



THE ANTARCTICAN SOCIETY

905 NORTH JACKSONVILLE STREET
ARLINGTON, VIRGINIA 22205

HONORARY PRESIDENT — MRS. PAUL A. SIPLE

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November

No. 2

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Mr. George R. Toney, 1964-65
Mr. Morton J. Rubin, 1965-66
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Mr. George A. Doumani, 1970-71
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Mr. Peter F. Bermel, 1973-75
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Memorial Lecturers:

Dr. William J. L. Sladen, 1964
RADM David M. Tyree (Ret.), 1965
Dr. Roger Tory Peterson, 1966
Dr. J. Campbell Craddock, 1967
Mr. James Franke, 1968
Dr. Henry M. Dater, 1970
Sir Peter M. Scott, 1971
Dr. Frank Davies, 1972
Mr. Scott McVay, 1973
Mr. Joseph O. Fletcher, 1974
Mr. Herman R. Friis, 1975
Dr. Kenneth J. Bertrand, 1976
Dr. William J. L. Sladen, 1977
Dr. J. Murray Mitchell, Jr., 1978
Dr. Laurence McKinley Gould, 1979
Dr. Charles R. Bentley, 1980
Dr. Robert L. Nichols, 1981
Dr. Robert H. Rutford, 1982
Mr. R. Tucker Scully, 1983
Dr. Richard P. Goldthwait, 1984
Dr. Mark F. Meier, 1985
Dr. Claude Lorius, 1986
Dr. Louis J. Lanzerotti, 1987
Mr. Peter J. Anderson, 1988
Dr. Ted E. DeLaca, 1989
Dr. Sayed Z. El-Sayed, 1990
Dr. Charles W. Swinbank, 1991
Dr. Susan Solomon, 1992
Dr. Michele E. Raney, 1993
Dr. Doyle A. Harper, 1994
Dr. Edith L. Taylor, 1995

Joint Meeting with The Explorers Club - Washington Group
and The Society of Woman Geographers

The Greatest Survival Story Ever Told

by

Geoff Shelley

Custodian of the Shackleton

ENDURANCE Lecture

on

Saturday evening, December 7, 1996

at

The Cosmos Club 2121

Massachusetts Avenue, N.W.

Social Hour 6 PM - Dinner 7 PM - Lecture 8:15 PM

The cost of dinner, including tax and gratuity, is \$40/person. Make check for dinner payable to Explorers Club-Wash. Group, and send to Donald M. Watkin, 3001 Veazey Terrace NW, #120, Washington, DC 20008-5455, by November 30th.

If you wish to have drinks before dinner, please write a note to Don Watkin. On it print your name (as it is on your credit card), name of credit card with number, name of bank, and the expiration date — as soon as possible — and sign your name.

Dress will be black tie, or dark suit, if you prefer.

The epic story of Shackleton's ENDURANCE Expedition, utilizing original magic-lantern slides taken by Frank Hurley! There will be Limited Edition photographic prints from the Expedition on exhibit and for sale. Leonard Hussey, first man ever to present a banjo concert to an all-penguin audience, returned to England and gave this lecture to various interested groups. The baton for continuing this 80-year old lecture has been passed to Geoff Selley, a policeman involved with school groups. Guaranteed to tickle the cockles of your heart, make the hairs on your backbone stand up. Three cheers for Sir Ernest! Hip, hip, hip hooray! COME!!!!

Please buy 1997 Antarctic calendars! (see page 2)

We got a lot of positive feedback on Kristin Larson and her Penguin Prattle. Some of you people weren't paying attention. She is not an employee of the National Science Foundation; she works there as an independent contractor assigned to the Office of Polar Programs. We like Kristin as she is a bit of a free spirit, a breath of fresh air. And, of course, it doesn't hurt that she is an attractive woman, fun to talk to. Her only obvious drawback is that she is going to law school, which can lead to debauchery, swindling, and even worse things. We were sort of hoping that Kristin would eventually take over this whole operation, as we could live with her quite easily. So enjoy Kristin as long as she writes for us, and let's hope that she does not drop us. You can trust her words, but all the rest remains suspect as before.

