

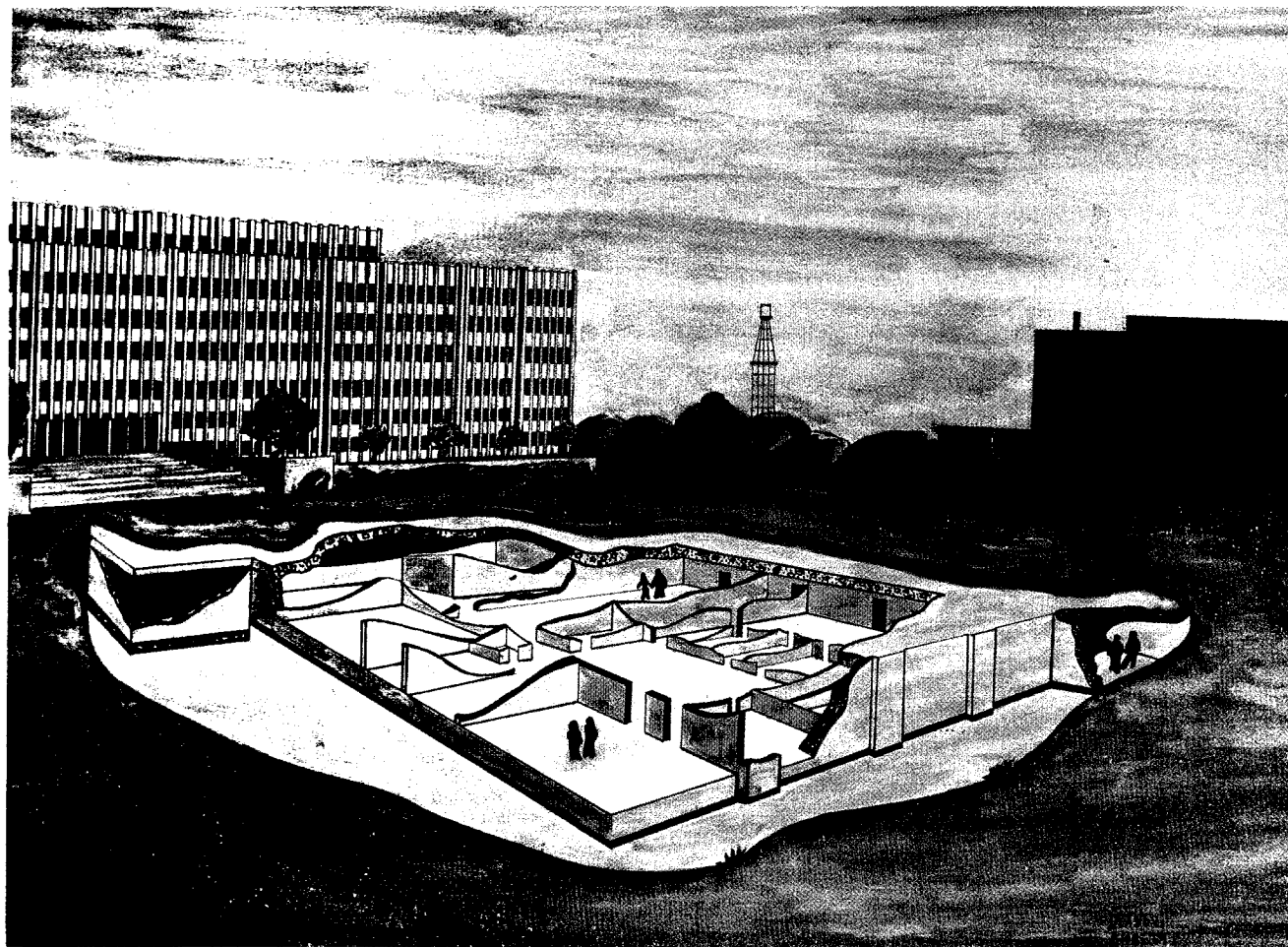
..... AN AMERICAN JOURNAL OF CIVIL DEFENSE

# SURVIVE

VOL. 3 NO. 1

JANUARY—FEBRUARY 1970

See: EMERGENCY MANAGEMENT—It Works In Oklahoma City. Page 2.



CIVIL DEFENSE FORUM

OAK RIDGE CIVIL DEFENSE SOCIETY

ASSOCIATION FOR COMMUNITY-WIDE  
PROTECTION FROM NUCLEAR ATTACK

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CZECHOSLOVAKIA PUTS HEAVY ACCENT  
ON CIVIL DEFENSE

CIVIL DEFENSE AND PUBLIC OPINION

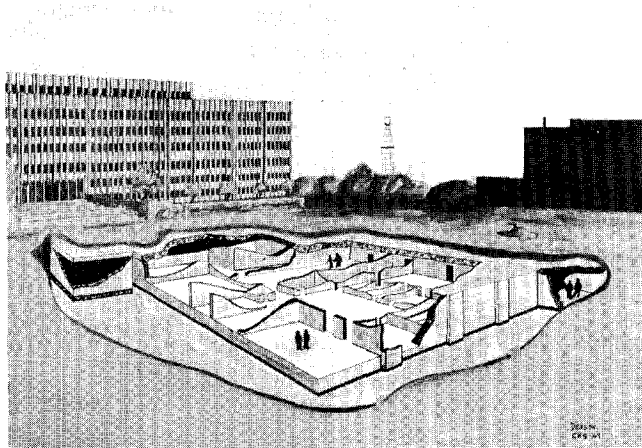
*"The need for an effective Civil Defense is surely beyond dispute. . . No city, no family nor any honorable man or woman can repudiate this duty. . ."*

*— Sir Winston Churchill*

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## COVER PICTURE



Shown on this issue's cover is the surface area of Oklahoma's "State Emergency Seat of Government" and a cutaway plan. Underground corridors lead from state government buildings to the "hardened" EOC. For further information on features of Oklahoma EOCs please turn to page 2.

## SURVIVE

... AN AMERICAN JOURNAL OF CIVIL DEFENSE

Sponsored by

The Civil Defense Forum  
The Oak Ridge Civil Defense Society  
The Association for Community-Wide Protection from  
Nuclear Attack

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Authors are encouraged to submit manuscripts for consideration by the editorial board for publication. Articles (preferably illustrated) should be 1,000 to 1,500 words in length, slanted to the non-technical reader, and oriented toward the civil defense field. Views expressed in contributions to *Survive* are those of the authors and do not necessarily reflect *Survive* policy.

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## Reader

## Comment

*Following is a condensation of a letter to Joanne Levey Gailar.*

Davis, California

Dear Mrs. Gailar:

Your article on "Civil Defense in the Soviet Union" in the March-April 1969 issue of *Survive* was outstanding and certainly something that every thinking American should read. It is not an article that should frighten anyone but it should make people aware of facts upon which to make important decisions about our need for an adequate civil defense program in the United States.

