

**JOURNAL OF**

# **CIVIL DEFENSE**

“...we heartily disagree”

**STORY ON  
PAGE 4**

**VOL. 10 NO. 4  
JULY-AUGUST 1977**

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## UPCOMING

Jul 17-19	USCDC Region III Annual Conf., Mobile, AL
Jul 24-29	CAP Annual SAR Course, New York
Sep 30- Oct 3	2nd International Conf. on Disaster Medicine, Mainz, West Germany
Oct 2-6	USCDC Annual Conf., Long Beach, CA
Oct 29	Journal of Civil Defense Annual Conf., Starke, FL

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# Capital Commentary

— by Jerry Strobe



## MONEY MATTERS

The new Congressional Budget process promises to keep civil defense in the Washington political scene throughout the summer months. Nobody knows how critical are the authorization measures that go to make up the Congress' spending limits. Certainly, the eventual appropriations are unlikely to exceed the authorizations, but will they fall much below the amounts debated and passed by both Houses? No one wants to take chances in this second year of operation of the new system. The amount of political activity being expended on the subject of civil defense is quite out of proportion to its budgetary visibility and signals its continuing strategic significance.

As we go to press, the House has approved a civil defense authorization of \$134.8 millions, a 50 percent increase over the Administration request. The Senate has authorized \$95.25 millions, so both Houses are on record as regarding the Administration request as too small. The administration is sticking to its \$90 million request, even though in purchasing power it represents the lowest appropriation for civil defense since passage of the Civil Defense Act of 1950. Bardyl Tirana, new director of the Defense Civil Preparedness Agency, who has the unlovely task of defending the Administration's position, has had the grace not to say he doesn't need the additional money. He has said he didn't ask for the increase -- which is true. He has said he wouldn't know what to do with the extra money -- which is less true. Quite aside from the fact that his staff knows perfectly well what to do with the money, both Houses have been explicit in describing what the increases are for. The Senate added \$1.25 million for a start on industrial protection, \$2 millions to expand crisis relocation planning, \$2 millions for upgraded CD communications.

The House had similar concerns and, in addition, added authorization for funding a rejuvenation of the training and education effort and a start on underground Regional Operating Centers for DCPA Regions 4 (Midwest) and 7 (Pacific Southwest), the two without such facilities. If past precedent is followed, the compromise authorization will fall between the House and Senate figures.

## PROXMIRE'S PLOY

Recognizing the surfacing Congressional concerns about a possible "civil defense gap" in the balance of power, an old CD adversary, Senator

William Proxmire (D-Wisconsin), began over a year ago a somewhat desultory series of hearings before the Joint Committee on Defense Production, of which he had become acting chairman. Right on schedule, his committee staff produced a report about the time that the civil defense authorization was being debated on the Senate floor. Predictably, the report ignored most of the testimony that had been received and selectively introduced other material to support the thesis that Soviet civil defense is either a mirage or a paper tiger, not warranting U. S. reaction. A minority report by Senator John Tower (R-Texas) and Representatives Garry Brown (R-Michigan) and Chalmers Wylie (R-Ohio) bore down on the more egregious views espoused by the majority report. And in a separate statement, Senator Edward Brooke (R-Massachusetts) observed that the report seemed aimed "to foster a certain persuasion rather than present an objective analysis of all factors relevant to the subject matter." Brooke also observed that the "emphasis on examining the issue in terms of deterrence thinking, nuclear war-fighting, and weapons capabilities extends the scope of inquiry beyond what is commonly assumed to be the purview of the Joint Committee." This concern was echoed on the floor of the Senate. Senator Howard Baker (R-Tennessee), in advocating an increase in the Senate Authorization to equal the House mark, noted that hearings on the matter were tentatively scheduled by the Armed Services Committee later in the summer.

## BARDYL'S BATTING AVERAGE

After only two months in office, it is a bit early to attempt to evaluate the performance of Bardyl Tirana as the leader of the U. S. civil defense. For one thing, he obviously labors under the difficulty that his boss, Secretary of Defense Harold Brown, doesn't think much of civil defense and, perhaps his boss's boss, President Jimmy Carter, doesn't either. For another, there are secret position papers being drawn up for the SALT talks, from which his Agency and any outside civil defense experts are barred, that may very well send civil defense the way of the ABM and assure the unilateral vulnerability of the American People. Finally, his appropriation represents the least resources every devoted to his task.

Given these impediments, the fact that his performance to date has been mixed may be forgiven. His appearances on TV talk shows have been busts. His attempts to justify the Administration's resistance to a budget increase are of such credibility as to produce letters to the editor asking if he really says those awful things quoted in the local press. On the other hand, he has effectively sought out and obtained the cooperation of key figures in the State and local civil defense apparatus. They are obviously exhilarated at being invited not only to the Pentagon but also to participate in the ad hoc policy making that has so far been Tirana's style.

## "PRICE OF PEACE" FEEDBACK KNOCKS APATHY

— From *Today* Grand Island-Hall County Civil Defense (Nebraska)

The following note was received from Earl N. Hanel of the Grand Island Typewriter Co. after he had attended a breakfast meeting on May 10th at which time Mrs. (Joan) Heinzman showed the film "The Price of Peace and Freedom"....

"... we appreciate having you take the time to let us in on some of the workings of our government and the need for knowledge as to what is happening in the world.

"We are quite complacent because we feel that we are so far from the action that we don't need to know or fear the outside oppression.

"Possibly the most horrible thing in the USA is the complacency of its citizens. We are living so high off the hog that we don't feel that disaster can come our way. And I wonder if many really think the Russians would be such bad bosses for we have gotten away from our Christian heritage as I recall it as a kid...."

