### **Antarctica Sun Times - ONLINE**

December 22, 1996

The Antarctica Sun Times is published by the U.S. Naval Support Force Antarctica, Public Affairs Office, in conjunction with the National Science Foundation and Antarctic Support Associates. Opinions expressed herein do not necessarily reflect those of the U.S. Navy, NSF, ASA, DON, or DOD, nor do they alter official instructions. For submissions please contact the Antarctica Sun Times staff at extension 2370. The Antarctica Sun Times staff reserves the right to editorial review of all submissions. The Antarctica Sun Times-Online is published in McMurdo Station, Antarctica

# **Navy Broadcasting Adds New Channel**

by JOCS Brady Bautch, Officer In Charge, Navy Broadcasting Det. McMurdo

Last Monday Navy Broadcasting Det. McMurdo successfully completed the transition to the new digital satellite signal as part of the Armed Forces Radio and Television Service (AFRTS) BC- 96 program.

This was done with a great deal of assistance from Antarctic Support Associates (ASA) Information Systems and Telco Division, and from Mr. Mitch Perry out at Black Island.

This conversion to a digital signal has allowed Navy Broadcasting Det McMurdo to add another channel to our line-up. The new channel is Channel 10 and features a new AFRTS satellite service called "NewSports."

Currently, NewSports provides approximately six - 10 hours of live and pre-recorded sports programming. However, on January 2 it will go to 24 hours a day and also provide news.

If you have a Zenith New Horizons television checked out from the housing office you will need to program the television to receive CH-10. This can be done using the remote which is available for check-out from the housing. Please return the remote promptly as it is the only one available in McMurdo.

The new digital signal has also meant a change in the types of satellite radio programs we receive. On FM 104.5 we now feature "Adult Contemporary II" when we are not using local DJs. FM 104.5 is also broadcast on the Community Information Scroll CH-5 on the television system.

On FM 93.9 we now offer country music which is also available on the Weather Channel (CH-6) on television. Also on 93.9 we will offer adult rock which is also available on the Air Transportation Channel (PAX) CH-7 on the television system.

Unfortunately, we have lost "AFRTS Voiceline" for the near future. We hope to offer that service again soon, but are waiting for an additional piece of gear being shipped from the U.S. before we can put this service back on FM 93.9.

For the near term, the programming on channels 8 and 13 will remain the same. However, in mid-March an additional AFRTS satellite channel is expected to be up and running.

Called "Spectrum," this channel will offer programs from Public Broadcasting Service, The Discovery Channel, Arts and Entertainment network and classic movies. This service will replace the programming on CH-13.

Also in mid-March the programming on the current AFRTS Satnet (CH-2) will be changed. It will then feature more AFRTS entertainment programs and less news and sports. At that time we will cutback the programming on CH-8 and offer movies from approximately 7 p.m. until approximately 1 a.m. and then again in the morning from 7 a.m. until noon.

### **South Pole to Get New Sled**

by JOC(AW) Jacqueline Kiel

A new larger cargo sled that will eventually be used at the South Pole was recently tested at McMurdo Station, according to Brian Stone, manager of Antarctic Terminal Operations.

While the sled has been in use throughout the summer season, the test proved the sled could hold and easily load oversized cargo. In the test a milvan was loaded into a C-130 using the new sled.

The \$34,000 sled is a 40-foot rollerdeck sled and is twice as long as regular cargo sleds. It weights 17,000 pounds and can carry 25,000 pounds of cargo. Additionally, where other sleds have independent ski systems making handling and backing more difficult, the new sled is a solid, one-piece unit.

"The new sled's just easier to handle than some of the other sleds," Stone said. "When you try to back up (an old sled), it's like trying to back your dad's boat - it's all over the place. And when two smaller sleds are hooked up in a train, backing is even more difficult."

The design of the sled it low-tech, but efficient. "It is similar to a design used in Greenland where they had to move a tremendous amount of cargo," Stone said. "It is designed to hold a five-pallet train."

