

# FIGHTING CHANCE

*John 8: 31-32*

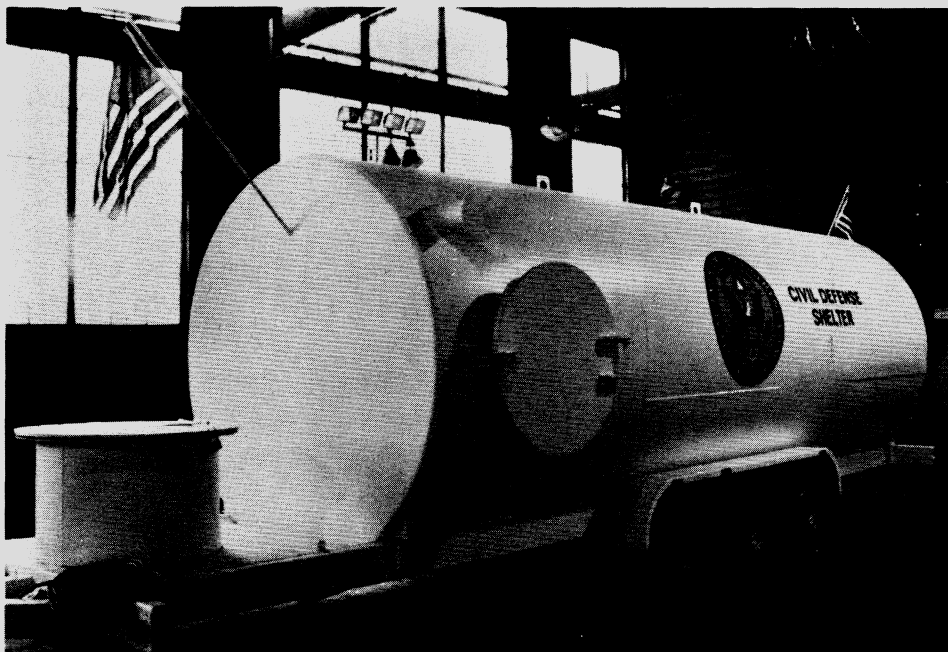
*Proverbs 22: 3*

Newsletter Vol. II, No. 7

January 1989

## MOBILE SHELTER GOES TO WASHINGTON

One year ago we first suggested to officials at the Federal Emergency Management Agency that a fleet of mobile civil defense displays in the form of actual blast, radiation, chemical, and biological protective shelters should be built. This was during and subsequent to a meeting held at FEMA to consider ways of promoting self-help and volunteer efforts for civil defense.



Many of the proposals concerned “paper” solutions. Brochures, pamphlets, information kits, organizational charts — these are the stock in trade of the bureaucrat. They have been tried in one form or another for decades, and they do not work. They are “makework” for paper-shufflers. Worse they have negative value, because they provide an illusion of civil defense in which the few real resources available are wasted.

Americans will respond to civil defense hardware — real civil defense equipment and knowledge — delivered to them by people who understand these things and who have provided them to their own families. Americans will not respond to paper descriptions provided to them by people so lacking in knowledge and motivation that they have not even provided protection for their own families.

If a complete mobile display of civil defense hardware were available in each locality for use in public presentation by the motivated members of those communities, then both the practical and political aspects of civil defense would be propelled toward their proper priority.

This has been the experience in Jackson County, Oregon where our first mobile shelter display was made possible by the donations and hard work of the members of the Jackson County Civil Defense Council. This Council was started as a result of the bulk mailing of *Fighting Chance* in Jackson County.

Gradually this mobile shelter display, through appearances in parades, county fairs and expositions, and various other public functions has won over local officials and citizens. The television, radio, and news commentators have given very favorable and enthusiastic coverage; the county government is responding enthusiastically; and membership in the Civil Defense Council has grown rapidly as a result.

The civil defense volunteer efforts which FEMA seeks to promote have grown in this region of Oregon 1000-fold — perhaps even 100,000-fold — more as a result of this mobile display of real hardware than they would have by an equivalent expenditure on government pamphlets.

