

THE AMERICAN JOURNAL OF CIVIL DEFENSE

SURVIVE

MARCH - APRIL 1972

See
THE FLORIDA PRIMARY
— Page 4.

EDITORIAL...

DID YOU KNOW?

When you say "civil defense" in polite society today, as the man says, you "smile." The term brings to the mind of the average American:

- An abandoned shelter that led a useless life,
- A World War II tin-hat block warden,
- A retired colonel plugging a "lost cause,"
- Billions down the drain,
- Nuclear war and the end of the world.

All of it to him ridiculous or horrifying, or both.

But to a potential enemy it's good. Very good. An America unwilling to defend itself, its citizens, is the answer to his prayer. It strips the United States of any effective defense. The enemy propaganda agent finds his cards are all trump.

Civil defense has all but been buried in America. The Federal Government backs off from its own program. The press is silent or contemptuous. "Priority programs" push it aside. Political leaders are wont to see it as an issue which their constituents understand poorly and view with distaste. So they demur. They hedge their negative stand by making sure that there is a civil defense structure — a hierarchy hamstrung with crippling limitations that can be provided with activities and statistics that make it look productive.

The enterprising public information section of the federal Office of Civil Defense has just begun a new series of designs called "Did You Know?" We should like to steal its idea for this editorial. For instance:

DID YOU KNOW that Sweden has extensive blast shelter for its urban centers? DID YOU KNOW that Switzerland has the same? And Russia? And Norway? And Denmark? And The Netherlands? And China? And other countries? And

DID YOU KNOW that the United States has *no* blast shelter program?

DID YOU KNOW that other countries spend two, three, four, five and more times as much per capita as the United States, the "richest country on earth," does on civil defense?

DID YOU KNOW that Russia has highly organized plans to *thin out* population concentrations in the event of international crisis and that the United States avoids such planning? Also that Community Shelter Planning in the United States calls for moving people to central urban shelters and thereby *increasing* population concentrations (i.e. *creating* targets)?

DID YOU KNOW that Russia has developed the ABM (anti-ballistic missile) for the protection of cities and that the United States has steadfastly declined to consider ABM protection for its cities?

DID YOU KNOW that because of these and other civil defense preparedness facts the United States in a nuclear war stands to lose

over

ten

times

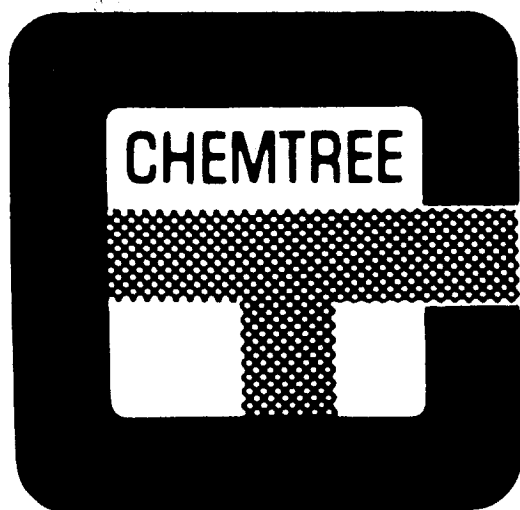
as many

killed

as its chief rival the Soviet Union????

DID YOU KNOW that this imbalance means that the United States presents itself to an aggressor as the world's *number one nuclear target*?

DID YOU KNOW that strong political leadership could correct this situation?



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"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

SURVIVE

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COVER PICTURE

Oil painting by John Caithness. Property of Col. and Mrs. Charles H. Pozarnsky.

Whereas the Federal Government now provides a considerable amount of assistance, it remains for the city to withstand the first massive onslaught of the disaster. The city stands alone during those first frightful hours or perhaps days, and it is during this initial period of time when the good building codes, the good communications, the good decision making, and the good planning pay off in terms of lives and property saved. What is done or what is not done during this early period more than anything else will determine how well the public trust has been preserved.

—Mayor Edwin W. Wade
Long Beach, California

SURVIVE

THE AMERICAN JOURNAL OF CIVIL DEFENSE

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Authors are encouraged to submit manuscripts for consideration by the advisory 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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Free-swinging freshman Congressman Floyd Spence is the product of a football scholarship at the University of South Carolina. Captain of the track team and basketball player, Spence also collected highest scholastic and student government honors. He brought this same fire and leadership to law school and to civic, military and political life. At 43, Spence is a veteran South Carolina lawmaker and now, on the Washington scene, an outspoken proponent of a national defense posture that will serve to keep America viable and a cornerstone of world peace.

SOVIET ARMS BUILD-UP AND THE POLICY OF "ASSURED DESTRUCTION"

by CONGRESSMAN FLOYD SPENCE



The annual Soviet Armed Forces display on November 7, honoring the revolution of 1917, did not show any new missiles or strikingly new weapon systems. But that is certainly no cause for complacency or rejoicing. The build-up of the Soviet arms arsenal and their expansion of defense research and development in search of new and better weapon systems continues at a steady pace.

In his speech at the Moscow ceremony, Soviet Defense Minister Marshal A. A. Grechko stressed again that "the most important task is to raise the defense capacity of the USSR, the combat power of the Soviet armed forces and their constant preparedness . . ."

In line with this statement, it is significant that this year's military parade in Moscow was seconded by a display of Soviet naval strength in the port of Havana, Cuba. A naval detachment consisting of two submarines and two submarine chasers, under the command of Rear Admiral N. V. Soloviev, arrived in Havana several days before the November 7 commemoration to participate in the Cuban celebrations. The Soviet vessels displayed anti-aircraft rockets, and atomic missiles were clearly visible on the decks of the larger submarine chaser. Friendly Cuban visitors queued up on the piers in long, curious lines and were invited aboard for a close-up look.

The menacing language of this show of strength in American waters should not be overlooked or misunderstood. This is the first time the Soviet armed forces have ever celebrated their revolutionary holiday in any official way in the waters of the North American continent.

Ever since the time of Lenin, the Communists have said continually that they must gain not only a strategic superiority but a complete and effective supremacy over the capitalist world -- in weapons technology, armed forces

strength, economic capacity to produce decisive weapon systems, and psychological and moral readiness to use these weapons. That was what Khrushchev meant when he used his famous phrase "we will bury you." The Soviets have behaved according to their statements, but for some strange reason, which I confess has always baffled me, their pronouncements are considered by too many Americans to be only so much meaningless propaganda.