It is true that the political system makes a program like this much simpler to accomplish in Russia. I get the distinct feeling from your article and from a set of Russian civil defense posters that I received recently, printed back in 1958, that they are maintaining a strategic lead in civil defense programs for their people. Can it be that they care more about the survival of their people than we do? I refuse to believe this, but should I? We are the ones who are fighting in Viet Nam and Korea. Neither the Russians nor Red Chinese are sending their youth to these theatres of activity. Sums of money spent there would have provided the civil defense system in the United States that would be substantial if not adequate for our needs. We could have and be improving it daily at *nominal expense*.

During World War II the U.S.A. was the world champion at war. In peace she has maintained top position for about 25 years. Is she suffering from old age or the inefficiencies of the democratic way of life? I hope not and I believe not,

but I'm worried. If we should suffer a worldwide nuclear war we will find out, but I hope and pray that it will not take this to wake us up.

We must dispel fear and apathy by giving something positive and honestly encouraging to replace it. I don't believe the American people have reached the point of no return, but they are getting fed up with more and more of the same in governmental policy. They need to know the facts, the true nature of the threats, and what we can do about them. They need to know what is expected of them in the event of any emergency that arises and who is going to do what at these times.

It is quite ironic that a member of "one nation under God" should have to point to Russia and the leadership they have shown in the protection of her people, compared to that provided by a nation whose government is "of the people, by the people, and for the people."

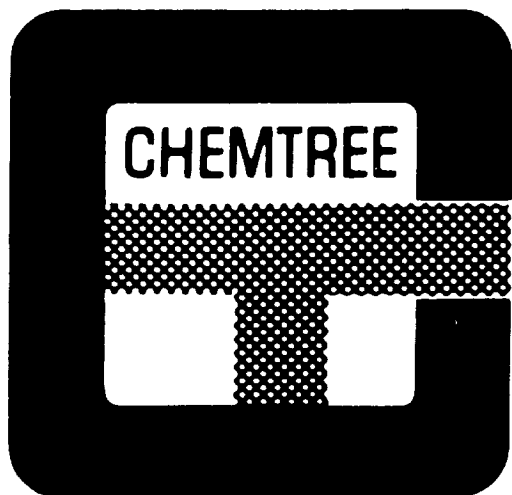
George E. Miller, Jr.

Regional Agricultural Engineer

### Red Cross Counts Hurricane Camille Costs

With 350 staff workers handling 30,000 applications for recovery aid from the Camille disaster area American Red Cross officials reported that to date over \$15,000,000 had been spent in relief to victims. Over \$6,000,000 of this total went for replacement of household furnishings. More than \$4,000,000 represented building and repair costs. Food, clothing and maintenance mounted to over \$2,000,000, and emergency period mass care took about \$600,000. 83% of the total was used in Mississippi, 16.5% in Louisiana and 0.5% in Alabama.

It is anticipated that the final expenditure figure will top out at \$20,000,000 and that the last of the Red Cross staff will leave the area late this year.



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*BLAST protection in American urban areas IS practical. Two outstanding examples are city and state emergency government locations in Oklahoma City.*

# Emergency Management— It Works In Oklahoma City

by John Causten Currey\*

City Manager Robert Oldland of Oklahoma City is a firm believer in emergency plans. The fact that he was city manager of Anchorage when the disastrous Alaskan earthquake struck that city is undoubtedly a factor in his determination to be prepared for any sort of calamity.

When he came to Oklahoma City in 1967, Bob Oldland found an organization and a man to match his enthusiasm for this approach. The city's Director of Safety and Civil Defense, Leroy B. Hansen, has served in that post since 1959.

Hansen's operations are based in a municipal emergency operations center which is located in a blast-protected underground building. This EOC is manned 24 hours a day.

Both Oldland and Hansen argue persuasively that local governments can and will support sound civil defense programs if they are combined with other essential services.

"I do not suggest that we could get along without the plans and tools with which to meet a war or nuclear emergency," Oldland says. "But the standard concept of civil defense is outmoded. The name itself is misleading; it

no longer represents the full range of services which an effective and adequate emergency system provides."

## Planning Covers all Types of Emergencies

Hansen agrees. "Both local and national governments should recognize the need for a single program to plan for, respond to, and recover from emergencies of all types," he says.

*There are 120 Oklahoma communities with civil defense emergency warning systems. These systems have been credited with saving many lives in tornadoes and other natural disasters.*

*Emergency operations centers exist at the state capital and at 139 local points. Of these 52 were built or converted specifically for use in emergency operations of government.*

*(Taken from the Congressional Record)*

Oklahoma City lies at the south edge of the area of greatest tornado frequency in the United States. Some 200 of these violent storms occur each year in north and central Oklahoma. In earlier times, casualties from twisters were often heavy. With modern warning systems, deaths are rare. In the 5-year period 1962-1966, only one death occurred in the state. In 1967, 4 members of one rural family were killed when they waited too long to seek shelter. Oklahoma City itself has a remarkable safety record for the past decade.

Part of the reason is the civil defense warning system. The city's 19 siren towers, and two suburban sirens, are controlled from the EOC. They can be sounded individually, in any selected combinations, or all at once.

Emergency plans also cover flash floods, local area flooding, power failure, civil disorder, major fire, and a number of other possible calamities.

## Salesmanship a Necessity

Hansen works steadily at the public relations side of his job. In addition to encouraging visits to the EOC, he is a frequent speaker at civic functions, explaining various



CD Director Leroy B. Hansen works in his underground office, a part of Oklahoma City's 11,700 square-foot blast-resistant EOC.

*\*John Causten Currey — columnist, political analyst, and top-drawer intelligence expert — counts among his many awards three Freedom Foundation's George Washington Medals.*

phases of his work. He sees the integration of civil defense into the day-to-day pattern of city operations as the basic reason for the remarkable public support for his department.

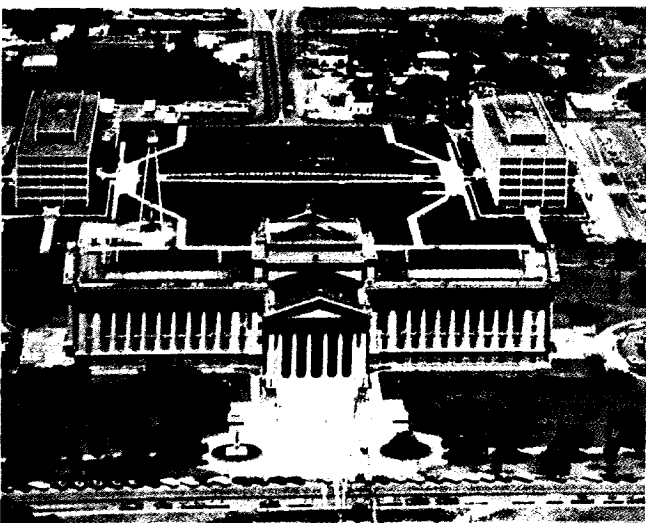
"Before we had today's facilities and coordination, we had to be sold on the idea," says a former city councilman. "Hansen is a great salesman. He has vision and yet is a completely practical man. He convinced the mayor, the manager, and the council. If he had not been so persuasive, that 1962 bond issue for an emergency operations building would never have been on the ballot. It is probably the best single investment in a management tool the city ever made."

