

# CHEMICAL WEAPONS CONVENTION BULLETIN

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## EDITORIAL: THE TWO-PERCENT SOLUTION

President Bush told the United Nations last year that the United States was willing to destroy 98 percent of its chemical weapons within eight years of the CW Convention coming into force. This was welcome news, for it envisaged a rate of destruction somewhat greater than the draft Convention requires. But the President went on to introduce an idea that could leave ultimate US chemical disarmament uncertain: the remaining US stocks would be destroyed "once all nations capable of building chemical weapons sign that total-ban treaty." In other words, the idea was being floated that the US might avoid committing itself to the Article IV provision of the draft Convention to destroy all stocks within ten years.

That was more than four months ago. Since then, no other party to the treaty negotiation has even hinted that it likes the idea, let alone endorsed it. Nor, it seems, has the Administration yet decided how to determine whether a nation is or is not, in this special sense, "capable." So the prospect before us is, once again, delay in Geneva and loss of momentum in the negotiation, while the implications of the idea are being debated. Is it worth it? How exactly is this two-percent solution supposed to cure the problem at which it is said to be directed?

Put crudely, it rests on the premise that the threat of a US CW stockpile can cause hold-out nations to join the treaty. But what is the evidence that such coercion will work? It seems to us that the opposite outcome is more likely, and that the two percent could become a positive stimulus to CW armament. For would not the spectacle of the United States clinging to that last two percent convey an altogether conflicting message? If, despite its vast array of conventional and other forces, the United States were seen to regard even a small holding of CW weapons as essential to its security, how much more highly might not CW weapons come to be valued by less heavily armed nations?

More than that, how can the US expect nations that now favor chemical disarmament -- and they are in the great majority -- to renounce their option to have chemical weapons if the US commitment to eliminating its own stockpile is left ambiguous? Faced with so discriminatory a prospect, many supporters of the CW Convention would find it impossible to join.

Certainly there are other ways in which the United States can influence waverers, whether it acts on its own or in concert with the Soviet Union or with other active advocates of the CW Convention: ways that are not double-edged and would not endanger the treaty itself. In fact, the US and other supporters of the Convention have not even begun to engage critical states in the Middle East or southern Africa in the kind of dialogue that would probe their true attitudes toward chemical disarmament or persuade them of the advantages of the Convention to their own security and economic interests.

The Administration is currently engaged in a policy review aimed at bringing the long-running binary munitions program into line with the President's new chemical disarmament initiatives. The results should become apparent by the time of the next US-Soviet summit, in June. If international support for the two-percent solution has not materialized by then, are we to expect the Administration to go on flogging a clearly dead horse? That would be tantamount to abandoning the quest for a truly multi-lateral Convention. Or will the Administration instead stand by the position which the United States originally proposed in Geneva and which the current draft treaty embodies: that all stocks be destroyed within ten years of entry into force?

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# NEGOTIATING CHEMICAL DISARMAMENT

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This article intends to give a conventional progress report on the chemical weapons negotiations, as well as a presentation of the main outstanding issues. It will also serve to illustrate the contradiction between the manifestly expressed political will to conclude a ban on the one hand, and the frustrating reticence to make a real commitment to the negotiating process in the Conference on Disarmament, on the other hand.

Regrettably the Gulf War created an incentive for chemical weapons proliferation and thus made a comprehensive ban all the more urgent. Against this threat, the two major events of 1989 -- the Paris Conference and the Canberra Conference -- have built fragile barriers of words and declarations. In the meantime, states have been looking to the major powers, mainly to the United States, for a clear signal which road they are ready to take: the road of classic nonproliferation policies, doomed to failure in the chemical context, or the road into the unknown, towards the first global comprehensive verified disarmament agreement ever.

In his address to the United Nations General Assembly on 25 September, the US President seems unambiguously to have made the latter choice. This high-level commitment was, however, immediately modified by some reservations. For a while the position was held, but later abandoned, that the US should be able to continue CW-production after the entry into force of the Convention. Another reservation is, however, still maintained. According to it, the US should have the right to interrupt the destruction of its chemical weapons after eight years and keep a small stockpile indefinitely, or until such a time that it unilaterally has decided that all "CW-capable states" have joined the Convention. It is obvious that any such reservation, which goes to the very heart of the Convention -- the obligation not to use and not to stockpile chemical weapons -- has a crippling effect on the multilateral negotiation.

\* Views and assessments in this article are those of the author and do not necessarily reflect positions of the Swedish government.

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## The Draft Convention

The basis for work in Geneva is contained in a weighty document, entitled "Report of the Ad-Hoc Committee on Chemical Weapons to the Conference on Disarmament." The draft convention itself, the so called "Rolling Text," is made up of twenty Articles, eight Annexes and a Protocol on Inspection Procedures, contained in some 130 pages of Appendix I of the report. Appendix II of the report contains working material which either has been insufficiently elaborated, or which, on political grounds, has been blocked for inclusion in the Rolling Text itself. Every word that goes into the report, be it Appendix I or Appendix II, requires consensus of the forty participating states. Footnotes and brackets, however, can be freely used by delegations to demonstrate that the inclusion of a specific text does not necessarily commit them.

Basically the draft convention has the following structure:

In Article I, the basic undertaking is given not to "develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone." Furthermore, the Article contains an unambiguous prohibition of use of chemical weapons, as well as an undertaking to destroy chemical weapons and chemical weapons production facilities.

Of major importance is the definition of chemical weapons, as contained in Article II. All of the following are classified as chemical weapons:

1. "toxic chemicals ... and their precursors ..., except such chemicals intended for purposes not prohibited by the Convention, as long as the types and quantities involved are consistent with such purposes";
2. specifically designed munitions and devices; and
3. "equipment specifically designed for use directly in connection with the employment of such munitions and devices."

It is important that the definition contains a subjective criterion -- intent -- and that thus *any* chemical could be considered a chemical weapon, if there is an intent to employ it as such. This broad definition is necessary. It enables the Convention to keep pace with technological development. It is, however, bound to create difficulties with chemical industry and, consequently, for states having a major chemical industry lobby.

Articles IV and V, together with their detailed Annexes, contain provisions regarding the declaration and

destruction of all chemical weapons and chemical weapons production facilities, as well as the verification thereof. The destruction should be completed within ten years after the entry into force, and the production facilities rendered inoperable immediately after the entry into force.

Article VI stipulates the right to develop, produce and transfer chemicals for purposes not prohibited by the Convention. This right is combined with the obligation to subject chemicals listed on three schedules in the Annex on Chemicals, as well as the facilities producing or consuming them, to international monitoring. Three verification regimes of a descending degree of intrusiveness are outlined in the three Annexes to the Article.

Article VII provides for the establishment in each State Party of a National Authority, which would oversee domestic implementation of the Convention's provisions. And Article VIII provides the outline of an International Organization with a Technical Secretariat.

Article IX on Consultations, Cooperation and Fact-finding provides the frame-work for one of the most debated and innovative features of the Convention, i.e., challenge inspections.

Articles X and XI deal respectively with Assistance and Protection against Chemical Weapons and Economic and Technological Development. Draft texts for these Articles are still in Appendix II.

The following Articles constitute traditional Final Clauses, such as Relation to Other International Agreements, Signature, Duration, etc. Not all of them, however, are non-controversial. In fact, major problems arise from the Convention's relation to other international agreements and its entry into force.

Besides the Annexes to specific Articles that have already been mentioned, the draft Convention contains an Annex on Chemicals and an Annex on the Protection of Confidential Information. A Protocol on Inspection Procedures is also under elaboration.

The Annex on Chemicals requires a few words of explanation. The backbone of the Annex consists of three schedules of chemicals, corresponding to the three verification regimes. The first schedule basically contains known chemical warfare agents or chemical agents which have been tested for chemical weapons use, including families or groups of chemicals closely related to the known agent. The schedule also includes organophosphorus components of binary weapons. Except for certain mustards, used in cancer treatment, none of these substances can be assumed to have legitimate use beyond research. Chemicals on Schedule 1 are limited to a very restrictive production regime, with an aggregate one-ton ceiling, under strict verification.



The second schedule contains certain precursor chemicals to those on Schedule 1. Many of these chemicals have a number of civilian uses and are produced in commercial quantities. They are subject to an intrusive regime of routine on-site inspections, based on yearly declarations and facility agreements.

The third schedule contains both certain well-known, but out-dated, chemical warfare agents, such as phosgene, and precursor chemicals, including a number of chlorinating agents. Chemicals on Schedule 3 have in common that they are commercially produced in such vast quantities that any routine on-site verification system safeguarding against diversion would either be prohibitively costly or a sham, or both. In the draft Convention, Schedule 3 chemicals are therefore subjected only to monitoring by data.

### The Hurdles

The above description gives the outline of a Chemical Weapons Convention which seems workable and the structure of which seems to command general support and agreement. Nevertheless, the problems yet to be solved go to the very core of the Convention. They are:

#### The scope:

- The prohibition of use as of entry into force

#### The verification:

- Challenge inspections
- The search for some additional qualitative measure between routine inspection and challenge inspection to ensure confidence in compliance

#### The power:

- Composition and decision-making of the Executive Council

#### North-South issues:

- Assistance
- Economic development
- Sanctions
- The "nuclear link"

It is my view that these issues do not need much work to be clarified and solved. The solutions are to a great extent already there. What is needed is the determination and the courage to choose between solutions and, in the process, to make compromise and bargains. I will concentrate my comments on use, verification and the North-South issues.

### Use

The problem regarding the prohibition of use of chemical weapons comes clearest to light in the disagreement over Article XII, the treaty's Relation to Other International Agreements. The 1925 Geneva Protocol has, for all practical purposes, been reduced to an instrument of non-first-use, due to the reservations made by a third of its Parties. Some countries, first of all the United States and France, argue that the Protocol therefore not only contains the *obligation* to refrain from chemical weapons use, but also confers the *right* to retaliate, within the limits of generally accepted rules of war, if the adversary has used chemical weapons in violation of the Protocol. Some statements go even further and seem to interpret the Protocol, including reservations, as conferring a general right of second use. Not surprisingly, Iraq alleged first use by Iran when it admitted its own employment of chemical weapons.

According to this school of thought, the Convention cannot abrogate the "right" to retaliatory or second use of chemical weapons, as long as those weapons exist. In plain words, a few states want to keep a second use option for the duration of the destruction period, i.e., for the first ten years of the Convention. To the majority of countries -- East, West and Non-aligned alike -- this proposition is unacceptable. It would leave us -- at least for a decade -- with a legal system as fragile and inefficient as that of the 1925 Protocol. It would seriously undermine the possibility to attract universal adherence. To the few but influential countries that have not joined the NPT, and to the many that are critical of the implementation of Articles IV and VI of the NPT, the prospect of a new chemical NPT-situation, with haves and have-nots, is simply politically undigestible, even for a specified and relatively short period of time.