## 1977 BUDGET LOWEST EVER

Measured in 1977 dollars even the civil defense kick-off budget of 1951 outstrips the 1977 budget according to ASDA (American Strategic Defense Association). It's the lowest ever. If Congress follows the advice of faint-hearted DOD bureaucrats the 1978 budget will set another record for a new low. Here are ASDA CD budget data (in 1977 million dollar values):

1951	\$ 99.4	1960	\$121.9	1969	\$111.1
1952	227.8	1961	138.6	1970	117.6
1953	129.8	1962	580.2	1971	110.4
1954	142.0	1963	285.1	1972	112.0
1955	139.8	1964	241.0	1973	112.1
1956	188.6	1965	219.6	1974	101.7
1957	243.2	1966	216.2	1975	91.7
1958	101.0	1967	201.8	1976	87.6
1959	106.3	1968	164.9	1977	87.4

## CD JOURNAL PUBLISHER SPREADS WINGS

Legal steps to revamp APNA, the publisher of the *Journal of Civil Defense* are now in progress. APNA (which stands for "Association for Community-Wide Protection from Nuclear Attack") on July 19th officially assumes the new name of "ACDA" — American Civil Defense Association.

A heavy public relations effort will tie in with a stepped-up public service commitment. For instance, ACDA will offer civil defense seminars, technical reports, conferences, briefings, etc. With a widened base of operations it is anticipated that the ACDA mission of home defense education will reach a much higher level of effectiveness.

## PROXMIRE QUAGMIRE

Senator William Proxmire's long-awaited "Civil Preparedness Review" (See Capital Commentary, page 1) has now been published and calls for a consolidation of disaster agencies under the President. To many CD pros this is good. But the pains with which the report goes to discredit civil defense has produced a good bit of head scratching. Three Republican members of the ten-man Joint Committee say in a minority report that the review "takes a too narrow, shortsighted and, at times, inaccurate view" of the USSR buildup. A fourth, Sen. Edward W. Brooke, cites the minority view and points to "unresolved" questions in a separate statement.

The committee split between Democrats and Republicans does not reflect a pattern in Congress. The recent heavy House vote to up the CD budget (over Tirana's indifference) was not along party lines.

The two-part "Civil Preparedness Review" is defined as "Report by the Joint Committee on Defense Production." The U. S. Government Printing Office has it on sale for \$2.50 (Nos. 84-629 and 83-793).

## DID YOU KNOW - ?

THE SOVIETS HAVE DEVOTED CONSIDERABLE RESOURCES TO THEIR CIVIL DEFENSE EFFORT?

THE SOVIET CIVIL DEFENSE PROGRAM EMPHASIZES:



- EXTENSIVE EVACUATION OF URBAN POPULATIONS PRIOR TO AN OUTBREAK OF HOSTILITIES.

- CONSTRUCTION OF SHELTERS IN OUTLYING AREAS.



- COMPULSORY TRAINING IN CIVIL DEFENSE FOR THE ENTIRE SOVIET POPULATION, HALF ARE ALREADY TRAINED.

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# EDITORIAL...

- Sam B. Slone III  
(USCDC Vice President for Region Three)

While the Soviet Union has quietly, but effectively been developing a civil defense system that now is considered to be one of the best – if not the best – in the world, and one which expects to provide for the survival of all but 5% of the Soviet people, we are expected to accept without question 40% or 50% or possibly 60% fatalities, and to do the best we can to save the rest!

Why?

Why has there been no long-range program of evacuation and dispersal of our metropolitan areas? Why has there been no national program of development of blast-protected shelter for our people in critical industry? Why has there been no ongoing program to provide blast protection for our vital facilities?

Why?

Where has been the national leadership to state "we can save the majority of our people in the event of nuclear attack provided we do this, this, and this" and that such a course aggressively pursued would insure that degree of survival?

I submit that the Federal Government's "direction" for the national civil defense program has been erratic, poorly planned and not receptive to thoughts and ideas originating at the local government level, where the ultimate survival must occur.

During the 27 years that have elapsed since the passage of Public Law 920 we have seen the evacuation planning of the Fifties, the CSP of the Sixties,

and now the CRP and NCP of the Seventies. Where is the consistency in our Civil Defense program?

We must, if we are to survive, take immediate steps to overcome the lead which the Soviet Union has taken by developing a credible civil defense system.

How can we do this?

One way is to demand and secure congressional and administrative support for a civil defense program that avails itself of every means to provide for the protection of all our people, backed by necessary laws to advance the program and by the necessary funding to enable it to achieve its ultimate goal.

I feel that the United States Civil Defense Council, the National Association of State Disaster Preparedness Directors, the civil defense associations of the several states, and the Defense Civil Preparedness Agency should begin immediately and work jointly and cooperatively to achieve the foregoing.

I feel we must seek and obtain the involvement of the American people. We need to take our cause to them by whatever means is available to us. Through the Media, through personal public appearances, through a concerted mailing campaign, and through other methods we can influence public opinion in strong favor of a vastly upgraded civil defense program.

Why not?

**WHY**  
**?**

Scientific American's editor, Dennis Flanagan, declined to publish the following letter rebuttal to an eleven-page feature article which contained questionable defense data. The letter-written by Dr. Eugene P. Wigner and Dr. Arthur A. Broyles – "sets the record straight" with an exposure of part of the article's misinformation and the alarming disparity between Soviet and American civil defense capabilities.

## "...we heartily disagree"

— Eugene P. Wigner

— Arthur A. Broyles

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December 16, 1976

Mr. Dennis Flanagan, Editor  
*Scientific American*  
415 Madison Avenue  
New York, New York 10017

Dear Sir:

In the November, 1976, issue of the *Scientific American*, there appeared an article entitled, "Limited Nuclear War" (LNW). It is somewhat surprising to find in the pages of this publication an article that is more political than scientific, but there it is. We have requested an opportunity to present an article giving more completely the scientific aspects of nuclear warfare, but since this request has been denied, we write this letter to answer the main political thrust of the article, one with which we heartily disagree.