Another advantage of the sled is the addition of push blocks which are used to push and position the sled using a fork lift. They make the sled considerably tougher. "You could bump into it, back into it with a dozer, push it from the side and pull it," Stone said.

The smaller sleds don't have this feature. "They're designed to be towed and backed up," Stone said. "They're not designed for you to push on them."

The features the sled has, including a winch mounted at one end, will make loading and unloading faster and more efficient.

The sled will be of great value at the South Pole because of off-load problems encountered early in the season. These problems stem from contrails, which normally form when the aircraft is flying. Because of the extreme cold temperatures at the Pole, the contrails form on the ground when the aircraft is idling.

"The contrails make off-loads difficult due to reduced visibility, so pallet trains, which are sleds connected together to hold bigger loads, aren't sent to the Pole until two or three weeks after the station opens for the season," Stone said. "The hope is that having a good sled may allow trains."

The long-range goal is to purchase more of these sleds so they are available both at McMurdo Station and the South Pole.

### **AROUND USAP**

by JOC(AW) Jacqueline Kiel

**McMurdo Station** - McMurdo Station Manager, Al Martin, extends his "Thank you" to everyone who participated in the town cleanup. Over 10 tons of trash were picked up.

The latest water samples taken around town showed a decrease in the overall lead level in the station's water. Advisories are being removed from those buildings with lead levels below the action level.

There are now five operational power generator engines. The fifth engine was repaired last week. The sixth engine will be repaired when a new block arrives on board the M/V Greenwave.

Personnel and cargo were dropped off at the Executive Committee Range Field Camp on Wednesday to open-up the camp. An additional flight to the field camp on Thursday delivered food, fuel and cargo. Research in the area is on the volcanic record in Antarctic ice.

The Automatic Geophysical Observatory (AGO) team was removed from the AGO3 site on Friday, Dec. 13. While there, the field team performed maintenance, calibration, data recovery and refueling. Two 500 gallon fuel tanks were delivered to the sight. This is the first time these bulk tanks were deployed into the field.

**South Pole** - Antarctic Support Associates personnel began preparations for recovering fuel from the old South Pole Station. Once recovered, the approximately 9,000 gallons of fuel will be used by the Polar Ice Coring Office for drilling efforts.

**R/V Nathaniel B. Palmer** - During the week, the vessel continued to head for the ice edge. The crew and researchers conducted science seminars and strategy meetings for mooring placement, ice sampling and other measurements.

**R/V Polar Duke** - The ship departed Punta Arenas Thursday in support of research on the Antarctic marine ecosystem, which will focus on microbiology and carbon flux. During the cruise, researchers intend to recover a bottom-moored sediment trap, deploy two more sediment traps and measure atmospheric carbon dioxide.

# **Local Computer Network Capabilities Increase**

by JO2 Trevor Poulsen

It wasn't long ago when McMurdo had only one email account and all messages had to be business-related.

McMurdo residents now send an estimated 10,000 email messages a day between themselves, according to Information Systems (Infosys) Network Engineer Chris Liljenstolpe.

"We also handle about six thousand pieces of mail coming in everyday and three thousand going out," he said.

Today, the increasing use and popularity of email has made personal accounts an indispensable tool for communication in Antarctica. Nearly all local residents have accounts of their own.

McMurdo's computer network capabilities continue to expand. This season, Infosys will likely increase the size of the town's connection to the internet to 784,000 bits per second from 680,000.

"That will provide a little better performance for folks - a little more bandwidth for people moving files back and forth: downloading files from the internet and sending files back home," Liljenstolpe said.

"The big problem we have are folks who send very large files over email - a couple of megabyte files," he added. "The DaVinci (email) system can't handle it and it stops mail for everyone else."

Liljenstolpe recommends using File Transfer Protocol (FTP) to transfer large files. This can be done using FTP software.

Another feature that has been added to the McMurdo computer network is continuous access to the internet. So, if the satellite connection is down any outgoing email message may wait up to five days to be sent.

