

Publication of the map and handbook set will be welcomed by both academic and commercial communities and is all the more timely for the latter as conditions for foreign investment in the FSU continue to improve. (Ben Seligman, Manor Farm, West Chelborough, Dorchester, Dorset DT2 0PY.)

BY AIRSHIP TO THE NORTH POLE: AN ARCHAEOLOGY OF HUMAN EXPLORATION. P.J. Capelotti. 1999. New Brunswick, NJ, and London: Rutgers University Press. xix + 224 p, illustrated, hard cover. ISBN 0-8135-2633-7. \$US26.00.

After an unsuccessful attempt in 1896, which came to nought because of the lack of the essential southerly winds, in 1897 the Swedish explorer Salomon August Andrée started from Virgohamna on the north coast of Danskøya in Svalbard in an unpowered hydrogen balloon, *Örnen*, hoping to reach the North Pole. This event has become widely known, largely because of the disappearance of the balloon, Andrée, and his two companions, and the remarkable discovery of their camp and skeletons on Kvitøya in 1930. The fate of the expedition was revealed by diaries found at the camp and by photographs that, when developed, graphically illustrated the details of that fate, although the film had lain undeveloped for 30 years.

In 1906, 1907, and 1909, Walter Wellman, a reporter for the *Chicago Record-Herald*, made three attempts at reaching the Pole from the same location in Svalbard, but using powered dirigibles. In 1906 it was found that the engines had serious defects and the dirigible was not even inflated; in 1907 the dirigible flew about 24 km and in 1909 about 64 km.

The first part of *By airship to the North Pole* traces the history of these events, placing them in the context of the history of Arctic exploration and of the development of balloons and dirigibles in general. In both cases the author castigates these over-ambitious 'explorers' for failing to undertake field trials of their craft before taking them to the Arctic. His discussion is seriously weakened, however, by a total lack of maps to show where the two men had planned to go, and what they actually achieved. It is further weakened by several factual errors or misuse of terminology. On several occasions Capelotti refers to the permanent pack ice of the Arctic Ocean as the 'polar ice cap'; the term ice cap refers to a large glacier, such as the Devon Island Ice Cap, and should never be applied to sea ice. The spelling of the name of George W. De Long's ship was *Jeannette*, not *Jeanette*. On page 12 Capelotti states that the start of the drift of *Fram* was close to that of De Long's *Jeannette*; *Jeannette*'s drift, however, began to the east of Ostrov Vrangelya, that of *Fram* to the northwest of Ostrova Novosibirskiye, more than 1700 km, or well over 1000 miles, farther west. On page 60 Capelotti states that during his 1898–99 expedition to Zemlya Frantsa-Iosifa, Wellman's team 'explored and discovered a few small islands in the archipelago.' Ostrov Greem Bell, one of these 'few small islands,' is actually one of the largest

islands in the archipelago, covering approximately 2800 km². Mistakes such as these, with reference to easily checked data, tend to cast doubt on the calibre of the author's own research.

In 1993 Capelotti mounted a thorough archeological examination of the abundant relics of these various early attempts at Arctic aviation at Virgohamna: the remains of Wellman's impressive balloon hangar, the remains of two of Wellman's craft, the residues from the operations for producing hydrogen used by both men, and much more. This discussion is rendered almost incomprehensible by a total lack of maps of the site, although (page 156) Capelotti does mention that he produced a planimetric map of his archeological investigations.

A large part of the book is occupied by the author's attempts at demonstrating the value of his type of archeology. One hypothesis he attempts to prove is that the frequency of occurrence of labels or trade-marks on artifacts found on the site at Virgohamna, when compared to the frequency of occurrence in Wellman's writings or of advertisements in Wellman's *Chicago Record-Herald* should prove or disprove the accusation levelled at Wellman that his were purely advertising stunts, rather than genuine attempts at exploration. Since only five brand names were found on artifacts on the site, this effort was rather inconclusive. Similarly Capelotti attempts to prove or disprove Wellman's veracity in general, on the basis of his statement that the iron used to produce the hydrogen for his dirigible was tainted. Capelotti proves to his own satisfaction that this statement is correct — but this one example of verification is scarcely enough on which to assess a man's reputation.

Capelotti has made useful contributions by unravelling the details of the structures and artifacts still surviving at Virgohamna — structures and artifacts that have often been misidentified by other writers — and by identifying the crucial flaws in both Andrée's and Wellman's polar attempts. But even these contributions are badly flawed by the map problems. And surely such a study could have been better reported in a rigorous, concise journal article, rather than in a 'popular' book. (William Barr, Arctic Institute of North America, University of Calgary, 2500 University Drive NW, Calgary, AB T2N 1N4, Canada.)

DEVELOPMENT IN THE ARCTIC. Tom Greiffenberg (Editor). 1999. Odense: Danish Polar Center. 132 p, illustrated, soft cover. ISBN 87-90369-29-7. Price DK 150.00.

Development in the Arctic is the record of the proceedings from the Seventh Nordic Arctic Research Forum Symposium, which was held in Slettestrand, Denmark, in January 1998. Published by the Danish Polar Center, the report is attractively presented in A4 softback format. A compilation of 15 papers, the book features a number of monochrome illustrations and maps, contact information for the participants, and a short list of other Nordic Arctic Research Forum publications. All of the material is in English.