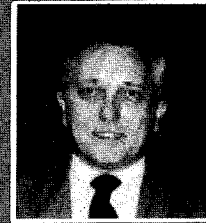
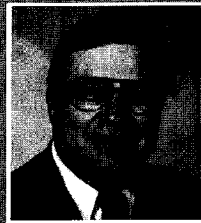
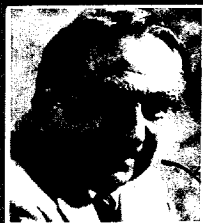


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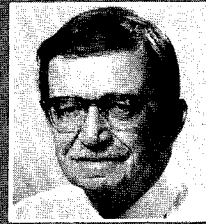


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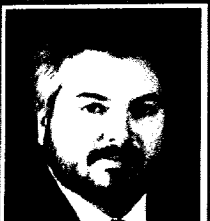
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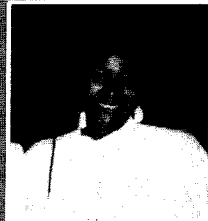
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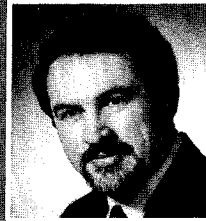
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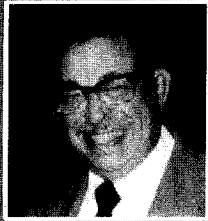
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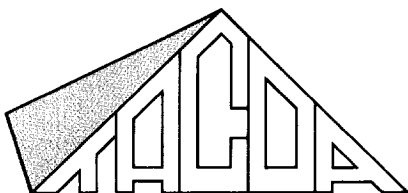


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New Head at FEMA

After several false starts, the Bush Administration at last has named appointees to the positions of director and deputy director of the Federal Emergency Management Agency and submitted the appointments to the Senate for confirmation. Indeed, one appointment, that of Jerry Jennings to be deputy director, already has been confirmed. Jennings replaced Robert Morris on May 19th and is serving as acting director pending the confirmation of Wallace E.

Stickney's confirmation is not in trouble.

Stickney as the new FEMA director. Stickney's confirmation is not in trouble. Jennings' nomination was submitted first and just happened to catch the Senate in a fit of action just prior to the most recent adjournment. Stickney's confirmation hearing has not been scheduled at this writing.

Wallace Stickney is a 56-year-old native of Salem, New Hampshire. A civil engineer, he is a protégé of John Sununu, former governor of New Hampshire who is now President Bush's chief of staff and one of the most powerful men in Washington. Stickney has an MA from Harvard and an MS from Northeastern University. He spent 11 years as a Federal

Stickney . . . Sununu's point man in the difficult and controversial job of getting the Seabrook nuclear power plant in operation.

employee in the Region One office of the Environmental Protection Agency. His job was director of the Environmental and Economic Impact office. In 1983, Sununu took on Stickney as a special assistant for environmental affairs. Soon he was Sununu's point man in the difficult and controversial job of getting the Seabrook nuclear power plant in operation. The utility company went broke in the process but Seabrook is now operating at 40 percent power and climbing despite the opposition of Massachusetts governor Dukakis and a host of antinuke activists. Since 1985, Stickney has served as a commissioner of the New Hampshire Department of Transportation. Being John Sununu's man should be helpful in his new job as director of FEMA.



Jerry Jennings is 50 years old. Born in Michigan, he received his BS degree from Eastern Michigan University in Ypsilanti. He served with the Marines and with the CIA in the Far East during the 1960's. He then became a special agent with the FBI in Memphis and New York City. In 1973, Jennings came to Washington as a member of the staff of the National Security Council and since has become an experienced Washington hand. As a member of the staff of the Assistant to the President for National Security Affairs, he served under three Presidents — Ford, Carter, and Reagan. Several civil defense studies were done by the NSC staff during this period. In 1982, Jennings was appointed executive director of the White House office of Science and Technology Policy and of the White House Science Council. This was about the time when OSTP was advising President Reagan on the proposed Strategic Defense Initiative.

Jennings . . . served with the Marines and with the CIA in the Far East during the 1960's.

Since 1986, Jerry Jennings has been deputy director of the Selective Service System. Now, as deputy director of the Federal Emergency Management Agency, his experience on the NSC staff and in OSTP should be good news for FEMA's Office of Civil Defense. We can look forward with anticipation to the tenure of Stickney and Jennings. □

In meeting the threat — and the subsequent devastation — of Hurricane Hugo, people on the American island of St. Croix (one of the Virgin Islands in the Caribbean Sea) faced a problem that mainlanders don't have: there was no place for the 50,000 residents to run to as mounting winds beat the shores. St. Croix's 84 square miles didn't allow for evacuation.

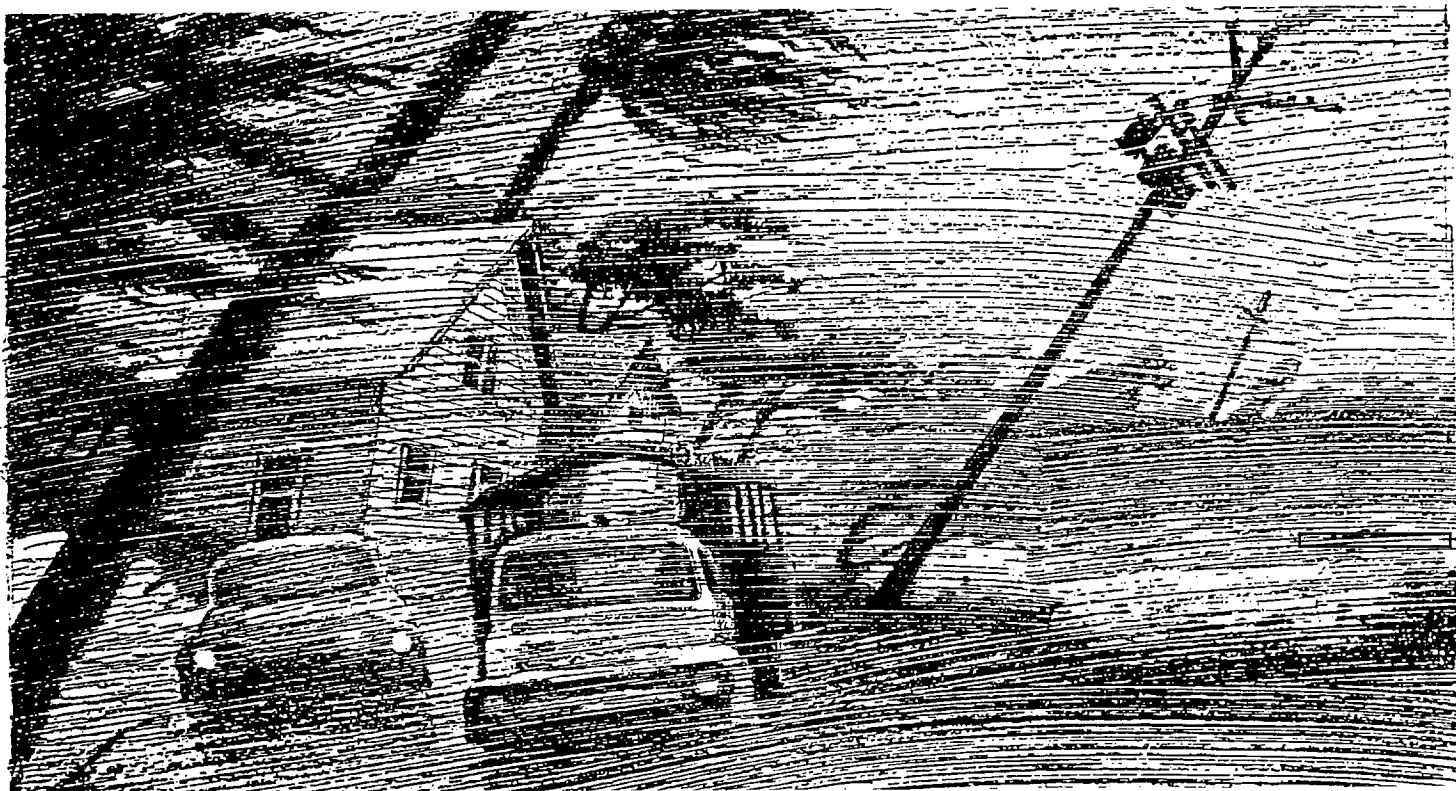
That didn't, however, mean that hurricane preparedness was impossible. It is possible if the situation is analyzed beforehand. Here three St. Croix authorities focus on the problems — and solutions to them.

Hurricanes David and Hugo: Lessons for Hurricane Disaster Planners

— William W. Saitta, Ph.D., Professor of Business,
St. Croix Campus, University of the Virgin Islands

— John A. Boyd, MBA, Division of Continuing Education,
St. Croix Campus, University of the Virgin Islands

— Anton L. Christian, Assistant Commissioner,
Virgin Islands Department of Public Safety



Introduction

In 1979 one of the authors (Saitta) lived in Brevard County, Florida when Hurricane David, the mildest of hurricanes categorized by the widely accepted Saffin-Simpson measuring scales, passed directly over the area. He randomly sampled 205 households in the area and published the results of the statistical study in the *Journal of Civil Defense* (Saitta and Bergeron, 1980: 16-17). In 1989 this

same author lived on St. Croix, U.S. Virgin Islands when Hurricane Hugo passed directly over that area. Hugo was categorized as a category five storm (Badolato et. al, 1990: 17). The purpose of this paper is to contrast

Lessons to be learned . . . what should be done the next time?



Saitta



Boyd



Christian

briefly two statistical studies done in each geographic area after the passage of Hurricanes David and Hugo. Moreover, the present article concen-

trates on the effects of Hugo and the lessons to be learned by disaster planners from this hurricane. What should have been done to prepare? What damage did Hugo do? **What should be done the next time?**

Hurricane David — 1979

The results of the Hurricane David study were published 10 years ago (Saitta, Ibid). Many questions were asked: one covered the amount of damage done to dwellings including

an island in the middle of the Caribbean that is hundreds of miles from the nearest large land mass. Only affluent people with the price of air fare could evacuate — and then only if they did so in good time. Many hurricanes had approached St. Croix in the past. As in the past, people said “this one will pass us also.” Almost no one evacuated before the storm hit. When the residents did realize that Hugo was going to be a direct hit, it was too late to evacuate.

the storm. Thousands of housing units were totally or partially destroyed. The authors watched normally law-abiding people act irrationally. One group took tree limbs and destroyed gas pumps because the pumps could not pump gas without electricity. Mothers “took” food and milk because they had young children to feed and had no food.

It was too late to evacuate

St. Croix is a U.S. possession: an 84-square mile island . . .

spoiled food, flooding, and damage done by falling trees. The following was found:

Table 1

**Amount of Damage Done by
Hurricane David to Area
Residences (Florida)**

none	48%
some but less than \$50	21%
\$50 but less than \$200	14%
\$200 but less than \$500	10%
\$500 and over	7%
	100%

The storm was unbelievably destructive. All phone lines were destroyed. There was a total island-wide electrical blackout. All radio and TV stations went off the air. The emergency broadcast network was never activated on St. Croix because the equipment was destroyed very early in the storm. The nearby island of Puerto Rico activated its emergency broadcast network during the storm but announcements were in Spanish and were of little value to St. Croix residents. There was no way for the few active government officials to communicate with the public. Absenteeism among police and the National Guard was very high the first day after

Others saw the “taking” of food and “took” other things. It started with roofing supplies and escalated to anything and everything. Three days after the storm, 1100 MP’s were sent in by order of the President of the United States to restore order. About 100 Federal Marshals and FBI agents followed to do the paper work. By the time the MP’s arrived, there was very little left to steal. Their presence did allay the fears of a large segment of the population about personal safety. Thousands of area residents were evacuated using military aircraft and thousands later left when commercial service was restored.

The Statistical Study

An extensive statistical study was done on the two U.S. Virgin Islands of St. Croix and St. Thomas between 60

The “grade” given Civil Defense by Brevard County, Florida residents when they were coerced to evacuate their homes in face of a relatively low-grade hurricane was very good: 95% of the residents left their homes when asked to leave. Almost all the respondents would evacuate again if asked — even in spite of David’s slap-on-the-wrist ferocity. They did not seem to mind that they were coerced out of their homes by Civil Defense for a hurricane that later proved to be mild and caused little damage.

Hurricane Hugo — 1989 (September 18-19)

In September 1989 Hurricane Hugo’s eye passed directly over St. Croix in the United States Virgin Islands. The storm lasted about 16 hours and winds were in excess of 200 mph. All three authors were living there. St. Croix is a U.S. possession: an 84-square mile island about 1100 miles south of Miami, Florida. Naturally it is almost impossible to evacuate



St. Croix residential areas hard hit by Hugo.



Hugo often flattened conventional home construction.

and 90 days after the storm hit. The authors of this article, Saitta, Boyd, and Christian, have lived on St. Croix for six, ten, and thirty-five years respectively. Saitta, who has a Ph.D. in applied statistics and who wrote the 1980 Hurricane David article, helped with the general questionnaire development and survey methodology. Boyd actually did the study. He has done eight major political and media studies on the island. Christian is the Assistant Commissioner of Public Safety in the Virgin Islands.

Normally law-abiding people act irrationally

In the aftermath of a very extensive natural disaster there is no way to obtain a 100% correctly drawn random sample. Techniques based on random samples by census tract or phone did not apply because most housing units were either destroyed or abandoned and 100% of the phone service had been destroyed. People were standing in long lines! Long lines existed in grocery stores when they finally reopened. The emergency agencies had long lines. The interviews were thus conducted in eight locations in commercial districts and everyone in the line was asked to fill

out the questionnaire. People were advised that their privacy and anonymity would be guaranteed. There was little resistance offered to filling out the forms and substantially all were complete. On St. Croix 189 of 193 questionnaires were completed. On St. Thomas 116 of 116 were com-

Long lines . . . long lines

pleted. The sampling technique tended to eliminate rich residents who pay others to shop for them and very poor people who live on the streets and do not stand in line to shop because they do not have the money to shop. Demographic information from the Chamber of Commerce indicates that about three percent of the population has an income over \$50,000. These people might be considered rich. Further, the Red Cross estimates that about one half percent of the island is considered homeless. Background information was collected on ethnic origin, term of residency, home ownership, income levels, employment status, and storm damage. People were asked about their degree of involvement in post-Hugo looting. The questionnaire asked them to assess the reasonableness of "taking" various items like

food to purely nonessential items like gold and jewelry.

