



THE ANTARCTIC SOCIETY

7338 Wayfarer Drive

Fairfax Station, Virginia 22039

HONORARY PRESIDENT --- MRS. PAUL A. SIPLE

Vol. 00-01

October

No. 1

Presidents:

Dr. Carl R. Eklund, 1959-61
Dr. Paul A. Siple, 1961-62
Mr. Gordon D. Cartwright, 1962-63
RADM David M. Tyree (Ret.), 1963-64
Mr. George R. Toney, 1964-65
Mr. Morton J. Rubin, 1965-66
Dr. Albert P. Crary, 1966-68
Dr. Henry M. Dater, 1968-70
Mr. George A. Doumani, 1970-71
Dr. William J. L. Sladen, 1971-73
Mr. Peter E. Bermel, 1973-75
Dr. Kenneth J. Bertrand, 1975-77
Mrs. Paul A. Siple, 1977-78
Dr. Paul C. Dalrymple, 1978-80
Dr. Meredith F. Burrill, 1980-82
Dr. Mort D. Turner, 1982-84
Dr. Edward P. Todd, 1984-86
Mr. Robert H. T. Dodson, 1986-88
Dr. Robert H. Rufford, 1988-90
Mr. Guy G. Guthridge, 1990-92
Dr. Polly A. Penhale, 1992-94
Mr. Tony K. Meunier, 1994-96
Mr. Ron Naveen, 1996-98
Dr. Paul C. Dalrymple, 1998-2000

Honorary Members:

Ambassador Paul C. Daniels
Dr. Laurence McKinley Gould
Count Emilio Pucci
Sir Charles S. Wright
Mr. Hugh Blackwell Evans
Dr. Henry M. Dater
Mr. August Howard
Mr. Amory H. "Bud" Waite, Jr.
Dr. Charles W. Swithinbank
Dr. Paul C. Dalrymple

BRASH ICE

We are a little bit late getting out of the gate with this one, as we are entering a transition phase, one where Ruth and I will be more or less phased out over the next two years. On the whole it has been a good run, but our time has come. When I look back at where the Society was in the Fall of 1978 when Ruth more or less opened the portals of her home for the Society, a lot of positive things have happened. This is our 23rd year, and Antarctica has changed immensely in those years. Back then, it was almost a small, tight little fraternity; now Antarctica is much bigger, very much bigger than the sum of its parts.

There have always been voices raised as to what roles the Society should fulfill. Maybe it was never a happier group than when they met in the basement of the founding father, Carl Eklund. It was a good old boys' drinking club, and this continued through the reign of Harry Dater, who kept a locker full of suitable libations for Board meetings. Can't say that those meetings weren't happy ones. Ruth and I had a very peculiar idea, that the Society should only consist of members who had paid their annual dues, and, as such, people like Roger Tory Peterson were given their walking papers. We grew from about 160 to over 650 members, although now we have dropped back to slightly over 500.

In the early days, the newsletters were produced maybe once a year. This number increased along with the Society's membership, and then were produced for each and every meeting, five or six times a year. We used to have an annual picnic each summer, and after a phenomenal growth in membership in our first few years, Bert and Mildred Crary gave Ruth and me a small toy trophy for our accomplishments. When the astute Bert handed it to us, he said, "You know you have created a monster." No truer words were ever spoken, and it has been impossible to keep the ball rolling. No one really wants to put in the time and effort to

Special Notice: 2001 ANTARCTIC CALENDARS. We have only 200 of the beautiful New Zealand Hedgehog House Antarctic calendars, and they are again, most spectacular. A fantastic jade iceberg that you won't believe, and most wonderful shots of King penguins at St. Andrew's Bay and Chinstraps at Baily's Head, and more! We are selling them at the same old price of \$US 11.00 (in the U.S. and Canada) Order early by sending your check to the Society's address, 7338 Wayfarer Drive, Fairfax Station, VA 22039. They will be mailed out pronto from a redoubt in Maine.

write. No one wants to take the flak, which often comes when you tell the truth that may embarrass someone with thin skin. No one really wants to put in the time and effort that Ruth Siple has so elegantly and diligently done on behalf of the Society. Now she is closing in on ninety, has macular degeneration in one eye, and even though her flesh is more than willing she is going to have to slow down.