In response to our suggestion and our description of the initial results in Jackson County, FEMA asked the Oregon Institute of Science and Medicine for a competitive bid to build a mobile shelter display for their Emergency Management Institute at Emmitsburg, Maryland. This display is to be used at their civil defense school and to be provided to civil defense groups in the Washington, D.C. area for local use.

The Oregon Institute received a contract from FEMA which is paying for a large part of this display. The remaining resources are being provided by Fighting Chance and by the volunteer work of members of the Jackson County Civil Defense Council.

A special 30 foot-long steel trailer has been built which has a cradle for the 8 foot wide and 22 foot long blast shelter body. It also has a platform forward of the shelter cradle on which is mounted a shelter entry and blast door display and, during transit, a stairway and platform for entry to the shelter.

The shelter size was chosen as that which would be easily portable on a reasonable size trailer. The optimum shelter for public use is 12 feet in diameter and 50 feet long. Individuals and groups often choose intermediate sizes in accordance with readily available surplus steel tanks or other considerations. This mobile shelter is the smallest size which is currently being commonly installed. Surplus fuel tanks usually are this large or larger.

The triple axle trailer with ball hitch weighs about 10 tons when it is loaded with the shelter display. It has a low center of gravity, moderate tongue weight, and electric brakes, so it can be moved short distances with a large pickup truck or carryall. For the move to Washington, we will use a special truck like those used to move mobile homes on the highway. Ideally, a proper tow vehicle should be dedicated to each shelter display.

The shelter body has two 36-inch diameter entryways which terminate with the bolt flanges which would be used to attach the entryway tubes. Bolt flanges are provided on the inner end of these entryways also to accommodate inner doors or partitions. The entryways are on opposite ends and sides of the shelter body.



**Entrance End.**

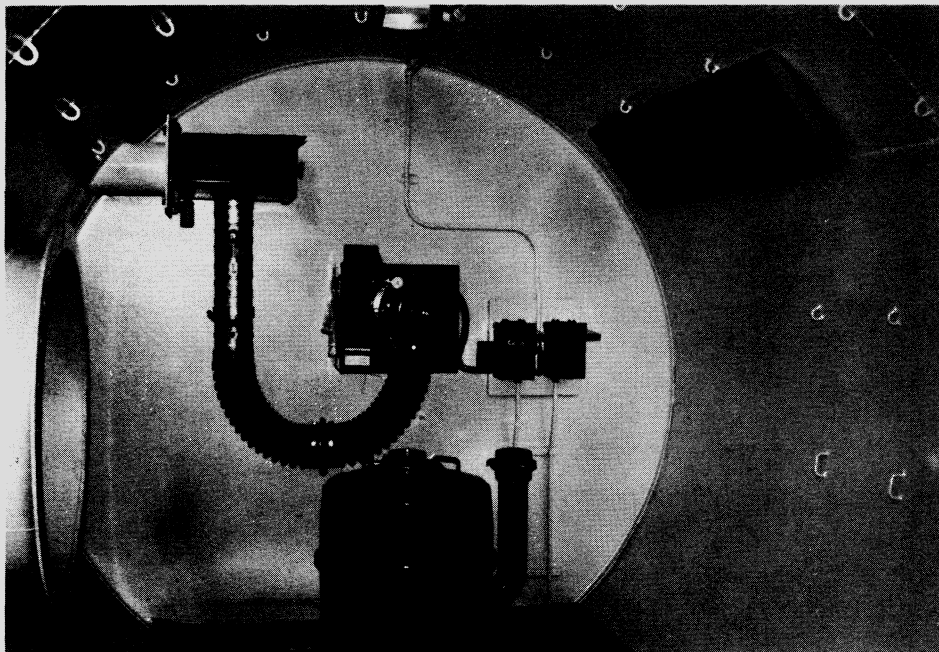
A portable stairway and platform is mounted here during display.

The shelter body itself is a cleaned fuel tank which has actually been buried and used as a fuel tank for more than 20 years. It was buried without any coating or cathodic protection in a relatively dry, sandy location. The slight pitting on its surface, therefore, illustrates a worst case, since shelters should be coated and cathodically protected.

