Book reviews


The undertaking to compress the basic facts of aviation medicine into a small volume intelligible to the layman is a formidable task, and the author has made a valiant attempt to achieve this. In walking the verbal tightrope between being too technical and over-simplifying for lay consumption, any writer must lose his balance occasionally, and the author is no exception. Although the chapter headings follow a logical sequence, the detailed presentation is sometimes confusing. At times facts follow each other with no apparent link, which gives the impression of lack of cohesion. Some descriptions and definitions are particularly misleading, e.g., comparing hyperventilation with hypoxia, and the failure to highlight the most frightening symptom in over-breathing—cerebral spasm. Similarly, anyone with practical experience of decompression sickness will notice that there is no mention of the prodromal warning which often precedes the joint pains and chocking sensation, namely, the feeling that cold water is being poured down the back.

Even allowing for attempts to simplify medical terms for the layman, some are very loosely defined (e.g., the definition of ‘accommodation’ as ‘near vision’ and the implication that otitic barotrauma is synonymous with rupture of the ear drum). On the other hand, no attempt has been made to simplify some terms which would be obviously unintelligible to the average reader (e.g., pilots are cautioned against taking anticholinergic drugs. How many pilots know what an anticholinergic drug is?) In the same chapter advising pilots of inoculation requirements, the author outlines a 28-day regime for ‘pilots who are obliged to go abroad at short notice’. If the physiology of circadian rhythms is to be discussed at all in a volume of this size, it deserves more explicit treatment. It would be much more practical to give the non-medical reader some idea of the subjective effects of rapid time-zone changes and to advise him on how to minimize the adverse reactions.

While agreeing that tranquillity of mind is desirable before piloting, I feel that the advice on avoiding a row with one’s wife before doing so might well have been extended to explain how one does just that if the little lady decides she fancies a few rounds prior to her husband’s flight!

In advising the layman on the use of antibiotics, some amplification should be given on the necessity to continue treatment for a minimum of five days, and a short note of possible side-effects would be useful. Many authorities—including NASA—would advise Lomotil as a standard anti-diarrhoeal in preference to furazolidone—of which, incidentally, the more usual dose is one tablet four times daily.

On the credit side, this book contains a lot of useful information, and it is unfortunate that its impact is lessened by minor blemishes which more meticulous editing could have removed.

S. C. Bateman


This publication is intended for the guidance of public health officers who, in general, are not specialists in the radiation protection field. The book complements two earlier publications of the World Health Organization which deal with the surveillance of environmental radioactivity.

Emphasis is laid on the fact that the volume is concerned neither with exposures arising from medical applications nor weapon fall-out, but only with the release of radioactive wastes into the environment.

Five aspects are considered, concepts of waste management, sources of waste, collection, and sampling, routes, and techniques of disposal and transportation.

There is an excellent introduction which clearly puts the subject into perspective. However, this standard is not maintained throughout. The volume could be improved by a more clear presentation and better layout. This shortcoming is illustrated in the section on routes and techniques of disposal where there is an intimate mixture of specific examples of disposal operations, general practices, and calculations on personal exposures. In addition, it is rather odd to find a short summary appearing midway through the section.

Transportation is dismissed in approximately 70 words and, in view of the greater numbers of persons exposed, this aspect of the problem could have been expanded to advantage.

There appear to be few technical errors but a notable omission in Annex 2 is the lack of any reference to $^{40}$Ar produced in closed-cycle carbon dioxide cooled reactors. Certainly in the U.K. this radionuclide is a major constituent of the coolant radioactivity.