BUY, BUY, BUY THOSE NEW ZEALAND ANTARCTIC CALENDARS. We have a surplus of Antarctic calendars this year, as some of our big buyers, like Jim Stoner who used to buy about forty, aren't doing too well on the farm this year and have cut back. So as we go to press, we still have a hundred sitting in the Nerve Center. You can't beat our price, as after mailing, we are only making pennies, and Ruth drives every day to the post office to mail them with no compensation. Say there, Michele Raney, Gisela Dreschhoff. Anne Benninghoff, don't you need some more for your mail man, your ice man, your garbage collector? And don't forget your mechanic.

ABOUT THE LAST NEWSLETTER. Several people, including some whom I highly respect, wrote us after my tongue-in-cheek words about how many of us who went to the ice with the IGY forty years ago this fall were a pretty motley bunch. We used to get a lot of letters when we purposely spelled Admiral Dufek's name as Admiral Defect. I'm not just certain when it all came about, as I spent both 1957 and 1958 on the ice, but somewhere along the line his name did get changed to something which we thought was more appropriate. Perhaps it happened at the South Pole, as we got to see a lot of the Admiral with both Ed Hillary and Bunny Fuchs leading traverses into the camp. However, Defect, pardon me, Dufek, did have one strong backer, admirer, and that was the legendary Larry Gould who liked to quote from an argument he had with the Admiral which ended up with Dufek saying, "Damn it, Larry, you let me run this Navy, and I'll let you run the goddamn IGY program." The quotes are sort of a sanitized version of the true spoken words, which were so effective that both lived happily ever after with one another.

Paul Humphrey wrote to the effect, "Hey, you forgot me, I did a lot of work, I was an important man back in those days." So, right, Paul, you were important, but I wrote about the characters, and you were so serious and straight arrow and worked so hard that I couldn't think of one thing comical about you. But let's give Paul some of his just dues, quoting from his letter of 24 October 1996. "I was the designated representative on the USS ATKA voyage of the U.S. National Committee for the IGY for a possible return to Little America and to investigate other possible station locations. I was then responsible for recruiting and selecting all meteorological personnel, and made a second and a third trip to the Little America location to start assignments there. Throughout the IGY I was Dr. Wexler's only assistant on IGY matters pertaining to the Antarctic. I also selected, ordered, and spent many Saturday afternoons overseeing the packing and shipping of all items in the meteorological program." There's more, but we're going to cut Paul off right there!

HARVARD TRAVELLER CLUB HONORS ITS SECOND ANTARCTIC DROPOUT. Norman Vaughan doesn't come in second very often, but he did November 12th when he became the second Antarctic to receive the Club Medal from the Harvard Traveller Club. The first to receive it was the late Eddie Goodale, a fellow dropout of Norman's, who also drove to the dogs on the 1928-30 Antarctic Expedition. Norman addressed the illustrious group at the Harvard Club, speaking on "Dogs on Ice: Adventure and Exploration in the Antarctic." This preceded his and Carolyn's return to the ice later in the season on a cruise ship. Norman is trying to put some distance between himself and Charles Swithinbank for overlapped time in Antarctica. Norman was in the Bay of Whales for his 23rd birthday in 1928, and will be in the Drake Passage for his 91st birthday this year, a span of some sixty-eight years.

When Norman and Carolyn get back to Alaska, they are going to be actively involved in sort of a Grand Alumni of the Iditarod camping trip. All mushers have to be former racers, but they are going to do it the civilized way this time, with ten hours of rest each day. They will even loan dogs to the weary, and have an escort of four snowmobiles. There is a real famous and real old Eskimo who will be the ceremonial leader, although his health will allow him to do only the first mile and the last few hundred meters. He is the Satchel Paige of Eskimos.