However, Ruth and I will keep on going for the next two years, as Ruth is very fond of our new President, Kristin Larson, and wants to work with her. There is an element of the Society who would like to see more organization, and they will no doubt take over in two years. I will be the first to admit that we used strong-armed dictatorial rule within the last ten years, as I never saw much good coming out of Board meetings. And I felt that those who did the work should have more than just a vote, as only those of us who did the work had a keen appreciation for what sold.

I want to use this space to talk about a common man who has been a godsend to this society for all of our twenty-three years, Peter Barretta. He has been struck down by bad health in recent years, but there is no person in our Society who loves Antarctica more than Pete. Even today, in poor health, Pete still sends weekly clippings on Antarctica to this office, as I am sure he does to Brian Shoemaker and his *Polar Times*. By a strange coincidence, Pete comes from the same town as Ruth: Meadville, PA. But there were no similarities in their backgrounds: Pete rode shotgun back in the days of bootlegging booze during prohibition! However, today Ruth and Pete are very much alike: kind, considerate, giving do-gooders. We need more Ruth Siples and Pete Barrettas.

JOHN SPLETTS DOES THE SPLITS. John Spletstoesser (whose book review appears later in this newsletter) is a former Antarctic geologist and, for the past twenty years, a premier lecturer on miscellaneous and sundry high latitude cruise ships. He went to the well, almost one time too many this past summer. While on a helicopter sightseeing run at Novaya Zemlya, he and eight other passengers were returning to the Russian Icebreaker *Kapitan Khlebnikov*, when the "stuff started to hit the fan tail, so to speak crudely. The chopper crashed on the deck, with all propellers being claimed by Davey Jones. However, St. Peter

was not then accepting any new recruits, that is to say, all passengers miraculously survived and John opted to have his broken ankle repaired in Rockland, Maine.... seventeen days after the crash. So he has lived to give another lecture or two or more, but not until 2001.

A Note from Incoming Antarctic Society President: Kristin Larson. I remember well the moment I first became cognizant of the urge to visit Antarctica. It was in 1984; the impetus was Eliot Porter's photograph of Bull Pass in the Wright Valley, near McMurdo Station. The other-world quality of this stunning image, the surreal illumination and total lack of anything familiar about the landscape compelled me to see this place with my own eyes! I made a personal resolution to go there in my lifetime. Little did I realize then, that I would be standing atop Bull Pass less than five years later.

From that high point, the transition was easy. Antarctica quickly went from being a mere avocation to an all-out vocation! Two winter-overs, six summer seasons and numerous ice miles followed. I served first as McMurdo Laboratory Supervisor (in the Eklund Biological Center and then in the Crary Science and Engineering Center), later at NSF assisting with Antarctic environmental compliance issues.

In thinking back over the ten or so years I have been associated with Antarctica, I feel that it is as much about the people as it is about the landscape that makes the place special. Rare 'is the job that allows you to rub elbows with a senator, helo pilot, artist, scientist and heavy-equipment operator, all in the space of a single afternoon! In my capacity as lab manager, I was particularly fortunate to have extensive contact with the full cast of characters. As point-of-contact for hundreds of researchers representing the full gamut of scientific disciplines, not only was the lab staff exposed to their research ideas, but also played vital roles in the success of their scientific missions. To this day, I continue to take great pride in the job we did in helping to facilitate what I consider to be some of our nation's most important scientific priorities. From hemostats to here hours, we planned, allocated, strategized, optimized and almost always got it right!

During my tenure on the ice (which I'm certain is not forever done with!) USAP marked many

significant milestones, the least of which was the beginnings of the major infrastructure modernization, now well underway. Although it wasn't always easy discarding the traditions of "expeditionary science," the changes have brought about an amazing array of new and expanded scientific capabilities. And not only has scientific capability undergone tremendous change during the past ten years, but also noteworthy has been the attention paid to environmental protection issues, continent-wide. It was this aspect of my work (associated with NSF's implementation of the Antarctic Treaty's Protocol on Environmental Protection) that set me on my current professional trajectory, in the field of international environmental law.

Currently I am a beltway denizen and law school student, but this has not dampened my enthusiasm or involvement in Antarctica. I continue applying my "ice lessons" and maintain an active interest in the development of "Antarctic law." Also, I have been able to draw on my ice experience to assist the US Environmental Protection Agency in drafting regulations for tourist activities in Antarctica, and to assist private bidders respond to NSF's call for a new USAP support contractor.