Hinged and lockable doors made from one-half inch steel plate are provided as weather closures on the outside of each entryway. They are for the mobile display only, but could be reversed and used as actual inner doors if the shelter were buried.

It is intended that visitors enter and leave the shelter through one of the entryways only, so only one stairway is provided. Both entryways could be used. Experience has shown, however, that the display is more effective in public if one entry is used for visitors and the other is opened for light and ventilation. Usually a table with civil defense literature, petitions, and other materials is set up along side the shelter next to the visitor entrance and staffed by civil defense volunteers.

Inside we have installed a complete, working LUWA-180 ventilation system with full nuclear, chemical, and biological air filtration capabilities. This Swiss system provides shelter air for 60 occupants with 2000 hours of continuous protection against chemical agents by means of a special activated charcoal filter. It also has a prefilter for fallout particles and an absolute filter for biological agents.



LUWA System at Entrance End  
Post-attack Solar Panel is Upper Right.

The LUWA blower can be operated electrically if the display is plugged into a 110 volt AC power source or manually by means of an easily operated hand crank. In manual operation the unit also generates electricity for a small emergency light which is provided by LUWA. The inlet duct includes a flow meter, so that air flow rate can be measured and adjusted appropriately.

Air enters the shelter through a LUWA blast valve mounted on the shelter wall just above and beside the entrance. This connects to a 10-inch diameter pipe which goes through the shelter body and is covered by a weather closure on the outside. This pipe has a bolt flange by which it would be connected to the entry tube if the shelter were buried.

Air exits the shelter through a similar valve and tube at the opposite end. The exit blast valve is of a type that maintains a continuous pressure inside the shelter relative to the outside. This assures the positive shelter pressure needed to guard against leaks if the chemical and biological air filtration systems are in actual use.

The shelter floor is made from four foot wide planks of one and one-fourth inch thick plywood supported by angle brackets at the sides only. These planks are five feet, three inches long which is the width of the shelter floor. This floor has some flexibility which helps protect the occupants from shock waves caused by exploding weapons. Under the LUWA unit the floor panels also have a center support bracket which is required by the weight of the unit. The LUWA unit has its own internal shock protection.

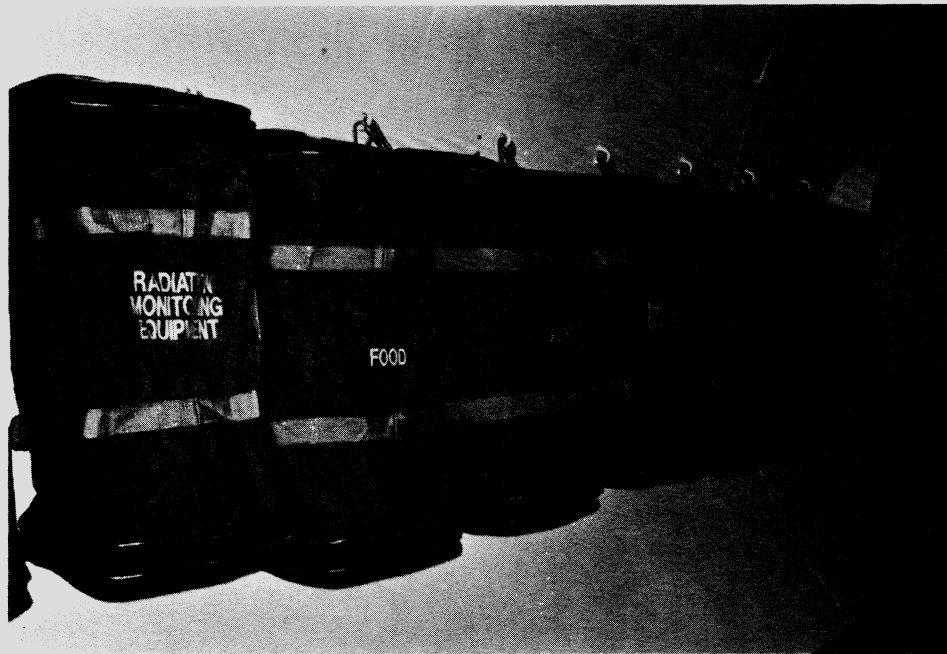
The floor is covered with a blue carpet which can be rolled back to gain access to the storage area under the floor. The floor planks are held down with wing nuts which can easily be removed by hand or with a small pair of pliers.