The Extent of Damage on St. Croix

This article concentrates on St. Croix because St. Thomas did not have the looting or destruction that was experienced on St. Croix. (Recall in the ten-year-old study done after Hurricane David in Florida that almost half of Hurricane David's residents

Table 2 U.S. VIRGIN ISLANDS HURRICANE HUGO CASUALTIES	
KILLED	8
INJURED	10,500
[Estimate of Damages . . \$1 billion	
— \$10,000 per person]	

had no damage from the storm.) Saitta was without electrical power and phone service for about three months. Boyd, who lives in a different part of the island, was one of the very first in the entire community to get power. It took over one month. Phone service restoration took four months. These restoration times were typical. Many measures of storm damage were reported in the papers. One stated that federal disaster expenditures in the Virgin Islands in the wake of Hugo may top \$750 million (DiMeo, April 13, 1990: 1). Hugo did massive damage on the mainland of the United States, but there one can at least get in a car and drive away from the destruction. One can not drive away from an 84-square mile island in the middle of the Caribbean. There is no relief from the total destruction. Everywhere one looks, one sees total devastation. When St. Croix and St. Thomas residents were asked "What type of damage did your family suffer from Hugo?" the following was reported by 189 respondents on St. Croix and 116 on St. Thomas:

Table 3 Residential Damage from Hugo		
	St. Croix	St. Thomas
Almost none	20%	71%
Lost part of roof	32%	24%
Lost most of roof	30%	4%
Lost everything	18%	1%

Both the Florida Hurricane David and St. Thomas Hurricane Hugo people suffered relatively minor damage. St. Thomas, however, did have more damage than Florida. St. Croix is another story. St. Croix's extensive damage combined with many other factors led to widespread looting and a total breakdown of law and order. Is some looting ok?

One question asked of St. Croix residents was "Do you think it reasonable that people took any of the following (Yes ____ No ____)". Table 4 below summarizes the responses.

Table 4 Percentage of People Who Think It is Ok To Take		
	Non-Looters (N = 159)	Looters (N = 30)
Food	45%	93%
Building Supplies and Tools	25%	83%
Clothing	25%	77%
Furniture and Appliances	17%	63%
Gold, Jewelry, Perfume	15%	47%

Respondents were more understanding of the "taking" of food than they were of the "taking" of gold and jewelry. This is a very important point. Subsequent court trials were most interesting. Recall that it is estimated that 10,000 people looted. In the seven months following the storm there have been a total of 10 jury trials of looters and no more trials appear to be in the offing. Of these 10 cases perhaps 4 could be categorized as people who "took things" for gain or resale or who had incomes much above the island's average. All these individuals were found guilty. Of the 6 jury cases that could be categorized as "poor people" who took "needed" items, all of these people were acquitted. No one who "took things" has been sentenced to jail. These facts alone should pose an interesting dilemma for prosecutors in the future. The only person who may go to jail is a man who shot and killed a person he believed to be a potential looter. He was found guilty of voluntary manslaughter. His case will possibly be appealed.

Who looted?

There were 30 self-proclaimed looters found in the 189 people sampled on St. Croix. They had a

statistically higher unemployment rate and a statistically lower amount of storm damage than the non-looters. There was no statistical difference between the median length of time on the island, the percentage of renters, or the percentage who had family incomes below \$15,000. In summary, looters had low storm damage and higher than average unemployment. If one's storm damage was excessive and one's family was exposed to the elements, one was too busy to loot. One also had no place to put the stolen goods. The survey suggests that 70% of the island saw the looting, 58% knew some of the looters, and 16% looted. The island's population is about 50,000.

Lessons to be Learned From Hugo

First Badolato studied the effects of Hugo on the mainland of the United States. In his section, "Lessons Learned: A Summary" (Badolato Ibid: 5-10) he stresses the need for prior storm planning and preparedness. On St. Croix, the General in charge of both the Virgin Islands National Guard and the Virgin Islands Territory Emergency Management Agency (VITEMA) was relieved of his command by President Bush after the storm. This action was prompted because of a report by the National Guard Bureau in Washington that severely chastised the local Guard head for failing to take proper actions before, during, and after the Hurricane (DiMeo, April 19, 1990: 3).

The need for prior storm planning and preparedness

Second: Badolato stresses the need and importance of cellular phones and a reliable communication network. St. Croix had no phone service for over a week. Five lines were finally available for 50,000 people approximately ten days after the storm. The residents were trying to reach relatives on the mainland, which made the limited phone service even more congested. The island had no radio station for about a month. Emergency antennas and power generators are an absolute must. Cellular phones started being available about three weeks after the storm and were the most effective way

to communicate with the mainland. The new Guard head states that his priorities include establishing solid communication lines, establishing neighborhood wardens similar to those found in Civil Defense, and improving pride in the Guard. (DiMeo, April 19, 1990: 3).

Third: Looting will take place when the law and order system breaks down in the face of a very destructive hurricane. Perhaps 10,000 people looted. Few were brought to trial and no one went to jail for looting.

Summary:

Order totally broke down after Hurricane Hugo hit St. Croix, in September 1989. There were about 120 nonadministrative police to cover an 84-square mile island that is broken down into three districts. Looting went on 24 hours a day and perhaps half-a-dozen groups of 1000

Police and National Guard . . . some abandoned their duty to attend to their families

to 3000 looters operated simultaneously. Obviously the police were limited in what they could do. Almost all the police and National Guard people had homes that were totally or partially destroyed. Some abandoned their duty to tend to their families. The authors feel that there should be a coordinated pre-storm plan to have basic emergency supplies available. Outside help to maintain order must, in the authors' opinion, be in place before the storm hits.

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World Disarmament: A "Mirage"?

What with the recent Summits and differences in opinion on Soviet and American arms and defenses, there is one item that appears to enjoy agreement: the concern about the research, development, deployment and use of missile-delivered nuclear, chemical and biological weapons by Third World nations.

One credible source of neutral

... a joint American-British intelligence operation aroused worldwide attention by its last-minute prevention of a long-planned shipment from London's Heathrow Airport to Baghdad of special electronic capacitors that can be used to trigger nuclear devices. The incident made it clear that the Israeli raid had not killed Iraq's nuclear program and that, despite the Gulf War and regional upheavals, Baghdad's effort to develop atomic weapons had systematically continued. . . .

There is little new in all this. Experts

size chemical weapons and manufacture ballistic missiles. The business has not been handled by shadowy weapons merchants operating on the periphery of the worldwide arms trade, but by prominent corporations — mostly with at least the tacit approval, if not the active assistance, of governments worried about creating enough jobs on their own labor markets. Everybody's doing it; there are a thousand reasons, a thousand excuses.

... No fewer than 22 developing countries are reported to have their own missile programs, and 17 of them



From the *Florida Times-Union* of April 3, 1990. Reprinted with the permission of the *Florida Times-Union*, P.O. Box 1949, Jacksonville, FL 32231.

information is the *Swiss Review of World Affairs* (Switzerland marks this year 1-3/4 centuries of peace in the midst of Europe's 19th and 20th Centuries battlefield). An editorial by Hansrudolf Kamer (titled "The Mirage of World Disarmament") in its May 1990 issue says in part:

One of modern civilization's nightmares is that the megalomaniacal dictator of a half-developed country might one day get his finger on the nuclear trigger. Recently, those of us who have lately grown complacent about East-West détente, and have come to regard the threat of military destruction as remote, were once again confronted by harsh reality.

have repeatedly pointed out that creeping proliferation of nuclear and chemical weapons continues, along with the spread of the technology needed for their manufacture and delivery, and that these matters generally receive public attention only when something spectacular happens. . . .

Other countries too — Israel, India, Pakistan, South Africa, Argentina, Brazil, even North Korea — appear to be making concerted efforts to get the Bomb.

... West European nations (including the neutrals), the Soviet Union and the USA all have supplied Iraq with the equipment, technology and know-how to launch a nuclear program, synthe-

have already produced rockets which can be armed with conventional or chemical — and soon perhaps nuclear — warheads.

... There is still the ominous possibility that an unstable Third World dictator, bent on national prestige and regional hegemony, may be willing to employ weapons of mass destruction and will also have the ability to send them winging to remote European targets. The question is: how can such a threat be countered? □

Note: The *Swiss Review of World Affairs* is a monthly publication of the *Neue Zürcher Zeitung* — Subscription \$48 a year. American address: 100 Wall St., New York, N.Y. 10005.

LETTERS

ON "PROFESSIONALISM"

Las Vegas, NV

Dear Editor,

This is a response to the article in the April 1990 edition authored by James M. Ridgway, Ph.D. entitled "Emergency Management a Profession?" ...

The article "suggests the need for gradation and differentiation in standards" relative to jurisdiction size or complexity. This concept flaws the process of defining who is a professional and may run counter to state laws which already spell out minimum levels of competency or a scope of performance.

Certainly a minimum threshold level of competency can be described from which persons may advance. Other professions recognize the value of professional development and specialized training in a particular discipline. A cardiologist still has "M.D." after his signature. ...

Contrary to statements in the article, there is no basis for requiring a person to satisfy an arbitrarily established number of clock hours of instruction. Current educational philosophy embraces the concept of meeting instructional objectives. ...

Members of the emergency management profession should resist the suggestion to avoid establishing a "cutting number." The final point describing characteristics of a professional is that "There is mobility — the freedom to practice anywhere the service is needed." Allowing that a lower level or differentiation of standards is appropriate based on size of jurisdiction defeats the goal of establishing the professional field. ...

/s/ Jim O'Brien

STORY OF A LETTER

Dennis R. Ricketts of Newport News, Virginia on May 5th wrote a letter to the editor of his local paper. It contained a Gorbachev quote from the *Journal of Civil Defense*. His letter read in part:

I found an interesting quote that you probably did not see in your local paper. It goes as follows:

"Gentlemen, comrades, do not be concerned about all you hear about glasnost and perestroika and democ-

racy in the coming years. These are primarily for outward consumption. There will be no significant internal changes within the Soviet Union, other than for cosmetic purposes. Our purpose is to disarm the Americans and to let them fall asleep. We want to accomplish three things: One, we want the Americans to withdraw conventional forces from Europe. Two, we want them to withdraw nuclear forces from Europe. Three, we want the Americans to stop proceeding with Strategic Defense Initiative. ..."

This quote is by Mikhail Gorbachev in a speech to the Soviet Politburo in Nov. 1987.

In a letter to the *Journal* Mr. Ricketts explains what happened:

The letter "fell through the cracks" inasmuch as it was not edited or altered. It was published on a Wednesday morning. On Thursday morning, at 8:00AM I received a call from a very distraught editor, who started asking me all kinds of questions about where I got this quote from. Seems the paper had started getting calls from readers who could not believe what they had read.

Mr. Ricketts had traced the quotation to the *Journal*, and he was furnished a copy of the *Journal's* December 1989 issue in which the quotation appeared. In another letter to the *Journal* Mr. Ricketts says in closing:

Anyway, thanks again for the information your group sent. I hope that I can get some more information on your group in the near future. If possible, could I receive a sample copy of your publication so I can get an idea of what is going on?

Mr. Ricketts received the information he requested.

THE U.S. ARMY TOO WENT TO PANAMA ... AND THE NAVY ... AND THE AIR FORCE

[To the Editor of the *Washington Inquirer*]

APO Miami

... There are not "12,000 marines" here in Panama, nor have "25 of our marines already been killed in the invasion." The U.S. armed forces do include Marines, but they also include the OTHER good men (and women) of the Army, Navy, and Air Force. ...

Sergeant Flores, an Army engineer whose charge blew the hole in the wall of the Comandancia at the outset of Operation Just Cause, had this to say about the young soldiers in his squad: "I am proud of each and every

one of them. They ably performed their missions while under fire, without hesitation and without freezing when the fighting intensified. We opened the wall and waved the infantry through it so that they could assault and take their target."

Tom Strider

[The *Inquirer* replied:

"It certainly was not in a spirit of denigration that *The Inquirer* incorrectly identified American forces in Panama as Marines. We are justly proud of all our forces and grateful to them for helping keep America the land of the free.

— Ed.]

NO OIL SPILLS HERE

American Nuclear Society
La Grange Park, IL

Dear Editor:

The observance of Earth Day 1990 raises the basic question of our industrial society functioning in harmony with the planet Earth. One of the major activities necessary for our modern life is the generation of electricity.

The American Nuclear Society is comprised of more than 16,000 scientists, engineers, and other professionals working in the nuclear field, and therefore, as president of the society I want to address nuclear energy. Nuclear energy plants generate one-fifth of America's power without producing any carbon dioxide, sulfur dioxide or nitrous oxide.

Clean and reliable

These gases are the major contributors to the greenhouse effect, acid rain, ozone depletion, and global warming.

It is clear that nuclear energy should continue as a major component in our nation's energy mix. The promise was made in the 1950's that this new technology would be clean and reliable. The 109 plants in America demonstrate every day that they are indeed clean and reliable. In fact, there is an environmental imperative for nuclear energy!

Sincerely,
/s/ Walter B. Loewenstein
President

In this 4th installment of nuclear scientist Carsten Haaland's series on Nuclear Weapons Background and Effects he describes the immediate radioactivity produced by a nuclear explosion, the dust, the smoke and toxic gases, the ejected materials (in the case of ground or near-ground bursts) and large-scale fires. In the fifth installment for the Journal's October 1990 issue, Haaland will turn to an analysis of fallout.

**4th installment
of 6-part series**

Nuclear Weapons Background:

SECONDARY EFFECTS OF NUCLEAR WEAPONS — Induced Radioactivity, Dust, Fires and Nuclear Winter

— Carsten M. Haaland, Oak Ridge National Laboratory

Induced Radioactivity

Neutron radiation from ground bursts and from low altitude air bursts can interact with certain elements in the soil and in construction materials to make them radioactive. If the detonation is a ground burst, there will be so much radioactivity from fission products in the fallout that the radiation contributed by induced radioactivity will be negligible. However, if a weapon is burst at an altitude such that the fireball does not touch the ground, and if the yield is less than about 300 kilotons, the neutron pulse in the initial nuclear radiation can induce considerable radioactivity that may be a hazard to emergency workers, firefighters, rescue workers, medical corps, and so on, if these people emerge from shelter shortly after the blast.