However, my most favored Antarctic-related activity has been involvement in The Antarctic Society. By writing a column on current ice events for the newsletter, and by attending meetings, I have stayed in touch with what's going on down on the ice. Moreover, I have met some of the most influential policy makers, explorers and researchers, all of whom have played vital roles in shaping the infant continent into the relatively easy-going "cozy" place that it is today. Involvement as a volunteer in this organization has proven to be one of my most satisfying commitments, and I truly feel privileged to be a part of this illustrious membership!

As incoming President, I have many goals, the most important of which is to preserve the style of the Society. Based on my observations, the Society largely reflects the character of our involvement in Antarctica. In its early years, the Society was a rough and tumble gang of explorers and hardy field scientists...as the number and diversity of ice sojourners changed so has our Society. I would also like to resurrect the practice of regularly-scheduled, Society-

sponsored speakers, and to encourage more contributions to the newsletter in addition to the excellent input that we already receive. Feel free to contact me any time through our Honorary President, Ruth Siple (letterhead address) or via e-mail: k_larson@earthlink.net.

R. TUCKER SCULLY RETIRES (Ray Arnaudo). Tucker Scully retired from the State Department last month. As is often said of those who make a difference, the landscape will not be the same without him. Certainly the polar landscape will be different.

Tucker Scully has been an extraordinary public servant, and a friend of the oceans and the poles, but especially Antarctica. His 35-year career, first as a Foreign Service Officer and later as a member of the Civil Service and the Senior Executive Service, is marked by innovative leadership and extraordinary accomplishments in foreign affairs, and particularly in international oceans and polar policy.

After tours in the Middle East and Mediterranean, Tucker worked in the Bureau of Oceans and International Environmental and Scientific Affairs, recently as Deputy Assistant Secretary for Oceans and Fisheries, and prior to that as Director of the Office of Oceans Affairs and chair of the interagency policy groups on oceans and Antarctica. He has led the interagency development of comprehensive U.S. oceans policy for negotiations, such as the United Nations Convention on the Law of the Sea and its accompanying 1994 Agreement on Deep Seabed Mining Agreement, and with regard to Antarctica, he is best known for his role in negotiating the Convention for the Conservation of Antarctic Marine Living Resources, the Convention for the Regulation of Marine Antarctic Mineral Resources, and the Environmental Protocol to the Antarctic Treaty.

Most important to friends of Antarctica, however, was Tucker's work to help the US Antarctic Program. He testified many times before Congress in support of USAP, and NSF will always be grateful for his support for South Pole station funding. NSF awarded him its highest honor when he retired.

What may be less well-known by Antarctic Society members is that Tucker, more than any other individual, has been responsible for many

treaties and agreements involving the oceans in general. In addition to those polar agreements mentioned above, he negotiated the Oceans Chapter of Agenda 21, the UN Environment Program's Global Program of Action, Regional Seas Agreements for the Caribbean and South Pacific, maritime boundary agreements with Mexico, Canada, several Pacific island states, and Russia, the Protocol Amending the 1972 London Dumping Convention, and the nearly-concluded Multilateral High Level Conference on Conservation of Highly Migratory Stocks in the Central and Western Pacific Ocean. In the North, he took the U.S. into the Arctic Council, and, perhaps fittingly, in one of his last official acts, negotiated a bilateral agreement to protect polar bears.

Perhaps the citation for lifetime service by Secretary of State Albright said it best:

"His consensus building and managerial skills, combined with his mastery of the issues, have made him and his office the focal point within the government on oceans and polar issues. His unique blend of conceptual innovation and practical problem-solving abilities make him an extraordinarily effective exponent of U.S. interests. Almost no aspect of current U.S. oceans policy or practice exists apart from his artful hand. In fact, we believe him to be one of the Department's most talented and versatile negotiators."

It is safe to say that very few oceans or polar agreements in the past two decades do not bear his mark. Those of us who have the pleasure to work with him can only say: "He made a difference and he will be missed."

FORMER PALMER STATION MANAGER DIES

(Kristin Larson). Kirk Kiyota, stalwart supporter of the U.S. Antarctic Program and unswerving friend of many, died suddenly, early this month. He was 43.