Many people, including leading government officials, expected and hoped that after gaining parity, both the United States and the Soviets would level off and stop further expansion of their weapon systems.

In 1968 we agreed to join with the USSR in negotiations on strategic arms limitations, the so-called SALT talks. The United States at that time had 1,054 ICBM's, 656 SLM's and over 600 long-range bombers; the Soviet Union had a total of 600 ICBM's, including 100 heavy SS-9's. Since 1968 there have been five rounds of SALT, alternating between Helsinki and Vienna. During the three years of negotiation, the Soviet Union has increased its ICBM arsenal by about 900, to the present figure of about 1,500 or 1,550 units, including approximately 300 SS-9's.

The United States was serious about arms limitations and did not increase the actual number of its ICBM's. We began only a replacement program wherein the improved Minuteman III was substituted for out-dated Minuteman I and II missiles and some MIRVing of individual warheads was undertaken.

Contrast this with the Soviet Union, which has maintained the ICBM construction rate of about 300 new missile systems annually, or about 150 to 180 new missiles from one SALT negotiation round to the other. In 1971, space reconnaissance revealed that the Soviets were preparing new and bigger silos for ICBM's, the number of which by Octo-

ber, 1971, was estimated at 100. These new underground silos are capable of accommodating missiles even larger than the formidable SS-9. As Hugh Sidey noted in the October 15th issue of *Life* magazine, our best experts are still uncertain as to precisely what this new construction means, weaponwise.

In the area of missile defense, the Soviet Union has about 67 ABM sites, with SA-7 missiles capable of missile intercept at high altitudes. According to more recent reports, a group of about 50 new launchers is being deployed for ABM interceptors with much higher velocity. Our modest Safeguard ABM program is dwarfed by comparison.

During October, Soviet technology succeeded in actually intercepting a satellite in flight, linking the interceptor with it and blowing up both. This is a feat we have yet to perform. If the Soviets can intercept and destroy their satellites in flight, they may soon be able, if they are not already, to intercept and destroy our surveillance satellites. This is the only practical means we have of keeping abreast of arms developments taking place within their closed society. Their ability to destroy these reconnaissance satellites means they would control the timing of any possible future direct confrontation. In the critical days or weeks preceding such possible strike they could eliminate our ability to anticipate or observe the preparations for the strike.

Further, the Soviet strategic missile force now has 750 medium-range units capable of reaching U. S. installations in Western Europe and the Far East for which the United States has no comparable equivalent, either through NATO or otherwise.

Then there is the Soviet Navy. It has grown much faster than anybody could anticipate or predict. In the short period of 14 years, under the command of Admiral S. Gorshkov, the Soviet submarine and surface fleet grew to a strong force capable of staging in the waters of the world a naval exercise, code named "Ocean," which surpassed any similar maneuver by any country or group of countries in the entire naval history of the world. In 1968 the USSR started its Y-class submarine program. This is its principal submarine-launched missile carrier. It is estimated that about 17 such submarines were operational by the end of 1970, and at the rate of about one sub per month, they have close to 27 at the present time. The Soviet surface fleet concentrated on adding new missile cruisers ("Kresta" class), destroyers ("Kynda" class), and the small speedy "Komar" and "Osa" boats in numbers surpassing any estimates and predictions. As a result, the Soviets can now maintain a permanent fleet of about 40 to 60 ships in the Mediterranean Sea alone, putting an end to the U. S. Sixth Fleet's complete control of the area and exerting strong political impact in the Middle East, North Africa, and Southern Europe.

The Soviet Union is evidently dedicated to supporting its recent political initiatives with a strong, balanced armed

force which will be superior to the United States in the areas of strategic missiles, air force, naval power, and conventional on-the-ground weaponry. They engage in negotiations designed to limit or reduce armaments only for the purpose of speeding up and implementing this final Soviet superiority. The theoretical reasoning of mutual advantage, implicit in "parity," "sufficiency," or "flexible deterrence," has not affected to any appreciable degree the basic Soviet thrust toward a stronger, superior military force and a position of real prevailing strength, both militarily and politically. In pursuit of this goal, the Soviets channel a considerable portion of their resources to expand their armaments research and production. As Mr. Sidey accurately noted in his article, their research and development budget has, for years, exceeded "anything necessary for mere parity with us."

The great weakness of our so-called "assured destruction" posture has been its underlying assumption that the leaders of the USSR respond, as our people do, to the threat of massive retaliation with its toll in death and destruction.* Nothing in the moral or political system they espouse warrants such an assumption, and nothing in the record of their recent arms development indicates concern in that regard.

What is far more likely is that we will, indeed, awake one day soon to find the Soviets have achieved some massive new break-through in weapons technology which will render our defensive system obsolete.** It is not in terms of striking particulars but in terms of overall growth and input into research and development and the number and complexity of new Soviet weaponry developments, that this prediction is justified. It simply stands to reason that a nation engaged in extensive weapons research and development will, sooner or later, come up with a breakthrough. Certainly one engaged in only minimal research and development, as we have been, is not likely to be able even to cope with such a breakthrough by others, let alone achieve one itself.

In short, "assured destruction" is not defense — it is merely psychological warfare. And I am convinced it was propounded by people who had a rather poor grasp of both defense and psychology.

The policy of "assured destruction," which is meaningless to the Soviets but grates on the moral principles of Americans, should be scuttled in favor of a forthright policy of dynamic research and development, an unmistakable posture of military strength with a balance between defensive and offensive systems, and a resolute civilian population bolstered by an adequate and visible civil defense. It is to the support of programs and funding essential to such a policy that I have pledged myself as a member of the House Armed Services Committee. ■

*See *English translation of Soviet book Civil Defense (1971) analyzed by Joanne Gailar in May-June 1971 issue of Survive.*

**See "The Myth of 'Assured Destruction'" by Eugene P. Wigner, *Survive*, July-August 1970.

THE FLORIDA PRIMARY

a **Survive Staff Report**

Florida has attracted more than tourists this winter. Presidential hopefuls, their bandwagons, and their wives have since December criss-crossed the "Sunshine State" until hardly a hamlet has been slighted. The early Florida primary (March 14th) is a sure bet to heat up into a crucial test of candidate strength.

Three years ago an issue would have been the antibalistic missile (ABM). But ABM is now dormant and is being soft-pedalled. Civil Defense is also hushed. And shelter — what's that? The 1962 missile jitters are long forgotten.