The authors of LNW (Sidney D. Drell and Frank von Hippel) have written their article to defend a national defense policy that has influenced a large number of our government officials. It proposes to maintain a situation where "We and the Russians are each others' nuclear hostages." In order to keep US citizens in a hostage state, many members of the Congress have opposed antiballistic missiles (ABM) and civil defense shelters. These devices would prevent American deaths in case of nuclear attack and thereby rescue our people from being hostages.



The proponents of holding American hostages point out that, if losses to *both* sides are unacceptable in a nuclear war, this war will not occur. They fail to note, however, that if one side keeps its population vulnerable while the other does not, the weak side is likely to be forced to capitulate to the strong, probably without the need of an attack. It will have to succumb to what is called a "nuclear blackmail." This point is consistently disregarded in the article we are referring to.

#### "ONLY THOSE WHO NEGLECT"

Evidence has been accumulating for a number of years at an ever increasing rate that the Soviet Union and the Chinese have no intention of leaving their people unprotected. Indeed a reading of statements by their leaders indicates their intention to, if nuclear war comes, survive it and fight it through to a victorious conclusion. As the Final Document of the 1969 convention of the 74 communist parties of the world announced "The existing situation demands united action of Communist and all other anti-imperialist forces so that maximum use may be made of the mounting possibilities for a broader offensive. . .". And, in this "offensive" the protection of the people from nuclear weapons should play a crucial and effective role. As Marshal W. I. Chuykov, former Chief of Soviet Civil Defense, said: "Although the discussed means of destruction are called mass means, with knowledge and skillful use of modern protective measures they will not destroy masses of people but only those who neglect the study, mastery and use of these measures." (Did he refer to us?)

The defense of the hostage theory is often based on the statement (see LNW), ". . . in the event of nuclear war neither this country nor the USSR would be able to defend itself against virtual annihilation." This is a belief that has enjoyed enormous popularity in the press. It is totally incorrect as it stands. It was denied by (former) Secretary of Defense Schlesinger and is at variance with a number of careful calculations. One of us (EPW) has published such a calculation, well known to at least one of the authors (SDD) of the article we criticize and uncontradicted in the literature, showing that if the USSR evacuates its cities before a confrontation, the losses our missiles could produce would be well below 4 per cent of the population.\* The PONAST study, organized by the National Security Council, considered a nuclear attack in which the USSR aimed two thirds of its destructive force at civilian targets. This attack would destroy 45% of the US population under our present inadequate civil defense system. Is this an acceptable situation? The same study shows that if we equal the Swiss defense expenditure per person for about 10 years, these losses would be reduced, *by these measures alone*, to about 5½ per cent of the people.

---

\*T. K. Jones of the Boeing Aerospace Company estimates Soviet losses at 2% — well below our 4% estimate.

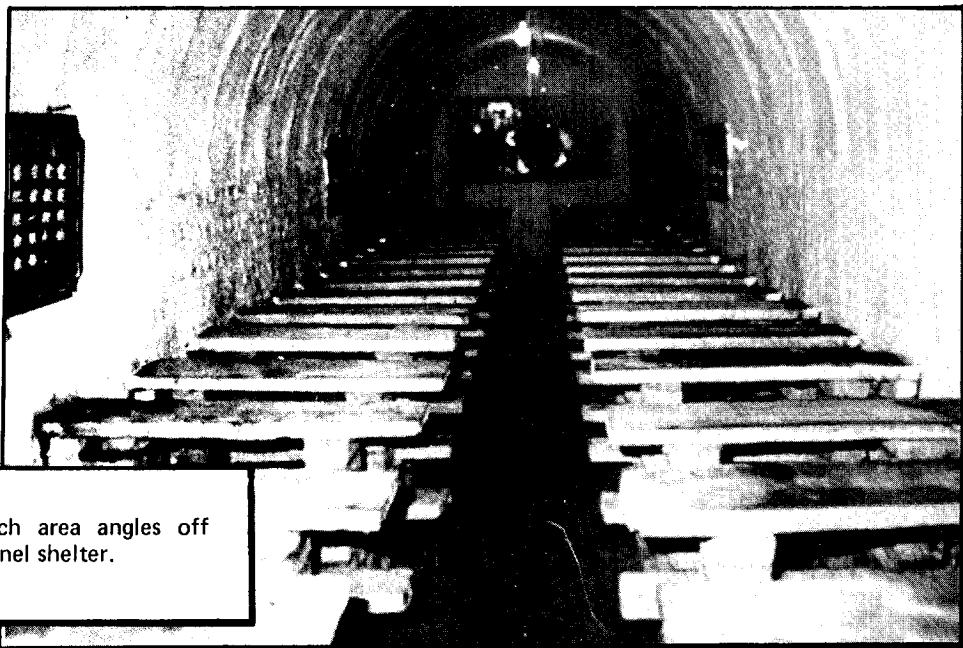


Table and bench area angles off from Peking tunnel shelter.

The protection of a civilian population from the effects of nuclear war can involve four primary elements: (1) a capability of destroying enemy ICBM's before they are launched, (2) an ABM system to destroy them on the way in, (3) a dispersal procedure to remove the population from direct blast and fire, (4) and a shelter system that places a shield between people and the blast wave, fire, and radioactive radiation.

As we shall see, all of these elements appear in the Soviet and Chinese systems taken together, but one system emphasizes some elements while the other chooses others. It is interesting to note how the difference in the two civil defense systems reflects on national intentions in the next few years.

For years, the United States built its ICBM's to carry a small pay load as a deliberate contribution on our part to maintaining our population in a hostage condition. In order to destroy ICBM's before launch, it is necessary to penetrate their shielded silos even though the explosion may be several tenths of a mile away. The small bombs, for which our missiles were designed, were unable to accomplish this. One way to make small bombs effective is to improve their guidance system to place the explosion nearer to the silo. The LNW article states that the U. S. does not have silo destroying missiles but is conducting research and development along these lines. The Soviets have had for many years, however, large ICBM's capable of destroying hardened silos even with relatively poor guidance. Their SS-9's carry a single 25 megaton pay load or three mirrored 5 megaton bombs. Former Assistant Secretary of Defense Packard said as long ago as 1969, "The Soviets are testing multiple warheads on the SS-9. And if they give the SS-9 three individually guided warheads with high accuracy and high yields — which they are fully capable of doing — then they triple their threat to Minutemen (our ICBM's) and remove our confidence that that portion of our deterrent can survive in adequate numbers."

