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New Nerve Gas Plan Leaves Tests and Storage Undecided

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WASHINGTON, Aug. 11 — The expected decision to end a 16-year moratorium and resume military production of chemical weapons is being celebrated by the Pentagon as the end of a long campaign.

But according to a wide range of experts on both sides of the issue, the debate left unresolved a number of divisive questions about the future of the United States' involvement with these weapons, including where they will be deployed, how they will be tested and whether the planned weapons can meet the Pentagon's strategic needs.

Array of Unresolved Issues

A House-Senate conference has authorized $155 million to begin production of a new chemical bomb and artillery shell, billed as a safer replacement for aging stockpiles of nerve gas. The nerve gas program, part of a bill authorizing $302.5 billion in military programs for the fiscal year beginning Oct. 1, has been approved by the Senate and is awaiting a final House vote in September.

Interviews with Pentagon officials, members of Congress, scientists and others involved in the chemical weapons debate raise the following points that seem to assure that this year's soil. Pentagon officials say they have now decided to deploy them only in the United States or on ships, which critics vote will not end the battle over chemical warfare:

¶Although most experts say Europe is the most likely scene for a battle with chemical weapons, European allies have balked at even discussing the deployment of the new weapons on their say would be too far from battlefields.

¶Many scientists and intelligence officials believe the United States cannot be fully confident that its new weapons will work without open-air testing, banned in this country since 1969. Yet politicians say there would be emphatic public resistance to resuming tests.

¶A Presidential commission that endorsed the production of new nerve gases in June is among those who say the Army chemical weapons program may be obsolete before it is completed. They fault the Army for not designing long-range, unmanned weapons to deliver chemical agents behind enemy lines without risking the lives of pilots.

¶Talks aimed at an international treaty banning chemical weapons remain stymied in Geneva, and there is little optimism among Reagan Administration officials or outside experts that the impasse can be resolved, because such a treaty would be extremely difficult to enforce.

Possible Chemical Arms Race

The Pentagon promoted its new chemical weapons program in part on the ground that a sign of American determination would induce the Soviet Union to bargain more seriously toward a ban.

But talks aimed at controlling chemical weapons have gone on without success since 1972, and American intelligence officials say the Soviet Union is perfecting more advanced nerve gases. The Presidential commission on chemical warfare said in June that prospects of a ban are "dim" because the facilities are easy to disguise.

To some observers, that raises the prospect of a continuing chemical arms race.

Richard E. Cavazos, a retired four-star Army general who served on President Reagan's Chemical Warfare Review Commission, which endorsed the new chemical program in June, said he was often exasperated by the reluctance of Pentagon officials and critics to look beyond the immediate proposal.

Although he strongly supports the nerve gas program, he said in an interview: "The larger issues have been lost. Neither side wants to address them. They didn't want to lift that lid."

One of the most politically volatile issues is whether to deploy the new weapons in Europe, where the political sensitivities of allies are still tender from fights over deploying medium-range missiles and neutron weapons.

The House, arguing that a superpower encounter would most likely begin in Europe, voted in June to require that the North Atlantic Treaty Organization formally agree to store the new weapons on its soil before production could begin.

After strong objections from the Pentagon and State Department that this would cause political turmoil in Europe, the House-Senate conference dropped the requirement. But the bill would require the President to consult with allies and prepare a detailed deployment plan. The measure also expresses the nonbinding "sense of Congress" that the new weapons will replace existing stockpiles, including one in West Germany.

Pentagon officials now insist they have no plans to put the weapons in Europe.

The new weapons are considered safer to handle than the old ones because they contain separate canisters of nonlethal chemicals that mix to form a deadly vapor only when fired. The old weapons already contain the nerve agents in their deadly forms.

Amoretta M. Hoeber, the Army's senior chemical weapons official, said that as a result, the new weapons can be stored safely in the United States or on ships, and flown to the front when a crisis beings.

"I honestly don't think it makes very much difference" if the weapons are not put in Europe, Mrs. Hoeber said in an interview.

The Chemical Warfare Review Commission also endorsed that view in its report.