Steel loops have been welded in an array on the inner shelter ceiling to serve as mountings for the hammock beds and chairs which provide compact sleeping and sitting and also provide an essential part of the internal shock protection for the occupants. These loops are in an array of eight positioned at one foot intervals across the shelter repeated every two feet along the length of the shelter. This permits the fabric furnishings to be hung anywhere in the shelter.

The hammocks are Cresson Kearny's boat-shaped design with a center strap and tabs which permit them to be converted into chairs. Each hammock has a loose fabric secondary bottom for insulation and for storage of personal effects. The boat shaped design is compact and also prevents occupants from falling out. They are suspended with slightly flexible rope for additional shock isolation.

In keeping with the display color scheme the hammocks are red and blue. The shelter is white inside and out as are the trailer and blast door displays. American flags with poles and mountings are provided at the top of each end of the shelter for use when the shelter is on display.

Additionally, a four-foot diameter, eight color, United States Federal Seal of the Emergency Management Agency is painted in the middle of each side of the shelter on the outside. On the outside back end at the bottom are printed the primary shelter specifications of occupancy (about 30 people), blast protection (200 psi), and chemical and biological protection capabilities.



Habitability and personal protection items are primarily contained in rows of rectilinear red and gray nylon bags which are hung in the concave curvature of the shelter walls along both insides. These are labeled “hammocks,” “sleeping bags,” “radiation monitoring equipment,” “protective clothing,” “communications equipment,” “tools,” “sanitary supplies,” “food,” and “medical supplies.”

This last item, “medical supplies,” is the result of the efforts of Dr. Jane Orient and several of her colleagues in Doctors for Disaster Preparedness. Dr. Orient compiled lists of medical items from her own shelter and from several other physicians and assembled an extraordinarily complete medical kit which she displayed for comment at the American Civil Defense Association meeting at Salt Lake City in October 1989.

Based upon comments there, she made further improvements in the kit and augmented its contents. The shelter display contains this actual medical kit. This is not a toy box of bandages with instructions about what to do until the doctor comes. It is complete with prescription drugs and surgical instruments. If the doctor comes, the shelter will provide him or her with the tools of the trade. If the doctor does not come, the shelter occupants have the tools and the books — also provided in the kit.

A complete list of the contents of this kit and indications as to use will be published in the February 1989 issue of this newsletter. The cost was about \$1000 and many of the items would need to be purchased with the cooperation of your personal physician.

A food display with one person-year of grain, beans, oil, and salt in 17 square plastic buckets is displayed in one back corner of the mobile shelter. Only one person-year is provided to reserve space for visitors. Also, in practice, most of the long term food supply and the shelter water supply would be stored in the entry and exit tubes for additional radiation protection after the shelter is occupied. These entryway tubes are omitted from the mobile display, because they would make it too wide for easy mobility.

Additional food of the instant, non-cooked survival type for use during the brief actual shelter stay is provided in the nylon bags hung along the shelter walls. Here we have selected some of the better, more economical commercial products. This could, of course, be omitted entirely, since food during a few days in the shelter is not a mandatory survival requirement.

It is during the long post-attack period that stored food becomes a life or death matter. In previous newsletters we have urged the storage of long term supplies which can still be purchased at a cost of about \$100 per person-year of food. One such year of food is on display in the shelter.

A water storage display occupies the other back inside corner of the mobile shelter. Like the food, this is a partial requirement, since much of the water would be stored in the entryway tubes after occupancy.

We have stored the water in Preparedness Products water storage and sanitation kits. These are cardboard units with a plastic liner for water and a small supply of toiletries. After the water in a box is used, the container converts to a dry toilet and waste storage container.

Installed shelters should have, if possible, a drain in one end which can be curtained off and provided with a toilet. This is not possible, however, in all locations. The displayed water storage and toilet equipment is of a type suitable for all instances and locations.