Remember that ultra wealthy blonde phenom of about 70 whom Norman took to the South Pole last year, and then close to the North Pole last spring? Evidently Norman must have spent some time banging her ear about the joys of a younger life partner, as she is about to marry a thirty-one year old. I don't know exactly what is in the air or in the water, but Norman seems to have started a groundswell of Antarcticans searching and finding something young. The latest to have a big smile on his face is John Spletstoeser who found a lovely at Scott Polar Research Institute who is thirty-five his junior. And the amazing thing is that Kim also has a big smile on her face. What is going on in this world? And speaking of Scott Polar, the heir apparent for writing this column about five years ago was this charmer Pam Davis. She took down her real estate shingle and went over to Cambridge, presumably to pick up a degree and come on home. But she got hooked on sculling or rowing or something in the water, and decided that England wasn't all bad, in spite of its weather. Then she, too, met a young Antarctic, and on her way to her PhD, they got married. So now it is Dr. Pam Davis, and there will be a little sculler at the boat house this spring. So there goes that heir apparent.

Meanwhile back at the ranch in Cambridge, Charles Swithinbank is going to solidify his position as the person who has seen the most of Antarctica by being on the baptism flight of Air Adventure Network out of Capetown, flying a bunch of intrepid Norwegian mountaineers into Queen Maud Land. If you are an avid reader of this taradiddle, you know that Charles has been in Antarctica in the 40's, in the 50's, in the 60's, in the 70's, in the 80's, and in the 90's. I don't quite understand it - it might be the new arithmetic - but he has been in Antarctica for six consecutive decades, but is still only in his mid-sixties! Don't turn around, Norman!!

Two percent of Antarctica is exposed bedrock, but about 98 percent of the earth scientists lecturing on cruise ships are geologists! Art Ford, who was submarined by the U.S. Geological Survey last year, has laid down his geology hammer, and will be on the ALLA TARASOVA lecturing this austral summer. Another hard-rock type out there lecturing will be Hal Borns. John Spletts is circumsizing Antarctica on the KHELEBNIKOV as we go to print, and must be encroaching on getting his ten-year pin as an Antarctic lecturer. Gerry Webers lectures frequently, and Bob Rutford occasionally. The late Gentleman Jim Zumberge was another lecturing geologist, bon vivant, and entertainer extraordinaire. But outside of Swithinbank and Dick Cameron, how many glaciologists have lectured on cruise ships?

HARRY DARLINGTON III OBITUARY (Robert Dodson). Harry Darlington, 78, veteran of two Antarctic expeditions in the 1940s, died in Virginia of a stroke on November 6, 1996.

In 1940-41 Harry was the youngest member of the U. S. Antarctic Service Expedition (USAS), serving at its East Base on Stonington Island on the Antarctic Peninsula. As a dogteam driver, he took part in a 1500-mile sledge journey that mapped previously unexplored territory on the Weddell Coast. Previous to the U.S. Antarctic Service Expedition, Harry had taken part in the Grenfell Labrador Expedition in the 30s.

Returning to Stonington Island in 1947-48, he was a pilot with the Ronne Antarctic Research Expedition. On this expedition he was accompanied by his bride, Jennie. She and her companion, Jackie Ronne, were the first women to winter over in Antarctica. Upon her return, Jennie - with the help of author Jane McIlvaine (who became the wife of the expedition's first mate, Nelson McClary) - wrote a book entitled "My Antarctic Honeymoon." The Darlingtons¹ daughter, Cynthia, who was born in 1948 soon after their return, was the first child to have been conceived in Antarctica. Had it not been for a rescue by two Navy icebreakers, enroute home from the Ross Sea in the southern summer of 1947-48, making the long detour to extract the expedition's ship from unrelenting summer ice, the expedition would have been stranded for a second winter. This would have given Cynthia the added distinction of being the first person born on the continent (Stonington Island, at that time, was connected to continental glacier ice).

During World War II Harry, as a Naval aviator, flew with a B-26 anti-submarine squadron which made several successful bombing missions against German submarines.

A lifetime sportsman, he was a member of the American World Championship bobsled team in 1939. He was an avid sailor since childhood. Two years ago, at North East Harbor, Maine where he had a summer home, he finished first (at the age of 76) in a world series of racing for "International One"-designed yachts. Last year, at 77, he placed third out of 22 boats at an international competition in Norway.

Harry has raised cattle on his Chilly Bleak Farm since the late 1940s, crossing Charolais and Angus breeds, receiving national recognition. Anyone who toured his spread came away with a strong impression that here was a well-managed operation whose owner had devoted heart and soul, and much work, to its success.