The neutron pulse can induce considerable radioactivity . . .

The levels of initial nuclear radiation required to produce significant induced radioactivity are far above lethal levels. Only certain materials are affected, such as aluminum, cobalt, magnesium, and sodium. In many cities there are large piles of salt stored for use on snow-covered streets. Salt contains 45 percent sodium by weight. If a salt pile is located within the area of high initial nuclear radiation, it may be highly

radioactive after the detonation. Because the half-life of radioactive sodium is fifteen hours, the pile itself, and the salt that is scattered by the blast wind, may be emitting hazardous radiation for several days after being activated.

Induced radioactivity will not affect the time of stay in shelters unless there is a large quantity of susceptible materials near the shelter entrance which are made radioactive. Large coils of aluminum wire or piles of salt should not be stored near the entrance to a shelter that is close enough to a likely target area to be irradiated with neutrons.

Because of neutron absorption in air, radiation from induced radioactivity will be negligible at a distance greater than two miles from ground zero, regardless of the yield of the weapon. At closer distances, the induced radioactivity will vary with the yield and height of burst, and with the amount of susceptible material present.

Dust

There are two kinds of dust problems that arise from nuclear detonations. The first kind of dust problem is local and exists only in the immediate area affected by thermal radiation and blast. The second kind of dust problem could arise from the detonation of many large-yield ground bursts that loft a great quantity of fine dust into the stratosphere where the

dust may remain for months and cause climatical changes.

The first kind of dust problem may arise from certain conditions and at some distances from ground zero where a great quantity of dust will be produced by a combination of thermal radiation and blast wind, even from air bursts. For ground bursts, there is a much greater quantity of dust produced than from air bursts because of the interaction of the fireball with the ground. The dust under discussion here does not include the dust entrained in the fireball which later comes down as

. . . dust . . . may totally obscure visibility . . .

radioactive fallout. Except at ranges where the neutrons from the initial nuclear radiation may induce some radioactivity, depending on the materials available, this dust is not in itself dangerous, but may totally obscure visibility to the extent that it may interfere with rescue and fire-fighting activities. The thermal radiation produces dust by causing a sudden expansion of the exposed surface of dirt, sand, stones, or concrete, such that a small layer of the surface material explodes off as very fine dust particles. The blast wind churns up available dust from the area and mixes it with the dust pro-

duced by the thermal radiation. The "dirt cloud" is readily visible in Fig. 1 (Glasstone, 1977, p. 30).

The second kind of dust problem from nuclear detonations first received wide attention after the publication of "Long-term Worldwide Effects of Multiple Nuclear-Weapons Detonations" by the National Academy of Sciences in 1975 (NAS, 1975). It was stated therein (p. 54) that "the amount of submicron aerosols that might be injected into the stratosphere from a thermonuclear (ground) burst is about 1000-10,000 tons/megaton." The submicron-sized dust assumed to be injected into the stratosphere from the detonation of 10,000 megatons of large yield weapons was then found to be comparable with the quantity of submicron dust injected into the stratosphere by the giant volcanic eruption at Krakatoa in 1883. The dust from the Krakatoa explosion caused no catastrophic changes in climate, hence

it was concluded by the National Academy study that dust from a large-scale nuclear war would probably not have any highly significant long-range effects. Only megaton and larger yield weapons were considered in the National Academy study. It is doubtful that smaller weapons of a half-megaton yield or less would carry enough dust to the altitudes required to be a problem.

More recently, a study by Turco and others has proposed that dust in combination with smoke from nuclear detonations could result in a catastrophic reduction in temperature effecting a whole hemisphere of the earth with a "nuclear winter" (Turco, 1983). This study met with widespread criticism concerning the weapon scenarios, the amount of dust and smoke injected into the stratosphere, and the mechanisms for removal of these materials from the atmosphere. After many megabucks spent on research, it has been con-

cluded that a major nuclear war may cause some temperature reduction in some regions, but the overall effect is nowhere near the major damage caused by direct weapons effects.

Smoke and Toxic Gases

As with dust, there are two kinds of problems with smoke produced as a result of nuclear detonations, one local in nature and the other global, the latter resulting from large fires. Both smoke and toxic gases are produced initially when the thermal radiation rapidly heats up materials such as composition board, plastics, and painted surfaces. Toxic gases could include carbon monoxide, formaldehyde, hydrogen cyanide, nitrogen oxides, and phosgene. These materials will be mixed with the dirt cloud mentioned above to produce a potential hazard for firefighters and rescue workers who may be required to emerge from shelters to perform emergency services after the blast

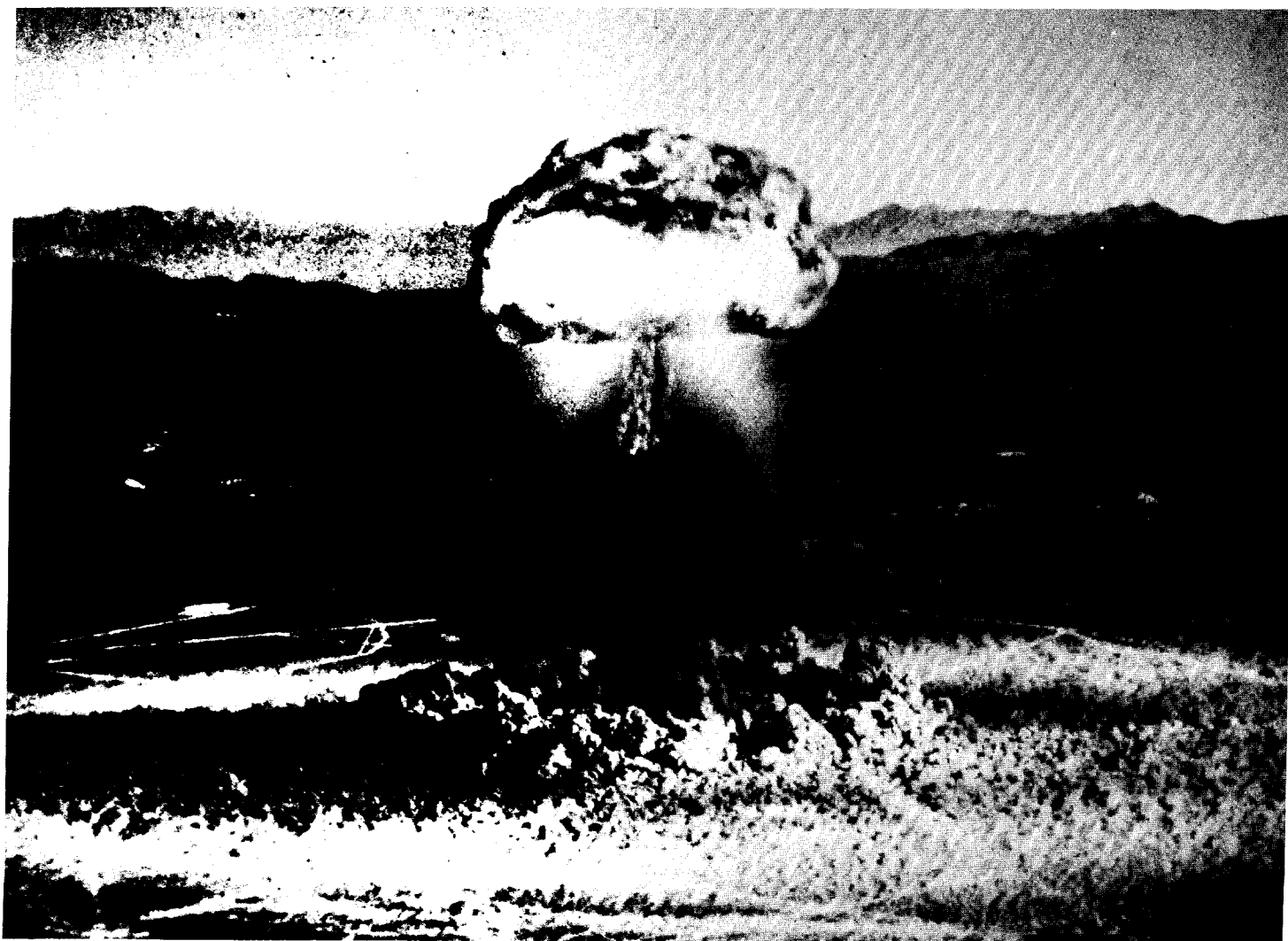


Figure 1. An "A-bomb" explosion showing the dirt cloud on the ground and the mushroom cloud.

wave has passed. Additional smoke and toxic gases will be produced if a large fire develops.

The possible global problem of large quantities of smoke in combination with dust being injected into the stratosphere has been mentioned above and will not be discussed further here.

Ejected Rocks and Debris

Rocks and debris will be thrown out to considerable distances from ground bursts, but not from air bursts. The fireball of the ground burst forms a crater in the earth by heat and pressure. Some of the materials that are in the crater volume are vaporized by high temperatures and are carried aloft with the fireball. Additional materials of the crater are pulverized into fine dust by high pressure. Most of this material is also drawn up with the fireball as it rises. If there are materials near the edge of the crater that are difficult to break apart, such as slabs of reinforced concrete, or rock, these materials may be broken

Boulders or chunks of reinforced concrete could . . . land as far as several miles away.

up into large chunks instead of being pulverized. It is possible under certain circumstances, especially from megaton ground bursts, that such boulders or chunks of reinforced concrete could be expelled from edge of crater area with such high velocities that they would land as far as several miles away.

These large objects would all fall to the ground within the first minute after the burst. For unsheltered persons, other hazards in the area affected by ejected rocks and debris will be more lethal. Emergency workers in shelters within the rock-flying area should not emerge from shelters until this hazard is over. There is the possibility that an occasional large boulder could land directly on a shelter and destroy a portion of it, even though this shelter might otherwise have protected its occupants from all other weapons effects.

Large Scale Fires

About 35% of the enormous energy released by a nuclear detonation is emitted in the form of heat and light, as described in the section on thermal

Table 1. Slant range in miles for radiant exposures from air bursts to fixed objects on the ground^a

Yield (kt)	Time ^b (sec)	Radiant energy in calories per square centimeter					
		5	8	12	25	50	200
Slant range in miles from fireball center							
10	1.1	1.4	1.1	0.9	0.6	0.4	0.2
50	2.3	2.8	2.3	2.0	1.3	1.0	0.5
100	3.2	3.8	3.1	2.6	1.8	1.4	0.8
200	4.3	4.9	4.1	3.5	2.5	1.9	1.1
500	7.0	7.5	6.4	5.3	4.0	3.1	2.1
1000	8.7	8.9	7.8	6.6	4.8	3.8	2.5
5000	17.7	14.8	12.7	11.2	9.1	7.2	4.5
10000	24.0	18.0	15.8	13.9	11.8	9.3	6.5
20000	32.8	22.0	19.8	17.4	15.3	12.6	9.2

^a Air bursts less than 15,000 feet altitude, visibility 12 miles.

Data taken from Glasstone, 1977, p. 291.

^b Time required for delivery of the radiant exposure. See TIME C in Fig. 2.

Table 2. Radiant exposures for ignition of various materials for low air bursts

Material	Yield in kilotons		
	35 (2 sec) ^a	1400 (10 sec)	20000 (33 sec)
Radiant exposure (cal/cm ²)			
CLOTHING FABRICS			
Cotton, dark blue, 8 oz/yd ²	14	19	21
Cotton, khaki, 3 oz/yd ²	14	21	28
Cotton, khaki, 8 oz/yd ²	20	30	39
Cotton, olive, 8 oz/yd ²	14	19	21
Cotton, white, 8 oz/yd ²	32	48	65
Cotton corduroy, brown, 8 oz/yd ²	11	16	22
Cotton, new denim, blue 10 oz/yd ²	12	27	44
Cotton-nylon mixture, olive, 5 oz/yd ²	12	28	53
DRAPERY FABRICS			
Cotton, dark colors, 13 oz/yd ²	15	18	34
Rayon gabardine, black, 6 oz/yd ²	9	20	26
Rayon twill lining, beige, 3 oz/yd ²	13	20	28
OTHER FABRICS			
Cotton chenille bedspread, light blue	No data	11	15
Cotton muslin window shade, 8 oz/yd ²	7	13	19
VARIOUS TINDER MATERIAL			
Beach tree leaves, dry	4	6	8
Cardboard carton, brown, 16 oz/yd ²	16	20	40
Grass, dry	5-6	8-9	10-11
Newspapers, dry	5-6	7-8	12-15
Pine needles, brown (ponderosa)	10	16	21

^a Duration of exposure in seconds (through TIME C in Fig. 2).

radiation. The slant ranges for radiant exposures from weapons of various yields are given in Table 1. The radiant exposures required for ignition of various materials are given in Table 2. According to the latter table, a radiant exposure of six calories per square centimeter from a 1.4-mega-

ton weapon is enough to ignite dry leaves or shredded newspaper that are in the direct line-of-sight to the fireball. From Table 1 one may estimate that the range for this radiant energy to be delivered would be about 8 miles, under the visibility conditions stated. This radiation of

heat would certainly start fires wherever there are light-weight readily-combustible materials in direct line-of-sight of the fireball, and all within the first ten seconds after the burst. However, this radiation would do no more than scorch the surface of heavy wood timbers and heat up asphalt shingles, except perhaps directly under the fireball where everything is going to be smashed anyhow.

Light-weight readily-combustible materials . . . that could be ignited by the thermal radiation

Those who have used a propane torch know that it takes several seconds application of direct flame to get a two-by-four or asphalt shingle to start burning by itself. The rate of delivery of thermal energy in the flame of a propane torch is between 300 and 600 calories per square centimeter per second. From Table 1, it can be seen that the rate of delivery of thermal energy from a nuclear fireball, even where the *total* radiant energy is 200 cal/cm², is from 2 to 60 times less than from a propane torch, depending on the yield. If there are no light-weight readily-combustible materials around, there is little chance of fires being started by the thermal pulse from a nuclear weapon except in the area which is totally destroyed by blast effects.