Of course there are submarine based ICBM's, and these are harder to locate. The Soviet answer to our Polaris fleet is a large number of "killer" submarines. These submarines are faster than our Polaris ships. They are designed to wait off our coastal naval bases and to stay with our subs when they leave port. They are then in position to destroy them by torpedo.

#### ABM — EVACUATION — SHELTER

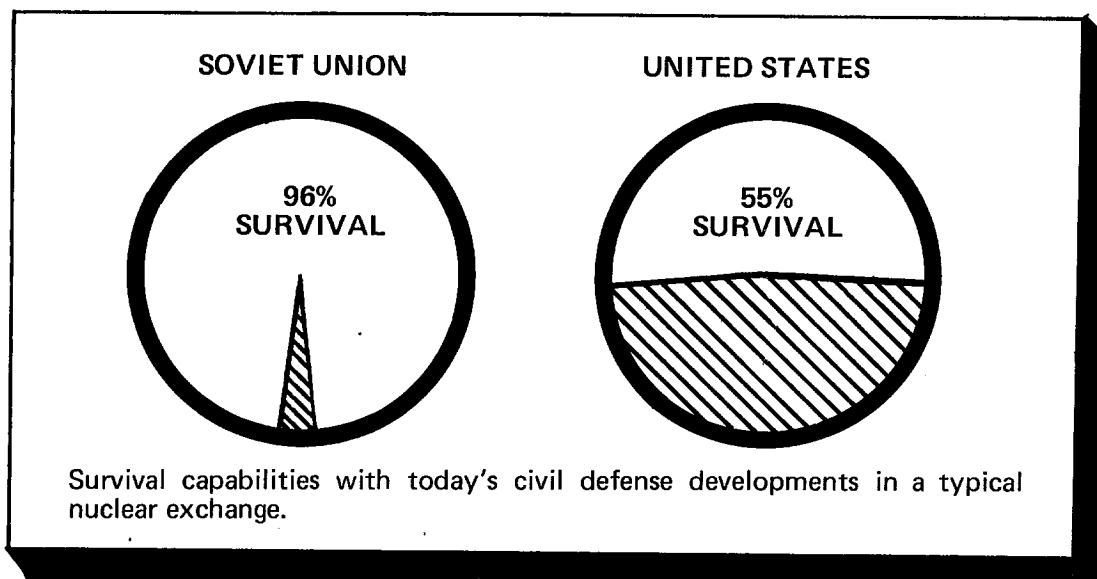
The United States has developed the world's most effective ABM's. As a measure of this effectiveness, we note that Professor Hans Bethe of Cornell University studied the ABM system proposed in 1968 and favored the deployment of the thin system (with twelve sites) which was under consideration at that time. It is not surprising that the Soviets have been willing to sign a treaty to restrict ABM bases to one locality. They have chosen to defend Moscow. We have declined to defend any city. There is no evidence in the published literature at this time of a Chinese ABM system.

The Soviet Union has adopted a highly effective civil defense plan that provides for the evacuation of their city populations to outlying areas. These people then construct "expedient shelters" using materials at hand. For example, where forests are nearby, a trench is dug and lined and covered with small logs. Earth is then piled on top to provide a blast resistance of 40 pounds per square inch, (Tested by the Oak Ridge National Laboratory). These shelters also provide quite adequate protection from fire and fallout radiation. They also reduce the middleth blast distance from a one megaton explosion from about 4 miles to less than 1.5 miles, thus reducing the area covered by this pressure by a factor 8. Soviet estimates are that this program can be expected to reduce the loss of life in a large city from "90% of the population . . . to a level between 5% and 8%." The calculation referred to before shows that their nationwide losses would be less than 4% of their population even if all our missiles were directed at their people and their ABM totally ineffective. This is less than half of what they suffered in World War II and raises the question of whether they are effectively deterred from attacking us. One may well wonder whether the LNW statement that 200 surviving missiles, less than one fifth of our inventory, would constitute an "overwhelming retaliatory force" was meant seriously.

The Chinese plans are quite different. They have constructed blast shelters in their cities in the form of tunnels. They are readily accessible and provide good and rapid protection for the people. Many photographs were taken of these shelters. The Chinese in a sense boast of them. They were also shown to President Nixon on his visit to China.

It is interesting to compare the Soviet civil defense system with the Chinese. The Soviet plan requires two to three days to put into effect. We have checked by actual trial that an average family can construct an expedient Russian designed shelter in about two days. Where do they find those two or three days? They have them if they are planning to precipitate a confrontation, with a threat to attack. The Chinese system, on the other hand, requires only a matter of minutes to reach shelter. It is ready immediately if they are attacked without warning.





#### ODD ARGUMENTS

The "Limited Nuclear War" article raises the question of whether the Soviet government is actually serious about its civil defense plan. In answer to this, we can cite the fact that they printed 130,000 copies of their 1969 civil defense manual of 351 pages. They published, since, a new edition. Plans for expedient shelters have been distributed. Civil defense training has been implemented in the schools so that, by the time a child completes the tenth grade, he has received a total of 115 hours of civil defense instruction. Adult civil defense training is also mandatory. There is little doubt that over 100 million people have taken their intensive training course. Blast shelters have been constructed particularly to protect factory workers. Blast doors have been provided for subways. The television, radio, and newspapers continually remind the Soviet populace of the need for civil defense. One Soviet source indicated in 1969 that "more than a thousand persons have participated and are participating in (providing civil defense) television broadcasts in all studios." Every town has an evacuation transport commission headed by the deputy chairman of the local Council of Workers' Deputies. Detailed plans for evacuation are available to him.

