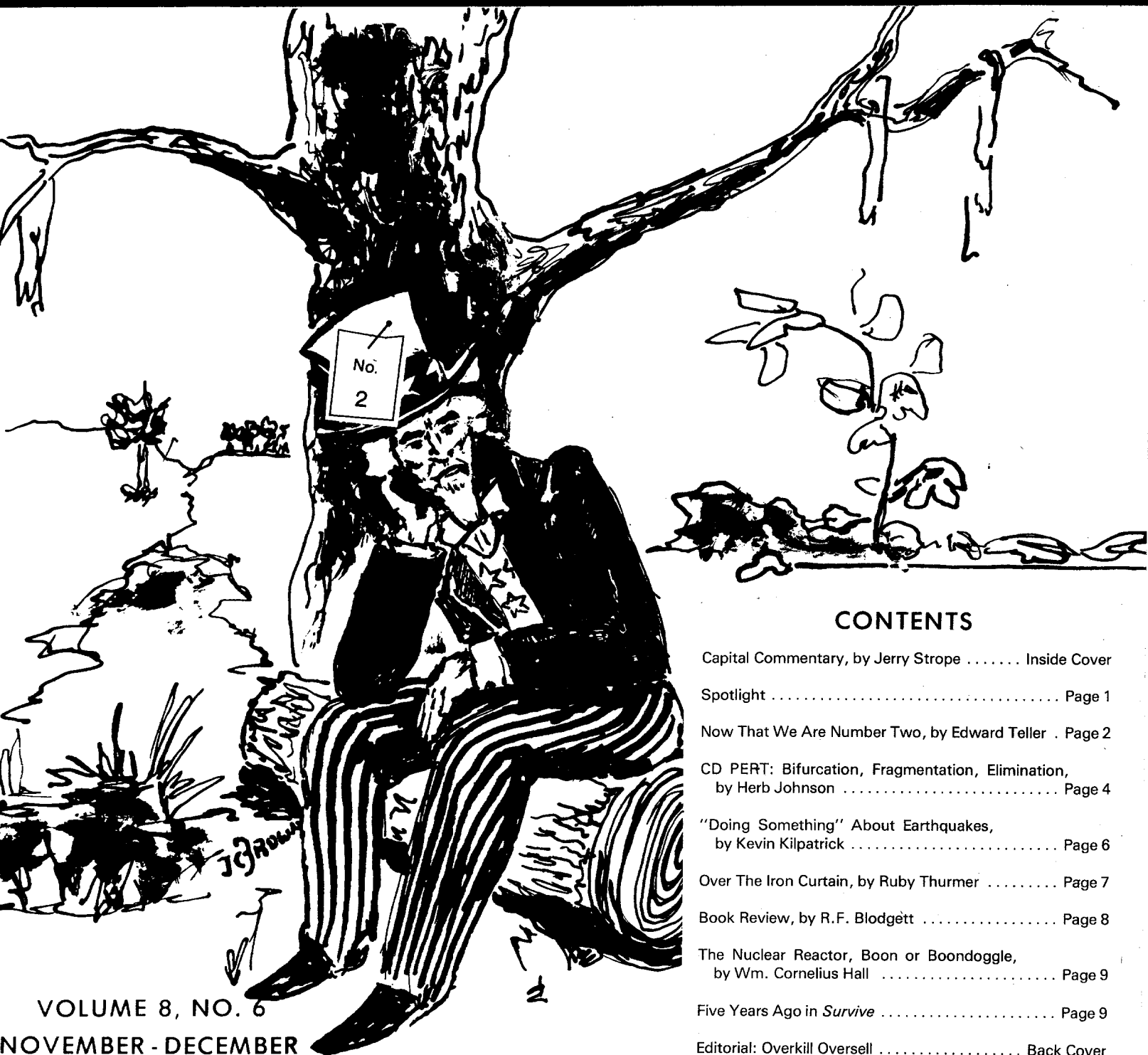


SURVIVE

SAFRIC JOURNAL FOR LIFEN



CONTENTS

Capital Commentary, by Jerry Strobe	Inside Cover
Spotlight	Page 1
Now That We Are Number Two, by Edward Teller ..	Page 2
CD PERT: Bifurcation, Fragmentation, Elimination, by Herb Johnson	Page 4
"Doing Something" About Earthquakes, by Kevin Kilpatrick	Page 6
Over The Iron Curtain, by Ruby Thurmer	Page 7
Book Review, by R.F. Blodgett	Page 8
The Nuclear Reactor, Boon or Boondoggle, by Wm. Cornelius Hall	Page 9
Five Years Ago in <i>Survive</i>	Page 9
Editorial: Overkill Oversell	Back Cover

VOLUME 8, NO. 6

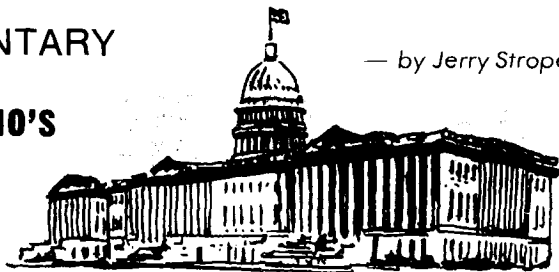
NOVEMBER - DECEMBER

1975

CAPITAL COMMENTARY

— by Jerry Strobe

I WONDER WHO'S KISSINGER NOW?



With a Presidential election barely a year away, increasing numbers of hopefuls are finding it newsworthy to play the fascinating game of "Get Kissinger." The original version of this game was invented in the Federal bureaucracy, whether in Defense or State is a matter of controversy. Purely defensive in original concept, the game has, over the past few years, been refined in diverse ways by Professor Kissinger's erstwhile colleagues at Harvard and Yale. Congressional critics have been influenced by both bureaucratic and academic gamesmen. The object, of course, remains the same: to suggest with more or less urgency that the time has come for Kissinger to leave the scene and return the making of foreign policy to less brilliant but more stable minds.