### SCIENCE PROJECT UPDATE

by JOC(AW) Jacqueline Kiel

#### Long Duration Balloon Program/Pathfinder Balloon Project (S-145)

This NASA-funded project launches high-altitude balloons into the stratosphere. These large helium-filled balloons circumnavigate the continent at an altitude of 100,000 to 130,000 feet for up to 24 days.

This year's project includes the launch of one or two pathfinder balloons carrying Global Positioning System-based payloads. They will hopefully provide insight into the central circulation pattern of the polar anticyclone, which is a system of winds that rotate counterclockwise about a center of high atmospheric pressure.

Principle Investigator Steven Peterzen will prepare for next year's launches while at McMurdo Station. He will then travel to the South Pole where he will release the balloons which will be tracked from the United States.

#### Near-Surface Processes Affecting Gas Exchange: West Antarctic Ice Sheet (S-155)

The focus of this research is on the physical processes that affect how heat, vapor and chemical species in the air are incorporated into snow and polar firn, which is granular snow that has not completely compacted.

The processes the research will focus on include advection, diffusion and the effects of solar radiation penetration into the snow.

Principle investigator Dr. Mary Albert and Edward Arons are conducting field studies at Siple Dome using gas chromatography on collected samples. They are obtaining samples from a site where the snow is undisturbed.

## **Late Season Ice Travel Requires Caution**

by Samantha Tisdel

As the sun reaches it's zenith in the sky with the summer solstice, the annual deterioration of the sea ice is well underway. This heralds many changes to take place around McMurdo.

Perhaps the most visible of these changes is the soupy melt- water pool which has recently formed at the transition to the ice runway road. According to McMurdo's sea ice instructor Buck Tilley, this massive slush-puddle is caused by differential melting which often occurs where sea ice and land meet.

"The sea ice at the ice runway itself is still stable," said Tilley, "but we'll only get one more week of use out of the transition before we'll have to shut it down completely."

With the transition rendered useless for vehicle traffic, the ice runway will be shutting down for the season, with all aircraft activity shifting to Willy Field and Pegasus. The shift is scheduled to occur today.

Once the transition is closed, access to the sea ice from McMurdo will be effectively shut off. There are already some routes which have entirely or partially been shut down for the season, Tilley said.

This includes the routes to the Penguin Ranch, Cape Evans, and the Erebus Glacier Tongue. The route to Cape Royds is now open for snowmobiles only. "There are cracks opening everywhere," Tilley said. "New cracks are forming, and old ones are getting larger."

People who are out on the sea ice this week should use extreme caution. "Anything flat and smooth looking is suspect, because it indicates thin ice," Tilley said. "Dark patches or black patches are extremely dangerous."

And of course, cracks should be avoided whenever possible, or crossed at the narrowest juncture. This may entail taking a slight detour from the main route, but it's well worth the effort to be safe.

Those traveling on snowmobiles on the sea ice are reminded that in order to cross a crack safely, the crack should be no wider than one-third of the front ski tip.

"Don't push the limits," Tilley said. "Don't be a cowboy. It's better to be a chicken around here than to have a fatal accident and get some building named after you."

Foot travel on sea ice requires more caution now, as well. The Cape Armitage route from McMurdo to Scott Base has been closed for the season due to instability of the sea ice. In fact, the shoal at Cape Armitage (where the "nose" of Ob Hill descends to the sea ice) will be the first place near McMurdo where open water will appear, Tilley said. This is because of current activity which erodes the bottom of the sea ice in this area.

The route to the iceberg will remain open for now. It is being monitored daily by Scott Base personnel. "The route could close at any time," Tilley said. "People going out there should definitely stay on the flagged route, and be aware that the sea ice right around the berg is quite thin and unstable. Don't get near the berg, and definitely don't go on the berg!"

Although the break-up of the sea ice in McMurdo Sound is inevitable, Tilley said it's impossible to predict when open water will make its long-awaited appearance. "The ice edge is eroding more and more each day," he shrugged. "It just depends on the wind and the sun."

# **New Fuel Pumps Ready**

by JO2 Trevor Poulsen

McMurdo drivers can now fill their vehicles using a new and improved set of fuel pumps.

