Journal of Civil Defense



World War III – Yes or No?
See: Washington Perspective (page 5)
Editorial (Back Cover)



The American Civil Defense Association

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LT. GEN. GRAHAM WAS A GENTLEMAN'S GENTLEMAN

Lieutentant General Daniel O. Graham died on December 31st. He graduated from West Point in 1946, participated in the Berlin Airlift of 1949, got to Headquarters MACV a couple of years after me, and was Deputy Director of the Defense Intelligence Agency from 1969-1973 and its Director from 1974-75, from which he retired (after a stint in the CIA in 1973-74). Following his first civilian job in 1976 as a Research Professor at the University of Miami, he founded and was Director of the High Frontier Project. He, together with the renowned Dr. Edward Teller, stood for a strong civil defense - both the passive as well as an active defense that could deplete the numbers of incoming missiles and thus support the passive civil defense.

His Strategic Defense Initiative (SDI, derisively termed Star Wars by his less-knowledgeable critics) was President Reagan's ace that was played in Iceland (and later played by Ambassador Henry Cooper in Geneva). The SDI was the catalyst that started the tumbling of the Berlin Wall. The purpose of High Fronter was to support the SDI, and the purpose of Danny's letter to me was to tell of his passing the baton for High Frontier over to Hank Cooper, "a warrior who won't ever compromise on America's defense."

Danny's letter told how he had served with the same group as Hank, a group which "developed and recommended specific programs...required to defend America and... Many of these...were adopted by the recent Defense Authorization Act." He died two days after he wrote that. Hank's letter to me says that, in his opinion, "Clinton is defrauding the American people" by "claiming to build defenses for our troops" but which are secondrate and, in effect, holding secret talks that "are giving the Russians a veto over American defenses...making it more difficult...to defend ourselves - he's selling you...out!! This is not an accident. Clinton just vetoed the Defense Authorization Act."

Whether General Graham knew of that seditious veto of Clinton, I don't know. If he did, it may have contributed to his early demise. In any event, due to the lack of press coverage, I can safely say that General Graham died as an unsung hero. It is too bad that some of these long-term fighters are never recognized by the very people whom they are trying to save. I guess the the normal American is too caught up in his or her own affairs to make any effort to determine what really is going on (and why) and has no idea that the outside world not only sees him or her as the holder of the riches that they are preparing to plunder.

For those who knew him, General Graham died as a courageous fighter. I called him a gentleman's gentleman. For the press, he was just another old soldier who faded away.

> Tom Strider Citrus Hills

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WASHINGTON PERSPECTIVE

- Kevin Briggs



Storm Warnings

The Great Blizzard and Floods of January '96. As storms moved, unstoppable, to strike the Plains and New England, many heeded the warnings and made preparations. Our family joined the multitudes of other Washington D.C. area residents that went shopping to buy bread, milk, diapers, firewood, etc. just before the storm struck. Fortunately, most people recognized the need for such items and prepared accordingly. However, few of us realized just how bad the snow and subsequent flooding would be. Many people that did not prepare or heed the warnings suffered greatly - and unfortunately, a few died.

When we finally ventured out to go shopping again, we were surprised at how bare some of the shelves were - in particular, we found it amusing how people (including us) were taking bread off the stocking carts before it even had a chance to be loaded onto empty shelves. We couldn't help but wonder what would have happened if the storms had shut down the resupply to our area for a longer time.

Storm warnings for '96. As we look ahead to the remainder of 1996, one can only wonder what storms this country will face. Each year has its own challenges and yet, it seems that the trends are bleaker now than for the past several years. What follows are some storm fronts that need to be viewed with caution. Hopefully, most of them will be as hurricanes that turn back out to sea - yet if January's storms are in any way prophetic - we had best be prepared.

Earthquakes: People within our country often think of earthquakes as hazards that only Californians and Alaskans need to worry about. Few realize that the largest series of quakes known to have occurred in the North American continent were centered around New Madrid, Missouri and could severely damage cities in a multi-state region. However, every state in the nation faces some degree of earthquake risk, with 39 states (and roughly 70 million people) in areas that are expected to receive moderate to severe damage. In some respects, regions thought to be at minimum risk may actually pose the greatest hazard, since building codes are based on relatively recent seismic history (i.e., the last several hundred years). If a moderate to severe earthquake shakes an unprepared region, major loss of life and property may occur.

Infrastructure Efficiency/Instability: Our country is relying more and more on technical and material efficiency to give us an edge in the world's economy - yet this very efficiency is also making our society more unstable. For example, we increasingly rely on vulnerable computer and communications technologies to streamline our banking, commerce, and military/political systems. Efficiency based on assumed stable or peaceful conditions could prove disastrous. Redundant systems are needed in our power, communications, and computer industries. Consider what would happen if you went to the ATM machine or bank, and could not withdraw your "money". How long would you be able to live if power and food distribution systems were shut down "temporarily"? These could happen as a result of major regional natural or man-made disasters.

Russia: Trends have been very ominous of late in our relations with Russia. With Russian President Yeltsin fighting for his political life, his turn to anti-Western hardliners for support is catching most of Washington D.C. by surprise. His purge of several reform-minded members of the Russian cabinet and selection of Yevgeny Primakov as the new foreign minister shocked the U.S. because of his reportedly vicious anti-U.S. and anti-Israel sentiments. He is assessed by many to be the principal architect of Russia's support to Iraq's Saddam Hussein. He has already forgiven half of Libya's \$16 billion in debt to Russia and reportedly has as a top priority the healing of relations between Iran and Iraq. He also has strong ties with China and reportedly supports a Moscow-Beijing alliance over one involving Japan. Mr. Primakov has a political ally in the ultra-nationalistic Vladimir Zhirinovsky who supported his appointment and heads up the second most popular political party in Russia. The ailing President Yeltsin also appears to be forging political alliances with Zhirinovsky with the hope of defeating the communists in upcoming elections. Alexei Mitrofanov, a close associate of Zhirinovsky and the chairman of the Duma's geopolitics committee, reportedly stated that "Russia should supply Iraq with the tanks it needed to reconquer Kuwait and then protect Iraq under Russia's 'nuclear umbrella'" [from the Washington Times, 31 Jan. 96].

Missile Threats: While President Clinton required that language be stripped from the '96 defense bill that required deployment of a national missile defense system for the U.S. by 2003, lawmakers did add \$450 million to Clinton's request for \$370 million for a national missile defense and set a goal of being able to begin procurement within two years. The intent for this legislation is to build an ABM site at Grand Forks, ND, within 5 years that could counter up to 5 incoming ballistic missiles, according to Representative Curt Weldon, the chairman of the House National Security Subcommittee on R & D. A January 30th article in the Washington Times reported that "Mr. Weldon, one of Congress' leading missile defense advocates, believes a ballistic missile threat to the United States is 'imminent." The paper went on to state Mr. Weldon's belief that "fissionable material along with critical missile parts, already has been smuggled outside the old Soviet Union". This information, combined with the Administration's unilateral acceptance of relaxed export controls on "converted" Russian SS-24 and SS-25 missile systems, is a matter of great concern.

Are you prepared for these and other possible storms? And what of other storm fronts such as terrorism and the growing spread of infectious diseases. Please consider what role you may have in helping to improve this nation's preparedness. If you are not involved or feel there is more you would like to do, please take the time to let the TACDA staff know.

The views expressed in this article are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

The American Civil Defense Association (TACDA), for the first time in its seventeen-year history of annual seminars, skipped a year - 1995. Seminars had been held in key U.S. cities such as Chicago, Los Angeles, Salt Lake City, Dallas, Kansas City, Las Vegas, Washington DC and so on. In October 1996 TACDA will feature its eighteenth seminar - once again in Washington DC (the Holiday Inn Fair Oaks in the close-in suburb of Fairfax, Virginia where luxury accommodations and superb facilities - and reasonable rates - prevail). Also featured, of course, is a blue-ribbon program.

1996 TACDA SEMINAR SETS SIGHTS ON U.S. PREPAREDNESS OBJECTIVE

ue to the overall importance (and the general disregard) of active and passive strategic defense programs by government in the United States, their heavy accent in a number of other countries, and the recent reawakening to their need in the U.S.A. by a good number of this year's political candidates, this "early notice" of the 1996 TACDA seminar is deemed to be appropriate.

TACDA's 1996 seminar will be held October 11-14 at the Fairfax, Virginia Holiday Inn Fair Oaks. Fairfax is a few short miles from central Washington, making it tempting and entirely convenient for seminar participants to "see the sights." A Washington Metro station is nearby with complimentary hotel transportation thereto and therefrom.

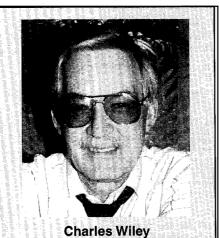
Special tours are also available.

KEY FOCUS: SEMINAR PROGRAM

Most important, is the challenging seminar program itself, which covers the time period Friday evening October 11th (when the "Welcome Reception" begins at 7PM) through to a final luncheon on Monday, October 14th (see "Agenda Outline," next page). Sunday morning (October 13th) will be a free period.

Top defense strategists are now being invited to appear and will be announced in the summer issue of the Journal of Civil Defense.

Charles Wiley, veteran foreign correspondent featured for many years past on Accuracy-in-Media's speakers bureau (see biographical sketch below), will address the seminar luncheon on Friday, October 11th. Wiley is an inveterate crowd pleaser who enjoys sharing his many adventures



Charles Wiley is a veteran journalist who has reported from over one hundred countries. His perceptive eye for analyzing foreign policy led Mr. Wiley to predict the current turmoil in the communist world. Mr. Wiley's indepth search for facts led to his arrest eight times by secret police throughout the globe, including the KGB, and imprisonment in Castro's Cuba while he was a correspondent for New York City radio station WOR.

Mr. Wiley has covered 11 wars, including reporting for NBC, UPI, the London Express and numerous other U.S. and foreign news media. He was in Vietnam in 1962, 1964, 1968 (during the Tet offensive) and 1972.

with his audience, invites questions and comments and mixes with seminar participants at breaks, receptions, etc. Wiley makes himself available for other speaking engagements in the area of the seminar. He has delighted TACDA seminar audiences for the past seven seminars.

Other prominent speakers being invited to address the TACDA audience include leading strategic defense proponent Dr. Edward Teller (who developed the American H-Bomb); Russian born and bred Leon Goure whose views on Russia and Communism are based on first-hand experience; French native and shelter pioneer Marcel M. Barbier whose new venture into round-shaped structures holds exciting promise; Ambassador Henry Cooper, President Reagan's SDI front man in stubborn talks with the Soviets (he is the late General Daniel Graham's successor as director of High Frontier, the crusading organization which for the past fifteen years has been building fires to keep SDI alive and in the spotlight); Dr. Reed Blake of Brigham Young University in Provo, Utah who represents the Mormon philosophy of all-around preparedness for all types of disaster situations; Richard C. Rasmussen, retired Director of the Civil Defense Staff College (back in the days before a weakening of FEMA civil defense policy saw it sabotaged); Dr. Conrad V. Chester. retired chairman of the Oak Ridge National Laboratory's Technology Program and the nuclear attack analyst who produced the comprehen-

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sive 1993 study on American fatality estimates in a nuclear attack (see chart representing this study near the end of this issue's editorial on the back cover); Nancy Greene, foremost U.S. intelligence analyst (and wife of the late Lorne Greene); and Sam Cohen, whose work on the neutron bomb is legend and who authored the widely quoted article "Nuclear Terrorism Coverup" in the Fall 1995 issue of the Journal of Civil Defense.

Delivering the keynote address at the opening of the seminar proper on Saturday morning will be TACDA's new president, Kevin Briggs. The 38-

AGENDA OUTLINE 1996 TACDA SEMINAR **WASHINGTON DC** (In suburb of Fairfax, VA)

Friday, October 11

Arrival day

7:00PM - Welcome Reception

Saturday, October 12

8:00AM-11:30AM - Seminar Program 11:45AM-1:00PM - Luncheon

Program

(Speaker: War Correspondent Charles Wiley)

1:15PM-5:00PM - Seminar Program

Sunday, October 13

(Free morning)

1:15PM-5:00PM - Seminar Program

7:00PM - Banquet Reception

8:30PM - Banquet

Monday, October 14

8:00AM-11:30AM - Seminar Program 11:45AM-1:00PM - Luncheon

Program

Afternoon: special meetings, end of seminar.

year-old Briggs represents a dip into younger generation preparedness proponents. A graduate of the Air Force Academy, he is currently a DOD civilian in the Washington DC area serving as the Chief of the Communications Plans Division in support of the Joint Staff's Nuclear Operations Division. (A recent Journal article featured Briggs' blastfallout shelter, which he built to accommodate his entire neighborhood.)

Expected to participate also is TACDA's new vice-president Kenneth Brown who operates a private flying service among other pursuits and is also from the "younger generation."

Other challenging speakers on strategic defense-related topics will be invited. Information will be published as the program develops.