Survive, however, checked past statements, dug up old voting records, and asked candidates for current comments.

EVALUATION OF FLORIDA PRESIDENTIAL PRIMARY CANDIDATES:

	Answered Survive	ABM Stand	Civil Defense- Shelter Stand
NIXON	Yes	Pro	Weak
MUSKIE	No	Anti	?
WALLACE	Yes	Pro	Pro
HUMPHREY	Yes	Pro	Pro
JACKSON	Yes	Pro	Pro
McGOVERN	Yes	Anti	Anti
LINDSAY	No	?	?
YORTY	Yes	Pro	Pro
CHISHOLM	No	Anti	?
McCARTHY	No	Anti	?
HARTKE	No	Anti	?
ASHBROOK	No	Pro	?
McCLOSKEY	No	Anti	?

The above table gives a capsule run-down of *Survive* evaluations. And the following thumb-nail observations and candidate opinions supplement the table.

NIXON Civil defense received a much-needed shot-in-the-arm on March 14, 1969 — several weeks after the Nixon inauguration — when Nixon said in a press interview:

"Congressman Holifield, in the meeting this morning, strongly urged that the Administration look over the shelter program, and he made the point that he thought it has fallen somewhat into disarray due to lack of attention over the past few years. I have directed that General Lincoln, the head of the Office of Emergency Preparedness, conduct such a survey. We're going to look at the shelter program to see what we can do there in order to minimize American casualties."

But since then: silence. The "Lincoln Report" has languished on the White House shelf. Repeated prodding by interested congressmen and reporters has been to no avail. Although Nixon rates high for his 1969 ABM effort he strikes out for his failure to follow through on this civil defense probe. The administration's pegging of the civil defense budget was also a mild plus — but not enough.

MUSKIE The best that can be said for Ed Muskie and civil defense is that the former ignores the latter and the latter deplores the former. However, Muskie is — according to reports — frontrunner for the Democrats. He is against ABM, and it can be presumed that he views civil defense with similar coolness. Publisher William Loeb of the *Manchester Union Leader* (New Hampshire), which is opposing Muskie in his home territory, said in a front-page editorial that Muskie's national defense record would "leave the nation as helpless as a clam on the beach at low tide!"

WALLACE Under the governorship of George Wallace, Alabama in 1971 introduced in its public schools the first compulsory civil defense education program in the country. Says Wallace for *Survive*:

"I think it is well known throughout the length and breadth of this country how I feel about the need for a strong national defense. In my judgment, we should look more homeward for the defense of our nation in the future. We should spend more of our defense dollars and effort here at home protecting our own people against the threat of aggression and nuclear war. Civil Defense is an integral part of the overall defense posture and must be so considered and treated.

"Survival on the home front — protecting the lives and property of our people — is what Civil Defense is all about, and I feel that the program overall has suffered during recent years from lack of concern and inadequate funding.

SURVIVE

"The need for an effective Civil Defense is beyond dispute, and one need only refer to my record of support for the Civil Defense program in Alabama during my previous and present administrations to readily understand my sentiments."

HUMPHREY "With respect to civil defense, I have long been a proponent of an active civil defense program, and supported the increase in civil defense expenditures for fiscal year 1972. The new budget of 78.3 million dollars represents an increase of roughly 4.5 million dollars over last year, due mostly to the emphasis on the matching funds program between Federal and state governments. The matching funds, as you know, cover the important domain of emergency operating centers as well as personnel expenses. Also I am sure you are aware of the active Federal program with respect to the provision of shelters in all public [and] private buildings. I support this activity. I am also interested in seeing other services of our civil defense program expanded for domestic purposes. Civil Defense has played a major role in community relief work and more of this could and should be done in the future.

"With respect to ABM, I supported this year's ABM authorization and appropriation for a two-site ABM program because of my concern for an early and substantial agreement at the Strategic Arms Limitations Talks (SALT). I have long been an advocate of sensible arms control and I think the limitation of the deployment of Safeguard is a step in the right direction. We must be certain that any ABM agreement, however, effectively limits Soviet ABM deployments in a parallel fashion. What I think is essential in all matters of arms control, ABM included, is the recognition that nuclear weapons implicitly are not the sole indicator of national security and that we can limit their development and deployment with the support of the other nuclear powers without upsetting this security.

"I am disappointed that the President has not met his promise of reaching an ABM agreement by the end of this year.* Time is of the essence and I would hope that in a matter as delicate as this, the President does not choose to play politics."

JACKSON "I believe that civil defense has a significant role in helping defend this country and that the Nixon Administration and the Congress should recognize that role.

"President Nixon is in trouble on civil defense. The Nixon Administration has downgraded civil defense efforts and abdicated its responsibility for prudent and sensible protective measures.

"Today a wise civil defense program faces formidable opposition. There are many in Congress who want to gut our entire national defense program and further degrade our civil defense effort. In fact, I'm the only candidate for the

Presidency who stood up on the floor of the Senate last year and voted *against* a proposal to slash the defense program by \$8 billion that would have threatened the existence of *any* civil defense effort and mortally crippled the ABM program.

"Indeed, I have led the fight *for* the ABM in the Senate Armed Services Committee and on the floor of the Senate. I have consistently voted *for* the ABM. Last year I guided the successful campaign on the Senate floor to defeat the Hughes amendment which would have terminated at once all work on our ABM system.

"Americans cannot turn their backs on the dangers and uncertainties of the world. We cannot pretend that military preparedness and civil defense are less important than they were some years ago.

"Can we maintain a sound defense position and still meet our urgent unmet needs at home? Can we pay for defense and still rebuild our cities, restore our environment and still give all Americans a decent standard of living? Of course we can. And the money is there, waiting for skilled, tough leadership to put it to work.

"The money is there in the dynamism of our trillion dollar economy — the economy that has sputtered, coughed and almost expired under the Nixon Administration. Last year alone, because of the recession, we lost 30 billion dollars in Federal revenues. We lost the brain and muscle power of more than 5 million Americans who could not find work. We lost the potential output of the quarter of our productive capacity which lay idle.

"Our most important asset continues to be our national resolve — to defend our liberties and to protect our vital interests however rough the going. It is at bottom, a question of will — what Winston Churchill called "the will to stay the course." I put my chips on the steadfast majority of the American people."

McGOVERN Senator McGovern gives straight-forward answers to *Survive* questions. He opposes ABM. He would reduce civil defense expenditures. And he would favor a low-key shelter approach. As a "dove" McGovern would probably take an outright "appeasement" course if elected.

