

#### 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 F. 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. Rutford, 1988-90 Mr. Guy G. Guthridge. 1990-92 Dr. Polly A. Penhale, 1992-94 Mr. Tony K. Meunier, 1994-96 Mr. Ronald S. Naveen, 1996-98

#### **Honorary Members:**

Ambassador Paul C. Daniels Dr. Laurence McKinley Gould Court 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

# Paul C. Daniels

### Memorial Lecturers:

Dr. William J. L. Sladen, 1964 RADM David M. Tyree (Ret.), 1965 Dr. Roger Tory Peterson, 1966 Dr. J. Campbell Craddock, 1967 Mr. James Pranke, 1968 Dr. Henry M. Dater, 1970 Sir Peter M. Scott, 1971 Dr. Frank Davies, 1972 Mr. Scott McVay, 1973 Mr. Joseph O. Fletcher, 1974 Mr. Herman R. Friis, 1975 Dr. Kenneth J. Bertrand, 1976 Dr. William J. L. Sladen, 1977 Dr.J. Murray Mitchell, Jr., 1978 Dr. Laurence McKinley Gould, 1979 Dr. Charles R. Bentley, 1980 Dr. Robert L. Nichols, 1981 Dr. Robert H. Rutford, 1982 Mr. R. Tucker Scully, 1983 Dr. Richard P. Goldthwait, 1984 Dr. Mark F. Meier, 1985 Dr. Claude Lorius, 1986 Dr. Louis J. Lanzerotti, 1987 Mr. Peter J. Anderson, 1988 Dr. Ted E. DeLaca, 1989 Dr. Saved Z. El-Saved, 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 I. L. Sladen, 1996

# THE ANTARCTICAN SOCIETY

905 NORTH JACKSONVILLE STREET ARLINGTON, VIRGINIA 22205

### HONORARY PRESIDENT - MRS. PAUL A. SIPLE

Vol. 97-98 April No. 4

Mr. USA - IGY ANTARCTICA comes to Washington April 30th

OUR 1998 PAUL C. DANIELS MEMORIAL LECTURE

Joint Meeting with the Polar Research Board

CHARLIE ON ICE

by

Dr. Charles R. Bentley University of Wisconsin-Madison

on

Thursday, 30 April 1998

4:30 - 5:30 PM Reception follows

5:30 - 7:00 PM

at

The Polar Research Board 2001 Wisconsin Avenue NW Green Building - Room 104

(two large red brick buildings between the Safeway and Holiday Inn)

Dr. Bentley's talk will be a retrospective on his long career with highlights from his many experiences in the Antarctic. He's brilliant, he's enlightening, he's engaging with dry humor! The only thing he doesn't have is hair, but that should not detract from a glorious time! COME! COME!

(More about Charlie on page 3)

Operation Deep Freeze lives on. Reunion of Deep Freeze I and II will be on 7-10 May 1998 at the Marriott Hotel, Denver Tech Center, Denver, Colorado. Keynote speakers include Boiling Byrd Clarke and Ralph Glasgal. For more information contact the Coordinator, Jim Bergstrom at 703-978-6541.

East Coast residents should be on the lookout this year for visit to their home ports of the 110' replica of Cook's ENDEAVOUR!!

WHITHER SHOULD GOEST THE SOCIETY, AND HOW? (Paul Dalrymple). Without going into any unnecessary details, may we tell you that for the first time in the history of our Society there has been internal strife within our Washington ranks. It involved me, and it affected me so strongly that I have resigned as editor of the Newsletter, and asked our president to tell the Board at their March meeting, although he never did. But I am happy to say that through the turmoil Ruth Siple has remained a staunch supporter. And the new "kid" in the Nerve Center's operations, Kristin Larson, has been in our camp, too.

But the person who has really been affected by it all is our Honorary President, a very devoted member of the Society, who really is the uniting force of the whole organization. In fact, she is the Society. It operates out of her home, although she will be moving soon to the grandmother's apartment at her granddaughter's home out in Fairfax County. This move in itself is somewhat of a traumatic event, being made as sort of a concession to her family as Ruth moves past the age of 80.

I had a professional relationship with Ruth's late husband, as we were more or less in the same working arena, being civilians with the Department of Army, being in environmental research, sharing many of the same interests in climatology. And when my work took me to the Washington area in the early 1970s, I got to know Ruth, and I guess it was a natural thing for both of us to get involved in this Society. I got to know the whole Siple family; Jane became an undeclared daughter. I even had a hand in engineering her marriage, finding her Mr. Right.

