The Antarctican Society

VOLUME 11-12 FEBRUARY NO. 3

PRESIDENT
Charles Lagerbom
16 Peacedale Dr.
Northport, ME 04849
icechip@bluestreakme.com

VICE PRESIDENT
Dr. Anthony J. Gow
117 Poverty Lane
Lebanon, NH 03766
petprotector@comcast.net

TREASURER
Paul C. Dalrymple
Box 325
Port Clyde, ME 04855
Phone: (207) 372-6523
pcdal@roadrunner.com

SECRETARY
John F. Splettstoesser
433 Fifth St. Apt. 316
Waconia, MN 55387
spletts@embarqmail.com

WEBMASTER
Thomas Henderson
520 Normanskill Place
Slingerlands, NY 12159
webmaster@antarctican.org

"BY AND FOR ALL ANTARCTICANS"

Honorary President: Dr. Charles Swithinbank

P.O. Box 325, Port Clyde ME 04855

WWW.ANTARCTICAN.ORG

CONTENTS

FAREWELL TO RAYTHEON - FAREWELL TO KARL

BRASH ICE. Frustration, Frustration, Frustration. This NEWSLETTER has been on the front burner for two months with several headline features, but things seem to change whenever we think we are ready to start our engines. The one constant the past two months has been the centennial celebrations of the arrival of Amundsen and Scott at the South Pole. And then just when I figured out what the new South Pole marker was like, I found out that it was a lot more complicated than I thought. And when it looked like the new contractor for Antarctica had been selected and would commence on April 1st, things weren't exactly as they seemed. In the interim, the Russians were drilling away at Lake Vostok as their summer was ending. The question was whether there was enough time before the onslaught of winter for them to reach the lake. On Sunday, February 5th, three days after Ground Hog Day, it all became a mute question, as the Russians actually pulled off their miracle, reaching Lake Vostok. Then we heard that Karl Erb was finally going to retire after Lord knows how many years as head of the Office of Polar Programs at NSF. Now we must go to print.

Probably the most astute of all of the most learned of all Antarcticans, Lou Lanzerotti, has received a high honor from the American Geophysical Union, the Bowie Medal, which is given in honor of William Bowie whose spirit of helpfulness and friendliness in unselfish cooperative research made him a scientific icon. It is awarded to an individual for outstanding contributions to fundamental geophysics and for unselfish cooperation in research. Lou is currently a distinguished member of the National Science Board, as well as a staff member of the New Jersey Institute of Technology. His Antarctic credentials include upper atmospheric research at both Siple Station and the South Pole. P.S.: Lou also happens to be a very nice guy.

We once had an Antarctic Hungarian as a Society member. His name was Bela Csejtey, and he died last month in the Stanford University Hospital. Art Ford recalls how he met him in Vermin Villa , a McMurdo Jamesway in 1962. Bela had escaped Soviet tanks entering Budapest in 1956, and came to the States where he got his Ph.D. in geology at Princeton. In 1962 he worked on a Rutgers project on the origin of soils in the Dry Valleys. Later he joined the U.S. Geological Survey and spent a career escaping brown bears in Alaska. Art worked with him on the Denali Fault. Even though he was successful in escaping the Soviet tanks and the brown bears of Alaska, he was not successful in escaping the cancerous ravages of lymphoma.

We are now 325 in number, down slightly from where we were a year ago. Not surprising, as many of our members joined up soon after the International Geophysical Year, and are either dying off or are now using their dollars for fun and games. Over 30 percent of our members are now receiving the Newsletters via electronic means, which helps us out in the Head Shed. On our Membership Form, we beg you people to renew for multiple years, as this is a sole person endeavor, and everyone we can get to renew for two or more years is a load off of this person's (mine) back. Some of you people have pointed out that our book- keeping leaves something to be desired. Sorry there folks, we will try and do better. But we are also going to play harder ball, not keeping delinquents on our rosters beyond 18 months.

Are we financially stable? Yes, we are, in fact very much so. And we intend to remain this way. We are very happy with those of you who contributed to the Ruth J. Siple Fund for books for the library named in her honor at the Amundsen-Scott South Pole Station. In the last few months contributions have come in from Billy-Ace Baker, Kenneth Behannon, Rodger Brown, Dick Chappell, Winston Cope, Guy Guthridge, Charlie Greene, Peter Harrison, Marie Hurtig, Ann Johnson, Ken Moulton., and John Schullinger. Ann, incidentally, is the oldest daughter of Ruth and Paul Siple. We still have 90 delinquents for this calendar year.