Included also in the program will be the annual TACDA membership meeting, a TACDA Board Directors meeting and a shelter workshop. The usual lively exhibit area is another special feature.

Registration, as indicated by the registration form, has been set at a bargain \$220, with a 10% discount available for registrations prior to August 1st - i.e. \$198 - and a special rate of \$179 for students and spouses. As in prior TACDA seminars the meeting of expenses is the primary goal - not profit.

Registration personnel at TACDA in Starke, Florida are staff coordinator Kathy Eiland and communications supervisor Regina Bass. Both ladies will be welcoming participants at the registration desk of the Holiday Inn Fair Oaks.

WASHINGTON SIGHTSEEING

Information will be available (and published) prior to the seminar and at the seminar itself on Washington area tours and places of special interest. These include, of course, the White House, the Capitol, the Smithsonian Institute, the Lincoln Memorial, the Washington Monument, war memorials, and countless others. Also FEMA.

With the 1996 elections less than a month away from the seminar dates, the usual exciting atmosphere of Washington will be supercharged at seminar time.

Seminar registration tickets will serve as numbers to be drawn at a raffle during the seminar. Six or eight special prizes will be available to winners.

Another choice (for those not attending the entire seminar) is the "partial registration" feature whereby a seminar participant may attend one or more parts of the program at a special fee - for instance, \$20 for one program speaker - with luncheon or banquet this would be increased to take care of food.

For further information call TACDA at 904-964-5397 or FAX 904-964-9641. Or write to TACDA at P.O. Box 1057, Starke, Florida 32091.

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TACDA SEMINAR PARTICIPANT October 11-14, 1996

Views on civil defense spread to institutions where the problem of protecting large groups in disaster situations - hundreds or thousands - presents special considerations. Jerry Houston's approach to civil defense has blossomed out from consideration of prison populations to the much larger problem of protection for the U.S. population. He sees prisoner labor involvement on a countrywide scale as one way to begin a serious national shelter program - one that could really reduce anticipated missile attack fatalities so effectively that it would act as a war deterrent. The fast-growing terrorist threat begs inclusion in disaster preparedness efforts. Also natural disaster threats.



Jerry Houston

AN AMERICAN CIVIL DEFENSE COMEBACK?

- Jerry Houston

re as a great nation may indeed embrace a mighty God, have an awesome military record, live high on the hog, value an unprecedented freedom, drive bigger and better cars, and put a lot more food on our tables than our neighbors around the world.

Even our prisoners live a lot better than most people in Third World countries. We stand out as a beacon of "life, liberty and the pursuit of happiness."

But we don't have a credible civil

Several past presidents, including my hero Ronald Reagan, have called for an improved civil defense program. But so far the hard money required to make it happen has not been provided.

FIRST DUTY

The constitutional first duty of every elected government official is to protect America's people. The Civil Defense Act of 1950 (now scrapped) was conceived for the "common defense." But it was never developed. Providing for the common defense is, as it should be, a leadership responsibility - and rightly so. It merits first priority attention that it fails to get. Most of our elected leaders take the time to debate and lobby every conceivable issue from the spotted owl to peace in Bosnia. Very few take the time and trouble to turn their attention and efforts to providing means for protecting "We the People" of the United States.

HISTORY STRESSES NEED

Our nation's history of disaster stresses the fact that we need to do more to protect life and property. The excessive casualties and damages that occur with each new disaster emphasize the point. Yet, this desperate call for help measured in unnecessary deaths, injuries and property destruction is largely ignored.

FOR THE RECORD

Natural disasters in recent times have occurred in just about every region of the world. Earthquakes, hurricanes, floods, tornadoes, forest fires, freezes - you name it. The 1995 hurricane season was one for the books, and Hurricane Opal topped things off with its damaging sweep into the Gulf Coast region. Wildfires also took their

TERRORIST TOLLS

The Oklahoma City and World Trade Center bombings got the nation's undivided attention to the frightening terrorist potential we face here within our own borders. We should all realize now that the terrorists are really here - and that we had better wake up and prepare now for the worst that may be just around the corner.

We furthermore learn, according to an article published in the Fall 1995 issue of the Journal of Civil Defense by Dr. Max Klinahoffer entitled "Organophosphorus Poisoning (Nerve Gas)" and another article in the current Journal by C. Bruce Sibley entitled "Nerve Gas - Terrorism's Newest Weapon" that terrorists have another highly lethal weapon.

And recently, under pressure from the United Nations, the Iraqis confessed to holding out on sizeable amounts of lethal biological and chemical agents known as "anthrax" and "botulism." How much more do they have?

BASEBALL-SIZE BOMBS

According to another article in the Fall 1995 issue of the Journal of Civil Defense there is a frightening "minineutron" bomb potential "out there" waiting to happen. Author Sam Cohen points out that an explosion of a typical mini-neutron bomb (the size of a baseball!) at ground level could have a deadly (neutron flux) effect of up to 1800 feet! A similar neutron bomb exploded at the optimum altitude of 300-400 feet could have deadly radiation effects up to 3,500 feet.

Then there's "Red Mercury" another weapon capable of causing major damage and useful as a terrorist weapon. Russian President Boris Yeltzin has been involved in its production.

SATAN AMERICA

Despite our government's humanitarian and diplomatic peacemaking efforts in foreign affairs we continue to hear reports of angry people in eastern and far-eastern nations refer to the United States as "Satan America."

MAD AS HELL

Vladimir Zhirinovsky is leader of

Russia's Liberal Democratic Party and is currently a lead candidate to become Russia's next "coup" or elected president. He is undoubtedly one of the most dangerous politicians in Eastern Europe today, and it is more than rumor that he is "mad as hell" at the West, especially the United States. According to an article entitled "Letter From Moscow... Nightmare on Red Square" by journalist Maureen Orth in Vanity Fair Magazine Zhirinovsky blames most of Russia's ills on the United States. He says, "Wherever there are diseases they come from the United States - AIDs, drunkenness, moral decline, everything."

In 1993 he told an Iragi audience in Baghdad: "Wherever there is a war, there are Americans."

Igar Serebriakov, a former Russian army colonel who heads "Fatherland," a military information clearinghouse, predicts that three months after Zhirinovsky comes to power, "the world will face a threat of an active nuclear war in a way it has never done before." When we consider the socioeconomic climate in Russia today it becomes hard not to imagine a worsening crisis or that a coup is not in the making.

MORE CRISES AND WARS

President Clinton's proposed plan to deploy 20,000 troops in the former Yugoslavia brought on a sharp response from Russian President Boris Yeltzin on October 19th 1995, who said: "WE WON'T LET IT HAP-PEN...WE HAVE TO STOP THIS...."

It only stands to reason that with this turn of events there will be an even greater escalation of international conflict and a renewal of the COLD WAR as well.

The United States troop deployment will supposedly assume the lead role in the NATO peace implementation with the reputation as the biggest, meanest dog around. This may not set well with many Europeans, especially Russian nationalists supportive of the Serbian struggle in that region. The NATO peace implementation would likely spread and explode into a multi-front war. Are we, as a nation, prepared for the worst scenario?

BROADER CONCEPT

Modern protective measures for the American public are seriously inadequate, especially when compared with the Swiss, the Swedes and

the Soviets. They provide much better protective care for their people. For instance, in January 1994 the Eastern Bloc (Russia) created "EMERCOM" - a new and broader concept of civil defense which focuses on a rapid and smart response to natural and manmade disasters, providing assistance to disaster victims beyond their own borders.

WORKING MAN

Unlike our congress, most of the "Duma" (Russian parliament) still believes as Lenin did that if they can save and protect their "working man" everything else will go well. But if they can't save him they will lose everything. It is no wonder then that all Russian citizens are encouraged to undergo a period of basic civil defense instruction.

UNPROTECTED CAPTIVES

Assuming that old-fashioned American common sense Murphy's Law have some merit, our worst disaster scenario may not be the last to occur.

As unprotected captives to a bankrupt national security strategy doctrine known as "Mutual Assured Destruction" (MAD) how would we as a nation survive should there be a nuclear showdown between the so-called superpowers? Of course, there are some protective shelters provided for a lot of our key government leaders at such locations as Sulphur Springs. West Virginia, Colorado Springs, Colorado and Mount Weather, Virginia, and a good number of other special facilities. There is a book out which gives more details about these special installations. It is entitled Underground Bases and Tunnels: What is the Government Trying to Hide*, by Richard Sauder, Ph.D. (1995). This book was recently reviewed by Walter Murphey in the Fall 1995 issue of the Journal of Civil Defense.

LAST DITCH ATTEMPT

Former President Ronald Reagan in 1982 made a last-ditch attempt to arouse congressional interest in a smart \$4.2 billion civil defense effort. Under his plan there would have been substantial shelter and evacuation programs put in place for those in high-risk areas and for key industries. That plan needs to be taken off the congressional "dead heap" pile and revised and implemented while there is still opportunity to do so.

PRISONER FACTOR

There are more than one million prisoners behind bars in the United States. This number jumped up by 90,000 within this past year alone. The United States must create 1,700 new beds per week to accommodate a substantial labor resource which could and should be invited to help provide the civil defense program nationwide.

PRISONER COSTS -**OR VICE VERSA**

Simple arithmetic should show us that the prisoner problem is a mounting welfare burden on the taxpaver. In fact, the upkeep cost ranges anywhere between \$12,000 to \$20,000 per year per prisoner. Many of the same people who prisoners may have harmed must help pay for the prisoner's upkeep year after year and forever. I am the only one I know of who advocates a full reversal of this psychology. Under my plan prisoners would eventually be repaying taxpayers and earning their own way.

"OFFENDERS" TO "DEFENDERS"

I believe that most (but not all!) prisoners are reformable and should be provided a means of amending their ways. Civil defense work projects would be one excellent way for serious-minded prisoners to move away from crime, redirect their focus from being public offenders to being public defenders.

PRISONER CLASSIFICATION AND SECURITY DESIGNATIONS

In my plan I outline concrete ways in which all prisoners could work and contribute to the civil defense effort from within the limits of his or her respective security designation and assigned classification category. Real incentives would be developed without disturbing other programs.

A ONE PRISONER ARMY

So, I am a one-prisoner army in need of a general (retired or otherwise) with the vision and savvy to build a credible civil defense for the 21st Century.

NOTE: Houston has had in the past few years several parole hearings and is due for another one shortly. A Mennonite religious group is interested in Houston and has offered him a home and employment upon his release.

^{*}Available from Mylin Publishing, San Diego, CA - phone 1-800-497-6646. Price: \$16.90 (including shipping and handling).

CD SCENE

WORLD WAR III FOR 2003??? TACDA MISSION: ITS PREVENTION

For over 30 years TACDA has tried to warn the American public and its elected representatives that modern warfare meant attack on the homeland with the very latest in modern weaponry. Which means American homeland fatalities in the range of 150,000,000 people. Dr. Conrad V. Chester (retired from Oak Ridge National Laboratory) shows a few million in excess of that number in his published charts.

But people and politicians have not wanted to believe this. It doesn't jibe with what the experience has been throughout history. It has been easier to ignore the warnings and reach for another martini.

Now, however, there are signs in Washington that give credence to the idea that preparedness against modern weaponry is the sensible choice, the one, the only one, that will provide America a solution for survival.

There are also acknowledgements that without a credible defense a real danger exists. For one instance, Speaker of the House Newt Gingrich is quoted as saying:

Without some kind of serious antiballistic missile defense, we are literally naked to blackmail and we risk losing two or three of our cities.

Two or three? Would he want to change that to two or three hundred? That would be more in keeping with the Chester study.

COMMUNISM GAINS IN RUSSIA

The veer away from Communism that the demise of the Soviet Union brought about has seen a substantial reversal with the recent elections to the Russian "Duma" – the congress.

Communists won the largest bloc of Duma votes that resulted in winning over 22 percent of the vote. Following the Communists came Vladimir Zhirinovsky's Liberal Democratic Party with a bit over 11 percent.

One announcement by Communist Party leader Gennady Zyuganov was that the agreement that broke apart the Soviet republics would be revoked.

Russia's super-silent attack submarines have increased their patrolling of the Atlantic and Pacific U.S. coastlines.

Apparently responsible for the new popularity of the Communist Party was the claim that the party has backed off from its strict communist philosophy.

About the same time as the Communist victory at the polls came the report that Russia's super-silent attack submarines have increased their patrolling of the Atlantic and Pacific U.S. coastlines. With that, there is the report that Russia and Cuba have agreed on an intelligence-gathering base in Cuba.

What next?

CORRECTION

Journal of Civil Defense article in Winter 1996 issue "Singapore Civil Defence Revisited" by Tom Strider

UPDATE ON OUR RECENT UPDATE OF SINGAPORE'S CIVIL DEFENCES. The article in our last issue incorrectly said that Lieutenant Juliana Adam was a Staff Officer for Public Education. That was her previous role. Major Subhas informed us that she now is the Staff Officer for Public Relations. Tom Strider also wrote that a major came in from the Operations Department to answer a technical question regarding HAZMAT suits. No wonder he was able to respond with the answers so competently! He is the Head of the HAZMAT Branch. Again, we wish the Singapore Civil Defence Force continued success with its recently (1 Aug 94) revised mission: to protect and save lives and properties in peacetime and emergency.

