The Antarctican Society

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CELEBRATION. Hear yea, hear yea, the University of Maine's Gala 100th Anniversary of famed Norwegian polar explorer, Roald Amundsen, reaching the South Pole, Collins Center for the Arts, Orono, Maine on November 21, 2011. Dr. Olav Orheim, Executive Secretary of the Norwegian International Polar Year Secretariat and Chair of the Polarship Fram Museum in Oslo will give the keynote presentation on:

NEW KNOWLEDGE ON THE ATTAINMENT OF THE SOUTH POLE 100 YEARS AGO, WITH REFLECTIONS ON THE PERSONALITIES OF ROALD AMUNDSEN, ROBERT FALCON SCOTT, AND ERNEST SHACKLETON

Dr. Orheim is a distinguished glaciologist, climatologist and polar expert who spent more than thirty years studying the effects of global warming in the polar regions. He was managing Director of the Norwegian Polar Institute from 1993 to 2005, and Professor of the University of Bergen's Department of Geology from 1989 to 2005, teaching glaciology from 2005. From 2005 he has been managing polar research at the Research Council of Norway. He is Chair of the Board of the Fram Museum in Oslo, which houses the ship that carried Roald Amundsen to the Antarctic in 1911/12.

Dr. Orheim was hand selected by the Norwegian Embassy to come to Orono to give this wonderful Centennial Presentation, and they generously provided the funding so that he could come before us on November 21st. If you can possibly make it, by all means come to hear this celebrated polar scientist honor Amundsen during his Centennial Anniversary. Dr. Paul A. Mayewski, Director of the University of Maine's Climate Change Institute, and Dr. Harold W. Borns, Professor Emeritus, Climate Change Institute, are co-hosting the celebration, Exhibits and displays featuring Climate Change Institute projects will be available for public viewing in the foyer of the Collins Center for the Arts.

If you are planning on attending, please contact Betty Lee at the Univ. of Maine at (207) 581-3406 or e-mail her at bliqcs@maine.edu. She, in turn, will have your name tag ready for you to wear when you arrive at the Collins Center. She also would like information on your ice participation so that you can be recognized from the chair that evening. I am looking forward to seeing many of you on the 21th of November in Orono.

HEADS UP. A Coming Attraction in Washington. D.C. The Explorers Club Washington Group will host a joint dinner meeting with the Antarctican Society and the Society of Woman Geographers on Saturday evening, December 3rd at the Cosmos Club in Washington, D.C. It is considered a "black tie" affair, as the explorers have a yearning to dress formally, wearing their colorful medals and decorations. So it is an occasion where you can't overdress!

The speaker that evening will be one of our very own, Jerry Marty and he will talk on his home away from home, "SOUTH POLE ANTARCTICA , From Early Exploration to the 21st Century Scientific Research Facility." After Jerry saw to it that the new elevated station at the South Pole was completed to everyone's satisfaction, he leaped forward into retirement. But it turned out that he wasn't really cut out for retirement, so he is now back at the National Science Foundation and is as happy as a clam at high tide. Hopefully he will not talk endlessly that evening, but what you will be hearing will be coming directly from the horse's mouth, the pure, unadulterated truth about the true South Pole. It has all the markings of a fun evening. Will we see you there? Hope so!

Reservations can be made through Bill Runyon, 1812 19th St., NW, Washington, DC 20009. Be sure to enclose a check for each dinner, $70.00 each, made out to the ECWG. If you require a vegetarian meal, be sure to specify it.

BRASH ICE. This is sort of a Pre-Centennial Celebration Newsletter, announcing a couple of upcoming lectures for which we thought some of you might want to make advanced reservations We also want to tell you again that we have a few 2012 Antarctic Hedgehog calendars for sale. There will be no recognition of orders placed after December 1st, so if you want one get your order in NOW. And that includes you, Jeff Rubin, our perpetual late orderer. Sixteen dollars per. I might say that there's a difference of opinions. I think the calendars are the best offered in many, many years. Bill Sladen doesn't care for this year's calendar. One of us is right, one of us is off base. I hope you believe me!