Actually, Henry Kissinger seems at his least vulnerable just now. Less than a year ago, American foreign policy appeared bankrupt. Not only was the Viet Nam disaster complete but shuttle diplomacy had failed in the Mideast, North Korea was making threats, and Portugal was turning to the left. The gains since then few would have believed possible last spring. Portugal, to even Kissinger's surprise, has rejected Communism. In the Mideast, the U.S. is established as the peacemaker. North Korea is still worrisome but has backed off its threat. Indochina has stayed out of the news and a Western-oriented regime has come to power in Bangladesh.

Not all of this good news can be laid at Secretary Kissinger's door. But some Kissinger magic goes almost unremarked in the press. Witness the recent economic confrontation in the UN with the Third World. While Russia and China ducked clumsily, the U.S. extolled the virtues of capitalism and told the poor nations they could get help in the West. Algeria got nowhere with its "new world economic order" and the Arab oil producers may have to ease their plans for another price boost.

Still, all is not roses in Kissinger's future. He is having more trouble with the Congress than he has had in foreign lands. Not too long ago, a trade agreement with the Soviets was scuttled by Congressional provisos. An arms embargo on Turkey has resulted in the closing of U.S. bases there without bringing an agreement on Cyprus any closer. Kissinger's Egypt-Israeli pact waited on approval from Capitol Hill to send "technicians" as well as arms aid. Even the UN approach to the Third World depends on Congressional cooperation in the field of foreign aid.

The real crunch facing Dr. Kissinger in the immediate future, however, is the matter of SALT II. Detente with the Soviet Union is the "biggie" and detente to most people means solid progress on arms control. The first SALT agreement has been blasted repeatedly as giving the Soviets strategic superiority. The charges have been aggravated by the truly massive Soviet strategic buildup since then. Some say the Russians have cheated; certainly, they have taken every advantage of loopholes and fuzzy language. Brezhnev's summit visit has been delayed repeatedly as the SALT II negotiations continue. It seems unlikely now that he will come this year. As the election rhetoric begins to flow, Henry Kissinger must know that SALT II is where it's at.

SURVIVE

The American Journal of Civil Defense

VOL. 8, NO. 6

NOVEMBER-DECEMBER, 1975

Sponsored by
The Civil Defense Forum
The Oak Ridge Civil Defense Society
The Professional Society for Protective Design
The Association for Community-Wide
Protection from Nuclear Attack

Policy Board

WM. CORNELIUS HALL, Chairman
J. HOWARD PROCTOR
WALTER D. HYLE, JR. (USCDC)
J. R. MAXFIELD (ex officio)
ARTHUR A. BROYLES
KARL LUNDGREN
LOWELL B. JACKSON
HERBERT W. JOHNSON
JOHN H. NEILER
W. RAY MONTGOMERY
EUGENE P. WIGNER
FRANK L. WILLIAMS

Advisory Board

BILLY G. DUNAVANT
NEAL FITZSIMMONS
F. CORNING KNOTE
EVAR P. PETERSON
STUART L. PITTMAN
JOHN A. SAMUEL
R. G. SHERRARD
BYRON D. SPANGLER
H. W. TARKINGTON
EDWARD TELLER
ANTHONY J. WIENER

Editorial Committee

KARL LUNDGREN, Chairman
CLIFFORD A. LYLE
JOHN A. SAMUEL
LAURETTA E. FOX
FRED V. WILLIS, JR.
JAMES W. DALZELL
ROBERT F. BLODGETT
HERBERT T. BOGERT

Staff

Editor WALTER MURPHEY
Business Manager CAROLYN HAYES
Public Relations FRANK WILLIAMS
Art J. C. BROWN, JR.
Distribution BILL DESHA

SURVIVE is published bimonthly by the Association for Community-Wide Protection from Nuclear Attack. Address: SURVIVE, Post Office Box 910, Starke, Florida 32091. Subscription: \$5.00 per year. Phone (904) 964-5397.

SURVIVE presents authentic information relating to civil defense — to the survival of free government, the United States and its people in the nuclear age. Its aim is public education in this field and service as a forum.

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.

Material may be reproduced if context is preserved, credit given, and copy sent to SURVIVE.

SURVIVE. . NOVEMBER-DECEMBER, 1975



REACTORS GET PUBLIC OK

Contrary to opinions of U.S. leadership groups, a strong 63% majority of Americans favor the building of more nuclear power plants in the United States. Only 19% oppose the idea, while 18% are not sure.

These figures tumbled out of a nationwide Leon Harris and Associates survey conducted for Ebasco Services Incorporated and are reported in a 3 1/2-page story in the September 1975 issue of *Nuclear News*.

Principal reasons given for favoring nuclear power developments were (1) economic — i.e. lower fuel bills, (2) environmental — i.e. less pollution, and (3) an abundant source of energy.

The 19% opposing nuclear development in the U.S. cited (1) hazards to communities, (2) need for supporting alternative energy sources, and (3) radiation. Only 1% of the general public was worried about radioactive waste disposal.

The same survey conducted a "credibility" poll on sources of nuclear reactor information. In it John Doe gave scientists a 58% vote of confidence. But other sources fared poorly: state governors, 9%; U.S. Senators, 8%; U.S. Congressmen, 7%; labor union leaders, 7%; and newspaper ads opposing nuclear power, 6%.

PATTYCAKE

CBS on its September 17th evening news broadcast featured a new Pentagon pronouncement that a Soviet attack on U.S. missile sites would result in an estimated 21.7 million U.S. fatalities. If the attack were to embrace city targets as well, the death toll would probably exceed 100 million the source revealed.

On the same date *The New York Times* reported from Washington:

The Pentagon now estimates that 3.5 million to 22 million people would be killed in a Soviet attack against the bases of intercontinental ballistic missiles in the United States. Last September, in testimony before the Senate Foreign Relations subcommittee on arms control, Defense Secretary James R. Schlesinger had estimated that fatalities in such a Soviet attack would range from 800,000 to three million people.