THE WALL STREET JOURNAL ACCENTS NUCLEAR DANGERS

In a January 2, 1996 editorial *The Wall Street Journal* emphasized strategic irresponsibility on the Washington political scene. Titled "The ABM Treaty's Threat" the editorial says in part:

With his veto of the 1996 defense bill last week, President Clinton just made the world a more dangerous place.

...Millions of Americans may pay for his decision with their lives, when some future commander-in-chief lacks the means to shoot down a ballistic missile heading on a lethal trajectory for an American city. By vetoing the bill, Mr. Clinton also shows that he has no viable strategy for dealing with the changed nuclear realities of the post-Cold War world – realities that are discussed nearby by former Reagan Defense official Fred C. Ikle.

In his column Fred C. Ikle writes:

...Yet with or without Start II, nuclear weapons will remain plentiful, are becoming more widely available, and thousands of them will be kept ready for instant use. If just one or two nuclear bombs should explode somewhere - whether by accident, because of a terrorist act, or as part of a military campaign the international order would be transformed more profoundly than by the collapse of the Soviet empire. The U.S. will be unprepared to cope with this contingency if it clings to the Cold War strategy of bipolar deterrence alone, based on a threat of mutual genocide....

NUCLEAR TEST BAN CIRCUMVENTED BY U.S. SUPERLASER TEST?

France has ignored the Nuclear Test Ban Treaty by completing six tests of its nuclear weapons in the South Pacific. It promises now to observe the treaty.

The U.S. has taken another route. It is now working on a "National Ignition Facility" which will be able to test nuclear weapons without exploding them. No underground tests necessary.

So reports *The Christian Science Monitor* in an article by Loren Stein.

The test, which takes a fraction of a second, will burn up to 500 trillion watts of power.

Alghouth there are objections from anti-nuclear quarters, there is also support. Former Los Alamos physicist Ted Taylor points out that "NIF" could provide research for microwave and pure fusion weapons.

AMBASSADOR HENRY F. COOPER NEW CHAIRMAN OF HIGH FRONTIER

Former SDI Director (under President George Bush) Ambassador Henry F. Cooper assumed the chairmanship of High Frontier just before General Daniel O. Graham's death on December 31, 1995.

Ambassador Cooper was President Ronald Reagan's representative in Geneva in SDI talks with the Soviets. There he refused to compromise on SDI. As General Graham said in his letter of December 29, 1995 (he died two days later): "Hank is a warrior who won't ever compromise on America's defense....'

Under Ambassador Cooper we can look forward to the same tough SDI policy pursued by General Graham.

CHEMICAL-BIOLOGICAL-**NUCLEAR TERRORISM** PREDICTED FOR USA

The prestigious British Intelligence Digest in its January 5th edition sees American action to protect Israel as resulting in a terrorism campaign in the United States.

"Recent reports," says editor Joseph de Courcy, "confirm that the U.S. security services believe such a threat to be not only credible, but inevitable."

Tremendous growth in terrorism over the next decade or so...

He backs this up with a warning to the U.S. House of Representatives by CIA Director John Deutch wherein he announced that he had "come to the conclusion there is going to be a tremendous growth in terrorism over the next decade or so, not only directed towards Americans but throughout the world."

IN MEMORIAM - GENERAL DANIEL O. GRAHAM

Lieutenant General Daniel O. Graham, founder in 1981 of High Frontier. and its director died of cancer on December 31, 1995. General Graham was a pioneer in the 1970s in advocating defense against the growing Soviet missile threat and was confidential advisor to President Reagan before and during his presidency. General Graham was mainly responsible for the government's involvement in ballistic missile defense (the "Strategic Defense Initiative") and along with Dr. Edward Teller was responsible for government research on it. His High Frontier efforts to promote it continue under the directorship of Ambassador Henry Cooper. General Graham was 70 years old at the time of his death. (See also review of his recent book by John Bex on page 22 and F. R. Duplantier's tribute to him in his page 17 report "Who Will Conquer New Frontier?") General Graham was a frequent featured speaker at TACDA seminars. His valiant efforts to give America protection from offensive missiles will be carried on by those he inspired.

"MISSILE SHIELD A MUST"

The American Legion for January 1996 carries a story by Jean J. Kirkpatrick entitled "Missile Shield A Must." In it she stresses the development of ballistic missiles by Third World countries like Irag, Iran, North Korea, Syria and Libya.

We can't afford to remain defenseless

She criticizes Congress for not voting for a "ballistic missile defense" and for supporting the strategy of Mutual Assured Destruction (MAD) that is based on vulnerability for everyone.

"We can't afford to remain defenseless" her subtitle says in part.

(Ms. Kirkpatrick is a senior fellow at the American Enterprise Institute.)

CARBON MONOXIDE DETECTORS NEW MODELS RECOMMENDED

Veteran TACDA writer and advisor Van E. Hallman (from the mountains of Arizona) brought to the Journal's attention that problems are being experienced with some household carbon monoxide detectors (which resemble smoke detectors) in that they are sometimes given to false alarms and unnecessary responses by fire departments.

Chief Sam Cahan of San Diego, California (retired New York City fire chief) reports that this is true and

concerns primarily the older models. He suggests checking the 1996 Consumer Reports Buying Guide for "an excellent review of CO detectors including buying recommendations."

Caution: carbon monoxide detectors are not to be confused with smoke detectors.

HOW TO GET DONATED SUPPLIES

Organizations that react to disasters and public emergencies can get brand new, donated supplies through a nationwide corporate gifts program. Available items include tools and hardware, protective clothing, plumbing and electrical fixtures, computer software, office supplies, maintenance items, paper products, and seasonal decorations. The program is administered by the nonprofit National Association for the Exchange of Industrial Resources, or NAEIR, based in Galesburg, Illinois. Recipient groups pay \$645 annual dues, plus shipping and handling, but the supplies themselves are free. NAEIR says members average \$9,000 worth of new merchandise a year. Participants choose what they need from 300-page catalogs issued every ten weeks with a computer deciding who gets what. A moneyback guarantee covers all first year members. For your free information packet contact NAEIR, P.O. Box 8076, Galesburg, Illinois 61402-8076. Phone: 1-800-562-0955. FAX: 1-309-343-0862.

The world is waking up to the fact that terrorism is for real and that a serious reaction to it is needed if the public is to be protected. Gas is in the forefront as a terrorist weapon and promises to become an even more serious problem. Dr. Max Klinghoffer's article "Organophosphorus Poisoning (Nerve Gas)" was the first Journal article to focus on the subject (Fall 1995 issue). Here we have a view from Britain:

Recent Japanese mass-poisoning incidents involved the deliberate release of the deadly chemical warfare nerve agent, Sarin. This corroborates a long-standing belief that this and many other forms of toxic weaponry can be manufactured in covert laboratories or purloined from existing military stockpiles – for use against unprepared police forces and civilian targets. Nerve agents are so-called because an extremely small amount (0.5-2 mg) disrupts the nervous-musculature system and inflicts an agonizing death on its victims – in minutes. Many of today's insecticides have the same basic ingredients!

NERVE GAS

■ Terrorism's Newest Weapon ■

- C. Bruce Sibley

ighly poisonous compounds are no strangers to the battlefield, but those capable of disrupting the nervous system did not attract serious military attention until 1932, when the German chemists, Lange and von Krueger, uncovered the extraordinary toxicity of organophosphorous insecticides. By 1934, Hitler's Nazi regime had gained control of Germany and the chemical giant IG Farbenindustrie. Under the direction of Gerhard Schrader, IG Farbenindustrie was contracted by the German Army to undertake research into the toxic properties of these so-called nerve agents!

In 1936, Schrader's team had produced Tabun (GA), the first nerve agent, Sarin (GB), followed in 1938. A third nerve agent, Soman (GD), went into production in 1944. The 'G' codes were added later, by British and American scientists, which is why experts and textbooks refer to these nerve gases as 'G' agents.

By the end of World War 2, some 12,000 tons of German nerve agent was captured by advancing allied armies, much of it inside artillery shells and bombs. Special technical scavenger groups of the Soviet Army seized part of this booty, including a complete production facility for Tabun and Sarin, plus formula for making Soman. This valuable cache included precision tools and machinery, nerve gas munitions, V2 rockets, libraries of data, and technical personnel. Until fairly recently, it was not widely known that the wartime allies had also investi-

gated the properties of nerve agents, but apparently the work had not advanced sufficiently for these findings to materialize as chemical warfare munitions.

It was not until the late 50's, that Anglo-American and Soviet military scientists admitted the existence of more potent forms of nerve agent, called VX and VR-55 respectively. These are claimed to be about 10



C. Bruce Sibley is a physicist and electronics engineer, with specialist knowledge of military technology and civil defense. He is author of SURVIVING DOOMSDAY, a best-selling textbook published in 1977. Since then, he has published innumerable reports on NBC warfare countermeasures, as well as lecturing and broadcasting on these topics. Between 1983-89 he published and edited the ubiquitous Journal of Practical Defence, plus a series of special reports which included Nuclear Terrorism, and the Chernobyl disaster. This report is based on notes for a new book, and therefore remains the copyright of the author.

times more toxic than Sarin (the most toxic of all the 'G' agents). VX is a nonvolatile liquid with the consistency of engine oil. The Russian VR-55 nerve agent is thought to be a mixture of VX and Soman.

In January 1975, the Sunday Times newspaper revealed that a Ministry of Defense and British Patent Office blunder had allowed public access to the VX nerve agent patent! And also in 1975, and again in 1976, there were additional reports that vials of Tabunhad been intercepted by the US Postal Authorities, and that special units of the German and Austrian police forces had raided premises in Bonn and Vienna, resulting in the seizure of several liters of Tabun.

HOW NERVE AGENTS KILL: The transmission of impulses through living tissues is so rapid (in milliseconds) that it was once believed to be an entirely electrical phenomenon. But in 1936, biologists Loewi and Dale shared the Nobel Prize for Medicine and Physiology for discovering that the electrical transmission between nerve endings is aided by acetylcholine, a natural substance synthesized by living cells.

The voluntary or involuntary contraction of muscles, including the repetitive contraction of the heart and lungs, and all other essential autonomic functions, are all controlled by acetylcholine. In electronic terms, a minuscule squirt of acetylcholine acts like a chemical switch. It opens channels in connective tissue, enabling electrical

neuro-signals to pass through in the form of charged ions. The influx of sodium ions into tissue, with corresponding outflows of potassium ions, unbiases a millivolt negative potential which normally exists across the cell membranes, enabling muscular contraction to occur.

But after each contraction, it is vital that the supply of acetylcholine is terminated – to allow the muscle to return to its former relaxed state. This is achieved by yet another natural substance, called acetylcholine-esterase (ACE). This is an enzyme that degrades the acetylcholine into choline and acetic acid – thus restoring the original negative bias and switching off electrical conduction between cells.

SYMPTOMS: However, very small (0.5 mg) doses of nerve agent disrupt these processes, by binding with the ACE enzyme and halting its neutralizing action. This allows abnormal levels of acetylcholine to accumulate at nerve endings. The victim then begins to develop a range of symptoms of increasing severity, dying minutes later!

Periodic exposure to so-called sub-lethal doses of nerve agent may also lead to death – after hours, days, or weeks, rather than minutes. This is because liver detoxification processes take time to rid the body of poison. Repeated exposures of the liver to sub-lethal amounts of nerve agent, however small, have a tendency to accumulate and overwhelm the victim, regardless of heroic prophylactic treatment!

In cases involving the absorption of lethal doses of nerve agent, the victim first experiences musculature weakness and whole-body twitching. This is followed by pupil pinpointing, blurred vision, mucus in the throat and lungs, drooling, runny nose, headache, nausea, sweating, chest pains, labored breathing, choking, vomiting, involuntary urination and diarrhea. These signs are accompanied by agonizing whole-body cramp, caused by continuous muscular contraction. Then paralysis stops the heart, respiratory collapse occurs, coma and death follow.

Those recovering from minor nerve agent poisoning, will require several weeks of treatment and nursing before ACE levels return to normal.

The foregoing symptoms are somewhat similar to those observed for lethal snake bites, insect stings, and curare! Naturally manufactured nerve toxins have been under the medical microscope for decades, mainly in the quest for new drugs. Military science is concerned with developing new agents and antidotes – in anticipation of these exotic toxins falling into the hands of an enemy nation or terrorist group.

PROTECTIVE COUNTERMEA-SURES: MASKS & CLOTHING. Swift protective action is needed when a nerve agent attack is imminent. In fact, it is imperative to don the same kind of protective clothing as that issued to military personnel. This consists of a face mask or respirator, with hood, and a nuclear-biochemical (NBC) suit – with gloves and boots.