Evacuation exercises are expensive. They bring factory production to a halt and increase the chance of accidents. Nevertheless, individual institutions and factories are required to conduct frequent evacuation drills and at least one sizeable city, Sevastopol, has been evacuated. The success of this drill showed that the evacuation plans can be implemented and also taught them how to improve them.

The LNW article opposes a US civil defense program because it would remove our citizens from a hostage status – a status designed to prove to the Russians that we will never attack them. The argument is also presented that an improvement of our civil defense would stimulate the Soviets to further upgrade their civil defense. But they are already far ahead of us in this area. Are we to simply abandon the arms race and leave it to them to obtain overwhelming superiority with all the dire consequences to our life and freedom? It is pointed out that an armed nuclear truce has existed for many years without an American civil defense. This ignores the fact that, until the last few years, US superiority in nuclear weapons was great and evident. That superiority is now gone and the balance is heavily tipping toward the Soviet Union.

We find in LNW a rather strange statement. "In the 1960's the US adopted a strategic policy giving top priority to the prevention of nuclear war through deterrence rather than to preparation for fighting nuclear wars if deterrence should fail."

How do you deter an attack unless you convince an enemy that you will fight the war that he is starting? We find it extremely doubtful that any one can be convinced that we will retaliate unless we are prepared to protect our population from the consequence of that retaliation.

It may happen that the American public will awaken some morning to learn that, for the past six hours, a Soviet city evacuation has been underway. Our President will then face three alternatives: (1) launch a nuclear attack against the Soviet Union, (2) order the evacuation of our cities, (3) or do nothing. If he chooses the first alternative — we surely do not advocate this — he can expect the loss of 45% of America's unprotected population in the Soviet retaliatory attack. If he chooses the second alternative, without the planning that should go beforehand, American roads will soon be jammed. Those people lucky enough to reach the countryside will not know where to go to find food, other necessities, and how to build expedient shelters. If he chooses the third alternative and does nothing, the President will soon be faced with Soviet demands under the threat of a nuclear war where American losses can be expected to be almost half the population while the Soviets will suffer a population loss of less than half of that in World War II. We propose to make the second option a reasonable one by preparing the American population to carry out a civil defense plan like that in the Soviet Union. If we can evacuate and construct shelters as they can, they will see that they cannot gain by executing their plan. If they do set evacuation into motion, we can maintain the nuclear balance by doing the same. If, finally, they do attack, we can save a maximum number of

### COMPARATIVE DEFENSE CAPABILITIES

	1	2	3	4
	ICBM Silo Destruction	ICBM Destruction in flight	Population Dispersal	Sheltering of Population
USSR	Good	Poor	Good	Good
China	Poor	None	None	GOOD
USA	Good	None	POOR	POOR

American lives to rebuild our country after the war.

These are not the only points of criticism that we have of the LNW article but our letter is long enough as it is. On the other hand, we wish to approve this article for communicating a good deal of useful information and compliment its authors for having raised a very important question in *Scientific American*.

Sincerely yours,

*Arthur A. Broyles*

Arthur A. Broyles  
Professor of Physics, University of Florida

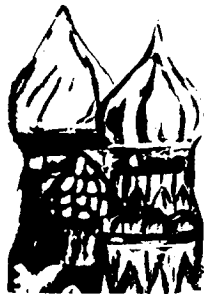
*Eugene P. Wigner*

Eugene P. Wigner  
Professor of Physics, Princeton University

# OVER THE IRON CURTAIN

—Ruby N. Thurmer

Emergency Technology Section  
Health Physics Division  
Oak Ridge National Laboratory\*  
Oak Ridge, Tennessee 37830



"Our duty . . . a sacred one . . . is to maintain the country's armed forces on a high level, so that the Soviet troops may always have the most modern weapons, which the imperialists cannot ignore!"

\*

Boris Ponomarev (age 72), Secretary of the CPSU Central Committee, spoke at a reception in Prague on April 28, 1977. This was a meeting of communists and workers party representatives to review the work of world Marxists. Exerpts from his speech to fellow communists follow:<sup>(4)</sup>

" . . . apart from the communists there is no other force in the world capable of showing a way out of the impasse to which imperialism leads the people.

" . . . Of course, the communists and revolutionaries must still exert great efforts before they succeed in building such a world [communist world] on the entire planet. First of all we need to break the resistance of imperialism, which is dogged and hard. A worldwide struggle is now in progress in the spheres of politics, economy, and especially in the sphere of ideology."

\*

These reports should alert all concerned persons to the need for taking decisive action to provide the U. S. population with the means to attain a reasonable amount of protection for themselves should the situation worsen as a result of changes in Soviet leadership and/or policies. Our nation should accept the fact which the Soviets have made undeniable for the last 60 years: their ultimate goal is a world centered around Moscow — a world of communist states. Their means of attaining this goal is, they hope, through gradually increasing their sphere of influence. They, at present, prefer to do this peacefully, i.e. "peaceful coexistence" or "detente," and they are making definite progress. Therefore, unless we are willing to accept the same fate as Czechoslovakia and Hungary, among numerous others, we must face this in a sensible manner and be prepared to defend ourselves in all vulnerable areas, including the presently, grossly neglected one — civil defense.

## REFERENCES

1. London, The SUNDAY TIMES in English, 27 March 77, p. 10, as reported in FBIS-SOV-77-59, March 28, 1977, pp. 8-10.
2. V. Sozinov, "Always in a State of Combat Readiness," Moscow SOVETSKAYA ROSSIYA in Russian, 10 April 1977, p. 2, as reported in DAILY REPORT, SOVIET UNION, FBIS-SOV-77-78, Vol III, No. 78, April 22, 1977, P. V3.
3. As reported in KOMMUNIST VOORUZHEN—NYKH SIL in Russian, No. 24, December 77, pp. 70-77.
4. Moscow TASS in English, 0955 GMT, 28 April 77, as reported in DAILY REPORT, SOVIET UNION, FBIS-SOV-77-83, Vol. III, No. 83, April 29, 1977, pp. D1-4.

