## **Book Reviews**

## Is nuclear war survivable?

by Geoffrey Pearson

Effects of Nuclear War by Peter Sharfman for the Office of Technology Assessment, US Congress. Detroit: Gale Research Co., 1984, 300 pages, \$45.00US.

This is a re-issue of the original study published in 1979 by the Office of Technology Assessment, with additional material prepared for the OTA and presumably classified at the time. This material consists of two working papers entitled "Small Attacks on the USA and Soviet Energy Production and Distribution Systems" and "Long-term Health Effects from Nuclear Attack Radiation Exposures." The second paper in particular will be of interest to doctors and others engaged in the debate on the longerterm effects of nuclear war. Neither paper, however, adds anything of great significance to the central issues, one of which, "nuclear winter," has since come to be far better understood than it was five years ago. It is not clear therefore why the original study has been re-published at this time, although there will be many readers no doubt whose interest in the subject in 1979 was a good deal less then the effort required to read the report. Unfortunately few will wish to pay the \$45.00US asked to buy the new edition.

This is a pity because this study is still probably the best available of its kind. It considers four different attack cases: single weapons of various sizes dropped on Detroit or Leningrad; a limited attack on oil refineries in both the USA and the USSR; an attack limited to military targets in both countries; and a very large attack against a range of targets. It also considers the effectiveness of civil defence preparations in both countries, without, however, drawing conclusions about the merits of such measures. Finally, there is some discussion of the long-term effects of ionizing radiation, and brief treatment of effects on the ozone layer of the atmosphere and on the earth's ecology. The bibliography is out of date but the glossary remains useful.

When originally published, public attention was focussed on the casualty figures which the report revealed under its various scenarios. The worst case figures ranged from two million deaths for the single city scenario to one hundred and sixty million deaths for the country-wide

attack. The best case ranges for these two scenarios were two hundred thousand and twenty million respectively. The differences in these estimates reflect the very large uncertainties involved in calculating them, including the time of day, the degree of protection available, and the weather. The report admits candidly that whether a large scale attack would destroy civilization as we know it in North America is beyond calculation; but it raises interesting questions about the differences between the USA and the USSR with respect to their capacity to "survive" in such conditions. Current and future research into these conditions, and especially the effects of nuclear winter, is likely to draw more attention to the indirect and long-term effects of nuclear war than was possible in 1979. The key question will be whether this research leads to changes in policy which actually reduce the risks of nuclear war. Science gave us nuclear fission. Perhaps it will also be science that helps us to turn back from the road we have taken since.

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Geoffrey Pearson is a Canadian diplomat whose recent assignments have included Adviser on Arms Control and Disarmament and Ambassador to the Soviet Union.

## Warning to innocents

by Courtney Gilliatt

Caveat—Realism, Reagan and Foreign Policy by Alexander M. Haig Jr. New York: Macmillan, 1984, 367 pages, \$23.95.

Caveat is General Alexander Haig's first book. In the preface he says that it is neither autobiography nor formal history but a description of the most important events during the year-and-a-half that he was Secretary of State under President Ronald Reagan from January 1981 to June 1982. He implies that there will be more books giving the public a complete account of his eventful career.

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