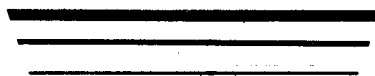
Twenty years ago the Pentagon had mixed-target figures in a widely-published chart. It predicted that in 1970 a Soviet attack would inflict over 100 million casualties. But little stir was caused — even though the chart showed how the toll could be cut to 45.2 million through the use of defense measures. In 1957 the top-secret Gaither Report (declassified in 1973) showed top-level leadership the same thing. Figure B-1 of this report revealed that fatalities could be cut to less than 20 million with good urban shelters — which represented an investment of \$55 billion. Doubling the investment would bring expected casualties down to less than 10 million. No action.

In 1970 seven members of Nixon's "Blue Ribbon Defense Panel" as a matter of conscience submitted an unasked-for supplemental report expressing their shock at America's defense laxity. They warned that "the mood of the people and much of the Congress is almost one of precipitous retreat from the challenge. This paradox in response to possible national peril is without precedent in the history of the country."

Now, according to *The Times*, Senator Stuart Symington, chairman of the arms control subcommittee, observes: "Perhaps we sometimes lose sight of the unprecedented and truly terrible costs of nuclear war."

The CBS-New York Times disclosures give the new analysis combined media prestige. Should they provoke a Watergate-type investigation a disrobing light might be focused on the need to use some of the taxpayer's money to protect the taxpayer.

But in the Washington climate of patty cake this is a lot to expect. □



UPCOMING:

November 22, 1975 — SURVIVE's 8th Annual Planning Conference, Starke, Fla.

December 4-7, 1975 — 7th Annual Conference of the National Association of SAR Coordinators, Denver, Colorado

March 25-27, 1976 — USCDC Mid-Year Conference, Washington, D.C.

In 1968 Edward Teller — looking warily into the future — wrote for SURVIVE an article titled "Civil Defense in the Age of Russian Superiority." In his new SURVIVE article he examines the dilemma of U.S. defense with a focus on the chilling facts of the world situation as it has developed since that time.

Dr. Teller is today Senior Research Fellow, Hoover Institute of War, Revolution and Peace, Stanford, California.



NOW THAT WE ARE NUMBER TWO

— by Edward Teller

Ten years ago the United States was number 1 in military strength. This was most obvious in the time of the Cuban Missile crisis. That experience, painful to the Russians, gave additional reason for the Kremlin to change the situation.

It is not obvious when we became number 2. It seems probable that, in fact, we are now number 2 although there are many who do not admit it.

One consequence of this change is also obvious. To be number 2 is not in the least comfortable. A second point may be less obvious but it is one that I strongly believe. The United States wants peace in a more determined way than the Soviet Union.

The last statement will be questioned. In the past thirty years, Russia was never involved in protracted military action. The United States was involved twice — in Korea and in Vietnam. Therefore, so the argument goes, the Russian government is peace loving, Washington is not.

I have to differ with this argument. The Russians have been involved in military action in East Germany, in Hungary and in Czechoslovakia. To be sure, these actions were quite brief and quite inexpensive from the Russian point of view. Each of them had the purpose of tightening Russian control. The actions have been carried out successfully in a complete and swift manner. In the case of United States involvements the purpose was not to extend our influence. It was rather to prevent the spread of Communist domination (that was

the claimed purpose and, in my opinion, it was the real purpose). In Indochina, a costly effort led to disaster. In Korea a somewhat less costly undertaking was, at least temporarily, successful. The last chapter may not have been written yet.

I conclude that the contrast between the U.S.S.R. and the United States military involvements is not that the former is peace loving, the latter warlike. I am rather driven to the unhappy conclusion that the former is successful, the latter tends to be less successful or unsuccessful.

The particular case of the Middle East should be remembered. In that area, Russian initiative led to conflict. American efforts continued to be directed towards peace and stability. This statement may not appear to be completely correct if one considers not only actions but also public discussions. Armed American intervention was mentioned as a possible way to secure oil supplies. This approach has been rejected and I believe that it will be rejected on the basis of principle. It is also my opinion that it must be rejected because we are now number 2. Adventurous undertakings by number 2 would be foolish indeed.

It appears to me that from the point of view of continued peace, it is a sad fact that Russia has actually won the Cold War. One may even say that the policy of Detente is one way for us to acknowledge this defeat in a relatively inoffensive manner. From this point of view, an incomplete detente might be wise while a

complete detente is unrealistic. (Probably this is one of the mistakes which nobody commits but many attribute it to their political opponents.)

It is necessary to return to the beginning of the argument. Is it true that we are number 2?

In my opinion, it has been true for some time in land armies and land armaments. It is probably true in the air, most certainly in the exceedingly important field of air defense. Salt I made it clear that we are number 2 in Nuclear arms. In the last few years we have yielded the first spot to the Russians on the oceans. This last fact is particularly important because we are no longer in a position to protect the freedom of the seas. We have no longer the reasonable assurance that we can come to the aid of our allies if necessary. And we cannot even protect our lines of commerce in the many raw materials (including oil) which we get from foreign sources.

There are two areas where we are still number 1. These are electronics and battlefield experience. Electronics which has a strong basis in our consumer oriented society happens to have important military applications. Two obvious examples are the precision-delivery of explosives (for instance, the smart bomb) and electronic computers (which permit the replacement of human efforts by more reliable and more rapid instruments).

Our other advantage is that many officers in our armed forces have battlefield experience. The last real experience of this kind occurred for the Russian armies in the second world war. Probably none of these World War II officers would be engaged in combat in any actual future fighting.

As I look at the details given in the last paragraphs, I cannot escape the conclusion that we are, in fact, number 2 if everything is taken into account. The leaders in the Kremlin are exceedingly cautious. They want to use their military strength only in case they are taking no chances (as for instance in the occupation of Czechoslovakia). Therefore, one may argue that to be number 2 is good enough.

But what will happen to our alliances? Western Europe has been a worry to the Russian policy makers. Will Finlandization of Europe occur in the near future?

An even more immediate painful question is the problem of the Middle East. There is little doubt in my mind that we are the only reliable ally of the Israelis. But what good is a reliable ally who is number 2 when the ally of the other camp is number 1?