Ruth and I got involved in the operations of the Society, and, as Ruth is prone to say, "We were a team." I could not have written the newsletters without Ruth, as she not only censored out all the really good stuff which could have gotten me sued, but she proofread every sentence. I, in turn, helped Ruth out with the membership, the treasury. The Antarctican Society became Ruth's life, and I truly enjoyed every minute of it when I lived in the Washington area.

But things change in life, and I knew without anyone telling me that when I moved to Maine my writings lost some of their personal punch. I was out of the mainstream, and then Kristin surfaced, and there was an immediate love affair between Ruth, Kristin, and me. It became obvious that the time was fast approaching when new blood had to take over the things Ruth and I had been doing. We have long talked about it, and Ruth said, "When you go, I'll go." She is willing to follow me now, although this would not be her first choice, as she wants to keep writing those little yellow notes.

It has all been a very traumatic experience for her. She said that it has been her worst experience with people in her whole lifetime. Ann Hawthorne has been designated as chairperson of the Nominating Committee for the new officers, and they are meeting on April 25th. I am proposing in this period of strife and turmoil that Ruth be selected as our incoming president, with Kristin as her vice-president. Put the position in the hands of the people who will be doing the work. Hey, no one gets reimbursed for anything in the Society, so give the power to those who do the work. Ruth will stay on to do the work, if elected.

It also has to be a time of reflection as to what you people really want. Have the newsletters become pass£; are you reading them? Are the Washington lectures worth continuing, or should we just have our annual Memorial Lecture? Has the time come, as John Behrendt proposed, that we consider getting into your home computers?

Write your thoughts to Ann P. Hawthorne at 649 C Street SE, #402, Washington, DC 20003, or e-mail her at APHAWTHORN@aol.com. Decision day - April 25th - so please do it NOW!!!

And for those whom I have offended or stepped on in the past twenty years, I do apologize. Perhaps I knew not what I was doing. But then perhaps I did.

A WORD ON DR. BENTLEY (Julie Palais, NSF Program Manager for Glaciology). Charlie Bentley's career, which has spanned more than five decades, began far from the ice of Antarctica. In fact, when he graduated from Yale University in 1950 as a Physic major, his plan was to enroll in law school in the Fall of 1950. However, during the summer of 1950 he took an opportunity to work with Maurice Swing's group at Columbia University aboard the research vessel ATLANTIS. After two months at sea he "never thought of law again," and went on to earn a Ph.D. in geophysics from Columbia University in 1959. His dissertation topic involved seismic measurements on the Greenland Ice Cap. This work in Greenland prepared him well for his many trips to "the ice," the first of which coincided with the International Geophysical Year, where he was the Antarctic geophysical traverse leader for the Arctic Institute of North America, in Marie Byrd Land.

In his early work, Charlie Bentley pioneered the use of geophysical techniques in Antarctica, including the study of wave propagation in glacier ice and other heterogeneous media. His work has also included flow and mass balance studies, and studies of icebergs, ice shelves, subglacial till and subglacial crustal structure. In 1961 Charlie began his long association with the University of Wisconsin-Madison as an Assistant Professor in the Department of Geology and Geophysics. Since 1987 he has been the A. P. Crary Professor of Geophysics in that department. He and his many students, post-docs and collaborators are the authors of over 280 papers and abstracts in the scientific literature.

Dr. Bentley is a fellow of the American Association for the Advancement of Science (1990), the American Geophysical Union (1991), and the Arctic Institute of North America (1992). In 1990 he was honored by receiving the International Glaciological Society's highest award, the Seligman Crystal for being "one of the pioneer who laid the foundations for current work on the ice sheet," Dr. Bentley's other honors include having two features in Antarctica named for him: Mount Bentley (4245 m) in the Sentinel Range of the Ellsworth Mountains, and the Bentley Subglacial Trench, a major subglacial trench (2540 m below sea level) of West Antarctica which lies south of the Byrd Subglacial Basin.

Dr. Bentley has been very active in national and international organizations and committees, including Chairman of the Polar Research Board from 1981-1985, Vice President of SCAR from 1990-1994, and a Convenor of the SCAR group of Specialists on Global Change and the Antarctic (GLOCHANT) from 1992-1997. Dr. Bentley has been a pleasure to work with over these many years. He is a role model and mentor for many, myself included.