The emergency operations center was approved by one of the largest margins in any bond election in Oklahoma City's history. By the time it was completed it represented an investment of about \$650,000, exclusive of land. At present, it is estimated that another \$100,000 has been spent on additional equipment.

The city emergency operations building stands apart from other structures, easily accessible from two interstate expressways and several main avenues. It is entered through a dogleg corridor and a single blast door. The core-and-perimeter floor plan covers 11,700 square feet. The building is designed to withstand a blast overpressure of 30 pounds per square inch, and the fallout protection factor is "something over 10,000."

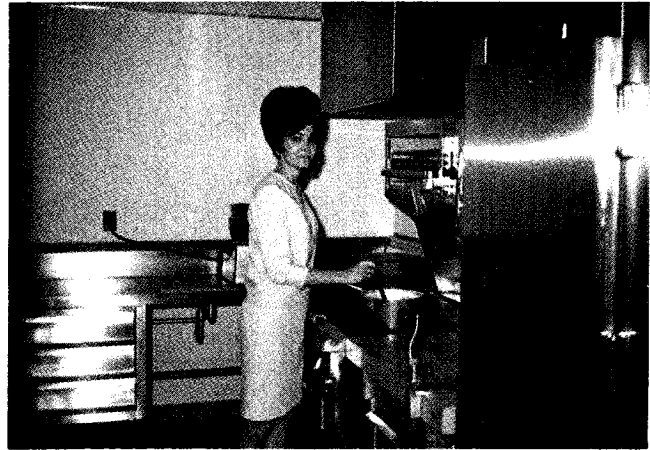
### State Also Digs In

The state legislature had already approved an underground building to house "the emergency seat of state government in Oklahoma" before the city voted on its own EOC. Completed about the time the city building was begun, the state building covers about 18,000 square feet in a blast-protected structure which is, like the city EOC, in



Million-dollar hardened Oklahoma State EOC lies 20 feet under grassed area beyond State Capitol (foreground) in Oklahoma City.

Photo By North American Rockwell Corporation



Stainless steel kitchen caters to the needs of the Oklahoma City CD staff on a day-to-day basis as well as in emergencies. Here staff member Fran Taber warms a pot of soup.

daily use. A long underground corridor between the Sequoyah and Will Rogers state office buildings would serve as dormitory areas in emergency. The 370-foot section between the two 18,000-pound blast doors is lined with travertine marble, and connects at the east, outside the blast doors, with two other underground buildings. A cafeteria seats 400, and across the way there is a 375-seat auditorium. Both, of course, are excellent fallout shelters.

The state emergency center building contains offices of the state civil defense agency, an emergency communication center, and a data processing center with a high-performance RCA Spectra 70/35 computer. In this building, which represents a total investment of \$1,000,000, all lighting and plumbing fixtures and such accessories as clocks and fire extinguishers are shock-mounted. There is an emergency power supply, a 600-foot-deep water well, and a silo-based retractable communication antenna which can be extended 123 feet above the mall in three minutes, including the time it takes to open the silo hatch. The cover can open even if buried under tons of debris.

Both buildings are cheerful, well-lighted, and attractive places to work, featuring filtered constant-temperature air systems. Recent redecoration of the director's suite in the state building (which would become the Governor's suite in an emergency) puts it on a par with executive offices in the newest skyscrapers. Royal blue carpets, walls covered with grasscloth, walnut or cork paneling, or in bright sun-gold, and large planters remove the last vestiges of the "basement" aura of many subsurface buildings.

Oklahoma City's preparation for emergencies would not be the same without such physical plant investments. Yet the physical facilities are more a reflection of official and public acceptance of emergency preparedness than a reason for it. And that is the point most often made by responsible officials in Oklahoma City. ■

Inga Lindblom, Public Information Officer for the Swedish Office of Civil Defense here translates for *Survive* an article on Czechoslovakian civil defense which appeared in *Civilt Försvar*, the official Swedish publication for civil, economic and psychological defense.

# **CZECHOSLOVAKIA PUTS HEAVY ACCENT ON CIVIL DEFENSE**

*Behind the Iron Curtain facts about civil defense are to a great extent considered secret. Information received through official documents and the press is very sparse. Recently, however, some news of Czech civil defense has been received through Czechoslovakian refugees arriving in Switzerland as a result of the Czech political crisis.*

On April 18, 1961 a "total defense" law was enacted in Czechoslovakia. It was said that its aim was to "perfect the defense of freedom and the socialistic order." The law not only anticipates a strong defense through providing for increased fighting forces but above all stipulates a suitable organization of Czech *total* defense. Civil defense measures as well as industrial protection are to be stepped up. The national economy must be geared to defense to a greater extent than has been the case in past planning.

## **Civil Defense for the Citizen**

Civil defense is consequently a part of this total defense of the Czech republic. Its task is to protect the inhabitants from enemy aerial attacks, to recover from the consequences of these attacks and to create a base for a frictionless commercial and industrial life in war. The citizen will have an active role in accomplishing civil defense tasks.

According to official Czech sources great activity was displayed during the period 1962-1964 in the domain of training people in defense matters and in the protection against modern weapons such as nuclear bombs. In Czechoslovakia the Federation for Cooperation with the Army (SVAZARM) cooperates closely. Like the Soviet Union's DOSAAF, SVAZARM has great influence on Soviet civil defense. There is also cooperation with the Red Cross, the Federation for Physical Education and the Firefighting Corps.

## **Industrial Protection — an Important Part of the Organization**

One of the most vital jobs of civil defense appears to be the protection of industry so that production can go on. Factories are therefore well supplied with protective equipment. Also, administrative agencies, newspaper printing shops, and radio and TV studios are protected. Employees are required to enroll in industrial protection classes.

The inhabitants at large do not have gas masks or other protective equipment. This latter fact has up to now been considered in the light of ideological and psychological background factors with reference to the official theory that the Soviet nuclear power protects all peace-loving countries in the socialistic camp.

## **Shelters in New as Well as Old Buildings**

According to law all new buildings must have shelter. Specifications have been issued governing the construction of shelters in the basements of old buildings. There are no public shelters, but it is notable that the Prague subway contains a "subway central" for government use in the event of war.

## **Evacuation and Billeting**

In case of need there must be a way for people, their belongings and other equipment to be moved away from places that are threatened by attack or actually attacked. In

billeting areas residents are required to furnish food and lodging to evacuees and to take care of their possessions and evacuated equipment.

### Extensive Survival Training

At the beginning of 1968 the party organ *Rudé Právo* carried an article which cited the training of the Czech people in defense against modern weapons and survival measures. It revealed that during the years 1962-1964 five million people had successfully completed this training. Of these people 3.3 million had taken what seems to have been military and political courses oriented along these lines.

In 1965 the Minister of the Interior devised a plan for the further training of the people, including first aid, firefighting, protection against biological and chemical warfare and radioactive fallout, and construction of shelters. Czech refugees interviewed in Switzerland, however, appeared to have no knowledge of this training.