The fact remains however that there usually are light-weight readily-combustible materials distributed throughout every city that could be ignited by the thermal radiation from a nuclear weapon, provided the materials aren't wet. Furthermore, many fires may be started by ruptured gas lines and electrical short circuits caused by the destruction of the blast wave. The combination of these fire-starting effects indicates that there may be thousands of small fires beginning to burn throughout the city after the blast wave has passed through, even though the blast wind may blow some of them out. There will be too many fires to be put out by the regular fire departments. One of the necessary training programs that would go along with a national blast shelter program would be to train people when and where to emerge from shelters after the blast wave passes, in order to put out these many

small fires before they grow into big ones.

There are two kinds of large-scale fires, conflagrations and firestorms. A conflagration is blown in the direction of the local wind, like a forest fire or the Great Chicago Fire of 1871. Firestorms are a special kind of large-scale fire, a phenomenon of this century. Firestorms rarely occurred before World War II. In order to produce a firestorm, thousands of fires must be started over an area of a few square miles within a few minutes. If there is enough combustible material in the area, and if the local winds are not blowing too strongly, the small fires will grow and spread. The heated air from these fires rises up and draws air into the area from the sides. This air fans the fires which then burn more fiercely, causing the heated air to rise more rapidly, which in turn, draws the air in from the sides at higher velocity. The primary characteristic of a firestorm is that it generates its own winds. The winds always blow toward the center of a firestorm, on all sides.

The Great Fire in Chicago in 1871, (Broido, 1960) in which 250 people perished, was not a firestorm. The fire was driven by local winds, not by the fire itself. The day after the Chicago fire, there were 1182 fire victims in a massive forest fire in Wisconsin, a fire also driven by external winds.

Three-fourths of the total devastation of Germany in World War II was caused by fire.

Several notable firestorms were generated in Germany in World War II by incendiary bombs dropped by American B-17 bombers. Three-fourths of the total devastation of Germany in World War II was caused by fire. One of the worst firestorms in the history of mankind took place in Hamburg on July 27, 1943. Within twenty minutes after the incendiary bombing by waves of B-17 bombers, over two-thirds of all the buildings in a five square mile area were ablaze. Winds at the outskirts of the firestorm, blowing toward the center, became so strong that firemen were again and again actually hurled into the air. Within a few hours the fire had begun to run out of fuel and die down. Despite the ferocity of this storm, the official records show that over

85% of the 280,000 people in the fire-storm area survived, and nearly all who sought refuge in bunkers, covered trenches, and other non-basement shelters survived. Many of those 15% who died sought refuge in shelters in the basements of many-storied, heavy-timbered German structures, where they were first asphyxiated and then cremated (Broido, 1963).

Lessons from the Hamburg evidence are these: 1) people *can* survive and *have* survived the worst firestorms; and 2), shelters should not be located where they may be covered by burning structures or rubble unless they have the capability to be sealed off and can provide an adequate supply of air for the occupants.

Most American cities . . . too spread out

Another point about firestorms: most American cities are simply too spread out for firestorms to develop. It has been determined that areas must have more than 20% of the ground covered with burnable buildings throughout an area of at least a square mile before it becomes possible for a firestorm to be started. Many German and Japanese cities fulfill this requirement. Most American cities do not.

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Reducing Armaments . . . Building Defenses

— Interview with John W. McKay

Walter Murphey (WM): Mr. McKay, in weighing attempts to revive interest in civil defense in the United States, do you feel that there is value in looking at those programs of other countries?

John McKay (JM): There is much to consider these days. Civil defense has at least survived — which is more than can be said of many other federal programs. And looking at civil defense programs of other countries is certainly a big help. There are many

tomorrow.

On the other hand, we still have to think seriously about protecting the population from all hazards, including a nuclear exchange. As of today, no strategic weapons in the Soviet arsenal have been removed. And, I believe their modernization program continues unabated.

On balance, I think the danger of a conventional war in Europe leading to a nuclear exchange has been dramatically reduced. Unfortunately,

role in dealing with Hugo. The remarkably low fatality figure is one stunning example. Credit for this should go to FEMA's Hurricane Preparedness Program as well as the State and local civil defense personnel who implemented these plans, and the National Weather Service which provided advance warning.

After Hugo had passed, however, things did not go so well. And we need to profit by mistakes. Winds of over 200 miles per hour, for example, took down communications towers. Emergency power systems failed too often. We obviously need to strengthen these crisis management systems so they will survive any emergency.

WM: There was also criticism of FEMA for not moving fast enough to contend with Hugo's impact.

JM: FEMA, by law, has no authority to respond to a disaster prior to a Presidential declaration. This serves to tie FEMA's hands, and changes in the law may be in order.

FEMA did try to deal with this handicap, however. For instance,

. . . we still have to think seriously about protecting the population from all hazards, including a nuclear exchange.

lessons to be learned. Turkey, for example, relies heavily on volunteers, actually "drafts" volunteers.

WM: Dramatic events in Eastern Europe recently are on people's minds and affect their thinking. What about this situation as it relates to defense?

JM: What has been happening in Eastern Europe is truly remarkable. But it is by no means the only area where we should be concerned. The winds of change are blowing in democracy's favor throughout the world. Changes in the Soviet Union; the election of Mrs. Chamorro in Nicaragua, and the establishment, with U.S. support, of the rightfully elected leadership in Panama are all signs which point to a brighter

the arsenals are still in place.

I believe that if this country makes decisions in the future to reduce our offensive capabilities, we should look very seriously at increasing our defenses. And, I believe that civil defense is an important element in our national strategic defense.

Preparedness had a very important role in dealing with Hugo. The remarkably low fatality figure is one stunning example.

We need to take lessons from day-to-day applications of civil defense. Hurricane Hugo was the best real-life example of what works and what does not work in civil defense. Preparedness had a very important

Grant Peterson (director of FEMA's State and Local Programs and Support Directorate), sent FEMA officials to St. Croix and Puerto Rico immediately after the hurricane passed. But he did so as an "exercise." I believe,

given our legal authorities and the extreme severity of the hurricane, that FEMA did an excellent job in contending with the massive damage.

Now, with a focus on Hugo, the FEMA role in disaster response is being restudied. Analyses should result in improving — streamlining — FEMA responsibilities.

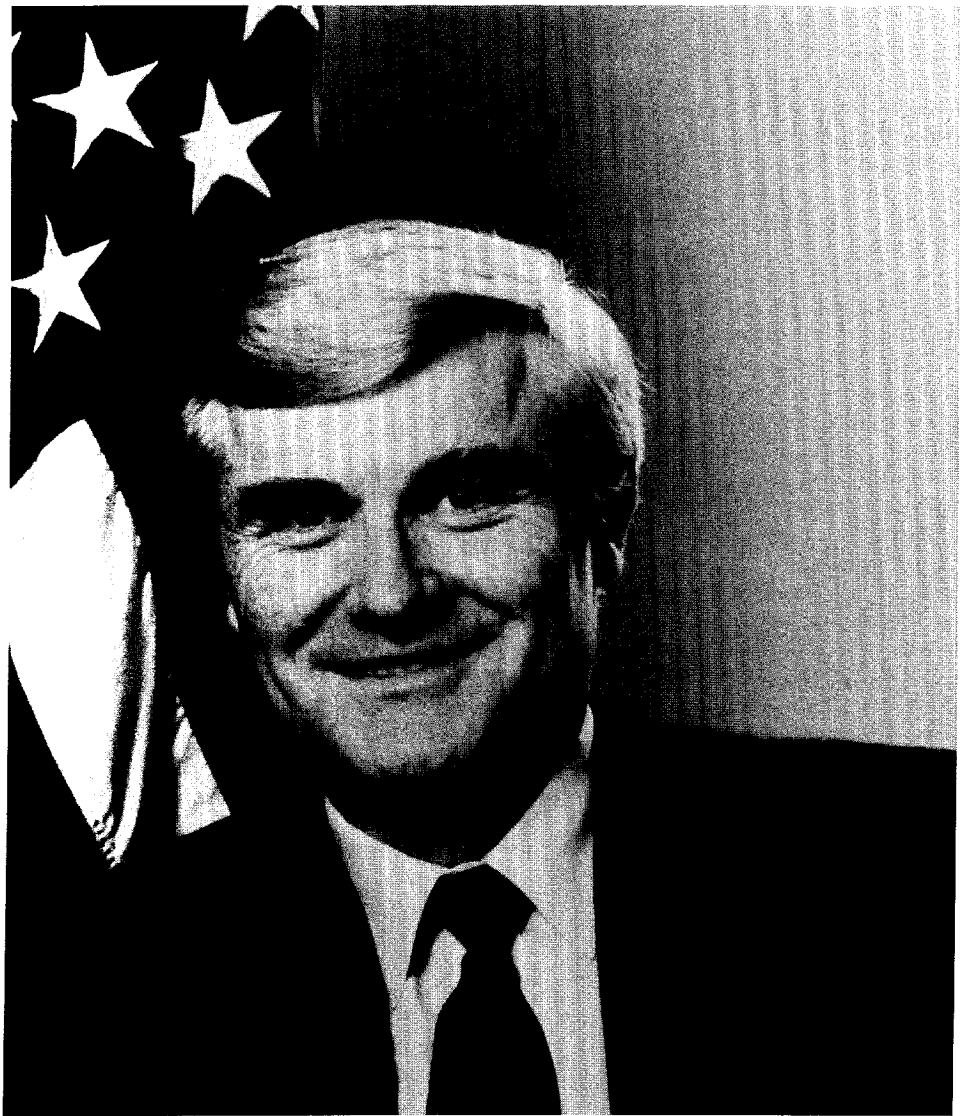
WM: And how about the international picture and the threat of missile attack and so on? Are things really going to be different here too?

JM: Let me paraphrase Edward Luttwak, the writer and strategic analyst. He says "the world may become less threatening, but more dangerous."

That is to say that the Third World development of nuclear, biological and chemical weapons and the proliferation of missile capabilities emphasizes the continuing need for a strong civil defense program.

All echelons of government bear a responsibility to protect the population. The law gives them this mandate. Naturally, people are most worried about what is closest to home. I think we have designed a civil defense program that, if properly applied, is and can be of service to States and localities for all emergency situations.

**The world may become
less threatening,
but more dangerous.**



John W. McKay

As a factor in preparedness, exercises should be underlined as extremely important in contending successfully with all types of disasters.

The recent air crash in Sioux City, Iowa is an outstanding example of the value of exercises. Here it permitted a coordinated response that actually resulted in saving lives.

On the other hand, the lack of exercises brings about unnecessary tragedy. We need a well-developed and nationwide civil defense that will act as a credible deterrent. □

Morris Retires From FEMA

Robert H. ("Bob") Morris, deputy director of FEMA since 1983, retired from his post on May 19th. Morris, who served long stints as FEMA's acting director — once after Louis O. Giuffrida left the post in 1985, and again when Julius W. Becton, Jr. resigned in early 1989. Speaking to the DDP/TACDA Seminar in 1989, Morris said:

It is clear that, in planning for the next ten years and beyond, all of us concerned with human survival will need to set a course which steers between the needs to identify the dangers which will confront us and the opportunities we will encounter to reduce those dangers. FEMA expects to take a lead role in charting that course. It will do so in cooperation with government at all levels, chief private sector elements and especially with concerned groups such as The American Civil Defense Association, Doctors for Disaster Preparedness and the American Society of Professional Emergency Planners.

Morris will make his retirement home in Albuquerque, N.M.

TACDA strategic defense seminars began back in 1978 with the first "trial balloon" held in Gainesville, Florida. Since then they have branched out to larger cities — Kansas City, Washington, Dallas, Los Angeles, Salt Lake City, and this year Chicago. Chicago, the "hub" of the midwest, cultural center, facing beautiful Lake Michigan, is a seductive host to many conferences, and it promises TACDA and DDP participants a unique experience. With the help of supporting organizations — notably Chicago-based Live Free and High Frontier out of Washington, D.C. (which will hold its own symposium in conjunction with the seminar) — the 1990 seminar promises to outdo all past efforts.

Of special note, the SDI "Exchange of Views" brings in the participation of the Soviet Union for the first time (see below).

Truly, a conference not to miss.

TACDA/DDP 1990 Seminar Focus:

PREPAREDNESS!

The full spectrum of disasters, from the single-victim variety to the multimillion-casualty catastrophe that aggressor attack with modern weaponry can program for the unwary, will be subjected to searching analyses at the TACDA/DDP Seminar in Chicago August 10-13.

"Hurricane Hugo," observes TACDA president Dr. Max Klinghoffer, "had its invaluable lessons in both preparedness and unpreparedness. It follows that preparedness is the key to dealing with disasters of all kinds, and the bigger they are the truer that is."

The agenda proper of the seminar — on Saturday and Sunday, August 11th and 12th, sparkles with experts that give disaster response coverage a "full spectrum" approach.

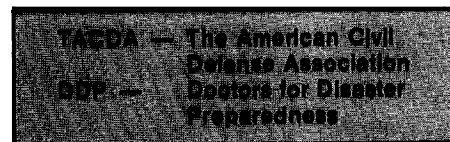
Intelligence analyst Nancy D. Greene (widow of Lorne Greene) will

speak on "Strategic Deception." Dr. Giuseppe Satriano, president of Italy's Soccorso Amico and Dr. Annamaria Nucci, American representative of the Italian rescue group, will address the subject "The Mediterranean — No. 1 Hot Spot." Recent political

Event: TACDA/DDP Seminar
Dates: August 10-13, 1990
Place: Ramada Inn — Northbrook (northside suburb of Chicago, near Chicago's O'Hare International Airport)
Registration: \$169 (\$190 after August 1st). Rooms: \$49 s/d
Information: TACDA/DDP, P.O. Box, 1057, Starke, FL 32091
 (Tel: 904-964-5397)
 (FAX: 904-964-9641)

upheavals in neighboring Romania, and political events in other eastern European nations will be analyzed in light of their effect on Mediterranean powder kegs.