LINDSAY Godfrey Sperling Jr. of *The Christian Science Monitor* says: "Mayor Lindsay is easy to read. He tells you what he is going to do by telling you he won't do it." When Lindsay expressed contempt for the job of Vice President, Sperling reasoned that this is exactly what Lindsay wants. Lindsay charisma takes the place of any well-defined public stand on ABM or civil defense.

YORTY Los Angeles Mayor Sam Yorty does not hedge an inch on civil defense. He is for ABM, including its use for population protection. He would do the Russians one better as far as a U. S. civil defense program is concerned. And he wants shelter for all Americans.

CHISHOLM Shirley Chisholm is proud of the fact that no big interests support her. Leaning toward civil rights and women's lib and poverty cures, Chisholm

(Continued on Page 11.)

*We are at a loss to interpret this reference to President Nixon. We do not believe that Nixon is committed to any proposal the USSR might make no matter how one-sided it is. —Ed.



SPOTLIGHT

QUAKES AND "CANNIKIN"

Instead of triggering an earthquake, as many feared, the Amchitka underground nuclear test — CANNIKIN — last fall merely triggered a good case of jitters. According to Dr. Kenneth S. Deffeyes of Princeton University, explosions of this type can be used to relieve quake-producing strains, thereby reducing the danger of serious earthquakes.

And in spite of the failure of CANNIKIN to split Alaska down the middle or to send a tsunami off to swallow up people on Pacific islands, as predicted by some, there is still a good bit of feeling against this kind of nuclear test — and against nuclear tests of any kind.

Leading the pack of protesters is the Committee for Nuclear Responsibility, Incorporated, which works out of a midtown New York office. In a plea for funds last January it said of CANNIKIN:

"Fortunately, the immediately perceptible results were not catastrophic, but it will require years to determine the full results of this fool-hardy explosion. Because of this and because the test represents a major escalation of the nuclear race, it must be regarded as a step backward for all humanity."

Not only were the perceptible results not catastrophic — they were barely perceptible. Other points the Committee made generally are equally specious. Its approach is an emotional harangue, and a rather poor one at that. It also fails to mention the nuclear burst triggered about the same time by the USSR, though it was even more powerful than that at Amchitka. Evidently explosions produced by the USSR can cause no harm.

Few deny that earthquakes are serious problems. And although Dr. Deffeyes, the Princeton authority, sees the possibility of reducing the severity of earthquakes through explosions similar to CANNIKIN, he and others who have made similar scientific studies in this field point out that the phenomenon of the earthquake is hardly ready to be conquered.

The reaction of the Soviet Union to the earthquake problem is also of interest. Thirteen percent of the Soviet land area lies in zones where earthquakes are frequent. In 1970 one-third of new Soviet housing went up in earthquake areas. The 1966 quake which destroyed much of Tashkent gave birth to a new Soviet industry: prefabricated "earthquake-proof" structures. Tashkent is the principal testing

area, where prefab aseismic structures up to nine stories high have been built. These buildings have already withstood severe shocks and are built to survive major earthquakes.

Made of reinforced panels which themselves are locked together with reinforcements these structures are also more durable, safer, more economical, protection against other natural disasters, and to be sure — also protection against moderate blast levels of nuclear weapons.

"None of the great aggressors of history have deceived their neighbors. They all said what they were up to, and they had to say it in order to prepare their own people. While they sometimes protested their peacefulness in statements for foreign consumption, their day-to-day statements for home consumption, and their internal actions, were so frank that it required self-deceit abroad to misread them."

—Albert L. Weeks in *The American Legion Magazine* (November, 1971)

SURVIVE 1971 PREPAREDNESS AWARDS

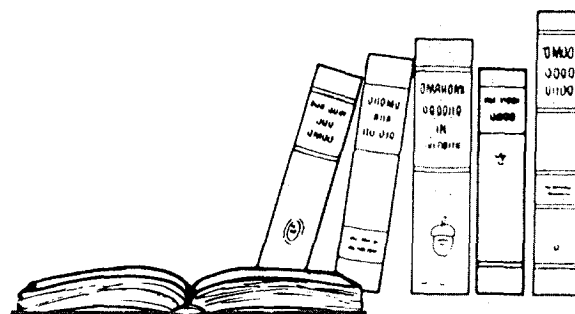
Region I	Worcester, Massachusetts
Region II	(No Award)
Region III	Homewood, Alabama
Region IV	St. Paul, Minnesota
Region V	Shawnee, Oklahoma
Region VI	Norfolk-Madison County, Nebraska
Region VII	Oahu, Hawaii
Region VIII	(No Award)

NATIONAL AWARD
Shawnee, Oklahoma

Note:

The Survive Awards Committee is forwarding engraved plaques for presentation to awards winners. The Survive Policy Board, meeting in Atlanta on February 5th and 6th, voted to continue the awards for 1972. Guidelines will be published in the May-June issue of Survive.

REVIEWS



COST BENEFITS IN SHELTERS

Cost Benefits in Shelters, TR-69, November 1971, U.S. Government Printing Office (for the Office of Civil Defense), 35 pages. Distribution through civil defense channels. Free.

A serious study on shelter costs — initial and long-range costs — has been sorely needed for many years. This is it. Undertaken and prepared by the Department of Architectural Engineering of Pennsylvania State University, it enjoys the stamp of professionalism from start to finish. What it shows in a nutshell is that, given a quality high school to construct (\$22.87 per square foot), that high school can be built to include shelter for over twice its occupant population at *no extra cost*. Further it will result in *operational savings* during the years that follow.

Tables give details of calculated costs, and end results are summarized on the last page as follows:

	UNPROTECTED	PROTECTED	ANNUAL SAVINGS	20-YEAR SAVINGS
CONSTRUCTION COST	\$2,565,480	\$2,565,480	-	-
GLASS BREAKAGE	\$ 6,850	\$ 3,800	\$3,800	\$ 76,000
WINDOW CLEANING	\$ 1,214	\$ 540	\$ 674	\$ 13,480
INSURANCE				
Building	\$ 4,283	\$ 3,873	\$ 360	\$ 7,200
Contents	\$ 964	\$ 892	\$ 72	\$ 1,440
HVAC	\$ 27,618	\$ 22,821	\$4,797	\$ 95,940
TOTAL SAVINGS			\$9,703	\$194,060

The criticism can be levelled at the study that it does not cover the cheaper one-story primary or secondary school where shelter is more of a problem. And this is true. It doesn't mean to, and the hidden extravagances of the "cheap" school should be the subject of another study.