CHARLIE BENTLEY AND THE BENTLEY FAMILY (Paul Dalrymple). In the old days, Pleistocene people seemed to be of the very finest cut. All you have to do is look at the late Bill Field, the late Dick Goldthwait, and the current Link Washburn. Charlie Bentley is from the same piece of fabric, and as the limb is bent, so will the tree grow. Marybelle, his evermore bride, is a most delightful person, and is a Russian literature scholar. Daughter Molly is and has been for some time, a very fine radio producer for a Madison, Wisconsin station. And son Alex, a handsome young man, is on a PhD track with two masters, one in archaeology and one in geochemistry.

Charlie is the only surviving IGY link still working in Antarctica. Over forty years on the ice, and he still hasn't hung up his ice axe, nor does it look like he will in the immediate future. Retire as a professor, yes; retire as an indefatigable investigating field scientist, never. The Satchel Paige of the Antarctic. Charlie is going to keep at it until he gets it done right, or the ice sheets of Antarctica all melt away, whichever comes first.

## PENGUIN PRATTLE by Kristin Larson

CURTAIN CALL. Light fades and a thick dark curtain sweeps down around the continent, separating players from guests. Another transition is underway and the Prattler has reason to believe that this will be no ordinary winter in Antarctica. However, like all good beltway denizens, I cannot reveal my sources. While that news develops there is plenty other libation on which to slake our curiosity of all things ice.

A FITTING END. Following closely on the heels of an El Ninja summer season of continuous storms, Mother Nature walloped Antarctica one last time before turning out the lights. Her parting shot was the biggest earthquake of the year, measuring 8.1 on the Richter scale, centered just off the "Australian sector" near the Balleny Islands. This zinger of a quake occurred on March 23. It undoubtedly sent huge waves ashore, and probably caught snoozing Emperors a bit flat-footed. Maybe March should be renamed "Jump," as it is a common month for seismicity. The Alaska earthquake of 1964 was magnitude 8.6, and it occurred on March 27. Then, on the same date in 1980, Mt. St. Helens blew up.

GOOD AS GOULD. The R/V LAURENCE M. GOULD set out on her maiden voyage this past Christmas Eve, heading south from her cozy patch of earth in the Louisiana swamps. To date, the GOULD has performed two research cruises in and around Antarctica's peninsular region. She is also scheduled to support Palmer Station and perform "ice trials" into the winter months. As with all new vessels, the GOULD has a few kinks to be worked out, the most serious being what is termed "hull noise." Apparently the ship's stout snout, which is needed for ice breaking, causes "bubble sweep-down." The bubbles obliterate depth-sounding signals, making scientific measurements of all types very difficult. Luckily, the 230-foot GOULD was able to borrow a portable depth sounder from a 20-foot Zodiac at Palmer Station, and press ahead with her important scientific missions!

OF ICEBERGS AND SHIPS' HULLS. While seasonal ice folks flew north to places like Fiji and Borneo, the crew of M/V GREENWAVE contemplated Davy Jones Locker, and the USAP came uncomfortably close to providing a southern version of Titanic. The GREEN-WAVE is a large cargo container ship used each year to resupply McMurdo Station, South Pole and New Zealand's Scott Base. Approximately two days out from McMurdo the GREENWAVE's propulsion system became badly disabled right smack in the middle of Antarctica's notorious Iceberg Alley. Iceberg Alley is like a backwoods-bowling lane on a Saturday night. It is the home of Antarctica's wayward icebergs and growlers which rage around the continent, borne upon a band of rollicking sea between 60 and 70 degrees south latitude. And if icebergs and big ocean are not enough for a foundering ship, this region also experiences nightfall! Imagine bobbing around in that frigid soup! The U.S. Coast Guard Icebreaker POLAR SEA was able (just barely) to tow the GREENWAVE several hundred miles to the comparatively calm waters of New Zealand. Undoubtedly this episode will provide spawn for many a new ice legend!

On the subject of ice and unlucky ships, I recently came across a remarkable bit of testimony in the matter of Steamship TITANIC provided by one of our own - Sir Ernest Shackleton! During liability trials held in the Southern District of New York, Sir Ernest served as an expert witness owing to his "large experience with ice." Good old Shackleton minced no words, stating that "a speed of 21 to 22 knots per hour should never be maintained in an ice zone," and that "when there is no wind and an abnormal fall of temperature, such a drop would be an indication of ice." For more see the Web at http://www.thesmokinggun.com/titanic

**OTHER MARITIME MORSELS.** The research ship NATHANIEL B. PALMER will be departing New Zealand on May 1 for a winter cruise into the deepest parts of the Ross Sea.