### Civil Defense During the Czechoslovakian Crisis

During the Warsaw Alliance's occupation of Czechoslovakia in August 1968 there were statements in the newspapers that the Czech resistance movement used both civil defense personnel and civil defense equipment in establishing communications inside and outside the country. However, as far as is known, no radio transmitters are reserved exclusively for civil defense. Apparently there was some confusion with SVAZARM, which does have special radio units. ■

## Needed In Quake Regions: Built In Shelter

Ninety percent of all those killed by earthquakes are killed because of the failure of people to build earthquake-resistant structures in earthquake-prone areas according to a California Institute of Technology report by Dr. Charles F. Richter. Lateral vibrations on unstable soil literally "shake down" conventional construction.

The continued erection of "economy" buildings in these areas, say geologists, is an open invitation to keep earthquake casualties at high levels. Corrective action lies in the passage and enforcement of practical building codes which clearly outline earthquake-resistant standards of construction.

The method of reinforcing involved also gives a building added protection against storm and nuclear blast. Such reinforcing can be designed to protect against all three threats with approximately the same 90% effectiveness cited for earthquake protection alone. In addition, a building so designed often would have other advantages, among them decreased operational, maintenance and insurance costs over a building-life span of many times that of what we now accept as adequate.

The prospects of invoking such safety measures, however, are not at the moment encouraging.

## People Protection

*(Excerpt of talk by National Director of Civil Defense John E. Davis given before the Las Vegas Rotary Club on October 30, 1969.)*

Gentlemen, I am not here to scare anyone. But I believe all Americans should look clearly at a military threat facing our Nation. Let me describe some of the major elements of this threat rather briefly.

— In the last three years the Soviet Union has more than quadrupled its land-based missile forces — its ICBMs. Today Russia has as many or more ICBMs as does the United States.

— Another point: All indications are that the Soviets are expanding their submarine-launched ballistic missile forces. They have the capacity to equal our own forces, in terms of numbers, by 1975.

— Still another point: Evidence indicates that the Soviet missile forces may have twice the weight-carrying capability — or nuclear payload — of our own missile forces. This is the way Air Force Secretary Robert Seamans described it in testimony before a Senate committee, and I quote him:

"With the ICBM launchers now under construction and their existing submarine-launched ballistic missiles, the Soviets will have over twice as much total missile payload as the entire U. S. land and sea-based missile force. This payload advantage could present a serious threat to the United States."

There is no doubt about it in my mind. The threat exists and it is growing. Many people don't like to think about it. But our job — yours and mine — is to think about it — and to *prepare*.

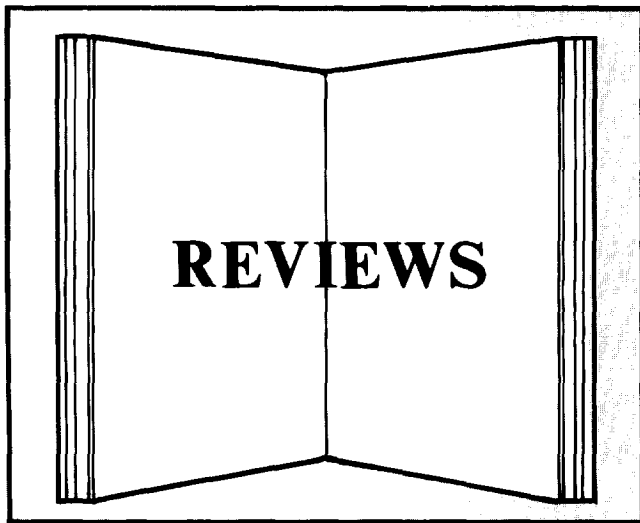
There is much we can do together to prepare. And this brings me to the subject of civil defense — a *people-protection* program — the only program of its kind in our entire structure of national defense. If attack should come, this one program called civil defense could save millions and millions of lives. And human life is our most precious resource — the lifethread of our Nation.

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## COMING...

January 16-17 — Annual *Survive* Meeting, Gainesville, Fla.  
March 29- — U. S. Civil Defense Council  
April 1 Meeting, Washington, D. C.  
April 5-9 — National Association of State CD Directors, Spring Conference, Washington, D. C.

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## Shelters In New Homes

SHELTERS IN NEW HOMES — a 32-page report appearing in the October 1969 issue of *Homebuilding*.

*Homebuilding* is the official organ of the National Association of Home Builders. It is published monthly for the professional builder and is now in its twenty-fifth year.

It should be encouraging to civil defense proponents that a leading American magazine for the home construction

The provision of better housing within the reach of all Americans is a matter of urgent concern in which the National Association of Home Builders shares. Toward this end we are continuously trying to improve security, shelter, and livability in the homes we build. Homes being constructed today will be lived in for many years. Therefore, it is important that we build homes today that will fulfill tomorrow's requirements.

This builders manual, prepared by the NAHB Research Foundation, shows how any home builder or owner can provide an area that protects against fallout radiation and windstorm without sacrificing its day-to-day usefulness.

Eugene A. Gulledge, President  
National Association of Home  
Builders

*Note: NAHB President Gulledge is now Commissioner of the Federal Housing Administration and Assistant Secretary of Housing and Urban Development — Ed.*

industry has decided to give home shelter possibilities (in new construction) a thorough treatment. It is particularly significant because it provides a family with an alternate solution to the public shelter and its necessary discipline and crowding (as well as its obvious advantages).

The *Homebuilding* article gets immediately to facts, to cases, to plans, and to costs. It gives 16 shelter plans, one for each of 16 different types of houses, with drawings, specifications, and cost figures. It offers 11 suggestions for dual-purpose use of shelter space and points to the economy of shelter design in a new home. It recommends that pleasant shelter space be offered to the owner as one of many modern new home features, "as a reasonable approach to meeting family needs and not from a 'fear' standpoint." It accents also the fact that this "bonus room" presents no technical problems to the experienced builder and that it is a good selling point.

Significant also is that protection against storm is underlined as an additional shelter attribute. Basements of course offer some storm protection in any event. Two of the 16 shelters, however, although above ground, provide excellent storm shelter due to the fact that reinforced concrete walls are tied in with reinforcing dowels to reinforced concrete ceilings. (Other general recommendations are given for providing storm resistance.) A shelter such as this would be effective against a hurricane like Camille or a tornado — or moderate blast from a nuclear weapon.

*Homebuilding* and the National Association of Home Builders have made a real contribution to public safety. The article ends with this observation from Jack Hoerner who has supplied over 3,000 home shelter spaces in the Denver area:

"This is the first time in modern history that American home owners and builders are called upon to not only help themselves but contribute to the national well-being by deterring future nuclear blackmail. In addition, because the construction is so simple and inexpensive, the home fallout shelter should be as common as the second bath. The NAHB Research Foundation is to be commended on its leadership in this field. Everyone should remember that in any emergency, pouring money over paper plans won't construct even one 'instant fallout shelter'."