How come the Society is located in a small lobster town, population less than 600, in mid-coastal Maine? Well, why not Port Clyde, it has to be somewhere where there is a post office and someone who regularly picks up the mail. That someone is me, Paul Dalrymple, and I am the treasurer and sees to it that the Newsletter is written occasionally and mailed off to you folks. The web-site is located in Slingerlands, New York, a suburb of Albany, New York where Tom Henderson is our most able webmaster and keeps it up-to-date time-wise. Our president is Charles Lagerbom, school teacher in Belfast, Maine, who resides with family on the top of a hill in Northport, Maine over-looking beautiful Penobscot Bay. It is here where Charles, alias Chips, does all of his scanning of your pictures, at NO CHARGE. Chips, Tom, and I all serve you at no charge, as Antarctica was, is, and ere shall be our home away from home, our beloved would-be-permanent home.

Anybody for the North Pole? Art Mortvedt, veteran Alaskan bush pilot with over 5,000 hours flight experience, who has been on twenty, yes, twenty expedition to the Antarctic as a pilot, including flying to the South Pole. Is now offering flights to the North Pole in his Cessna 185. Art lives in Manley Hot Springs, Alaska, tel/fax 1-907-672-3206. His web site is www.polarflight90.com. Also mortvedt@alaskawilderness.net. And he is ready to leave this April. How about you?

Karl Erb sent the following e-mail announcing his retirement on March 31st to his NSF colleagues in the Office of Polar Programs on 5 February 2012
"Anticipating the coming of spring, the blooming of daffodils, the opening of the fishing season and many other good things I have decided to retire from government service in April. It has been a great privilege to work with every one of you for these good years, the absolute highlight of my working life, Thank you all. With best regards, Karl"

Here's some of the climate data from the South Pole for 2011. The big news is the highest temperature ever recorded at the South Pole, 9.9 degrees F on Christmas Day. The all-time highest wind speed ever measured at the South Pole was recorded on September 27th, 58mph,

.

Climate Summary for the Calendar Year 2011
Average temperature…….-56.3F
Maximum temperature……. 9.9F
Minimum temperature……... -l03.4F

Average wind speed……..11.9MPH
Maximum wind speed……58 mph

Average hours sunshine per day…..	15.3
Percent of possible sunshine	64%

Snowfall, net change at stakes	8.9 inches
Clear days	126
Cloudy days	91
Partly Cloudy	148

LOCKHEED TAKES OVER THE U.S. GOVERNMENT'S ANTARCTIC OPERATIONS, KEEPS STAFF IN DENVER *Denver Westword,* Dec. 28, 2011
More than two years past its original deadline, the **National Science Foundation** has finally awarded a contract to Lockheed Martin to handle the U.S. government's vast operations in Antarctica. The thirteen-year, $1.9 billion contract begins April 1 and its headquarters will continue to be based in Centennial. Lockheed Martin takes over from Raytheon Polar Services, which has run the program since 1999. Although Raytheon bid on the contract again, it faced stiff competition from Lockheed and several other companies and didn't make the final cut.

LOCKHEED MARTIN WINS CONTRACT WORTH UP TO $2BN
Financial Times, Dec. 28, 2011
Lockheed Martin, the world's biggest defense company by revenues, has won a multi-year contract from the **National Science Foundation** that could be worth up to $2bn to support the extensive US research presence in Antarctica. As part of the contract Lockheed will transport US scientists and goods to and from Antarctica, support efforts to upgrade local infrastructure and manage bases in the region that provide a staging post for expeditions and research.

At McMurdo Station, the main hub, Lockheed will effectively run a small town with an airport, a pier, a hospital and a hotel as well as a laboratory complete with an aquarium. Linda Gooden, head of Lockheed's Information Systems & Global Solutions business, said that the company was delighted with the award and noted Lockheed's "longstanding history of supporting customers in remote locations". Environments do not come more remote than Antarctica. The continent is one of the coldest, driest and windiest places on earth, where the lowest recorded temperature is -90C.
In his 2007 film, Encounters at the End of the World, Werner Herzog, the award-winning documentary filmmaker, presented McMurdo Station as an other-worldly environment, inhabited by an engrossing assortment of oddball characters.
The NSF, independent federal agency that supports science in the US, has maintained a US presence in the region since the 1950s. About 3,000 Americans, from agencies such as NASA and the defense department take part in NSF research and logistics activities each year. Research projects include efforts to better understand climate change, particularly the relationship between Antarctica, its ice sheet and the Southern Ocean, and also biological experiments that take advantage of the area's remoteness and extreme climate.
Lockheed beat out incumbent provider Raytheon, to win the initial four and a half year contract. Follow-on options could extend the contract to 13 years, and if Lockheed wins those the total contract value could reach $2bn.