They will travel south along the 180th meridian and return north in mid-June along the 175th. east meridian. The primary purpose of the cruise is to examine sea ice formation dynamics; however, a lucky bird biologist is also hitching a ride! Dr. Jerry Kooyman, well-known for his work with Emperor penguins, will be surveying transmitter packs on some lucky birds so that he can track their winter wanderings and diving habits. Jerry has been studying Emperor penguins for several decades, but has never observed them in their winter habitat. Watch for updates here!

On a more sobering note for items of an ocean-going character: readers of Prattle may recall that last year Chuck Gallagher, retired Navy Master Chief and long-time Antarctican, died in McMurdo Station during a winter-over stint as a civilian. This past season Chuck's "cremains" were committed to the deep just north of McMurdo Sound in a ceremony by the Coast Guard.

FAIR WINDS AND FOLLOWING SEAS. In February the U.S. Naval Support Force Antarctica closed its shops for good, thus ending a century and a half of naval support of research in Antarctica. Leading the vanguard was Lieutenant Wilkes, who, in 1838, undertook the six-ship U.S. Exploring Expedition. Wilkes' fleet sailed with many naturalists and scientists into uncharted waters and along shorelines that now bear his name. Lieut. Wilkes set .the tone for the many stout squadrons and detachments that have followed over the years. The Navy has often led the charge in Antarctica, opening up its vast frontiers and helping establish the United States as a leader on the continent. Putting aside all that bravery and apple pie stuff, we will just plain miss them. There really is no replacement for pork adobo and beanie-weenies. All the best!

SAY CHEESE. It appears that the U.S. Antarctic Program quietly pulled off one of its more remarkable feats ever this past austral summer. You may be asking yourself "Self, what could be this amazing act of which the Prattler preaches?" Hint: Combine six distinguished Senators from the Committee on Appropriations, with an El Nino weather year and an exceedingly narrow window of opportunity for a visit to Antarctica...a bleeding ulcer is almost assured. Truth-be-told, the Prattler is still not sure who can rightfully claim credit for the parting-of-the-clouds and the calming-of-the-winds during the remarkable three-day evolution this past January, but somehow the Senators, led by Ted Stevens (R-Alaska), saw Antarctica without a hitch. From the heights of the polar plateau and South Pole Station to the duncolored Dry Valleys, Antarctica entranced them. Even the Orcas and the Emperors were on cue. Someone has been leading a charmed life. Either that or a devils' bargain has been struck!

ART-ANTICA AND THE WOOABLE WU. Early in the 1997-98 austral summer USAP sponsored a unique and ambitious addition to its venerable Artists and Writers program. For the first time, a team of professionals was dispatched to Antarctica whose sole mission was to document the underwater world of McMurdo Sound. Many of you will be amazed when you see Norbert Wu's images of Antarctica's exotic underworld. Unlike most of the continent that is devoid of life, the Antarctic underwater realm palpate with color and vibrancy. The Artists/Writers group was led by Norbert Wu, a widely published and highly regarded professional photographer (with a scientific background!), included three other professionals with equally impressive credentials. They made more than 68 dives during their two-month stint, and shot thousands of images! One of this group's goals is to produce a natural history guide to McMurdo Sound. In the interim, the Prat suggests that you check out their exciting and educational Web site at http://scilib.ucsd.edu/sio/nsf/index.html

NO IDITAROD THIS YEAR (Paul Dalrymple). Norman Vaughan, the ageless 92-year old musher mountaineer, went into a local garage, the Providence Hospital, for a spring tuneup. They checked out his body works, found a little rust on his chassis, something about corrosion around an artery on the left side of his neck. They took a hammer and chisel and got rid of that nasty old corrosion. Someone had said he was all heart, so they looked that over, and decided that he might be better off with a few bypasses, so they gave him three. We talked with a spokesperson at the hospital on 1 April, and he said that it was no joke, that old Norman had just had a couple of rough days, but was doing better. They expected that he would have to remain in the garage, pardon me, hospital, for another week. Bride Carolyn was at his bedside. A later call to Trapper Creek revealed that Norman is making slow progress.

On 6 April they had Norman up and standing, after a month of being flat in bed. It is now expected that he will leave the hospital the day after income taxes are due, although it is not believed at this time that there is any federal connection with his exiting on that date. C'mon Norman, get up and going. You have things to do, a life to live.