Bearing on this situation will be an exposé by Dr. John R. Christiansen and Dr. Reed H. Blake of selected foreign civil defense programs and policies (an analysis of effective homeland defense measures). Drs. Christiansen and Blake, sociology professors at Brigham Young Univer-

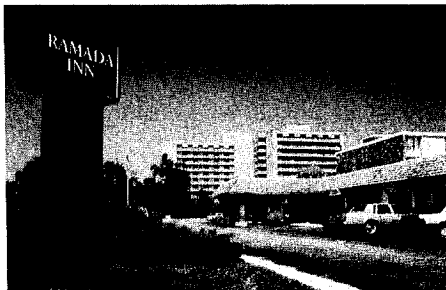


sity, have made exhaustive on-the-spot analyses of civil defense in those countries where it is an integral part of national defense.

Emergency medical questions will be covered by Dr. Stanley Zydlo, who will speak on "The Emergency Room in Disaster," and Michael A. Hawotte, who will address the subject of "AIDS — the Next Decade." Dr. Zydlo is EMS Project Medical Director for the Northwest Community EMS System and Chief of Emergency Services at Northwest Community Hospital. Mr. Hawotte's unique background in



engineering and medicine combines to make him a foremost researcher working on products to fight AIDS and other diseases. He is currently on the staff of Scientific Systems Services. A medical panel will round out medical presentations. It will consist of DDP officers Dr. William R. Nesbitt, Dr. Gerald L. Looney and Dr. Max Klinghoffer.



Ramada Inn — Northbrook

TACDA/DDP SEMINAR AGENDA — August 10-13, 1990

Master of Ceremonies: Captain T. J. Wadsworth

Friday, August 10

- 8:30AM-12N — High Frontier Symposium
- 1PM-3PM — TACDA "Roundtable" (Discussion period, committee reports)
- 3PM-5PM — TACDA committees to meet
- 7PM — Welcome Reception (Exhibit Hall)

Saturday, August 11

- 8AM-8:15AM — Opening Ceremonies (Invocation, Pledge, etc.)
- 8:15AM-9AM — Keynote Address: "FEMA Forecast"
- 9AM-9:45AM — Marcel M. Barbier — "On Going Shelter Needs" — Exhibitor Introductions
- 9:45AM-10:15AM — COFFEE BREAK (Exhibit Hall)
- 10:15AM-11AM — Dr. Stanley Zydlo — "The Emergency Room in Disaster"
- 11AM-11:45AM — Michael A. Hawotte — "AIDS — The Next Decade"
- 11:45AM-1:30PM — (Luncheon) Charles Wiley — "What Road? War? . . . Peace?"
- 1:30PM-2:30PM — Shelter Panel — Dr. Conrad V. Chester, Edwin N. York, Paul Gauthier
- 2:30PM-3:15PM — COFFEE BREAK (Exhibit Hall)
- 3:15PM-4PM — Berry Williams — "Hurricane Hugo — What Happened?"
- 4PM-4:45PM — Rosa Timmons — "The Emergency Manager — Today's Challenge"
- 7PM — Reception (Exhibit Hall)
- 8PM — (Banquet) General Daniel O. Graham — "SDI: Now More Important Than Ever"

Sunday, August 12

- 8AM-8:15AM — Opening Ceremonies
- 8:15AM-9AM — James C. Jones — "Behind the Hype: The Real Survivalist"
- 9AM-9:45AM — Nancy D. Greene — "Strategic Deception"
- 9:45AM-10:15AM — COFFEE BREAK (Exhibit Hall)
- 10:15AM-11AM — Dr. John R. Christiansen/Dr. Reed H. Blake — "Civil Defense Abroad: A Way of Life"
- 11AM-11:45AM — Dr. Giuseppe Satriano/Dr. Annamaria Nucci — "The Mediterranean — No. 1 Hot Spot"
- 11:45AM-1:30PM — (Luncheon) Dr. Edward Teller — "Preparedness Payoff: Peace"
- 1:30PM-2:30PM — Medical Panel — Dr. Max Klinghoffer, Dr. Gerald L. Looney, Dr. William R. Nesbitt
- 2:30PM-3:15PM — COFFEE BREAK (Exhibit Hall)
- 3:15PM-4PM — Philip C. Clarke — "Terrorism's Proliferating Missiles: Can We Stop Them?"
- 4PM-5:30PM — Alexander V. Zhgutov/General Daniel O. Graham — "SDI: An Exchange of Views"
- 6PM — DDP Business Meeting; DDP Board of Directors Meeting
- 8PM — Shelter Workshop — Dr. Conrad V. Chester
- Intelligence Workshop — Nancy D. Greene

Monday, August 13

- 9AM-11AM — TACDA Business Meeting; TACDA Board of Directors Meeting

REGISTRATION

TACDA/DDP 1990 SEMINAR, AUGUST 10-13

Registration — \$169* (After Aug. 1: \$190)

*Includes: 2 luncheons, 1 banquet, 2 receptions
& coffee breaks

TO: TACDA/DDP Seminar
P.O. Box 1057
Starke, FL 32091
(Phone: 904/964-5397)
(FAX: 904/964-9641)

- ☐ Enclosed \$ _____
- ☐ Please bill me
- ☐ I'll pay at registration desk
but want early registration
rate

Name(s) _____

Address _____

City _____ State _____ Zip _____

Phone (_____) _____

ROOM RESERVATION FORM

Mail reservation to:

RAMADA INN Northbrook
Attn: Reservations Department
2875 N. Milwaukee Ave.
Northbrook, IL 60062
Phone: (1-800/872-0680 or 708/298-2525)
FAX: (708-298-4615)

No deposit required.
Give credit card
information if
arriving after 6 PM.

- ☐ Single or } \$49
- ☐ Double }
- ☐ Confirmation
requested

Arrival date/time _____ No. of days _____

Name _____

Address _____

City _____ State _____ Zip _____

Phone (_____) _____

— TACDA/DDP SEMINAR PARTICIPANT —

HURRICANES — AND MANAGEMENT CHALLENGES

A critical look at Hurricane Hugo will be provided by Berry A. Williams, North Carolina's Chief of Individual Assistance Programs and a key expert in disaster recovery programs. Kansas City's Rosa Timmons, secretary-treasurer of the American Society of Professional Emergency Planners and president-elect of the Missouri Emergency Preparedness Association, will speak on "The Emergency Manager — Today's Challenge."

A "Shelter Panel" to handle questions dealing with passive preparedness will be composed of Dr. Conrad V. Chester, chairman of the Emergency Technology Program at Oak Ridge National Laboratory, Edwin N. York, Boeing Aerospace Company executive, and leading shelter contractor Paul Gauthier from Louisiana.

James C. Jones, who holds survivalist encampments yearly and publishes the *Live Free Newsletter*,

will make his presentation on "Behind the Hype: The Real Survivalist." Jones beats the drums for civil defense. His volunteer activities include numerous pursuits that give meaning to practical methods of defense. He underlines pioneer patriotism as a means of contending with the ills of the day. Jones' following is international, and he offers survivalism as a means of contending successfully with the problems of our nuclear age.

DR. TELLER ON "PEACE"

At last year's seminar in Washington, D.C. Edward Teller — world-wide acclaimed nuclear scientist, writer, researcher and lecturer — was ill and unable to appear. This year he is back in stride and will address the seminar at the August 12th luncheon. His subject: "Preparedness Payoff: Peace." Dr. Teller, who is known as the "architect of the H-bomb," is a senior fellow at the Hoover Institution on War, Revolution and Peace and a space researcher at Livermore National Laboratory.

Scheduled also is a FEMA speaker who is to make a "FEMA Forecast" as the keynote address. Due to current top-level changes at FEMA at this writing the identity of the speaker is not yet known. (It will be in short order.)

SOVIET-AMERICAN "EXCHANGE"

The dramatic climax of the seminar will be the August 12th afternoon discussion between Alexander V. Zhgutov, Second Secretary of the Soviet Embassy in Washington and General Daniel O. Graham, former U.S. Armed Forces Intelligence chief and now director of the nation's No. 1 SDI proponent, High Frontier. Titled "SDI: An Exchange of Views," the presentation will allow General Graham ten minutes to present his pro-SDI case, then Secretary Zhgutov will be given ten minutes to present his views. After that each speaker will be given three minutes to summarize. This will be followed by questions from the listening audience.

In 1987 General Graham debated General N. F. Chervov, of the USSR Armed Forces General Staff Directorate on SDI (the October 1987 issue of the *Journal* carries a report on it).

Mr. Zhgutov is with the Arms Control Section of the Soviet Embassy. His field of special interest is nuclear weapons and the non-proliferation issues. He is a graduate of the Moscow State Institute of International Relations.

Preceding the Zhgutov-Graham "exchange of views" on SDI, well-known writer and commentator Philip C. Clarke (formerly with Mutual Broadcasting Company, the Associated Press and *Newsweek* — in the U.S. and abroad) will present what is held by many experts to be the world's No. 1 problem: "Terrorism's Proliferating Missiles: Can We Stop Them?"

WILEY RETURNS TO SEMINAR PODIUM

At the August 11th luncheon, hard-hitting war correspondent Charles Wiley (he has reported from over 100 countries and a number of communist jails) will speak on prospects for war and prospects for peace. And the path to each. The popular Wiley has appeared at previous TACDA/DDP seminars and is a member of the Accuracy In Media speakers' bureau.

Banquet speaker on August 11th will be General Daniel Graham, who will outline the progress made — and to be made — by SDI.

Two workshops will again provide information in their respective fields at 8PM on August 12th. Dr. Conrad V. Chester will conduct the shelter workshop and Nancy D. Greene will manage the intelligence workshop.

High Frontier will present its own

PARTIAL REGISTRATIONS

Welcome reception	\$25
Luncheon (Aug. 11 or 12)	25
Banquet Reception Aug. 11th	15
Banquet	30
Banquet and reception	40
Full AM or PM program (no meals)	30
Students/spouses	20
Half of AM/PM program (no meals)	20
Students/spouses	15
One presentation only	10
One day's session (no meals)	50
Students/spouses	35

DELTA SEMINAR TRAVEL OFFER

DELTA Air Lines has arranged special discounted fares for TACDA/DDP Seminar travel (certain restrictions may apply). For details regarding discounts call DELTA at 1-800-221-1212 and ask for "Special Meeting Network." Your file reference for the TACDA/DDP Seminar is I-29003. (DELTA ad on page 4).

QUESTIONS AND ANSWERS

Q: Will questions and answers again be a part of presentations?

A: Yes. Each speaker is asked to reserve time for questions and answers. Questions and answers will also follow the "Exchange of Views" on SDI between the Soviet representative, Alexander V. Zhgutov and the American representative, General Daniel O. Graham.

Q: Will tapes of the presentations be available?

A: Tapes of all presentations will be available and may be purchased in the exhibit area (as has been the case in the past).

Q: Must a participant be a member of TACDA or DDP to attend the seminar?

A: No. The seminar is open to the public.

Q: Will partial registrations be available?

A: Yes. See table in column three, this page.

Q: Will tours of the Chicago area be available?

A: Yes. Boat, bus and carriage tours of Chicago's many points of interest are waiting your choices. (See notice on page 21, col. 3.)

Q: Will there be media coverage of the seminar.

A: Yes. Media interest is high.

(Other questions? Ask the friendly ladies at the TACDA/DDP registration desk.)

Progress Report

Sponsored by High Frontier

More Defense for Less . . .

Friday, August 10, 1990 8:30-12 noon

Ramada Inn — Chicago Suburb of Northbrook, Illinois

(Co-sponsored by TACDA in conjunction with TACDA Conference)

Session I: Capt. Scott Lotman *Why is SDI so important in 1990?*

- The latest declassified intelligence data on Soviet military capabilities.
- A discussion on Third World ballistic missile threats.
- A live scenario of an accidental launch of a ballistic missile.
- Question and answer period.

Session II: Major Gen. Milnor Roberts

- *See the new animated film on the SSX.*
- *SSX/Brilliant Pebbles.*
- *Updated information on Brilliant Pebbles.*

Refreshments will be served.

Clip and return to High Frontier, 2800 Shirlington Road, Suite 405A, Arlington, VA 22206

High Frontier Progress Report

- ☐ Yes, I will attend. Enclosed is my \$25 registration fee.
☐ Special student/senior citizen rate at \$15.
☐ Please send me more information about High Frontier.

Name

Address

City, State, Zip

Telephone ()

morning symposium on Friday, August 10th. (Announcement appears above.) Focus will be on the development of SDI in the 1990s and an in-depth look at SSX and Brilliant Pebbles.

Master of ceremonies for the seminar will be Captain T. J. ("Jerry") Wadsworth, 1989 president of the American Society of Professional Emergency Planners (ASPEP), director of Bonneville County Civil Defense in Idaho Falls, Idaho. Idaho has been a long-time all-out proponent of effective homeland defense measures.

BUSINESS MEETINGS — ROUNDTABLE

Membership and Board of Directors meetings will also take place during the seminar. DDP will hold its annual meetings beginning at 6PM on Sunday, August 12th, and TACDA meetings are scheduled for Monday, August 13th from 9AM to 11AM.

For those participants who themselves want to get down to brass tacks, to be heard, and to weigh civil defense pros and cons, to criticize or praise or whatever, a two-hour "Roundtable" will be held on August 10th (Friday) beginning at 1PM.

**RAMADA INN — NORTHBOORCK:
"TOPS"**

Setting for the seminar is the just-renovated Ramada Inn — Northbrook, a luxury "find" on Chicago's posh "North Side." A scant seven miles from Chicago's O'Hare International Airport, it offers free limousine service around the clock between the hotel and the airport. It also offers transportation to Northbrook's many bargain-rich malls, restaurants and night spots. And, if you prefer, the Ramada has its own gourmet "Reflections" restaurant — plus its intimate "Reflections" lounge.

Add to this complimentary coffee calls every morning, a big outdoor swimming pool, an indoor gym, and woodland jogging trails just across the street. And many more amenities — even handy free parking for those who elect to drive to the seminar.

The "friendly Ramada" is hospitality at its very best.

*

An integral part of the seminar will be, as usual, those shelter builders, shelter suppliers and homeland defense organizations that provide information from their booths in the exhibit area. Displays will include those from METTAG, Live Free, High Frontier, DDP, Davis Cave Construction, Nuclear Defense Shelters and Equipment, and the *Journal of Civil Defense*. Free handouts will abound.