It is of the greatest importance in this situation to try to look into the uncertain future. The future does not look too bright. There is accumulating evidence that the Russians are doing more about research and

development related to their armed forces. This means that the lead that they have with respect to the United States will become greater, not only in a quantitative sense but also in a qualitative way. The next technological surprise in warfare may occur in connection with Russian developments rather than in the United States developments.

What does one do if one is number 2? The standard answer is: "Try harder". But in what way? It is both important and unpopular to say that we should increase our military expenditures. But if we are to do so (which in the present economic situation is particularly painful) it is necessary to concentrate on the areas where our deficiency is greatest and where the consequences of the deficiency are most dangerous.

One of the suggestions that must be considered seriously is to strengthen the Navy. I should not simply advocate the construction of bigger ships. New and efficient developments and inventions are needed with particular urgency.

In a more general way, one should say that research and development must be given the highest priority. The military competition has been too frequently called an arms race. This is a misleading expression. The technological competition is much more important. In an arms race what matters is quantity. In the race of technology, the important factor is quality. The qualitative advantage, however, cannot be acquired without emphasis on research and development. This should be clearly understood both by our political leadership and by the scientific-technical community. Without better technology, the long range prospects for freedom look dim.

Perhaps the most important objective step that we could take is to strengthen Civil Defense. For number 1 to neglect civil defense is imprudent; for number 2, it is insane. We should remember that the Russians have learned a bitter lesson in World War II. In the sequel they have never neglected civil defense. In the saving of lives in case of a nuclear conflict they are most certainly number 1.

The real dilemma for number 2 is the question of alliances. As the second best, we can't stand alone. But as the second best, we may have great difficulties retaining our friends. This is a particularly bitter consequence of our present situation.

One might hope that the nations of the free world, seeing their common danger, would begin to cooperate in a serious manner. This would be a good use of reason for which there are not many precedents in history. □

HANDY SURVIVE BINDER NOW AVAILABLE

Attractive hard-back SURVIVE binders (capacity: 24 issues per binder) are now available to SURVIVE subscribers. Price of \$7.50 per binder includes all handling and shipping charges. Order from SURVIVE, P.O. Box 910, Starke, Fla. 32091.

PERT:

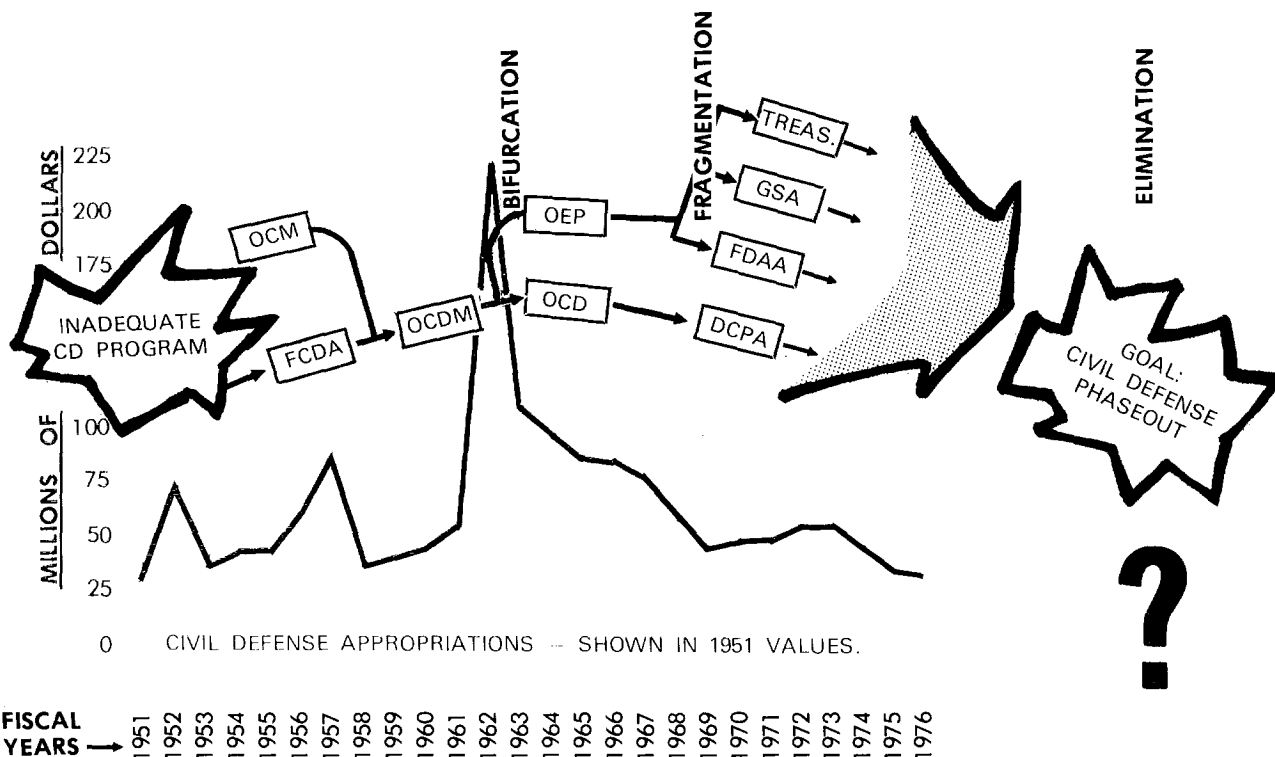
BIFURCATION FRAGMENTATION ELIMINATION

— by Herb Johnson

PERT is a sophisticated management flow tool developed by the U.S. Navy to permit the time-phased achievement of program objectives. PERT stands for "Program Evaluation and Review Technique." It was used to excellent advantage by Admiral Hyman G. Rickover in promoting the Polaris program. The DCPA Staff College teaches it.

It can also be used to chart negative-type achievements. A close look at the events in the disaster preparedness field in recent years indicates that civil defense has been "PERTed". Our illustration is admittedly not a pure PERT chart — but PERT fathered it, and whatever the mutation, the credit or blame for its conception lies with PERT.

