



THE ANTARCTICAN SOCIETY

905 NORTH JACKSONVILLE STREET
ARLINGTON, VIRGINIA 22205

HONORARY PRESIDENT — MRS. PAUL A. SIPLE

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No. 1

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Dr. J. Campbell Craddock, 1967
Mr. James Pranke, 1968
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Dr. Frank Davies, 1972
Mr. Scott McVay, 1973
Mr. Joseph O. Fletcher, 1974
Mr. Herman R. Friis, 1975
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Dr. Laurence McKinley Gould, 1979
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Dr. Louis J. Lanzerotti, 1987
Mr. Peter J. Anderson, 1988
Dr. Ted E. DeLaca, 1989
Dr. Saved Z. El-Sayed, 1990
Dr. Charles W. Swithinbank, 1991
Dr. Susan Solomon, 1992
Dr. Michele E. Raney, 1993
Dr. Doyle A. Harper, 1994
Dr. Edith L. Taylor, 1995
Dr. William J. L. Sladen, 1996

Dr. Meredith F. Burrill

December 23, 1902 - October 5, 1997

* * * *New e-mail address for Paul Dalrymple* * * *

pcdal@midcoast.com

IS WEST ANTARCTICA ON THE MOVE?: IMPLICATIONS
FOR CLIMATE AND SEA LEVEL

by

Dr. Robert Bindschadler

Chairman, West Antarctic Ice Sheet Working Group
NASA Goddard Space Flight Center

Greenbelt, Maryland

on

Tuesday, October 28, 1997

12 Noon

National Science Foundation
4201 Wilson Blvd., Arlington

Room 380

(Sign in at Security Desk)

Dr. Bindschadler has led eight field expeditions to Antarctica, and has participated in many others to glaciers and ice caps around the world. His main interests are in the dynamics of glaciers and ice sheets with a focus on the use of remote sensing to improve our understanding of the role of ice in the Earth's climate. He has developed techniques to measure ice velocity and elevation, using both visible and radar imagery, to monitor melt of the ice sheet by microwave emissions, and to detect changes in ice-sheet volume by repeat space-borne radar altimetry. Bring your crampons and ice axes!

1998 New Zealand Antarctic calendars available at \$11.00.
Send your orders now to RJS. Avoid the rush.

*Highly recommended family reading - Charles Swithinbank's
AN ALIEN IN ANTARCTICA! See pages 8-9.*

The northern hemisphere summer is winding down, so we must get back to the word processor. But this year something new has been added – we now have an e-mail address here in Maine. It's on the cover page, but here it is again – pcdal@midcoast.com That will come in on the white box of Paul Dalrymple. Should you wish to e-mail Ms. Penguin Prattle, aka Kristin Larson, her address is: k_larson@earthlink.net

The big news in our headquarters is that our Honorary President was invited by the powers-to-be in the Office of Polar Programs to swing with some gusto a bottle of champagne onto the bow of the LAURENCE M. GOULD. I'm sure Larry would have wished that it could have been poured through his very own lips rather than smashed against his bow. He certainly would have felt in this case that it was a waste of the nectar of the gods.

We recently had a great overnight visit from George and Mary Lowe. Hadn't seen George since mid-January 1958 when he came into the South Pole station as a member of Bunny Fuchs' British Commonwealth Trans-antarctic Expedition. He's in great shape; ditto for his bride, even more so! George is a famous mountaineer, famous photographer. He was with Hillary and Tensing on Mt. Everest, and his film, "The Conquest of Everest," won the award that year for Best Documentary Film. Antarctica breeds great friendships.

Bernadette Hince, science editor for the Australian National Dictionary, will publish in late 1998 a "Dictionary of Antarctic English," documenting what well may be the world's youngest English dialect. Such words as "bolows" will appear, which is defined as burned-out left-over winterer. Antarctica itself was created by ancient Greeks, hypothesizing an icy southern place to match the one they knew about in the north: thus, *ant*, Greek for opposite, and *arctos* or Bear, after the name for the northern constellation.