Early forms of 'Noddy Suit' (its jocular name), meant wearing an impervious, oil-resistant outer garment, over an inner one impregnated with activated carbon. Another impermeable design used nylon fabric lined with butyl rubber. Although both gave satisfactory NBC protection, the suit posed a serious heat-stroke threat to the wearer when worn in hot climates under active battlefield conditions!

The British solution was to design an entirely new suit (Types M3 & prototype M4) made of strong lightweight air-permeable material, with an inner lining of activated carbon fiber. The amazing 'absorbent' properties of activated carbon and other impregnates, provides the best allaround protection against every known biochemical war agent.

DECONTAMINATION OF THE ENVIRONMENT: Most chemical warfare agents are destroyed by a mix of water, steam, and various common household chemicals — soap, soda, detergent, bleaching powder, petrol, paraffin, plus carburizing and other solvent spirits.

A slurry spray made from chlorinated lime, calcium hydroxide, and hypochlorite, is capable of destroying G-agents and VX, as well as 'mustard gas' liquids. Detergents containing perborates are especially effective against nerve agents, but those without this additive produce an end-product that remains poisonous.

DECONTAMINATION OF SKIN: It is obviously preferable to avoid nerve agent droplets on the bare skin – hence the 'Noddy Suits'! But no doubt such exposures will occur and a decontaminating kit should be kept ready at hand. If a protective glove is forgotten and a drop of nerve agent

contacts the back of the hand – it is vital to remove the droplet within the first few seconds of contact. But this does not mean rubbing so hard that the skin becomes broken. Such damage helps speed absorption!

If the free hand is protected by an NBC proof glove or mitt, use some dry pads of toilet or Kleenex tissue to dab and mop up the agent. Quickly follow this up with a dusting of washing powder, flour, or talcum powder. Then, using some more pads of paper tissue — moistened with bleach-water — gently rub the spot again. Then dust-dry with more flour or talc. Provided you act quickly, the efficiency of this technique will remove about 99 percent of the nerve agent contamination.

ANTIDOTES: It is vital that a

In Switzerland & Sweden, a comprehensive civil defense program means that every citizen can be sheltered in a nationwide network of underground reinforced concrete shelters. The ventilation of these structures excludes radioactive fallout and biochemical agents. Hence – even in a peacetilme emergency (involving the deliberate release of toxic agents) citizens have the assurance that there is somewhere safe to hide, until after the emergency is over.

nerve agent antidote be administered quickly – provided there is no doubt that a specific nerve agent is about to be deployed or is already responsible for the onset of illness. The antidotes, atropine and toxogonine, are highly toxic themselves and are therefore unsuitable for other forms of poisoning. It is imperative to be certain of what you are dealing with before injecting these antidotes into yourself or others.

Self-injection is made simple by the development of a special autosyringe, supplied with straightforward instructions to all military personnel. Newer forms of supplementary antidote are becoming available, including some in pill form.

Many experts have serious reservations about the life-saving potential of these antidotes and skin decontamination procedures. This is because many victims will have exceeded the

lethal absorbed dosage by several orders of magnitude before self-aid is administered or outside aid arrives. Early warning and a good 'Noddy Suit' seems the best line of defense.

AGENT DETECTION: The military are equipped with portable electronic sniffers - instruments that detect, identify, and give audible alarm for a wide range of toxic war gases, aerosols, liquids, and dusts. In addition, there are some very much simpler indicators available. There are tubes of special dyes, or tinted papers and discs, which change colour when exposed to a specific toxic warfare agent.

CHARACTERISTICS & DISSEMI-**NATION:** In their pure state, all nerve agents are colorless, although some are only in appearance. Impure versions are said to be brown or milky in color. Tabun, Sarin, and Soman may have a fruity, sometimes camphorlike smell, whereas VX smells like rotten fish. But using your nose to detect a nerve agent isn't recommended!

Sarin, the gas used in the Japanese Tokyo subway incident, has a volatility similar to that of petrol, and therefore disperses more readily as a vapor than VX, which has the consistency of motor oil. Clearly a pure gas poses no contact hazard since it must be inhaled to cause damage. However, a vapor can enter the body via the lungs, ears, eyes, and skin.

The military method for releasing a nerve agent entails spraying the agent as a pure gas or droplet aerosol, from aircraft fitted with apparatus similar to that used for crop spraying. This mode of seeding is equally applicable to other toxic warfare agents, including radioactive dusts and biological aerosols.

Alternatively, dissemination can be achieved by the projectile method. This time the agent is carried inside a bomb, artillery shell, or missile warhead, and is dispersed by a small detonation high above the target. The most favored weather conditions for dispersing a cloud of atomized nerve agent is a moderately warm day with light prevailing winds.

After aerial dissemination, gas and vapor agents have a tendency to drift downwind from the release point, dispersing over an increasingly wider area until concentrations fall below casualty-producing levels. Conversely, deliberately thickened nerve agent droplets fall to earth quite quickly,

where they may persistently contaminate a specific target area for several days or weeks. Here, contaminated land and structures remain off-limits until evaporation, soil reactions, rain, or decontamination reduces the contamination to non-dangerous levels. Especially thickened nerve agent droplets not only pose a threat to exposed skin and eyes, but also stick to ordinary shoes and clothing, where it performs its insidious task of soaking through the material to reach the skin underneath! Depending on which nerve agent is used, breathing a very small amount of gas or the aerosol for just a few minutes, at concentrations of approximately 70-300 milligrams per cubic meter of air, or 0.5 -1 milligrams of liquid nerve agent (a pinhead droplet!) on exposed skin causes death in under 5 minutes!

WHO STOCKPILES BIOCHEMI-CAL AGENTS? Quite regardless of countless UN conferences and treaties banning biochemical weapons, much of NATO's biochemical arsenals, and those of the former Soviet Union, remain intact and undestroyed - such is the magnitude of stocks held and the complexities of decommissioning them. Whether signatories to such treaties or not, previous and contemporary events confirm that many nations have ignored these international guidelines. Such nations have set up secret biochemical laboratories, munitions plants, and covert nuclear bomb programs in order to develop more effective weapons, antidotes and protective measures.

Meanwhile, the corruption, chaos, and decay inside the former Soviet Union, is rife with criminal opportunism. More Kalashnikov rifles are being sold on the blackmarket. Weapons grade uranium and plutonium (not forgetting the mysterious Red Mercury) have been available for some time, despite the Kremlin's repeated assurances to the contrary. How long before Sarin, Tabun, VX, or neutron shells are purloined from the leaky, poorly guarded, arsenals of this once proud Empire?

NIGHTMARE COMES TRUE. The first indications that poisonous war gases were being produced illicitly in Japan came in July 1993. Residents living in Tokyo's Koto district telephoned police and emergency services to complain about noxious fumes escaping from a building owned by the Aum Shinri Kyo 'Doomsday' religious cult. What the emergency services and police discovered remains unclear, and the culprits were not apprehended.

Subsequently, on the night of June 21st 1994, at the Japanese Alp resort of Matsumoto, 7 people died in terrible agony and another 260 were taken to hospitals in various stages of respiratory distress. Rumors and bizarre accusations followed in the wake of this new incident, until official investigators astonished the world by announcing that Sarin, a deadly chemical warfare agent, had been deliberately seeded into the atmosphere!

Several more Sarin-related poisoning incidents occurred in Japan between July 1994 and March 1995. The first of these was at Kamikuishiki (near another Aum Shinri Kyo building), when residents complained of choking fumes on three separate occasions. The second attack on Nara, near Osaka, saw 230 victims rushed into hospitals with eye pains, breathing difficulties, and skin rashes. Attacks occurred again at Kamikuishiki - when police and government scientists raided buildings belonging to the Aum Shinri Kyo cult, seizing drums of chemical prerequisites for the manufacture of Sarin and other chemical weapons. Furthermore, at Yokohama, 20 railway travellers were overcome by fumes. Then later, at a Tokyo subway station, several passengers were taken to hospitals complaining of chemical fumes, breathing difficulties, eye and skin irritation, and nausea. Finally, on March 20th 1995, Sarin was released at Kasumigaseki station, Toyko, during the rush hour.

Kasumigaseki subway serves a complex of Japanese government and business offices, and over 5,000 workers fell victim to this attack and 12 of them died. Had the purity and concentration of the Sarin been much higher, the death toll and longterm serious injury could have risen to many thousand. A far-seeing report published many years ago (1970) by the American Public Health Association, quoted the findings of 18 top consultants to the World Health Organization, who predicted that a few tons of aerosol VX, seeded above a city of 5 million, would kill several hundred thousand people, injuring as many again - in just a few minutes!

25 YEARS AGO IN THE JOURNAL OF CIVIL DEFENSE

(Then known as SURVIVE)

READER COMMENTS

[March-April 1971 issue]:

Dwight, Illinois

To Survive:

I wonder how history will record forty million needless American deaths?

Will the record show that every competent civil defense official in the U.S.A. was aware of the perilous position of the civilian population in that nuclear war? Will the record show that every competent military commander was aware of the perilous position of his military personnel in the same nuclear attack?

Why have our people not been given a chance to develop an adequate shelter complex? Why have we not developed strategic stockpiles of food?

Why? Is it because civil defense is "political suicide"?

Every knowledgeable person knows in the event of a nuclear attack that Main Street U.S.A. would be the front line of battle and that forty million bare-chested Americans would needlessly die in the holocaust. Congress has been told repeatedly that this is the stake in the shelter program.

Some say that no nation would be so barbaric as to explode a nuclear bomb on an unprotected city. They forget Hiroshima!

NOTE: Mr. Steichen's 1971 estimate of 40 million American fatalities in a missile attack compares to the 1993 estimate of over four times that many (i.e. over 160 million) in Dr. Conrad V. Chester's 1993 Oak Ridge National Laboratory report.

Errors have been made before in the history of the U.S.A. by a politically motivated Congress and by aging departments of the Army and Navy. A farsighted general named Billy Mitchell was court-martialed and cast out of the defense posture of the U.S.A. because he challenged the establishment with his air arm.

In spite of this blunder America was given time to reverse its field and develop a World War II military machine that tipped the balance.

We shall not be given time again. Our political leaders are frozen to civil defense inaction. How will history record those 40 million deaths?

Clement J. Steichen

AND A LITTLE LATER [May-June 1972 issue]: **UNDER THE HEADING** "CIVIL DEFENSE ABROAD":

"Our civil defense is aimed at making Sweden so tough to attack that no rational enemy will ever try." Should, in spite of this, Sweden be attacked then the first aim of Swedish diplomacy, civil defense and other parts of Swedish total defense - i.e. peace - will have failed.

"In this event the second aim - the fight of our total defense for Sweden's freedom - will take over."

SWEDEN

"If the worst should happen - atomic bombs over Sweden - the survival of Sweden and its population will be in jeopardy.

"For the survival of our population a good civil defense is needed. And I can say that our Swedish civil defense is good."

> - Sven-Eggert Bergelin Swedish National Board of Health and Welfare

> > • • • • • •

Two years ago Survive reviewed the 1969 Swiss Civil Defense Book by Albert Bachmann and Georges Grosjean. The review read in part:

"Pacifism and defeatism are written off [in Switzerland] as attitudes impossible to tolerate, incompatible with serious approaches to peace and freedom.

SWITZERLAND

"Switzerland, the manual stresses, will continue to be prepared, to opt for peace by making its defenses so strong that they cannot be overcome without a prohibitive price."

The book was originally printed in French, German and Italian. In 1970 it was translated into Japanese. And in 1971 into Arabic.

NOTE: Sweden and Switzerland, both on the touchy scene of frequent European wars - and highly vulnerable to involvement - have both managed through determined preparedness efforts to remain at peace for over 180 years.

BEHIND THE

Mr. Duplantier is Editorial Director for the St. Louis-based America's Future, Inc. and writes "Behin stations. America's Future advocates a strong national preparedness as an effective war deterrent

REDS WAGE 'PEACE' TO CONQUER WEST

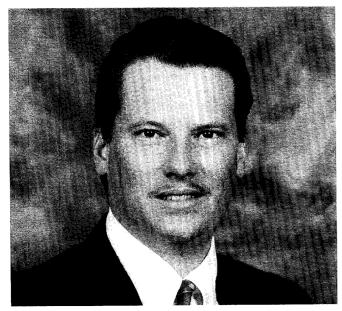
Dramatic reforms in Eastern Europe and the Soviet Union signaled the end of the Cold War and ushered in an era of peace, right? Not necessarily. One former KGB agent says the whole thing's a charade.

- F. R. Duplantier

Anatoliy Golitsyn was a KGB agent for 16 years prior to his defection to the United States in 1961. In 1984 he published a book called *New Lies for Old* in which he predicted unprecedented economic and political reforms behind the Iron Curtain, the legalization of Solidarity in Poland, and the fall of the Berlin Wall. His predictions were ignored or dismissed at the time, but all soon came to pass. Westerners were astounded by the turn of events, and in the euphoria that followed the significance of Golitsyn's predictions was lost.

The ultimate aim is "peaceful conquest of the United States and Western Europe from within."