The real military utility of chemical weapons is such a dubious issue that even purely military considerations would, in my view, point in the direction of chemical disarmament. A renunciation of the second use option does not seem to be too much of a sacrifice. The existence of a chemical weapons stockpile until the tenth year will still have a deterrent effect. If political considerations are added, the case for an immediately effective prohibition of use in the future Convention becomes overwhelmingly strong.

If military personnel of a major power were subjected to chemical attack by what is usually termed an "irresponsible Third World leader," support at home and alliance support abroad would be assured even for devastating conventional retaliation. The moment chemical weapons were to be employed, that support would change to strife and disagreement. As far as nations in the Third World are concerned, it is obvious that the temptation to



acquire and to use chemical weapons has increased as a consequence of the Gulf War. However, the possible advantage of use vanishes when the neighbor also is equipped with chemical weapons, and it decreases dramatically when he has protective gear.

Paradoxically, the proliferation of chemical weapons in the Middle East, including the alleged development of chemical weapons in Iran, could thus lead to an increased willingness to accept a comprehensive chemical weapons ban on all sides in that region. This, however, presupposes that the major chemical weapon states are ready to join the club on the same conditions as every one else.

## Verification

Gloomy predictions have been made that the Convention is virtually unverifiable. This view was expressed by General Burns in one of his last interviews as Director of the Arms Control and Disarmament Agency. In this respect, the Bush Administration's recent policy review seems to have ended on a more optimistic note. In his UN address, President Bush stated that "our recent arms control experience and our accelerating research in this area makes me believe that we can achieve the level of verification that gives us confidence to go forward with the ban."

It is obvious that verification can never be fool-proof and that, therefore, any verification system is liable to be labeled as insufficient. However, verification must be seen in relation to the military significance of a possible violation, compared to the overall benefits of the disarmament measure in question. In this perspective, verification is, in the final analysis, not a technical issue, but a political one.

At what stage are we ready to say "enough is enough?" I am confident that it is possible to achieve the requisite and adequate *level of verification* to have confidence in a Chemical Weapons Convention. In the draft Convention, declared military stockpiles and production facilities are subject to continuous international on-site inspection until their complete destruction. These provisions are fully elaborated. So are the essentially similar provisions regarding verification of the very limited production of Schedule 1 chemicals for medical, pharmaceutical, research and protective purposes.

In the civilian industry, provisions regarding routine on-site inspection to monitor the production of Schedule 2 chemicals have been tested in some 20 national trial inspections. The experience gained shows that the provisions of the Rolling Text by and large are sufficient to permit an effective implementation. Considerable work needs to be done regarding instrumentation, procedures, etc., but such work could now be aimed at the Preparatory Commission and the future Technical

Secretariat. It has little bearing on the text of the Convention itself.

It has been generally recognized that a safety-net is needed to deter against the non-declaration of military stockpiles and production facilities, as well as against clandestine production or diversion of listed chemicals. This is the task of challenge inspections. How come then, since the Soviet Union agreed to the American concept of mandatory challenge, no progress has been made towards translating the recognized need for challenge inspections into treaty language?

First, we must recognize that unlimited challenge is a novel concept, which does not even exist in bilateral or regional treaties. Challenge in the INF Treaty is limited to specified installations. In the Stockholm Document it is limited to specified military activities. The Conference on Disarmament is thus charting new waters. It takes time to get used to the idea, especially for many Third World countries to which such intrusiveness smacks of neo-colonialism and is perceived as a threat to the trappings of national sovereignty, so cherished and so recently attained. For others, the initiation of a challenge by a hostile neighbor is feared to bring the risk of intelligence-gathering. For a country with such specific traditions and historical experiences as China, the concept is revolutionary, indeed. Still other countries might fear disclosure of unacceptable conditions of health and environmental protection, or simply feel that they have no means to effectively enforce the Convention on their industry, which anyway might not be theirs, but, rather, part of a non-transparent multinational corporation. The nuclear threshold countries might have their specific concerns, too. Should the request for a challenge inspection at Kahuta in Pakistan, Trombay in India, Dimona in Israel, Walindaba in South Africa or Pilcanyeu in Argentina be taken at face value as an expression of concern regarding possible clandestine production or stockpiling of chemical weapons? Or is it simply a way of breaking in on their nuclear secrets through the back door?

If concerns like these worry participating states, it is no wonder that progress towards treaty language on challenge inspection is slow. Still, my personal impression is that we are steadily moving towards an understanding and acceptance of a truly obligatory challenge. Thus, the idea of some kind of political filter in the Organization that would weed out "unserious" challenges and only let "real" challenges through, seems to have fallen out of favor.

Without having been accepted into the Rolling Text, so far it seems that participating States agree that:

Each State Party has the right to request an on-site inspection in any other State Party in order to clarify any matter which



causes doubts about compliance with the provisions of the Convention, or any concern about a matter pertaining to the implementation of the Convention and which is considered ambiguous, and to have this inspection conducted anywhere, at any time and without delay by a team of inspectors designated by the Technical Secretariat. The inspection shall be mandatory, with no right of refusal. A requesting State is under the obligation to keep the request within the scope of the Convention. Throughout the inspection, the requested State has the right and is under the obligation to demonstrate its compliance with the Convention. (CD/952, Appendix II, page 197)

If challenges cannot be filtered, the procedures for carrying out a challenge inspection become more important. There is a growing insight that these procedures must allow sufficient intrusiveness and access in order to create confidence, but must also take into account the legitimate interest of the requested state to protect confidentiality regarding facilities, activities and equipment not related to chemical weapons. The magic formula to attain this objective is called "managed access." In this respect, the United States and the Soviet Union already have valuable experience from the implementation of the INF Treaty. They have also bilaterally been able to elaborate some inspection procedures for the Chemical Weapons Convention, which have contributed to the multilateral work. However, the INF is a bilateral agreement and some of its provisions cannot automatically be transplanted into the multilateral context.

Negotiating challenge, the position of a few Western States -- mainly the United States and the United Kingdom -- has, in my view, created an unnecessary obstacle to the universal acceptance of obligatory challenge inspections. Furthermore, their position permits an important number of states to stay in the shadows, with no need and no incentive to come forward and declare whether or not they actually accept obligatory challenge.

The issue at hand is whether one sees the challenge inspection as a bilateral or as a multilateral measure. In the first case, the Technical Secretariat is an instrument, supervised and managed by the requesting state throughout the inspection. The requesting state also retains an almost exclusive monopoly on the assessment of the results of the inspection. In the second case, the challenge inspection, after having been initiated by the requesting state, takes on a multilateral character. The inspection will be carried out by the inspection team, without further directives from the requesting state. The assessment will be done by the Executive Council. Of course, nothing can hinder the requesting state from making another assessment and drawing its own conclusions.

It is the view of this author that an international organization for the implementation of a disarmament agreement is created to verify compliance independently. When creating new international institutions one should try to make them stronger, and not further encourage the irresistible temptation of states to misuse them as weapons against other states. It can therefore be argued that the bilateral view of challenge in the framework of a multilateral convention not only is tactically unfortunate, but also substantively flawed.

#### **Additional Measures of Verification**

A presentation of outstanding problems would not be complete without mention of various proposals for what has been called Ad-Hoc verification measures. Proposals for such measures stem from a few simple assumptions:

- even if monitoring of listed chemicals is totally effective, a vast number of chemical facilities capable of producing listed chemicals would never be monitored.
- challenge inspection, intended to cover all undeclared facilities, is seen as a dramatic and confrontational measure.
- challenge inspection must be based on some kind of evidence of non-compliance, and such evidence is not always easy to come by.
- a state with the intention to violate the Convention would not start clandestine production of a listed chemical in a declared facility and would avoid building a new one if a capable non-declared facility existed.

Against this background, various proposals have been made. One calls for random inspection of undeclared facilities. Another suggests that individual states can propose inspections in another state, but as a routine measure, without explicit suspicion, and limited by quota. Little progress has been made on this issue, but the general idea is gaining ground. The main proponents are industrialized Western states. The Soviet Union and the United States are favorably inclined. China and the non-aligned states are more skeptical, suspecting a new form of challenge inspection in disguise.

Even if the general idea of ad-hoc verification has obvious merits, the concrete proposals made so far remain unconvincing. On top of routine inspection, the first proposal, made by the Federal Republic, seems to give little additional confidence at high cost. The second proposal, which is of British origin, is much more cost-effective, but has serious political shortcomings, as it is difficult to distinguish from challenge inspection.

In the area of chemicals, we deal with a vast and diversified industry, and we intend to monitor a number of different substances. This makes it much more difficult



to verify through accountancy control coupled with containment and surveillance measures, which are successfully applied to the much smaller and more homogenous nuclear industry, where but a few easily detectable items are monitored. A very radical solution might be to do away altogether with normal routine on-site inspection, as outlined in Annex 2 to Article VI of the draft Convention, and introduce a system of some kind of ad-hoc verification over the totality of the chemical industry.

### North-South Issues

Under this heading one can lump together a few problem areas that have in common that they in varying degrees confront traditional positions of the industrialized countries with specific security concerns or perceptions of all -- or groups of -- developing countries. On the one hand, it can be argued that developing countries often take the shortsighted and simplistic view, that in any agreement, whatever its substance, the richer countries must somehow be made to pay. In the NPT it was certainly justified to balance the monopoly on nuclear weapons and technology with transfer of nuclear technology and cooperation for peaceful purposes under safeguards. In a non-discriminatory treaty, like the one under discussion, there seems to be no reason for compensation. Disarmament should be a value in itself.

On the other hand, industrialized countries are singularly insensitive to the need of developing countries to take part in industrial and technological development and to their justified fears of being excluded or discriminated against. To many, the NPT has been a bitter experience, where perfectly bona fide States Parties have been subjected to ludicrous unilateral "nonproliferation measures," far beyond what was ever foreseen by the NPT.

This is what Article XI of the draft Convention on Economic and Technological Development is all about. It simply states the obvious, that all States Parties of the Convention should facilitate the fullest possible exchange of chemicals, technology, etc. This means that one cannot impose arbitrary restrictions or export controls against another State Party, once the treaty is in place with its verification system, including monitoring of transfers of listed chemicals and how they are used. This provision does not "cost" anything, and it seems a mystery that it has not yet been accepted by the Western Group of countries for inclusion in the Rolling Text.

