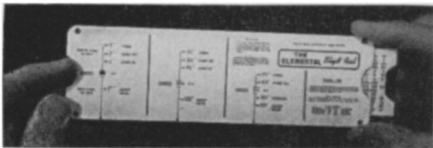


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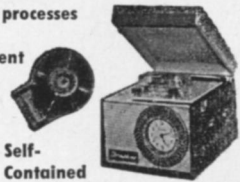
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NATIONAL GEOGRAPHIC MAGAZINES. 1888-1960, any issue. Periodical Service, Box 465-SN, Wilmington, Delaware.

PUBLIC SAFETY

Civil Defense Booklet Hit

► THE GOVERNMENT'S civil defense pamphlet, *Fallout Protection; What to Know and Do About Nuclear Attack*, gives a false hope of protection from nuclear attack and, indeed, may "tranquelize" America into a false sense of security, the Washington Association of Scientists charged.

In a unanimously adopted statement, the W.A.S., a local chapter of the Federation of American Scientists, said that while the fallout information and counsel in the booklet is "technically" correct, "it would be an error for citizens to assume that the measures described are adequate to insure maximum safety in the event of a nuclear attack."

As the W.A.S. statement notes, many scientists and other experts on the effects of nuclear explosions have said that the booklet does not stress sufficiently the limitations of any fallout and civil defense program.

It fails to make clear that any hope for protection from the main effects of most kinds of nuclear attack is an illusion. The CD pamphlet deals largely with an attack from a five-megaton weapon. An enemy nuclear attack would hardly be limited to a five-megaton bomb.

The booklet also fails to stress the extremely limited nature of circumstances in which fallout shelters might save some lives and "does not emphasize the truth that no individual can by his own efforts insure his survival in a nuclear war." Instead, seven of the 46 pages are devoted to a chapter entitled *Individual Action: Family Shelters*, from which any lay reader might reasonably assume that he can protect his family in a homemade shelter for about \$150 worth of materials.

The pamphlet also describes individual shelters where "the danger from fallout would be at least 100 times less than to unprotected persons." It fails to make clear that this degree of protection still is likely to be inadequate to prevent radiation sickness or death.

The danger of fallout radiation is also minimized. For example, it states that fallout radiation cannot make anything radioactive, without explaining that fallout itself is radioactive. Therefore, fallout will contaminate material on which it may settle—whether it be food, clothing, water, or humans.

The pamphlet acknowledges this but says that such contamination "probably" would not be carried on bodies or clothing in sufficient amounts to endanger others, but persons so contaminated "should wash themselves for their own protection." It also recommends washing foods to make them "safe." But if food has contamination in it, rather than on it, it cannot be washed off.

The CD pamphlet does not indicate how many might be killed and how man might survive under different conditions. It does not make clear the great difference between

high and low level explosions and their relation to fallout levels.

Civil defense does not mean security. It can in a limited sense mean some survival; but, as the W.A.S. statement declares, "The long-range security of all people must lie in a recognition that nuclear war is not a feasible means of resolving international conflicts."

• Science News Letter, 81:78 February 3, 1962

MEDICAL TECHNOLOGY

Sniperscope Adapted For Eye Diagnosis

► A UNITED STATES Navy infrared "sniperscope" has been adapted by a dentist to help doctors in the diagnosis and treatment of the blind.

Dr. Joel Friedman of Columbia University, New York, first became interested in the adaptation through studies of infrared photography of the mouth lining (oral mucosa). He later refined his technique and applied it to many clinical studies in ophthalmology.

The instrument devised by Dr. Friedman can help surgeons determine whether sight can be restored in patients afflicted with opaque corneas. The operation is called corneal transplant.

During World War II the near-infrared receiver was developed for receiving blinker signals at night and, when combined with an infrared light source, as a telescopic rifle sight (sniperscope) against enemy personnel.

Dr. Friedman's research is reported in *Naval Research Reviews* published in Washington, D. C.

• Science News Letter, 81:78 February 3, 1962

Questions

GENERAL SCIENCE—How much has the Science Talent Search awarded in prizes since 1942? p. 69.

MEDICINE—What was the highest radiation dosage received by Yugoslavian atomic scientists in an accident? p. 74.

PHYSICS—How does a cheat proof workbook give a true record of students' work? p. 67.

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