We haven't gone to press recently, and during that interim our ranks have been depleted. Elsewhere in this newsletter you will read about the passing of a very active member of our Society, Pete Burrill. But also gone is Gordon Fountain, age 84, who may have been the last surviving member of the BEAR OF OAKLAND from the 1933-35 era. And Roy Shults, a retired Navy captain who served under Admiral Dufek, died at age 82 in early August; plus Admiral Dick Black's beloved widow, Aviza Black, an artist who did fashion drawings, who died of cancer on May 7th. Although not a Society member, the internationally renowned Emperor penguin photographer, Bruno Zehnder, got caught in a blizzard while working off Mirny station, and perished in the storm when he wasn't able to find his way back to camp. John Spletts' obit on Bruno appears at the end of this newsletter. As far as I know, the rest of us are more or less alive as Ruth and I enter our third decade of giving you some facts, some fictions, some out-and-out fabrications. The astute Bernard Stonehouse compliments our outputs by referring to them as "taradiddle." We don't care what you call it as long as you read it! For the pure truth read Kristin Larson's Penguin Prattle which will appear in each and every issue.

THE 1998 NEW ZEALAND (HEDGEHOG) ANTARCTIC CALENDAR. Again we offer you the most beautiful Antarctic calendar that we know of at a ridiculously low price. We don't break even on them, as we are here to serve you, not to make money off you. Come to think of it, though, not the best way to run a society!

But this new calendar is a good one, although not their greatest. The centerfold is certainly not your typical centerfold, this one being a painting by Wally Herbert of the ENDURANCE locked in the ice, complete with an aurora overhead canopy. The January photo of an orca skyhopping at McMurdo is well worth much more than the price of the calendar. Truly spectacular! And September's light on icefloes and peaks in Paradise Bay is a dandy.

We have enough calendars this year so you will get them in plenty of time for Christmas mailings. But don't delay, order now, and liberate Ruth from making Christmas runs to the post office in late December. Buy, buy several!

OCEANITES ANSWERS DREAMS OF TOURISTS. Our Society's illustrious president, Ron Naveen, who is the commander-in-chief of Oceanites, has come up with two breadwinners which will shortly be on the streets. And one, "The Oceanites Site Guide to the Antarctic Peninsula," bids well to be a big seller for the 10,000 or so tourists going to the Peninsula. It will be the bible that will give everyone a detailed description of what lies in store for them, as well as a factual history to take home to show friends, neighbors, and cohorts what they actually did see. Jeff Rubin's "Lonely Planet" book will get tourists to the ships, but old Ron is going to make their trip come alive by telling them what's in store for them.

This black wire-bound book, 9" x 6", has 128 pages, 116 colored photos, 20 maps, and covers 39 prime visitor sites. Another 21 sites are also mentioned. This is the first site-by-site guide ever published. All tour companies distribute end-of-the-cruise logs for their tourists, but this study will be a handy-dandy to have to help one do his/her own planning as the ship moves along the Antarctic Peninsula.

At this time we cannot give you specific information on how to obtain this site-specific book, but we will tell you how in our next newsletter. It will be available in November. People going to our meeting on the 28th will have an opportunity to see an advance copy.

Another Ron Naveen/Oceanites report coming out soon is "The Compendium of Antarctic Visitor Sites," which will be available through the governments of the United States and the United Kingdom. Essentially it is the result of three summers' work on the Antarctic Site Inventory at 51 sites on the Peninsula, and a full analysis of where tourists have gone and what they have done in the last eight years. The report will have site descriptions, maps, photographs, data, animal counts, and a lot more, some of which may actually be of interest to someone. One never knows what curiosities lurk in the hearts of humans, but this book should be an encyclopedia of information and data on all Antarctic tourist sites. All you ever wanted to know about Half Moon Island, and never asked!