CENTENNIAL NOTES FROM LIESL SCHERNTHANNER AT THE SOUTH POLE December 12
Happy South Pole Anniversary! We're having a good time here at Pole with an excellent group of Norwegians, several aircraft-loads of visitors, a few Arctic Trucks, and other fun. The Prime Minister of Norway and his staff are delightful to work with and have as guests. They went cross country skiing the first day they arrived! We had a nice picture with good station turnout at the Pole last night, and then the Norwegians served the whole community "glug" (hot-spiced wine) and cardamom cookies. Tomorrow we have a few speeches, the revealing of an ice bust of Amundsen, and special dinners for our guests. With the visitors that come from Union Glacier (ALE) and Novo (TAC) we have a new set up with a very nice visitor center and

store out by the ceremonial pole. It reduces the congestion inside the station and seems a nice meeting place for folks. All in all, it is shaping up to be a good Anniversary Celebration and a great season.

December 16. Most of the big wheels are gone. The Prime Minister and his entourage left the day after the Centenary-- they thanked the community profusely and are taking away good memories of their visit. The elite list of visitors are also trickling out of here via Basler and twin otter towards Union Glacier. We had quite a collection of polar adventurers (93 people were at the ALE camp). It is rather fun to see those who return several times throughout the years. They're familiar faces and while we're not "friends" who keep in touch, we are all happy to exchange hugs and greetings, thanks to the happy familiarity and success of reconnection at such a nice place.

January 5. The remote and inhospitable South Pole remained largely unchanged prior to the IGY starting a new phase of plateau occupation and research. In recent years, the transformations at South Pole are visible and significant in new buildings and science platforms; thinking back 100 years, the changes are staggering. Celebrations at 90South on December 14th, a memorable day in Antarctic and Polar History, brought together, crisp air, sunshine, ice crystals, Polies, Expeditioners, Support Staff, Camera Crews, Distinguished Visitors, and a world of observers to reflect and acknowledge the impressive accomplishment of Roald Amundsen, Olav Bjaaland, Oskar Wisting, Sverre Hassel, Helmer Hanssen.

Much has been made of "the Race to Pole." Despite methodology or degrees of success, one cannot help but simply admire the grand accomplishment of attaining the South Pole by fortitude, time-limited equipment, and some good fortune – although many, including Amundsen, would profess that luck is a matter of preparation. During Centenary events, Norwegian Prime Minister Jens Stoltenberg emphasized the "Courage, determination and endurance, and readiness to meet new challenges" that brought the first humans to Pole. Accomplished adventurers such as Borge Ousland talked about the perpetuating inspiration instilled by the last heroic age explorers. Amundsen's carpenter's grandson, Jan Stubberud (78, skied in the last degree with Amundsen's watch), iterated character traits that have been appreciated and emulated for the following generations. Visitors read expedition journals, transporting witnesses to Amundsen's camp where one could appreciate hardship, splendor, and achievement rolled together. The proud Norwegians were well represented in the majority of the 93 visitors at the ALE Camp near pole, and the Norwegian Head of State and his entourage. The 235 Polies on station were out in force representing a modern Antarctica paying homage to the deserving. Components of the event were broadcast live to Norway, and there were "tweets" and "blogs" and digital photographs galore. Strangely, this celebration connected South Pole to the world more than any previous event as communications and mindsets allowed people to simultaneous focus on this small spot at the bottom of the earth, whereas it took months for the news that Amundsen had made it to the South Pole to reach the outside world.

Despite modernity, the raw emotion of knowing that such impressive men stood where we now stand, a century ago, is humbling. There was silence at the Pole on December 14th, and a shared moment of awe. To those who came before us: thank you for forging the way.

For additional information regarding the South Pole Centenary and some pictures of recent events, you are encouraged to visit our local "on line" newspaper:http://antarcticsun.usap.gov/features/

December 24. Pole is strangely warm (see attached). We held the Race Around the World yesterday despite windy and foggy conditions, but over 75 people turned out and

had fun. We also had a great dinner served by our amazing galley staff. It has been very quiet around here this morning -- much fun was had last night. Today we'll be caroling over HF, enjoying another great brunch, and doing some catch up. I love Christmas at the Pole: no commercialism, just good company, a great meal, and a bit of rest. I think I've spent 15 Christmases on the ice and I've enjoyed every one of them. It is nice to think about family, too, however. My best Christmas on the ice was when I had two sisters here at the the Pole with me!