The stacks of food and of water and toilets are secured to the shelter with black cargo netting to keep them in place when the mobile shelter display is moved.

The electrical system provides both 110 volt AC power and 12 volt DC power to the shelter. 110 volts is provided only when the shelter is plugged into a 110 volt AC source. It is used to operate the LUWA ventilation unit and power receptacles which may be used for video presentations or other aspects of the display.

The 12 volt DC system operates the internal lights and is powered by rechargeable storage batteries which, for convenience in the display only, are contained in the blast door display. In actual shelter installation, these batteries are installed in the storage area under the floor.

The batteries are recharged from the towing vehicle or from the 110 volt AC power as in recreational vehicles. In actual installation each shelter should be attached to 110 volt AC power which will keep the batteries charged for emergency use.

This battery power is primarily for lighting. A small amount may also be used for radios and other economical instrumentation uses. Two sets of lights are mounted on the shelter ceiling. One set provides 60 watts of fluorescent lighting for use when the shelter is on display. In installed configuration, these lights would provide light for non-emergency use. Their regular use provides a check that the 12 volt DC system is in good operating order.

The second set of lights has very low wattage bulbs for emergency use. In an all white painted shelter a surprisingly small amount of light is needed — even for reading. One's eyes adapt to a low light condition easily. These low wattage lights can operate for several weeks on a single battery charge.

During the post-attack or recovery period it can be of substantial importance to have 12 volt DC power available for lights, radios, instruments, and even occasional use in starting an engine. For this reason the electrical system is equipped with a plug inlet for recharging the batteries from a solar panel. An appropriate solar panel is provided in the mobile display shelter along with the plug and cord for attachment to the battery system.



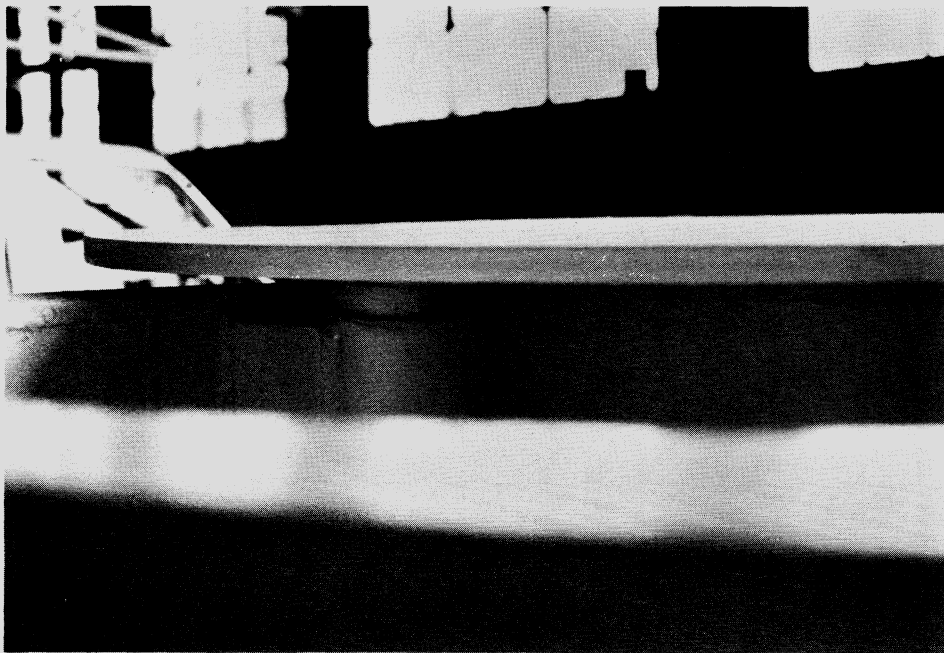
Mathew and I explain the blast door to Mark Bradshaw, a local television anchorman. Press response to the mobile shelters in Oregon has been enthusiastic and uniformly positive.

When there is no additional danger outside the shelter, the panel is to be taken to the surface and attached to the battery system by means of the cord which is then passed through one of the entryways. This is designed to keep the emergency electrical system operating for years without reconnection to an outside power source.