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## Emergency Health Service Digest

Fifty-seven recent articles on disaster medical services are expertly summarized in the first issue of the *Emergency Health Services Digest*, Public Health Service Publication No. 1071-D-8. Aimed at doctors and other professionals faced with problems of mass casualties the digest covers disaster situations ranging from realistic exercises and highway accidents to battle and nuclear attack. The bitter problems facing those who must organize and direct mass casualty care are given refreshingly frank evaluations. One article entitled "Aftermath of a Deadly Twister", for instance, looks at the vicious May 1968 Midwest tornadoes



from the point of view of the overwhelmed hospital staffs and how they might do better if confronted with a similar demand in the future. One doctor says:

"Next time we won't do any surgery; we will stop bleeding and treat for shock, then transport as many victims as possible to nearby hospitals for surgical repair."

Other subjects covered include the use of Packaged Disaster Hospitals, effective emergency planning, psychological aspects of disaster, triage, and communications. Copies of the digest are on sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 at forty cents each. The digest also offers reprints of selected articles. These may be obtained from:

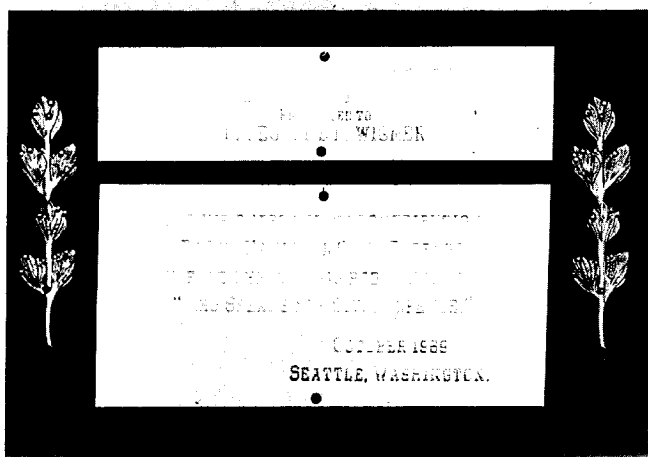
Robert O. Stewart, Chief of Training  
Division of Emergency Health Services  
Public Health Service  
6935 Wisconsin Avenue  
Chevy Chase, Maryland 20015

Mr. Stewart also welcomes comments and suggestions.

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## ***Who Speaks For Civil Defense* Receives 'Best Book Award'**

At its annual conference in Seattle (October 6-11, 1969) the United States Civil Defense Council presented its 1969 "Best Book Award" to Dr. Eugene P. Wigner for his book *Who Speaks For Civil Defense*.



*Who Speaks For Civil Defense* is a critical appraisal of American civil defense. Among those writers contributing to it are: Walter Cronkite, Stuart L. Pittman, Neal FitzSimons, and Herbert Robach.

*Who Speaks For Civil Defense* is available through bookstores or direct from Charles Scribner's Sons, 597 Fifth Avenue, New York, New York 10017. (Paper back — \$1.65; hard back — \$3.95.)

## **EDITORIAL**



### **Rhode Island Takes One Step Forward**

A *good* example of a *good* plan against the fallout radiation effects of nuclear attack is the new Rhode Island Community Shelter Plan. Elsewhere throughout the country community shelter plans are being devised for separate communities and counties, and sometimes groups of communities and counties. Rhode Island has drawn up a plan for the entire state. It is a model of coordination and clarity sired by the Rhode Island Council of Defense, supported by local civil defense directors, and produced by the Rhode Island Statewide Planning Program. In line with federal Community Shelter Planning policy the plan was printed as a 40-page supplement to the Providence Sunday Journal on June 29, 1969. It gives a graphic picture through the use of 31 maps of those portions of Rhode Island where fallout shelter can be provided for residents. (This amounts to somewhat less than half the total state area, but because of urban-rural population distribution and the fact that most shelters are in built-up areas about four-fifths of the population can be sheltered.)

In line with federal planning practice the Rhode Island plan avoids covering other major casualty-producing effects of nuclear weapons. The plan does say: "Fallout may arrive within 20 or 30 minutes, close to the place the weapon exploded," which means that ground zeroes of nuclear detonations must be assumed to be very close to the borders of Rhode Island if not within them. The highly industrialized vicinity of Providence, where seven-eighths of the population of Rhode Island is concentrated, appears to be a logical area to fit in with this 20-minute fallout anticipation.

The Rhode Island plan does not openly consider the total nuclear defense problem. It does not mean to. But by not covering blast and fire problems it may give Rhode Island citizens the impression that a plan has been presented that provides for the all-around protection needed in and near possible target areas.

The progress marked by the Rhode Island Community Shelter Plan achievement is a big step forward in American civil defense planning. If this step could in turn stimulate a serious consideration of the question of good *urban* shelter it would indeed do much to enhance our survival capability.

(WM)



Maine's Bernice Rideout

## BERNICE RIDEOUT

### URNS MAINE TO

### CD EDUCATION

Maine is typical of the United States as a whole in that her cities have more than ample public fallout shelter while her thinly populated areas lack such facilities. With over 85% of her population classified as small town and rural the shelter problem focuses outside the modest urban centers of Portland, Lewiston and Bangor.

A backwoods do-it-yourself tradition, basements in over 80% of all Maine homes, and a remoteness from prime nuclear target areas have combined to underline education as a logical road to survival in nuclear attack. This is the approach taken by Maine's veteran Chief of Community Services, Mrs. Bernice Rideout, who introduced survival training into the state's elementary, parochial and public schools in 1963. For the lower grades "Ready the CD Safety Squirrel!" is cleverly exploited as an inflatable CD symbol. Somewhat like "Smokey the Bear", "Ready" informs the younger children that survival preparations for his long winter can just as easily be applied to survival preparations at home for a nuclear fallout situation. A more advanced program is available for Grades 5 through 8.

Mrs. Rideout's program has expanded with appropriate sophistication at the upper levels to embrace the entire Maine school system. It broke into TV in 1965. It reached a total of over 100,000 Maine pupils. Requests from other states and from universities have come to civil defense headquarters in Augusta. In 1966, Mrs. Rideout was invited to the OCD Staff College at Battle Creek, Michigan to outline the Maine school program to civil defense officials from across the nation. In 1968, OCD conducted a formal study on results of the Maine program which was published as *A Pilot Study of Young American's Beliefs and Knowledge About Civil Defense*.

In 1969, Maine's Governor Kenneth M. Curtis issued a proclamation making civil defense a part of Maine's education structure. (See opposite column.) Although strikingly successful throughout the state, CD officials are careful to point out that civil defense instruction in schools is not mandatory.

Bernice Rideout's CD pioneering has paid off. ■

*State of Maine*

**Proclamation**

WHEREAS, the constantly changing conditions of the world dictate the continued preparation for emergencies, be it nuclear or natural; and

WHEREAS, the threat of manmade disaster is an evergrowing fear; and

WHEREAS, each political subdivision of this State is authorized to establish and shall establish a local organization for Civil Defense and Public Safety in accordance with the State Civil Defense and Public Safety plan and program; and

WHEREAS, the school child of Maine is the most valuable asset to our State; and

WHEREAS, "In the event of enemy attack it is imperative that the school children of this State receive maximum protection and, when possible, be reunited with their families."; and

WHEREAS, each school system should formulate workable, written plans and policies for the protection of all school children under emergency situations;

NOW, THEREFORE, I, Kenneth M. Curtis, Governor of the State of Maine, do hereby proclaim that

**CIVIL DEFENSE EDUCATION**

be an integral part of the background of the faculty, administration, and students of all school departments.