CIVIL DEFENSE "PERT" CHART



ABBREVIATIONS:

OCM - Office of Defense Mobilization
FCDA - Federal Civil Defense Agency
OCDM - Office of Civil and Defense Mobilization

OEP - Office of Emergency Planning
OCD - Office of Civil Defense
TREAS. - Treasury Department

GSA - General Services Administration
FDAA - Federal Disaster Assistance Agency
DCPA - Defense Civil Preparedness Agency

The idea is that you start off with an inadequate program to begin with, which leaves it open to criticisms from Congressmen ready to make hay by attacking weak and vulnerable legislation (higher budget requests reflect vain efforts to upgrade the program). Former Senator Stephen Young of Ohio used these tactics in the late 1960's. For instance, looking into the foggy future from his Capitol swivel chair Young once announced that there was no defense against missiles and that "the Civil Defense program of today will be as obsolete by that time [1975] as Civil War cannonballs, ladies' bustles, flintlock muskets, and mustache cups."

Russia smiled and redoubled her civil defense efforts.

Having a shaky program under attack you then butcher it into two or more parts two or more times. A report sold to the General Services Administration by Consolidated Analysis Centers, Inc. calls the 1962 butchery "bifurcation" and the more damaging 1972 dismemberment "fragmentation." These are indicated on our PERT chart. We have added another that carries out Senator Young's thinking: "elimination."

The picture, of course, is not as simple as we have painted it. There are other program changes brought about by budget cuts and befuddlement that work to doom the people protection program. A real PERT chart would include a good number of these additional elements. Some of them might be:

1. Training cuts
2. Package Disaster Hospital program turnover
3. Shelter survey downgrading
4. Radiological defense cut
5. DIDS abandonment
6. Personnel and Administration cuts
7. CD Technical Services Center phaseout

Other PERTS of more widespread and more devastating nature could be:

1. Failure of political leadership to back the program publicly
2. Failure of federal agencies to implement meaningful CD measures and set the example for lower echelons
3. Anti-CD propaganda and ridicule
4. Political roadblocks

Bifurcation was a first major strategic step in planning for the sabotage and dumping of the civil defense program. Fragmentation was next. They were cleverly conceived and applied and have set the program up for execution through a simple coup de grace by some Congressional "hero." Representative Les Aspin — Congressional heir to Young — is trying to be that hero,

COMPARISON OF CIVIL DEFENSE BUDGET REQUESTS WITH RELATED CIVIL DEFENSE APPROPRIATIONS, 1951-1976 (IN 1951 DOLLAR VALUES — SHOWN IN MILLIONS OF DOLLARS)

YEAR	REQUESTED CD BUDGET	ACTUAL CD APPROPRIATION	YEAR	REQUESTED CD BUDGET	ACTUAL CD APPROPRIATION
1951	403.0	31.8	1964	301.5	97.0
1952	526.3	75.4	1965	306.1	89.9
1953	583.6	43.4	1966	162.9	89.7
1954	147.5	47.4	1967	110.2	83.7
1955	86.7	49.2	1968	88.1	68.4
1956	75.8	68.2	1969	58.6	49.2
1957	117.2	89.5	1970	55.5	51.2
1958	121.4	38.1	1971	52.6	51.4
1959	69.5	41.2	1972	53.2	53.2
1960	91.6	47.7	1973	57.3	53.9
1961	69.0	54.5	1974	52.0	50.5
1962	276.2	227.6	1975	47.2	44.8
1963	663.7	112.3	1976	48.0	43.6

but so far he hasn't quite been able to cut it. His apparent ignorance of the real issues of war and peace that are involved in home defense (no real handicap in Washington) is reflected by the action of Phil Stanford, an Aspin aide, who after leaving the Aspin staff a few months ago wrote an article for *Parade* — the highly popular Sunday newspaper supplement — favorable to the new civil defense concept of Crisis Relocation Planning. This appeared to be a confession that Aspin's views were tragically deviate and that civil defense was after all a basic survival requirement. (See "Capital Commentary" by Jerry Strobe, *Survive*, September-October 1975.)

But opportunist politicians are not bothered by these minor critics. National survival considerations have little chance against the glamor of the hero syndrome.

And if you are liberal, left, sympathetic to giving our potential enemies the upper hand and ourselves the "wrong end of the barrel" you applaud the actions of those who attack civil defense. It's a handy whipping boy. And the bastinado helps to make temporary friends with the hard left countries who like the tremendous advantage it gives their own preparedness-conscious populations.

Unless another wide-visioned Hébert or another well-muscled Kennedy can step in to force a new focus on what civil defense really means in terms of survival and peace prospects and how basically vital it is to us right now and into our wobbly future we can loll and lapse into the narcissistic web of self deceit, self pity, self indulgence and comatose comfort. □

XX

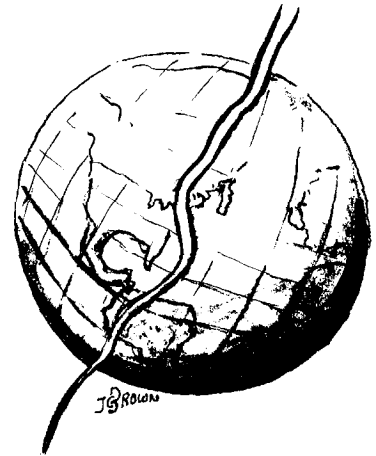
For every difficult and complex problem, there is an obvious solution that is simple, easy and wrong.

-H.L. Mencken

“Doing Something”

About earthquakes

— by Kevin Kilpatrick



Long Beach, California has learned to be realistic about earthquakes. Its last major experience was in 1933 when much of the city was destroyed and loss of life was unacceptably high. With California's state government predicting over \$55 billion in quake damages during the next 25 years Long Beach can look for a new disaster in the foreseeable future. Just when is not now sure. But when it comes Long Beach intends to be prepared to withstand it with minimal loss of life and minimal damage.