Perhaps other critical observations — the negative approach is always popular — could be made. But it should also be realized that many shelter critics come from that distinguished group of planners which has been responsible for giving the United States over 200,000,000 shelter spaces without meaning to — that is, by accident.

In hunting for criticisms ourselves the only one we can level at the study is one that the study itself admits: it is too modest, and other more thorough studies should follow.

For instance, it covers vandalism savings only partially. Also maintenance savings. It does not account for the value of extended building life. A greatly improved health environment is difficult to measure in dollars, but it is a major benefit. The same with increased wall space. The study covers noise control, but there is also a great improvement in light control and a sharp decrease in visual distractions.

And there are more subtle benefits. For instance, glass breakage in northern schools during winter will deny use of the affected space until glass can be replaced. This is a real loss which again is difficult to tag with a price.

Cost Benefits in Shelters can be used as a school board convincer in high school planning. It should be followed by further professional studies. It should, for instance, encourage the ten-year-old Abo underground school in New Mexico — and certainly others — to present cost figures on their actual operations compared to nearby conventional structures.

Cost Benefits in Shelters is a fine first step in showing school officials — often ill-informed and tradition-bound — that the way is now wide open to increase dramatically safety standards for America's school children and at the same time realize substantial savings. ■

REPORT TO THE CONGRESS; ACTIVITIES AND STATUS OF CIVIL DEFENSE IN THE UNITED STATES

**Report to the Congress; Activities And Status of Civil Defense in the United States* — by the Comptroller General of the United States. 59 pages. 1971.

It is to be sure significant that the prestigious General Accounting Office (GAO) has taken the trouble to "evaluate

**The Professional Society for Nuclear Defense cited this report in its January-February Newsletter.*

the accomplishments of the civil defense program over the past 10 years." And it is entirely good that — unlike the Lincoln Report and other cloaked analyses — this document saw the light of day without prolonged quibbling. Civil defense in its present delicate health could do with more such attention from other federal sources, even from the executive branch itself.

It is also significant, as United Press International reported, that

"Although GAO in its reports often tends to come down on the side of less spending, it suggested this time that Congress consider spending more, not less, for civil defense."

The Office of Civil Defense is acutely aware of its inadequacies and can trace most of them to the unfortunate fact that Congress during a period of steadily increasing defense spending has put underdog civil defense on a budgetary toboggan.

GAO faces up to the problem of shelter in cities (which *Survive* has long advocated) and notes:

"There are, however, no programs (other than research) aimed at protecting people against chemical or biological weapons or the direct effects of nuclear explosions, such as blast, heat, and shock."

The report further observes that

"in developing additional fallout shelter protection, the Secretary of Defense should set priorities on the basis of targeting assumptions and the best available predications of risk."

The negative approach to this problem has long persisted, however, and the Department of Defense itself contends that "no one can predict exactly which cities or industrial areas will be targeted." Perhaps now a change can be expected.

The report also opens up other questions heretofore muted. One of them is the participation of federal agencies in government shelter policies. In answer the Office of Civil Defense cites the weak language of Executive Order 11490 (1969) which "authorizes" agencies to "protect the public to the maximum extent feasible." It goes on to state, however, that the Post Office Department is now putting shelter into many new post offices. If true, this is a happy reversal of former foot-dragging. Evidence and statistics would be in order.

And GAO concerns itself with protection factors (PFs). It reveals that the United States in 1955-57 set a minimum PF of 5,000 for public shelters, that this was lowered to PF 1,000 in 1959, to PF 100 in 1960, to PF 40 in 1962, and a little later in Community Shelter Planning quasi-officially to PF 20 and then to PF 10.

One wonders at this plunging spiral, still more at the GAO recommendation that a review be made to see if PF standards cannot be revised downward. And one winds up with the impression that GAO's "in-depth" study might have probed a bit deeper. ■

CD CALENDAR

(State, regional, national and international meetings)

March 12	Conference, Indiana Civil Defense Directors — Huntington, Indiana
March 27-29	Midyear Conference, United States Civil Defense Council — Washington, D.C.
April 9-12	Conference, California CD & DA — Long Beach, California
May 5-7	Conference, Nebraska Civil Defense Directors Association — Agalalla, Nebraska
June 2-8	Exposition: L'Homme, l'Air et l'Eau — Paris, France
June 5-7	Conference, Region VII United States Civil Defense Council — Phoenix, Arizona
June 6-9	Conference, Region V United States Civil Defense Council — Albuquerque, New Mexico
June 10	Conference, Indiana Civil Defense Directors — Vincennes, Indiana
June 11-14	Annual Conference, National Association of State Civil Defense Directors — San Antonio, Texas
June 12-15	Conference, Region II United States Civil Defense Council — Ocean City, Maryland
June 16-19	Conference, Region III United States Civil Defense Council — Greenville, S.C.
June 18-21	Conference, Region VI United States Civil Defense Council — Abilene, Kansas
July 26-28	Conference, Region VIII United States Civil Defense Council — Pocatello, Idaho

(Officials of state, regional, national and international civil defense associations are invited to submit dates and places of meetings. Please submit early.)

Asked for his views on Russia's stance in the nuclear arms race former Senator and Screen Star George Murphy replied:

"Russia is now saying that further development of the ABM [Antiballistic Missile] should be halted. They have theirs, but we don't have ours. I just hope our people don't fall for it. This evening, Russia can unleash more destruction on the United States than we can deliver on the Soviet Union."

Chinese progress in the development of an intercontinental ballistic missile can be judged by the reliable report that a Chinese tracking ship is now nearing completion. This points to ICBM tests within two years and ICBM deployment before the end of the 1970 decade.

"Bare Bones" Civil Defense

(Dialogue between Congressman Donald W. Riegle, Jr. of Michigan and National Director of Civil Defense John E. Davis during a recent congressional hearing.)

Mr. Riegle. As I went through your statement, and I have listened to the colloquy today, I get the feeling that for all practical purposes you want to think in terms of nuclear attack. We are sitting ducks in this country today from a civil defense point of view. Now, I say that not in any way to demean the work that has been done or the presentation made here, but, to the contrary, to say that I think that you are obviously working with a set of budget constraints and priority constraints which just are not adequate to what you need to get the job done the ways it needs to be done.