PRAVDA, TASS, AND RADIO MOSCOW have almost completely ignored both S. U. and U. S. civil defense items during the past weeks. Their main interests being the "ridiculous" plan offered by the Carter administration for the SALT agreement, Western attitudes regarding the reduction of NATO and Warsaw pact forces in Europe, and the U. S. "meddling" in their internal affairs, i.e., Pres. Carter's support of human rights.

The official Soviet attitude toward the human rights issue was expressed by Georgiy Arbatov, the Director of the Soviet-American Institute in Moscow: (1)

"Whatever Carter does in stressing the human rights issue, it will not gain him anything. We will not change our position and Mr. Carter could find himself cornered, because the result could well be a counter-reaction which would only show that he is making things worse."

No specific "counter-reaction" was iterated by Arbatov in his discussion.

These developments possibly seem to be unrelated to civil defense; however, it is becoming necessary to consider civil defense an important part of the US/SU strategic picture. When policy discussions are underway and problems loom on the international horizon, we can no longer ignore such shocking disparities as those revealed by Gen. George J. Keegan.

The Soviets, of course, are interested in eliminating the proposed B-1 bomber and the cruise missile from the U. S. arsenal. Both are classified by the USSR as obstacles to SALT. However, the Chief of the Main Staff of the Air Defense Forces, Col. Gen. V. Sozinov, stated: (2)

"The Air Defense Forces have all-weather supersonic fighter-interceptors equipped with powerful rocket armaments capable of destroying enemy aircraft and *cruise missiles* [emphasis added] throughout the entire range of their use in combat."

Possibly they won't have to rely on negotiations after all to eliminate the cruise missile threat. It could already be taken care of.

\*

Leonid Brezhnev (age 70) stated at the October 1976 CPSU Central Committee Plenum: (3)

\*Research sponsored by the Energy Research and Development Administration under contract with Union Carbide Corporation.

# BOOK REVIEWS

R.F. Blodgett

**THE HEALTH HAZARDS OF NOT GOING NUCLEAR**, by Petr Beckmann. Published by The Golem Press, Box 1342, Boulder, Colorado 80302, Third Printing January, 1977, 190 pages. Paperback: \$5.95. Hardbound: \$10.95.

"A sense of proportions is what this book is about."

In nine carefully structured chapters the author methodically offers sane and logical rebuttals and counter-arguments to the statements made by self-styled environmentalists and especially Ralph Nader. (The book is dedicated "To Ralph Nader and all who worship the water he walks on.") Beckmann never tries to prove that nuclear power is one hundred percent safe, only that it is far safer than any other form of large-scale energy conversion yet developed.

It is hard not to be absolutely convinced that he is correct when he compares figures of the big picture; for instance, the number of mine and pollution deaths caused by the use of coal for electrical generation as compared to similar figures presented for nuclear power. He compares the total effects, expense and efficiency of the various power producing possibilities and in every case is able to show nuclear to be superior.

The anti-nuclear activists appear to misquote figures, take conditions entirely out of context. They seem to be widely supported by a prejudiced press. The sensationalism of nuclear malfunctions makes these stories attractive to the media when, in fact, the possibilities of major harm are far more probable with, for instance, a dam collapse in a hydroelectric system of power production. Similar catastrophic possibilities are cited for all other power production networks and make for thought-provoking reading.

Anyone interested in the future life-style of America ranging from energy and health to managed press and misrepresented facts advertised to the general public must read this book. If not, read it anyway for a good methodology to counter arguments to any misrepresented situation.

Be sure, immediately after reading the dedication, to refer to the last page and read "About the Author," because many times his presentations will make you wonder if he can prove his premises and conclusions. Dr. Beckmann surely appears to have the credentials and has no ax to grind.

**THE SOVIET CIVIL DEFENSE SHELTER PROGRAM**, by Leon Goure. A special Report on International Affairs produced by the Center for Advanced International Studies. Available from: Dir. of Publications, Center for Advanced International

Studies, University of Miami, Suite 1213, 1730 Rhode Island Avenue, N. W., Washington, D. C., 20035, 23 pages.

As with all Dr. Goure's reports on Soviet Civil Defense this pamphlet is drawn entirely from open Soviet sources. Why current national U. S. policies choose to disregard this type of intelligence is difficult to comprehend.

The report indicates a steady upgrading of facilities for civilian protection evolving from practiced population relocation to rural hasty shelter construction locations, to increased emphasis on in-place shelters in population centers. Permanent Soviet shelters are constructed to withstand not only fallout, but significant amounts of blast overpressure and include chemical and bacteriological protection.

The Russian concept is based upon a program of shelter for everyone, a mandatory system to include shelter in new construction, a high level of multipurpose protection, and a strong continuing effort for constant upgrading, including stocking of supplies and equipment. It appears, however, that their shelter stay time is generally considerably less than is programmed in the U. S. plans.

It is ludicrous to imagine that any minimal civil defense effort in the U. S. could possibly be considered provocative in light of Army General A. I. Radzievskii's statement in January, 1977 that "methods of protecting the population and the national economy against attacks" are "constantly being improved." These improvements are now identifiable enough for all to see.

**Le Livre de la Sécurité Familiale** (The Family Security Manual). Published by Hachette, Paris, France. 1977. For the office of Family Security of the French Ministry of the Interior.

A fascinating book covering domestic accidents that take over 5,000 lives a year in France. Printed attractively and given effective accent through the generous use of photos, sketches and diagrams.

One remark stands out:

"To become acquainted with a risk is to gain the possibility of reducing its gravity for oneself as well as for others. Even of suppressing it. Preventing an accident means first taking account of the risk, knowing how to evaluate it."

The manual omits the subject of nuclear weapons effects. The argument could be made that in France the subject is muted. Should it be? The expertise displayed in producing "Le Livre de la Sécurité Familiale" applied to a book on protection from nuclear attack would certainly wake up a lot of Frenchmen.