Again, we have no detailed information on how you folks can get a copy, but it is expected to be available through our State Department's Ocean and Environment Section. And if you have a U.K. address, you can go to the Antarctic desk in the Polar Regions Section of the Foreign and Commonwealth Office in London. But more information in the next newsletter.

R/V LAURENCE M. GOULD DEDICATED, OCTOBER 9, 1997. Isn't it a miracle that our illustrious Honorary President was able to christen the R/V LAURENCE M. GOULD with only one swing, and here I thought she was a weakling! I notice the write-ups on

the ship keep referring to it as "the GOULD." Even though he was a most distinguished scientist, college president, and chairman of everything polar, he was always just plain "Larry." Anyway, this new multi-disciplinary research platform, designed for year-round polar operations, will accommodate 26 research scientists working on 75-day missions. Larry lasted almost a century, so this ship has a lot of sailing to do, a lot of miles to cover, to catch up with him.

Ruth being selected to christen the LARRY was another jewel in her tiara as Grand Dame of U.S. Antarcticans. For many, many, many years she stayed on the sidelines at home being the dutiful wife and mother while Paul was serving as a polar explorer-scientist. With Paul's passing, Ruth, in a very conservative reserved way, started to nurture her own personal interests in the Antarctic. Her home became our headquarters, and for twenty years now she has done everything to keep us afloat as a Society. And, believe me, typing, folding, and stuffing these things into over 500 envelopes is no picnic. It is just so nice when something like this is bestowed upon this gracious woman. I know how deeply she appreciated the honor. And I also know how much she appreciates letters from you all - they make her days. We're so happy for you, Ruth.

CEREMONIES TO MARK DOD ANTARCTIC SUPPORT TRANSITION (May 28, 1997, Naval Support Force Antarctica, Public Affairs Office in Port Hueneme, California). Since the days of Admiral Richard Byrd's historic flight over the South Pole, the U.S. Navy has led the way in opening Antarctica to scientific exploration.

However, with its expeditionary mission complete, the U.S. Navy will formally turn over the responsibility for logistical support of the U.S. Antarctic Program to the U.S. Air Force in a ceremony to be held in Christchurch, New Zealand on February 21, 1998.

A second ceremony will be held on March 12, 1998 at the Naval Construction Battalion Center in Port Hueneme, California. This ceremony will formally disestablish the historic U.S. Naval Support Force, Antarctica after 42 years of providing expeditionary and logistical support on the world's most southern continent. Individuals interested in attending any or both of these ceremonies are asked to contact JOC(AW) Jacqueline Kiel at (805)982-5934, or via e-mail at: nsfa15b.nsfa@asa.org.

OHIO STATE UNIVERSITY IS BECOMING ANTARCTIC CITADEL IN THE U.S. The United States has never had a dominant polar center, although the Stefansson Library at Dartmouth once made Hanover a center of importance. And there is not only a great, but truly fantastic, Arctic museum honoring Peary and MacMillan at Boudoin College in Brunswick, Maine, which is a well-kept secret. It is a model of what a polar museum should be, and one of our very own, Ken Moulton, is a docent there.

But elsewhere in this newsletter you will see supporting articles for bringing back the dome from the South Pole and reestablishing it on the campus at Ohio State University, using it as a polar centerpiece museum. Ohio State has come a long, long way since the establishment of their Institute of Polar Studies immediately after the International Geophysical Year. There is no other university in this country which even comes close to approaching them in Antarctic PhDs. Their current facilities are superb, they have a lot of topnotch researchers, and they seem to have an aggressive bunch of professionals. And what a delightful addition to their library in Emanuel Rudolph's collection of fine polar books. Although Ohio State maintains their archives elsewhere on campus, there are some pictures of polar explorers on the wall, and a display case of polar memorabilia. Visiting the Byrd Polar Research Center makes one feel good inside, and, as an individual interested in polar history, there is a strong internal wish to see their center grow and prosper as they have

since their inception under that great gentleman, Dick Goldthwait.