Although he had not returned in almost fifty years, he held a deep respect for Antarctica and the early expeditions, including those of Admiral Byrd who had been titular chief of the USAS. This was evidenced during an outdoor dinner at his home during the 1980s. His longest and most heartfelt toast was directed at Ruth Siple who was among the guests that moonlit evening. She was, for him, a most admired member of the Antarctic community.

1996 ANTARCTIC OZONE HOLE BELOW RECORD AVERAGE SIZE (Goddard Space Flight Center, Greenbelt, Maryland). Two NASA instruments again have detected substantial depletion of ozone levels over Antarctica, commonly referred to as the Antarctic Ozone Hole.

The average size of the Antarctic Ozone Hole during 1996 has been almost as large as in the peak year of 1993, although ozone values are higher than the record lows seen in September 1994, according to preliminary analysis of satellite data by scientists at NASA's Goddard Space Flight Center in Greenbelt, MD. During the current year, the ozone hole covered a surface area over the South Pole roughly equal in size to the North American continent.

These data were recorded by two of NASA's Total Ozone Mapping Spectrometer instruments (TOMS) launched this year, one on board the NASA Earth Probe Satellite and another on the Japanese Advanced Earth-Observing Satellite (ADEOS). Low ozone amounts over the Antarctic continent consistent with these TOMS data also have been

validated by ground-based instruments and other satellite-based instruments.

The average size of the ozone hole during this year was 8.3 million square miles, similar to observations in the last four years. The largest observed average size of the ozone hole was in 1993, at 8.5 million square miles.

The hole started to form in mid-August of this year and reached a one-day peak size on September 7, 1996, of about 10 million square miles, then quickly shrunk to values of less than 8.5 million square miles. The previous largest one-day peak size hole was 9.4 million square miles on September 27, 1992. In comparison, the surface area of North America is 8.1 million square miles, while Antarctica has a surface area of 5.4 million square miles.

Since the mid-1980s, the region covered by low total ozone begins to grow each year in early August. This region reaches its maximum extent in September, while the lowest ozone values are typically seen in late September and early October. The ozone hole usually disappears by early December. The ozone hole in 1996 opened up slightly earlier than in previous years, but had begun to decrease in surface area below 7.7 million square miles by October 16, 1996.

"This ozone hole is very similar to those seen in recent years," said Dr. Paul Newman, research scientist in the Laboratory for Atmospheres at Goddard. "Although its area climbed briefly over that of the previous peak, that is not as great a concern as the average size, because meteorological conditions can cause large day-to-day fluctuations. This is similar to winter temperatures, where one really cold day is not as important as the average temperature over the whole winter season."

The ozone amounts measured by TOMS/ADEOS and TOMS/Earth Probe dropped to 111 Dobson units on October 5 near the center of the Antarctic continent, with values below 220 Dobson units measured over a wide area. Total ozone values less than 100 Dobson units were measured in both 1993 and 1994, with the record low value of 88 Dobson units measured on September 28, 1995.

Scientists at the South Pole from the National Oceanic and Atmospheric Administration (NOAA), working with balloon-borne measurements, have found low total ozone values similar to those seen in 1994. "However, in the central region of the ozone hole, from 7.5 to 12.5 miles altitude, ozone depletion was more severe than in the past," said Dr. Dave Hofmann of the NOAA Climate Monitoring and Diagnostics Lab in Boulder, Colorado. The NOAA measurements showed that complete destruction of ozone at an altitude of 10 miles was observed over the period from Sept. 24 to Oct. 14. "Total ozone did not reach record lows because of unusually high ozone above the ozone hole at 15 miles which compensated for the low values in the ozone hole," Hofmann said.

"These deep and large ozone holes are likely to continue to form annually until the stratospheric chlorine amount drops to its pre-ozone hole values," said Dr. Richard Stolarcki, also a research scientist at Goddard. "The slightly earlier ozone hole this year probably resulted from the continued increase of Antarctic stratospheric total chlorine levels." (To be continued in next Newsletter)

INTERPERSONAL DIFFERENCES calls for a minor two-minute penalty in the ice hockey world and back in the old days at a Dew Line station people never even looked up from their Carlsbergs when a Saturday night brawl broke out among the construction workers. But things are changing in this world. The world turns aghast as an all-star baseball player expectorated in the eye of an incompetent umpire, and the outside world read screaming headlines that the FBI and a mediator were heading to McMurdo and Casey stations to bring peace and happiness back to the pristine continent. All the time this was happening, people at home were crushing down turnstiles to get the opportunity to fork over big bucks to watch mayhem being committed on the turf below. Life is all in the eyes of the beholder.