Tapes of speaker presentations may be obtained there also.

*

At the seminar itself the usual door prizes (keyed to registration numbers) will be announced by the master of ceremonies.

*

For further information on the seminar and special attractions call the TACDA/DDP Starke, Florida office at 904-964-5397 — or write to TACDA, P.O. Box 1057, Starke, Florida 32091. Or just FAX 904-964-9641. (Register early for a free TACDA coffee mug.) ☐

CHICAGO TOURS

Seven luxury bus companies offer tours of Chicago from one to seven hours. Water cruises (lunch, dinner, moonlight) are also readily available (arranged by Chicago's 16 boat cruise companies). Even carriage tours.

Chicago's cultural centers, sports facilities, 29 miles of beaches free of commercial construction, and other points of special interest (even an Al Capone gangland tour) are at your beck and call. Add to this Chicago's fantastic park system and unique architecture.

Make your plans according to your desires. The hotel staff is ready to cater to your tour needs whenever you're ready.



1990s: INCREASE IN DISASTERS? UN ATTENTION TO DISASTER REDUCTION

In a *Natural Hazards Observer* article titled "Will the 1990s be a Decade of Increasingly Destructive Natural Disasters?" Philippe L. Boulle of the Office of the United Nations Disaster Relief Coordinator (New York) says:

Today, there is a considerable body of knowledge about natural hazards that also enables us to devise effective means to limit the damage they cause. Yet, the reality of the situation is that disasters are increasing in number worldwide, and their social and economic impacts are becoming more and more difficult to bear. . . .

The growing concentrations of populations and the development of physical infrastructure in areas that are hazard-prone may lead to an increase in the number of disasters in the 1990s. For effective disaster reduction in the coming Decade, we have to accord much more attention to preventive measures to reduce the vulnerability of communities to natural hazards.

In the *British Journal of the Institute of Civil Defence*, W. Wagner of the UN's International Decade for National Disaster Reduction Secretariat reports:

On 22 December 1989 the United Nations General Assembly took a major step towards a concerted global effort to reduce the destructive impact of natural disasters when it proclaimed the International Decade for Natural Disaster Reduction — IDNDR — beginning on 1 January 1990. . . .

It was decided also about the objective of the Decade, which in today's final version is:

'to reduce through concerted international action, especially in developing countries, loss of life, property damage and social and economic disruption caused by natural disasters, such as earthquakes, windstorms, tsunamis, floods, landslides, volcanic eruptions, wildfires, grasshopper and locust infestation, drought and desertification and other calamities of natural origin'.

In the same issue of the *Journal*, Eric Alley, president of the Institute, writes on "The Myths and Realities of Natural Disasters." And Eric has a good bit to say about badly needed corrective action. For instance:

As we enter the International Decade for Natural Disaster Reduction, surely our common humanity demands that we develop a more rigorous analysis

of the growing problems that face us in the disaster field. That we should be pro-active and not reactive to the events that challenge us. For too much of the world's resources have been poured into and down the bottomless drain of disaster relief, mainly because when it comes to the expected effects of disaster, myth still overwhelms reality. Partly for this reason and partly because of mismanagement borne of a lack of prior planning, international relief efforts are plagued with wasteful, useless and often counterproductive activities. That is not to say that disaster relief should be abandoned, far from it, it is the priorities that are wrong.

Alley lifts the lid on more problems. What about technological problems? What about terrorism? What about Third World missile capabilities? The decade of the 1990s hold surprises here too. Is there any chance of widening the focus? If not, that may be something else we wish we had done come the year 2000.

QADDAFI PLANS SECOND CHEMICAL PLANT — UNDERGROUND

With the help of European technology, Libya is ready to construct a second chemical plant — protected by surface-to-air missiles. Site will be at the Sabha Military Base and will be underground. This is in contrast to the first chemical plant in the desert city of Rabta, which suffered a fire of mysterious origin.

The new plant is in line with Third World development of modern weaponry. — Insight 6/11/90

UNIVERSITY OF SOUTH ALABAMA OPENS HAZMAT TRAINING CENTER

Founded in 1989 and in full swing in 1990 the Center for Emergency Response Training (C.E.R.T.) at the University of Alabama offers a HAZMAT curriculum.

On the upcoming calendar for instance is a course on "Managing the Hazardous Materials Incident" (fee: \$695), and another on "Hazmat Identification and Awareness" (fee: \$200).

The first course is scheduled for August 13-17 and the second for October 6th. They are also repeated at later dates.

For further information contact:

C.E.R.T.
USA — Brookley Center
245A Club Manor Drive
Mobile, AL 36615
(Phone: 205/431-6527)

NCCEM MEETS IN SAN ANTONIO OCTOBER 14-16

NCCEM (National Coordinating Council on Emergency Management) holds its annual conference at the Gunter Hotel in San Antonio, Texas October 14-16.

The program will include presentations on the Loma Prieta earthquake, oil spills, the Mexican emergency program and other key issues.

For further information contact: NCCEM, 7297 Lee Highway (Unit N), Falls Church, VA 22042 (Phone: 703/533-7672).

1990 ICDO CONFERENCE: BAGHDAD — NOVEMBER 10-12

Baghdad, Iraq is the site selected for the International Civil Defense Organization's 10th World Civil Defense Conference November 10-12. Special activities will extend before and beyond.

The theme of the conference is "Civil Defense and Development." Focus will be on planning from the national and international levels.

For further information contact the International Civil Defense Organization, 10-12 chemin de Surville, 1213 Petit-Lancy/Geneve, Switzerland.

AMERICANS ON DEFENSE CUTS: NO!!!

Howard Phillips in his *Issues and Strategy Bulletin* reports that in a *New York Times* poll 61% of Americans said "NO" to defense cuts. It should be pointed out that Dr. Jiri Nehnevajsa's polls on civil defense have shown that over 75% of Americans favor homeland protection.

Phillips points out also that in the same poll 59% said "NO" to aid to eastern Europe, pointing up the distrust and doubts of Americans insofar as an eastern Europe political rollover is concerned.

"This," says Phillips, "is further evidence for the argument that,

instead of making preemptive concessions to the anti-national security lobby, President Bush should be rallying the American people to maintain an adequate national defense..."

MOST STRESSED WORKERS? ... MORE CANDIDATES IN LINE

New Jersey's Bureau of Fire Safety Newsletter reprints the following table:

AMERICA'S MOST STRESSED WORKERS

According to the American Heart Association, the following is a list of the most stressed workers in America, in order of stress level.

1. FIREFIGHTERS
2. Race Car Drivers
3. Astronauts
4. Surgeons
5. NFL Players
6. Police Officers
7. Osteopaths
8. State Police Officers
9. Air Traffic Controllers
10. Mayors
11. Jockeys
12. Public Relations Workers
13. Photojournalists
14. Advertising Executives
15. NCAA Basketball Coaches
16. Real Estate Agents
17. Commercial Fishermen
18. Members of Congress
19. Commercial Pilots
20. Stockbrokers
21. Taxi Drivers
22. Reporters
23. Architects
24. Loggers
25. Lawyers

While no one would quarrel about the No. 1 selection, other candidates for inclusion in the first ten might include EMTs, teachers, bus drivers, smugglers, double agents, cashiers and maybe a few others. Even mothers.

"ANGEL" AWARD GOES TO HIGH FRONTIER'S "ONE INCOMING" FILM

The coveted Angel Award went this year to several recipients. One was to *One Incoming*, the High Frontier film that dramatically portrays the results of the accidental

launch of a nuclear missile and the devastating impact of its ten warheads on the eastern coast of the United States.

Other film recipients: *The Little Mermaid*, *Driving Miss Daisy* and *The Cosby Show*.

The *Journal of Civil Defense* reviewed *One Incoming* in its December 1989 issue. The review's final paragraph had this to say:

The message of *One Incoming* is simply that the United States in order to survive as a nation and in order to save its population from wholesale slaughter, must demand that our government act responsibly, and provide now known effective protection measures.

One Incoming may be ordered from High Frontier (see ad, page 31).

Note: High Frontier will present a symposium in conjunction with the TACDA/DDP Seminar on August 10th. See notice on page 4.

HUNTLEY REPORTS ON STATE DEPARTMENT BRIEFING

Dr. Henry C. Huntley on May 23rd, just prior to the Bush-Gorbachev summit, covered a State Department briefing by State Department representatives Jeffrey Starr (negotiator for START) and Dr. Sherman Garnett (negotiator on conventional arms with NATO).

Dr. Huntley reports on their briefing:

Negotiating with the Russians today is much more meaningful without the polemics and ideology of a few years back. The concept of START is to improve strategic stability and to reduce the incentives for a first strike. One of the essentials is to establish adequate communications so that both sides will not be surprised by new developments.

In the reduction of missiles, the primary concern is with ICBMs because of the short 30-minute time frame from launch to impact and the lack of recall. . . .

With respect to space defenses against missiles it is hoped to have in place mechanisms and agreements for each side in the next two years. . . .

In summary, it would appear that much has been accomplished. However, there are still major sticking points in the verification before we can hope to see ICBMs wither away and all troops out of Eastern Europe. It is also true that a major upheaval in the Soviet Union could cloud this entire picture.

JOURNAL ARTICLES APPEAR IN SWITZERLAND'S ZIVILSCHUTZ

Three *Journal of Civil Defense* articles, translated into German, appeared recently in the Swiss civil defense magazine *Zivilschutz*.

The March 1990 issue of *Zivilschutz* carried a translation of the *Journal's* October 1989 article "Denmark: A Leader in Civil Defense" by Dr. Reed H. Blake and Dr. John R. Christiansen of Brigham Young University.

The same issue printed a translation of Dr. Leon Goure's report on the upgrading of civil defense education in Soviet schools.

In the April 1990 issue of *Zivilschutz* the translation of another Blake-Christiansen article, "Sweden's Civil Defense: A Vital Activity," was featured in the "foreign" section of the magazine.

Translations were made by Dennis Wedlake, formerly on the staff of the Swiss Office of Civil Defense, now leading an active retirement in the Swiss town of Wabern.

METTAG CONTINUES TO GROW

METTAG (Medical Emergency Triage Tag), processed and marketed by the *Journal of Civil Defense*, continues to expand its coverage.

"The feed-back we get," says METTAG marketing manager Brenda Reynolds, "is that METTAG is the quality tag that does the triage tag job when the chips are down. It's not the cheapest. It's the *best!* For 30 or 40 cents the emergency medic has what he or she needs: a tag that is clear and weather resistant. A tag that uses international symbols that are instantly understood irrespective of language background or literacy level. A tag that has its own serial number on the tag and on each tear-off so that it can be used even when identification of a victim is not known. Easy to write on with pen or pencil. In four clear-cut colors. A lot more. No wonder it keeps growing in popularity. The saying 'When lives count, count on METTAG' says it all. Contact us for free catalog and sample." (METTAG, P.O. Box 910, Starke, FL 32091 — phone: 904-964-5397; FAX 904-964-9641.)

REVIEWS

YAMAMOTO — THE MAN WHO PLANNED PEARL HARBOR by Edwin P. Hoyt. McGraw-Hill Publishing Co., New York, N.Y. Contains index and 16 pages of black and white photos. 271 pages, 1990, price \$19.95. ISBN 0-07-030626-5.

— Reviewed by Winifred Strider.

Drawing on personal interviews, statistical reports, diaries, and research from previous works, the well-known military historian and journalist Edwin P. Hoyt draws a vivid portrait of the Japanese naval genius and war hero Isoroku Yamamoto, a career naval officer who pioneered the field of naval aviation.

In the summer of 1940, the militant faction of the Army, under the leadership of General Hideki Tojo, was pushing Japan toward a political alliance with Germany and Italy which the faction said was essential to the well-being of Japan. Arguing that such a treaty would inevitably lead to war with Great Britain and the United States, a suicidal decision, Yamamoto opposed the Tripartite Treaty. Failing in his efforts to dissuade the Navy from supporting the Treaty, he resigned himself to planning a war he genuinely believed Japan could not win.

Taking note from the career of his personal hero, Admiral Heihachiro Togo, who had defeated the Russians in a surprise naval attack in 1904, he devised a plan which he determined was Japan's only hope for victory. To guarantee absolute secrecy, he requested a new communications code; secondly, he demanded an immediate step-up of the Navy's modernization program, focusing on enormous increases in aircraft which would be essential in the vast simultaneous operations at Hawaii, Malaya, the Philippines, Guam, Wake Island, Borneo, and Java. A deadline of October 10th was set for making the decision: war or no war. A huge preemptive attack which would knock out the U.S. Pacific Fleet's ability to fight for a year could give the Japanese Army freedom of movement in the South Pacific as far as Australia and might persuade the Americans to make peace in a hurry. Thus was conceived the plan for the infamous sneak attack on Pearl Harbor.

By skillfully weaving together

documentary and personal reports, the author has humanized Yamamoto, the potent force behind the war in the Pacific, the "dove" who became a "hawk". This is a book to be enjoyed by those who served in the Pacific, naval history students, as well as by general readers.

CITIES AND DISASTERS: NORTH AMERICAN STUDIES IN EMERGENCY MANAGEMENT, edited by Richard T. Sylves and William L. Waugh, Jr. Published by Charles C. Thomas, 2600 So. First St., Springfield, IL. 62794-9265. 1990, 237pp., plus bibliography and index. Price \$48.75.

— Reviewed by James M. Ridgway, Ph.D.

This book is primarily a text for college courses in disaster policy and emergency management. It is, additionally, an excellent book for libraries and for the personal collection of people now working in these areas of public affairs. The book was motivated by the May-June, 1984 workshop on emergency management sponsored by FEMA's Senior Executive Policy Center, Emmitsburg, MD and the National Association of Schools of Public Affairs and Administration.

Fifteen writers, mostly professors, contributed to the book. The editors have done a fine job of condensing and organizing the work. While motivated in 1984, the writers have done a lot of surveying of public officials and analyzing of disaster cases since then. The chapters start with a description of the survey, or cases, present the findings, draw conclusions, and note sources. For people who "read as they run," the introduction gives a good summary of the whole book. However, a reader who stops with the introduction will miss a lot of "good stuff."

