celestial observations. All evidence indicates that Henson was barely literate. And in a 1909 letter to his patron, Thomas H. Hubbard, Peary stated categorically that Henson could not take astronomical observations.) Moreover, one cannot be impressed with the authority of Avery's demonstration of how easy it would be for Peary to navigate a true course north when he states as a fact that, 'because the sun completes a full 360-degree circle of the earth in one twenty-four-hour day, one degree of longitude equates to four minutes' time' (page 289).

So Avery is right and wrong: his trip does not prove Peary reached the pole nor even that Peary could have reached the pole in 37 days in 1909. It does prove that Tom Avery's party, as equipped and resupplied, reached the North Pole in 37 days in 2005, however. And it shows that just as in Peary's time, big money can be coaxed from rich sponsors if they see some advantage in providing it. Avery did not attach Barclays

Capital and all his numerous other corporate sponsors' names to newly discovered or invented headlands on the Arctic Ocean as Peary did to guarantee their immortality, but he does splash them liberally across his pages, like the branding done in contemporary movies, to increase their exposure.

Peary once said that discovering the North Pole would make him the equal of Columbus and Napoleon. And the reactions of Avery's explorer-critics to his success in reaching the North Pole in 37 days, something Wally Herbert said beforehand was 'impossible,' and Avery's retorts suggest that one thing, at least, hasn't changed in a hundred years: the egos of explorers and adventurers and their overestimation of the importance of what they have actually done or claimed to have done are still as big as they were a century ago. (Robert M. Bryce, Montgomery College, 20200 Observation Drive, Germantown, Maryland 20876, USA.)

SMITHSONIAN AT THE POLES: CONTRIBUTIONS TO INTERNATIONAL POLAR YEAR SCIENCE. Igor Krupnik, Michael A. Lang, and Scott E. Miller (Editors). 2009. Washington DC: Smithsonian Institution Scholarly Press. xv + 405 p. illustrated, paper cover. ISBN 978-0-9788460-1-5. Free on request to Ms. Ginger Strader, Manager (straderg@si.edu). doi:10.1017/S0032247409990349

This volume represents the Proceedings of the 'Smithsonian at the Poles Symposium,' held at the Smithsonian Institution on 3–4 May 2007, and is published as a contribution to the International Polar Year (IPY) 2007–2008. The symposium was a joint initiative of the International Council for Science (ICSU) and the World Meteorological Organization (WMO). An objective of the symposium was to increase understanding of how polar regions affect the habitability of our planet.

Multidisciplinary research from the IPY already provides new evidence of the widespread effects of global warming in the polar regions. Snow and ice are declining in both, affecting human livelihoods as well as local plant and animal life in the Arctic, as well as global ocean and atmospheric circulation and sea level. The chapters in this volume address many of those concerns and more, as our planet experiences changes that will eventually affect humans as well as its fauna and flora.

The 31 chapters by 79 authors represent research associated with Smithsonian initiatives, although the numerous co-authors

from other affiliations show wide involvement on a variety of subjects. The chapters are grouped into six themes -IPY histories and legacies; cultural studies; systematics and biology of polar organisms; methods and techniques of under-ice research; environmental change and polar marine ecosystems; and polar astronomy: observational cosmology. Multi-authored chapters are particularly prominent in the latter 4 groups, where affiliations range from a variety of U.S. and non-U.S. academic institutions and research centres, the Smithsonian Institution, and native populations in Greenland and Nunavut. Along with authors' names commonly seen in the literature associated with products of their research (Gerald Kooyman, Scripps, diving physiology of emperor penguins and Weddell seals, as only one example), it is gratifying to see native names as co-authors as well, indicating their involvement in the research. Examples are seen in a chapter on narwhal dentition, the 15 authors have affiliations from the Smithsonian as well as names of elders and hunters from Nunavut and Greenland.

Most of the illustrations and maps are in black and white, with some on glossy paper in colour to enhance the resolution and readability of the data. An 11 page index helps the reader locate significant topics in the various chapters. Smithsonian should be commended for making the book available at no cost, thus widening the audience for a significant series of subjects related to the IPY. (John Splettstoesser, P.O Box 515, Waconia, Minnesota U.S.A. 55387.)

ANTARCTIC PILOT: COMPRISING THE COASTS OF ANTARCTICA AND ALL ISLANDS SOUTH OF THE USUAL ROUTE OF VESSELS. S.J. Lawrence (compiler). 2009. Taunton: United Kingdom Hydrographic Office. 7th edition. xviii + 489p., illustrated, hard cover. ISBN: 978-0-70-774-2014. £50.10.

doi:10.1017/S0032247409990465

The very subtitle of this latest edition of the Antarctic Pilot referring to 'all islands south of the usual route of vessels' is likely to engender a quickening of the pulse in the reader even before perusal of the volume starts. One has long suspected that

deep in the bowels of the Hydrographic Office in Taunton there exists some person, who perhaps rarely sees the light of day, whose task it is to insert in these ostensibly most functional and prosaic of books an element of poetry, a desire to bid farewell to normal cares and to embark on a voyage ... it matters little where. A much more distinguished writer than the present reviewer made a similar point. Somerset Maugham at the start of his famous story *The vessel of wrath*, written in 1931, enlarges on the merits of the series of works of which the Antarctic Pilot is representative. 'There are few books in the world that contain more meat than the Sailing Directions published by the Hydrographic Department....'. He devotes more than a page of the story to a description

of the series in question especially noting their 'matter-of-fact style, the admirable order, the concision with which the material is set before you, the stern sense of the practical that informs every line' but which cannot 'dim the poetry' contained therein. He mentions also the variety of incidental information provided, availability of supplies at various anchorages and so forth, and concludes '[c]an the imagination want more material than this to go on a journey through time and space?' (Maugham 1951). The answer, surely, is a resounding negative.