But Golitsyn is sounding the alarm again. He's just published a new book called *The Perestroika Deception* in which he repeats the warnings he issued more than



F. R. Duplantier

10 years ago. Golitsyn says the purpose of perestroika is twofold: to elicit Western financial support for the revitalization of the socialist economies, and to facilitate the convergence of East and West. The ultimate aim is "peaceful conquest of the United States and Western Europe from within."

The Communists have gone to great lengths to recreate the trappings of Western democracy, with opposition parties and free elections. But they are just imitations of the real thing. "Even so-called 'free' elections do not pose a problem for the Communist parties. Because of their secret partnership with the 'opposition,' the Communist Parties are invariably in a winning position. It is their candidates — whether Communist or 'non-Communist' — who always win, since all the non-communist candidates and 'parties' are controlled, says Golitsyn. "The Communists have succeeded in concealing from the West that the 'non-Communist' parties are secret partners of the Communists, not alternatives or rivals to them."

The same thing goes for the so-called independent Republics. "The present Communist strategists are concealing that it is they who are now creating 'independent' Republics," says Golitsyn. "The strategists are concealing the secret coordination that exists, and will continue to exist, between Moscow and the 'nationalist' leaders of these newly 'independent' Republics." He says the apparently fragmented Soviet Empire can be reassembled at any time.

Definition of "perestroika": "Restructuring" or "reorganizing." It means in effect change but not fundamental reform.

Perestroika represents "a broad strategic assault on the Western mindset," an assault that gives every indication of achieving spectacular success. "The meaning of developments in the (formerly) Communist world is misunderstood," says Golitsyn, "and the intentions behind Communist initiatives have been misinterpreted. Enemies are accepted and treated as though they have suddenly, overnight become allies of the West." Golitsyn confesses himself saddened by "the contemporary jubilation of American and West European conservatives who are cheering 'perestroika' without realizing that it is intended to bring about their own political and even physical demise."

HEADLINES

d the Headlines" for over 200 newspapers across the United States as well as for American radio t.

WHO WILL CONQUER NEW FRONTIER?

The first nation to successfully exploit the new frontier of space will dominate the 21st Century. The late Lt. General Daniel Graham strived to make sure the U.S. would "be that nation."

- F. R. Duplantier

"Mankind's access to new frontiers has always been a major factor" in the prosperity of nations daring enough to exploit them, said Lt. General Daniel Graham, the founder of High Frontier and America's leading proponent of the Strategic Defense Initiative. "Although governments played vital roles in blazing the trails and ensuring access to new frontiers, protecting the pioneers and their property, individual initiative and free enterprise decided the outcome in almost all successful cases. Opening and fully exploiting the new frontier of space will be no exception."

In an autobiography called *Confessions of a Cold Warrior*, released shortly before his recent death General Graham recounted the highlights of his amazing career as soldier, intelligence officer, and space pioneer. Perhaps his crowning achievement was his contribution to the development and promotion of the technology that subsequently became known as the Strategic Defense Initiative, or SDI. Ronald Reagan's unwavering commitment to SDI was a deciding factor in the demise of the Soviet Union, as former Soviet officials themselves acknowledge.

...we will need someone with General Graham's feisty nature...

General Graham's determined, and ultimately successful, effort to launch SDI confirmed his preference for individual initiative over bureaucratic management. "Proposals for fundamental change such as High Frontier concepts of strategic defense," said Graham, "are viewed as threats. Redirection of resources and energies threaten to degrade the value of expertise among bureaucrats executing current policies and programs. There is no bias as powerful among bureaucrats and politicians as the bias toward what they have said and done in the past."

General Graham learned from personal experience that "no fundamental changes - however common-



Lt. Gen. Daniel O. Graham

sense, however valuable to the nation, however readily executed – will be generated *inside* government. Only 'outsiders,' free of bureaucratic constraint and internecine turf guarding can even *propose* such changes with any hope of adoption. This is a situation which bodes ill for our country," said Graham, "and it is steadily worsening: the larger the bureaucracy, the less amenable [it is] to change; the greater the numbers of departments and agencies, the fiercer the turf guarding."

During the course of his distinguished career, General Graham developed a well-deserved reputation for combativeness. If America is to seize the golden opportunity offered by space, we will need someone with General Graham's feisty nature to prod our government along. Overcoming bureaucratic "barriers to change" requires courage, pugnacity, and persistence, said General Graham, and those virtues will be essential for the conquest of space. Space promises to be "the new 'high seas,'" said Graham, "offering huge strategic and economic benefits to the nation that is preeminent in that arena." What worried Graham is the possibility that the United States, "strapped by bureaucratic rigidity, will fail to seize our historic opportunity to utilize space."

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What started out as a book review (see "Bibliography" at end of article) found so much to report on that it turned into an article. The Kobe earthquake has many lessons for urban planners, and Marcel Barbier clearly shows what they are. His professional analysis is a logical follow-up of the report of the local impact of the Kobe disaster by Tim Murphey published a year ago in the Spring 1995 issue of the Journal of Civil Defense.

THE GREAT KOBE EARTHQUAKE

- Marcel M. Barbier

1. Physics

The Kobe earthquake took place on January 17, 1995 at 5:50 A.M. with a magnitude of 7.2 on the Richter scale. The epicenter was located 15 km southwest of Kobe City. The maximum peak horizontal accelerations were of the order of .8 g, the maximum ground displacements of the order of 50 cm and the peak velocity of the ground motion was of the order of 30 cm/sec, a nightmare for engineers!

2. Loss of Life

The population density was at certain locations, as high as 11,000 inhabitants per km² (28,000 per square mile).

In human lives, 5,504 were dead and missing, a relatively small number compared to the 25,000 of the Armenia earthquake of 1988, the 41,000 of the Iran earthquake of 1990, and especially the 142,000 of the great Tokyo earthquake of 1923.

The causes of death in Kobe were crushing (90%) and fires (10%). In the great Tokyo earthquake, it was the reverse. Most Kobe residents were sleeping and the victims could not escape before being crushed.

Injured were about 40,000 with 2,000 gravely.

Triage was practiced, both in rescue operations and in hospitals,

because there there was not enough personnel to rescue and give treatment to all. Some expressed their dissatisfaction at leaving seriously injured people without treatment. Some hospitals were destroyed, most were damaged and without water, gas, and electricity.

3. Damages

The casualty figures quoted can be compared to the number of houses and buildings damaged which reaches 400,000, 100,000 of which were totally collapsed, 107,000 partially collapsed, 183,000 partially damaged, and 6,000 burned down.

The wooden houses that collapsed had heavy traditional tiles, insufficient bracing of the walls and weak ties to the footings. Modern standards of wood construction would have resisted better.

320 bridges collapsed

The walls of reinforced concrete buildings collapsed too, either at the ground floor level, where the load is maximum or, for high rises, at midheight strangely enough. Buildings with setbacks break at the discontinuity. Cracks of columns and beams were numerous. One believes the lat-

eral forces exceeded the lateral seismic coefficient set by the building code in most cases.

Steel structures were also damaged, probably because of bad welding between vertical and horizontal steel beams.

The transportation system (rail-ways and highways) had a lot to suffer: 320 bridges collapsed, 9,400 roads were damaged, a 650 meter (2,000 ft) long section of the overhead Hanshin expressway collapsed, 250 reinforced concrete columns in the subway cracked.

About 1 million customers in Kobe and other areas depending on the power plants lost electrical power due to damages to thermal power plants, transformer stations, high and low voltage lines. Half of them had power restored in 24 hours; and for most of the remainder it took 1 week.

The water was cut off to about 3 million people. In Kobe City alone 1,000 damaged joints were found in 4,000 km of distribution pipelines. Restoration was long (weeks) due to the necessary repairs, mainly replacement of joints by new, earthquake proof (?) joints. 800 water tank rollers manned by 2,000 technicians supplied water.

The sewage system experienced 10,000 breakages and 43 waste treatment stations out of 102 were damaged.

There was no damage to gas production plants and high pressure pipelines, but some in middle pressure and many in low pressure ones, mostly at joints of a type not allowing relative displacements of more than 3 cm.

Of 1.5 million telephones, 285,000 experienced an outage, but one day after, all but 85,000 were restored to service.

Fires: there were 294, resulting in the destruction of buildings on 66 million square meters of land.

4. Emergency Response

The Japanese government met that same morning and established various headquarters for counter measures. It later enacted 14 laws for relief of the victims.

The local authorities (prefectures of Hyogo and Osaka and Kobe City local government) started working at relief operations within an hour. One week after the quake Kobe City had opened 589 shelters where 236,890 refugees lived. On February 24 (1 month and 1 week after) all schools were reopened.

Search and rescue operations were carried out by fire, police services and the military. Living and dead rescued were 193 and 428 the first day, 608 and 189 the second, 816 and 114 the third, 419 and 30 the fourth, 231 and 9 the fifth, 116 and 4 the sixth, and 80 and 2 the seventh, for a grand total of 3,286 in the first four weeks. Private citizens are believed to have rescued about 15,000 persons. It is estimated that the military was sent in too late, arrived the second day at 6:00 P.M. and lacked rescue equipment.

5. Medical Aspects

90% of the 5,500 fatalities were caused by being crushed in collapsing houses, the others died from fires. 35,000 persons were injured.

Crush syndrome included compressed muscles turning to necrosis, releasing hemoglobin which caused acute renal failure. Post traumatic stress disorder afflicted not only quake victims but also relief workers.

Many hospitals and clinics in the quake area were either destroyed or unable to function due to lack of water, gas, and electricity. Ambulances could not reach them due to traffic congestions or impassable roads or bridges.

The Japanese self defense forces provided: 1.6 million man-days of work, 350,000 vehicles and 7,000 aircraft flights. They saved 157 lives from collapsed houses. 20,000 patients were treated in four mobile field hospitals, 33,000 tons of water and 570,000 meals were supplied.

Five phases of disaster medicine were identified.

- 1. First phase, 36 hours, life threatening traumas, resuscitation, triage and evacuation.
- 2. Second phase, from 3rd to 6th day, milder trauma patients treated as first aid by doctors visiting shelters.
- Third phase, 1st week to 1st month, acute diseases (colds, gastric ulcers) were treated at fixed aid stations, with help of nurses.
- Fourth phase, to 2 months, chronic diseases (hypertension, diabetes) were treated, with a smooth shift to recovering local medical facilities.

5. Fifth phase, rehabilitation, preventive medicine have begun.

At the triage phase, doctors should have written their diagnoses on emergency medical tags and attached these to the patients. Lack of such records and information about the patient was felt into the second phase, where doctors began to hand out one day prescriptions to patients.

6. Emergency Shelters

It is mainly schools that have been used as shelters. However, some school buildings and furnishings had been badly damaged. Also, school teachers were not prepared to be shelter managers, and in half of the cases they had to assume these functions as there were not enough city officials. In the future, schools should be checked for their seismic resistance and furniture should be built in or fixed in place.

7. Risk Assessment of Damaged Buildings

From January 19 to February 9, 46,610 buildings were inspected by experts; 6,476 or 14% were found to be unsafe (likely to collapse), 9,302 were labeled "caution" and the rest was found "safe" (fit for occupancy).

8. International Help

Many countries were very generous in various ways. Search and rescue teams could not arrive until 36 hours after the quake. Especially appreciated were the Swiss sniffer dogs (used at home for avalanches). Medical teams had a language barrier, except those from East Asia who were fluent in Japanese. 46 countries

(Cont. on page 20)



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provided help in kind or cash. The U.S. donated blankets, plastic sheeting and tents from one of its bases in Japan.

9. Volunteer Activities

Non-government organizations and civilian volunteers from outside and inside Japan provided a lot of help. The turnout of individual volunteers was amazing: by January 29, 7,200 were registered in Kobe.

People affected... over 3 million

10. Psychological Stress Care After the Quake

The number of people affected by this disaster was over 3 million, of which 320,000 were made homeless. Post-traumatic stress reduction was sought by: 1) debriefing through booklets; 2) outreach to the victims; 3) counseling by social workers; and 4) public information dissemination.

11. Economic Damage

The estimate of material damages amounted to 7.5 trillion yen, roughly divided as follows: infrastructure (harbor, highways, railroads): 2.5; residential: 1.5; commercial-industrial: 1.4; and equipment (machinery): 1.

12. Reconstruction

Emergency legislation, regulations and planning were enacted by the central government and local authori-

The amount of debris was calculated to be of the order of 15.5 million cubic meters: zones were established for its disposal at sea in coastal waters.

Reconstruction planning included



building limitation areas (those which suffered most damage due to building collapses and fires), where development plans are in force.

Of quays in the harbor 177 were damaged out of 186 by collapsing or subsiding by about 3 meters. New quays will have a lateral seismic coefficient of .25.

Railways and roads were restored to full use in a few months. The rebuilt expressway should be an engineering marvel with steel reinforced concrete columns twice as thick as previously and rubber shock absorbers instead of steel bolts.

For housing and shops, the government supplied box-like prefabricated huts for temporary use that line the landscape beside the still empty 200 acres of the Nagata and Suma wards completely gutted by fire.