BRING THE DOME HOME! (Sandra Markle). I'd like to invite you to share the vision for an exciting opportunity—the creation of a special national Antarctic museum.

Plans are underway to add new facilities at the South Pole Station that will expand its size and research capabilities. These plans, however, include removing the dome which has sheltered the main station buildings for the past two decades and retrograding it as trash. Instead, let's BRING THE DOME HOME! When it's home, let's reconstruct it as a national Antarctic museum—perhaps to be called The Richard E. Byrd National Antarctic Museum. And let's pack it full of exciting, interactive learning experiences about past exploration, current research, and, most of all, the incredible continent of Antarctica.

I'm pleased to share that an effort is underway to make this vision a reality. Senator John Glenn has expressed enthusiasm for the project. So have a number of Antarctic researchers, including Gerald Kooyman and Ellen Mosley-Thompson. Brian Shoemaker of the American Polar Society has also been actively working toward this goal. At a recent meeting of the Byrd Polar Research Center's Executive Committee, the group voiced unanimous support for the idea of bringing the Dome to Ohio State University and constructing the museum in connection with this Center, a plan with exciting potential for a powerful synergy of purpose, people and place.

A national Antarctic museum would be especially valuable for children. This would be a place to remember the past and to explain the present. Even more, though, it would be a center for creating a vision for the future. From the very beginning of the project, school children throughout the U. S. should share the vision by contributing their pennies, nickels, and dimes to BRING THE DOME HOME! Then while they await its return, they will have a reason to learn about Antarctica and the rich research history of which the Dome is a part.

The opportunity to transform the Antarctic Dome into an interactive museum for the children of the 21st century offers exciting possibilities. It's rare when something that might otherwise become trash has an opportunity to inspire future generations. Come share the vision! Please speak up, and add your words of support!

MEREDITH F. "PETE" BURRILL, BON VIVANT GENTLEMAN, SUCCUMBS AT AGE 94. Pete Burrill, one of the founding planks in our Society, one of our past presidents, supposedly died according to the most prestigious national newspapers, on October 5th. Not true, Pete just stopped breathing. He is going to live on ad infinitum among those of us who were fortunate enough to have known him. His voice may be silent from now on, but his spoken words of nearly a century of achievements will echo on for years, and his eyes, twinkling from hearing something which tickled his fancy, will shine on and on and on.

There was a very lengthy - seventeen paragraphs - humanized obituary in the New York Times for October 10th, and there was a watered-down obituary in the Washington Post on October 11th. But, unfortunately, some of his accomplishments were not included, including his important roles as a highly recognized and accredited national and international scientist. He was a past president of the Association of American Geographers, 1966, and for years and years headed up their Bylaws Committee. He was the second president of the American Name Society, 1955, an organization pertaining to place names rather than name calling. He was chairman of the U.N. Conference on Standardization of Geographical Names, held in Geneva in 1967, and from 1960 to 1977 was chairman of the U.N. Group of Experts on Geographical Names. For thirty years Pete was the Executive Secretary of the United States Board on Geographic Names, and Director of the Office of Geography, Department of the Interior, until he was super-

annuated in 1973. He also taught at Lehigh, Oklahoma State, and George Washington University, among others.

Pete was introduced to the polar regions in 1940 and 1941 when he went to Alaska on behalf of the General Land Office, and shortly thereafter started working on problems related to Antarctic names. In 1949 he produced the first U.S. Gazetteer on Geographic Names of the Antarctic, and followed that one with another in 1956. He visited Antarctica in 1959, and, subsequently, was honored with his name on a 2310-meter mountain in Victoria Land.