We are proud of our Centennial Medal honoring Amundsen's and Scott's arrival at the South Pole a hundred years ago this austral summer. We have sold over a hundred to you members, Liesl Schernthanner took an additional twenty-five with her to the South Pole, and the ship's store at Port Lockroy asked for and were given 250 for sales to deep pocketed tourists visiting their base this coming season. If any of you Antarticans want one of our Centennial Medals honoring Amundsen and Scott, please let us know here at our base of operations in Port Clyde, Maine. Each medallion is selling for $30.00 each, which includes handling and shipping.

AT LONG LAST, ED STUMP'S MAGNIGICENT PRODUCTION ON ONE OF THE WORLD'S NEAR PERFECT PHOTOGRAPHIC WONDERS HAS BEEN PUBLISHED. Hurray, hurray, hurray!!! Yale University Press 's "THE ROOF AT THE BOTTOM OF THE WORLD, Discovering the Transantarctic Mountains" by Edmund Stump in now on the streets, coming out in mid-October of this year. Not only is this the Perfect Centennial Book covering the routes of Amundsen and Scott to the South Pole a hundred years ago, but it takes the readers all the way across Antarctica through its most scenic beauties. What a wonderful Christmas present, and the price is

phenomenal, $29.95. However, Amazon is selling the same brand new book for only $19.97. At that price, buy one for each of the grandchildren, plus one for your mother-in-law.

It was over twenty-five years ago when I was blessed to attend an Antarctican Society meeting in Washington, D.C. when Ed Stump gave a presentation on the Transantarctic Mountains. I was captivated by the beauty of his photography, and started to bug him immediately to publish. After some forty years of researching the mountains, after some 8000 pictures, we are now rewarded with the finished product, the very best of the best on 254 pages. It is not just another picture book, as Ed walks you across the Transantarctic Mountains. Some of you will find yourself in stories dear to Ed's memories. And it is not a book confined just to Ed's life period, as he goes back to the first Byrd Antarctic expedition and includes Larry Gould's traverse in support of the first-ever flight to the South Pole. It was well worth waiting for, although I thought that both of us might die before it ever saw print. Thank God it is finally published, what a great asset and contribution to Antarctic literature. Buy, you will be delighted and absorbed page-by-page.

SOUTH POLE DOME. (Jerry Marty)
The South Pole Station Dome has been successfully deconstructed, the structural materials returned to US soil, and a portion reassembled for display at the USN Seabee Museum – Port Hueneme, CA.
Of interest may be - how did this effort progress from the January 9, 1975 Dome station dedication (and occupancy by Dick Wolak and the DF75 winter-over crew) to the Dome display in the USN Seabee Museum as part of the official dedication and ribbon cutting ceremony on July 22, 2011? The following is a bullet timeline summary of the events, agreements, and actions that bring us to July 22, 2011:

I. Reasons for removal

- The Dome had met and exceeded its design life. The cost effectiveness to meet current code compliance and the integration of 21st century technology upgrades was determined to be prohibitive (to include usage options for any type of storage).
- The yearly snow maintenance & removal costs from drifting created O&M budget challenges; equipment hours, equipment fuel costs, and labor. These resources were in competition with other new station and science construction project planning and prioritization.
- The new South Pole Station Environmental Impact Statement (EIS) and Antarctic Treaty requirements required the removal of the Dome and Skylab. Replaced facilities are required to be removed and not left on the surface.
- All the Dome and Skylab functions had been transferred to the new South Pole Station Elevated Structure during the FY06 summer season.
- The basis of design included the concept of the Elevated Structure replacing the Dome as the USAP South Pole Station 21st Century icon.

II. Disposition options

- The removal of the Dome and Skylab was a specific line item within the approved new South Pole Station master construction project budget. It represented the last phase of the New South Pole Station project and was part of final site remediation.
- Various concepts were discussed with the focus being on safety, cost, and schedule. The concepts also looked for options which required minimal labor and equipment in support not only the actual Dome removal, but also shipping the material back to the USA as scrap. The concepts included demolition using some aspect of an implosion technique, disassembly using metal cutting saws,

disassembly piece by piece, shredding the material (aluminum) on site, and various combinations thereof.

- It was determined that removal of the Dome and Skylab would occur during the FY10 summer season. Deconstruction with the intent to use the material for reassembly was not to be the primary focus. The tasking was to remove (deconstruct) the structures using a safe method and maintain the budget and schedule.

