

Some other and unknown cartographer has served the editor less happily, in executing a folding map intended, probably, to show place names. The map has no scale, much of the print is extremely small, and there seems to be a lack of system in the names shown. Thus Mould Bay finds a place but not Arctic Bay; Alert is marked but not Pangnirtung, and there is a railroad to Lynn Lake, but not to Churchill. Goldfields survives but not Mayo, and the Eastern Arctic is nameless except for the most recent weather stations. The coast of Greenland, less Disko Ø, is a stylized bit of wriggly fretwork. The inclusion of this folding map, which pulls out for use during reading, is an excellent idea, but the execution is lamentable.

The thirty pages of well chosen photographs are technically magnificent. Well known photographers who have contributed prints include Richard Harrington, George Hunter, and R. N. Hourde. Better known in other ways, but also skilled photographers, are A. E. Porsild, J. W. Anderson and L. A. Learmonth. The photograph by Geo. White of H.M.S. *Alert* caught in the ice of Robeson Channel in August 1876, while returning from the polar sea, is excellent. It might well be hung in every air station of the far north to illustrate the conditions under which arctic pioneers worked. Many chapters contain references to the scientific contributions of early expeditions, so that the reader of 'North of 55°' does not get the impression that "opening up the North" has been a postwar undertaking.

Perhaps the most illuminating chapter is that by Dean Grant MacEwen, entitled "Food from the soil". It has often been thought that the abundant bare rock of the Northland would eventually, if only by the law of averages, produce minerals of economic worth. What, until recently, has been less apparent is that in some areas the soil too can bring its rewards. In spite of work done at Fort Vermilion as early as 1886, when there were no railroads north of Calgary, the possibility of producing fresh food for local use throughout the Mackenzie

valley is still not generally recognized. Perhaps attention could be called to it by some University granting an honorary degree in Agriculture to Mr. Browning who has made a living by horticulture near Fort Simpson for the past thirty years!

In concluding this review of an excellent book, which deserves to be read widely, special mention should be made of the drawings of wildlife by Clarence Tillenius and Terence M. Shortt. Northern residents unskilled in such matters will be specially appreciative of the interest they add to life 'North of 55°'.

TREVOR LLOYD

THE NAVIGATOR'S POCKET ALMANAC, 1955, FOR AIR AND SEA NAVIGATION AND ASTRONOMICAL SURVEYING.

By PAUL E. WYLIE. *The Institute of Navigation, University of California, 1954. 9½ x 6½ inches; 22 pages; tables and diagrams.*

There are many almanacs current for one year, and almost all of them are large and bulky. The 'Air almanac', for example, covers one year in three editions, each valid for a four-month period. Mr. Wylie's pocket almanac, while current for one year, is small, very compact and well laid out, but still contains the essential information in a readily available form.

'The navigator's pocket almanac' is mainly for use in calculating the Greenwich Hour Angle, the declination of the sun, Venus, Mars, Jupiter, Saturn, and Aries, and in determining the approximate times of sunset and sunrise. A table of Sidereal Hour Angles and Declinations for navigation stars is also included. The hour angle for 00 00 hours for each Greenwich date is tabulated, and "Hourly difference" values are listed for both hour angle and declination; thus several calculations are required to determine the local hour angle and declination of a body for any given time.

The pocket almanac appears to be very suitable for sea navigation and for use by most land parties. However, in

air navigation where time is at a premium, and frequent astronomical observations are necessary, the additional steps in computing hour angle and declination are very time consuming. Also, on long flights, where fatigue becomes an important factor, errors creep in if computations are not reduced to a minimum. Hence, for general use in the air, it is questionable whether including one year's data in a very condensed form, at the sacrifice of simple tables from which information can be extracted with practically no calculations, is desirable. Most navigators will probably still prefer the 'Air almanac'.

By omitting tabulations of the moon, considerable space has been saved. This may not be a handicap when the pocket

almanac is used by land parties and in sea navigation, but in air navigation it is a limitation as the moon is used for heading checks and position fixing, especially when full, and when diffused cloud or haze makes star-sighting difficult. Except for the sun, the moon is the only body which can be sighted during the continuous daylight of the arctic summer. Thus the omission of the moon tabulations limits the usefulness of the almanac in high latitudes.

Many sea navigators and land travelers will find 'The navigator's pocket almanac' very convenient. Many air navigators will want to keep one with their equipment for the time when they are caught without a current edition of the 'Air almanac', which is all too frequent.

K. R. GREENAWAY

INSTITUTE NEWS

Appointment of Mr. T. H. Manning as temporary Executive Director

On 1 April 1955 Mr. T. H. Manning was appointed temporary Executive Director of the Institute. Mr. Manning, who lives in Ottawa, has travelled extensively in the Canadian North and has a wide and intimate knowledge of arctic matters. His main interests are in mammalogy and ornithology, but he has also made important contributions in hydrography and other surveys and has published many papers dealing with these subjects.

Mr. Manning was born in England in 1911, and first travelled in the north in the summer of 1931 when he visited the Faeroe Islands and Iceland while an undergraduate at Cambridge University. The next year he spent the summer and following winter travelling on foot and with reindeer in northern Norway, Sweden, Finland, and Russia. It was in 1933 that he first came to northern Canada and remained for two years surveying Southampton Island under the auspices of the Royal Geographical Society and collecting birds and mam-

mals for the British Museum. Since then he has lived in the Canadian North for either the summer or winter of practically every year, on many occasions being accompanied by his wife.

Some of the expeditions Mr. Manning has led have been private, such as the British Canadian-Arctic expedition of 1936-41 on which much of the west coast of Baffin Island was explored, and others government, such as the Geographical Bureau's *Nauja* expedition, which explored the newly discovered islands in Foxe Basin, and two expeditions under the auspices of the Defence Research Board to the Western Arctic, one in the *Cancolim* in 1951 and the other the circumnavigation of Banks Island by canoe in 1952-3. In 1953 his vessel was the first to pass through M'Clure Strait.

During the war Mr. Manning served in the Royal Canadian Navy, and special use was made of his northern knowledge. He was seconded to the U.S. Army Engineers in connection with the siting and construction of Southampton Island airfield and to the Geodetic Service for