However, private persons who have lost their houses are on their own if they want to rebuild and many do not have the cash to do so.

13. Concluding Thoughts

Compared to the 1923 earthquake, in which all of Tokyo burned, this earthquake had only few fires, and the victims were mostly those caught under collapsed buildings. The Japanese had made a huge effort between 1923 and 1995 to build cities safer with respect to fire.

However, house and building construction needs to be improved.

Thank God it was not a nuclear bomb and there was no radioactive fallout to kill the unprotected population and all the rescue workers.

BIBLIOGRAPHY

Comprehensive Study of the Great Hanshin Earthquake, Research Report Series No. 12, United Nations Center for Regional Development, Nagoya, Japan, October 1995.

"A year after quake, Kobe still shaken", Willis Witter, The Washington Times, January 19, 1996, page A 14.

A decline in courage may be the most striking feature that an outside observer notices in the West today....Such a decline in courage is particularly noticeable among the ruling and intellectual elites....

- Aleksandr I. Solshenitsyn

TOO GOOD TO FILE

SENATE REJECTS DEFENSE CUT

During consideration of the fiscal 1996 Defense authorization bill. Senator Byron Dorgan (D-ND) offered an amendment to cut \$300 million from the \$671.5 million provided by the bill for an anti-missile defense system designed to protect American territory from a missile attack. With a \$243 billion defense budget larded with funds for defending "allies" and bankrolling UN "peacekeeping" operations, a progressively smaller portion of the defense budget is available for the actual defense of America. "This [anti-missile defense funding] should be the highest priority," argued Senator James Inhofe (R-OK) against the Dorgan amendment. The Senate tabled (killed) the Dorgan amendment...

- The New American

FOOT-DRAGGING ON "START" (START: Strategic Arms Reduction Treaty)

The START II treaty has been slow off the blocks, thanks to complications in the former Soviet Union and politics in the United States Senate. But now that action appears imminent in the Senate, all parties should rally behind a treaty that promises to become the keystone for a worldwide system of controlling nuclear arms....

The outlook is for overwhelming approval. After all, the treaty does away with the most destabilizing class of weapon - multiple targeted reentry vehicles (MIRVs) which are much more central to the Russian strategic arsenal than to American one.

But sadly, as the Senate appeared ready to ratify START II, the Russian Duma, with a new crop of nationalist and Communist deputies, may be cooling on the treaty. That situation won't be helped by the continuing enthusiasm of conservative U.S. lawmakers for an American anti-ballistic missile (ABM) defense shield. The Russians see that as an attempt to nullify their nuclear deterrent....

(The article goes on to deplore new efforts to put an anti-ballistic missile system in place in the United States, and claims this could defeat the START effort.)

- The Christian Science Monitor

PREPAREDNESS ON SKIDS?

The year 1995 was a mixed bag for strategic defense. It began in hope as the Republicans took control of both houses of Congress. In particular, the House was dedicated to enacting the "Contract with America" used in their successful campaign. Also, Senators had written a joint letter to President Clinton asking him not to support the ABM Treaty during his visit to Moscow. There was a bump in the road of progress in February when the House voted to delete the development of a ballistic missile defense system from the proposed National Security Act, one of the ten parts of the Contract.

The good news was that on the same day that SDI was deleted, the House rejected an attempt to halt any funding of ballistic missile defense. More good news was to come. The House passed a defense authorization bill in June that contained \$3.8 billion for ABM development. The change of heart was due to two initiatives. First. the Heritage Foundation issued a report on a new ABM study that concluded that the Navy's AEGIS air defense system could be the best basis for a missile defense for the nation. The report of Team B, as it was called, pointed out that some \$50 billion had already been spent on AEGIS and that only a fraction more would be needed to give it the capability to kill missiles of any range....

The course of civil defense during the past year has been mainly downhill. if that is still possible. The perceived need for off-site radiological capability around nuclear power plants in some 30 states appears to be the only reason that FEMA has not abandoned completely its radiological instrument capability. FEMA is canceling its National Defense Executive Reserve program, which effectively puts it out of the strategic defense picture.

Opponents of strategic defense, assisted by supposedly unbiased reporters in the mass media, often charge that concern for civil defense and active defense is a relic of the Cold War. We reply that strategic defense is not a creature of the Cold War but rather of the Nuclear Age, which is very much with us....

 ASDA Newsletter (American Strategic Defense Association)

CHINA'S DEVELOPING **NUCLEAR PROGRAM**

... China isn't limiting its military modernization to conventional arms. In a test conducted last May it demonstrated its potential to launch mobile ballistic missiles far beyond its borders, reaching all of Asia and the American West Coast. Recent reports suggest that China is developing even more powerful strategic weapons, including a missile that can hit any target in the United States and a squadron of nuclear powered submarines armed with multiple-warhead ballistic missiles....

The Christian Science Monitor

JAPANESE TERRORIST CULT **EYES NUCLEAR WEAPONS**

According to a study done by the Senate Permanent Subcommittee on Investigations, the Japanese religious cult Aum Supreme Truth, which is responsible for the gas attacks in March [1995]...in the Tokyo subways, has been for years stockpiling chemical and biological weapons.

Sam Nunn (D-GA) said that he requested the study out of concern that the Tokyo subway attack "signals the world has entered a new era."

"The scenario of a terrorist group either obtaining or manufacturing and using a weapon of mass destruction is no longer the stuff of science fiction or adventure movies," said Nunn. "It is a reality which...if we do not take appropriate measure, will increasingly threaten us in the future.

The cult, which has over \$1 billion in assets, also "considered the cost of buying a nuclear weapon," said Senator Nunn. "This was a group, which, in the furtherance of its religious and political goals, sought to acquire, and planned to use, some of the deadliest weapons known."

The cult's reach stretches around the world, including activities in Russia, Zaire (where cult members went to study the Ebola virus for their germ warfare program) and the United States. In Australia the cult purchased a \$400,000 farm where it tried to mine uranium, and where it tested its sarin gas on sheep.

- The Shield (High Frontier)

REVIEWS

THE COLD WAR AND STAR WARS (SDI), AN INSIDER'S VIEW

CONFESSIONS OF A COLD WAR-RIOR. AUTOBIOGRAPHY OF DANIEL O. GRAHAM, by Lieutenant General USA Retired - Daniel O. Graham, Preview Press, Fairfax, Virginia 1995, 229 pages, \$22.00.

Reviewed by Colonel John E. Bex.

The special value of this book is that it is an all-out advocacy of Star Wars and the Cold War in pure form. It would be difficult to find a more determined advocate than General Graham, then and now. After 30 years in uniform pursuing these causes, he founded a civilian organization, High Frontier, which has been following a similar course for the last 20 vears.

President Reagan singled out General Graham for the highest praise: "As you know, Dan, you and I were talking missile defense before you set up High Frontier in September of '81.... You and a small group of dedicated, determined people helped us move the SDI concept over all the roadblocks put up by people of less vision and belief in American capacity - God Bless You!"

Newt Gingrich wrote General Graham, the quintessential Star Wars-Cold War warrior, in May 1995. "Your contributions to U.S. national security and the U.S. space program are exceptionally well known in Congress. As Director of the Defense Intelligence Agency, your unflinching analysis of Soviet capabilities and intentions reminded us that the Soviet Union was an unfailing adversary that wished the United States immense harm.... Thank you, Lieutenant General Daniel O. Graham, for helping save America."

The author spends a good deal of his time defending his Star Wars program against critics such as Lyndon Larouche, and similar scurrilous attacking opponents, but not enough addressing the fundamental questions about Star Wars. After all, Star Wars began with no leading scientist supporting it except Edward Teller, its creator. Overall, Star Wars has been a very mixed bag. Even his conservative Republican friends have now voted in Congress to slash radically all spending for Star Wars, before it has had any chance to achieve any solid results whatsoever.

In a recent Gulf War there was a sort of dress rehearsal of Star Wars in the battle of the Patriot anti-missile missiles against Sadam Hussein's Scud missiles aimed at Israel. During the war, it was officially reported by the U.S. that the Patriot missiles had been very successful, which seems far from being the case - though this kind of report in wartime is perhaps understandable since the coalition of allies would have fallen apart if Israel had retaliated and entered the war. That any Arab country would fight on the side of Israel against another Arab country was simply unthinkable. But after the war, on a more sober assessment, Israel estimated that the Patriot missiles knocked out only one in ten perhaps of the incoming Scud missiles, and recently has tended to lower even this low estimate.

General Graham frankly places his profession, the military, along with the police, above others. "I believe that such trust is not to be found among most other professionals. In most other professions there is not the presumption that your very life may depend one day on the honesty and dedication of your colleagues - police work, no doubt, an exception. Camaraderie in the military at all ranks was real." So, all in all, the book expresses a rather extreme viewpoint, and that is perhaps its greatest

(As reported elsewhere in this issue of the Journal, General Graham died on December 31, 1995.)

NO SUCH THING AS DOOMSDAY, by Philip L. Hoag. 1996. \$24.95 plus \$4 shipping and handling from Yellowstone River Publishing, P.O. Box 206, Emigrant, MT 59027.

- Reviewed by Edwin N. York.

The subtitle Underground Shelters and How to Prepare for Earth Changes, War and Other Threats is an accurate description of the contents of this survival book. It is written in easy-to-follow layman's terms and is directed toward an audience that is seriously considering building shelter. It succinctly discusses the pros and cons of various shelter types. Problems and successes of a number of shelter projects are also described. The author's personal experience in building and operating a large group shelter provides authenticity to the book.

There is a short (only 17 pages) description of nuclear weapons effects which summarizes nuclear detonations and the changes in hazards with types of bursts. A very high altitude burst - above the atmosphere - can produce a strong electromagnetic pulse (EMP) over a radius of hundreds of miles. The EMP can damage sensitive electronics and result in severe loss of communications, computers, etc. Mid-altitude bursts (one to 10 miles height) produce the greatest blast and thermal damage of soft targets such as cities. Surface bursts produce the most fallout and therefore result in the greatest area where shelters are needed. Subsurface bursts would be used against hardened missile launch facilities and command centers.

Advantages and disadvantages of fuel tank shelters, shipping containers, culvert shelters, steel auonset shelters, pre-made fiberglass, conventional steel-reinforced concrete shelters, thin-shell concrete technology, basement shelters, expedient shelters and mines, tunnels and caverns are described. Enough material is provided to permit a serious shelter planner to consider which shelter type might be best suited for his situation. No panaceas are listed.

Over half the book is devoted to the practical considerations of shelter design equipment selection, life support, and shelter occupancy. Size of the shelter is the primary consideration - how many occupants are expected? The minimum requirement is 10 square feet for each occupant. This is extremely cramped. The more space you can provide the better will people cope with being confined.

Site location is extremely important. Is there a high water table? Can the site be drained? Will bedrock make excavation expensive? Can you drill a well? Is the soil granular so it can provide earth arching, or is it clay or silt? Entryways and blast doors are crucial. Will the occupants include elderly, disabled, children,

infirm or obese? Many people cannot readily negotiate vertical ladders or small doors. Entryways may require turns to help attenuate nuclear radiation. Can these be negotiated by stretchers if required?

Considerable attention is given to the air supply and air conditioning. Overheating due to high humidity from exhaled air has been a common problem in shelter stay experiments. Carbon dioxide and carbon monoxide detectors are as important as radiation detectors. Air inlets and exhausts may require blast valves. Several types of blast valves are shown schematically. Various types of air filters are also described and pictured.

Electrical power systems, batteries, generators, inverters, lights and candles are noted. Fuel storage safety requires strict adherence to local safety and inspection requirements. Best methods for long-term food storage require rodent protection (metal containers) and insect prevention (CO2 or nitrogen) atmosphere. Lists of typical long-storage foods and amounts needed are given. The appendices and lists of equipment suppliers are very helpful.

Psychological considerations of shelter occupancy including fear, terror, panic and depression and how to help alleviate them are discussed. Sanitation, disease, and how to cope with death are discussed at some length also. Radio communications and EMP protection are briefly described. Various types of radiological monitoring equipment (rate and dosimeters) meters described along with nomographs for radiation exposure. calculating Decontamination equipment and techniques are given. Physical protection from vandals or other unwanted intruders is briefly mentioned.

A unique and important subject is the chapter on management organization and leadership for a group shelter. An example of a seven-page shelter lease agreement is included. Any joint activity requires careful and thoughtful ground rules and agreements. This need is especially critical for a group shelter since the critical use is always at some unknown future period.

IN CONFIDENCE: MOSCOW'S AMBASSADOR TO AMERICA'S SIX COLD WAR PRESIDENTS, by Anatoly F. Dobrynin, Published by Times Books/Random House, Inc., 201 E. 50th St., New York, NY. 1995, 639 pages plus appendix and good index. Price \$30.00.

Reviewed by James M. Ridgway, Ph.D.

