

*Environmental Hazards in the British Isles*, by A.H. Perry, George Allen and Unwin, Hemel Hempstead, 1981, £12.00 hardback, £5.95 paperback, 191 pp.

This book attempts to cover its broad subject in the space of 191 pages. The 10 chapters cover the following topics: storms; snow, frost and cold; floods; drought; fog; pollution; seismic, geomorphological and pedological hazards; biological hazards; vulnerability and risk. It will be evident from this that the emphasis falls on natural rather than man-made hazards. There is some ambiguity in the introduction as to whether or not technological hazards are to be included. In the end we find topics such as Canvey and Flixborough dealt with in less than one page, under pollution hazards. The section on risk assessment is very meagre and includes some unsubstantiated assertions on acceptability taken from another source. The book would have been stronger if the author had concentrated on the subject of environmental hazards, which is what he clearly knows about best, as shown in the excellent chapter on floods. For those unfamiliar with the field this book is a useful introduction, with some important conclusions about the scale of environmental hazards. This in itself is likely to be a good antidote for anyone who has developed a narrow obsession with man-made hazards.

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*Pyrotechnics in Industry*, by Richard T. Barbour, McGraw-Hill, New York, 1981, 190 pp, 105 figs., 3 tables

There continues to be a steady growth in the range of application of explosive materials, and this book presents a selection of more recent devices whose development has been heavily influenced by aerospace and societal problems. Military and quarrying applications are not explicitly discussed, although these often parallel or anticipate the developments. Successive chapters deal with initiators, detonating cords and shaped charges, cartridge-actuated devices (nuts, bolts, thrust generators, extractors, etc.), matches, airbags, escape hatches and quality assurance. The text is liberally illustrated with drawings and photographs that accompany brief descriptions of how each device works and topical examples of systems that incorporate them. Undoubtedly, this is all interesting and stimulating and many explosives technologists will browse profitably among its pages.

The book is evidently intended for the technician rather than the disciplined engineer or scientist; the material is not only somewhat undisciplined in its presentation, but it is difficult to present in a disciplined way a technology that has moved forward very much on waves of urgent and heavily government-funded programs. It is not a book about explosive substances or how

to design one of the devices, and it is not recommended for those seeking such information. Other texts have been written in the last decade that cover the topic more comprehensively both in regard to devices and to substances.

In recent years, United Nations, OECD and NATO committees have striven to define the terminology of explosive substances, including high explosives, propellants, pyrotechnics and their modes of functioning. Since there appears to be so much expert agreement on these terms and their significance in the areas of hazards and international storage, transportation and trade, it is a pity the author has not chosen to adopt them. The mixture of redundancy and contradiction in such loose terminology as “deflagrating pyrotechnic propellant” made this reviewer wince several times in reading the text and recall that explosives technology has far to go before it reaches maturity.

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