By the Governor

Joseph V. Edgar  
Secretary of State

A true copy.

Attest:

Joseph V. Edgar  
Secretary of State

Given at the office of the Governor at Augusta, and sealed with the Great Seal of the State of Maine, this Tenth day of June, in the Year of Our Lord, One Thousand Nine Hundred and Sixty-nine, and of the Independence of the United States of America, the One Hundred and Ninety-third.

Kenneth M. Curtis  
Kenneth M. Curtis

# SO BE IT!

-by Don F. Guier

## *The Silent Majority*

In recent months a forgotten campaign phrase — “the silent majority” — has been on more lips and more front pages than ever.

Millions of Americans who seldom speak out on public issues have found that the term fits them. Silent no longer, they have been bombarding Congress, the White House, local and network television, and the nearest editor.

President Nixon's November Viet Nam speech and Vice President Agnew's remarks about television and sections of the press have won unexpectedly large and overwhelmingly favorable response.

Many of our national problems might not have grown to such serious proportions if the silent majority had spoken up sooner. But there is another side to that coin: the people do not speak out until national leaders raise an issue publicly, take a position, and call for support.

When our leadership is silent, the majority remains silent; when our leadership speaks up, the majority responds.

Civil defense is one of the national issues on which there is an impressive majority which is unfortunately silent.

About 85% of Americans report that they are favorable to civil defense.\* They also believe that Democrats, Republicans, the Congress, military leaders, scientists, the local mayor, the local editor and local clergymen are favorable, too.

Americans almost unanimously (95%) disagree with the idea that there is no need for civil defense because nuclear war is impossible. Over 90% disagree with the notion that there is no need for civil defense because our present military defenses are adequate. Over 55% think their chances of surviving a nuclear war are less than 50-50. Over 90% agree that civil defense would save “many” Americans lives in a nuclear attack.

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\*Statistics based on data from American Views on Civil Defense in the Cold War Context—1966. Department of Sociology, University of Pittsburg (Jiri Nehnevajsa, Principal Investigator.)



About 90% consider it important to provide adequate funding for civil defense among the programs competing for funds before Congress. Over 85% disagree with the argument that money which might be spent on civil defense would be better invested in more military defense.

About 85% of Americans believe it would be desirable to have fallout shelter throughout the nation, plus shelters against blast, heat and chemical and biological agents in large cities; and 75% consider it desirable to be able to evacuate people near military bases and in some large cities.

On the other hand, our pro-civil defense majority is silent as far as Washington is concerned. The fact that there is very little mail on civil defense leads Washington to assume that there is very little interest or support. This assumption has caused federal civil defense appropriations to decline to the point that they can no longer match the appropriations from scarce local funds by state and local governments. Less than a dime of each hundred dollars the federal government budgets for defense is spent on civil defense.

It is apparent that federal support for civil defense will languish until the majority of Americans make known to Washington their desire for better preparedness. It is equally apparent that the majority will remain silent until our leadership raises the issue, takes a position, and calls for support.

Since the end of our monopoly of nuclear weapons, our national leadership has been silent on civil defense except for a brief period after President Kennedy's 1961 meeting with Krushchev and the ensuing Berlin Crisis.

The comprehensive study of civil defense which President Nixon requested of General Lincoln last March has just been completed. If this report, like earlier studies, makes the case for a strong civil defense program, perhaps the civil defense silence will be broken.

# CIVIL DEFENSE AND PUBLIC OPINION

—Commentary on On A Study by T. H. Atkinson

*Dr. T. H. Atkinson has summarized<sup>1</sup> the very interesting results of his investigation of public civil defense response to the Berlin Crisis of 1961. His study is particularly valuable in that his conclusions are not just idle speculation but are backed up by numerical data. His findings are of special interest to those involved in the national civil defense program:*

The crisis period starts at the time of the Vienna Conference between Kennedy and Krushchev that ended in discord over Berlin on June 4. The rise of tension about this time is shown in Fig. 1. Its peak was reached on October 28 when U. S. and Soviet tanks faced each other at 100 yards across the Berlin Wall. From that point on tension began to cool and declined rapidly through November and December.

The amount of tension was computed from (1) the frequency of hostile events, (2) the degree of hostility in each national action, (3) the reports of journalists and political analysts, and (4) indications from polls of public concern as to the threatening nature of the crisis.

During the crisis period, President Kennedy conducted an extensive public and congressional campaign for an expanded and reorganized civil defense effort. His program stressed individual and local protection procedures, especially shelter building and food stockpiling. Although statements were constantly emanating from cabinet-level officials, especially the Secretaries of Agriculture and Defense, the major event of the campaign was a nationally televised speech by Kennedy on July 26 dealing with civil defense and the Berlin Crisis. His speech was followed by an appeal to the Congress for a record civil defense allocation, which was approved in August. New programs were then planned and coordinated through the Office of Civil Defense in the Department of Defense.

## Public Interest in Civil Defense

A number of public opinion (Gallup) polls were taken during this period, and their results are illustrated by the bars in Fig. 2. These bars indicate the percent of the people queried that admitted stockpiling food to be used if war

Figure 1. United States-Russian tension over Berlin during 1961 crisis.

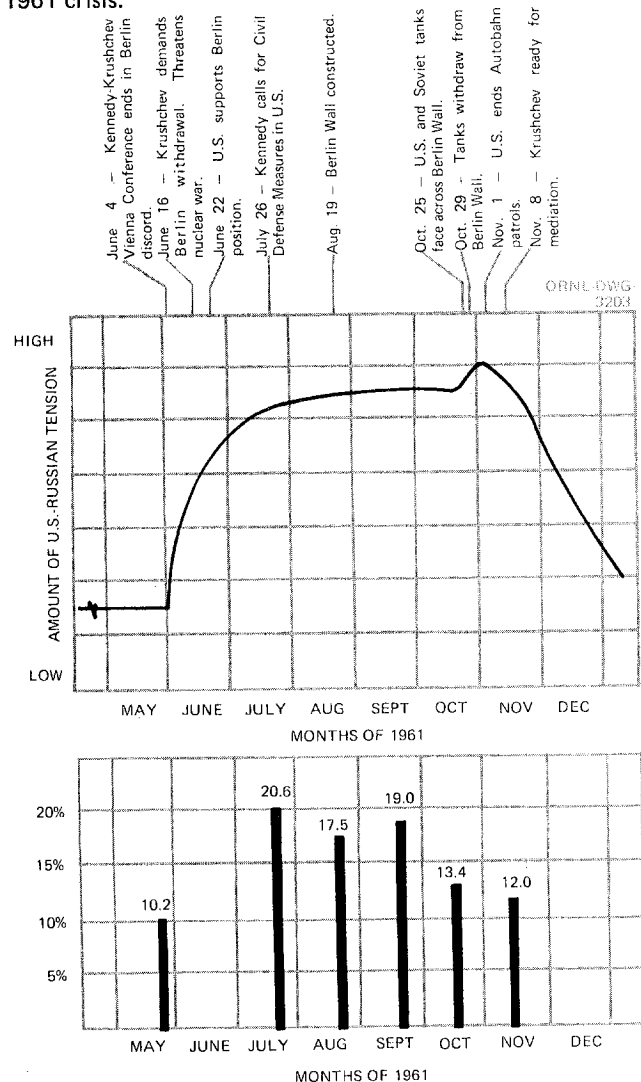


Figure 2. Percent of U.S. Population Stockpiling Food during 1961 Berlin Crisis.