Kirk's introduction to the ice started as a snowmobile mechanic in McMurdo Station, where his prior experience supporting the national motorcycle racing circuit was of great benefit to scores of field parties. He knew well that the success of a scientific mission, and even the difference between life and death,

depended heavily on the quality and care of vehicles being sent into remote field conditions. It wasn't long, however, before his calm, fair, service-oriented personality was recognized for the strengths it would lend to the program's leadership. Kirk rose quickly through the ranks serving as managers of transportation, and the international Weddell Sea Ice Camp. Ultimately, he served for several years as Station Manager at Palmer Station, during both the winter-over and summer seasons. More recently he was named Deputy Director of Operations at Johnston Atoll Air Base in the South Pacific.

While Kirk's contributions to the success of the USAP are innumerable, it is really the outstanding quality of his friendship that makes his loss so great. I know I speak for many in saying that his kind smile and quick wit will be missed.

OLDEST ANTARCTIC BOY SCOUT DIES

(Robert Dodson). Arthur E. Owen, 73, a veteran of the Ronne Antarctic Expedition (1947-48), died on May 13, 2000 in Buffalo, NY, of prostate cancer. As a geologist for Berea Oil and Gas Corporation of Buffalo, for whom he had worked for the past eighteen years, he had been outstandingly successful in finding and developing new deposits, particularly hard-to-find pockets of gas, in the northeastern U.S. and overseas. Born in Prescott, Arizona, he lived for most of his youth in Beaumont, Texas before joining the Navy and serving with the Pacific Fleet towards the end of World War II. In January 1947 he was selected from a group of Eagle Scouts in Beaumont to join the Ronne Expedition where he became a leading dog-team driver.

During a three-month period in late 1947 and early 1948 he, together with Walter Smith (now of Tampa, Florida), Doug Mason and Ken Butler of the Falkland Islands Dependencies Survey (FIDS, now the British Antarctic Survey) carried out one of the great dog-team journeys of Antarctic history. In the course of a round-trip journey of 1180 statute miles they surveyed the western shore of the Weddell Sea as far as the Bowman Peninsula, turning back at a point just short of latitude 75° south. Together with the Ronne Expedition's aircraft, providing ground control for its aerial photographs, they had contributed to the survey of the world's last significant stretch of unknown coastline, helping to fill the gap on the western and

southwestern coast of the Weddell Sea. With typical modesty, Art Owen, in his report, stated: "Most of the credit for its successful completion fell to our twenty-seven Husky friends, and to the aircraft that laid the vital caches for us, and last but not least, to my comrades, Butler, Mason and Smith."

Art Owen was the finest of companions, easygoing with a beguiling Texas drawl, staunch in the face of hardship, extremely courageous, never complaining, unassuming and modest to an extreme. There was nothing glib about him. Later in life, although he never returned to the Antarctic, the experiences of 1947-48 remained a lifetime highlight. His love for the Antarctic was matched only by his love for the mountains. During his lifetime he climbed more than 300 peaks, most or them in the U.S., Canada and Mexico. Fittingly, a mountain in the Antarctic is named for him. It is Mount Owen, at the head of Nantucket Inlet near the base of the Antarctic Peninsula on its East Coast, at about 74 degrees 30 minutes south.

FORMER POLAR PROGRAMS BUDGET OFFICER DIES (Walt Selig). Oscar (Butch) Vigen came to Polar Programs in the National Science Foundation in the late 1960's after serving in the Army where he was a Lt. Col. He graduated from the Army's Command and General Staff College at Fort Leavenworth, Kansas. During WWII he participated in combat operations in the Pacific, and later served with the occupation forces in Japan and with combat units in Korea during the Korean War. He was awarded the Legion of Merit, Bronze Star, two Purple Hearts and the Combat Infantryman's Badge. After retiring from the Army in 1968, Butch was the Budget Officer for Polar Programs for 18 years. He was a genius in managing money, and he kept us solvent during several periods of major money crises. How he could foresee some of the problems we were never able to figure out. He had a wonderful sense of judgement and it was no problem for him to separate the wheat from the chaff and come up with a very logical solution everyone was happy with.

ANTARCTIC EXPLOSION. Everyone who has a word processor or can write seems to have written a book on Antarctica, or at least has one in the mill. There is a veritable smorgasbord out there to be sampled, and it is hard to decide on

which books to grace your pallet. If it is Roland Huntford, if it is Alan Gurney, if it is Charles Swithinbank, if it is Tim Baughman, then the book immediately attracts my attention. Then we look for non-Shackleton books, as we already have a shelf of The Boss!