Facilities Maintenance & Construction (FMC) engineers Chris Rock and Chris Martin recently installed one mogas and two diesel pumps at the town fuel depot.

The new pumps will have features not previously available, one of which is an automatic shut-off valve that stops the flow of fuel if the operator releases the pump handle.

Another feature is a data collection monitor into which the operator will key his/her department number. The monitor will keep track of departmental fuel consumption.

A sign posted at the fuel depot will have instructions on how to operate the new pumps.

## **USAP PERSON OF THE WEEK**

by JO3 Roland Ortiz

Second Cook Kenneth Turner is known throughout McMurdo as the infamous "Elvis."

Working as a Second Cook in the galley, Turner's showmanship has added a little flair to dining in McMurdo.

Turner started entertaining by accident three years ago. "I waited tables and they said dress up as somebody, so I came as Elvis and the whole thing went from there," he said. "People then started hiring me for parties."

He started to get the Hollywood bug, so he went to Los Angeles. "I wanted to get into the acting business," he said. "I also like writing scripts for TV shows and I'm currently working on a drama screenplay," he added.

Turner has had some experience in the media industry. "I've done three radio spot commercials. They were two Hallmark Network commercials and one real estate commercial," Turner said.

Turner's dedication to entertaining others is not the only thing he does. He cooks a variety of meals mainly for lunch. Turner being Second Cook has it's responsibility. "I ensure the meal is done on time and correctly," he said.

Originally from Detroit, Mich., Turner leaves McMurdo at the end of the summer seasons and plans to visit Detroit. In May, he will return to Los Angeles, Calf., to continue his work in the entertainment industry.

# The Parade Of Lights!

by T.J. Gagnon, Bryan Collom and Nancy Ford

You may have noticed bright, yellow fire trucks crewed with firefighters and flashing lights responding through town. Although operating a fire truck is a childhood dream for many and is a lot of fun, it takes a careful driver and a knowledgeable engineer to effectively operate a fire engine. Our operators are highly trained and safety is their primary concern.

The McMurdo Fire Department is equipped with two Pierce-Arrow Pumpers, one Ward Limited Tanker, two Star of Life Ambulances, three Nodwell Crash Vehicles, and two Chieftain Crash Vehicles. It takes considerable time and training to become proficient in operating and maintaining emergency response vehicles.

The reason you see these vehicles responding to emergencies with only flashing lights (the parade of lights) and not traditional sirens, is in consideration for day sleepers and other McMurdo residents.

Please use caution when you see an emergency vehicle approaching; you are far more visible to drivers when you walk facing traffic,.

Although our parade of lights is not a direct celebration of this holiday season, we invite you to stop by the firehouse for some holiday cheer! With only three days until Christmas, we wish you all Happy Holidays and a Happy New Year!

### **NAVY NEWS**

#### Navy Upgrades Internet Kit With New Software

WASHINGTON (NWSA) -- The Space and Naval Warfare Systems Command (SPAWAR) has updated the web browser that comes with the Navy Internet Kit (NIK). The new version has more features and better performance than the browser included in the original kit.

The Navy Internet Kit was first developed in 1994 by SPAWAR. It's designed for Sailors who either aren't on a local area network (LAN) or have no other Internet access. Any Navy active duty or reserve member or Navy Civilian employee with a PC and modem are eligible to receive the kit.

There are three ways to receive the Navy Internet Kit. Eligible personnel can request the kit by sending an e-mail to: ron.turner@inpo.navy.mil or download it from SPAWAR web site on: http://www.spawar.navy.mil .

The Navy's success in fulfilling its critical missions depends upon the ability of its people at every level from seaman recruit to Secretary of the Navy to have access to the right information at the right time from anywhere in the world. Internet connectivity is a critical part of that goal. The Navy Internet Kit with its enhanced web browser is a significant improvement in information exchange capabilities for the Navy Internet user.

The NIK is a three-disk set and requires Microsoft Windows. Later versions will include Macintosh and UNIX compatible software.