November 1988 (vol. 5, #1)

1601 N. Tucson Blvd. Suite 9, Tucson, AZ 85716

c 1988 J Orient

INFORMATION GAP ASSAILED AT DDP/TACDA MEETING

Edward Teller, a survivor of two world wars that divided his country and killed half his friends and relatives, said that a realistic means of keeping the peace is essential. But how can Americans be realistic when their government has not told them that the Soviet Union has spent more than \$100 billion to assure that the Communist Party would survive a nuclear war?

Teller addressed the annual meeting of Doctors for Disaster Preparedness and The American Civil Defense Association, held in Salt Lake City October 21-24.

Teller was optimistic about the technical possibilities for an American defense. Because of miniaturization and improvements in sensors, the cost estimate for the first phase of a kinetic energy system has been reduced from \$115 billion to \$69 billion. This good news has received far less attention from the media than the trillion dollar cost disinformation.

Although Teller was initially doubtful about excluding the use of nuclear explosives (the x-ray laser), he has concluded that the President was right to choose the nonnuclear approach. The x-ray laser, Teller said, was a novel method that conceivably could become very effective. However, it was recognized from the beginning that it would require a large investment in engineering. The program received little funding, and little progress was made.

The cost of deploying SDI, according to veteran journalist Philip Clarke, would be the cost of one tank full of gasoline for every American.

General Daniel O. Graham, chairman of the Coalition for the Strategic Defense Initiative, asked all supporters to write to President Reagan (The White House, Washington, DC 20050), urging him to begin deployment of Phase I of SDI before he leaves office, choosing defense over the Midgetman program. The former would make a historic change in strategy from revenge to defense; the latter might make Mutual Assured Destruction work a little longer. At some point, the ABM Treaty would have to be modified or abrogated, General Graham noted. Unilateral adherence in the face of Soviet violations makes no sense.

Arizona Calendar

The annual Pearl Harbor Day meeting of Arizona DDP is scheduled for 7:30 p.m., Wednesday, December 7, at the Wilmot branch of the Tucson Public Library. The program will be Part I of the Nuclear War Survival Skills videotape, featuring Cresson Kearny, entitled Expedient Blast and Radiation Shelters.

Grant Peterson, new director of the Office of Civil Defense, Federal Emergency Management Agency, said that civil defense is at a crossroads. The program has been crippled by lack of funds. Plans to build emergency operating centers have not been carried out. The emergency broadcasting system has continued to deteriorate, and is neither reliable nor survivable. With \$7.9 million allocated for 1989, FEMA can begin to rebuild the system. The emergency public information budget has been increased from \$0 to \$2 million. One purpose is to replenish the four-year supply of materials that were exhausted in two months after the Soviet invasion of Afghanistan. A new FEMA pamphlet "A Comparison of Soviet and US Civil Defense Programs" shows the differences between Soviet commitment and US neglect. (A copy may be ordered from FEMA, Washington, DC 20472.)

Norwegian and Danish civil defense programs were described by John Christiansen and Reed Blake. Shelters are a first priority of new construction programs and serve the dual purpose of providing sports facilities.

Conrad Chester of Oak Ridge National Laboratory presented a shelter workshop. Cost estimates ranged from \$0 to \$10 or \$25 per person (1960 dollars) for fallout shelters in new buildings to \$1000 per space for Swiss-style blast shelters in new construction. Tunneling, Chinese style, under cities like Manhattan would cost about \$2000 to \$5000 per space (1980 dollars). Chester noted that although evacuation has been touted because of apparent low cost, the economic losses incurred by an evacuation could equal the cost of a shelter system. He also agreed with Herman Kahn that evacuation is crisis-destabilizing.

In his banquet address, Petr Beckmann assailed alarmist media reports about the ozone hole and the greenhouse effect, which generate hysterical demands to fetter American industry. He noted that the world production of carbon dioxide from burning fossil fuels was only one-tenth the amount expelled by the world population of termites, and called for the establishment of CATF (Citizens Against Termite Flatulence).

Lenin's Truth

"We must be able to agree to any sacrifice, and if need be to resort to all sorts of tricks, slyness, illegal methods, evasion, concealment of the truth or prevarication."

Lenin, 1920, Left-wing Communism, An Infantile Disorder quoted in Peace and the Management of Fear by Bruce Wallace

Anthrax in Sverdlovsk

A 1979 anthrax outbreak near the Microbiology and Virology Institute, a military installation near Sverdlovsk City, has been adduced as evidence of Soviet BW activities. Until recently, the Soviets have published very little information about the outbreak, simply stating that it was due to contaminated meat purchased "from private sellers at makeshift markets," who did not comply with veterinary regulations.