Ambassador Dobrynin is a great witness of both the U.S. and the USSR in the "cold war" - from Kennedy to Reagan and from Stalin to Gorbachev. The book goes into great detail on events and personalities. This review will limit itself mostly to the ambassador's comments on the Cuban Missile Crisis and the Strategic Defense Initiative (SDI).

How did Dobrynin become "the right man at the right place and the right time?" In this regard he does not give much personal information. As a high school student he placed second in a mathematics contest in Moscow. This qualified him for a place in higher education. His father, a plumber, favored engineering. Dobrynin at the age of 25 in the summer of 1944 is working as a designer at the Experimental Aircraft Plant No. 115 in the Moscow area. Irina, his wife, also an engineer, is working at a similar plant a safe distance from Moscow.

At the end of a Politburo meeting in 1944. Stalin called Molotov aside and told him to start a school for diplomats. The tide of war had turned and Russia would soon have to have relations with many nations. Molotov asked where he would get students. Stalin told him to pick engineers who had good relations with the workers. The school would teach them the humanities, foreign languages, and diplomacy.

Thus, Dobrynin found himself. against his will, in the first class of fifty at the school. He was in the twoyear Western Program. At a graduation celebration he "wised off" to the school director with the result he spent another year at the school. In this year he wrote and defended a thesis on President Theodore Roosevelt's role in the Russo-Japanese War.

After graduation Dobrynin was

assigned to the training section of the foreign ministry. He worked there for about two years and developed a distaste for training manuals. Valerian Zorin became deputy foreign minister and took Dobrynin on as a second assistant. He worked for Zorin for five years until 1952 and learned a lot about the paper flow and decision making at the highest levels.

In September, 1952 Dobrynin was sent to Washington as counselor to the embassy. These were tough times diplomatically. Stalin, under Marxis doctrine, thought USSR-US war inevitable. U.S. policy was for "containment." On July 24, 1954 Dobrynin was promoted to minister-counselor at the Washington embassy.

In 1955 Molotov traveled across the U.S. by train to attend the tenth anniversary of the UN in San Francisco. Dobrynin went with him and ended up as his interpreter. Dobrynin was called back to Moscow to be Molotov's assistant. Andrei Gromvko was Khrushehev's foreign minister. In 1956 he assigned Dobrynin to the UN with the rank of "ambassador extraordinary and plenipotentiary." Dag Hammarskiold made him under-secretary for special political affairs. For two years, Dobrynin and wife lived in a residential hotel in Manhattan and got better acquainted with American English and urban life. In January, 1960 he was called to Moscow and made head of the American Department of the Ministry of Foreign Affairs.

In January, 1962 Khrushehev appointed Dobrynin Ambassador to the U.S. Irina would not believe it until Gromyko phoned their home and congratulated him. In April, 1971 he was made a full member of the Politburo Central Committee. In November. 1982 he was named Hero of Soviet Labor and got the highest civilian decoration in the USSR. In 1986 he was recalled to Moscow to head an international foreign affairs unit.

Dobrynin's record is cited to show he had high level experience not only in Russia and the U.S., but also in the UN. It also validates one of the amusing accounts in the book. Secretary Shultz (The Sphinx) had to assure President Reagan that Dobrynin was indeed a communist. (Cont. on page 24)

REVIEWS (Cont.)

On the Cuban Missile Crisis Dobrynin confirms what General Anatoli I. Gribkov states in *Operation Anadyr*, reviewed previously in this journal. The operation was so secret that neither Dobrynin nor Zorin, then Ambassador to the UN, knew anything about it. Their instructions from Moscow were to say, if questioned, Russia was supplying Cuba with defensive weapons. Dobrynin complains that they were made "involuntary tool(s) of deceit."

At the time of the crisis the U.S. had 5,000 nuclear warheads, the USSR had 300. One of Khrushehev's objectives was to equalize the nuclear balance by getting Russian missiles closer to the U.S. There were placed in Cuba 42 missiles with intermediate range, but only two with megaton strength. Forty thousand Russian troops guarded the missiles.

The confidential channel for negotiations on the crisis was contact at all hours between Robert Kennedy, the Attorney General, and Dobrynin. (Some crisis accounts assign Georgi Bolshakov, Chief of the TASS Washington Bureau, a role in the negotiations. Dobrynin discounts this.) Dobrynin kept Moscow informed on U.S. news and moves in the crisis. "The embassy also pointed to a general stoking of tension in the United States through the media, which were reporting that various states were placing civil defense systems and nuclear bomb shelters on full alert and were storing food and other necessities for the population...."

Resolution of the crisis hinged on agreement that the U.S. and its allies would not invade Cuba and NATO would remove missiles from Turkey in due time. Russia would remove nuclear missiles from Cuba. In Dobrynin's view no one "won." The crisis ultimately cost Khrushehev his job. Placing missiles in Cuba was so secret that the Russian public knew nothing about the crisis until Khrushehev broadcast that the crisis was over. Since removal of missiles from Turkey, but agreement with the U.S., was not announced at the time, the Russian preception was that Russia backed down and got nothing in return. (The reviewer suspects Khrushehev made the Politburo and the generals nervous.)

Dr. Edward Teller appears first in the book, along with Senator Barry Goldwater, in the Kennedy administration, as opposed to the nuclear test ban treaty. Teller next appears in the Reagan administration as chief proponent for the Strategic Defense Initiative (SDI). Dobrynin writes that "Missile defense became one of the few issues that actively engaged Reagan once he was in the White House." To President Reagan SDI was a shield and not a spear.

SDI shook up international affairs and "disarmament" thinking. In the reviewer's opinion, based upon what is said in this book, the U.S. wanted security and to be first in technology and strength. Russia wanted recognition, respect as a world power, and parity in strength in Europe. Neither country really wanted World War III. Over the years negotiations on test bans, ABM, Salt I and II, START, ICBM's, MIRV's, detente, placement of troops, planes, missiles and warheads were swayed by these factors. SDI, the militarization of space to some, blew the calculations made over twenty years and put a new, dynamic factor into the negotiations, which are ongoing. (In this, where does the safety of the U.S. public stand?)

On SDI itself Dobrynin writes, "Our physicists, headed by Academician Yevgeny Velikhov, were as skeptical as many of their American counterparts, but their view hardly carried much weight...." Some scientific opinion holds SDI can be defeated as a protective measure by overloading a sector in space with weapons. While the Russian military wanted to respond to the SDI "threat," Dobrynin says military spending for this or anything else had nothing to do with the collapse of the USSR.

Since this review covers only two elements in 639 pages and 26 years of diplomatic history, it dehumanizes the book. Dobrynin writes pungent characterizations of the officials with whom he interacted over the years. If U.S. officials, like Kennedy, Rusk, and Kissinger, had sense enough to use it, he could offer a secure, "no leaks," confidential channel for information

exchange and diplomatic planning. His banes were U.S. politicians' penchant for sticking their heads into TV cameras and rigid, doctrinaire thinking in both countries. His statement at a diplomatic banquet is pertinent: "...I always tried to be objective and was guided by the desire to improve relations between our two great countries."

(The reviewer's recommendation, of course, is that readers should sustain Dobrynin's respect for U.S. technology and capitalism by buying this book. it is a milestone in recent U.S. history and a beacon to any young person in any country who wants to become a diplomat.)

RONALD REAGAN - THE GREAT COMMUNICATOR, edited by Frederick J. Ryan, Jr. Printed by Collins Publishers San Francisco, 1160 Battery Street, San Francisco, CA 94111. 158 pages. 1995. Price: \$17.95.

- Reviewed by Bob Baffin.

Here's a tribute to an American president (1981-1989) who doggedly and proudly called for national preparedness. In this volume of quotes and photos Reagan stands out for what he is known as by his constituents and admirers: a practical, friendly, expressive, tough leader of his nation — a "communicator" as the book's title points out.

With all his charm, generously displayed in the pages of the book, Reagan was a leader who constantly underlined the need for tough preparedness – for active and passive defense. He supported civil defense, and he introduced the concept of the strategic defense initiative.

One quote on page 32 makes this clear. Says Reagan near the end of his presidency:

One thing is certain. If we're to continue to advance world peace and human freedom, America must remain strong. We must turn a deaf ear to those born-again patriots who talk about strength while serving up the same old menu of weakness. If we have learned anything these last eight years, it's that peace through strength works.

And again, this time near the beginning of his presidency, Reagan

has this to say (page 38):

The Western commitment to peace through strength has given Europe its longest period of peace in a century. We cannot conduct ourselves as if the special danger of nuclear weapons did not exist. But we must not allow ourselves to be paralyzed by the problem, to abdicate our moral duty. That is the challenge history has left us.

Another quote could serve as a warning to the nation's leaders today. On page 45 Reagan warns:

Every lesson of history tells us that appeasement does not lead to peace. It invites an aggressor to test the will of a nation unprepared to meet that test. And tragically, those who seemingly want peace the most, our young people, pay the heaviest price for our failure to maintain our strength.

Most of the quotes betray Reagan's wisdom, personality and humor. A few, like the three quoted above, are deadly serious. The last quote is perhaps the most touching. Both he and his wife Nancy had had cancer, and Reagan himself had been badly wounded in an assassination attempt. Now, today, he must face another test of character. He says in his last quote:

I have recently been told that I am one of the millions of Americans who will be afflicted with Alzheimer's Disease....

In closing, let me thank you, the American people, for giving me the great honor of allowing me to serve as your President. When the Lord calls me home, whenever that may be. I will leave with the greatest love for this country of ours and eternal optimism for its future....

> Regards, /s/ Ronald Reagan

In line with Reagan's national preparedness accent it would also be proper to cite a telegram he sent to the 1984 TACDA Seminar in Daytona Beach, Florida. Cabled Reagan:

IT IS A PLEASURE TO SEND MY WARMEST GREETINGS TO THE MEMBERS OF THE AMERICAN CIVIL DEFENSE ASSOCIATION AS YOU GATHER FOR YOUR 7TH ANNUAL SEMINAR.

MY ADMINISTRATION FIRMLY BELIEVES THAT THE PURPOSE OF OUR COUNTRY'S DEFENSE CAPABILITY SHOULD BE TO PROTECT THE LIVES AND PROPERTY OF THE AMERICAN PEOPLE. THUS, I AM DELIGHT-ED TO HAVE THIS OPPORTUNI-TY TO COMMEND YOU FOR YOUR STEADFAST COMMIT-MENT TO STRENGTHENING **OUR NATIONAL CIVIL DEFENSE** AND PROMOTING CONTINUED COOPERATION AMONG FEDER-AL, STATE AND LOCAL GOV-ERNMENTS AND THE PRIVATE SECTOR.

ALTHOUGH A GREAT DEAL REMAINS TO BE DONE TO ENHANCE THE ADEQUACY OF OUR CIVIL DEFENSE POSTURE, YOUR CONTRIBUTIONS TO THIS CAUSE GIVE ME CON-FIDENCE THAT BY PURSUING A COORDINATED APPROACH TO EMERGENCY MANAGEMENT, WE CAN SAFELY PREPARE OURSELVES FOR ANY CRISIS WE MAY FACE IN EITHER WAR OR PEACE.

NANCY JOINS ME IN APPLAUD-ING YOU FOR YOUR DEVOTED SERVICE TO YOUR COUNTRY AND YOUR FELLOW CITIZENS. AND WE SEND YOU OUR BEST WISHES FOR CONTINUED SUC-CESS IN YOUR PRAISEWORTHY ENDEAVOR.

RONALD REAGAN

BOMBS AND BOMBINGS, by Thomas Graham Brodie (second edition). Published by Charles C. Thomas, publisher, 2000 So. First St., Springfield, IL 62794-9365. 276 pages large format. November 1995. Price: \$57.95 hardback, \$39.95 paper.

Reviewed by Bob Baffin.

With the recent incredible growth of terrorism world-wide, the spread of the "Death to America" threat in certain Third World countries and the alarming increase of violence and explosives of throughout America it is reassuring to see a Miami lawman and serious student of bombing techniques and new methods of analyzing and resolving this type of violence make a serious study of the growing problems involved.

The fact that Thomas Brodie's remarkable study was taken so seriously that it has gone into a second edition is a welcome sign that we have started to take terrorism dead seriously and want to get on with a solution to its problems.

The author's preface gives an eyeopening description of what Bombs and Bombings is all about. He writes:

This book was written to answer the inquiries received from many sources concerning the subject of bombs and bombings. The author hopes that the information contained herein may help save lives and property. The book is not intended to make experts of readers or to assume any responsibility arising therefrom. The following pages contain a general outline of the procedures employed in processing commercial or homemade explosives, military explosive ordnance, suspected packages, infernal machines, bomb scares, explosions, bombings and similar incidents....

Brodie further advises that study of the problem must be accompanied by experience. And he welcomes "new technology that has increased the life expectancy of those professionals in the field of bomb disposal."

Bombs and Bombings is illustrated with over 200 photos. Its eleven chapters cover convincingly the many facets of bomb problems and contributes meaningfully to their understanding, especially by professionals assigned to dealing with the threats.