But there are some interesting, very interesting books coming out on the likes of Robert Falcon Scott, Cherry-Garrard, Sir Douglas Mawson, Birdie Bowers, Frank Wild, and Tom Crean. Sir Hubert Wilkins once told me that his favorite polar explorer of all time was Mawson, and there has been surprisingly little written about him. A historian by the name of Philip Ayres has recently come out with MAWSON: A LIFE, published by the Melbourne University Press. Of all the true Antarctic explorers, he may have been the very best natural scientist. Jean Baptiste Charcot was a very eminent doctor, but we'll take Mawson. This book by Ayres sounds like a must-buy for all Antarctic hero-worshippers.

Then the books on Bowers, Wild, and Crean should shed more light on these luminaries. Two of the books, THE FIFTH MAN, HENRY K. BOWERS by Charles H. Lagerbom (to be reviewed in our next newsletter), and FRANK WILD by Leif Mills, are both published by Caedmon of Whitby, and may be hard to find, even though they were published in 1999. The Collins Press in Cork is publishing the book on Crean, due out in September. Some of you true Antarcticans may know Lagerbom, as he worked for the U.S. Antarctic contractor for two austral summers in the early 1990s. He became enthralled by the story of the ill-fated Scott expedition, and when he came back home decided that he wanted to write a book on Birdie Bowers, and so THE FIFTH MAN was written and published. Charles is now a secondary school teacher in Belfast, Maine, the chicken capital of the state!

Another book by another Antarctic, Susan Solomon, is due out later this year. The title is THE COLDEST MARCH, and Yale University Press is the publisher. As the title indicates, and as the press publicized last winter, Susan's interests centered on how Scott's party was victimized by an unusually cold summer. She uses a unique way of introducing each chapter; and you must buy to find out what it is! At last, a book on Scott with positive overtones.

another BOOK on the horizon, by the well-known Antarctic author, Sara Wheeler, is going to be on the life of Cherry-Garrard. If you are like us, you can't wait to read this book, to find out how much Cherry-Garrard is Cherry-Garrard, and how much Cherry-Garrard is George Bernard Shaw; his neighbor and close friend. This should be a winner.

Already on the street are books by Tim Baughman (PILGRIMS ON THE ICE, Robert Falcon Scott's First Antarctic Expedition); Alan Gurney (THE RACE TO THE WHITE CONTINENT); Michael Rosove (LET HEROES SPEAK, ANARCTIC EXPLORERS, 1772-1922); and Bernard Stonehouse (THE LAST CONTINENT, DISCOVERING ANTARTICA). John Spletts reviews the Stonehouse book below. Michael Rosove is participating in the Shackleton Commemorative Crossing of South Georgia from King Haakon Bay to Husvik Harbor in November 2000. He hopes to celebrate his 52nd birthday alive and outside of a crevasse. Another book is a paperback by an ex-Navy Captain, former Deputy Director of NSF's Division of Polar Programs, former Executive Secretary for the Council of Managers of National Antarctic Programs, and current amateurish golfer and husband, father and grandfather, Al Fowler. His book has an almost non-title, COMNAP, published by the American Literary Press.

There are other new books out there, one on Bernt Balchen, which is another Byrd-bashing book. Marty Sponholz has one on the internet about being a micrometeorologist at Plateau Station in the late 1960s (which he may or may not publish). Charles Swithinbank, who is about to enter Antarctica for his seventh consecutive decade, is working, sometimes, on his fourth biographical book, this one to be titled A YEAR IN THE ANTARTIC WITH THE RUSSIANS. Jeff Rubin has a new edition of the Lonely Planet Guide to Antarctica. Great buy, loaded with great stuff, but he left out the eateries in Ushuaia! There is also a biography on L.E.G. Gates that is currently awaiting a publisher, and lastly, Susan Solomon is considering doing a book on Byrd.

If you are interested in buying any of these books, many are available through Longitude Books in New York City. Contact Darrel Schoeling (800-342-2164). Also, if you visit the famed Mt. Washington Observatory in New

Hampshire, you will find a large collection of Antarctic books given to them by Rudi Honkala (who recently returned his house to his wife, who somehow put up with him through three winter-over years). Tim Baughman, by the way, is now Dean of the College of Liberal Arts at the University of Central Oklahoma in Edmond, Oklahoma.