Article X on Assistance poses more complex problems. It would seem natural that States Parties express their solidarity by undertaking to extend assistance to any one of them which has been the victim of chemical weapons use. It is quite another thing to grant assistance on the basis of what one State Party perceives as a threat of use of chemical weapons against it. This proposal by some non-aligned countries could, if implemented, open

up a Pandora's box in an international organization. How could such a threat be substantiated? The possibilities of resultless fact-finding missions, loose allegations, endless debates and recriminations ending in stalemate along well-known lines of automatic solidarity are easy to imagine.

Another potentially difficult issue concerns sanctions. Many non-aligned countries, having experienced the frequent impotence of the Security Council and arguing that giving up the chemical weapons option is a significant sacrifice in military terms, call for automatic and collective sanctions against a violator of the Convention. It is of course an illusion to think that any other organ could be more efficient than the Security Council or that automatic sanctions could be generally accepted. A compromise will have to be found on the basis of sanctions through the withdrawal of rights and privileges under the Convention and immediate reporting of a violation by the Organization to the Security Council.

Finally, the "nuclear link" must be mentioned. It was given substantial attention in press coverage of the Paris Conference, where some Arab states inferred that as long as Israel kept its nuclear option open, Israel's neighbors -- all of them parties to the NPT -- could not be expected to renounce their chemical option. From a strictly military point of view this link does not make sense. The Arab position, which, contrary to what the press stated, was never pushed very hard in Paris, could of course be interpreted as a pretext for not joining the Convention, for unwillingness to accept challenge, or just another means to put pressure on Israel. The fact that Israel was blocked from participating as a non-member in the work of the Ad-Hoc Committee in 1989, after Libya, Syria and Iraq had been admitted, is ominous. No other action on their part could do more to undermine the credibility of the Arab nations' commitment to a chemical weapons ban, and to multilateral disarmament in general. On the other hand, it would be dangerous to dismiss the "nuclear link" as just another way of procrastinating or blackmailing. To a degree, proponents of the idea of nuclear linkage are motivated by sincere and concrete security concerns. If the draft Convention has a truly non-discriminatory nature, those concerns cannot be further allayed within the framework of the chemical weapons negotiations. They must be dealt with through bilateral diplomacy. But they should not be forgotten. In the meantime, the active and constructive contribution to the chemical weapons negotiations first of all by Egypt, but also by other Arab states and by Iran, should be welcomed and encouraged.

### In Lieu of Conclusions

The late Mrs. Myrdal, Sweden's longtime disarmament negotiator and Nobel Peace Prize Laureate, gave a telling title to her book on multilateral disarmament: *The Game of Disarmament*. A short history of chemical weapons



negotiations could be seen as confirming Mrs. Myrdal's view of disarmament as a game.

Even if the use of poison and poisoned weapons was first prohibited in the Brussels Convention of 1874, and then at the Hague in 1899 and again in 1907, let us go directly to Geneva in 1925. The issue of chemical weapons was then initiated by the United States, proposing a prohibition of all trade in chemical weapons and chemical warfare agents. This proposal was found far too discriminatory by countries not producing chemical weapons and was rejected. Instead, the proposal for a general prohibition of use of chemical weapons was negotiated, accepted and signed. Thus was born the 1925 Geneva Protocol. It immediately attracted wide adherence, except from the original initiator, the United States, which did not ratify the Protocol until 1975.

By the time of World War II, all major powers possessed chemical weapons. The Soviet Union had acquired chemical weapons in the 1920s with German assistance after the Rapallo agreement. In spite of expectations to the contrary, chemical weapons were not used in the war. This probably had little to do with the Geneva Protocol, but was rather the result of doubts regarding military effectiveness and fear of the opponent's retaliatory capacity. After the war, some stockpiles were destroyed. The United Kingdom practically renounced chemical weapons and started destruction of its complete stockpile in the 1950s. Research, development and production continued, however, especially in the major powers. Chemical weapons did not get much attention during this time, with nuclear issues being on everybody's mind.

In 1969 the United States stopped producing chemical weapons through a unilateral moratorium, and the ENDC -- the forerunner of the Conference on Disarmament -- resumed work on chemical weapons. In 1972, the Biological and Toxin Weapons Convention was concluded as a step down the road. At the same time, however, the Soviet Union continued a massive build-up which led to unease in the United States. This unease coincided with a technological development in the US: binary chemical weapons. Still, it turned out to be difficult to convince Congress of the need to resume chemical weapons production. Congress also required a presidential certification that resumed chemical weapons production was essential to the national interest. Neither Presidents Carter nor Ford made such a determination. The Reagan Administration did, but coupled it with a bold proposal for a comprehensive ban on chemical weapons, presented in the Conference on Disarmament by Vice President Bush in 1984. As a result, in 1985, Congress approved initial funding for production of binary chemical weapons.

The American proposal (CD/500) contained strict verification requirements, namely mandatory challenge inspection. In 1984 it was a safe guess that such an intrusive measure of verification would be totally unacceptable to the Soviet Union. And so it turned out to be for two years. However, in 1986, *perestroika* having gained ground,

the Soviets called the bluff. They accepted mandatory challenge inspection and even added the notion of "any time and anywhere" to it. Suddenly, there was a real negotiation going on, and it made big strides in 1986 and 1987. There was a definite feeling that a Convention was feasible and actually in the offing.

Chemical weapons had been used and were being used in the Gulf War. The international reaction was inadequate. Negotiations got more complicated. The Soviet Union, absorbed by other problems, became more passive; the United States seemed indecisive. It was an election year, and statements in Washington gave growing evidence of conflicting views between different government agencies. Congress' main interest seemed to be sanctions against Iraq and legislation on export controls

The Paris Conference in January 1989 brought global condemnation of chemical weapons use and global support for the negotiations in Geneva. It was a unique manifestation of international unity. Most countries expected a swift policy review in Washington and action in Geneva by the new US administration. This was not to come. Preoccupied by priority items like START, CFE and nuclear testing issues, and torn between conflicting demands from Congress and conflicting views from government agencies and allies, the United States still kept to CD/500, by now five years old, whether it could contribute or not to the negotiation.

Instead, the Canberra Conference was initiated. It was perceived by most non-aligned countries as a retreat from the Paris declaration and a signal that Washington gave priority to nonproliferation policies without commitment to a comprehensive chemical weapons ban. In the very end, this turned out not to be the case. But this perception of the Canberra Conference, which was not dispelled in advance, cast its shadow over much of the work in 1989. As a result, the 1989 session of the Conference on Disarmament, in spite of good progress on a number of issues in the draft Convention, brought no decisive breakthrough.

The statement of President Bush at the United Nations shed no new light on the policy review. What he stated there had largely already been decided by Congress or results from the draft Convention. The great value of his statement lies in its expressed confidence in the verifiability of the Convention and the commitment to a multilateral comprehensive solution to the problems posed by the existence and spread of chemical weapons. The reservations that followed, however, and the incapacity to come to grips with the issues of challenge inspection and use, as well as the emphasis on nonproliferation concerns, have left many participants with the impression that the required resolve is not yet at hand.

Work on the Convention has progressed so far that the stage is now set in Geneva for a decisive breakthrough during the 1990 session. Whether this opportunity will be used is far from clear.



*What follows is taken from the Sussex-Harvard rolling CBW chronology. The intervals covered in successive Bulletins have a one-month overlap in order to accommodate late-received information. The basic chronology, which is continuously updated, is fuller and provides complete citations of sources. For access to it, apply to Julian Perry Robinson at the Science Policy Research Unit, University of Sussex, Brighton, BN1 9RF, England.*

**6 September** The Soviet news agency TASS reports from Chapayevsk that the chemdemil plant there is to be converted into a training center for industrial methods of destroying toxic chemicals. TASS says that the plant will not be used for its original purpose "as the Soviet Government has decided to heed public requests" [see 30 Aug]. The leader of the Soviet CD delegation had been quoted by TASS a few days previously deploring the fact that the Chapayevsk plant had been "built without the necessary preliminary agreement with the local authorities and public." {TASS 2 Sep in FBIS-SOV 5 Sep; TASS as in WP 7 Sep}

**11 September** The shares of Ferranti International Signal are suspended on the London Stock Exchange {STel 17 Sep}. It is this British company which, through a subsidiary, has US Government contracts for production of binary chemical weapons (Bigeye bombs, and chemical canisters for the 155-mm artillery round). The subsidiary, Marquardt Corporation, is under US federal investigation, but neither this nor the parent company's difficulties appear related to the chemical-weapons contracts {Ind 22 Sep}. Ferranti now faces the prospect of a forced merger.

Marquardt is 90 percent behind its delivery schedule on one of the binary-munition contracts, says the US Army {DW 5 Sep}.

**14 September** In the US Senate, the Appropriations Committee reports on the 1990 Defense Appropriation Bill. It accepts the House recommendation that \$15 million be provided for an Army effort in CW verification research, but would fence the money until 30 days after receiving from the Defense Department "a well-defined, focused program of chemical weapons compliance monitoring research designed to support the US negotiating effort in chemical weapons arms control." The Pentagon had been asked for such a report by the Committee the year previously, but had failed to furnish it. {Senate report 101-132}

**18 September** In Washington at the State Department, US and Soviet officials start to meet, in four working groups, in preparatory talks for the Baker-Shevardnadze ministerial meeting in Wyoming during 22-23 September. {WT 19 Sep}

**19-22 September** In Canberra, 375 delegates from 66 countries and 4 international organizations meet for the Government-Industry Conference against Chemical Weapons (GICCW) [see 13 Jun]. About half of the delegations include representatives of national chemical industries, these accounting for about 20 percent of the participation, and many delegations also include representatives of trade unions and of industrial and trade departments of government. It is said that about 95 percent of the world's chemical production capacity is represented.

The industry participants adopt a collective statement in which, among other things, they "express their willingness to work actively with governments to achieve a global ban on chemical weapons, and their willingness to contribute additional momentum to the Geneva negotiating process" and "state their willingness to continue their dialogue with governments to prepare for the entry into force of an effective Chemical Weapons Convention which protects the free and non-discriminatory exchange of chemicals and transfer of technology for economic development and the welfare of all people."

And they agree to establish an International Chemical In-

dustry Forum, meeting in Geneva, as a focal point for industry input into the treaty process.

