well as the assumptions that went into the determination of the sensitivities. This audit trail is very useful, allowing for the recalculation of values should new information be gathered on species responses or shorerline residence. One problem with the atlas is that no analysis is given for the determination of the four categories of sensitivity. With out this, the sensitivity analysis is harder yto evaluate.

In general this atlas is a very valuable addition to the literature on the region. It pulls in information from a variety of sources, but expresses it in highly useable format. Its true usefulness requires that it be on the shelves of all agencies and individuals responsible for responding to an oil spill. Let's hope they never need to use it. (Heather Myers and Laurence Turney, Yellowknife.)

ANTARCTIC TREATY SYSTEM

THE ANTARCTIC TREATY SYSTEM IN WORLD POLITICS. Jørgensen-Dahl, A. and Østreng, W. 1991. Basingstoke, Macmillan and the Fridtjof Nansen Institute. 475p, illustrated, hard cover. ISBN 0-333-55586-4. £45.00.

The Antarctic Treaty System (ATS) continues to generate academic interest: here is yet another compendium of papers — some 29 in all — from a wide spectrum of authors on aspects of the Treaty and its instruments.

After an introduction by the editors, Chris Beeby outlines the goals, performance and impact of the ATS. Section 1, 'Experiences from the Convention on Living Resources', provides four papers on aspects of CCAMLR. Section 2, 'The minerals convention (CRAMRA) as a management tool', includes five papers on the System's most recent and ill-fated convention. Section 3, 'Resource management and the ATS at large' includes six paper on miscellaneous topics including SCAR, the environmental movement, Antarctic science and (again) CRAMRA. Section 4, 'The ATS and the world community', presents six papers assessing the legitimacy and legality of the ATS, its ability to adapt to external challenges, influences of the United Nations, ATS and the Law of the Sea Convention in relation to external challenges, and the need for redefining consultative status. Section 5, 'The ATS model and the future', covers in seven papers the role of the ATS as a model for international cooperation, possible alternatives to the System, tourism and the need for a legal regime, and the ATS model and the future.

The layout is familiar, many of the contributors (Heap, Beck, Larminie, Kimball, Trolle Andersen, Barnes, Vicuña) are old hands: haven't we seen this all somewhere before? Not quite, for the ATS is in transition — some would say upheaval — and the contributions are in general honest attempts to keep up-to-date with galloping events. Many were given at the May 1990 conference of the Fridjtof Nansen Institute: others were presumably written even later than that, and to have them in print by early 1991 is an achievement in itself. Students of the Antarctic Treaty System will find this a useful compendium, though they had better read it quickly — another of its kind is almost certainly already in press. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

AN ESKIMO LIFE

KUSIQ: AN ESKIMO LIFE HISTORY FROM THE ARCTIC COAST OF ALASKA. Bodfish, Waldo Sr.; recorded, compiled, and edited by William Schneider in collaboration with Leona Kisautaq Okakok and James Mumigana Nageak. 1991. Fairbanks, University of Alaska Press. 330 p, photographs, maps, soft cover. ISBN 0-912006-44-7. US\$21.00.

For over a century the mandate for the cultural translation and interpretation of traditional societies has rested almost exclusively with anthropologists - an intellectual monopoly both ethnocentric and academically myopic. Recently however, first-person accounts by members themselves of a given society have emerged to augment traditional scholarly ethnographies. Whilst providing illuminating accounts for social scientists, such narratives have also contributed significantly to local knowledge and ethnohistory to the benefit of the community itself. Fulfilling both capacities are the chronicles of the Inupiag elder Waldo Bodfish Sr. in this, the second volume in the University of Alaska Oral Biography Series. The current work combines the narrative of Kusiq, Bodfish's Inupiaq name, given after his mother's first husband, with the considerable cultural, historical, and lingual annotation of three North Slope experts afforded by formidable 128page appendices.

Born in 1902, the son of an Inupiaq mother and a commercial whaling captain, Bodfish was raised during a period of profound social change on the Arctic Coast of Alaska. He recollects life in residence at a Lutheran mission school (a surprisingly pleasant time for him, he notes), recalls whaling from an open boat, and recounts tales of the 'messenger feasts', a series of traditional celebrations linking people together via reciprocal invitations and acceptances to festive banquets between villages. Additionally, he records much of the modern development of Alaska including anecdotes of Rasmussen's visit to the region in 1924, the introduction of aircraft and radio into Alaska, and his own career during the 1940s as an employee of the Weather Bureau.

Bodfish's sketches are most noteworthy for their rich insights into the lifestyle of the Inupiat. He devotes considerable detail to descriptions of hunting, fishing, trapping and reindeer herding as well as such topics as traditional snow shelter and sod house construction. Throughout he notes the importance of relatives and elders as his mentors in the acquisition of theses skills; through their guidance he gained the mastery and confidence to survive and succeed: from his mother's last husband he learned to hunt seals at the breathing holes, his uncle taught him to herd reindeer, and an indulgent elder taught him the secrets of building snow houses. However, the reader is also presented with the less salubrious aspects of life on the North Slope: the premature death by tuberculosis of Bodfish's step-father left him alone at fifteen to hunt and trap for his mother and her children until she remarried. In sum, this is above all the life history of a distinguished Inupiaq hunter for whom upon retrospective reflection 'the happiest time of our lives, in all those years, [was] when I was hunting'. As such it is both a revealing and entertaining tale. (M. J. Whittles, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

POLAR ICE TECHNOLOGY

ICE TECHNOLOGY FOR POLAR OPERATIONS. Murthy, T. R. S., Paren, J. G., Sackinger, W. M. and Wadhams, P. (editors). 1990. Southampton, Computational Mechanics Publications. 426 p, illustrated, hard cover. ISBN 1-85312-091-X. £83.00.