In early spring of 1981, Pete, who lost his first wife two years previously, married Betty Didcoct, another geographer, another past president (she of the Society of Woman Geographers). We were officially invited to the ceremony, and we unofficially wrote it up in the April 1981 Antarctic Society Newsletter. It was loosely written, to say the least, but Pete liked it, so sent it off to the headquarters of Phi Beta Kappa, and, lo and behold, they reprinted it in its entirety. There went Phi Beta Kappa!! Pete was described as being dressed to the gills, and looking something like an Emperor penguin with a mustache. Betty made out better with "her smiling radiance permeating every inch of the church." Famed mountaineer Barry Bishop was quoted as saying that it was a grand reaffirmation of how weddings should be. And we wrote that "never in the history of geography in this country had so many geographers gathered in a rookery with such a commonality of love and friendship. The church, Chevy Chase Presbyterian, was filled with people, wall-to-wall. It was a great wedding as weddings go, and the reception was a fantastic production, too.

Pete, for all practical purposes, amounted to Mr. Geography in this country, the Charles Swithinbank of geographers. We all know that Charles has been in Antarctica during the past six decades; well, Pete went to the national meetings of the Association of American Geographers in each of the past eight decades, even presenting a paper in the 1990s. He was a most loyal graduate of Bates College in Lewiston, Maine. His class of 1925 annually returned to join other class reunions. On his 70th, he led the Alumni Parade, sitting in a wheelchair with his class numerals on a placard in his lap, and waving warmly to the surrounding crowds. A devoted native of Maine, Pete returned most summers to midcoastal Maine where he had a home in Pemaquid. Pete is going to be missed - one hell of a guy!

AN ALIEN IN ANTARCTICA BY CHARLES SWITHINBANK (reviewed by Steve Dibbern). Surely Dr. Swithinbank's experiences must qualify him as one of the preeminent explorers of the OAE. He has been a part of Antarctic operations from 1949(!) in Queen Maud Land to the present. Longevity and breadth of experience alone would put this book on any Antarctic's "Must Read" list. Fortunately it meets all expectations from a number of directions.

It should be understood from the outset that the real limitation is the scope which limits the book to his experiences with the American program. The good news is that it is understood that there may be one or two more books concerning his career with his native British program and private expeditions.

Historically Dr. Swithinbank does a good job of weaving his experiences into the overall fabric of our program. Many researchers who write about their experiences maintain a strictly personal narrative, but he explains both the setting and the personal detail that paint a picture of the changes in politics of science, the methods used and the conditions in the field. "Alien" is also very well illustrated with photos (mainly his own) and maps. His story also illustrates how early scientific developments with such things as glacial flow measurements can, over time, grow into larger and branching programs, such as the flying programs, with the Scott Polar Research Institute and later to the Blue Ice Runway program and tourism flights.

Personally he is generous with anecdotes so that the younger reader can understand what conditions were like during a not-well-recorded period of Antarctic research. He is also generous with his praise of both his scientific colleagues, and just as importantly, with the support personnel who made much of his scientific work possible

A last point, both for the reviewer and in his book, is a most interesting epilogue. This may be the most important part of his book. It is a summing-up of his total experiences scientifically, politically and personally, and it is worth reading. He uses both praise and criticism to make his points about how Antarctic science happens and where it is headed. It is one of the most balanced assessments that I have read.

I do not know Dr. Swithinbank (although we must have come very close at one point at McMurdo), but this book makes me wish I did. He writes like the gentleman that, I am told by mutual friends, he is. I look forward to the future volumes about his vast Antarctic experiences.

AN ALIEN IN ANTARCTICA BY CHARLES SWITHINBANK (Additional review by John Spletts-toesser). It was a pleasure to read this book by Charles, having known him since 1960, my first trip to Antarctica, and for him at that time, just another of many and many more to come. During later years I had the good fortune to spend time in field areas where he also worked, and witness some of the exploits he meticulously has recorded in his book. He apparently kept very detailed journals because names and events are thoroughly documented. It is not just another explorer's journal, but an interesting account of his life in Antarctica. Somehow he got the publisher to include numerous color photos and also keep the cost of the book within reach of the intended audience. And the good news is that he intends to issue additional books to cover other aspects of his career. By all means, order the book for a reading of adventure "in the pursuit of science," as the author puts it. Send a check for the book cost (\$49.95) plus \$3.00 shipping and handling to McDonald & Woodward Publishing Co., 6414 Riverland Drive, Fort Pierce, FL 34982 (telephone 800-233-8787) For orders to non-U.S. addresses add another \$3.00. Once you have the book in your hands you will discover the meaning of the word "Alien" in the title.