<sup>1</sup> T. H. Atkinson, Annual Progress Report, Civil Defense Project, March 1968 - March 1969, page 42 (Oak Ridge National Laboratory Report ORNL-4413 Part 1). A more detailed report is in ORNL-4444.

came. Food stockpiling was taken as a good indicator of civil defense activity because it could be started quickly and was relatively inexpensive.

These bars indicate that a little over 10% of the population had taken precautions against attack before the crisis began to heat up. The number of concerned people rose rapidly to a point above 20% as tension rose but began to relax back toward the pre-crisis level long before the international tension reached its climax. This verifies that people do not maintain a high state of alert over a long period of time but tend to adjust to each level of tension. Thus, although rapid rises in tension may serve to jog people into supporting the national civil defense program, such support is not likely to be sustained. The only real hope for public support of an adequate federal program may lie in long-term education.

### Civil Defense Response to a Crisis

The polls also indicated what *types* of people responded to the crisis by stockpiling food. They show that a person who approved of President Kennedy's action as a president was just about as likely to take action as one who did not. The same was true for those who expected war and those who did not. Similarly, it made no significant difference whether a person approved or disapproved the use of military force to maintain the status of Berlin. On the other hand, those who were not aware of the Berlin Crisis at all or who had no opinion about the questions mentioned above were less likely to stockpile food than those with more awareness or with a definite opinion. It is, perhaps, not surprising that the personal qualities that caused a person to become aware of a crisis and to form definite opinions also contributed to his ability to respond through civil defense measures. It is interesting, for instance, that 10.8% of those *unaware* of the Berlin Crisis were stockpiling food.

Atkinson employs a statistical technique to determine a score for each of several variables to determine how strongly it influenced the population to stockpile food during the crisis. The results are shown in Table I. A low score indicates a high rank, that is, considerable influence. His analysis showed that education, income, awareness, and race all had significant influence. Civil defense response to the crisis was more frequent among the better educated, high income, and white groups. It is interesting to note that income and education exert their influences essentially independently of each other. Thus a man with higher income does not appear to be more likely to respond simply because the odds are higher that he has a better education.

### Education and Income Response with Time

Having identified education and income as the most important factors determining civil defense response. Atkinson then proceeds to analyze how people in various

Variable	Average Rank
1. Education	2.80
2. Income	4.40
3. Awareness of Berlin	5.60
4. Race	5.80
5. Religion	6.40
6. Region	6.60
7. Sex	6.80
8. Political party	7.20
9. Attitude toward Kennedy	8.20
10. Force in Berlin	8.75
11. Expectation of war	9.00
12. Age	9.20
13. City size	9.40

Table 1. Average Rank of Attitude and other Variables as Predictors of food stockpiling.

education and income groups are affected by the passage of time. His results are plotted in Figs. 3 and 4.

The response according to income groups in Fig. 3 shows that the high income group differs from the other two in that its response curve rises much more rapidly, reaching an appreciably higher point. It is important to emphasize that this dependence on income is present even though stockpiling food is a relatively cheap matter. Evidently the poorer income groups feel the pinch of even this inexpensive step.

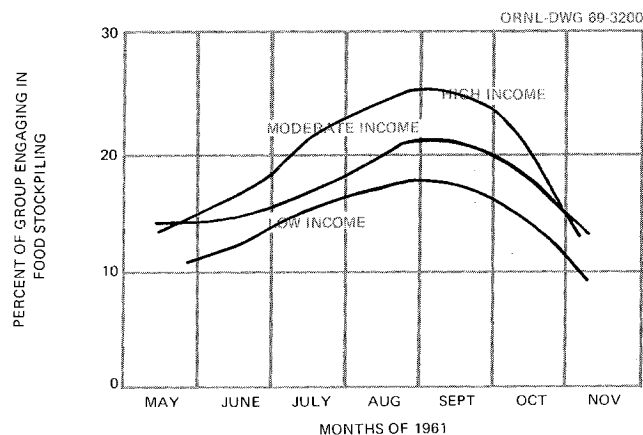


Figure 3. Food Stockpiling for Income Groups during the Berlin Crisis.

Fig. 4 shows that people educated to high school and college levels respond much earlier and more strongly than those with less education. This suggests that the "word" filters down to the less education levels after first passing through higher levels.

### Policy Suggestions

As a result of this study, Atkinson has the following

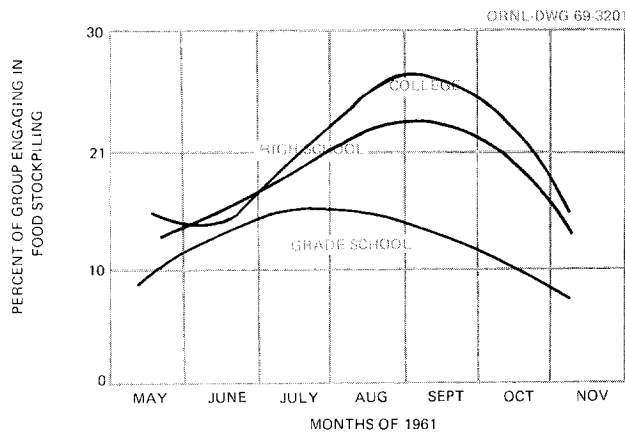


Figure 4. Food Stockpiling for Educational Groups during the Berlin Crisis.

suggestions for those associated with government civil defense programs:

1. Given an emphasis on private civil defense measures the percent of the population adopting such measures will be small (20%), even under conditions such as those existing during the 1961 Berlin Crisis.
2. Maximum preparations under such conditions will probably occur shortly after the increase in tension and may begin declining even if the crisis continues.
3. The degree of acceptance of private civil defense measures will vary with education and income; given any effectiveness of the measures, this variation will affect the characteristics of the population surviving an attack.
4. The educational characteristics of that surviving population may vary with time elapsed during the crisis: the relative size of the higher-education proportion may be greatest early in the crisis and may decline as the crisis progresses.
5. Attempts to gain acceptance for private civil defense programs should be formulated according to the principles of the "two-step flow": that is, the programs should be sold to the opinion leaders first, and they, in turn, will disseminate them to the rest of the population
6. The acceptance of private civil defense programs will be influenced by income level even at the lowest levels of investment. This differential suggests that public shelters would provide more nearly equal protection for all United States citizens.