Working from the premise that most disasters are "local," 80% of the book is on local problems. Frances E. Winslow's chapter titled "The Role of the Emergency Services Coordinator: It Starts When the Emergency Ends" is a detailed exposition on how the job of the local coordinator has expanded. The chapter titled "The Big Apple and Disaster Planning: How New York City Manages Major Emer-

gencies" by Sylves and Thomas J. Pavlak will make coordinators in smaller cities happy with the problems they have.

The book has an international cast in that Joseph Scanlon has a chapter on the role of Canadian mayors in emergency planning. Chapter 5 discusses how the problem of acid rain has created "extra-federalism" as failure of central governments to act has prompted across the border action by affected Provinces and States. The Gander plane crash is covered in detail in Chapter 6. The response there is compared to the response to a crash in San Diego.

Discussion of U.S. federal programs such as major disaster declarations and the national flood insurance program is less profound. Waugh's chapter on "Emergency Management and State and Local Government Capacity" has some significant points.

In regard to the Integrated Emergency Management System (IEMS) Waugh writes, "The model raises questions concerning the administrative system required to coordinate and support such a program. It would necessarily have to be a relatively sophisticated and well-financed program and it is uncertain whether states and communities are up to the task. . . ."

Further on he writes, "... For American civilian emergency management programs, the 1980s has been a decade of budget reduction. Some FEMA military-related programs, as in civil defense against enemy attack, benefited from the nation's huge across-the-board increases in defense spending. But, unfortunately, this only encouraged FEMA to borrow back into its legendary mission of civil defense, at the expense of other types of disaster and emergency management programs."

Constant readers of this journal will find this quotation amazing. They might even think the professor's sources have filled his mind with dove feathers. No cornucopia of funds have come to FEMA's civil defense programs in the 1980s. To the contrary, civil defense as a national program to protect the public has sunk into a murky "surge."

This brings us to the only weakness in an otherwise scholarly book. There

is no chapter on civil defense. A textbook for students should be comprehensive. While social science research on disasters, and studies on management and administrative measures to improve coordination in meeting disasters are significant, all of these deal with a set world with assistance available from "outside." Students, future leaders and emergency planners and operators, should be exposed to the "unthinkable" — protracted jurisdiction isolation sans communications, energy, and "outside" supplies or help. Judgment and comment need to be made on the applicability of current, accepted disaster research findings to situations of greater scope and severity.

DEMOCRACY IN DANGER?

Well, yes. One of America's foremost patriotic organizations, America's Future, is dedicated to dealing with that danger. It is located at 514 Main St., New Rochelle, N.Y. 10801, and it miraculously markets patriotic pamphlets for a pittance. They address democracy's ills and call for a reawakening of America and Americans to the concepts of the Founding Fathers and the traditions of America's pioneer heritage. They constitute a dose of convincing common sense in today's precipitous slide into dependence on nursemaid government.

America's Future was founded in 1946. Its pamphlets include:

American Freedom — The Next 200 Years, by Allen C. Brownfeld

The Art of Choosing a College, by Russell Kirk

Castro's Cuba: Soviet Bastion in the Americas, by Philip C. Clarke

Communism — A Plan for World Conquest, by Philip C. Clarke

Defending America: "Nuclear Freeze" or "Assured Survival?", by Philip C. Clarke

Drugs, Demons & Disaster — Can We Save Our Kids?, by Philip and Caroline Clarke

Free Enterprise: The Road to Prosperity, by Clarence B. Carson

The Lessons of Vietnam, 1975-1985, by Philip C. Clarke

The Nuclear Option: A Question of Survival, by Philip C. Clarke

South Africa's Importance to the Free World: An Untold Story, by Allen C. Brownfeld

The Victims of "Dick and Jane," by Samuel Blumenfeld

Why Our Public Schools are Failing, by Solveig Eggerz

Any three of these 3-in. x 8-in. pamphlets for \$1. Quantity discounts and free offers to schools.

The first of the above pamphlets, *American Freedom — The Next 200 Years* (24 pages) serves us here as an example. The following excerpts give an idea of America's Future's red-white-and-blue philosophy:

John Adams expressed the view that, "Whoever would found a state and make proper laws for the government of it must presume that all men are bad by nature." . . .

Adams attempted to learn something from the pages of history: "We may appeal to every page of history we have hitherto turned over, for proofs irrefragable, that the people, when they have been unchecked, have been as unjust, tyrannical, brutal, barbarous and cruel as any king or senate possessed of uncontrollable power." . . .

We must consider the possibility that too many Americans want other things more than they want freedom and that they are no longer "jealous" of freedom, in the way men such as Samuel Adams argued they would have to be if it were to be maintained. . . .

Voters say they are against big government, and oppose inflation and deficit spending, but when it comes to their own particular share, they act in a different manner entirely. Former Minnesota Congressman Walter Judd recalls that a Republican businessman from his district "who normally decried deficit spending berated me for voting against a bill which would have brought several million federal dollars into our city. My answer was, 'Where do you think federal funds for Minneapolis come from? People in St. Paul?' . . . My years in public life have taught me that politicians and citizens alike invariably claim that government spending should be restrained — except where the restraints cut off federal dollars flowing into their cities, their businesses, or their pocket-books." . . .

This point was made nearly 200 years ago by the British historian Alexander Tytler: "A democracy cannot exist as a permanent form of government. It can only exist until the voters discover they can vote themselves largess out of the public treasury. From

that moment on, the majority always votes for the candidates promising the most benefits from the public treasury — with the result that democracy collapses over a loose fiscal policy, always to be followed by a dictatorship." . . .

If freedom is to be preserved Americans must rediscover the values upon which it rests — self-reliance, individualism, and a jealous preservation of the natural rights which government does not bestow but which (in a free system) it should respect and with which it should not interfere. If we insist upon asking government to do things *for us*, we will soon learn that it is instead, doing things *to us*.

In large measure, we can make the decisions to maintain freedom or lose it on the basis of the demands we make upon our elected officials. If we demand that they leave us alone, freedom will endure. If, on the other hand, we demand that they give us "something for nothing," we will quickly learn that we pay for that "something" with our own freedom. . . .

Too many have believed that, somehow, "democracy" was an end in itself. Democracy, however, is a process and not a value. It only means that the government is selected by the people, rather than through heredity or by some other means. If the people have good values, democracy will produce a good and virtuous society. If their values degenerate, however, so will all other aspects of society. . . .

If the United States is to avoid the decline which overtook Rome, it will require a conscious effort. If history simply takes its course, the future of freedom is not bright.

We are faced, then, with our question: Can freedom survive into the future? Our answer must be: Yes, it *can*, but it will not unless we work very hard at seeing to it that the conditions and prerequisites for freedom continue to exist.

The pamphlet ends with the statement that, "fortunately for us, the dream of American democracy is still very much alive."

For further information write America's Future.

NOTE: One of the authors of the above-listed pamphlets, Philip C. Clarke, will appear at the TACDA/DDP Seminar as a featured speaker on August 12th. His topic: "Terrorism's Proliferating Missiles: Can We Stop Them?"

Outlawing all atomic weapons could be a magnificent gesture. However, it should be remembered that Gettysburg had a local ordinance forbidding the discharge of firearms.

—Homer D. King

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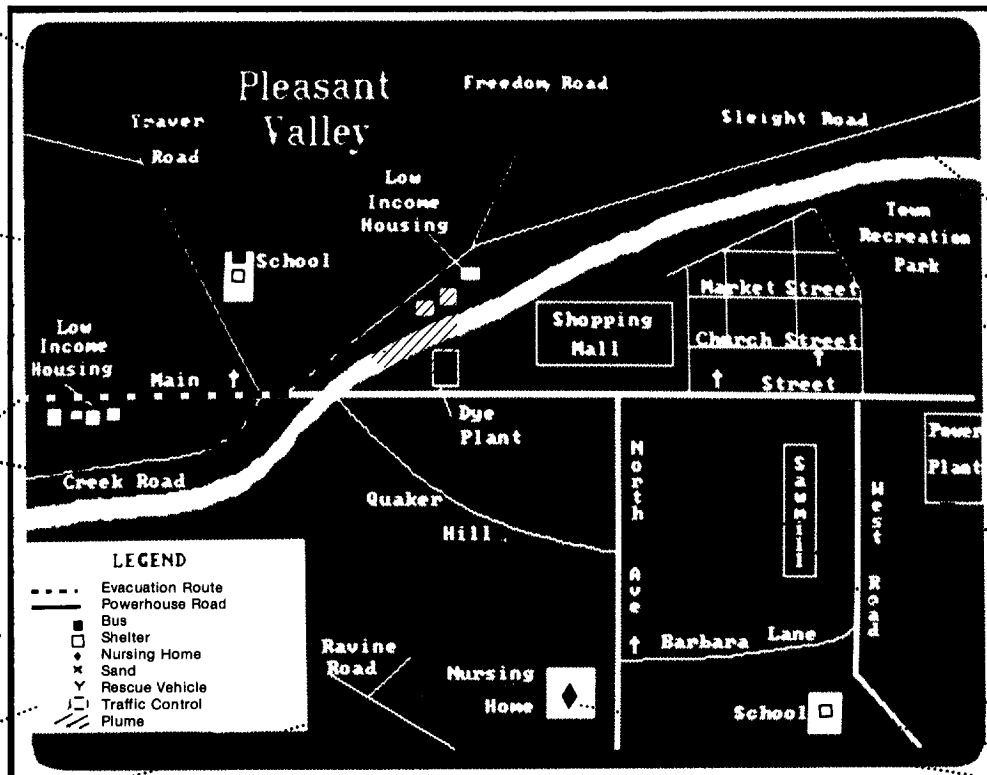
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TOO GOOD TO FILE

SDI AND THE THIRD WORLD

SDI advocates rightly say that now the world is bi-polar, but in the near future it will become multi-polar. This will affect the military sphere. At the present time eight countries may go nuclear any time, whereas by the end of the century 20 countries will be able to overstep the "nuclear threshold." They will also have missile technologies. As a result the risk of an intentional and accidental nuclear conflict will increase dramatically.

- from an article by Major General V. Belous, M.S., The SDI Syndrome, released by Novosti Press Agency through the Information Department of the Soviet Embassy, Washington, D.C.

SOVIET SDI?

On September 23, 1989, I attended a conference that was addressed by Senator Malcolm Wallop, R-Wyo., in which the senator described the ominous and growing military gap between America and the Soviet Union. . . .

Senator Wallop quoted from a recent report by the highly respected Committee on the Present Danger (CPD), which points out that the U.S. is worse off entering the 1990s than it was in the 1980s. . . .

"The Soviets also carry out extensive strategic defense programs, both in research and development and in production and deployment, that overshadow the U.S. Strategic Defense Initiative (SDI) program. And they have developed an extensive network of hardened, deep underground shelters that is still being expanded (and which probably consumes more than 2 percent of Soviet gross national product). Further, the Soviet investment in space — an aspect of rapidly expanding importance to the military balance — is truly massive, with more than 90 percent of all Soviet launches of a military nature and embracing the world's only orbiting permanent space station."

- from a report by Donald McAlvany in the April 1990 issue of *Justice Times*, P.O. Box 479, American Fork, UT 84003.

ROBINSON SHELTER TO GO TO PENNSYLVANIA FAIR

Half a million Americans will have the opportunity to see a mobile all-hazards shelter display at the Allentown Fair, one of Pennsylvania's largest regional fairs, from August 28 through September 3. The steel shelter, when properly installed, would provide protection against 200 psi of blast overpressure, a radiation protection factor of 10,000, and 2,000 hours of protection against chemical and biological agents. . . .

The shelter was built by the Oregon Institute of Science and Medicine for the Pennsylvania department of civil defense and was displayed at last year's annual meeting of Doctors for Disaster Preparedness.

Dr. Orient will be in charge of the display. . . .

- from the *DDP Arizona Newsletter*, May 1990 (1601 N. Tucson Blvd., Suite 9, Tucson, AZ 85716).

ON BEING NAIVE

There are a large number of unanswered questions arising from the events in Europe. Are we seeing the final collapse of totalitarian communism in the Soviet Union and its satellites? Is the Cold War over; have we won; has Western liberal democracy been established as the final form of human government? Should NATO, the bulwark of European security for forty years be abandoned as a relic of the Cold War? Can we now scrap our Defense Department? Is the rampart euphoria that we see on television and in the press justified by the facts, or are we relying on Gorbachev's rhetoric and our own wishful thinking? . . .

We could wake up after Perestroika and find ourselves with a bigger military problem than we have ever faced before in our history. Let's not make the same mistake we made at the end of World War II, let's not grasp defeat from the jaws of victory.

- from "President's Message" (Howard L. Christensen) in the Winter 1990 issue of *The AFA Briefing*, General Doolittle — L.A. Area Chapter 121.

"FIVE DANGEROUS WORDS"

"One of the most amazing phenomena of these times," began the *America's Future* editorial, "is the manner in which five dangerous words, repeated over and over again, seem to have lulled a large part of our population into an equally dangerous complacency. The five words are 'the Cold War is over.'"

That commentary, written by *America's Future* editor Rosalie Gordon, appeared in the August, 1973 issue of this newsletter. It went on to note how then Soviet Premier Leonid Brezhnev had reiterated the phrase, "the Cold War is over," on visits to Western nations, including the United States. Said Miss Gordon: "In this period of so-called détente and cooperation with Red Russia, it has been almost impossible to read a column or editorial or listen to a commentary from any number of liberal pundits without those words occurring in one context or another."

- From May 1990 issue of *America's Future* (514 Main St., New Rochelle, N.Y. 10801).

IN ANY CASE: A STRONG DEFENSE

Bruce Herschensohn [prominent California news commentator and politician] addressing a group at Hillsdale College said last month in part: "Let me be very clear on this point: even if Mikhail Gorbachev lived up to our best expectations and were a model democrat, it doesn't change the fact that our nation requires a strong defense. There is no guarantee that Gorbachev will remain in power, nor is there any guarantee that the Soviet Union constitutes the *only* threat to our interests."

"The key question in U.S. foreign policy today is not, 'Who is the real Gorbachev?' It is, rather, 'How do we best protect our nation?' Answering this question is not technical or complex, as the experts would allege. . . . Remember Pearl Harbor. Support any friend, oppose any foe. These are policies which millions of Americans understand and support. It is time to act upon them again."