# BARDYL TIRANA

## —Pal or Piranha ?

—Walter Murphey

You can say one thing for new DCPA Director Bardyl Tirana: he hasn't been idle. Perhaps better he had been. No sooner had he confessed that he knew nothing about civil defense than he became a voluble expert on the subject. He didn't need more money — civil defense was not all that important. The reaction of shock, dismay and anger that swelled from CD ranks triggered a series of semantic pirouettes by Tirana in discussions, letters and talks which soothed some and further confused others — made them madder.

Most top executives of national CD groups were soothed as were many who heard Tirana present his case. They feel he is sincere, has a viable program, will become effective and deserves support.

The second group is less patient. Elsie Jane Beck, a Western New York CD official, says:

"As a professional civil defense person with nearly 24 years experience—what is my opinion?

"I do not agree with the Honorable Bardyl R. Tirana . . . that the deterrent power of the United States is effective and that there is no crisis. 1980 might be too late, Mr. Tirana!

"From professional studies, journals, and everyday media reports, I strongly feel we live in a hazardous, unpredictable world . . . I believe civil defense is as much a deterrent as our military weaponry and we cannot as a nation afford to discard such a program."

F. J. Hilbus, President of the Alabama CD Association, observes:

"Some of us can remember during the 1930's that several counties and states paid a bounty anywhere from 50¢ to \$5 for a pair of coyote ears. During that period a half dollar was looked on as quite a bit of change, but I never knew any person in those days whose life wasn't worth many times the value of coyote ears.

"Surely we can spend as much to protect each American during inflationary times as we paid to kill coyotes during the Depression. Americans also deserve honest dedication from those responsible for their survival programs.

"I feel that Mr. Tirana owes it to our citizens to research civil defense, *then* give our people the facts as they actually exist. He will find that not only has all the fat been taken out of the civil defense budget, but so many bones were removed during the operation that it cannot stand.

"Three hundred forty-seven members of the House of Representatives realized this when they voted to increase civil defense appropriations."

The increase Hilbus refers to was passed-over Tirana's protest that he didn't want it.

Worse than current discord among CD pros would be the abandonment of vital CD aims. "America viewers" from the Soviet Embassy would love this and encourage it. You can't blame them. Ridiculous delusions like "overkill" help them immensely. Give them credit. They're smart. Smarter than Tirana.

But maybe not smarter than Congress.

Doesn't this give us direction over and above any split on the question of whether Tirana is a hero or a villain? Over the last three years the CD pros have done a magnificent and miraculous job in staging the Oversight Hearings. And these hearings in turn have exposed for Congress — and the press and public as well — the falsity and the treachery and the mortal danger of attempts at appeasement and unilateral undressing of our cities.

Most Congressmen now know that the "overkill" scare was a senseless hoax. Most Congressmen now know that the Soviet Union does have a total and burgeoning civil defense effort that assures its population of well over 96% survival under the worst conditions. Most Congressmen now know that the "hostage concept" is an immoral, cowardly, suicidal dodge that condemns masses of men, women, and children to incineration in nuclear attack.

The newest myth to surface is that of "retargeting." It too is an insult to any intelligent person who takes the trouble to examine it.

Eugene Wigner's article, "The Myth of 'Assured Destruction' " (*Journal of Civil Defense*, July-August, 1970) was based on retargeting and showed it to be remarkably ineffective.

Most Congressmen know that throughout the 20th Century peace for the United States has failed when the country has let its guard down and been unprepared.

The road for all of us to take now is therefore clear: a campaign of truth and getting that truth in a redundant fashion to Congressional leadership.

The people best qualified to keep us on the road: the people who are already on that road — the officials of USCDC and NASDPD. Let's dig in and help them with it. Let's make that a commitment.

The argument is not whether Mr. Tirana is a likeable, persuasive guy or not. The argument is whether our people are to be protected or not, whether we want to shield them or slaughter them, whether we want war through weakness or peace through preparedness.

What was it Leo Durocher said about nice guys?

# THE ACHILLES' HEEL OF CIVIL DEFENSE

(From *Civilt Försvar* - Sweden)

Civil Defense can be regarded as a system in which the various components, mutually interdependent upon one another as they are, all deserve fair consideration so far as support and conscious development are concerned. To produce a sensible balance in such a system is one of planning's most important and perhaps most delicate tasks - especially in times when budget restrictions mean that the arms of the scale are supersensitive to even slight disturbances produced in the act of weighing.

Evacuation, shelter, and relief are such well-established components of the system that they have almost completely overshadowed remaining ones. One of these others has in fact been treated very grudgingly and has received altogether very little attention. It has now at last been brought into proper focus, and just a casual glance at the popular edition of the program plan of the Swedish civil defense authority will show that this one, warning systems, is now an integral part of the well-designed civil defense package.

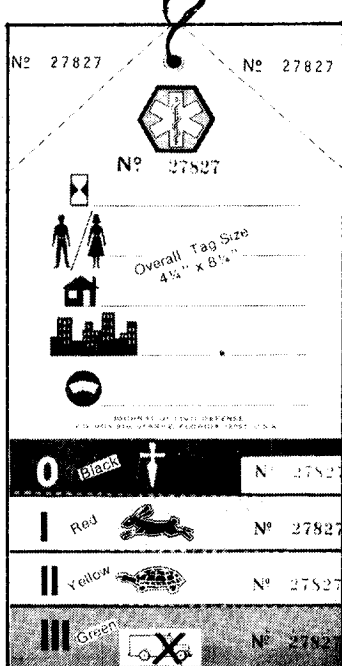
Surveillance, forewarning, and delivery of alarm are closely related aspects of one and the same matter, and principal responsibility for ensuring that the population is adequately warned rests with the military defense system, its air force and its supreme command . . .

It is not difficult to see the necessity behind such a demand. Not just the civil defense system, but in fact the entire defense effort depends upon the maintenance of an adequate alarm system. . .

