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 overbreathing—carrapodal 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 choking 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 antidiarrhoeal 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 fallout, 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 $^{41}$Ar produced in closed-cycle carbon dioxide cooled reactors. Certainly in the U.K. this radionuclide is a major constituent of the coolant radioactivity.
The final summary discusses the philosophy of the benefits of radioactive materials to mankind, which is not altogether relevant to the subject under review.

No doubt public health officers will find the publication useful as a good source of reference, but the author has failed to provide a clear picture of the subject as a whole; this is due entirely to the layout and presentation.

J. A. BONNELL


This annual publication maintains its stereotyped introduction and layout of tables. While the standard form in which it is presented allows easy comparison from year to year, unless the apparently identical introduction form of tables is examined carefully, some minor changes may pass unnoticed. For example, an average age has been added to the table of boardings at which pneumoconiosis was first diagnosed. First diagnoses of pneumoconiosis in coal miners are shown to be made at a slightly earlier age than pneumoconiosis from other trades.

The National Coal Board Medical Service data from its periodic x-ray scheme are identical with those given last year and are printed without further comment. One's general impression of the pneumoconiosis problem as shown in the digest is of a gradual reduction in numbers of freshly diagnosed cases but it is disappointing that the pace is so slow, particularly in coal mining in which the effort has been so very great and so concentrated. However, whereas in 1965 the coal mining industry accounted for about 80% of new cases diagnosed, this proportion for 1969 is just over 65%. As in previous years, however, the proportion of men with disabling assessments greater than 50% is relatively small in coal mining at about 3%, compared with 14% in mining and quarrying and just over 13% in asbestos workers. The apparently static position for mining and quarrying, refractories, iron founding work, and steel dressers over the last few years is also disappointing. New diagnoses of pneumoconiosis in asbestos workers appear to be tailed off a little and it remains to be seen whether the peak for this disease has been passed. There are still nearly a thousand new diagnoses of pneumoconiosis made annually in the United Kingdom and although the majority of these men are not greatly disabled, there is obviously a long way to go before a satisfactory situation is reached.

R. I. MCCALLUM


This booklet reports a number of papers which were read at a triple meeting of the British Occupational Hygiene Society, the Society of Occupational Medicine, and the Ergonomics Research Society, which was held in 1967. It happens, by an appropriate chance, that the reviewer is writing these words while sitting at the same desk in Cambridge at which he wrote up his laboratory notebooks in 1940-41 on the performance of Air Force pilots under the sub-optimal conditions of the effects of anoxia, amphetamine, and the short-acting barbiturate, hexobarbitone.

The papers in the booklet form a catholic collection of contributions, introduced by a penetrating essay from Lord Robens, in which he says quite frankly that man is often used to fill in the gap between machine and job which the engineer has been unable otherwise to bridge. The papers which follow suggest that 'moderate' noise for a long time is more likely to produce psychological symptoms if it is meaningful (which seems likely); that there is scientific evidence from performance studies for after-lunch sleepiness (which is reassuring); that there is little relationship on the factory floor between 'health' and productivity; that heat and standing are not good for the feet; that trichloroethylene in high enough concentration causes mental effects; that it is only when the concentration of carboxyhaemoglobin reaches 10% that auditory flutter fusion begins to be affected; and, finally, that emotional illness in industry is becoming increasingly important.

This collection of papers is very well worth having on the shelf, and, particularly, on the industrial physician's shelf, as he needs to be reminded that clinical abnormality, in which he was trained, is one thing, but performance change is another.

R. C. BROWNE

NOTICES

6th World Congress of Cybernetic Medicine

The 6th World Congress of Cybernetic Medicine organized by the International Society of Cybernetic Medicine will be held in Rome, April 5-9, 1972.

For further particulars please write to the International Society of Cybernetic Medicine—SIMC—348 Via Roma, 80134 Naples, Italy.

Nicolò Castellino Foundation

The Nicolò Castellino Foundation is offering a prize of one million Italian lira (about £700) for original and unpublished work in the field of occupational health. Candidates must be under the age of 36 and must not be university professors. The essay may be written in English, Italian, French, German or Spanish and should be submitted before February 20, 1972. For further particulars please write to the Secretary of the Nicolò Castellino Foundation, INAIL, via Guidubaldo del Monte 24, 00197 Rome, Italy.

Society of Toxicology

The annual scientific meeting of the Society of Toxicology will be held in Williamsburg, Va on March 5-9, 1972.

At the 1971 meeting in Washington, D.C., 158 papers in all phases of toxicology were presented. Abstracts of these papers appear in Toxicology and Applied Pharmacology, Vol. 19, No. 2, June 1971.

Additional information may be obtained from the Secretary:

Dr. Robert A. Scala,
Esso Research and Engineering Co.,
P.O. Box 45,
Linden, N.J. 07036, U.S.A.
Public Health Implications of Radioactive Waste Releases

J. A. Bonnell

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