This happy circumstance will be due in large part to the draft of a study completed in May 1975 and titled *Seismic Safety Element* a "general plan program" put out by the Long Beach City Planning Department.

The study divides the city into 75 "seismic response areas" and chart-outlines each area according to the degrees of risk involved. (The 1933 earthquake is used as a primary reference. It is associated with the Newport-Inglewood fault, which bisects Long Beach.)

A second chart outlines the "compatibility of building types" with expected earthquake effects in each seismic response area. This information is to be used in the design and construction of buildings and in the drawing up of building codes.

One serious concern is the existence of pre-1933 buildings where little thought was given to earthquake resistance. Every encouragement is given to the replacement of these structures.

On February 3, 1974 a major earthquake was predicted for a locality in Hopei Province of mainland China for a year and a day later: February 4, 1975. The earthquake arrived on schedule with a magnitude of 7.3 on the Richter scale. Major damage resulted, but absent were the usual great tolls of lives lost and wholesale injuries. The reason, of course, was that critical areas had been evacuated.

The Chinese are in the lead in forecasting earthquakes. They haven't yet perfected the art by any means, but their progress is amazing. In the United States, too, we may one day be able to alert threatened cities to impending major earthquakes and give precise arrival times. Our seismologists are working on it.

"Most people living in the greater Los Angeles area," the report says, "will experience a nearby, major earthquake during their lifetime. To date, most local communities have been less than thorough in preparing for that event."

When the construction of "critical/emergency facilities" — hospitals, public safety structures, government centers and the like — are planned special site seismic evaluations will be required. These will reveal the specific earthquake effects to be expected at the site and will dictate the type of construction to be employed.

Another factor to contend with is changes in elevation (due to extraction of oil) that much of Long Beach has undergone in recent years — but which has now been overcome. A sinking (or "subsidence") of 2 feet was at one time common along the shore area, which overlies one of the nation's largest oil fields. In the harbor area this settling has been around 6 feet. In one case it is nearly 30 feet. Injection of water and landfill operations have corrected this condition, but further difficulties can be expected if water injection stops while the pumping of oil continues.

The Long Beach Emergency Operation Center, an underground facility, would serve as the headquarters for coordinating emergency activities in the event of an earthquake — or any other disaster. Fortunately it is a well-protected building located in a low-risk area.

"Planning for the safety of urban populations in the event of earthquakes can be almost as frustrating as trying to stimulate interest and action to protect us against nuclear weapons effects," observes Long Beach Coordinator of Disaster Services Evar Peterson. "But finally I think we can say that California recognizes the threat of earthquakes and the risks involved — and has taken steps to develop public awareness of the hazards. Every city in California must now according to law develop its 'Seismic Safety Element' as a part of its master plan. We are bound to meet resistance because people like to think that earthquakes are never going to happen again, especially where the almighty dollar is dedicated to cheap and profitable construction practices. But I think we are making progress. A somewhat hidden but important dividend is that Long Beach gains in the basic civil defense requirement of obtaining more shelter and gearing itself to the unthinkable possibility of nuclear attack. But we don't talk about that very much. People object to being upset. It could spoil a week end."

The study makes 25 specific recommendations for upgrading Long Beach's ability to weather future earthquakes. Recommendation No. 5 implements the idea that any plan must be constantly revised and updated. It reads:

"As seismicity and its relationship to land use planning is in its infancy, the City should keep abreast of new information in the field and respond to new sources of information."

Recommendation No. 7 calls for "recycling" of buildings that do not meet stringent safety requirements.

Over the horizon is the budding science of earthquake prediction. This will become another effective weapon against the devastation of earthquakes. And this science is already well on its way to proving itself a valid means of determining just when, where and with what intensity an earthquake will strike.

Planning of the Long Beach type could be applied to all types of disasters throughout the nation. Or the world. Lives lost in fires, hurricanes, floods, blizzards, tornadoes, highway traffic and so on can be controlled and drastically reduced simply by hard-nose planning that overcomes the lethargy of the run-of-the-mill public official. □

Over The Iron Curtain -

— by Ruby N. Thurmer

Emergency Technology Section, Health Physics Division, Oak Ridge National Laboratory. (Operated by Union Carbide Corporation under contract with the U.S. Energy Research and Development Administration).



The training year for civil defense organizations in the Soviet Union begins on September 1st. Last December (1974) Lt. Gen. S. Kremenskiy, deputy head of USSR Civil Defense, published an article,¹ in which he reviewed CD accomplishments during 1974. He stressed the training of teams in small towns and rural areas and the inclusion of the general population and especially young people. He concluded with the following statement:

"The mission has been assigned: sharply improve the quality of the training of students and participants, instill in them practical skills. At the same time it is already time to begin preparation for the new programs to be introduced beginning 1 September 1975, taking into account new discoveries in the theory and practice of civil defense."

* * * * *

The (civil defense) exercise in the Kirov Kolkhoz, Kriulyanskiv Rayon, Moldavian SSR, was distinguished by its good organization. Relying on the civil defense staff, D. Chutak, the kolkhoz's chairman, skillfully led the actions of the CD formations and services. During the exercise, "anti-radiation shelters were constructed that can be used in peacetime for production needs."²

* * * * *

A Moscow Radio Peace & Progress broadcast in Mandarin beamed to China on May 22, 1975, took total

credit for the American downfall in Vietnam. It stated . . . "The whole world knows that it was the Soviet Union that provided the bulk of the assistance to Vietnam in its struggle against imperialist aggression: it was the Soviet Union that kept up a continuous supply of modern rockets, military aircraft, electronic equipment, military supplies, and transportation equipment to Vietnam. The United States lost more than 4,000 aircraft over the DRV — a result of the Soviet Union's combatant assistance to the DRV."³

* * * * *

PRAVDA, June 29, 1975, p. 2 LD — B.N. Ponomarev, candidate of the CPSU Central Committee Politburo and secretary of the CPSU Central Committee, gave an address at the graduation exercises for post-graduate students of the Social Sciences Academy. The following statement is from the text:

"No relaxation of international tension leads or should lead to the peaceful coexistence of ideologies — this is an axiom for communists. Life shows that under conditions of political detente the front of the ideological struggle does not diminish but, on the contrary, deepens and broadens."⁴

1. *Translations on USSR Military Affairs*, JPRS-63989, January 29, 1975, p. 5.
2. *Daily Report, Soviet Union*, FBIS-SOV-75-35, Feb. 20, 1975, Vol. III, No. 35, p. VI.
3. *Daily Report, Soviet Union*, FBIS-SOV-75-101, May 23, 1975, Vol. III, No. 101, p. C3.
4. *Daily Report, Soviet Union*, FBIS-SOV-75-129, July 3, 1975, Vol. III, No. 129, p. R3.