However, John G. Kester, a former Pentagon official who wrote the commission's report, said, "It would be better to have some forward-deployed." He suggested it would be possible to store the heavy shells loaded with just one of the two ingredients in Europe, bringing the missing component of the binary nerve gas in at the last minute.

Critics of this plan contend that having to whisk the weapons overseas in a time of crisis would take up scarce cargo space and possibly raise the level of tensions.

"If I was a Soviet military planner and saw the U.S. rushing tons of chemical ordnance to the front, I would assume I'm about to be attacked with chemicals and would use mine first," said Representative John Edward Porter, an Illinois Republican who opposed the new chemical weapon program.

"I don't think anyone can sensibly argue that forward storage is not the preferable means," agreed Representative John M. Spratt, Democrat of South Carolina, a supporter of the chemical program.

Mr. Spratt, the author of the House amendment requiring a NATO role, added that Europeans should share the burden of chemical weapons as beneficiaries of the alliance.

To fail to deploy the weapons in Europe, he said in an interview, "indulges the Europeans' penchant for escapism." He added, "The Europeans are the ones who should to be manufacturing and storing chemical weapons."

Another uncertainty in the new nerve gas program is testing the weapon.

After an open-air test in 1968 was faulted for killing a flock of sheep near Dugway Proving Ground, Utah, Congress banned outdoor testing unless the Pentagon certified that it was necessary for national security and the Secretary of Health and Human Services concurred that it was safe.

Reliability of Simulated Tests

All tests of the proposed new weapons, a 155-millimeter artillery shell and

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the Bigeye bomb, have been conducted using chemical simulants, with the actual chemical reactions confined to laboratories.

"We've had open-air testing with simulants, and chamber testing with real agents," Mrs. Hoeber said. "I don't believe there will be" open testing of the actual weapons "and I don't think it's necessary."

Matthew Meselson, a professor of biochemistry at Harvard University who opposes the new weapons, said: "It would be totally unprecedented to issue our troops untested weapons. The simulants they've used are just not like the nerve agent. It's unsafe not to test."

According to scientists familiar with the program, open-air tests of chemical artillery shells in the 1960's revealed that the chemical agent would occasionally burst into flame, destroying itself before hitting the target. Without tests, critics say, there will be no assurance the same thing would not happen with the new shells.

Thomas J. Welch, deputy assistant to the Secretary of Defense for atomic energy and chemical matters, said in an interview, "We have no plans for open-air testing and we don't see any need to open-air test the munitions — at this time, anyway."

But another senior Pentagon official who spoke on the condition he not be identified, said, "Somewhere along the line, you've got to put that equipment out under different climatic conditions and test it."

Military Utility Questioned

The Chemical Warfare Review Commission raised another question about the new chemical weapons.

"The shell and the bomb both are the products of 1960's technology," the commission said, "and military weaponry and assumptions have altered in the meantime."

The commission said the most urgent military need was a chemical weapon that could reach behind enemy lines to hit airfields, command centers and supply depots. It said the planned Bigeye bomb "is not the optimal solution" because it will expose pilots and valuable aircraft to antiaircraft fire. The other weapon, an artillery shell, is for battlefield use.

The alternatives, such as chemical ballistic or cruise missiles, "have been neglected by U.S. military planners," the report said.

Dr. Welch said the Pentagon believed that the Bigeye, whose vapor spray covers one-third of a square mile "doesn't have to be that precise," so pilots can drop the bomb from a safe distance.

He said the proposed weapons will be enough for "at least a decade."

Mr. Spratt, however, asked, "Has the Administration been so intent on breaking this 16-year moratorium that they are willing to go with the weapons readily at hand, even though those might not be the best choices?"

Reviving the chemical weapons program also requires a number of related measures that may generate controversy.

A recent report by the General Accounting Office, an investigative arm of Congress, found that the military has major shortages of detection devices, combat vehicles with air filters and medical supplies, and that some commanders do not require soldiers to wear bulky protective gear in chemical warfare drills.

Production of new weapons is also to be accompanied by disposal of the Army's old stockpile of chemical weapons. But there are disagreements over the cost and technology of disposal.