III. Display options

- Concurrent with the ongoing demolition for scrap analyses, the USN voiced an interest (to NSF) for acquiring the total Dome as part of (at that time) their design of the new USN Seabee Museum. This concept was for a total re-assembly which would provide a walk through venue and would be located adjacent to the Seabee Museum. Other discussions with the Navy included options for sections of the Dome being displayed at various Navy museums and bases. These discussions continued over the course of a few years and even included an option in which the Navy would partner with NSF by providing active duty Seabees augmenting the NSF support contractor during deconstruct the Dome for reassembly. In 2009 the Navy advised NSF that they, due to Seabee commitments in Iraq and Afghanistan, were no longer in a position to address the Dome disposition. The Museum display topic then became an issue for the USN Historical Foundation as the Seabee Museum was now under their authority and control.

- As the Seabee Museum, Port Hueneme, CA design progressed; the US Navy Seabee Foundation determined in 2010 that some portion of the Dome should be displayed within the Museum to represent the Seabee Antarctic involvement and contributions. They suggested that the Top section of the Dome would be appropriate. NSF agreed to provide the museum with as much salvageable material from rings 1 through 4 (the Dome has a total of 12 rings plus the foundation plate) as possible and a function of the on-site deconstruction methods.

IV. Dome deconstruction and USN Seabee Museum display

- As the USAP Support Contractor began the on-site FY10 Dome deconstruction efforts, their planning for the removal of rings 1 through 4 in support of the Seabee Museum assembly agreement brought forth questions regarding the original construction techniques and Basis of Design. With concurrence from NSF the following individuals volunteered to participate in conference calls with the South Pole construction crew and provided information (their role was that of consultants and not providing any direction): Jerry Marty, NSF Representative South Pole and NSF Construction Project Manager – New Elevated Station (retired); John E. Perry, Jr., CDR, CEC, USN, (retired), W/O PWO McMurdo, DF68, OIC CBU201, 1969-1971, South Pole Station (Dome), Project Officer, 1971-1973; Lee Mattis, PE Civil Engineer, TEMCOR Technical Representative for the 1971-1973 Dome Construction.

- During the course of the conference calls and on-site planning, it was determined that the most effective way of deconstruction the dome was to remove large sections and then disassemble them on the surface. This technique allowed for safety and efficiency, which achieved not only the goal of salvaging rings 1 through 4, but all 12 rings. As the result, the project was completed on schedule and within budget. NSF recognized this effort with the presentation of a Dome Deconstruction Award to the RPSC construction crew. This award included the key team member who guided the efforts to the successful completion: Steve

Bruce RPSC Construction Project manager Dome Deconstruction, Pole summer seasons 90', 92', 95' 96' 97' 10' Pole Winter 93'.

- All the deconstructed Dome materials were shipped back to Port Hueneme and placed in the USAP warehouse building #471. The materials comprising rings 1 through 4 were identified and placed in separate boxes and pallets.

- During the final display planning it was determined that the configuration of the intended room and ceiling support structure would only allow for the assembly and suspension of ring 1. Ring 1 is about 13 feet in diameter and weighs 550 pounds. The Seabee Museum contacted Jerry, John, and Lee to assist in re-assembly. All three traveled to Port Hueneme and for two days, June 13 and 14 and (with the help of 3 active duty and 1 retired Seabees) reassembled the Dome ring 1, the top section of the Dome. This section has the four vent holes. A US Flag that was flown at the geographic South Pole will be placed on top to recreate the original view from the underside. The official Museum ribbon cutting and opening was June 22, 2011.

V. Future for rings 2 – 12

- Disposition of rings 2 through 12 is pending further review of options. Some of the locations and agencies that may be interested in segments of the rings 2 through 12 are:
    - US Navy Museum, Washington Navy Yard, Washington DC – Polar Section has a permanent exhibit about Admiral Richard Byrd which covers South Pole and has display about the Dome at South Pole.
    - NSF Headquarters (wall display)
    - Christchurch Canterbury Museum – Polar Section
    - International Antarctic Center, Christchurch New Zealand
    - Byrd Polar Institute
    - Ohio State University – polar collection
    - JTF-Support Forces Antarctica, Hickam AFB, HI
    - 109th Airlift Wing, Stratton ANGB, Scotia NY
    - Empire State Aerosciences Museum, Scotia, NY
    - California State Space Authority, Vandenberg AF Base
    - Smithsonian
    - TEMCOR
    - HUCK
    - Other USN museums, Naval History & Heritage Command
- Are there any other thoughts from the reader?