**19 September** Australian Foreign Minister Gareth Evans announces that his department is establishing a Secretariat to act as the nucleus for the National Authority which will be required under article VII of the CWC to implement its provisions domestically. He says that the Secretariat, in consultation with other government departments, State Governments and the Australian chemical industry, "will be responsible for reviewing existing laws and regulations covering the activities of the chemical industry, and looking at ways of introducing and adapting the prospective requirements of the CWC to the current regulatory matrix." {News release no. M164, Australian Ministry of Foreign Affairs and Trade}

**19 September** The US Chemical Manufacturers Association announces in Canberra that its Board of Directors had the previous week approved a voluntary program under which all CMA member companies (175 in all, representing more than 90 percent of US basic chemical manufacturing) "are expected to implement the following practices: hold regular, formal reviews of company export procedures; promote awareness of chemical weapons concerns among corporate export and marketing personnel; establish ongoing relationships with government export authorities; implement procedures for evaluating whether orders of sensitive chemicals are for legitimate purposes; report suspicious orders or inquiries on chemicals of concern to Federal export authorities; and document all transactions in sensitive materials, and make that information available to the authorities upon request." This program, which goes beyond current requirements of US law, formalizes activities that CMA and its member countries have conducted over the past few years. {US delegation news release 19 Sep}

Similar systems of voluntary disclosure and cooperation have been in place for many years in several European countries, it is said later at a European Chemical Industry Federation (CEFIC) press conference. {CEFIC press conference 21 Sep}

**19 September** India informs the GICCW in Canberra that it has recently conducted a National Trial Inspection and that it would shortly be submitting a report on it to the CD. {GICCW/WSII/1}

**19 September** US Assistant Secretary of State for Politico-Military Affairs Richard Clarke, heading the US delegation to the GICCW in Canberra, speaks as follows at a press conference: "But in the end the only good solution, the only solution that will last, to the problem of [chemical weapons] proliferation is to have a global ban .... Verification is going to be very intrusive. It'll be necessary for inspection of upwards of 3000 chemical plants in the United States alone and 10,000 chemical plants around the world." {transcript}

Later in the day he says to the GICCW: "To the best of our information, there are 22 nations that have chemical weapons in their inventories, controlled by their military and ready for use." {GICCW/INFO/20}

**20 September** US CD Ambassador Max Friedersdorf, speaking at a press conference in Canberra, says that the majority of the 22 countries thought CW-capable by the United States are among the 68 members and participating non-members of the CD. He goes on: "I can't give you an exact figure. I would have to go down on



the list of those we suspect, but as I recall, out of the 22, I would imagine, at least in the neighborhood of 15 or more would be countries that are at the CD." {transcript}

**20 September** The Soviet Union informs the GICCW in Canberra that its "aggregate number of CW [chemical weapon] production and storage facilities and the facilities for the production (processing or consumption) of Schedule 1, 2 and 3 chemicals exceeds 100, of which approximately 30 facilities produce (process or consume) Schedule 2 chemicals." A Soviet compilation of data on these matters, in conformity with the FRG's CD/828 scheme [see 17 Aug], will soon be submitted to the CD. {GICCW/WSI/8}

**21 September** North Korea informs the GICCW in Canberra that it "wishes to adopt a joint declaration with South Korea on the establishment of a zone free from chemical as well as nuclear weapons throughout the Korean peninsula as one of the national measures in support of the negotiations on the CW Convention .... We are convinced that this type of measure could precede administrative steps in the case of Korea where security concerns are much more overwhelming than elsewhere" [see also 26 Jan]. {GICCW/P/49 (PROV)}

**22 September** In Bern, the Federal Prosecutor announces that several Swiss firms had been involved in providing financing and equipment for the chemical factory at Rabta, Libya, but that no Swiss laws had been broken. The investigation had been continuing since January [see 26 Jan]. An unidentified firm had supplied thionyl chloride to Libya in 1985, but this precursor had not been made subject to the war materials law until 1 March 1989. {Reuter as in BG 23 Sep}

**22-3 September** The Baker-Shevardnadze ministerial talks are held in Jackson Hole, Wyoming. Among the final communiqués is a Joint Statement on Chemical Weapons, which includes the following:

"... the Secretary of State and the Foreign Minister signed a Memorandum of Understanding regarding a bilateral verification experiment and data exchange. The steps agreed upon in the Memorandum are intended to facilitate the process of negotiation, signature and ratification of a comprehensive, effectively verifiable and truly global convention on the prohibition and destruction of chemical weapons.

"The verification experiment and data exchange will be conducted in two phases. Phase I involves the exchange of general data on the sides' chemical weapons capabilities and a series of visits to relevant military and civil facilities on their respective territories. In Phase II the sides will exchange detailed data and permit on-site inspections to verify the accuracy of the information exchanged.

"The sides also agreed to undertake a cooperative effort with respect to the destruction of chemical weapons. They agreed to reciprocal visits to monitor destruction operations of the other side, and to the exchange of information on past, current and planned destruction activities and procedures.

"The sides noted their agreement on some procedures for conducting challenge inspections and on the provisions governing the order of destruction of chemical weapons and of chemical weapons production facilities. These two approaches will be introduced into the multilateral negotiations in Geneva in an effort to contribute to those negotiations ....

"... The two sides emphasized the obligation of all states not to use chemical weapons in violation of international law and urged that prompt and effective measures be taken by the international community if that obligation is violated. In this regard, they underscored their support for the UN Secretary-General in investigating reports of violations of the Geneva Protocol or other relevant rules of customary international law.

"... The sides expressed satisfaction with the extensive and productive work accomplished at the [Government-Industry Conference Against Chemical Weapons, just concluded in Canberra] and the positive results reflected in the Chairman's final summary statement.

"Finally, the sides expressed the view that a truly global, comprehensive and effectively verifiable ban on chemical weapons is the best means to address the threat posed by the spread of chemical weapons on a durable long term basis. In the meantime, the sides emphasized their readiness to attempt to prevent the proliferation of chemical weapons. They intend to continue consultations on this issue." {official text}

**23 September** British Prime Minister Thatcher meets with President Gorbachev, and one of the topics they discuss is arms control. The Prime Minister tells reporters afterwards that the prospects for a ban on chemical weapons are "encouraging." {AP as in NYT 24 Sep; DTel 25 Sep}

## GLOSSARY OF ABBREVIATIONS FOR NEWS CHRONOLOGY

ACR	<i>Arms Control Reporter</i>	DerS	<i>Der Spiegel</i>	MENA	Middle East News Agency (Cairo)
AN	<i>Atlantic News</i>	DB	<i>Deutscher Bundestag</i>	NYT	<i>New York Times</i>
AP	Associated Press	DN	<i>Defense News</i>	Obs	Observer (London)
BG	<i>Boston Globe</i>	DW	<i>Defense Week</i>	SFC	<i>San Francisco Chronicle</i>
CBW	Chemical/biological warfare	DTel	<i>Daily Telegraph</i> (London)	SovN	<i>Soviet News</i> (USSR Embassy, London)
CD	Conference on Disarmament	FBIS	Foreign Broadcast Information Service (Washington)	ST	<i>Sunday Times</i> (London)
CD/	CD document series	FT	<i>Financial Times</i> (London)	TL	<i>Times</i> (London)
C&EN	<i>Chemical &amp; Engineering News</i>	G	<i>Guardian</i> (London)	TZ	<i>Tageszeitung</i> (West Berlin)
CNA	Chinese News Agency (Taipei)	GICCW	Government-Industry Conference Against Chemical Weapons	SovR	<i>Sovetskaya Rossiya</i>
CQ	<i>Congressional Quarterly</i>	HansC	<i>Hansard</i> (Commons)	STel	<i>Sunday Telegraph</i> (London)
CR	<i>Congressional Record</i> (Daily Edition)	IHT	<i>International Herald Tribune</i>	UN	United Nations
CSM	<i>Christian Science Monitor</i>	Ind	<i>Independent</i> (London)	USIA	US Information Agency
CW	Chemical warfare	Izv	<i>Izvestiya</i>	WP	<i>Washington Post</i>
CWC	The projected Chemical Weapons Convention	JDW	<i>Jane's Defence Weekly</i>	WT	<i>Washington Times</i>
CWCB	<i>Chemical Weapons Convention Bulletin</i>	KZ	<i>Krasnaya Zvezda</i>	WSJ	<i>Wall Street Journal</i>



**25 September** The *New York Times* reports: "In recent months, there have been disagreements within the Bush Administration about what approach to take on chemical weapons. The Joint Chiefs have reportedly argued that the United States should pursue an agreement with the Soviets on reducing chemical weapons stocks as an alternative to completing a global ban. Some Pentagon officials say a chemical weapons ban cannot be effectively verified and favor an agreement on reductions because it would allow the United States to keep a small supply of poison gas. But State Department officials argued that the United States could not effectively dissuade third world nations from acquiring chemical weapons unless Washington demonstrated that the United States was willing to give up its chemical arsenal." {NYT 25 Sep}

**25 September** President Bush includes the following in his address to the UN General Assembly: "Today I want to announce steps that the United States is ready to take, steps to rid the world of these truly terrible weapons, towards a treaty that will ban, eliminate, all chemical weapons from the earth 10 years from the day it is signed. The initiative contains three major elements:

"First, in the first eight years of a chemical weapons treaty, the US is ready to destroy nearly all -- 98 percent -- of our chemical weapons stockpile, provided the Soviet Union joins the ban ....

"Second, we are ready to destroy all of our chemical weapons, 100 percent, every one, within 10 years, once all nations capable of building chemical weapons sign that total-ban treaty.

"And third, the United States is ready to begin now. We will eliminate more than 80 percent of our stockpile even as we work to complete a treaty if the Soviet Union joins us in cutting chemical weapons to an equal level and we agree on inspections to verify that stockpiles are destroyed.

"We know that monitoring a total ban on chemical weapons will be a challenge. But the knowledge we've gained from our recent arms control experience and our accelerating research in this area makes me believe that we can achieve the level of verification that gives us confidence to go forward with the ban." {official text; NYT 26 Sep}

In the fact sheet on the speech which the White House issues, it is also said that "the United States will accelerate and significantly expand its efforts to improve verification capabilities and resolve the many technical and procedural questions associated with verification of a CW ban." {"Bush's chemical weapons initiative," 25 Sep}

**25 September** In the United States, unidentified government officials describe the President's second step [see preceding entry] as "a device to maintain the pressure for truly universal adherence." They say that further CW initiatives are under discussion, including proposals for (a) sanctions against nations that violate a poison gas ban, and (b) export controls on the sale of chemicals to nations that refuse to sign a treaty. {NYT 26 Sep}

At a briefing in New York, National Security Advisor Brent Scowcroft says: "The United States will also continue to modernize its small residual stockpiles so that we have the safest capable remaining stocks until a total ban" {USIA EUR-106 25 Sep}. A Pentagon statement on the Bush UN initiative says: "This initiative will neither interfere with nor force us to cut back our chemical modernization program. Our stockpile will see the overall reductions stated by the President. However, the last weapons to be destroyed will be the binary weapons, the safest weapons with the greatest utility" {WT 26 Sep}.