- From April 1990 issue of *Defense Education Committee Newsletter*, P.O. Box 328, Springfield, OR 97477.

THE MEANING OF PERESTROIKA

Perestroika is a word with many meanings. But if we are to choose from its many possible synonyms the key one which expresses its essence most accurately, then we can say thus: perestroika is a revolution. . . .

Perestroika means a resolute shift to scientific methods, an ability to provide a solid scientific basis for every new initiative. It means the combination of the achievements of the scientific and technological revolution with a planned economy.

. . . Those who hope that we shall move away from the socialist path will be greatly disappointed. Every part of our program of perestroika — and the program as a whole, for that matter — is fully based on the principle of more socialism and more democracy. —

We will proceed toward better socialism rather than away from it. We are saying this honestly, without trying to fool our own people or the world. Any hopes that we will begin to build a different, non-socialist society and go over to the other camp are unrealistic and futile. . . .

— from article excerpting passages from *Perestroika*, by Mikhail Gorbachev (in *Foundations of Liberty*, Vol. 2, 1990), published by East Moline Christian School, 900 46th Ave., East Moline, IL 61244.

CODEVILLA COMMENTS ON SDI

. . . We are seeing something of a replay of what happened in 1972. The U.S. possessed the technology for a state-of-the-art anti-missile system. The Soviet Union persuaded the U.S. not to use it by promising cuts in offensive forces, and then the Soviets went ahead and built precisely the defensive system that the U.S. was going to build. . . .

Today the heavy construction for a Soviet ground-based ABM [anti-ballistic missile] is well high complete. . . . *Indeed, Mikhail Gorbachev's number-one military priority has been the anti-missile and anti-aircraft defense service, the PVO (Protivovozdushnoy Oborony).* . . .

There is nothing inevitable about our military predicament, deep though

it is. . . . The Soviets could not maintain themselves in a position to fight and win a war were the U.S. to do but a fraction of what it could do for itself. For example, while building an anti-missile defense would not solve all our problems, it would deprive the Soviet Union of the "top cover" for the rest of its military activities.

. . . Most important, our own physical safety would be, if not guaranteed, certainly much enhanced. . . .

— Dr. Angelo Codevilla, Hoover Institution Senior Research Fellow, in *The Konzak Report* (reprinted from *Remnant Review*, P.O. Box 18272, Denver, CO 80218).

NO MORE "BRAVE POLITICIANS"?

One liberal canard is that during the Reagan administration, the deficit accumulated to such heights because Reagan cut taxes and increased defense spending. Reagan urged and Congress cut tax rates, but thanks to growth in the economy, tax revenue increased. Check your *World Almanac*.

Unfortunately, however, Congress increased spending — not only on defense, which Reagan requested, but on social programs, including many that he sought to cut or eliminate. The growth in the federal budget outlays has been in social programs, not defense. For the past four consecutive fiscal years, defense spending has been reduced.

The point is not to defend the Reagan administration, which is now of interest only to historians, but to illustrate there is no rational reason to believe that giving the present Congress more of our money would result in a balanced budget. In most places, the same applies to legislatures, county and municipal governments.

Every dollar cut, however, comes out of people's pockets, and they react as if it were a molar coming out of their gums without benefit of anesthesia. Thus, it requires a brave politician to cut the budget. Brave politician is, these days, an extinct species. . . .

— Columnist Charles Reese in the *Orlando Sentinel*.

"I believe that defensive systems, which prevent attack, are not the cause of the arms race, but constitute a factor preventing the death of people. Some argue like this: What is cheaper, to have offensive weapons which can destroy towns and whole states or to have defensive weapons which can prevent this destruction? At present the theory is current somewhere that the system which is cheaper should be developed. Such so-called theoreticians argue as to the cost of killing a man — \$500,000 or \$100,000. Maybe an anti-missile system is more expensive than an offensive system, but it is designed not to kill people but to preserve human lives."

— Alexei N. Kosygin, Premier, USSR, (from the cover of the January-February 1972 issue of *The American Journal of Civil Defense — Survive*).

DEALING WITH "ROSE-COLORED EUPHORIA"

Today, we are subjected to the growing caterwaul of political milkmaids who dream of the budgetary bonanza they envision becoming available from a rapid dismantling of America's military forces in the face of recent events in the Soviet Union and Eastern Europe. In a euphoria that boggles rational thought, their common plea seems to be, "The threat is gone; let's declare peace, create a sizable 'peace dividend' from massive reductions in the defense budget and solve the funding quandary for a wide array of domestic programs."

When will we learn? Americans seem to have a penchant for forgetting the lessons of history. . . .

Our representatives and planners should be turning every reasonable stone to control the defense budget. However, the decisions should be based on the real threat to our nation's security and positive behavioral changes by our adversaries, not on rose-colored euphoria or wishful thinking about intentions. . . .

— from May 1990 editorial by Col. Charles D. Cooper, editor of *The Retired Officer Magazine*, 201 N. Washington St., Alexandria, VA 22314.

UPCOMING

- Jul 23-27 **ADVANCED WORKSHOP ON NUCLEAR EMERGENCY PLANNING**, Boston, MA. Provides personnel with current developments in the radiation emergency field. Topics include: Radiation standards, effects, protection, control and monitoring, more. Contact: See last Aug 20-24 listing below.
- Jul 23-Aug 3 **CHEMISTRY OF HAZARDOUS MATERIALS**, EMI, Emmitsburg, MD. Provides basic knowledge required to evaluate potential hazards. For emer. response personnel & mgmt. Contact: see box below.
- Aug 6-10 **WAGING NUCLEAR PEACE**, Emmitsburg, MD. Objective: examination of nuclear war and related issues from a balanced perspective. Contact: See box below.
- Aug 6-17 **MANAGEMENT OF EMERGENCY MEDICAL SERVICES**, Emmitsburg, MD. Addresses areas of concern for ongoing EMS operation. Contact: See box below.
- Aug 10-13 **THE AMERICAN CIVIL DEFENSE ASSOCIATION/DOCTORS FOR DISASTER PREPAREDNESS ANNUAL SEMINAR** — "What Price Survival?" — Northbrook, IL (Chicago suburb). Reg. fee \$169 before Aug. 1. See story pages 18-21. Open to public. Contact: TACDA, P.O. Box 1057, Starke, FL 32091 (904/964-5397).
- Aug 20-24 **CIVIL DEFENSE SYSTEMS, PROGRAMS & POLICIES**, EMI, Emmitsburg, MD. Course provides an understanding of the history, mission and current status of U.S. CD. Shows how nuclear attack preparedness enhances & supports natural & technological preparedness, plus more. Contact: See box below.
- Aug 20-24 **IN-PLACE FILTER TESTING WORKSHOP**, Boston, MA. Contact: See directly below.
- Aug 20-24 **OCCUPATIONAL & ENVIRONMENTAL RADIATION PROTECTION**, Boston, MA. Address basic practices for working with radiation. Topics: atomic structure & radioactivity, ionizing radiation, monitoring and more. Contact: Office of Cont. Ed., Dept. B, Harvard School of Public Health, 677 Huntington Ave., Boston, MA 02115 (617/432-1171) FAX (617/432-1969).
- Aug 20-31 **CHEMISTRY OF HAZARDOUS MATERIALS**, Emmitsburg, MD. Provides basic knowledge to evaluate potential hazards and behaviors of materials. Contact: See box below.
- Aug 24-26 **IDAHO STATEWIDE EMERGENCY MEDICAL CONFERENCE**, Boise Convention Center, Boise, ID. Contact: Linda Ady, Conf. Coord., Idaho EMS System, 450 W. State St., Boise, ID 83720 (208/334-5994).
- Aug 26-30 **56TH ANNUAL ASSOCIATED PUBLIC-SAFETY COMMUNICATIONS OFFICERS CONFERENCE**, Hynes Convention Center, Boston, MA. Educational seminars, presentations, panel discussions, exhibits, more. Contact: Bob Buttgen, APCO Conference, P.O. Box 669, New Smyrna Beach, FL 32170-0669 (904/427-3461).
- Sep 10-14 **DISASTER PLANNING**, San Luis Obispo, CA. Contact: California Specialized Training Institute, P.O. Box 8104, San Luis Obispo, CA 93403-8104 (805/549-3536).
- Sep 10-21 **FALLOUT SHELTER ANALYSIS**, EMI, Emmitsburg, MD. Course for architects and engineers who assess protective value of structures against fallout radiation. Topics: weapons effects, design, federal policies and programs, more. Contact: See box below.
- Sep 14-16 **INNOVATIONS IN THE 90's**, Indiana State Emergency Management Conference, Indiana Convention Center, Indianapolis, IN. Contact: Sherrie Crain, Expo Coord., State Emer. Mgmt. Agency, Rm. 315, State Office Bldg., Indianapolis, IN 46204 (317/232-3980).
- Sep 24-27 **INTERNATIONAL CONFERENCE FOR DISASTER MGMT.**, Emergency 90, Cairo, Egypt. Sponsored by the Arab Academy of Scientific Research & Technology, co-sponsors: UNDRO, ICDO, Red Cross & Red Crescent. Topics: Risk analysis, planning & mitigation, international cooperation, more. Fee \$200 US till 6/30/90, \$250 after. Contact: ASRT, Emergency 90, 101 Sasr El-Aini St., Cairo 11516, EGYPT (202/354-6532) FAX (202/356-2820) Telx (93069 ASRT UN).
- Sep 25-28 **1ST INTL. CONFERENCE ON BURNS & FIRE DISASTERS**, Palermo, Italy. Topics: Natural, man-made, industrial fires and disaster, conventional and nuclear war conflict, burn handling, search & rescue, more. 4 languages. Reg. fee: \$350 US non-members, \$300 MBC members, \$100 accompanying person by June 30th. Contact: Eurocongressi, Via Liberta 147, 90144 Palermo, ITALY, (91-346484/302655) FAX (91/341533).
- Oct 3-4 **FLORIDA EMS ADVISORY COUNCIL MEETING**, Marco Island, FL. Contact: Dennis Divens, FL HRS, 1317 Winewood Blvd., Tallahassee, FL 32399-0700 (904/487-1911).
- Oct 14-16 **NCCEM ANNUAL CONFERENCE & EXHIBITION**, The Gunther Hotel, San Antonio, TX. Topics: Loma Prieta, oil spill, Mexican emer. program, chemical plant case study, much more. Fee: \$160 before 9/15, \$165 after. Non-members add \$25 extra. Contact: NCCEM, 7297 Lee Highway, Suite N, Falls Church, VA 22042 (703/533-7672).
- Oct 15-19 **TERRORISM COURSE**, San Luis Obispo, CA. Overview and targets of terrorism, disinformation, terrorist groups/individuals, more. Contact: CSTI, P.O. Box 8104, San Luis Obispo, CA 93403-8104 (805/549-3551).
- Nov 10-12 **10TH WORLD CIVIL DEFENSE CONFERENCE**, Babylon Karada Hotel, Baghdad (Iraq). Theme: Civil Defense and Development, sponsored by the ICDO. Contact: Secretariat, O.I.P.C., 10-12 chemin de Surville, 1213 Petit-Lancy, Geneva, Switzerland (41 22 - 793.44.33) FAX (41 22 - 793.44.28) Telex (423.786 CH).
- Nov 13-16 **EXPOPROTECTION 90**, 13th International Exhibition of Security, Safety & Protection, Parc des Expositions of Paris-Le Bourget, FRANCE. Contact: Expoprotection, 8 rue de la Michodiere, 75002 Paris, France (1/47 42 4100) FAX (1/47 42 40 30) Telx (250 303).

Application to EMI is made by using General Admission Application Form (FEMA Form 75-5) which can be obtained from state or local emergency management offices. For more information contact: FEMA National Emergency Training Center, P.O. Box 70274, Washington, DC 20024.

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■ EDITORIAL

Why SDI?

The "exchange of views" on the Strategic Defense Initiative (SDI) between High Frontier's General Daniel O. Graham and Soviet spokesman Mr. Alexander V. Zhgutov takes on more meaning as the days go by and the event approaches. An editorial in *The Wall Street Journal* on June 13th opened in this fashion:

When Ronald Reagan promised to share strategic defense technology with the Soviet Union, the skeptics said he was crazy. Well, maybe the Soviets will once again prove that the Gipper was crazy like a fox.

According to the editorial, at the recent summit meeting in Washington the Soviets eased their demand that SDI be scrapped. A joint U.S.-Soviet statement, in addition to calling for reductions in offensive weapons, stipulated the "development of new technologies." Behind this is the conviction by some Soviet strategists that now the Soviet Union badly needs its own SDI (in addition to its in-place ground-based ABM — and its in-place civil defense).

Why? It seems that there are some new kids on the block — Third World nations — that are well on their way toward getting into the modern arms game with chemical, biological and nuclear arms (see page 10). Plus the missiles to send them on their way.

One little glitch in the Third World programs, however, is that their missiles won't be "intercontinental." Not for a while at least. In other words, Washington is beyond their range.

Moscow is not.

That's the gist of *The Wall Street Journal* editorial. And it's the thinking of a good many strategic analysts.

One little glitch . . . their missiles won't be "intercontinental"

The idea of building up a technology to save lives (SDI) instead of one to destroy lives (a missile program) is not all that distasteful in some quarters.

□

This brings up another point: civil defense is also a factor in saving lives. A big one. A short article on the back cover of the *Journal's* December 1986 issue — citing a study by Dr. Conrad V. Chester of Oak Ridge National Laboratory — illustrates this. The estimate of fatalities shows that in an 8,000-megaton attack on the United States, and an efficiency of 90% in intercepting incoming missiles, a functional SDI would cut the expected fatalities by over half. Add a nationwide 50psi shelter program to the SDI effort and the fatality estimate plunges to one-tenth of what it is without the shelters, or around 5 million. If you base the estimate on a 99.9% SDI effectiveness you of course wind up with still fewer fatalities: around a million and a half. And add civil defense to this effort and your fatality figures plunge to around 15,000!

That's 0.006%. Not bad. Hardly worth a war. (Bear in mind; the USSR already has a civil defense program. A good one. Very good.)

The seminar "exchange of views" should plow some new ground. (See pages 18-21 for seminar information.) □

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