January 15. We're looking forward to marking the centenary of Robert Falcon Scott's party arriving at the South Pole on Tuesday. Unlike the Amundsen Centennial there are no official state events or TV broadcasts planned, but we will recognize the occasion with a simple ceremony scheduled for 6PM 17 January at the Ceremonial South Pole. 6PM is, apparently, the time that coincides with the Scott's arrival at the South Pole in 1912. We are coordinating a ceremony with the managers of the Visitors Camp near the station (ALE). I should explain that ALE stands for Antarctic Logistics and Expeditions (a subsidiary of Adventure Network International, ANI), the primary tour operator in the region – they work out of Union Glacier/Punta Arenas/Salt Lake City. The other big operator is The Antarctic Company/Antarctic Logistic Centre International (TAC/ALCI)), out of Novo (via South Africa) – there are several "Arctic Truck" groups that are coming out of this location, driving to pole in as little as 8 days! We expect over 30 people to ski in from the last degree (89 south) and about 13 long-distance expeditioners to arrive at Pole between the 16th and 18th of January. Soon after that, more adventurers arrive: seven last degree skiers and 40-some others from around the continent, including 5 groups of 2-3 skiers with Extreme World Races supported by 6 Arctic Trucks out of the TAC/ALCI camp 22 km short of the Pole (they like camping in the flat and white better than the busy pole!). There are a few kiters and even a bicycler coming in too!

In total, the ALE group intends to have about 70 clients and staff here for the Scott Centennial. A team from the British Antarctic Survey will also be in town with their Twin Otter to service an experiment they maintain from Pole each year. This adds festive acknowledgment to the important Centennial event. The occasion will be simpler and lower key than was the Amundsen event. The fact that Scott's party perished on their return trip adds somberness to this event.

Also going on this week: Lt. Col. Henry Worsley of the Royal British Legion will share some British Antarctic history and some of his own expedition experiences with the community on Monday evening our Galley. He may even show off a highly significant artifact (he carried Oates' polar medal with him to Pole). Henry is a distant relative of the Endurance Captain, Commander Frank Worsley of Shackleton's Imperial Trans-Antarctic Expedition of 1914–1916. He was also the leader of the 2008-2009 Shackleton Centenary Expedition that recreated Shackleton's Nimrod Expedition that reached the furthest south until Amundsen's expedition at a latitude of 88° 23′ S, just 112.2 miles from South Pole. He recently skied to Pole following Amundsen's route, in a race with another British Military team following Scott's route (the latter are about 100 miles behind, but will hopefully be here by Tuesday).

RUSSIAN SCIENTISTS REACH LAKE UNDER ICE IN ANTARCTICA.*AP Science Writer Seth Borenstein* Opening a scientific frontier miles under the Antarctic ice, Russian experts drilled down and finally reached the surface of a gigantic freshwater lake, on February 5th .

Touching the surface of the lake, the largest of nearly 400 subglacial lakes in Antarctica, came after more than two decades of drilling. It was

a major achievement avidly anticipated by scientists around the world.

The Russian team made contact with the lake water Sunday at a depth of 12,366 feet (3,769 meters), about 800 miles (1,300 kilometers) east of the South Pole in the central part of the continent.
Scientists hope the lake might allow a glimpse into microbial life forms that existed before the Ice Age and are not visible to the naked eye. Scientists believe that microbial life may exist in the dark depths of the lake despite its high pressure and constant cold — conditions similar to those believed to be found under the ice crust on Mars, Jupiter's moon Europa and Saturn's moon Enceladus.

Valery Lukin, the head of Russia's Arctic and Antarctic Research Institute, said reaching the lake was akin to the Americans winning the space race in 1969. "I think it's fair to compare this project to flying to the moon," said Lukin, who oversaw the mission and announced its success. American and British teams are drilling to reach their own subglacial Antarctic lakes, but Columbia University glaciologist Robin Bell said those are smaller and younger than Vostok, which is the big scientific prize. "It's like exploring another planet, except this one is ours," she said.