Kristin Larson's PENGUIN PRATTLE

(e-mail address: k_larson@earthlink.net Rewards for news, comments, tips!)

PENGUIN PRATTLES. Antarctica wakes and stretches; the gauzy pinkness of her sky belies the yawning ozone hole beyond. Mole-eyed winter-overs tire of their papaya-tinged dreams and their two-dimensional travel plans. Meanwhile, tour operators are pulling on their Helly Hansens, intrepid ice pilots dust off their machismo, and eager Antarctic researchers strain towards the gaping white maw of discovery. A fresh season beckons: on! on!

ACTING UP. In our last newsletter (eons ago) we informed our subscribers of Dr. Neal Sullivan's decision to step down from his position as the Director of Polar Programs, which happened this past August. While a search for his replacement is underway, NSF has recently named an Acting Director, Dr. John B. Hunt, who assumed the position on September 8, 1997. Dr. Hunt comes to the Office of Polar Programs from NSF's Mathematical and Physical Sciences Division where he has served in a number of capacities including Program Director, Executive Officer and Directorate Executive Officer. Dr. Hunt, who received his Ph.D. in 1962 in Chemistry from the University of Chicago, has also been a Professor of Chemistry at Catholic University at the U.S. Naval Academy, and at the Marine Science Consortium on Wallops Island, Virginia. With a background like that, Dr. Hunt is sure to "catalyze" the program, or at least get a "reaction"...

NAVY PULLS ALONG SIDE FOR THE LAST TIME. The 42nd and final season of the U.S. Navy's operation Deep Freeze is currently under steam. This year the Naval support group will be on hand in McMurdo and in Christchurch, NZ throughout the 1997-98 season. Sometime in March 1998, they will close up shop in New Zealand and in California and hand over the remainder of their functions to the New York State Air National Guard's 109th Mobility Air Wing and to civilian contractors. A formal farewell ceremony will be held in Christchurch on February 20, 1998, where the Navy will unveil a plaque honoring the 50 Americans who have perished in Antarctica since 1955. After that it's bumpers up and anchors aweigh...this is a sentimental time for all of us who have been a part of the great polar partnership with Operation Deep Freeze!

THE HOLE THING. It's a good thing that Antarctica is cold because, if it weren't, our southern friends would be getting more sun than would be good for them right now! For the 12th year in a row, since British scientists first reported an unusual thinning in the protective ozone layer over Antarctica, U.S. researchers are again watching the springtime depletion phenomena. Reports are coming in that the "total ozone column" (density measurement) is currently 60-70% below normal levels. That's bad news. However, the good news is that the depletion levels may not reach the record lows witnessed in 1993. Dr. John Lynch, NSF Program Manager for Polar Astronomy and Astrophysics says there may be at least two explanations for the lower ozone loss this year. First, in the early 1990's there was quite a bit of volcanic activity which released ash into the stratosphere. The ash can speed up ozone depletion. Second, the hole is "elongated" this year due to upper atmospheric waves; this slows down the depletion. Those wishing to look at some neat images, and track Antarctic ozone depletion should surf over to these two web sites: <http://jwocky.gsfc.nasa.gov/index.html> and <http://www.cmdl.noaa.gov>

Most all of us have heard of ozone destruction and its connection to certain manmade materials called CFCs, but some of you may wonder why it only happens over the polar regions. Antarctica is isolated from other continents, and is the only major land-mass that is completely surrounded by unimpeded ocean currents. These factors effectively block warmer air and ocean water from approaching the continent. When the sun goes down in March, the air over Antarctica gets colder and colder, and eventually leads to the formation of cyclonic winds known as the polar vortex. Inside the vortex the air gets so cold that some naturally occurring gaseous chemicals actually turn into ice crystals that get trapped inside the vortex with other chemicals, including CFCs. It's like a bowl of alphabet soup sitting over Antarctica not doing much throughout the long dark night. Only when the sun comes up in August do problems start to occur. The first rays of sunlight add energy into the soup bowl which wakes up the inert CFC molecules. The CFCs then start chewing up the protective ozone. This reaction keeps going until late October when the sun has finally warmed up the air enough to break apart the vortex and let some ozone-rich air get in from lower latitudes.