P.S. Another luminary of lesser years, Ed Hillary, 78, got injured when he fell in a shower on an Antarctic tour ship. He later developed pneumonia, and had to be hospitalized — as we understand it. But he has recovered and is doing well. WE ARE ALL VULNERABLE, WE'RE MORTALS AWAITIN'.

A REAL SWEETHEART, RURIKO HOSAKA LINDBLAD (Paul Dalrymple). Everyone connected with Antarctica has heard the name of the late Lars Eric Lindblad, the Founding Father of American Antarctic Tourism, but this will be all about one of the sweetest, most delightful persons I have ever met, his widow, Ruriko. I had the pleasure of being on two Antarctic cruises with her this past austral summer, and, oh!, how she enriched both trips.

She is very quiet, very soft-spoken — so much so that I heard only about 37% of what she was saying, but that was enough for me to realize that she was a very special unassuming person. She refuses to lecture, even though she has so much to say that would be of interest to everyone. But she will engage freely in one-on-one conversation, or even in small groups.

And as a translator, just superb. The first lecture I gave with her translating to an all-Japanese group, I wrote out my lecture, with blanks for where I'd be stopping so she could translate. It was a total waste of my time, as she can translate instantaneously. She is FABULOUS.

All staff members went ashore in the first zodiacs to assist the tourists coming ashore later. We had made a landing at Petermann Island to the right of where Charcot had tied up their POURQUOI PAS, and our expedition leader made the decision to beach one of the zodiacs up over this particular rock-bound coast. I was down near this zodiac, and glanced over my shoulder at the pulling task force, and there was the small, lithe Ruriko nearly bent to the ledges, pulling as hard as she could, with a line over her shoulder. Instantly she became "Captain Scott" to me.

So I called her by that name for the rest of the trip, and every time I did, this silly little grin would creep/spread over her face. She was/is a sheer delight. Occasionally you meet someone whom you either want to adopt, like Paula Hull of the San Diego Wild Animal Farm, or take home, like Ruriko. She lives in Connecticut I hope she gets real hungry for a lobster and comes to my doorstep looking for one, as it would be so great to see this wonderful person again. Captain Scott, I will never forget you. You are GREAT.

AT LEAST THIRTY-FIVE SOCIETY MEMBERS HAVE LECTURED ON ANTARCTIC SHIPS (Paul Dalrymple) Antarctic shipboard tourism started back in January 1958. During these forty years quite a few members of our Society have lectured on ships going to Antarctica. We came up, with John Spletts help, with a list of thirty-seven current members who have lectured.

Peter Anderson Tim Baughman Eal Borns William Breed Colin Bull Dick Cameron Boiling Byrd Clarke Jim Collinson Bob Dodson Darrel Schoeling
Sayed El-Sayed Brian Shoemaker
Carmen Field Ruth Siple
Conrad Field Bill Sladen Art Ford

Barbara Fry (MD) Peter Harrison Mike Kuhn John Levinson (MD)
Bill Littlewood
George Llano
Shirley Metz
Ron Naveen

Jackie Ronne

Tony Soper John Splettstoesser Charles Swithinbank Frank Todd Mort Turner Gerald Webers Gunter Weller

Widows of lecturers (who accom-Collinson Jackie Konne Widows of Tectulers (whe december Paul Dalrymple Jeff Rubin panied their husbands): Anne Gisela Dreschhoff Bob Rutford Benninghoff Jane Siple DeWitt Bob Dodson Darrel Schoeling Kay Goldthwait Marilyn Saved El-Saved Brian Shoemaker Zumberge

There are probably others who have fallen through the cracks, but even this list is rather imposing. The real high rollers in this crap game have been George Llano, John Splettstoesser, Peter Harrison, and Frank Todd. These people have been on so many cruises that they have lost count, although most know the number of years. Probably all four have over one hundred cruises each, meaning over two hundred crosses of the Dreaded Dunkin Drake.

THE LIGHTER SIDE OF TOURISM (Paul Dalrymple). Several members of our Society, including yours truly, lectured on Antarctic tour ships this past austral summer. There is limited compensation for one's services, but there is very liberal compensation from the association with Antarctic-interested tourists. Some are real gems, and I was very fortunate this year in meeting a naturalist-artist, or perhaps she is an artist-naturalist - whatever. An interesting event happened as we landed the tourists on a beach at West Point Island in the Falklands. As soon as we left the ship, each and every zodiac had a convoy of dusky dolphins alongside and darting across the bow.