BOOK REVIEW

ASSESSMENT OF RESEARCH ON NATURAL HAZARDS

By Gilbert F. White and J. Eugene Haas. Published by Monograph Series, Program of Technology, Environment and Man, Institute of Behavioral Science, University of Colorado, Boulder, Colorado, 80302, 1975, 487 pages, \$5.00.

— Reviewed by R.F. Blodgett

This book gathers together the available research and statistics on 15 major natural hazards in the United States and draws the obvious conclusion that some 5,192 person-years of investigation should be invested over a ten year period to most profitably resolve some of the present preparedness and relief problems. The authors contend that this \$40 million additional expenditure could "substantially curb the nation's annual billion-dollar disaster-caused economic losses and bring about a marked reduction in Federal and state expenditures required to cope with such losses."

White and Haas suggest that the current mode of hazard reduction tends to perpetuate and increase the problem because social, economic and political "people" factors have been largely ignored. In other words technological improvements in, for instance, earthquake prediction and hurricane warning capabilities have only served to provide citizens with a false sense of security, but do not motivate the public to accept and adopt practical building codes and land-use zoning for real hazard protection.

They point out that in states, "As with the Federal government, there is no single agency with this responsibility (disaster reactions), nor is there in most instances a coordinated plan for collaboration," that "It is probably not a distortion to say that 95% of all hazard-relevant research finds never reach the citizen" and, "At present, no agency provides basic funding or coordination for natural hazards research." As a result

of such fragmentation, they suggest that the National Science Foundation may be the key through which their proposal might best be funded, coordinated, and put to practical use.

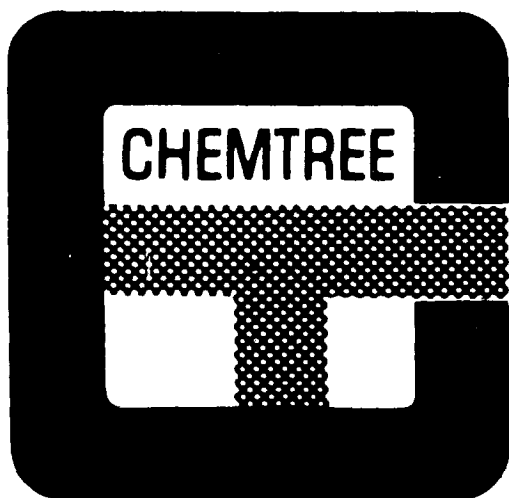
To pique the reader's own imagination, the following chart is a conglomerate of several individual tables in the book. Since lightening and urban snows are right at the top in deaths per 10 million people, do these become pressing natural hazards requiring relief? Similarly, because there are 119.52 injuries per 10 million in hurricanes, should not this be of highest priority? Finally, since frost causes the most property damage per capita, perhaps, in these days of famine and inflation might not this be the first problem to be more thoroughly researched and mitigated in the best possible way?

	Deaths 10 Million	Trend	Injuries 10 Million	Property Damage \$/Capita	Trend	Catastrophe Potential
Avalanche	.35	Up	.48	.002	Up	Low
Coastal Ero.	.	Up	1.40	1.40	NA	Low
Drought	.	?	.	3.90	NA	Medium
Earthquake	.38	Up	?	.50	Up	High
Flood	3.90	Up	?	5.80	Down	High
Frost	.	Up	.	6.00	NA	Low
Hail	.	Up	.	2.50	NA	Low
Hurricane	2.52	Up	119.52	2.50	Down	High
Landslide	.	Up	.	.30	Stable	Low
Lightning	5.43	?	10.95	.30	Down	Low
Tornado	5.24	Up	90.48	1.00	Down	High
Tsunami	1.57	NA	?	.001	?	High
Urban Snow	5.19	Up	3.19	.0015	Stable	Low
Volcano	4.65	Up	29.42	.95	Up	Medium
Windstorm	4.65	Up	29.42	.95	Up	Medium

* Catastrophe is defined as a situation in which damages to property, human health, social structure or processes are of such severity that recovery is a long and trying procedure.

What conclusions do you draw?

A most interesting report with a relevant and logical thesis especially for those professionally concerned with natural disaster overview, preparedness, and relief. Then too, think of the beneficial built-in trade-offs this approach might provide for the ultimate hazard—nuclear attack ☐



**SPECIAL
NUCLEAR
SHIELDING**
CHEMTREE CORPORATION
Central Valley, N.Y. 10917
914-928-2293

THE NUCLEAR REACTOR

— Boon or Boondoggle?

— by Wm. Cornelius Hall

The nontechnical reader is a victim of the pro and anti schools of the nuclear reactor question. Scientific opinion has polarized to the two extremes. Either the reader is convinced that civilization will be stymied and stunted if the reactor is not given every encouragement to furnish the energy the world demands — or that mankind will perish from the earth if the reactor is allowed free development.

Problems of shielding, accident, nuclear wastes storage, sabotage, theft, conversion of materials to nuclear weapons, development of alternate energy sources, development of fusion reactors, and so on confuse the reader, confuse political leaders, confuse civil defense officials, and apparently confuse the scientists themselves.