The same type of reaction also occurs over the North Pole, but is much weaker. This is because North Pole is closer to other continents and warmer oceans. Thus, the North Pole Vortex never gains the same strength as its southern cousin. NSF funds several projects researching the causes and effects of ozone depletion in Antarctica. One interesting project is looking at the possible damage to the phytoplankton (microscopic marine plants) in the clear ocean water near Palmer Station. They may be the most important members of Antarctica's food chain.

ANTARCTICA GETS X-RAYED. Imagine being able to peer into Antarctica's innards and see old secrets deep beneath her snowy mantle. Well, a new project called Radarsat is doing just that, and has recently produced some stunning images of ice streams and crevasses. Radarsat has even spotted the IGY South Pole Station and its ski-way which

are now more than 40 years old and buried beneath 30 feet of snow! Radarsat is an international project funded in part by NASA and NSF, in cooperation with the Canadian Space Agency in Quebec. Radarsat utilizes a sophisticated microwave radar system able to produce images through cloud cover, smog, haze, smoke and darkness. The satellite can be programmed to capture images of an area as wide as 320 miles, and can detect objects as small as 26 feet. The Antarctic Mapping Mission was made possible by rotating the satellite 180 degrees from its normal field of view, which was completed on September 11. Full mapping will require the collection of over 5,000 images

"Antarctica is the only continent on Earth that has not been properly mapped. Despite many years of research, we still do not know whether its massive ice sheet is growing larger or smaller. Radarsat¹'s Antarctic Mapping Mission should help us answer this question, and many related questions about its potential for affecting global sea levels," says Dr. Robert Thomas, Program Manager for Polar Research in NASA's Office of Mission to Planet Earth, in Washington, D.C. Previous research has revealed that about 90 percent of Antarctic ice flows into the sea via large "ice streams. These rivers of ice are tens of miles wide and about half-a-mile thick. Little is known about these ice streams which eventually flow into ice shelves, moving seaward at about half-a-mile per year, occasionally 'calving' off into huge tabular icebergs. High-resolution images of the ice sheet and exposed portions of the continent will serve as a benchmark for testing the predicted effects of global warming on the interior ice sheet and ice shelves.

Luckily you don't need to have sophisticated technology to take a gander at these great images. The Prattler strongly suggests checking out the web at:

<http://radarsat.space.gc.ca>

LOGO LOGIC? Prattler recently heard a rumor that NSF may be considering changing the old U.S. Antarctic Program logo. Personally, Prattler kind of likes the historic and "dated" quality of the old design...maybe I am just a traditionalist. Whatta y'all think?

1997-98 USAP HIGHLIGHTS. One of the most ambitious Antarctic research programs planned for this year is a six-nation geological drilling project at Cape Roberts (about 120 miles northwest of McMurdo). This 3-year project was originally slated to start last year, but had to be canceled for lack of sea ice. The drill rig itself is set up directly on the annual sea ice and will be coring the sea bed looking for clues of early geological and climatological conditions (30 - 100 million year old sedimentary rocks). The sea ice is again quite thin this year. This may curtail surface traverses to the drill site and necessitate the use of helicopters instead. The project will also make extensive use of the Crary Laboratory's geological research facilities.