After we had unloaded all the tourists, this artist-naturalist came up to me and said, "I would just love to go back out there and play with those dolphins." And I replied, "Do you want to use my chest waders?" Naturally she did, so she put them on and walked out in water up to her neck, and had a fantastic time for the next forty-five minutes cavorting with the dolphins.

So let's fast-forward to the end of the cruise when everyone assembles, and all staffers have to summarize their thoughts. I had the perfect introduction to my talk, but thought I had better first run it past the expedition leader. So I told him this was what I wanted for my introduction. "This no doubt will be my last trip to Antarctica as Father Time was finally catching up with me at age 74. I first came to Antarctica forty-one years ago, during the International Geophysical Year. And in all those years, I thought I had seen everything, but I discovered on this trip that I had not. For the first time ever, a woman got into my pants." I wasn't allowed to use it! But, Ho, you were/are something else!!

FORTY YEARS ON ICE: A Lifetime of Exploration and Research in the Polar Regions, by Charles Swithinbank (Reviewed by John Splettstoesser). After reading Charles's first book on his professional life, "An Alien in Antarctica," I wondered how he might top that with another, but he has. "An Alien..." is about his six expeditions to the New Zealand side of Antarctica, but "Forty Years On Ice" is about nearly all the rest, told in 19 chapters. Each chapter contains a first-hand account of what 40 different men might have accomplished in their professional careers, but here in 40 years, Charles has done all of it alone, from circumnavigating Baffin Island in an icebreaker (1956 - Ch.1) to his extensive work with The British Antarctic Survey, and since his retirement with the Adventure Network International in its exceptional 12-year history of transporting clients to the interior of Antarctica with wheeled aircraft landing on blue-ice runways (1987-88 and continuing - Ch.19). (I don't think Charles was aware that the field party of 4 that I was a member of, in the 1961-62 season in the Ellsworth Mountains, was the first to see the blue-ice runway that ANI uses at Patriot Hills. Of course, it took Charles and the veteran polar pilot, Giles Kershaw, to see its utility for wheeled aircraft.)

Between those chapters are accounts of his cruise on the icebreaker SS MANHATTAN through the Northwest Passage in 1969, then on a submarine under the ice at the North Pole. He also has hundreds of hours of flying in Antarctica'.doing a variety of field work, as a passenger and also as co-pilot, much of it involving radio-echo sounding of glacier thickness. In fact, much of Charles's polar life revolved around ships and aircraft and each activity is a story in itself.

One aspect of his life that I knew little about is given in the Prologue (1926-56), covering his early life and events which led to his career as a glaciologist. A brief experience on glaciers (Iceland), and a visit to Spitsbergen while in the Royal Navy, set the stage for his love of cold places with ice, and an invitation to join the Norwegian-British-Swedish Expedition in 1949-52. The rest is history.

As with his first book, this one is a first-class product with color photographs and high-quality paper. It was published in 1998 by The Book Guild Ltd., 25 High Street, Lewes, East Sussex, BN7 2LU, U.K., which takes orders by credit card only, at 25 British pounds, plus 15% for shipping. In the U.S., try Transatlantic Publications, Inc., 311 Bainbridge Street, Philadelphia, PA 19147, or get the book cheaper yet by writing to the author in Cambridge, U.K., where you can get an autographed copy for \$47.50, which includes shipping by surface mail. Charles will accept checks in U.S.\$, and lives at 7 Home End, Fulbourn, Cambridge CB1 5BS, U.K. It is possible that Charles has yet another book to bring to light, perhaps his personal account of the 1949-52 expedition in Antarctica.

SAFE PASSAGE QUESTIONED: Medical Care & Safety for the Polar Tourist. John M. Levinsor and Errol Ger, Editors. Cornell Maritime Press. (Reviewed by John Splettstoesser). Dr. John Levinson, M.D., experienced ship surgeon, and past President of the Explorers Club, was the motivator behind a conference on medical aspects of polar tourism, held at the Scott Polar Research Institute, Cambridge, England, on October 29-31, 1995. Medical experts from Antarctic Treaty Parties and tour companies attended, and provided the presentations.

There are certain risks involved in polar tourism, ranging from safety practices on board vessels and associated transport vehicles such as zodiac-type craft and helicopters, physician qualifications, medical equipment and supplies; medical emergencies, types of injuries encountered; liability issues, and so on. The volume addresses these issues and more to form a handbook of a sort for both tourists and tour operators to plan for and conduct safe tourism in polar regions, where the nearest medical facility might be a thousand miles away. (Paperback - at booksellers, or by calling 1-800-638-7641 in the U.S. Price \$24.95.)