The Antarctic Pilot has long been the essential vade mecum of mariners in the far south and the latest edition, compiled by Captain S.J. Lawrence, is even more valuable than its distant predecessors in that it includes a stunning set of colour photographs. But apart from this welcome innovation, the format is traditional. After a glossary, which contains such esoteric material as the Cyrillic morse code, chapter 1 is introductory but it still comprises 102 pages. Here we are straight back to Maugham since we are immediately advised of the fairly obvious point that 'as a result of the lack of landmass. . . and the frequency of cyclones in the area, very heavy seas and high swells are frequently encountered.' This constitutes the first of the warnings to mariners mentioned frequently throughout the book including, for example, the possibility of encountering mines (from World War II) in Kerguelen, and 'explosives scattered' around close to the former Wilkes Station. Indeed it seems that the only ocean going hazard that sailors are unlikely to encounter in the area is piracy. This chapter is wonderfully comprehensive and as well as the sort of information one might reasonably expect to appear, ice concentrations and so forth, there is a full account of the wildlife, with excellent photographs. More essential is a statement of 'principal harbours and anchorages'. Readers will not be surprised to learn that fewer than 100 of these are listed. There is also an excellent map of bases operated by the National Antarctic Programmes (lamentably spelt 'programs') after which the chapter goes on to consider in full detail the weather, of which, as was once jocularly observed, there is rather a lot beyond 60°S.

But this is a mere introduction to what follows, and chapter 2 affords an excellent example of the way the book is structured. This is upon the sub-Antarctic islands of Bouvetøya, Prince Edward Islands, Îles Crozet, Îles Kerguelen, Heard Island and the McDonald Islands and Macquarie Island. As an example of the comprehensive information set forth, in the 'General Information' section we are warned of the 'doubtful' existence of a 'rock', reported by SS Truls in 1929, 46 m high at 56° 07'S, 23° 39′E, some 720 miles east of Bouvetøya. The information on that territory itself covers some two pages and is exhaustive. There is a full description of the island that we are advised may be safely circumnavigated if one is 'remaining at least 2 miles off the coast'. One of the excellent points of the Antarctic Pilot is that there is no stint in the amount of space devoted to the history of the various territories under consideration and this indicates the desire of the compilers of the different editions to educate as well as to inform their readers. For Bouvetøya this covers more than a column and lists the various visits by vessels noting that they were usually frustrated with regard to landing. Full details of the circumnavigation of the island are stated including an ominous 'dangerous rock' and there is a note of anchorages and 'harbours', of which there are none of the latter at Bouvet.

The rest of the book continues in the same vein. In the section on the Antarctic Peninsula for example we find the most detailed possible description of all the passages and bays in that complex area. There can be few if any members of expedition cruise staff, who may have landed at some of their favourites very many times, for example Paradise Harbour, who would not find something that they did not know. Moreover there are clear colour photographs (from where did the photographers obtain the weather in which they were taken?) of beacons, refuge huts and so forth. For example in the case of Dorian Bay we have half page photographs of the beacon and of both huts, the latter clearly showing the flagpole up which this reviewer hoisted the Union Flag, which he found neatly folded on a shelf inside the hut, the last time he was there. It was replaced on the shelf at the end of the visit, one hopes with equal neatness! Dorian Bay is followed by Port Lockroy, that most visited site, with full information for approaching the harbour with the rather surprising note that this 'can be entered at night with the assistance of radar or searchlights.' There is, of course, an excellent photograph of Bransfield House.

The whole of the accessible part of the Antarctic coast-line is covered with the same exhaustive attention to detail and the descriptions of the less frequented parts are full of advice reflecting the imperfect state of charting, difficult conditions etc. In describing the Australian Antarctic Territory the compiler permits himself the observation (unattributed) that this is the 'home of the blizzard' and for George VI Land mariners are 'warned not to place any reliance on their magnetic compass' due to the proximity of the South Magnetic Pole.

The volume concludes with a full statement of the Antarctic Treaty and of the environmental protocol to it. There are also lists of facilities and refuges, the supplies in which 'may be extremely basic', Antarctic specially protected areas, historic sites and monuments, other protected areas, and statements of guidance for visitors. The index is as comprehensive as one would expect in a volume of this authority.

The book would have benefited by a thorough third reading by a third party to iron out a few slips. For example we have merely Bellingshausen on page 14 but he has been ennobled by page 178, there is a picture of the 'Accommadation' block at Halley on page 385, and Dr *R*. von Drygalski appears on page 426.

As might be expected the volume is substantially bound ready to survive much anxious thumbing on the bridges of vessels as they venture into the seas in question. The *Antarctic Pilot* is not cheap but in terms of value for money it is unsurpassed. In Maugham's day 4 shillings was considered reasonable for the *Yangtse Kiang Pilot*; nowadays £50 is not excessive for this latest edition of the *Antarctic Pilot*. (Ian R. Stone, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER)

## Reference

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