Science and Civil Defense

THERE is scarcely a science from astronomy to zoology that does not have a bearing, however remote, on civil defense. Every scientist in the United States has an individual measure of responsibility in the civil defense program, if only because laymen, rightly or not, look to scientists for answers to many crucial problems. The Federal Civil Defense Administration has learned from scientists working in the sociological and public reaction fields that, increasingly, the American people look to the scientist as an authoritative source of information.

Public esteem imposes a special burden of responsibility on the scientist, for, when he discusses present or possible weapons and defenses against them, he must weigh his words with more in mind than the reactions of his fellow-scientists. He must consider the effect of whatever he has to say on an already badly confused public.

In civil defense the responsibility of the scientist extends far beyond the evaluation of the possible public effect of his words. In many situations the scientist must assume leadership, and because of his background he may be the best possible teacher. This is particularly true in special-weapons defense. The veterinarian, the botanist, the plant pathologist, the epidemiologist, the bacteriologist, and the pathologist are admirably equipped to instruct in the field of biological warfare defense. The biochemist and the physical chemist can do much to aid in chemical warfare defense. Scientists in the fields of nucleonics and radiology should participate actively in radiological defense training programs. These are merely a few examples.

The active participation of scientists in civil defense state and local operational programs is vital. The role of the physician, the sociologist, the psychologist, the psychiatrist, the engineer, and the many specialists in fields directly applicable to the civil defense problem is apparent. Scientists should seek out state and local civil defense directors and offer not only technical advice but active service.

Certain it is that scientists, as individuals assisting local civil defense organizations, as individuals or groups advising state and local civil defense directors, and as responsible members of professional societies, can make major contributions to civil defense planning and operation. Without the active cooperation of scientists, and without the knowledge that they alone can provide in many areas, civil defense cannot be effective, and the Federal Civil Defense Administration is keenly aware of this fact.

Civil defense has been working for some time with many of the organizations affiliated with the AAAS. For example, in our publication *Health Services and Special Weapons Defense,* we recognize the contributions of the American Association of Blood Banks, the American Dental Association, the American Hospital Association, the American Medical Association, and the College of American Pathologists. Future publications will acknowledge the cooperation and contributions of other groups affiliated with the AAAS. But our cooperation with scientists must and will extend far beyond these contacts. We are spending considerable time at civil defense headquarters in outlining research programs and defining areas in which we must have additional scientific and technical knowledge to operate effectively.

Recently it was suggested that there is no science we do not need. The wry qualification was added that, if saturation attacks with modern weapons ever are made on the United States, and civil defense is not effective, then some of the sciences, such as archaeology, not directly involved in civil defense, may inherit what is left of the nation we have failed to protect.

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SCIENCE, founded in 1880, is published each Friday by the American Association for the Advancement of Science at the Business Press, 10 McGovern Ave., Lancaster, Pa. Entered as second-class matter at the Post Office at Lancaster, Pa., January 13, 1948, under the Act of March 3, 1879. Acceptance for mailing at the special rate postage provided for in the Act of February 28, 1925, embodied in Paragraph (d-2) Section 34.40 P. L. & R. of 1948.

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Annual subscriptions, $7.50; single copies, $.25; foreign postage, outside the Pan-American Union, $1.00; Canadian postage, $.50. Special rates to members of the AAAS.

The AAAS also publishes THE SCIENTIFIC MONTHLY. Subscription and advertising rates on request.