I read this summary about the Soviet Union and I see the way they are operating and the sustained nature of their program and the fact that they are building year after year to put this civil defense program in substantial being. It seems to me every year we do this bare bones job, we put ourselves in a differential situation where we are less and less able to catch up.

I am wondering if we are not at a point where we are going to have to face this issue and get it out in the open and recognize it as a first-priority item for national debate and discussion. We must decide whether we are going to continue to drift in that direction or face some tough choices.

Before I go any further, if you want to respond, feel free to.

Mr. Davis. I have to agree and say you put it very well, Mr. Congressman. I might add that we have been looking, and I have been looking practically since I took on the position of Director two years ago, (1) for this mandate to emanate out of the Security Council's final decision, and (2) the Armed Services Committee, I understand, is in the process of also taking a look at the status of the program and where Civil Defense ought to be in the overall strategic posture of the United States. I became worried because I have looked at the development of the Soviet Union and its offensive capabilities and I know we are not doing enough in Civil Defense. I know, too, it is not an easy job to do in the society in which we operate. Their civil defense is managed by a Marshal of the army. It is within the military structure and, as we all know, the structure of that government is designed so that you can get central control and get a response way down in the local cell and also to the farm out in the remotest areas.

Again, I think we are losing ground every year, and I find many things that ought to be done or gradually improved. We are losing some momentum, as I indicated in my statement today.

Mr. Riegle. It seems to me, and I am not an expert on nuclear strategy that relates to these sophisticated questions, that if Russia's civil defense program gets to a point where it is several times better than ours and they have the capacity to take a nuclear strike, either a first or retaliatory one, and can survive, that becomes a very important element in their calculations as to the way they play this thing out. I am wondering if the differential civil defense capability between the two nations may not be reaching a point where it is going to have to get factored into the overall balance of nuclear power.

Mr. Davis. Very definitely. We had this massive retaliatory force and this by itself gave us a sense of security. However, within just the past two or three years as has been indicated by Secretary Laird and Admiral Moorer in their testimony, we are finding how they have grown even while we talked with them in the SALT talks on how to control arms.

Whether or not this is by design, the facts are that we are arriving at a point where exactly what you say is true. We feel Civil Defense preparedness ought to be considered more in national strategy. ■

The Future From Fifty Years Back

by Wm. Cornelius Hall

A troubled New York industrialist recalls unheeded pollution trends of a half century ago and their consequences — and reminds us that today's defense danger signs too cannot be ignored without bitter cost.

The pristine beauty of our countryside even fifty years ago, was sometimes dramatically interrupted by pollution. I am still repelled by the horror of finding myself in a mass of floating scum composed of fly maggots and the waste from a dairy which had just begun operations upstream from the old swimming hole which till then had been crystal clear.

Another boyhood experience was at the private beach at Lydenhurst, the Jay Gould Estate on the Hudson River (Yes, everyone, even the rick, once swam in the now filthy Hudson!) Well, "the fleet was in," and the lower Hudson was full of ships. Each just flushed itself, and I encountered some of the flushing carried upstream by the tide.

The psychic trauma of these two experiences has deprived me of much of the pleasure I might otherwise have had through the ensuing fifty years in loving ships and rivers.

As a professional arboriculturist in the depression days of the 1930's I had to exert myself to get business. Lectures to garden clubs, to civic and service organizations were productive of inquiries some of which resulted in business. Having chosen a career with nature because I loved it, I commented on the retrogressions which I observed in the local countryside of whatever group I was addressing. For example the Otterkill Creek in Orange County, New York near Newburgh was a fine fishing stream and the water was so good in spite of a paper mill that only a half a mile downstream a summer resort had a beach that was greatly enjoyed by the guests. In the late 1930's as business volume at the paper mill increased the water quality deteriorated. I was roundly criticized as being anti-business when I pointed out what was happening. Ten years later no human would have considered entering the creek's water at the summer resort. It went out of business. In another ten years there were no fish. And fishermen — who are numerous, articulate and influential — made people listen. Political leaders were aroused, and at the end of a third ten year period the paper mill was ordered to cease pollution of the creek. It went out of business rather than face the huge outlay involved in rebuilding.

There are also serious side effects of pollution. Periodically some leaf-eating insect will greatly expand in numbers and defoliate its host trees in a local region. In the Hudson Highlands cankerworms, gypsy moths and Forst tent cat-



terpillars have each had one or more peaks of their cycle in the past several decades. As each such peak covers several years or more, unless control measures are taken there is repeated defoliation. The leaves are essential organs of all green plants, thus the mortality of trees following such an epidemic is high. Control is achieved by application of an appropriate insecticide. To do this a small volume of insecticide is mixed with a large volume of relatively clean water in the tank of the spray apparatus. The lower Hudson River has always been too salty — too phytotoxic* — to be used for this purpose, but from the Bear Mountain Bridge north, the water was so used. At least it was up to the time I entered military service in World War II. Upon my discharge at the end of the war I was shocked to learn that the quality of the Hudson's water had been so degraded that it was no longer fit to be sprayed on trees. This I also pointed out to my lecture audiences. Again I was considered anti-business. But this time I had an effective and telling answer: those who employed either my organization or a competitive one would have to pay much higher prices because the readily available and convenient Hudson could no longer be used as a source to fill spray tanks. Much extra time and mileage would be needed to do so elsewhere. However, in spite of this penalty and predictions of the situation becoming much worse no organized effort then came about to curb pollution of the Hudson.

Pollution comes in many forms. In the Hudson Highland there are many hills that need to be sanded in the winter so that motor vehicles will have traction when the surface is

*Phytotoxic — poisonous to plants

coated with snow or ice. In the summertime highway maintenance crews locate piles of sand where they will be needed the following winter. This sand must have a considerable volume of salt in order to melt the snow and ice. Sand crews are human; they feel the heat; they like shade on a hot day; so they spot beautiful big trees along the roads and under their cool comfort they dump loads of sand. Unfortunately the salty sand is toxic. And over a period of years, as much sand leaches into the soil, these trees decline in health and eventually die. This has happened to the largest and finest trees abutting four Hudson Highland highways. I used to show slides of such trees, first in all their foliage, then in declining condition and finally stark naked and dead. In spite of this visual proof to groups of intelligent people who appreciated the beauty of the countryside, and predictions of what has since happened, nothing was done to avert the disaster.