The Manchester Guardian had big black screaming headlines announcing "FBI Rushes to the Pole as Mutiny and Mayhem Follow Outbreak of Cabin Fever in Antarctica." It does not say anything about all the 911 calls the night before from some irate wife or browbeaten husband. The weapon of choice in McMurdo was a clawed hammer, not exactly a loaded gun, but it got the attention of the world. And, not only that, but it gave enterprising reporters the chance to dig into Antarctic history to cite other interpersonal matters, such as the deranged staffer at Casey who had to be locked up in a storage room, although the AP article out of Australia said incorrectly that it was at Mawson. And, of course, they rehashed how the doctor at Almirante Brown burnt down the station rather than face wintering over in front of one of the most spectacular sceneries in the whole world - Paradise Bay. And they recounted the story in the National Geographic Society magazine about an American doctor who had to refrain himself from pushing the camp commandant over a cliff. Antarctica has about a hundred-year history, and I doubt if there is a town in America where less violence has occurred in the last century. Big Deal!

SPOUSES OF ANTARCTICANS (Dr. Peter Suedfeld, Dept. of Psychology, University of British Columbia, Vancouver, BC V6T 1Z4, Canada). A research program is now beginning to study the adaptive strategies and other reactions of spouses and families of Antarctic scientists, support and military personnel, etc., during the absence of the family member on the ice. The researchers, both of whom are professors at the University of British Columbia in Vancouver, Canada, are a husband and wife team who are interested in this project at a personal as well as a professional level. Dr. Peter Suedfeld, an environmental psychologist, has done field research on how current-day crew members have adjusted to working in the Antarctic and the High Arctic. His wife, Dr. Phyllis Johnson Suedfeld, is a professor in Family Studies whose work has included research on family adaptation to novel circumstances. Both of them believe that the families play an important role in the sojourner's adjustment, and that the prolonged absence of an adult family member in turn affects the activities and interactions of the family. There is little systematic information available about the impact of these influences. Spouses of Antarctic travelers are requested to volunteer to fill out a mailed questionnaire, which asks how the family dealt with many aspects of daily life - emergencies, child care, finances, employment, family celebrations and traditions, contact with extended family, social activities, etc. - during and after deployment to Antarctica.

If you would like to participate, or wish to receive more information about the study, Dr. Peter Suedfeld can be reached at the address above; phone (604)822-5713; e-mail: psuedfeld@cortex.psych.ubc.ca Dr. Phyllis Suedfeld - phone (604)822-4300; e-mail: pjohanson@unixg.ubc.ca

THE STORY OF TWO WOMEN. Ten years ago, according to my notes, a cameo-complexion woman of youthful age joined our Society, and asked us how she could possibly get to Antarctica. As she was a very competent writer at the Pentagon, it looked like she might possibly qualify for some sort of a writing job at McMurdo. So she got a job with the contractor, but on the way to the Forum, got shunted off to another job at McMurdo. But she loved it there, soon found a man, and returned to the ice time after time after time. Eventually Lisa Fetterolf married Randy Jones, and they now are building a traditional Pueblo-style adobe house on five acres on the Carson River in Carson City, Nevada. They can't see Mt. Erebus from there, not even on a clear day, but they are sure dreaming about it. They are also talking about starting a family. Lisa is special in our Society, as she was our 400th member. We thought she was a good kid. We still think so.

A couple of years ago Steve Dibbern had impregnated this Charlottesville fourth-grade

red-headed school teacher with his love for the Antarctic. She said she wanted to go, Steve said, "You can't, they don't take elementary school teachers." She couldn't hear what Steve was telling her; she made application, and, lo and behold, was assigned to Al Harper's South Pole program.