RETURNING TO POLE. (Liesl Schernthanner) "*You're going back to Pole*?" I must have heard that question with an air of incredulity over 50 times in the last few weeks. Why it seems so unfathomably strange to return to 90 South is a mystery to me. Quite frankly, I love the place, the journey, the work, the weather, and the experience. I do remember, however, a conversation I had with a fellow FNG (___ New Guy) in McMurdo in 1995 when I started working in the US Antarctic Program. The discussion followed from reading a story of someone at the continent's most southern outpost; when asked what it was the protagonist liked about the South Pole, the retorts seemed to come easily, and among the good attributes of the place it was stated that the beauty of Pole was spectacular and a person need just step outside to see how the sastrugi had changed in order to appreciate it. Now sitting as we were in McMurdo with comfortable housing, plenty of scenic beauty, and opportunity for hiking, skiing, running, dancing, socializing, even playing baseball or rugby, my friend and I simply didn't

appreciate the simple pleasure that might avail itself by watching a snowdrift change. I believe our very unsympathetic comment was: "Loser!" It wasn't until the following Christmas Season that I, along with several other lucky souls, had the good fortune to visit Pole on a rare "Sleigh Ride" for a quick visit whilst the herc unloaded some precious fuel into the nearly empty bladders that then occupied the Fuel Arch. In that wonderful hour I ran around the world, listened to the dry squeaking of snow underfoot, marveled at the great expanse of white horizon, got a cold nose, ate cookies in the old Dome Galley, took the requisite "hero shots" at the South Pole marker, learned that Scientists often look up into the sky there instead of looking down into the earth, snow, or water, marveled at some of the seemingly impossible sastrugi formations, and I started to glimpse what Polies already knew: the place is amazing. It was then that I knew I wanted to work there. As a Fuelie and later in other operational roles including Winter Site Manager, I did get to experience working at the South Pole many times.

I believe there is a myth about working in the Antarctic that requires debunking. It varies, but the gist of the theory is that people go to Antarctica for the first time for adventure, they return because they need a job, and they keep going back because they no longer fit in anywhere else. While there may be bits of truth in some of that, I champion those individuals who keep returning because they truly like it, and believe in the Antarctic Program and efforts to manage a corner of this Earth peacefully and with good purpose. I find it difficult to overstate the value of returning individuals with their knowledge of projects, systems, operations, logistics, management, and of course science. It can bring a certain continuity to the program and ensure that the wheel not be invented over and over again. To return year after year, a person generally must have an excellent work ethic and phenomenal tenacity whilst mastering the task of taking the good with the bad and learning to appreciate small things, including the enchanting subtleties of human behavior, nature, and program change. I enjoy working with those folks!

If I really think about it, I, too, will admit that I am a bit surprised to be returning to Pole some 16 years after I took a sabbatical from my job doing applied research in Socioeconomics to work as a laborer in Antarctica. I never went back to my "real job." In addition to working seasonally at Pole and often during the planning season in Denver, I have performed other jobs in other parts of the world, taken breaks, traveled, gotten married, worked elsewhere in Antarctica, etc., etc. The last time I was at Amundsen Scott South Pole Station was in 2008, and after a few seasons away, and a few more experiences under my belt, I am eager to see how the landscape has changed. There is much to see: Elevated Station construction is completed, the Dome is gone, Old Pole has been collapsed, Ice Cube has finished drilling, telescopes are changing, new Science has been initiated, markers have moved, new energetic souls are coming to appreciate being at the bottom of the world for the first time, familiar faces are returning to work at the place they enjoy, and as is apparent each spring in particular, the snow drifts (and sastrugi) are always interesting, to say the least.

In additional to all there is to see, it is a special year at the South Pole, a Centenary. I find in humbling that it has been 100 years since the first heroic explorers managed to pitch their tents at 90 South. Where else in such a short time, other than outer space perhaps, has there been such a dynamic change in experience of a locale. For my trip to Pole, I simply have to pass my physical, receive my ticket, pack and go. It makes me ponder the luxury of the awaiting dinner and ice cream. How privileged any person is to have been to the South Pole. I feel particularly fortunate to be returning once again.