THE LAST CONTINENT: DISCOVERING ANTARCTICA by Bernard Stonehouse (John Spletts to review). Bernard Stonehouse has written a book particularly with tourism in mind, but there is much more here as well. It is a marvelous production of glossy paper and color photos, plus a detailed text discussion on virtually every facet of Antarctica. It also includes locations outside Antarctica that are typically part of tourist itineraries: the Falkland Islands and South Georgia. Bernard's experience in Antarctica goes back a long way, as a biologist/scientist who once said that he intended to be a meteorologist but after surviving an aircraft incident, switched to something more to Earth that would not involve a lot of flying. He thus became a biologist. An anecdote, perhaps, but Bernard's experience transcends all science when it comes to Antarctica, and it shows in his book. He is known for, among other things, determining the unusual breeding cycle of King penguins (which raise two chicks over three years) by living in a colony long enough to figure out how and why they do it. Being a proponent of environmental concerns of the continent, he led field teams beginning in 1991 to sites in the Antarctic Peninsula as part of Project Antarctic Conservation (PAC) to study tourism effects on wildlife and the environment, a project that continues today. Many years of data were accumulated to assess sites that tourists visit, with some results discussed in the book. Much of the field work of the PAC staff was made possible by means of transportation on tour vessels, which provided Bernard the means to not only travel to sites for study but also to contribute his vast knowledge by lecturing on cruises. I can attest to that, having traveled with him and hearing his presentations on birds.

The Stonehouse book provides a thorough evaluation of the numerous sites that tour vessels visit, so the reader knows what to expect on arrival. It is bound in a stiff-paper cover, has 288 pages, more than 130 color

photographs, 15 color maps, and is priced at \$24.95. Copies are probably available by now in U.S. bookstores (ISBN 0-9537907-0-3), but you can order a signed copy by the author (if requested) by contacting Ms. Irene Burns, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER UK. Enclose a check for US\$36, to cover airmail postage.

SOUTH POLE CONSTRUCTION STATUS (Jerry Marty). The construction of the new South Pole Research Facility remains "on schedule and within budget" as we embark on the 2000-01 season. During the past three seasons construction crews have completed the new Fuel Storage Facility (45 each 10,000 gallon steel tank farm and fuel distribution system), a new Garage/Shop Facility (capable of performing maintenance and repair of station vehicles as well as providing for industrial utility maintenance shops), and began construction of the New Power Plant.

Last year represented a very busy yet successful construction effort. During that time, both the Fuel Storage and Garage/Shop complexes were completed and approved for occupancy (December 10, 1999), and are currently in operation. Construction of the new power plant, with a 1-Megawatt peaking power capacity, also began during winter season. This work represented construction of the envelope steel arch (200ft x 55ft diameter), as well as the building footings, foundation and shell. Construction also commenced for the new station water and sewer utility distribution sub-surface tunnel, and an ancillary science research facility located in the Dark Sector. The water and sewer tunnel is a 6-foot wide by 10-foot high opening cut into the ice by using a tunneling machine. The total length of the tunnel will be 1850 feet, and at its lowest point will be 40 feet below the surface. The new science facility (Dark Sector Laboratory) is a 3,750 square foot, two-story facility. Construction of the sub-surface passageway and vertical tower (to the new elevated station facility) was completed to include the footing and foundation pad for the new elevated station facility.

During the winter season, construction personnel have been working on the interior of the new power plant (installing the power plant generators, switchgear, fuel piping, electrical feeders, etc) with completion scheduled for

November 2000. Final inspections, equipment and systems testing and facility acceptance of the new power plant are scheduled for the months of November and December 2000. Occupancy and activation of the power plant is scheduled for mid-January 2001, at which time it will become the source of station power. Concurrent with the completion of the power plant is construction of the elevated facility. Specifically, work will commence on wings A1 (50-person housing) and A2 (food service and mechanical systems), and during the upcoming winter-over, work on the interior of these wings will occur, with occupancy at the end of next summer. Steel test assembly was performed in the US last summer representing major components of the assembly, in order to minimize on-site issues with connections, sequence, and labor familiarity. Completion of the water and sewer tunnel will also occur during this summer. Construction this coming summer will also include activation of a 9-mete: antenna, MARISAT/GOES T-1 Earth Station Communication project. The project is scheduled for acceptance and activation mid-January 2001.

The current winter season became the second in a row to have continued construction activity (interior), bringing the total South Pole winter-over population to 50 total (an all-time high representing 10-science, 20-station support, and 20- construction). The upcoming summer season will bring another year of record population peaking at 220 (50-science, 85-construction, 69-station support, and 6-inspectors/vendor reps/NSF, and 10- special projects).