We met her, April Lloyd, at the September orientation. A bevy of VXE-6 pilots seemed to be constantly convoying her every step. It was obvious that she was excited about going to Antarctica, as she was walking on the ceiling. I later had the chance to spend an evening with her and her husband at Steve's house. Before she left for the ice, I wrote in the Newsletter that everyone would either love her or someone would shoot her. I really wasn't certain in my own mind which it would be. She confessed to being in a funk for awhile at the station, but had a great time. And she wrote several paragraphs about her experience in our Newsletter when she got back.

Then April moved to her family residence outside of Syracuse, and we wondered, but did not ask. We found out that April had turned in her husband for one of those VXE-6 pilots, one Gene "Rio" DeGennaro, and they are living in some weird place called Hawaii. From what I have heard, it is not very polarlike. Rio will probably take an early discharge, and hopes to become a commercial pilot. April is still teaching, still in touch with Al Harper, still in touch with NSF, and still dreaming of Antarctica.

THE BULL OF THE PAMPAS. We heard through a third party that Mario Giovinetto, Byrd '57, South Pole '58, plus a traverse from McMurdo to South Pole, was going to be cited by his native homeland, Argentina, for his Antarctic achievements. Several years ago, while browsing through Geographic Names of the Antarctic, I discovered that my old South Pole roommate had been the first person to ever set foot on Shag Rocks. Seems he was lowered down by helicopter when on an Argentine ship. Shag Rocks, between the Falklands and South Georgia, are about the most desolate rocks anywhere. Only a cormorant would find them inviting. Mario ended up as a geographer, and is currently at Calgary. Congratulations!

PENGUIN PRATTLES ON. Okay, well here we are already Issue No. 2. I am gradually getting into the "Ruth and Paul mode" of producing these gelid gems, bergy bytes, and reflections from the refrigerator on a timely basis, and I must say again that it is truly a pleasure to serve as a "mouth of the south"...spreading news, myths and heroics to points north! If any of you want to contribute an anecdote, poem or comment, please send it to my electronic mail address (klarson@gwis2.circ.gwu.edu) or directly to the Antarctic Society address. I do have a small confession: my electronic receptor (AKA e-mail) has been problematic this past month...so to those of you who already sent comments in that medium, or are considering doing so: I will be responding soon! For the moment, however: On, on!

THE BIG WHITE JUST GOT GREENER. On October 2, President Clinton signed into law H.R. 3060, also known as Antarctic Science, Tourism and Conservation Act of 1996, which implements the *Protocol on the Environmental Protection to the Antarctic Treaty* (also referred to as the Madrid Protocol). In so doing, the United States became the 23rd nation to ratify the Protocol. Full ratification will occur when all 26 "consultative" treaty nations accede to the Protocol. Finland will be ratifying it soon, leaving Russia and Japan as the remaining nations to complete the process. Mr. Tucker Scully, Director of Ocean Affairs at the State Department, reported that the legislation may not be "deposited" internationally until federal regulations are in place to implement the new bill. Currently the National Science Foundation, the Environmental Protection Agency, and U.S. Coast Guard are developing plans for completing the "rule-writing." In the interim, OPP will continue to observe

regulations which fulfill the spirit and intent of the Protocol as well as applicable federal regulations. The following is an excerpt from President Clinton's transmittal upon signing the bill:

"Almost 40 years ago, the United States proposed a treaty among the nations carrying out scientific research in Antarctica. The resulting Antarctic Treaty establishes this fascinating and remote region of our planet as a zone of peace, reserved exclusively for peaceful uses, and guarantees freedom of scientific research there.

The Antarctic Treaty has proven a uniquely successful agreement and has spawned an innovative system of supplementary agreements to protect the Antarctic environment and conserve its living resources. For these reasons, it gives me particular pleasure to sign into law legislation that will provide authority for the United States to ratify the most recent extension of that system: the Protocol on Environmental Protection to the Antarctic Treaty. The Protocol sets forth mandatory rules for the protection of the environment of Antarctica and the promotion of scientific research there. The bill that I have signed today implements the provisions of the Environmental Protocol. The Senate has already given its advice and consent to ratification of the Protocol.