At 160 miles (250 kilometers) long and 30 miles (50 kilometers) wide, Lake Vostok is similar in size to Lake Ontario. It is kept from freezing into a solid block by the more than two-mile-thick crust of ice across it that acts like a blanket, keeping in heat generated by geothermal energy underneath. Lukin said he expects the lake to contain chemotroph bacteria that feed on chemical reactions in pitch darkness, probably similar to those existing deep on the ocean floor but dating back millions of years. "They followed different laws of evolution that are yet unknown to us," he said.

Studying Lake Vostok will also yield insights about the origins of Antarctica, which is believed by many to have been part of a broader continent in the distant past.
And the project has allowed the testing of technologies that could be used in exploring other icy worlds. "Conditions in subglacial lakes in Antarctica are the closest we can get to those where scientists expect to find extraterrestrial life," Lukin said.

Drilling through the ice crust in the world's coldest environment brought major technological challenges. Temperatures on the Vostok Station on the surface above the lake have registered the coldest ever recorded on Earth, reaching minus 128 degrees Fahrenheit (minus 89 degrees Celsius). Conditions were made even tougher by its high elevation, more than 11,000 feet (3,300 meters) above sea level.

The effort has drawn fears that the more than 60 tons of lubricants and antifreeze used in the drilling may contaminate the lake's pristine waters. Bell said the Russian team was doing its best "to do it right" and avoid contamination, but others were nervous.

"Lake Vostok is the crown jewel of lakes there," said University of Colorado geological sciences professor James White. "These are the last frontiers on the planet we are exploring. We really ought to be very careful."

Lukin said Russia had waited several years for international approval of its drilling technology before proceeding. He said that, as anticipated, lake water under pressure rushed up the bore hole, pushing the drilling fluid up and away, then froze, forming a protective plug that will prevent contamination of the lake.

Russian scientists will remove the frozen sample for analysis in December when the next Antarctic summer season comes. They reached the lake just before they had to leave at the end of the Antarctic summer, when plunging temperatures halt all travel to the region.

Lukin, who made numerous trips to Antarctica, said the physiological challenges of extreme cold and thin oxygen were aggravated by isolation. *"If something happens to you or your colleague, there is no one to help,"* he said. *"It's actually easier to help an astronaut in space."*

Martin Siegert, a leading scientist with the British Antarctic Survey, hailed reaching Lake Vostok as *"an important milestone ... and a major achievement for the Russians."*

The British are trying to reach another subglacial lake, Lake Ellsworth. *"The Russian team share our mission to understand subglacial lake environments and we look forward to developing collaborations with their scientists and also those from the U.S. and other nations, as we all embark on a quest to comprehend these pristine, extreme environments,"* Siegert said in an email.

Americans scientists are drilling at Lake Whillans, west of the South Pole. Some voiced hope that studies of Lake Vostok and other subglacial lakes will advance knowledge of Earth's own climate and help predict its changes. *"The clues to how Earth may respond to the continuing impact of humans, particularly fossil fuel emissions and related climate change, are housed in the records of past climate change in Antarctica,"* said Mahlon Kennicutt II, Texas A&M University professor of oceanography, who leads several Antarctic science groups. *"A view of the past gives us a window on our planet's future,"* he said.

Russian researchers plan to continue exploring with robotic equipment that will collect water samples and sediments from the bottom of the lake, a project still awaiting the approval of the Antarctic Treaty organization. The prospect of lakes hidden under Antarctic ice was first put forward at the end of the 19th century by Russian scientist and anarchist, Prince Pyotr Kropotkin. Russian geographer Andrei Kapitsa noted the likely location of the lake and named it, following Soviet Antarctic missions in the 1950s and 1960s, but it wasn't until 1994 that its existence was proven by Russian and British scientists.

Drilling in the area began in 1989 and dragged on slowly due to funding shortages, equipment breakdowns, environmental concerns, and severe cold. The lake's crystal-clear water may make entrepreneurs sweat just thinking of its commercial potential, but Lukin shot that idea down. He said his team had no intention of selling any Vostok water samples, but would eventually share the results of their work with scientists from other nations.

Russian researchers at the Vostok station in Antarctica pose for a picture after reaching sub-glacial Lake Vostok. Scientists hold the sign reading "05.02.12, Vostok station, boreshaft 5gr, lake at depth 3769.3 meters."

The new Geographic Pole Marker was put in place at 90 south on January 1.
Each year there is a winter over contest to design a new marker and
in 2011, the machinist, Steele Diggles, won the contest and subsequently
produced the marker out of brass on station.