Only four hammocks are actually hung in the shelter while it is on display. These are all of one large size which we have determined to be suitable for everyone from large adults to small children. When in use these hammocks are each provided with a sleeping bag.

This display shelter is of a size that easily accommodates 30 people sleeping at the same time. A photograph of this sleeping arrangement is shown in a previous newsletter and also in our recent article in the December issue of the Journal of Civil Defense.

A blast door display is mounted on a four foot square platform on the trailer in front of the shelter. It consists of a two foot section of 36 inch entryway tube with a four inch flange. This is closed by a 44 inch diameter 3/4 inch steel plate blast door. The door is hinged with the canted mechanism which we developed here at the Oregon Institute of Science and Medicine.



**Blast Door Hinge.**

As the door is rotated, the hinge raises the door about two inches. This several-hundred-pound blast door can be fully opened by a child with one hand. It has no direct attachment to the

shelter, so it can be jacked straight up and off in case of external debris or damage. The door is held closed during the negative pressure blast wave from a nuclear explosion by chains and load binders which are shown on the mobile display.

This shelter is essentially the same as those illustrated in our shelter plans. In some locations the steel plate blast door may be substituted by the Oak Ridge National Laboratory membrane door. That door should be available on some future display shelters.

This display will be delivered to FEMA before their Emmitsburg conference on 23 January 1989. This conference is the followup to the first conference one year ago at which the mobile shelter display was first proposed. Thereafter, if you are in the Washington, D.C. area, you may wish to visit Emmitsburg, see the shelter, and perhaps arrange with FEMA to use it in your own grass roots civil defense work.

This mobile display shelter and its habitability equipment were assembled and delivered to Washington, D.C. from Oregon at a cost of about \$20,000. This is a cost well within the reach of local and state civil defense organizations and also private civil defense groups.

The shelter and blast door unit are bolted to the trailer. They could be unbolted and buried as is. The shelter body was previously buried under a Medford, Oregon truck stop, where it contained diesel fuel.

If buried as a shelter, this unit with its supplies would cost about \$15,000 installed or about \$500 per each of the 30 occupants. The LUWA unit provides air for 60 people and the other equipment and entryways would accommodate many more. For this reason, the per-occupant cost would be much lower than \$500 per person in a larger shelter.

## **NEW PRINTING OF NUCLEAR WAR SURVIVAL SKILLS**

We have now reprinted the updated 1987 edition of Nuclear War Survival Skills. This is the second printing of this edition.

Cresson Kearny has made a substantial number of changes in the text which are incorporated in this second printing. While these changes constitute valuable clarifications and updates, the basic survival information in the book remains essentially unchanged.

If you have a copy of the first printing, you should not feel that your copy is out of date. You might wish, however, to pass along your first printing to someone else whose family should have this essential information.

In response to increased printing and postage costs, the single copy price of the second printing is one dollar higher than for the first printing. Multiple copy prices are also increased. The new prices are:

1 copy — \$10.50 each  
2 copies — \$ 9.00 each  
10 copies — \$ 8.00 each  
100 copies — \$ 6.00 each

Substantially larger orders receive an additional discount.

We still have about 2,500 copies of the first printing. These will be sold at the first printing prices of \$9.50, \$8.00, \$7.00, and \$5.00 for one, two, five, and 15 copies respectively until they are gone.

These prices are all postage paid within the United States. Many Fighting Chance supporters send an additional 10% payment for postage. We very much appreciate this, but it is not mandatory. For orders outside of the United States postage costs are much higher, so we require that the recipient pay the postage.

## A MORAL IMPERATIVE

In the midst of our many individual activities to reach our goal of a homeland defense for America, we sometimes forget the fundamental principles upon which our efforts are based.

We advertise Soviet civil defenses and call for the installation in America of facilities of equal or better quality. We worry about the military imbalance with the Soviets and see civil defense as a part of the strategic equation. We focus, perhaps, on one particular threat — inter-continental missiles or terrorists or accidents — and forget that there are many others. “If the threat which especially interests us could just be neutralized, then maybe we would not need homeland defenses.”

We must never forget that comprehensive civil defense is a mandatory moral and ethical requirement of our Christian civilization.