Enactment of this legislation reaffirms United States leadership in Antarctic affairs. Our leadership is expressed in our world class research program on the ice, which is helping to answer basic questions about the Earth. The United States has also provided leadership in the innovative diplomacy that has made Antarctica a shining example of constructive international cooperation."

SENATE-MANDATED EXTERNAL PANEL HOLDS FIRST MEETING. A distinguished assemblage of professionals from industry, universities and government -- Richard B. Alley -- Pennsylvania State University; John B. Anderson -- Rice University; Norman R. Augustine Lockheed Martin Corporation; Rita R. Colwell -- University of Maryland; Charles E. Hess -- University of California, Davis; Hansford T. Johnson -- USAA Capital Corporation Lewis E. Link, Jr. -- Army Corps of Engineers (CRREL); Rudy K. Peschel; Rusty Schweikert President, NRS Communications; Susan Solomon -- NCAR; and Edward C. Stone, Jr. -- Jet Propulsion Lab -- met at NSF October 11-12, to learn about the U.S. Antarctic Program from a variety of scientists, NSF staff, and collaborating government agencies, including "frozen chosen" -- mainly contractors with a lot of ice time.

The External Panel which was established by NSF in August, is chaired by Norman R. Augustine, Vice Chairman of the Board and Chief Executive Office, Lockheed Martin Corporation. The panel will meet again before making a post-Christmas inspection visit to U.S. facilities in Antarctica. Neal Lane, NSF's Director, has asked the panel to "examine and make recommendations concerning: the stations and logistics systems that support science while maintaining appropriate environmental, safety, and health standards; the efficiency and appropriateness of the management of these support systems; and how and at what level the science programs are implemented. The panel's views and recommendations should include consideration of eventual replacement of South Pole Station and other infrastructure."

The Panel plans a preliminary letter report late this year or early next year to inform the fiscal 1998 budget process, and will convene once or more in early 1997 to write up a final report. Mr. Augustine wishes to receive comments from the public on how the nation should conduct its business in Antarctica. To be useful,

comments should be based on a good understanding of science, engineering, technology or management relevant to the U.S. Antarctic Program. We have passed the point of asking if the United States should be in Antarctica, so testimonials won't be of much use. What is required are suggestions to improve the present-day program. Suggestions received by 10 December will be presented to the panelists before their next meeting. Please send them to Guy Guthridge, Executive Secretary, U.S. Antarctic Program External Panel, Room 755, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.

SHIPS, BOTH WET AND DRY. The research ship NATHANIEL B. PALMER completed a cruise in the Indian Ocean sector earlier this year and, in so doing, has now completely encircled the Antarctic continent. During that same cruise, the N. B. PALMER called on the Russian Mirny Station in something of a "mercy mission" to donate four tons of food! It turns out that the Russian resupply ship, the FEDEROV, was hampered by mechanical problems causing the Mirny Station food supply to run dangerously low ... imagine the ingenuity of those chefs ... canned cabbage and cake mix?! Right now the N. B. PALMER is deep in the ice of Ross Sea, completing the second of 12 "JGOFS" (Joint Global Ocean Flux Study) cruises. To date, this is the largest program to be funded in collaboration with NSF's Ocean Sciences Division. One of the primary objectives of this project is to evaluate what role the Southern Ocean plays in controlling the global carbon budget. This information may help investigators predict the consequences of climate change and the fate of some greenhouse gas components. The first JGOFS cruise encountered some of the Southern Ocean's finest winter weather and two temporary labs on the aft deck broke loose! The N. B. PALMER will be used for a total of seven JGOFS cruises during the next 18 months, and, in so doing, will extend an opportunity to many investigators who have never worked in Antarctica.

On the subject of ships, fabrication of the new research ship, the LAURENCE M. GOULD, is on-track and expected to meet its maiden voyage date in September 1997. According to Al Sutherland, OPP Ocean Projects Manager, the L. M. GOULD is being fabricated in modules in the same shipyard that produced the N. B. PALMER (Edison Chouest in Louisiana). More progress reports to follow!