Encouraged by glasnost, Matthew Meselson requested and received an opportunity for scientific discussions with Soviet physicians who had been involved in the response to the outbreak. The interviews satisfied Meselson that the Soviets were not violating the biological weapons convention (thus vindicating his role in its adoption). His account states that there were 96 cases and 64 deaths (FAS Public Interest Report, Sept. 1988), rather than 1000 or more as estimated by the Defense Intelligence Agency. The Soviets simply denied US reports of inhalation-caused illness.

One of the officials who met with Meselson, former deputy minister of health Pyotr Burgasov, denied any decontamination efforts that involved aerial spraying (*Nature* 1988;332:674). However, in response to US charges that only an airborne agent would have required the cleanup techniques that were used, Nikolai Antonov of the ministry of health had previously stated that it had been necessary to decontaminate the area around Sverdlovsk because "undisciplined workers" had thrown contaminated meat into open garbage containers (*Science* 1986;234:143-144). The new Soviet statements have not persuaded US officials.

In attempting to explain the Soviet delay in providing details, science writer Eliot Marshall suggests the "embarrassment factor" over the socialist negligence that permitted the worst outbreak of human anthrax on record (Science 1988;240:383-385).

Mutual Assured Vulnerability and BW

Public officials have proudly proclaimed the extinction of the smallpox virus, a triumph sometimes cited by antinuclear activists as reason to hope for the eradication of nuclear weapons also. The virus's chance of survival in corpses, even those buried in the permafrost, is felt to be remote. However, samples lurking in laboratory deep freezers still constitute a risk, as a 1978 outbreak in a Birmingham laboratory illustrated. After years of effort by the WHO to persuade nations to give up their stocks, only two known reserves remain, in maximum security freezers in Atlanta and Moscow.

Although not an ideal biological weapon because of its slow spread, there is always a chance that someday the virus might be used to threaten an unvaccinated world (*Nature* 1988;332:755). Against this eventuality, the CDC maintains 19 million doses of vaccine in storage, and there are 200 to 300 million doses stored in Geneva and Lausanne.

The American military continues to vaccinate its troops. The Soviets stopped giving smallpox vaccine in 1979 but began again in 1984. The American Public Health Association has suggested that the two superpowers reduce the risk of biological war and reassure the world of the final end to the fear of smallpox by negotiating the end to vaccinations for troops (AJPH 1986;76:1229-1231.)

Uses of Biotechnology

While US biotechnology companies struggle due to regulatory and patent problems -- at least 24 filed for bankruptcy protection last year -- the Soviets have made the development of a biotechnological industry a top priority.

Soviet interest dates back to World War II. During the siege of Leningrad, single-cell protein (SCP) derived from wood shavings was used as food. The Soviet SCP industry is now the largest in the world, producing over a million tons of livestock fodder annually. It is estimated that one ton of SCP substitutes for about six tons of feed grain that would otherwise have to be imported.

One area of promising research is the combined use of monoclonal antibodies and toxins, e.g. ricin. This might lead to more effective cancer therapy (Defense Intelligence Agency, op. cit.) The Soviets are conducting extensive work on ricin, among other toxins (Wall St J 4/27/84).

The same technology can be used to increase food production or cure disease, or to develop potent toxins or more virulent microorganisms against which current US vaccines and antibiotics are ineffective.

Alarm bells are sounding in the US -- about the environmental impact of bacteria that improve the frost resistance of strawberry plants or increase the yield of soybeans or protect corn plants from insects (Wall St J 1/30/89).

Stalin's Memorial

A mass movement called "Memorial" has arisen in response to Gorbachev's promise to reveal the full extent of the "lawlessness and crime" of the Stalin regime. Most of the January 1989 issue of Moskau News, a Soviet newspaper published in eight languages and 140 countries, was devoted to the "decades of fear." Soviet estimates of the casualties exceed those of Western observers. Even before 1937, the year identified by Western authors as the beginning of the Great Terror, at least 17 to 18 million persons had suffered Stalinist repression; no fewer than 10 million lost their lives. About 10 million peasants were uprooted in order to collectivize agriculture, as Stalin admitted to Churchill, and about 6 million starved to death in Stalin's deliberately engineered famine. In total, Stalinism claimed far more Soviet victims than World War II.

The Moskau News (German edition) features an interview with one of the executioners, who told of loading the condemned into a vehicle, unloading them before a mass grave, gunning them down, then returning to the guardroom for free vodka. [See also *The Australian* 1/12/89.]

"Was there a doctor in attendance?"

"What for? We shot the ones that still twitched...."

"Did you sleep well? You had just killed human beings. Did you regret it?"

"...I thought no more about it. I slept well, and during the daytime we could go for walks. It was beautiful country. Of course, it was boring. No women...."

"So, you followed orders and shot them. But later you learned that you had killed innocent men and women. Didn't your conscience bother you afterward?"

"No....You know, I've become very soft-hearted; just to see an old man suffer makes me cry. But I don't feel sorry for them. Not at all. It's as if it never happened."