This book contains the proceedings of the second conference on Ice Technology for Polar Regions, held at Scott Polar Research Institute, Cambridge, in September 1990. The 31 papers are divided into the following areas: Ice environment; Vessels and structures in ice; Ice operations and management; Remote sensing of sea ice; Ice forecasting; and Ice acoustics. The quality of the papers varies considerably and the presence of several errors - particularly grammatical errors — in some leads one to suspect that editing may have been superficial and rushed. Although the main emphasis of the book is on technology, several papers are of a purely scientific nature, the most notable being 'The wave structure in the seas off an ice edge' by Cox and Squire. Here a more rigorous treatment has led to a more complete solution for this difficult wave dynamics problem, an improvement to existing theory that will be much appreciated by both the scientific and the engineering communities.

Of the review papers, the two most useful are by Wadhams on sea ice thickness measurement techniques and by Horn on the design, planning and execution of large multi-national arctic experiments. Of the eight papers on icebreakers I found the one by Kennedy, Voelker and St John on the design and operation of a new US Antarctic research vessel most informative. Clearly the excellent RV *Polarstern* will soon have a worthy rival in the southern hemisphere. In the category of gripping reading, the account by Voelker and Siebold of a polar icebreaker caught in an active shear zone near Prudhoe Bay, Alaska, is definitely the winner. This unscheduled field test should give icebreaker designers food for thought.

No fewer than seven papers on remote sensing indicate area of technology development that is likely to be most active for the foreseeable future. Holt, Kwok, Carsey and Curlander give an excellent overview of the Alaska SAR facility which undoubtedly intends to be in the front line of research efforts to produce usable products from the ERS-1, JERS-1 and RADARSAT satellites. In summary, the book is a useful library reference. However, it hardly warrants an investment of £83.00 by the individual. (Robin G. Williams, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

BRIEF REVIEWS

WEIRD AND TRAGIC SHORES: THE STORY OF CHARLES FRANCIS HALL, EXPLORER. Loomis, C. C. 1991. Lincoln, Nebraska, Bison Books. 388p, illustrated, soft cover. ISBN 0 8032-7937-X. £12.30.

Reprint of the classic account of the Cincinnati engraver, newspaper publisher, mystic and enthusiast who set out in 1860 to discover the whereabouts of Sir John Franklin's missing expedition, and died in mysterious circumstances on a later journey toward the North Pole. A fascinating story of one of the Arctic's more colourful explorers, with an afterword written for this edition.

TO THE SOUTH POLAR REGIONS. L. Bernacci. 1991. Bluntisham, Bluntisham Books. 348p, illustrated, hard cover. ISBN 1 85297 035 9. £39.95, US\$80.00.

Another beautifully-fashioned reprint of a polar classic from Bluntisham, with cover and contents styled to match the 1901 original — a collector's item But this is also a highly readable account of the Antarctic (*Southern Cross*) Expedition 1898–1900, a small private expedition, funded by publisher Sir George Newnes and led by Carsten E. Borchgrevink, that was the first to winter on the Antarctic continent. Louis Bernacci, the Tasmanian expedition physicist, wrote it soon after his return from Antarctica and shortly before joining Scott's *Discovery* expedition. There is an informative introduction by D. W. H. Walton. A limited edition of 450 copies, obtainable directly from Bluntisham Books, Oak House, East Street, Bluntisham, Hunts. PE17 3LS, UK: prices include postage.

A PRACTICAL GUIDE TO THE EUPHAUSIIDS OF THE WORLD. Baker, A. de C., Boden, B. P. and Brinton, E. 1990. London, Natural History Museum Publications. 96 p, illustrated, soft cover. ISBN 0-565-00985-0. £25.00.

Indeed a practical guide, well illustrated and annotated, to the 86 species so far recognized of this cosmopolitan and ecologically-important group. Lie-flat binding will facilitate use in the laboratory, for which the practical guide is no doubt intended. Identification is restricted almost exclusively to morphological criteria, using what seem to be clear and precise keys. Those interested in biogeographical or seasonal distribution, breeding times and other biological information on euphausiids will need to look elsewhere. In this the list of references may be helpful, though it does not include, for example, Miller and Hampton's key *Biology and ecology of the Antarctic krill* (*Euphausia superba* Dana): a review, published in 1988.

ULTIMA THULE. Malaurie, J. 1990. Paris, Bordas. 320p, illustrated, hard cover. ISBN 2-04-018400-7. 495 FF.

An elegantly illustrated history, in French, of the 170-year relationship between the northernmost people on earth and the explorers, adventurers and conquerors, military and