**25 September** Regarding the US stocks of CW weapons in West Germany [see 20 Jun], US Congressman Larry Hopkins tells the press that he has "serious problems" with the plan that has been drawn up for transporting the stocks to Johnston Atoll for destruction, and that he has urged the Department of Defense to reconsider it. {WT 26 Sep}

**26 September** USSR Foreign Minister Eduard Shevardnadze, addressing the UN General Assembly in New York, says: "We welcome the proposal concerning chemical weapons put forward yesterday by President Bush .... The Soviet Union is ready, together with the United States, to go further and assume mutual obligations prior to the conclusion of a multilateral convention; cease the production of chemical weapons, as we've already done -- I'm referring here to binary weapons -- and on a bilateral basis radically reduce or completely destroy Soviet and US chemical weapons, viewing it as a step toward the global destruction of chemical weapons; renounce the use of chemical weapons under all circumstances, and institute rigorous verification of the cessation of production and elimination of chemical warfare agents." {NYT 27 Sep}

At a subsequent news conference, USSR Deputy Foreign Minister Viktor Karpov says that the Soviet Union would not want the superpowers to destroy all their chemical weapons before the CD has agreed on a global ban. He says, further, that the Soviet Union would insist on an end to US production of binary weapons as part of any agreement, though this is not a precondition for negotiating. {LAT 27 Sep}

**26 September** Speaking at the UN General Assembly on behalf of the 12 countries of the European Community, French Foreign Minister Roland Dumas states that the Community wants a comprehensive treaty banning chemical weapons as soon as possible. {G 27 Sep}

**26 September** Britain proposes at the UN General Assembly that the CWC talks "move from the present intermittent pattern of negotiations to round-the-year meetings" [see also 28 Mar]. {*Disarmament Times* Oct 89}

**27 September** President Bush tells reporters that he is "absolutely not" willing to join with the USSR in agreeing, ahead of a global ban, to destroy all their stocks of chemical weapons, as Soviet Foreign Minister Shevardnadze had proposed at the UN the day previously. He continues: "We need a certain sense of deterrence and we need some leverage to get other countries to ban them." {DTel, WP 28 Sep}

**27 September** The US Defense Department releases its new edition of *Soviet Military Power*. Its accusation of Soviet violation of the Biological Weapons Convention is markedly less direct than that of earlier US Government publications, for example President Reagan's last *Report on Soviet Noncompliance with Arms Control Agreements* [see 2 Dec 88]. What it says is: "The Soviets continue to improve their ability to use biological agents. New biological technologies, including genetic engineering, are being harnessed to improve the toxicity, stability, and military potential of the Soviet biological warfare (BW) stocks. The Soviets continue to deny that they have an offensive BW program, but there has been evidence not only to support the existence of research and development but also weaponized agents. The Sverdlovsk biological agent accident of 1979 that resulted in the release of anthrax from a bacteriological warfare institute provided such evidence and a strong indication that the Soviets have violated the Biological Weapons Convention of 1972." {*Soviet Military Power 1989*}

**29 September** Hungary, through its Foreign Minister, informs the UN General Assembly that it "is ready to comply with all the provisions of the [CWC] and to act in full conformity with it even before it is concluded and enters into force.

"That means, *inter alia*, reaffirming that on Hungarian territory there are neither chemical weapons nor industrial plants capable of producing such weapons and that the production of the Hungarian chemical industry and the trade in chemicals serve exclusively peaceful purposes. In accordance with the envisaged articles of the convention we shall make an itemized declaration, to be renewed on a regular basis, on the production of and foreign trade in chemicals. Even before the conclusion and entry



into force of the convention, we are ready to accept verification, including on-site inspection, on a reciprocal basis, regarding all the declared facts and figures, as well as our military, industrial and trading activities relating to the scope of the convention. We consider that the potentialities of the United Nations can be used for this purpose under a procedure to be adopted later."

The Foreign Minister adds: "In agreement with the Government of the Soviet Union, I can also inform the General Assembly that the possibility of verification extends also to the installations of the Soviet army in Hungary." {A/44/PV.10}

**29 September** In the US Senate, the markup session scheduled by the Foreign Relations Committee on sanctions bill S.195, now revised to incorporate S.238 [see 25 Jan], is non-quotate and therefore postponed. The bill requires the President to impose sanctions against countries that use CW weapons and against US and foreign companies that supply materials for the weapons. It is opposed by the Administration, which prefers the House bill, HR 3033 [see 27 Jul], in that it allows the President more discretion in applying the sanctions. {CQ 30 Sep}

**29 September** The US-Soviet Task Force to Prevent Terrorism, a private organization sponsored by Search for Common Ground (Washington) and *Literaturnaya Gazeta* (Moscow), ends a week-long conference at the Rand Corporation in Santa Monica. Among its draft recommendations is the proposal that existing US-Soviet nuclear crisis control centers be expanded to exchange information on, and deal with, terrorist threats to use biological and chemical weapons. {AP as in SFC 30 Sep}

**2 October** At the UN General Assembly, the East German representative reaffirms the GDR proposal that a meeting of foreign ministers be convened in Geneva "so as to proceed to the final stage of the [CWC] negotiations." He adds: "We welcome the results of the recent talks between the USSR and the United States committing them to the conclusion of a relevant convention not later than next year." {A/44/PV.12}

**3 October** The Serbo-Croatian periodical *Danas* publishes a long interview with Lt-Gen Stanislav Petrov, the commander of Soviet Chemical Troops. He said: "we have also demonstrated chemical warheads on Frog and Scud missiles ... to foreign observers. I can also add here that we never had a chemical charge on this type of missiles when they are deployed outside the Soviet borders. In fact, the Soviet Union has never had or kept chemical weapons outside its territory. We keep our chemical weapons at home." {*Danas* 3 Oct in FBIS-SOV 13 Oct}

**4 October** The UN Secretary-General publishes the report of his Group of Qualified Experts on guidelines and procedures for investigating allegations of use of CBW weapons [see 31 Jul - 11 Aug]. {A/44/561}

**4 October** In the FRG, the Cabinet agrees to expand the export control list, adding another 25 chemicals to the list of 17 that are already controlled [see 13 Feb]. {*The Week in Germany* 6 Oct as quoted in ACR Oct 89 at 704.B.403-4}

In the Bundestag, Parliamentary State-Secretary for Defense Wimmer confirms what US Ambassador Ward had recently told an SPD working group: that the withdrawal of US chemical weapons from West Germany [see 25 Sep] would take place earlier than previously planned. {DB 4 Oct}

The *Washington Post* later reports that the Bush Administration actually wants the weapons removed in late 1990, according to unidentified "US diplomatic and military officials," despite an assessment by the Joint Chiefs of Staff that such a timetable carries "significant operational risk." The weapons would be shipped to Johnston Atoll in the Pacific, where they would be stored until their destruction there in 1997.

Quoting "secret US documents," the *Post* says the German stocks comprise 435 tons of GB and VX nerve gases held in

two types of artillery shell. It says, further, that the "shells reportedly were shipped to the US Army's Fischbach Ordnance Depot ... over a four-month period in 1967 at the same time older poison gas munitions were removed from another depot nearby." {WP 15 Oct}

**5 October** The US Department of Commerce, in testimony before the House Foreign Affairs Committee, announces that it plans to impose export controls on the remaining 10 precursors on the Australia Group warning list whose export from the United States still remains uncontrolled [see 28 Feb]; a total of 50 chemicals will then be subject to such foreign-policy controls {prepared statement of US Secretary of Commerce Robert Mosbacher; *Chemical Week* 18 Oct}, the same number as Japan, for example, now controls {*The Week in Germany* 6 Oct as quoted in ACR Oct 89 at 704.B.403-4}.

**6 October** Syria addresses the UN General Assembly thus: "Proceeding from our firm conviction that all States of the world should participate in the process of eliminating and prohibiting all kinds of weapons of mass destruction, the Syrian Arab Republic calls for the establishment of a zone free of all weapons of mass destruction, whether nuclear, chemical or biological, in the Middle East region. We believe that the United Nations provides the appropriate framework for the achievement of such an objective." {A/44/PV.16}

**7 October** The Soviet news agency TASS reports an interview with Lt-Gen Stanislav Petrov, the commander of Soviet Chemical Troops, in which he comments as follows on a recent article in a London newspaper {ST 1 Oct}: "The 'logic' of the article is that the Russians are proposing to fully eliminate the existing chemical weapons only because they have allegedly mastered a secret production of a still more terrible weapon of mass destruction which may ostensibly play a decisive role in time of war .... The correspondent also asserts that Western intelligence agencies believe that genetically engineered weapons 'have already been tested at several secret research stations in the Soviet Union.' I am officially stating that these conjectures are absolutely unfounded." {TASS 7 Oct in FBIS-SOV 10 Oct}

**7-10 October** In Hiroshima, International Physicians for the Prevention of Nuclear War (IPPNW) holds its 9th World Congress; it is the first one to include a workshop on CBW {*Japan Times* 7 Oct}. IPPNW's US affiliate, Physicians for Social Responsibility, proposes that the federation "incorporate into its activities work on the banning of research, development, production and use of chemical and biological weapons" {*Vital Signs* (Cambridge, MA: IPPNW) Oct 89}. The resolution is accepted.

**9 October** The *Washington Post* reports that President Bush, prior to his UN speech on 25 September [q.v.] (in which he announced "steps the United States is ready to take to rid the world of [chemical] weapons"), had issued a decision memorandum to key policy makers laying down a policy that would accommodate continued production of binary chemical weapons even after the CWC had entered into force.

The *Post* says that the President's decision -- "crafted to avoid a clear choice between enthusiasts and skeptics" -- originated in "an unusually secretive policy review" in which his top appointees had differed greatly "on the wisdom of a chemical weapons ban." The Defense Department had favored the continued-production option, so the report continues, arguing that the current production program for binary munitions would probably still be at an early stage when the CWC was completed and the treaty might later collapse. This Pentagon position also envisaged the creation of a "firebreak" during the 10-year destruction phase after the CWC entered into force -- a pause that would allow states parties to halt their destruction operations while re-evaluating the treaty. President Bush rejected the firebreak proposal, however. He also rejected a proposal from one part of the State



Department that the entire US CW stockpile be discarded unconditionally; and he rejected the proposal of the Joint Chiefs of Staff that the United States should, in effect, withdraw from the multi-lateral CWC negotiations and instead enter into a bilateral agreement with the Soviet Union to reduce, but not eliminate, CW stocks.