This study indicates that a completely adequate federal civil defense program cannot rely on voluntary action by the population as a whole. Well stocked shelters for everyone would have to be furnished by government prior to the time of a nuclear attack if the population is to be saved. (AAB) ■

## ACTION AND REACTION

by Herb Sawyer

### Life And The Exchange Ratio

Latter and Martinelli's chapter on "Active and Passive Defense" in the new book *Survival and the Bomb* (E. P. Wigner, Editor, Indiana University Press, 1969) is an outstanding discussion of factors determining the optimum defense of civilians. However, their concept of the "exchange ratio" — the ratio of the defender's cost of protecting a resource to the enemy's cost of destroying the resource — unduly reduces the justification for strong civil defense measures unless qualified in several particulars.

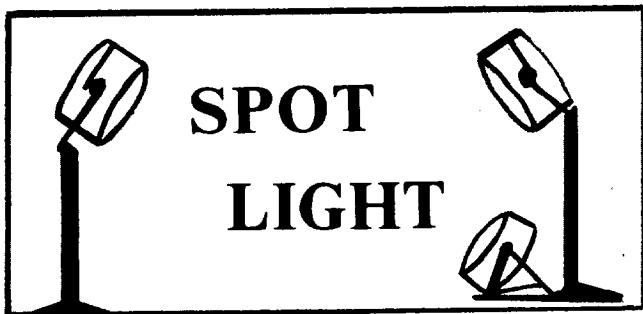
One important qualification was stated by Latter and Martinelli themselves: a wealthy nation can afford an unfavorable exchange ratio. For example, the United States could afford to spend more for civil defense than an attacker could spend in offsetting this defense.

Another qualification is that an exchange ratio, which because of high population density initially favors attack, deteriorates during the course of the attack because the attack reduces the density. Obviously marksmanship is a factor in the deterioration.

An example indicates the most important qualification. Obviously the United States would not spend billions to protect its population of deer even though the cost of protection were less than the cost to the enemy of attack. Nor, if the exchange ratio favored attack, would an enemy spend billions to annihilate our deer. This example suggests that additional factors in the balance are the value assigned by the defending nation to threatened resources and the estimated value to the potential attacking nation of destroying these resources.

A nation's urban civilian population is a resource for which the difference in these values has perhaps the strongest unbalancing effect, and this effect favors strong civil defense. With blast shelters, an urban attack destroys large areas of above-ground facilities and materiel and small pockets of the sheltered people. For facilities and materiel, the values of preservation to the defender and destruction to the enemy are about equal. However, preservation of civilians, who represent the future of a nation, should transcend all other values of the defending nation (notwithstanding our present contrary national policies on civilian defense), whereas civilians stripped of above-ground facilities and materiel will have little effect on the outcome of war, and their destruction will have but little value to the enemy (unless the enemy perversely aims at genocide).

Thus, the shelter spending which can be justified economically is equal to an important fraction of the value of the human life involved. This justified spending may be 10 to 1000 times the enemy's cost of killing, and also perhaps 10 to 100 times the actual cost of comprehensive protection. Moreover, this justified spending is probably 1000 to 100,000 times what we are now spending.



#### CD PROGRAM ZOOMS (IN CHINA)

Rising tension and border incidents between China and the Soviet Union have stimulated defense preparations in both countries. Overt signs of snowballing Chinese civil defense activities, according to reports coming out of China during the past three months, include these:

a. *Shelter construction.* Tunnel complexes, both urban and rural, are being built on a crash basis. One such complex is the extensive network spreading under Canton. Other types of public shelter are also being pushed hard. Expedient shelter comes in for special emphasis.

b. *Attack drills.* Simulated attacks, with Chinese planes adding realism, trigger mass shelter occupation exercises and the coordination of other defense measures by large segments of the Chinese population. Attack warnings have been improved and standardized.

c. *Civilian weapons training.* Men, women and children are being schooled in the handling of firearms and in defense maneuvers. Dummy weapons are widely exploited. Population shifts, where feasible, are made to make defense employment of civilians more effective.

d. *Food reserves.* In spite of painful food pinches in China, emergency food stocks are now being strategically located, and an effort is in progress to build up substantial grain reserves.

e. *Evacuation.* Plans for relocating non-essential persons to rural areas have been drawn up. To a limited extent these plans have already been tested. In the event of a crisis build-up or other reasons for anticipated war they could be quickly implemented.

Labor requirements to gear civil defense preparations to a new high plane are furnished largely on a "moonlighting" basis. Although this practice is cause for some complaining the people are reported as being generally enthusiastic about the task of home defense. It is, in fact, viewed by some Chinese officials as having a valuable and timely unifying effect.

McAlester-Pittsburg County Civil Defense Agency  
McAlester, Oklahoma

Miss Randine Chism  
Circulation Manager, *Survive*

Dear Miss Chism:

Again we wish to congratulate you on the contents of *Survive*. This is one magazine we wish could be made required reading for every elected and appointed government official throughout the United States of America. If this could only be accomplished we feel certain that in a very short time awareness of the need for a strong National, State and local civil defense posture throughout the country would become a reality, once the distorted picture presently being laid before our people became clear through constant reading of *Survive*.

Harold L. Horton  
Director

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# WHAT WE REALLY WANT—

by **Edward Teller**

*Edward Teller addressed the United States Civil Defense Council in Seattle on October 11, 1969. Complimenting the members of the Council on their perseverance and dedication in the face of overwhelming odds he noted that Washington was now taking a new and long look at the need for a realistic civil defense program. Following is an excerpt from Dr. Teller's talk:*

It has been stated that a nuclear attack may wipe out mankind. This is nonsense. The people who say such things either do not know the facts or are willfully misleading us. What has to be said is that in a nuclear attack a country like the United States will cease to exist if we are unprepared. And to be prepared means not only saving life. It means that we must be able rapidly to recover. We must be prepared to continue to exist and function under a nuclear attack . . .

What we really want — and this has been said often and is correct — what we really want is not to *survive* a nuclear war. What we really want is not to *have* a nuclear war. In this sense the idea of deterrence is even reasonable. I claim that the best deterrence that anyone can imagine is an effective civil defense. Missile defense is a good deterrent. The fact that we are proceeding in that direction is a sign that civil defense is not far behind. But if war should come, even if we have missile defense, even if we have civil defense, there will be very terrible destruction. We should avoid it if we possibly can . . . The main point is this: I doubt that anyone will ever attack us with nuclear weapons unless he is confident that he can wipe us out. If we can make sure that as a nation we shall survive we will have abolished the incentive for the Russians, for the Chinese, for anybody to attack us.

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IN THE MARCH-APRIL ISSUE:

## **IS THE SOVIET CIVIL DEFENSE PROGRAM *REALLY* BETTER THAN OURS?**

Joanne Levy Gailar's usual exhaustive research makes her candid conclusions provocative, authoritative and definitive.

## **THE QUESTION OF BLAST SHELTER — AS SEEN FROM FRANCE**

Former French CD representative to NATO and long-time head of French shelter research, General Pierre Teissier pulls no punches in probing blast shelter limitations and possibilities.