PENGUIN PRATTLE

Another ice season is upon us, and lest some think I am giving short shrift to the long and dominant winter season, let me quickly add that the coming ice season follows on the heels of an eventful and productive winter-over. Of particular note, this was the first, and by all accounts successful, winter season for the new support contractor, Raytheon Polar Services. As noted above, by Jerry Marty (NSF Construction Manager), the new South Pole Station work has continued apace during the winter contractor transition period, as have the formidable forces of nature found in Antarctic latitudes. This year, these forces produced at least two newsworthy stories, which are

highlighted below (ozone and icebergs). Plans for the coming summer season include many interesting research projects and other developments that will be highlighted in the next newsletter.

The No-Ozone Zone Enlarges. Not long after the sun sent its first rays of the year beaming down over McMurdo Station in late August, ozone scientists were noting that the extent of ozone loss over Antarctica was abnormal. Not only were total ozone concentrations falling off faster than normal, but the hole appeared much deeper than observed in recent years. By September 12, the hole was measured to be nearly 33 million square kilometers, an area more than three times the size of the United States! This shatters the record set in 1998 of 27 million square kilometers. For the first time, the hole opened wide enough to expose populated portions of South America to dangerous levels of ultra violet (UV) rays. UV, which is known to cancer, and damage plant development, is normally filtered before reaching the earth's surface by the layer of upper atmospheric ozone molecules.

Scientists think that the unusual ozone depletion pattern observed this year is attributable to the record-low temperatures in the stratosphere. These temperatures, in combination with the strength of this year's circumpolar winds (known as the polar vortex), allowed the physical and chemical conditions favoring the ozone depleting chemical reaction to occur to a greater extent than in the past. Human-made chlorine and bromine compounds cause most ozone depletion, and thanks to the 1989 Montreal Protocol limiting production and use of these compounds, it appears that their concentrations are leveling-off, or slowly decreasing. However, because of these chemicals' long persistence in the atmosphere, it will be many decades before their influence is no longer noticeable.

Peripatetic Bergs May Threaten Shipping Route. Back in March, a mass of ice calved off the Ross Ice Shelf not more than 200 miles from McMurdo Station, which is considered to be among the largest ever observed (11,007 square kilometers, or about the size of Connecticut). NSF is supporting the work of researchers who are modeling the potential path of the iceberg (given the forgettable name, B-15), which could get pushed by ocean currents and winds into

the narrow region north of McMurdo Sound, sealing off sea-based access to the McMurdo Station. For those not in the know, both McMurdo and South Pole Stations, as well as New Zealand's Scott Base, rely heavily on the annual resupply vessels that bring in food, fuel and other vital science and infrastructure cargo each January.

And, as if B-15 was not causing enough excitement, a second, smaller comrade, named C-16 has joined the mix, calving-off near the same location in late September. C-16 (approximately 900 square kilometers), is "of particular interest" says National Ice Center Navy liaison, Lori Butcher, "because of its proximity to Ross island...and may drift enough to impact the area where ships will be operating."

For those interested in tracking these icebergs from the comfort of your own desk some web sites are provided below. The first web site is particularly interesting because it provides animated depiction tracing the route of the large iceberg.

<http://uwamrc.ssec.wisc.edu/amrc/bergmovie.html>
<http://www.natic.noaa.gov/IcebergB-15.htm>
<http://nsf.gov/od/lpa/news/press/00/pr0012.htm>

Penguin Repatriation. While Cape Town, South Africa is slightly outside the usual reporting area of this newsletter, the Prattler would be remiss for failing to report that more than 19,000 "African" penguins (also known as Jackass or Blackfooted penguins), which were rescued in the wake of a massive oil spill, have recently been released back into the wild. While in captivity, the International Fund for Animal Welfare provided top-notch room and board conditions, including regular recreation. Unfortunately, -10% of the population died, but this is far less than the near 50% mortality rate that occurred in the aftermath of an 1994 oil spill in the same region.

Admiral Byrd to be Honored and You Are Invited! The Richard Byrd Community Library in Springfield, Virginia will be celebrating Byrd's birthday on Saturday October 21(11 am), by hosting a viewing of the Academy Award winning silent film, *With Byrd at the South Pole*, refreshments included. We know this is short notice, but if you are interested please call the library (703-451-8055), at 7250 Commerce St., Springfield, VA (no charge).