The President's decision memorandum, according to the *Post*, said only that the binary production program would continue; it did not actually say that completion of the CWC would not interfere with the program. But an unidentified "knowledgeable administration official" is quoted by the *Post* as saying that the United States will seek revisions in the draft CWC. [The present version of the Rolling Text requires immediate cessation of production upon entry-into-force of the treaty and disabling of chemical-weapon production facilities within three months.] Political and diplomatic preparations for such a move had not yet begun. {WP 9 Oct}

There is a news-agency wire-story later in the day, however, with attribution to an unidentified Administration official, saying that the USSR had been informed of US production intentions during the Baker-Shevardnadze ministerial meetings in Wyoming the previous month {WT 10 Oct}. Yet the first official Soviet public comment on the affair seems to belie this ("If the content of the *Washington Post* article corresponds to reality ...."), though it does say that if the new approach "is implemented at the talks, it would undermine the existing basis for agreeing the draft treaty and throw the negotiating process, which has already entered its concluding stage, far back." {TASS 10 Oct in FBIS-SOV 11 Oct}

**10 October** The Abu Dhabi newspaper *Al-Ittihad* publishes an interview with Libyan Foreign Minister Jadallah 'Azzuz al-Talhi. He had said that completion of the Rabta plant [see 1 and 22 Mar] has been held up because of pressure delaying the arrival of factory equipment. He also said that Libya does not intend to produce chemical weapons, even though there is no international law or agreement which would prevent it from doing so. {MENA 10 Oct in FBIS-NES 10 Oct}

**10 October** In Washington there is more information about the President's policy on binary production [see 9 Oct]. White House press spokesman Marlin Fitzwater confirms the decision to preserve the production option, explaining it as follows at a press briefing: "what we have said is, as we work down to zero under the treaty, or down to 80 percent under a Soviet agreement [see 25 Sep], if we could get one, we would continue to replace the more dangerous unitary with the binary. So ... the process is still that you go down to zero, it's just that you're upgrading as you go" {Federal News Service 10 Oct}. A similar explanation is given by the Under Secretary of State for Security Assistance, Reginald Bartholomew, at the Foreign Press Center the next day {USIA transcript}.

**11 October** Outside the White House in Washington there is a public demonstration against the President's CW policy [see 10 Oct] organized by the SANE/FREEZE Campaign for Global Security {SFC 11 Oct}. Speeches critical of the policy later begin to be made in both chambers of Congress, including powerful statements by Senate Majority Leader George Mitchell {CR 12 Oct p H6989, 16 Oct pp S13415-6, 17 Oct pp S13501-2}. The Chairman of the House Foreign Affairs Committee, Dante Fascell, says the policy has the effect of "unwittingly legitimizing the very thing that President Bush and Congress want to halt -- chemical weapons proliferation" {NYT 15 Oct}.

**15 October** The *New York Times* reports that President Bush's decision to retain the CW production option [see 10 Oct] had been driven by the Pentagon's desire to protect the Bigeye VX2 spraybomb production program [see 11 Sep], which was not now expected to get under way until late 1992 at the earliest. {NYT 15 Oct}

**16 October** In Washington, the Chairman of the House Defense Appropriations Subcommittee, John Murtha, warns the Defense Department of serious management and technological problems which a subcommittee investigation had found at the Johnston Atoll chemdemil plant. He advocates, again, further development of cryofracture technology as a backup {DW 30 Oct}. The Defense Department thereupon commissions a complete review of the issue.

**17 October** In Bonn, the Federal Defense Ministry announces that the US Army will next year begin the withdrawal of its CW weapons from the Federal Republic [see 4 Oct] {DPA 17 Oct in FBIS-WEU 18 Oct}. This is confirmed by US Defense Secretary Richard Cheney talking to reporters on 27 October at the end of a visit to Bonn. He says that the process of withdrawal will be completed in 1991 at the latest {DPA 27 Oct in FBIS-WEU 30 Oct}.

**18 October** The Director of the US Arms Control and Disarmament Agency, Ronald Lehman, addresses the First Committee of the UN General Assembly. He reiterates what President Bush had previously said to the Assembly about eliminating chemical weapons [see 25 Sep], but makes no mention of any US intention to continue producing them [see 10 Oct] {USIA Official Text 23 Oct}. At a breakfast meeting with reporters, however, he suggests -- if the press reporting is really to be believed -- that the Administration would sign a global treaty with added confidence if it allowed continued US production to deter use of poison gas by nations that did not sign the accord at the same time {WP 19 Oct}.

**19 October** The *Washington Post*, citing unidentified officials earlier in the week, reports that the Bush administration is conducting a review of its binary-munitions production plans in the light of the President's decision last month [see 9 Oct] to retain a much smaller stockpile in coming years. According to the *Post*, the current plans call for new production amounting to about 20 percent of the existing poison-gas stockpile, which it says is approximately 30,500 agent-tons; so far produced are binary artillery shells providing about 70 tons of nerve gas. {WP 19 Oct}

**19 October** The British Defence Ministry tells Parliament that it thinks it has "good reason to believe that several non-Soviet Warsaw Pact countries have undertaken offensive chemical warfare research and development programs and that in some cases these have been taken forward to the production stage." {HansC 19 Oct}

**20 October** In the US Senate, the Committee on Foreign Relations issues its report on the counter-proliferation sanctions bill, S.195 [see 29 Sep], favoring the proposed legislation. {*Sunday Patriot-News* (Harrisburg, PA) 22 Oct}

**24 October** *Tageszeitung* (West Berlin) reports that the Federal Government was now withdrawing its recent statement that, in regard to the US-Soviet data-exchanges and the attendant mutual inspections of CW facilities agreed to in Wyoming [see 22-3 Sep], it had given its consent to inclusion of US facilities in West Germany in the arrangements. The Federal Government was instead saying that, because the US stocks in the FRG constituted less than 2 percent of the total US stocks, they lay outside the Wyoming agreement, meaning that Federal consent was not needed.

*Tageszeitung* reports, further, that the Federal Government has secret intelligence on the continued storage of Soviet chemical weapons in East Germany, Czechoslovakia, Poland and Hungary, according to which some 26,700 agent-tonnes were held, as of August 1989, at 15 locations, possibly with more in storage at 71 other locations {TZ 24 Oct}. The allegation is vigorously denied in the Soviet press {KZ 2 Nov in FBIS-SOV 3 Nov}.

This purported disclosure of secret intelligence is also to be found in the English translation of what was described as the summary report of a secret briefing given by the Federal Government to a Bundestag committee, published soon afterwards in



*Arms Control Reporter* {ACR Oct 89 at 704.B.407-8}. However, according to this publication, the secret intelligence, which had been graded according to its reliability -- roughly "confirmed," "probable" and "possible" --, was that there are no confirmed chemical-weapon storage sites in any of the four countries, and that the locations said to hold those 26,700 agent-tonnes were only probable sites, the other 71 being possibles.

**25 October** At Amesbury in southern England, liquid emitted by a low-flying aircraft causes damage to the paintwork of cars {*Salisbury Journal* 2 Nov, *Southern Evening Echo* (Southampton) 3 Nov}. It later transpires that the liquid was a polyethylene glycol formulation {HansC 13 Nov} used as a CW-agent simulant from aircraft spraytanks at the British Army's nearby "battle run" used for NBC defense exercises at Winterborne Gunner; the pilot had apparently jettisoned a load away from the range {Ind 30 Nov}.

**26-7 October** The Committee of Foreign Ministers of States Parties to the Warsaw Treaty meets in Warsaw. Its communiqué includes the following: "The ministers called for the earliest possible conclusion of an international convention on the complete prohibition and elimination of chemical weapons, and called on the participants in the Geneva negotiations to settle the outstanding issues in 1990." {CD/957}

**27 October** Due date, according to the Soviet schedule, for destruction of the last remaining SS-23 missile in accordance with the INF treaty. {TASS 6 Oct in FBIS-SOV 10 Oct}. [The SS-23 missile, which has the Soviet designation QTR-23, is often described as a CW-capable weapon.]

**28 October** In Taipei, a spokesman for the Taiwanese Ministry of National Defense tells a press conference that the Republic of China will not manufacture biochemical weaponry but will conduct research on defense against it. {CNA 28 Oct in FBIS-CHI 30 Oct}

**30 October** US-Soviet bilateral talks on chemical weapons begin in New York {WT 27 Oct, NYT 31 Oct}. Their purpose reportedly is to further implementation of the Wyoming Memorandum of Understanding which provided for confidential bilateral exchanges of information about CW stockpiles and facilities [see 22-23 Sep] {CSM 24 Oct, TASS 27 Oct in FBIS-SOV 30 Oct}. The memorandum requires that Phase I of the information exchange be completed by the end of December {official text printed in CWCB 6}.

**30 October** In the UN General Assembly First Committee, Austria, with the support of Australia and the Netherlands, is tabling a resolution on biological weapons which is to request the UN Secretary-General to report on the implementation of the information-sharing confidence building measures agreed at the Second BWC Review Conference. {Statement of Ambassador Peter Hohenfellner (Austria) at the First Committee of the UN General Assembly, 30 Oct}

**30 October** In the UN General Assembly First Committee, the Soviet Union, represented by CD Ambassador Batsanov, includes the following in its statement: "We have been known to adopt for a long time a rather reserved position with regard to other countries' proposals for the inclusion of toxins within the coverage of the [CW] Convention. Now the Soviet Union is prepared to withdraw its objections on this score. At the same time, we shall continue to insist on more effective verification within the convention on biological weapons which as you know covers all toxins."

On chemdemil, the statement said: "Failure to take into account matters of public relations has cost us dearly at the initial stages of the construction of the chemical weapons destruction facility near the city of Chapayevsk. Heeding to the demands of

the local community the Government of the USSR was pressed to take a decision to convert the facility into a chemical weapons destruction training center that would use only imitation chemical agents rather than combat agents themselves [see 6 Sep].

"We believe that international cooperation in the field of destruction of chemical weapons could also be particularly helpful.

