*



# PROFILE

## Drivin' and smilin'

### Betsy Johnson shuttles people, mail and good cheer

By Jeff Inglis  
The Antarctic Sun

The shades are on, the radio's playing NPR and she has a big grin on her face. It's just another day driving the ice runway shuttle for Betsy Johnson.

She crosses the sea-ice transition more times a week than most people do in a season, piloting a huge orange van with massive wheels through the lumps and bumps where the frozen ocean meets the land of Ross Island.



In the van with her are the people and parcels going back and forth between McMurdo and the collection of buildings at the ice runway. Sometimes the van is full, sometimes she's the only one, but Betsy doesn't seem to mind. She is, after all, in Antarctica.

"Where else could driving in circles be more exciting?" she asked. It's the sort of question which defies an answer, but at the same time explains why so many highly-qualified professionals—Johnson is a physical therapist—take Antarctic jobs they'd never do at home.

This isn't the first job she's taken because of the location: Recently she worked as a driver for a cruise line in Alaska, giving passengers tours of areas where the ships docked. She and her husband, Bryan, who works at Air Services in McMurdo, plan to work for the same cruise company again when



they get off the Ice, on a working trip from Sydney to Bangkok.

But for the moment, Betsy's working on winning a bet she made with one of her passengers: that she wouldn't be smiling at the end of the season. She said she would make it, and her smile is still greeting everyone who scrambles up the metal step into the van.

She picks people up around town, and often goes the extra mile and drops them off at their final destination—instead of Derelict Junction.

Most people do get on at the shuttle stop there, between Building 155 and the dorms. But if they're injured or carrying heavy things, they get picked up.

Besides the transition, where she concentrates on keeping the van from bumping around too much, Betsy keeps up a running conversation with whomever happens to be along for the trip. It's a good-natured banter, and keeps her in touch with a lot of the goings-on as they're happening.

It's not the most adventurous job in town, she admits, but she gets to meet lots of people as they go to or from work, or travel out to do small repair jobs at the ice runway.

"I'm doing pretty well remembering people's names now. It's tough. They all know me, and they get in all bundled up, with their sunglasses on," she said.

Every now and then a bit of adrenaline kicks in. A few weeks ago the vehicles at the ice runway were gathering to convoy back to town before the weather got bad enough to prevent them from making the trip. With the wind worsening and a big line of vehicles in need of a driver to go first, Betsy, in the first few weeks of her first season on the Ice, started the long, slow drive from flag to flag, 3 miles back to town. The convoy made it safely back.

And sometimes a more relaxing event occurs.

"Every once in a while, we'll see some wildlife," Betsy said. She's seen seals and penguins along the road and at the ice runway. She and her passengers also get to see incredible *fata morgana*. She'll stop and let folks get out and take a few pictures if there's time.

Betsy always has her own camera with her, and will often take pictures if there's something spectacular to see. She's always on the lookout for fun on the trip. But even when there's not much to be had outside the van, she always waves as passengers pile in, merrily greeting anyone who needs a ride. ✨