The camp at Siple Dome will start its second year of operation at the end of this month. Like the Cape Roberts project, Siple Dome is also a drilling project, but the product is million-year-old ice instead of rock. The core is expected to be approximately 980 meters in length and 13 centimeters in diameter. These investigations will help to accurately assess the dynamic state of the ice and the age-depth relationships needed to decipher the paleoclimate record at this location. This will then allow researchers to differentiate ancient climate conditions that were local from those that were global. This is accomplished by cross-calibrating and comparing the Siple Dome ice core with cores from Greenland, and other Antarctic sites. The Siple Camp is located in West Antarctica and will support up to 75 investigators this year (bigger than most year-round stations!). Almost 400 hours of twin otter support and 275 hours of LC-130 (Hercules) aircraft time will be applied in support of research projects in this camp.

Among those conducting research at the Siple Dome location is Dr. Bindschadler, Antarctic Society's guest lecturer for this October. Dr. Bindschadler's field team will establish three elevation monitoring sites in the upper reaches of Ice Stream D, which will be revisited annually to measure the rate of thickening or thinning of the ice sheet in that region. Highly accurate Global Positioning System (GPS) receivers will be used to provide the precise elevations.

As always, NSF has an interesting lineup for their much-acclaimed Artists & Writers Program this coming year. This program provides opportunities for a small number of scholars in the humanities to participate in the Antarctic Program (including current Antarctic Society Vice President, and photographer, Ms. Ann Hawthorne). Among those selected for this year is a writer "memorist" from the University of Alaska, Anchorage, named Gretchen Legler. The author's goal is to produce a non-fiction book about the natural world that is both entertaining and consciousness-raising. Also, already deployed to McMurdo, is Norbert Wu who is a widely-published underwater art photographer from Monterey, California. Norbert, and his author, Leighton Taylor, and their team, plan to produce a publication illustrating the natural history of McMurdo Sound.

The long tradition of Scouting will continue this year. The first Scout in this program was Paul Siple, 1928-30, who went on to be one of the finest polar researchers. This year, Ms. Hannah Thomas of Saratoga Springs, New York, is the scholarship winner and is representing the Girl Scouts of the USA. Hannah is a sophomore at Mount Holyoke College and holds the highest award in Girl Scouting (the Gold Award). She will be assisting scientists in McMurdo and South Pole.

Also on the docket is the "penguin paparazzi"...those of you who read these publications may want to be on the lookout for stories posted from dateline Antarctica: Rocky Mountain News, Newsweek, Associated Press (science editor), New York Times (science editor), Albany Times, Aviation Week, and Science Magazine. Also on hand will be reporters from National Public Radio, Reuters TV News Service, and TV New Zealand's natural history unit.

BRUNO ZEHNDER'S UNTIMELY DEATH (John Spletstoesser). The news came from the Russian base Mirny in Antarctica in July - Bruno Zehnder had died in a blizzard. Later information gave details, that he had set out from the base on foot across the sea ice to the nearby Emperor penguin colony to do what he enjoyed more than anything else - study and photograph the Emperors, the only Antarctic penguin that breeds in winter. Bruno radioed the base that the weather had deteriorated, and he was starting back. He never arrived, but apparently missed the base by a short distance, walking right by without seeing it in the blowing snow.

I was at Mirny in January 1993 on a warm and sunny day - the base was on the itinerary of a Russian icebreaker with tourists. Much of that day was spent on the somewhat mushy sea ice in the area Bruno would have gone to, and we saw lots of Emperor penguins. Their breeding time had ended. I remember sitting on the rocks of nearby Suromskiy Island named for a man who died on a Soviet Antarctic expedition in 1957. I photographed Adelie penguins that nest on that small island, which barely has room for the Russian cemetery that consists of 29 caskets and 4 memorials, all of them bolted to the rock because there is no soil to bury them. According to Bruno's obituary in the New York Times, July 23, his brother Guido said that Bruno will be buried in Antarctica by his Russian friends, so I expect that the grave will be on that island.

Bruno was one of a kind. As the story goes, he had his Swiss passport changed to make 'Penguin' his middle name! His marital history is worth a story as well, but for that I refer you to the obituary in the New York Times.