Americans are hard to stir in their own interest. We are a nation of individualists each of whom wants to go his own way. I think this is especially true in our present national defense dilemma — particularly in the civil defense part of it. We see the long shadow of total disaster. We recognize that nuclear war can — and probably will — happen. We are much disturbed. The utterly distasteful problem appears to be overwhelming. We don't like it. So we do nothing.

It's easier that way. ■

The Florida Primary *(Continued from page 5).*

is primarily a "shaker-upper" in the primary campaigns. She has voted against ABM, and no civil defense opinion is evident.

McCARTHY In 1969 McCarthy voted against ABM. At present he is not considered a leading contender for the Democratic Party nomination. His platform, were he to organize one, would probably be oriented toward the idea that defense weakness would promote world peace.

HARTKE With less chance of gaining the Democratic presidential nomination than any of the other senators vying for the nod Vance Hartke is waging a subdued campaign. Possible dark horse. He voted against ABM, and his stand on civil defense is not clear.

ASHBROOK and McCLOSKEY John Ashbrook and Paul McCloskey represent Republican Party opposition for President Nixon. They are not generally conceded to be serious opposition. John Pierson writes in *The Wall Street Journal*: "Once upon a time, there were two pygmies and a giant. One pygmy had the giant by the left hand, the other by the right, and each was trying to pull the giant in his direction. But the giant didn't seem to be paying much attention." Aside from Ashbrook leaning far right (he is pro-ABM) and McCloskey tinged with liberalism to the left (he is anti-ABM) not much is known about their home defense positions. ■

(Survive will make further analyses of presidential nominees' defense platforms later in the year.)

"The Soviets' present buildup of strategic forces, together with what we know about their development and test programs, raises serious questions about where they are headed and the potential threats we and our allies face. These questions must be faced soberly and realistically." — President Richard M. Nixon, U. S. Foreign Policy for the 1970's; A New Strategy for Peace, Report to the Congress, February 18, 1970.

The President of the United States issued the above warning to the Congress . . . two years ago. Since that time the circumstances which provoked the warning have become much more serious. Yet no action has been taken to counter the danger.

A LESSON FROM HISTORY*

Whether or not the Soviet Union is now operating upon some Hitlerian timetable leading up to an actual attack upon the United States, in order to remove us once and for all as a military rival, is debatable. Quite possibly no decision has yet been made that this is necessary — not yet.

What does seem certain beyond reasonable doubt is that a period of almost unimaginable danger—not a "generation of peace" — lies ahead of this country. This stems from a combination of two factors. One is the political rot and erosion that is sweeping almost completely through what was once known as the "free world." The other is the rapidly accelerating momentum of the Soviet strategic military buildup.

Since World War II the military strength of the United States has always constituted the primary im-

*Condensed from *The Washington Report of December 20, 1971.*

pediment to the Communist revolutionary thrust, as well as the only serious threat to the U. S. S. R. military-technical base. During the long period when the U. S. possessed unquestioned strategic military superiority, the U. S. S. R. was forced to keep its own power thrust relatively muted, relying for its revolutionary gains largely upon the self-imposed defensive attitude of the United States and the peculiar mental processes of most Western statesmen and intellectuals, who simply refuse to understand what the game is all about. The refusal, for example, to support the Bay of Pigs landing once it was underway, and the conclusion drawn afterwards that it was foolish to have launched the operation to begin with, illustrate such thinking to perfection.

ANALYSIS OF DEVELOPMENTS AFFECTING THE NATION'S SECURITY

The "correlation of forces," however, has now changed. The military-technical base of the U.S.S.R. is no longer inferior to that of the U. S. Soviet military momentum is now such that unless the U. S. rapidly increases its own level of spending, the U.S.S.R. will have across the board military superiority by 1975. Most of our professional military leaders, such as Admiral Hyman Rickover, concede that they have superiority now in many categories of military power.

Their ICBM force of over 1600 launchers vs. 1054 for the U. S. is only the most dramatic example of such superiority. The most significant may well be their level of spending on military-related research and development (R&D). Beginning about 1968 the "crossover" occurred, when Soviet R&D spending exceeded our own. According to the best estimates, it now exceeds ours by some 40-50% per year — or \$3 billion annually. Given the added Soviet advantage of secrecy, which generally prevents us from learning about new Soviet weapons until they reach the prototype and testing stages, this will make the U. S. increasingly vulnerable to the kind of technological surprise that could make a Soviet first strike against us militarily feasible.

Even before we lost military superiority to the U.S.S.R., the U. S. largely lost its credibility as a military bulwark against Communist revolutionary warfare by the manner in which it chose to fight in Vietnam. By now, whether the Saigon Government does or does not survive politically has become almost academic. The indecisive conflict so traumatized American society that the U. S. President has as much as promised that we will never do anything like that again. And President Nixon's potential challengers to his job are all pledged to do less, not more, to defend our friends and allies.

The truly incredible thing is that, even at this late date, the bulk of Americans persist in living in a fool's paradise. While we bask in the reassuring radiance of . . . Presidential visits to Peking and Moscow, while we comfort our-

selves with the happy idea that an Arms Control agreement will soon make it possible for us to reduce even further our already greatly slashed military expenditure, while we look with satisfaction at a world in which there at least seem to be no major East-West crises, while we relax in the spirit of "détente" being pushed by the world-traveling Soviet leadership, and while we ignorantly conclude from all this that the Communists, this time, have really changed (the death of ideology one newspaper columnist proclaimed!), time is running out on us with chilling speed.

The Vice President, at least, seems to understand. In an interview with Alan Drury, printed in *Look Magazine*, October 19, 1971, he said this:

"We're talking now about our grandchildren, or at least about the next generation. Then is when the blow will come from the Soviets. By that time we will be so weak that we will not be able to respond unless we are willing to launch massive retaliation that could blow up the world. They have been extremely clever in never forcing a crisis. Their method is to work around us and weaken us on every side without forcing a confrontation. Again I say it scares me because these fellows in the Senate and in the House who oppose our foreign policy are doing things to this country which cannot possibly be reversed unless we soon start to undo them.

One might take issue with Mr. Agnew only on the part about the "next generation." If present trends continue the crunch will come much sooner than that.