HEW CAMP AT SIPLE DOME. For the past five years or so, glaciologists have been scouring the West Antarctic Ice Sheet, looking for the perfect place to extract a deep ice core. They found what they were looking for some 8,000 miles from McMurdo at 81°65' South latitude and 148°81' West longitude. The location is named Siple Dome because it is an elevated ice feature located near the Siple Coast area of Mari« Byrd Land. This site was selected because of its relatively flat subglacial topography and simplistic ice dynamics which allow for easier interpretation of core samples. The Siple Dome Camp was opened on Schedule (October 26) with a 10-person construction crew and six camp personnel. During this first year the camp will be assembled, and the coring rig will be erected; however, core extraction will not commence until next year. It is expected that this project will produce a 1000-meter core and will be completed in January 1999.

Some of you may well ponder what we can discover from a piece of ice five inches across and more than half a mile long ... the truth is, many clues about the world's climatic history can be revealed by looking carefully at these cores in much the same way as belly-button lint provides clues of recent wardrobe choices. Seriously, though, the core can be analyzed by measuring the minute quantities of gases, isotopes and other chemical species which are laid down as annular layers. By looking at these layers from modern times back through the last ice age, and beyond, researchers hope to define past global and regional climate regimes. The information obtained from the Siple Dome core will be compared and calibrated against data

collected from Greenland ice cores, and will assist researchers to differentiate between regional effects and truly global climate patterns.

Drilling for ice cores will also continue at the Russian Vostok Station (freshly provisioned!) where the deepest and oldest core is being extracted by a research team of Russian, French and U.S. scientists. Initial analyses of the Vostok core have shown a close correlation between known climate regimes and concentrations of the so-called greenhouse gases over the past 200,000 years. Many of you have probably already heard about the lake recently discovered below the Vostok drill site which is thought to be on the order of Lake Ontario in size, and has been sealed off from the atmosphere for hundreds of thousands of years. Rest assured, the drilling activity is planned to stop at approximately 3600 meters depth, and will not penetrate into the lake itself.

MEETINGS MEETINGS MEETINGS. I would hate to disabuse any of our readers of the notion that our nation's capital is a virulent hotbed of packed board rooms and maxed-out dayrunners ... "meet for those who can't," I always say! Be that as it may, October was exceptional, even by local B.C. standards. In particular, Antarctica was the focus of at least four major forums, starting early in the month with a workshop on Antarctic Tourism held at nearby Airlie House (see the movie *Fly Away Home* for visuals of the location, and the October issue of *Washingtonian Magazine* for a great account of Dr. Bill Sladen, and his research on Canada Geese at Airlie). The Tourism Workshop was convened to delineate roles and strategies for meeting new obligations imposed by U.S. legislation implementing the Madrid Protocol. This workshop was attended by the Antarctic Society's new president, Ron Naveen, who has been engaged in collecting data on the effects of tourism in Antarctica for the past several years. Also attending the Tourism Workshop were folks from EPA, OPP and IAATO (International Association of Antarctic Tour Operators).

Shortly thereafter the Polar Research Board met. Among the notable presentations made at that meeting was a review of XXIV SCAR (Scientific Committee on Antarctic Research) in Cambridge, England which was given by Bob Rutford, U.S. Delegate to SCAR. Our Arctic brethren also made several excellent presentations at the Polar Research Board meeting.

To cap it all off, at month's end, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) held its fifteenth annual meeting in Hobart, Tasmania. Dr. Polly Penhale, OPP Manager for Antarctic Biology and Medicine and U.S. Delegate to CCAMLR kindly provided the following commentary on the Hobart meeting: "The Treaty regulates harvesting of marine resources from the ecosystem perspective, taking into account not only species that are harvested (such as fish, krill, and squid), but the dependent species such as seabirds and seals, which feed on harvested species. At this CCAMLR meeting, a total of 23 new fishing regulations were adopted. A main issue of concern continued to be the problem of illegal fishing in the Convention area. The other main focus of the meeting was the issue of "new fisheries," as several applications were made to fish in areas never fished in before. Fishing regulations for the "new fisheries" contain requirements for significant data collection, so that a better understanding of the population will be gained."

Of course this is only a tiny taste of the meeting-potential for those of antarctic ilk, but then, this is the deployment season! If any of you harbor morbid, or otherwise honest curiosity as to the upshot of any of these meetings, please contact me, and I will endeavor to provide details.

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