We have the technological ability, scientific knowledge, and economic strength to install homeland defenses which will protect our families and most other Americans from the nuclear, biological, and chemical threats which are posed to them by accidents, terrorists, and war. We are morally required to install those defenses regardless of all other considerations.

We must install those defenses regardless of Soviet actions or perceived intentions. In fact, as a matter of morality, we should be supportive of the Swiss, Scandinavian, Soviet and Chinese systems of civil defense. Human life is precious.

The protection of human lives by means of civil defense from technological risks is both a humanitarian and a national defense objective which is morally required of any civilized people.

In all of our efforts to enhance American civil defense by any means at our disposal, we must not lose sight of this underlying moral principle. We also must never compromise or even pretend to compromise this principle regardless of apparent short-term opportunities.

## **PUBLIC OPINION**

Repeatedly, over the last three decades, polls have shown that Americans want the protection of a good civil defense system. They correctly believe that it is the responsibility of the federal government to provide this system under the common defense stipulation of our Constitution.

American support for civil defense has been correctly reflected in the efforts by Presidents Truman, Kennedy, and Reagan to initiate a good nationwide system. Unfortunately this has always been a passive support. It has not been competently galvanized into an active political issue. That is the job of Fighting Chance, the American Homeland Defense Alliance, the American Civil Defense Association, the Doctors for Disaster Preparedness and other similar efforts.

It is important for grass roots activists to know that they are working with the general inclination of American opinion rather than against it. In our efforts, we have been able to make activists out of only a small percentage of the people in each community. In each instance, however, we have found that the overwhelming majority of the people, press, and other groups in the community are passively favorable to our work.

Appeasement and surrender are just not a normal aspect of American mentality. People want to know how to maximize their chances of survival. They are not interested, on the whole, in doomsayers and the merchants of surrender.

At the most recent Capstone course at the National Emergency Training Center at FEMA's Emergency Management Institute in Emmitsburg, Maryland, I gave two presentations — one on community involvement and one in a semi-debate format opposite the president of the Washington, D.C. chapter of the "Physicians for Social Responsibility." The real attraction for me, however, is to hear the other speakers.

The talk by Dr. Jiri Nehnevajsa of the University of Pittsburgh summarized current public opinion based on recent polls. There have been about 120 such polls since 1950. Dr. Nehnevajsa has conducted 8 of them since 1963. The most recent polls are qualitatively identical to those of recent decades. Some results from the 1987 poll (with plus or minus two and one half percent accuracy at the 99% confidence level) are:

86% believe that the United States will need civil defense for war while 6% believe the United States will never have such a need.

76% believe that civil defense would save many lives in case of war.

74% believe that Americans would have only a few hours of warning in case of war with 58% believing that the warning would be 30 minutes or less.

71% would share their basements or shelter facilities with others and 91% would help evacuees with 82% willing to quarter strangers in their homes.

84% do not think that civil defense preparedness raises the chance of attack, while 9% think that it does.

91% do not consider strategic power a sufficient deterrent to attack, while 5% do.

72% do not agree that strategic defense in the form of an ABM system makes civil defense less necessary, while 20% do think so.

75% do not think civil defense harms so-called arms control efforts, while 15% think it does.

18% would rather yield to Soviet blackmail rather than go to war, while over 70% would rather fight than yield. 77% support retaliation in case of attack.

This aspect of human nature is the reason that appeasement always leads to war. Sooner

or later the will to resist which is intrinsic in human nature expresses itself through the political leadership. The appeasers, weakened by their appeasement draw back — the aggressors overreach — and the result is war.)

78% are willing to be trained in civil defense and 76% are willing to volunteer for civil defense.

Only 40% had ever heard of “nuclear winter” and only 9% had a reasonably accurate impression of what nuclear winter is or claims to be.

Civil defense is a powerful grass roots political movement just waiting to happen. Let us all redouble our efforts to make it happen before it is too late for our country, our families, and our civilization.