Consequently, by every objective standard that we can now measure the Soviets are building a military establishment which is aimed not merely at deterring war, as ours is, but of winning such a war, should it occur. The period of maximum danger to themselves, when the U. S. might have used its near monopoly of strategic military power to launch a preventive war against the U.S.S.R., is long past. What they must now worry about is that the sweeping tide of their political successes, coming as the inevitable fruit of their enhanced military position, will sooner or later threaten them with a desperation U. S. military response. To counteract this possibility, mere military parity with the U. S. is not enough. They have to achieve such overwhelming strategic military superiority that they can either overawe us into a final internal collapse and surrender or, should they detect signs that we intend to fight rather than submit, then they want to be able to fight and win a war with the United States. This could conceivably involve a preemptive nuclear first-strike by the Soviet Union.

The world is already fairly far along in this ghastly scenario of events. Yet most Americans understand these realities very poorly. Never having experienced war on our own homeland, and being unaccustomed to defeat, we Americans cannot really grasp the possibility that, for us, history could end disastrously. ■

SURVIVE

Civil Defense Abroad

PEACE: SWISS VIEW

In a report on the Swiss 1971 concept of civil defense Director of Civil Defense Walter König emphasized that this concept must rest squarely on the hypothesis of total war, war that will not spare the civilian population. Nevertheless, the report states clearly, this hypothesis does not mean that Switzerland considers the various forms of total war as normal or legal. To the contrary. All existing means of maintaining peace and — if the worst should threaten — of invoking international conventions to spare the Swiss people as much as possible from the tragedy of war should be utilized.

But should these efforts fail, and should the population be exposed to the disaster of modern war, the survival of the major part of the Swiss population would be assured — claims of “total annihilation” notwithstanding — thanks to the protective measures foreseen by Swiss planning. This is why the further realization of our plans in the fields of construction and emergency organization will permit our country to deal effectively with attempts at nuclear blackmail.

This should demonstrate beyond all doubt that Switzerland does not anticipate and does not itself want war. And if certain quarters claim that civil defense can be considered a preparation for war those quarters are simply guilty of malicious twisting of fact.

—from an editorial in the November 1971 issue of
Zivilschutz (Swiss Civil Defense Journal)

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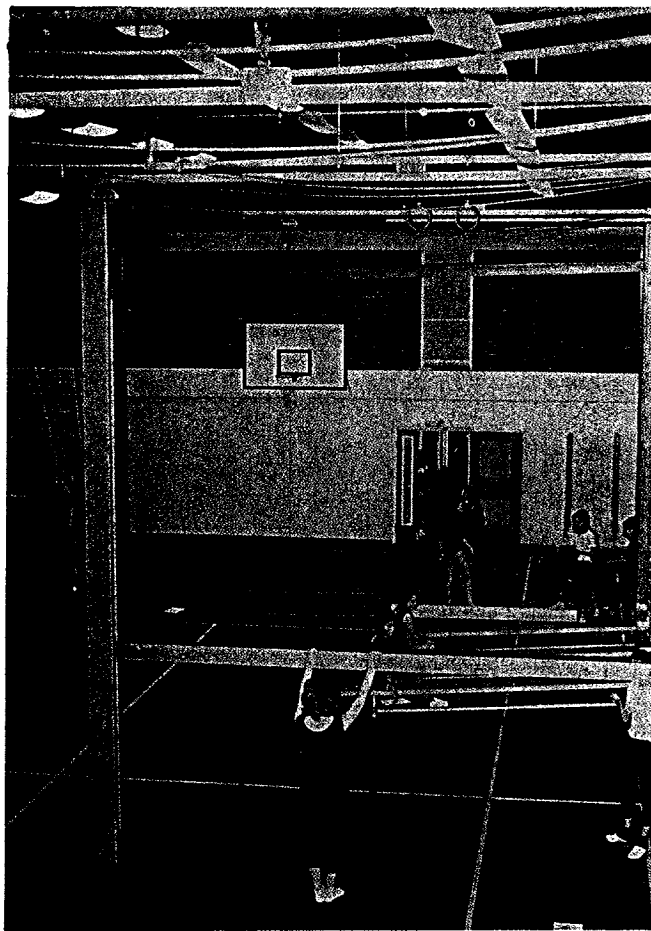
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SHELTER IN SWEDEN



One end of a combination gymnasium-basketball court, part of a girls' high school in Västerås, Sweden. No “slanting” for a protection factor of 40 here! Carved out of a granite hillside with its ceiling 50 feet beneath the surface it serves as shelter against all weapons of modern war. Its blast-protection capability approaches that of a missile silo. The installation — 83,900 square feet of usable space — also houses a garage, a theatre, a community youth center, and related activities. The gymnasium pictured above is built so that it can be divided horizontally into two large rooms, thereby providing additional floor space in emergency. To the right of and slightly higher than the basketball standard is a door which in the event of the division will serve the 2nd floor from a permanent hallway beyond.

Q & A CORNER

Q OCD advocates shelter, and our local and state civil defense people recommended to our town officials that our new recreation center contain shelter. A post office has just been built here, and it was not built with shelter in it (although our civil defense director strongly recommended it). The same happened with a new state rest home. Our mayor at a town council meeting told civil defense representatives that it is ridiculous for them to ask him to consider shelter in locally constructed public buildings when federal and state agencies won't subscribe to federal and state shelter programs and put it in their own buildings. It seems to me that the mayor has a good point. If shelter is good for local building programs then it ought to be good for state and federal building programs. What do you think?

A The thinking here is that you are dead right. We have achieved in our shelter programs a lot of finger-pointing and very, very little effective shelter. If the federal government could convince the federal agencies that the federal policy on shelter in new construction is worth implementing then the problem of getting local governments to subscribe to the policy would no longer be a problem. (And states could do the same — Arizona has taken the lead here!) We recommend that OCD train its biggest guns on the federal agency building programs. So far these agencies have given civil defense little more than lip service. U. S. Representative Charles E. Bennett, however, has for years attempted to make the inclusion of shelter in new federal building programs mandatory through the passage of proper legislation. He has had no luck. One consolation for your mayor, however: when nuclear war finally makes it obvious that we neglected our home defenses it won't be the fault of local government. Or will it?

Q How much does *Survive* pay for articles?

A *Survive* cannot afford to pay for materials. Writers convinced of the compelling need for a meaningful American defense write for *Survive* without fee.

Q What is the difference between x-rays and gamma rays?

A *The Effects of Nuclear Weapons* says: "Physically, gamma rays are identical with x-rays of high energy, the only essential difference being that the x-rays do not originate from atomic nuclei, but are produced in other ways . . ."

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