MISSION TO DRILL LAKE ELLSWORTH. **(**Published October 11, 2011 by TechMediaNetwork) A team of British engineers is set to begin a journey to a lake hidden beneath nearly 2 miles of Antarctic ice. The explorers depart next week for Antarctica on the first stage of an ambitious scientific mission to collect water and sediment samples from a lake buried beneath 1.8 miles (3 kilometers) of solid ice. This mission will hopefully yield new knowledge about the evolution of life on Earth and other planets, and will provide vital clues about the Earth's past climate.

Transporting nearly 80 tons of equipment, the "advance party" will make a journey almost 10,000 miles (16,000 km) from the United Kingdom to the subglacial Lake Ellsworth on the West Antarctic Ice Sheet. It is one of the most remote and hostile environments on Earth, with temperatures that hover at minus 13 degrees Fahrenheit (minus 25 degrees Celsius). Their task is to prepare the way for the "deep-field" research mission that will take place next year, when the team of scientists and engineers will live in tents, spending around three months working above the lake.

In October 2012, a team of 10 scientists and engineers will use state of the art hot-water drilling technology to make a borehole through the ice to the lake below. They will then lower a titanium probe to measure and sample the water followed by a corer to extract sediment from the lake. Lake Ellsworth is likely to be the first of Antarctica's subglacial lakes to be measured and sampled directly through the design and manufacture of space-industry standard "clean technology," the team noted. Antarctica is home to 387 known subglacial lakes, some of the most pristine environments on Earth. Lake Vostok in East Antarctica is the most well known of these lakes. A Russian team has been trying to drill and collect samples from Vostok, but was unable to do so before winter set in this year.

For years, scientists have speculated that new and unique forms of microbial life could have evolved in the cold, pitch-black and isolated environment of these subglacial lakes. Sediments on the lakebed are likely to reveal vital clues about the history of life in the lake and the ancient history of the West Antarctic Ice Sheet, including past collapse.

"For almost 15 years, we've been planning to explore this hidden world," said mission leader Martin Siegert from the University of Edinburgh. "It's only now that we have the expertise and technology to drill through Antarctica's thickest ice and collect samples without contaminating this untouched and pristine environment."

David Pearce, science coordinator at the British Antarctic Survey and part of the team leading the search for life in the lake water, said the mission will be a success no matter what is found. "Finding life in a lake that could have been isolated from the rest of the biosphere for up to half a million years will tell us so much about the potential origin of and constraints for life on Earth, and may provide clues to the evolution of life on other extraterrestrial environments,"

Pearce said in a statement. "If we find nothing, this will be even more significant because it will define limits at which life can no longer exist on the planet."

The unique 16-foot-long (5 meters) water-sampling probe will collect 24 water samples at different lake depths. It will also capture the top layer of sediments where the lake-floor meets the water. The sediment corer can extract a core up to 10 feet (3 m) long. The corer is strong enough to penetrate even the most compacted glacial sediments to extract a core sample.

LATE FLASH. A celebration of Bess Balchen Urbahn's life at the Owl's Head Lighthouse, Owls Head, Maine on October 22nd, 11:30am.

Antarctican Society
Centennial Medallion

Hear Ye, Hear Ye, Hear Ye. Another year, and a very special one - the centennial year from when Amundsen and Scott conquered the South Pole! We must recognize their glorious accomplishments, and have had a very distinguished sculptor design a lovely snowflake medallion honoring the arrival of both Roald Amundsen's and Robert Falcon Scott's parties at the South Pole on December 14, 1911 and Janury 17, 1912, respectively. The centerpiece for the medallion is a replica of a snowflake picked out by our own snowflake, Tony Gow, a recent Seligman Crystal winner of the International Glaciological Society. And the core of the centerpiece is a famous scene from the South Pole a hundred years ago, Amundsen's tent at the South Pole, made by Martin Ronne, a direct descendant of one of our Society's current members, Karen Tupek, with four infamous Polies standing by.

Enlarged-(Actual width 1.75 inches)

☐ YES! I want the medallion with the **pin. ($30 each for members, $35 each for non-members)**

☐ YES! I want the medallion with the **necklace. ($30 each for members, $35 each for non-members)**

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