"In general we believe that the convention on the prohibition of chemical weapons should be concluded within the next year or two and we hope that the General Assembly would call for the early conclusion of that convention." {Statement by S B Batsanov 30 Oct 89 as released by the USSR UN Mission}

**31 October** At Tooele, Utah, ground is broken for construction of the first full-scale chemdemil plant to be built in the United States [see 31 Aug]. {NYT 31 Oct}

**November** The new edition of *Army Focus*, published by the US Department of the Army, outlines the Army position that a chemical retaliatory capability is needed to deter possible Third World chemical threats as follows: "In the absence of a verifiable ban on chemical weapons, the modernization/demilitarization program will give US forces the capability to deter use of chemical weapons anywhere in the world, while placing our own troops at minimum risk. The public exchanges between the United States and the Soviet Union have created the impression of encouraging prospects for a treaty. With Soviet pressure to stop production, there is a strong danger of cutting back funds for chemical binary modernization too soon. Third World countries represent a great threat to US forces regardless of bilateral agreements with the Soviets. We must underscore the importance of deterrence based on a credible retaliatory capability and a strong defensive posture." {*Army Focus* Nov 89}

**1 November** In the US House of Representatives, the Foreign Affairs Committee approves CW sanctions legislation in the form of HR 3033 [see 29 Sep], now amended to reflect months of negotiation between the administration and Congress. The bill would require the President to impose specified sanctions on foreign firms or individuals if he determines that they have "knowingly and substantially contributed" to the efforts of a country to develop or use CBW weapons. The sanctions would not have to be imposed if the President determines that the government with jurisdiction over the firm or individual concerned has taken "corrective" action that the sanctions would run counter to US security interests. The bill allows the President substantially more flexibility than the Senate bill [see 20 Oct]. {Text of remarks by Hon Dante B Fascell, Chairman, Committee on Foreign Affairs, 1 Nov; CQ 4 Nov}

**3 November** The US-Soviet CW bilateral negotiations in New York [see 30 Oct] end. The USSR Foreign Ministry later says that these "consultations on the prohibition of chemical weapons" are to resume in Geneva on 28 November, confirming that the New York round had focussed on ways to implement the Wyoming Memorandum of Understanding. {TASS 9 Nov in FBIS-SOV 9 Nov}

**4 November** In Pirmasens, FR Germany, the Friedenskoordination Westpfalz hosts an expert panel to lead public discussion of the planned withdrawal of US CW weapons from the region, during which a Palatinate Citizens Appeal is launched, calling for greater official candor on the plans and the risks entailed, and for independent measures to achieve this. {TZ, *Pirmasenser Rundschau* and *Die Rheinpfalz* 6 Nov}

**6 November** The United States Congress receives the House-Senate conference report on the 1990 Defense Authorization bill {CR 6 Nov pp S14717}. The report approves \$47 million for produc-



tion of the 155-mm binary artillery shell [see 27 Jul], but fences all but \$2 million of it pending certification from the Army and the General Accounting Office that the production backlog [see 11 Sep] will be eliminated during 1990 and that the dichlor production plant under construction at Pine Bluff Arsenal has been completed.

The conference report also prohibits expenditure of 1990 defense appropriations on withdrawal of US chemical weapons stocks from West Germany until the Defense Secretary has satisfied several stipulations including certifying that "an adequate United States binary chemical munitions stockpile will exist" by the time the withdrawal begins. {FY 90 Defense Authorization conference report, section 172}

Other provisions include reinstatement of the requirement for an annual CBW obligations report from the administration, including a report on the FY 88 expenditure (section 243); a stipulation that the administration furnish a detailed report, in classified and unclassified versions, on the FY 89 biological defense research program (section 242); and the authorization of \$15 million to the Office of the Secretary of Defense for a CWC verification research program (section 241).

**7 November** Unidentified US administration officials tell reporters that US intelligence agencies are reviewing their estimates of the Soviet chemical weapons stockpile in preparation for next month's bilateral data exchange under the Wyoming agreement. According to one of these officials, the CIA believes the USSR to have slightly less than 50,000 agent-tons, whereas the DIA believes the figure to be closer to 75,000 agent-tons; estimates from the State Department and from "a special Army research center" are considerably higher {WT 8 Nov}. The DIA had lowered its previous estimate of 300,000 tons {WP 9 Nov}.

**9 November** In the US House of Representatives, a bipartisan group of House leaders writes to President Bush opposing a policy of maintaining the option of continuing binary-weapons production after conclusion of a chemical weapons accord [see 11 Oct]: "We write to urge you to make a clear statement of policy on this issue now and to reassert the US commitment to a treaty that bans production." They say, further, that "ambiguity on this issue may seriously undermine the momentum of negotiations." {C&EN 27 Nov}

**10 November** In Kuala Lumpur the Board of Industries of the ASEAN Chemical Industry Council is scheduled to meet to discuss, among other things, the role and responsibilities of the chemical industry towards banning chemical weapons. {GICCW/INFO/28}

**13 November** In the US Congress, the conference report on the 1990 Defense Appropriation bill directs that, as regards chemdemil, "design, engineering, environmental and other preparatory work for a full scale cryofracture plant [see 16 Oct] proceed with deliberate speed." Further, the conferees increased to \$27.61 million the funding for removal of US chemical weapons from Europe, in accordance with the latest cost estimates. {House report 101-345}

The House of Representatives adopts its CBW sanctions bill [see 1 Nov], HR 3033 {CR 13 Nov pp H8405-11}. The corresponding Senate bill [see 1 Nov] has been blocked at least until next year by a jurisdictional dispute between the Banking and Foreign Relations Committees {CQ 2 Dec}.

**13 November** The US firm Combustion Engineering Inc is bought by the European multinational Asea Brown Boveri Ltd, which is jointly owned by Asea AB of Stockholm and Brown Boveri Ltd of Baden, Switzerland {NYT 14 Nov}. Combustion Engineering is a

major contractor in the US binary-munitions production program [see also 11 Sep], currently engaged in building the dichlor factory at Pine Bluff Arsenal.

**14 November** The British government reaffirms to Parliament its position regarding the size of Soviet stocks of chemical weapons, as expressed in the 1989 Defence White Paper [see 2 May], notwithstanding reports that the US intelligence estimates have now been drastically reduced [see 7 Nov] {HansC 14 Nov}. It does so again on 30 November {HansC 30 Nov}.

**14 November** In Washington the Natural Resources Defense Council makes public a US Defense Intelligence Agency document dated July 1989, obtained under the Freedom of Information Act, stating that Israel has chemical and nuclear warheads available for its *Jericho I* missile as well as high-explosive warheads. {Reuter as in WT 15 Nov}

**14 November** In FR Germany, premises of Bayer AG are searched by Customs authorities on suspicion of having violated the Foreign Trade Law by supplying a "pesticide formulation plant" to Iran. Bayer denies any violation, but confirms that it had supplied such a plant, worth DM 5 million, at the end of 1987, stating that the plant was "not in the remotest way suitable for the manufacture of chemical weapons." According to a press report, the Köln Higher Finance Office had come to suspect that Bayer and Lurgi GmbH were participating in the construction of a large chemical factory in Qazvin in which chemical weapons might possibly be manufactured. {DPA 24 Nov in FBIS-WEU 29 Nov}

**16 November** In the US Senate, the Committee on the Judiciary issues its report on the BWC implementation bill, S.993 [see 26 Jul], favoring the proposed legislation. {Senate report 101-210}

**16-7 November** In Washington, the AAAS Program on Science, Arms Control and National Security holds a colloquium entitled "Chemical Weapons: Military Significance, Prospects for Proliferation, and Implications of Control."

**18 November** The newly designated leader of the US CD delegation, Stephen Ledogar, responding to questions from the Senate Foreign Relations Committee during its action on his nomination, writes: "In late September the President made a number of decisions that establish the basic direction for US policy on chemical weapons. We are now considering how best to implement the decisions." One decision had been to "continue modernizing our CW stockpile ... until a global ban is achieved" [see 10 Oct], but "no decision has been taken [by the Administration] to seek any textual change to allow continued production after the treaty has entered into force." {Stephen J Ledogar, letter dated 18 November 1989 addressed to Senator Claiborne Pell, Chairman of the Senate Foreign Relations Committee}

**20 November** In the US House of Representatives, a bill, HR 3758, is introduced by Congressman George W Gekas (R-PA) to require operators of facilities that conduct BW defense research to provide notification and related information to local police, hospitals and fire departments. {CR 21 Nov pp H9216, E4017-8}

**21 November** The US Senate consents unanimously to S.993, the Biological Weapons Anti-Terrorism Act, implementing the 1972 Biological Weapons Convention in the United States [see 16 Nov] {AP as in WT 27 Dec}. The bill now goes to the House of Representatives, where it will be considered by the Subcommittee on Immigration, Refugees, and International Law of the Judiciary Committee.



**24 November** There is press-reporting of Saudi Arabia having recently placed a contract with a British manufacturer for supply of 10,000 of the new S-10 respirator. {*Middle East Economic Digest* 24 Nov}

**27 November** In East Berlin, experts from Warsaw Treaty member states meet to exchange experiences and opinions on their countries' efforts to control the export of potential CW-agent precursors. {ADN 27 Nov in FBIS-EEU, 1 Dec}

**27-8 November** The Warsaw Treaty Defense Ministers' Committee meets in Budapest. Its communiqué expresses satisfaction with the recent initiatives on banning chemical weapons and eliminating all stockpiles. {SovN no 6504}

**28 November** In Geneva, the CD Ad Hoc Committee on Chemical Weapons reconvenes for open-ended consultations due to end on 14 December. Also, another round of US-Soviet bilateral consultations on the CWC is due to begin [see 3 Nov].

The following day, the head of the Soviet CD delegation, Sergei Batsanov, tells reporters that it should be possible for the Ad Hoc Committee to finalize the inspection protocol [see 29 Aug] for inclusion in the Rolling Text. On the bilateral consultations, he says that these should concentrate on ad hoc verification. He speaks also of a Soviet wish to extend US-Soviet technical cooperation on the destruction of CW stockpiles. {AN no 2174}

**29 November** President Bush speaks to reporters of US-Soviet dialogue on a pact to ban CW weapons: "I still am very much interested, and I think they are .... I've gotten back from them a real interest in moving chemical forward." {BG 30 Nov}

**30 November** Utah authorities cite Tooele Army Depot for 40 violations of hazardous-waste regulations at its pilot chemdemil plant, including the handling of CW agents in unpermitted areas. {WT 1 Dec}

**1 December** US CD Ambassador Max Friedersdorf, interviewed in Geneva early in the new round of US-Soviet CW bilaterals [see 28 Nov], says that, although the United States was hoping to exchange CW-stockpile data in accordance with the Wyoming agreement [see 3 Nov] in the course of the round, the USSR preferred to wait until later. He also says he did not expect chemical weapons to be on the agenda of the Malta summit. {USIA EUR-509 1 Dec}

**2-3 December** At the Malta summit, President Bush reportedly proposes to President Gorbachev that, if the Soviet Union accepts the proposals on CW weapons which he had advanced at the UN General Assembly [see 25 Sep], he will halt the US binary production program {FT 4 Dec, DN 11 Dec}; an agreement to this end might be signed at the next summit meeting, in late June 1990 {WP, WSJ 4 Dec}.