Political subdivisions considering energy alternatives — and usually looking seriously at the temptation to “go nuclear” — are searching for clear and simple advice on just what a nuclear reactor is and is not, what it does or does not present in the way of danger to populations, how reliable it is, and what its advantages may be or may not be. Not only do they need to know themselves in order to make decisions — they need to inform the people in a clear and precise manner just what they may or may not be buying.

The civil defense director is one of the logical officials to turn to for clarification, but he may well be as far out to sea on the reactor issue as anyone else.

It is with this incredible mix-up in mind that Oak Ridge physicist Carsten M. Haaland will present in *SURVIVE* during 1976 (beginning with the next issue) a series of illustrated basic analyses of the nuclear reactor question geared to the lay reader and in universal, honest and simplified terms. It has been a long time coming. It may resolve many a nettling doubt and help to give direction to those local governments considering their energy choices for the future. □

FIVE YEARS AGO IN *SURVIVE*

In 1970 the Soviet Union's climb to a tough homeland defense posture was well on its way. Russian-born Leon Goure wrote the following in the November-December 1970 issue:

The Soviet view of war is reflected in the Soviet Civil Defense program and its doctrine. This doctrine is based on the assertion that survival and victory in a nuclear war are impossible without assuring the protection of the population, the economy, the administration and sources of food. For example, Civil Defense Chief Marshal Chuikov, wrote in January 1970:

We stand on the premise that in nuclear warfare the one who will hold out will be he who is able to preserve peoples lives, to insure continuity of management and the survivability of production of the national economy, and to safeguard crops and livestock from destruction . . .

In brief, it is asserted over and over again that national survival and “victory” in a nuclear war are impossible without an effective Civil Defense, which therefore is an essential element of the overall Soviet defense capability. For this reason, Civil Defense is said to be an important concern of the Communist Party and of the Soviet Government, and it is each citizen's “patriotic duty” to participate in it.

Soviet Civil Defense is required to deal with a range of threats, including nuclear, chemical, bacteriological and conventional weapons as well as natural disasters. Soviet concern with defense against CW and BW, which they allege the United States is planning to use in a war, is undiminished to this day and adds considerably to the cost of the program. It is said that these weapons are especially suited for population attacks and may be part of a campaign to paralyze the economy and prevent post-attack recovery.

In conclusion, the main mission of Soviet Civil Defense is:

- (1) Protection of the population,
- (2) Assuring the continuing operation of critical industries and services in wartime,
- (3) Protection of food, crops, livestock and water,
- (4) Training the entire population in Civil Defense, and
- (5) Conducting large-scale rescue, fire-fighting and repair work following an attack. □

• SURVIVE • SURVIVE •

Key To:

- *Government Awareness!*
- *Government Awakening!*
- *Government Action!*

\$5 - one year

\$9 - two years

Order Now - We Bill You Later

SURVIVE

P. O. Box 910 - Starke, Florida

• SURVIVE • SURVIVE •

EDITORIAL . . .

Overkill Oversell

The idea of "Overkill" is that if nuclear war is for all participants so totally devastating, so universally lethal — and this way a number of times over — then any nuclear conflict is out of the question. A fatal step. An Armageddon. Even for a nation which may have a clear upper military hand.

Secretary of State Kissinger, CBS Commentator Cronkite and others in the public limelight have reported piously that the USA and the USSR now are overarmed to the point of being able to destroy one another "17 times over" or "100 times over."

So peace appears as the only possibility from any sane viewpoint — Soviet, American, Chinese, or whatever. The argument is attractive and has a compelling logic — If Overkill is indeed based on fact.

But is it? Let us consider these points:

(1) The latest Pentagon nuclear attack analysis, PONAST II (Post Nuclear Attack Study) shows that 53.8% of the US population survived a simulated 6800-megaton attack, 1/3 of this on urban-industrial complexes. It also shows that 94.3% could survive the attack if good civil defense measures were available. (With a well-developed antiballistic missile system this figure could be even closer to 100%.) All other studies — here and abroad — give similar pictures: survivability of a significant portion of society is certain, the figure depending directly on the quality and quantity of protection that the society under attack is given.

Is this annihilation? Is this the capability of killing the citizens of a country 17 times over? 50 times over? 100 times over?

Obviously not. Who's kidding whom? And why?

(2) The gung-ho Soviet civil defense effort is a prime indication that "Overkill" is something quite else than a concept to be applied seriously by Russians to Russians. Senator Howard H. Baker, Jr. (*Survive*, September-October 1975) shows that the Soviets — with their civil defense effort in high gear — would under the worst possible attack circumstances come up with a 96% survival. The Overkill theory, if considered at all in the USSR, is apparently for export only.

(3) Further, the Soviets are obviously unaware that their missile-nuclear weaponry will annihilate the United States 100 times over. According to Melvin Laird and other recognized US analysts they are every day with a burning determination visibly enhancing their attack and defense capabilities — in spite of SALT and detente. While we stand still, Overkill? Where?

At a recent luncheon talk to Washington newsmen (sponsored by the American Security Council) Deputy CIA Director Lt. General Vernon A. Walters quoted from a 500BC Chinese book, *The Art of War*:

"The most consummate art is to subdue your enemies without having to fight them on the battlefield. The direct method of war is necessary only on the battlefield, but it is only the indirect methods that lead to the true victory and its consolidation."

In other words, cold war and its propaganda are more effective than arms. Example: Hitler.

If Overkill is disproved every time we put it to the test what is it anyway? Is it a propaganda weapon? Is it meant to paralyze American leadership, to bring that leadership to think and act through fear? To lay the groundwork for nuclear blackmail?

It would seem that way. In this light Overkill appears as a deadly emotional phenomenon. One that requires a blind and smug gullibility that must deftly avoid the cold harsh light of fact to remain plausible.

So far it has done just that. □

Survive

P.O. BOX 910

STARKE, FLA. 32091

NON-PROFIT ORG. U. S. POSTAGE PAID STARKE, FLORIDA PERMIT NO. 61
--

Next In Survive:

A special 1976 series by Carsten M. Haaland (Oak Ridge National Laboratory) on the promise and the problems of nuclear reactors — and what makes them tick. Begins in January-February 1976 issue.