### **A PROPOSAL FOR 1989**

*This text will be published in the February issue of the Journal of Civil Defense and forms the basis of a proposal which we are submitting to the President and Vice-President Elect and the appropriate members of their cabinet.*

### **A REAL UNITED STATES CIVIL DEFENSE PROGRAM MUST BEGIN NOW**

Now at the beginning of 1989 and the beginning of a new Republican Administration in Washington, civil defense for Americans has a new opportunity. Civil defense funding has begun to increase, active public awareness has begun to express itself in Congress, and the new administration has made a promise in its 1988 Republican Platform which can only be fulfilled by substantive action on civil defense.

This new opportunity is not the first such opportunity. Since the days of the Truman Administration, civil defense has, from time to time, been reborn. In each instance, however, the opportunity was squandered and Americans were left largely defenseless against the nuclear, chemical, and biological threats posed by terrorists, accidents, and war.

This new effort in 1989 will succeed only if certain facts are kept in mind and if a simple, effective, and immediate beginning to *deploy* civil defense is made by the new Administration.

Some facts of relevance are:

1. Civil defense is a technologically mature subject. With billions of dollars of civil defense research completed and on file in our emergency technology libraries and with actual deployment of that technology for hundreds of millions of people in Europe and Asia already completed, there is absolutely no need to delay deployment while “studies” are carried out.

2. Civil defense is a fundamental moral imperative of civilization as well as an important part of providing for the “common defense” as specified by the United States Constitution. It threatens no one and is entirely independent of civil defense deployment in other countries whether they are governed by our friends or our enemies.

3. Civil defense is the provision to the people of certain defensive hardware and knowledge. Civil defense is shelters, radiation meters, field-tested instructions, easily accessible food reserves, and other physical preparations. Public relations brochures, bureaucratic “planning,” and other “makework” paper activities will save few lives in a real civil defense emergency.

4. A minimally sufficient program for the United States will require eventual expenditure of about \$75 billion in 1989 dollars. Proposals to provide civil defense for a small fraction of this cost are self-defeating, because they do not deliver sufficient protection.

5. We cannot build a civil defense system unless we actually make a beginning. That beginning must be consistent with the eventual construction of complete civil defenses. It must include actual civil defense shelters and equipment, distributed food reserves, distributed civil defense knowledge, and a stopgap temporary program to save some lives until the proper system is completed.

With these and related facts in mind, therefore, I propose that during the year 1989 the United States federal government should make the following expenditures.

1. \$75 million for the construction of 2000 fully equipped biological, chemical, and blast protective shelters with a capacity of 150 persons each as described in the December *Journal of Civil Defense* on pages 18 through 22. These should be installed throughout the United States in locations which include school yards, emergency medical depots near hospitals, FEMA emergency operating centers, city and suburban streets and parks, military bases and other representative sites.

With this done, at the end of 1989 one American in one thousand will have received protection, and experience will have been gained on a practical scale which will permit expansion of the program in 1990.

2. \$25 million for the distribution of specifically practical, field-tested and attack related self-help civil defense information to the American people. The necessary information in complete, publishable form already exists and includes, in particular, the Oak Ridge National Laboratory Report, *Nuclear War Survival Skills*.

With this done, at the end of 1989 one American in 40 will have practical information which can be shared with others to save lives while the national shelter system is built and to educate Americans as part of the ongoing civil defense program.

3. \$150 million to continue the current FEMA program at its present level. That program should be directed, however, to complete its system of emergency evacuation plans before the end of 1989. Emergency evacuation should be in place permanently to deal with certain specialized threats with long warning times and temporarily to save lives until a proper shelter system is completed.

4. \$10 million to establish within the Department of Agriculture new rules for the storage of the national food reserves, so that these reserves are placed within walking distance of those Americans who do not live in food producing regions. These rules should be in place and implemented by the end of 1989.

This increase in civil defense expenditures in 1989 of only \$110 million is a small, easily affordable action by which the new Administration can signal its commitment to fulfill the promise in the 1988 Republican Platform; can begin a substantive civil defense program; can revitalize the morale of the civil defense community; and can signal that neither the Administration nor its Department of Defense plans to stand between American families, children, soldiers, and civilians and their moral right to common personal homeland defenses.

Arthur B. Robinson  
Cave Junction  
December 26, 1988