In other words, the proposal seems to be that the US would abandon its notion of maintaining a right to manufacture CW weapons during the initial destruction phase of the projected CWC regime [see 10 Oct] provided the Soviet Union agreed to join the United States in starting to destroy CW-weapons stocks, down to 20 percent of the current US level, ahead of the treaty, and provided, also (although this is ambiguous in the press reporting), the Soviet Union accepted the idea of 2 percent of CW-weapons stocks being retainable under the treaty until all CW-capable states had joined it. {LAT as in *San José Mercury News* 4 Dec, NYT as in IHT 5 Dec}

At an end-of-summit news conference, President Gorbachev describes the proposal as "interesting" {NYT 3 Dec, NYT as in IHT 4 Dec, G 4 Dec}. President Bush says there are to be

ministerial-level bilateral meetings on the CWC negotiation in January and February {TL 4 Dec}. In their joint statement, the two presidents say they hope that significant progress towards the CWC will have been made by the time of their next summit meeting {Ind 4 Dec}.

**4 December** In Brussels, heads of state and government of the NATO countries meet for an informal session of the North Atlantic Council and are briefed by President Bush on the Malta summit. The President's press secretary releases a statement describing the Bush initiatives on CW at Malta in the following terms: "1) Speeding achievement of a chemical weapons ban by offering to end US production of binary weapons when the multilateral convention on chemical weapons enters into force, in return for Soviet acceptance of the terms of our UN proposal to ban chemical weapons. 2) Proposing to sign an agreement at the 1990 Summit to destroy US and Soviet chemical weapons down to 20 percent of the current US level." {*Fact sheet*: "The President's initiatives during the Malta meeting," 4 Dec}

UK Prime Minister Margaret Thatcher speaks of the failure of the USSR to build its promised plant for destroying its chemical weapons [see 30 Oct]. {TL 5 Dec}

**5 December** In Moscow, FRG Foreign Minister Genscher meets with his Soviet counterpart, Eduard Shevardnadze. The Soviet communiqué indicated that both ministers agreed that "production of chemical weapons, including binary weapons, should be terminated after the [CW] Convention comes into effect." {SovN 13 Dec}

**5 December** The Pope, addressing the global ecological crisis in his annual Peace Message, says: "Despite the international agreements which prohibit chemical, bacteriological and biological warfare, the fact is that laboratory research continues to develop new offensive weapons capable of altering the balance of nature." {LAT as in BG 6 Dec}

**7 December** In Iraq, the Minister of Industry and Military Production announces that a rocket capable of putting satellites into space, designated *Al-Abed*, had been successfully launched two days previously from the Anbar space research base west of Baghdad; that same day there had been a meeting in London of officials of the 8-nation Missile Technology Control Regime {FT Dec}. The launch of the rocket is subsequently confirmed by the US Defense Department {UPI as in IHT 9-10 Dec}.

**7 December** In Bern, there are Soviet-Swiss consultations on matters relating to the ban on CW weapons. {TASS 7 Dec in FBIS-SOV 12 Dec}

**7 December** In Moscow, TASS releases a commentary on what was said about CW weapons during the Malta summit [see 2-3 and 4 Dec]. It includes the following: "After the Malta meeting, the US President agreed to terminate the production of binary weapons after the multilateral convention on chemical weapons goes into effect .... The Americans ... propose not to include in the convention a provision to maintain two percent of the chemical weapons for a certain period of time. They suggest that this decision be formulated in a separate protocol." {TASS 7 Dec in FBIS-SOV 11 Dec}

**8-10 December** In Mosbach, FRG, is held the 6th International AFES-PRESS conference, on Verification and Arms Control: Implications for European Security, including a working group on CBW.

**11 December** In Britain, the House of Commons is told by the government that NATO has still not adopted procedures for the



authorized release of chemical weapons in Europe in time of crisis. {HansC 11 Dec}

**12 December** Secretary of State James Baker speaks as follows during a speech in West Berlin: "As the East-West confrontation recedes, and as the prospects for East-West cooperation advance, other challenges for European and Atlantic security will arise. They point to NATO's second new mission. Regional conflicts -- along with the proliferation of nuclear, chemical and biological weapons -- present growing dangers. Intensified NATO consultations on these issues can play an important role in forming common Western approaches to these various threats." {NYT 13 Dec}

**12-14 December** The Australia Group meets in Paris.

**13 December** In Moscow, *Sovetskaya Rossiya* publishes an interview with the Deputy Chief Military Prosecutor who is supervising a criminal investigation into the behavior of MVD and Army troops during their suppression of the Tbilisi demonstration in Georgia the previous April [see 9 Apr and 24 May]. On the use of chemicals, he is reported as follows: "Then special 'cheremukha' were employed. They are not chemical weapons. In the United States and other countries CS is ranked among the so-called 'police gases.' Let me also note that a USSR Supreme Soviet Presidium decree of 28 July 1988 makes provision for the use of special means. The arguments set out were confirmed by UN experts .... Experts confirmed that only 30 people had been poisoned in connection with the troops' use of the special means 'cheremukha' and K-51. Experts are continuing their studies .... Nor do the claims that the troops allegedly used chloropicrin correspond with reality. Neither the Soviet Army nor the MVD internal troops have products containing chloropicrin designed for such purposes." The inquiries are continuing {SovR 13 Dec in FBIS-SOV 26 Dec}. The report by the commission of inquiry established by the First Congress of USSR Peoples' Deputies is imminent {WP 22 Dec}.

**14 December** In Geneva, the CD Ad Hoc Committee ends the first part of its intersessional session [see 28 Nov]. There has been progress towards completion of a text for the Inspection Protocol which is to guide the work of the international inspectorate [see 29 Aug], but no significant movement on the issues of challenge inspection and order of destruction [see 28 Aug].

There has been no proposal that the draft CWC should be amended to accommodate the proposals made by President Bush at the UN General Assembly [see 25 Sep] and at the Malta summit [see 4 Dec].

*German readers may like to know that another outlet for the Sussex-Harvard rolling CBW chronology is CBW Infodienst. This new periodical is available from the Forschungsstelle der Berghof-Stiftung für Konfliktforschung in Berlin (West). For subscription details, apply to Joachim Badelt at the Berghof-Stiftung, Altensteinstrasse 48a, D-1000 Berlin. (Telephone: 030/831 80 90. FAX: 030/831 59 85. GreenNet: BSK.)*

**14 December** In Geneva, outgoing US CD Ambassador Max Friedersdorf [see 18 Nov], speaking to reporters at the close of a new round of US-Soviet CW bilaterals [see 28 Nov], says that the United States is still waiting for a Soviet response to the US offer on CW weapons made at the Malta summit [see 2-3 Dec]. {Ind 15 Dec}

**15 December** The British government announces that its existing controls on the export of potential CW-agent precursors to Iraq, Iran, Libya and Syria are being extended to cover all foreign destinations. {DTel 16 Dec}

**18-9 December** What TASS describes as "routine rounds of the Soviet-US consultations on the nonproliferation of chemical weapons and on the nonproliferation of missiles and missile technology" are held in Paris. The Soviet delegation is headed by Deputy Foreign Minister V Karpov and E Verville. {TASS 21 Dec in FBIS-SOV 22 Dec}

**25 December** In West Germany, *Der Spiegel* magazine publishes an account of preparations now under way for the removal of US CW weapons from the country. It suggests that the weapons are stored in an out-station of the US Army depot at Fischbach [see 23 May] located near the village of Clausen, some 30 km to the north. [Note: According to the US Joint Chiefs of Staff memorandum of 7 Dec 62 cited in CWCB no. 2, p 16, Clausen was one of four FRG locations then under consideration as alternatives to Kircheim-Bolanden, where, since late 1958, US CW weapons had been positioned without prior negotiation with the Federal German government.] The planned retrograde, scheduled for Summer 1990, is to be by road, rail and ship to Johnston Atoll in the Pacific via the port of Nordenham in Lower Saxony; it is to be completed before the Bundestag elections in December 1990. {DerS 25 Dec}

### Bush Administration's Chemical Weapons Budget Request for FY 1991

In the budget presented to Congress on 29 January, the Pentagon requested:

\$74.3 million for production of the 155 mm binary artillery shell (up from \$47 million last year); and

\$66.7 million for production of the Bigeye bomb (compared to \$6.8 million last year).

*Department of Defense Budget for Fiscal Year 1991: Procurement Programs (P-1), 29 Jan 90*

**26-8 December** In Hanoi there is an international symposium on consequences of the toxic chemicals used by the United States during the Vietnam War. It is attended by scientists from France, FR Germany, Japan, the Soviet Union, the United States and Vietnam. {VNA 29 Dec in FBIS-EAS 2 Jan}

**29 December** The United States and the Soviet Union exchange data on their CW stockpiles and facilities in accordance with Phase I of the bilateral process agreed to at Jackson Hole, Wyoming [see 1 Dec]. The exchange takes place simultaneously in Moscow and Washington, in the later, at a meeting between ACDA Director Ronald Lehman and USSR Ambassador Dubinin.



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## SOME FORTHCOMING EVENTS

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\* CD reconvenes in Geneva 6 Feb 90

\* "Lessons of the Iran-Iraq War," 17 Feb 90, and "Chemical Weapons Proliferation or Chemical Disarmament?," 18 Feb 90, AAAS Annual Meeting, New Orleans

\* "Implications of Chemical Weapons for Australia and the Region: Future Problems and Possible Arms Control Solutions," workshop at the Peace Research Centre, Australian National University, Canberra, 8-9 Mar 90

\* "Chemical Weapons Proliferation Policy Issues Pending an International Treaty," sponsored by the Groupe de Recherche et d'Information sur la Paix, 16 Mar 90, Brussels (For more information, write to the Groupe de la Recherche..., Rue

Van Hoorde, 33, B-1030 Bruxelles, or call 02/241 8420.)

\* "The Biological Weapons Convention Under Siege: Disarmament Issue for the 1990s," 5 Apr 90, University of Maryland (Baltimore County Campus), Catonsville, MD

\* UN NGO Committee on Disarmament panel on confidence-building and verification proposals for the Third Review Conference of the BWC, 5 Apr 90, New York

\* "Symposium on Improving Confidence-building Measures for the BW Convention," National Defence Research Establishment, Umeå, Sweden, 29-30 May [Open to technical personnel from defense research organizations, as declared under the UN information exchange.]

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