(Translation by Dr. Daniel M. Popp,  
University of Florida)

The Swedish Civil Defense Union celebrates its 40th anniversary this year. On November 18-19 it will mark the occasion with a conference in Stockholm. Swedish defense analysts claim that attention to defending the homeland that began in 1937 as sabers rattled in Europe contributed heavily to the fact that Sweden was able to remain neutral during World War II.

Veteran West Germany Civil Defense Director, Hans Arnold Thomsen, has retired after 13 years of service at the post. New director is Peter Glückert, whose background includes studies at Berkeley, California.



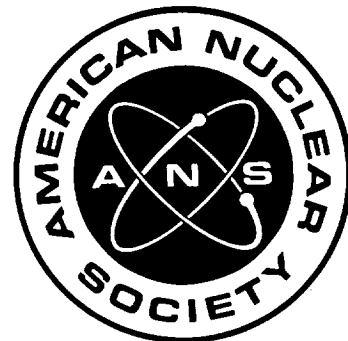
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## AND NOW, WALTER CRONKITE

(From May ANSPI - American Nuclear Society)

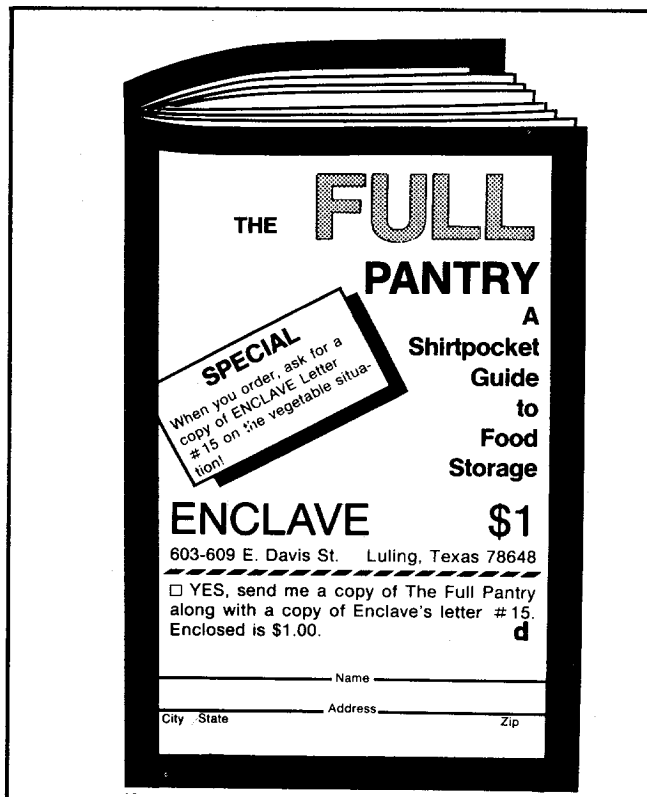
Walter Cronkite also is guilty of an instance of newscasting contrary to the public interest. Lynn R. Wallis, a member of the ANSPI committee and past president of the ANS Northern California Section, wrote to William S. Paley, CBS Chairman, that in a news story on April 7 Cronkite characterized plutonium as "the most toxic material known to man," saying, "A little bit on the skin can kill."

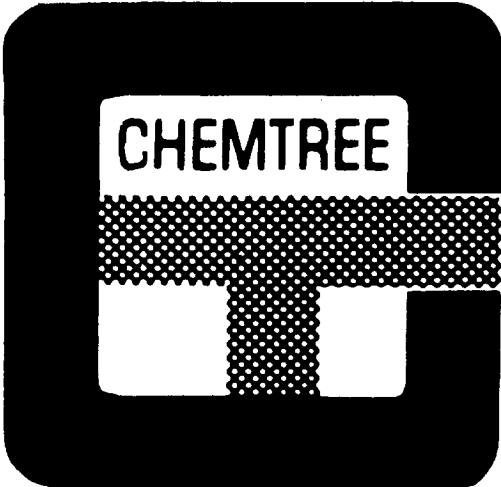
Wallis quoted these as the facts: "Plutonium is neither the worst nor the only hazardous material" with which man has had to contend. "A taste - less than a drop - of nicotine, parathion, TEPP, and other man-made chemicals would be fatal; ingestion of the same quantity of plutonium would not be lethal. As few as two drops of some pesticides in contact with human skin would be lethal; . . . plutonium in contact with the external surfaces of human skin is not harmful and cannot kill." Wallis suggested that Cronkite might have mentioned that during 20 years tons upon tons of plutonium have been handled in this country (as part of the national defense effort) without adverse consequences or fatalities; and that plutonium-powered pace-makers have been implanted in humans to save lives.

Every objective study that has been made of the energy problem has concluded that the United States needs to develop all its energy options, neither overemphasizing nor foreclosing any of them.

It is time for the country to face this situation realistically. We support the vigorous development of alternate sources and the detailed scrutiny that is being given nuclear power. But the exaggerated fear that would kill off the latter while naively relying in the still vague promise of "alternatives" is dangerously misguided.

- Christian Science Monitor (30 Mar 77)





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## CIVIL DEFENSE . . . PART OF THE STRATEGIC BALANCE

"For the men who rule Russia, nuclear war is not completely unthinkable, just publicly undiscussable.

"But Western specialists in Moscow say that this is what the Kremlin is trying to do about the 'unthinkable':

- Achieve clear nuclear superiority over the U. S. in strategic weapons, and over NATO in tactical nuclear arms in Central Europe.
- Maintain a civil-defense system sufficient to survive a sizeable U. S. retaliatory strike or the most damaging attack China might be able to launch.
- Foster through the West an attitude that nuclear war is indeed unthinkable and unacceptable by avidly promoting everything from political detente to 'peace' petitions with millions of signatures demanding disarmament.

"Civil defense is as much a part of the strategic balance as are missiles and bombers. That crucial fact must no longer be ignored."

James N. Wallace in Air Force Magazine



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