With terrorism incidents of various kinds multiplying throughout the world, a serious analysis of the problems and possible means of dealing effectively with them by career experts in the field is much more than just welcome. Bombs and Bombings belongs in law enforcement agencies, emergency management headquarters, government offices involved in population protection - and also in airline companies, travel agencies, hotels, etc.

It will help set the stage for a serious all-out attack on the continuing and fast-developing scourge of terrorism.

THE WEATHER ALMANAC, SEV-ENTH EDITION, edited by Richard A. Wood, Ph.D. Published by Gale Research, 835 Penobscot Building, Detroit, MI 48226-4094, Phone 1-800-877-GALE. 1996. Hardback 735

pages, 8fi"x11" format. Price: \$130.

- Reviewed by Kevin Kilpatrick.

Weather affects us all. The more we understand weather extremes the better we are able to contend with the problems involved, to reduce its adverse effects, to plan ahead, and in general to reduce casualties and damages.

Dr. Wood's seventh almanac, just out, does this and much more. Its 735 pages (8fi in. x 11 in. format) are crammed with invaluable information that arm the emergency management planner with the tools to fight for the safety of the people of his or her community.

Meteorologist Dr. Richard A. Wood retired from the National Weather Service after a 35-year career. He is the editor of five books and over 140 published science related papers and articles. He is also the editor of the 5th edition of the Gale Research Weather of U.S. Cities. He currently teaches, lectures, writes, and researches atmospheric natural hazard statistics and summaries. He has served under contract with the Centers for Disease Control (CDC) in Atlanta, Georgia for natural hazard statistics and summaries.

For instance, for starters, Dr. Wood gives monthly charts showing average and extreme temperatures for selected sites throughout the United States. This is followed by rainfall and snowfall patterns, again throughout the U.S.

Seven types of disaster are given special analyses. These are: hurricanes, tornadoes, thunderstorms, floods, winter storms, heat and humidity, earthquakes and volcanic activities. Preparedness and evasive actions are analyzed and give clear, in-depth, valuable information to the professional disaster specialist and others.

Of special interest to those concerned with certain locations and areas through the United States is a major section titled "Local Climatological Data Reports." These reports cover 107 cities (one city is in Puerto Rico) and take up 444 pages. They give extensive data on each city, including "normals, means and

extremes" of temperature, sunshine, humidity, precipitation and snowfall – and more.

Wood's Weather Almanac, this seventh edition like its predecessors, is an invaluable source book for government agencies having to do with weather information, emergency management offices, TV and radio weather programs and alerts, libraries, schools, airports, industry and all other activities that must be concerned with weather developments.

Now retired, Dr. Wood has done a remarkably thorough job with the seventh edition of his almanac. With more and more attention given to weather predictions and to disasters – and preparedness to contend with them that will effectively reduce disaster casualties and damages – the Weather Almanac can also be considered an invaluable investment for the citizen concerned with the safety of his family, friends, employees and neighbors – and the survival of his belongings, including perhaps his home and his business.

Highly recommended.

NON-LETHAL TECHNOLOGIES: MILITARY OPTIONS AND IMPLICA-TIONS, Report of an Independent Task Force, Malcom H. Wiener, Chairman, Council on Foreign Relations, published by the Council, 56 East 68th Street, New York, NY. 10021. 1995. 16 pages plus executive summary. Single copies gratis.

 Reviewed by James M. Ridgway, Ph.D.

To develop such a report, the council picks the topic to be explored and the task force chairperson. The chairperson picks the task force members. There are 21 members on the task force on non-lethal technologies representative of "think tanks" government agencies, the military, industry, and higher education.

As the United States gets involved in "small" wars and "peace keeping" efforts, it needs capabilities different from conventional military strength. Capabilities are needed to cope with mass, non-violent protests; terrorists or snipers using women and children as cover; and area communications and information control. The task force goes several steps beyond tear

gas, mace, water cannon, and psychological warfare OSS style.

Possible non-lethal technologies are: jamming communications and substituting programs and messages of our choice; "slickums" and "stickums" to impede movement; foams and nets; and obnoxious sounds and smells.

Several risks are identified: non-lethal weapons may lead to the use of lethal arms; possible retaliation against the U.S.; spread of such technologies to other nations; in terms of cost effectiveness, it may be cheaper to kill people; and offending international treaties, particularly those dealing with chemical warfare. The task force has a firm opinion the U.S. forces trying to use non-lethal technologies should also keep their guns handy – just in case.

The task force holds technological possibilities are ahead of military thinking, doctrine, organization, and training. Its recommendation is that the National Security Council should issue a directive to federal agencies to study non-lethal technologies and recommend policies thereon. The executive summary concludes, "...Non-lethal technologies have the potential for providing new strength for diplomacy, new credibility for deterrence, new flexibility for the military, and new strategic options for policymakers."

PERESTROIKA DECEPTION by Anatoliy Golitsyn. Published by Edward Harle Ltd., available from American Opinion Book Services, P.O. Box 8040, Appleton, WI 57913. Price: \$19.95 + 15% shipping (plus 5% sales tax for Wisconsin residents.) 1995.

"Perestroika has to do with moderate reforms. *The Perestroika Deception* is a collection of memoranda to the CIA.

A review in *The New American* by Senior Editor William Jasper states:

If Golitsyn is right – and no observer of Soviet affairs has come close to matching the accuracy of his predictions – the Kremlin leaders and their dupes, agents, and coconspirators in the West have succeeded in pulling off the greatest deception of all time.

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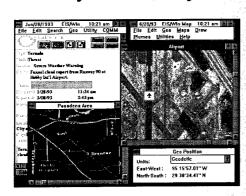
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(see also): METTAG ad - Page 4)

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CIVIL DEFENSE EMERGENCY SERVICES LISTINGS

The following listings are prepared as a service to *Journal of Civil Defense* readers. They will be developed further and republished at appropriate intervals. The listing of a company implies no judgment or rating of that company.

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Manufacturer
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Newbury Park, CA 91320
805-498-6062 FAX: 805-499-3708

The Survival Center

Box 234 McKenna, WA 98558 1-800-321-2900

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Federal Signal Corp. 2645 Federal Signal Dr. University Park, IL 60466 1-800-548-7229 FAX: 708-534-4855

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Civil Defense Emergency Services listings change with deletions and additions. Information on changes from readers would be greatly appreciated. Please send to:

> Journal of Civil Defense P.O. Box 910 Starke, FL 32091

Thank you.

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

- Winston Churchill

UPCOMING

Mar 17-21	EUROPEAN CONFERENCE ON TRAUMATIC STRESS IN EMERGENCY SERVICES. For information contact: Roderick Orner, European Conference Secretariat, Department of Clinical Psychology, Baverstock House, St. Annes Road, Lincoln, England LN2 5RA.
Mar 18-20	EDUCATION AND TRAINING CONFERENCE, National Disaster Medical System, San Diego, CA. For information call 800-226-3976.
Mar 25-29	OCCUPATIONAL & ENVIRONMENTAL RADIATION PROTECTION - Harvard School of Public Health, Office of Continuing Education, 677 Huntington Ave., LL-23, Dept. B, Boston, MA 02115-6023.
Ap/11/1-5	IEMC: ALL HAZARDS COURSE - Emergency Management Institute (EMI), Emmitsburg, MD 21727 (PH: 301/447-1000).
April 10-13	MIPS '96 – 2ND MOSCOW INTERNATIONAL INTERNATIONAL PROTECTION, FIRE SAFETY AND SECURITY EXHIBITION – For information contact: Carola Jansen, Security Division, ITE Group, Byron House, 112a Shirland Road, London, England @9 2EQ.
April 12-14	1996 EMS CONFERENCE – Sponsored by the Emergency Medical Services, Vermont Department of Health. Contact: Richard P. Gaun III at 802/863-7310.
April 19-20	THE OTHER SIDE OF THE STORY -Accuracy in MEDIA, Los Angeles Airport Marriott. Call Marion McGowan at 202/364-4401.
April 22-24	2ND INTERNATIONAL CONFERENCE, LOCAL AUTHORITIES CONFRONTING DISASTERS AND EMERGENCIES – Amsterdam, The Netherlands – For information contact: ICLA Conference Office, P.O. Box 20011, 2500 AE, The Hague, The Netherlands, FAX: (+31) 70 302 6204.
Apr 22-26	ALL HAZARDS COURSE - (See Item #4 above).
Apr 22-26	RADIOLOGICAL EMERGENCY PREPAREDNESS PLANNING WORKSHOP - EMI (See item #4 above).
Apr 22-26	RADIOLOGICAL EMERGENCY RESPONSE OPERATIONS - (See item #4 above).
Apr 25-28	INTERNATIONAL HAZARDOUS MATERIALS RESPONSE TEAMS CONFERENCE – To be held at the Sheraton Baltimore North Hotel. Contact: IAFC Conference Dept., 4025 Fair Ridge Dr., Fairfax, VA 22033-2868, phone 703/273-0911, ext. 340; FAX 703/273-9363.
May 19-22	1996 ANNUAL CONFERENCE – Illinois Fire Chiefs Association at Central Illinois' Peoria Civic Center. For information call 800-662-0732.
Jun 10-14	ASSOCIATION OF STATE FLOODPLAIN MANAGERS' 20TH ANNUAL NATIONAL CONFERENCE - For information contact: Diani Alicia Watson, ASFPM Executive Office, 4233 W. Beltline Hwy, Madison, WI 53711. FAX: 608/274-0213.
July 21-26	HAZARDS 96 - 6TH INTERNATIONAL SYMPOSIUM ON NATURAL AND MAN-MADE HAZARDS, TORONTO, CANADA. Contact: Natural Hazards Society, P.O. Box 49511, 80 Glen Shields Ave., Concord, Ontario L4K 4P6, Canada.
Jun 16-21	SIXTH WORLD CONFERENCE ON DISASTER MANAGEMENT (WCDM) – By the Canadian Centre for Emergency Preparedness at P.O. Box 2911, Hamilton, Ontario L8N 3R5. Telephone 905/546-3911; FAX: 905/546-2340.
July 29- Aug 2	PAN PACIFIC HAZARDS '96 VANCOUVER, CANADA — For further information: Disaster Preparedness Resources Centre, Univ of British Columbia, 2206 East Mall, 4th Floor, Vancouver, B.C. V6T 1Z3, Canada. Phone 604/822-5518. FAX: 604/822-6164.
Aug 24-28	FIRE-RESCUE INTERNATIONAL 96 - Contact the IAFC Conference Department, 4025 Fair Ridge Dr., Fairfax, VA 22033-2868. Phone 703/273-0911, ext. 340; FAX: 703/273-9363 OR ICHIEFS: IAFCHQ.

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EDITORIAL

WORLD WAR III - YES OR NO???

Over the years – 28 of them now – TACDA and its *Journal* and its seminars have plugged doggedly for a national preparedness posture that would see America so well defended that no aggressor in his right mind would risk an attack. Or even seriously think of it. It was an old concept even when George Washington – as pointed out in a recent *Journal* editorial – said near the end of the 18th Century:

There is nothing so likely to produce peace as to be well prepared to meet an enemy.

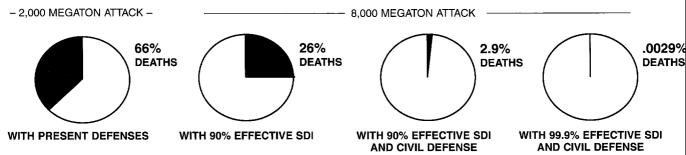
Among those American leaders who echoed Washington were Presidents Kennedy and Eisenhower. And Great Britain's Winston Churchill in his book *The Gathering Storm* points out that arm-chair attitudes "lead direct to the bull's-eye of disaster." World War II didn't have to happen he pointed out.

And as America's General Billy Mitchell warned: Pearl Harbor was in danger of being bombed, and – despite belief to the contrary – an airplane could sink a battleship. It was easier to ignore the danger, even the approaching attack armada. Saturday night parties were more important. We were "asleep at the switch."

Warnings of a possible World War III are obvious! The thousands of nuclear missiles on launch pads, the Russian nuclear-armed submarines constantly patrolling our Atlantic and Pacific coastlines, the feisty shouts of "Death to America" resounding through the teaming streets in Third World cities, the trade in nuclear materials. And so on.

A World War III would be over quickly, but death and destruction would be 400 times or more that of World War II. A fact difficult for most of us to grasp. We are firmly tied to the comforting idea that life will go on as it has with a lot of talk but no real action. A delusion.

World War III, however, can be prevented – in spite of its ominous threat – through known defense measures that so far in our dream world we have failed to develop. This has been clearly illustrated by Dr. Conrad V. Chester in his Oak Ridge National Laboratory study. A capsule version of this study is shown (again) by the following simplified chart showing estimated American fatalities:



As pointed out by supporters of the idea of effective defense, a nuclear attack fatality estimate of .0029% is better than one of 66%.

It makes nuclear attack vulnerability a stupid option. And a tough attitude of preparedness would also throw cold water on terrorism. George Washington was right two hundred years ago.

If we can take his advice today we could avoid World War III. We could survive!

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