

# CHEMICAL WEAPONS CONVENTION BULLETIN

News, Background & Commentary Relevant to Chemical Weapons & Chemical Arms Control

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## THE OPTION OF USING CHEMICAL WEAPONS

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The Geneva Protocol of 1925 prohibits the use of chemical weapons. A number of states parties have, however, reserved a right to second use or to retaliation in kind with chemical weapons. Among them are the United States and the Soviet Union.

The retaliatory use of chemical weapons requires the maintenance and prompt accessibility of useable weapons, the training of military personnel in their use, the elaboration of use scenarios for chemical warfare (CW) and periodic reliability checks of chemical warheads and delivery systems. The maintenance of such a use option necessitates an elaborated CW-culture within the military organization of the user state. Thus, change from a second-use policy to a no-use policy is bound to meet resistance.

In Geneva, states which have reserved the right to some use in relation to the Geneva Protocol's prohibition are participating in negotiations on the Chemical Weapons Convention, which is to provide a comprehensive and verifiable ban on chemical weapons. A comprehensive ban would contain undertakings by states parties not to develop, produce, otherwise acquire, stockpile, retain or transfer chemical weapons.

It is obvious that a state which implemented in full the provisions of such undertakings would be incapable of carrying out any use of chemical weapons. So a refusal of a government unconditionally to give up its use option would severely strain the credibility of that government's commitment to the fundamental provisions of the convention under elaboration.

The very basis of a convention must be the collective will of the nations to ban forever both the existence of chemical weapons and all use of them. The political and moral strength of this idea would be undermined if "some use" or "little use" were to be sanctioned. With such modifications, the excellent opportunity to eliminate for the first time in history a whole family of weapons would be compromised and lost.

*\* 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 question is: Why do governments hesitate to make the full commitment to ban chemical weapons?

There is a contemporary, lingering and even growing attraction of these weapons among political and military leaders around the world. The use by Iraq of chemical weapons during the Gulf War has been perceived by some as an important contribution to Iraq's achievement of a stalemate. Even though the purely military usefulness of the recourse to chemical weapons in the Gulf War has been disputed by respected military analysts, the political and psychological impact has been questioned by no-one. Furthermore, the feeble, almost apologetic international reaction to the use of chemical weapons during the Gulf War gave some comfort to the user. The Paris Conference in January 1989 became something of a late effort to repair some of the damage done. The Conference resulted in a broad international endorsement of the principle of a comprehensive CW-ban. This outcome was held in jeopardy until it proved possible, by a majority of participating states, to deflect an initiative by some of the Arab states to make the Conference justify the threat and use of chemical weapons as a means to offset a real or presumed nuclear weapons threat.

It is doubtful whether the Paris Conference succeeded in finally dispersing the notion of chemical weapons as the poor man's nuclear equivalent. Undoubtedly, however, chemical weapons are the poor man's killer. Trained and well-equipped troops are normally protected enough to suffer only little harm from CW attacks in comparison with badly trained troops with poor equipment -- the troops of the majority of Third World countries. The civil population in poor countries would be even more vulnerable. The potential horrors of anti-city chemical warfare in the Third World are almost beyond imagining.

There is reason to believe that militarily advanced countries would prefer not to use chemical weapons against each other. The gains would not be large enough to compensate for the drawbacks. Most probably, however, there are contingencies in relation to Third World situations where CW is

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considered a realistic option under certain circumstances. With that in mind, it is understandable, but not acceptable, that some Third World countries should toy with the idea of themselves also becoming CW-powers like the United States and the Soviet Union, especially as this is both economically and technically easier than joining the nuclear club.

Retention by the two major powers of their use option is not helpful for CW non-proliferation efforts, the most important component of which is the quest for a Chemical Weapons Convention of universal or near-universal adherence. Also, efforts to demonstrate the small military value of chemical weapons use are undermined by the position taken by the major military powers.

Purely military arguments in favor of keeping the use option open are not compelling. It is difficult to visualize a situation -- even on a Third World battlefield -- where any of the great powers, finding its forces under attack with chemical weapons, would not find conventional weapons in their arsenals sufficient, indeed far preferable, for deterrence or retaliation. One does not need chemical weapons in order to deter chemical weapons.

The United States has, up until now, reserved or sought to reserve its position in important respects: the right of retaliatory use and a right to keep a (small but significant) chemical weapons stock under certain specified circumstances. All the more welcome, then, is the recent US-Soviet summit agreement that would halt all production of chemical weapons. The long term consequences of such a measure make it a step towards a non-use posture.

Still, the immediate position of the great powers is not an example of consistency and consequence. The hesitation and lack of resolve with regard to the fundamental step of renouncing all use is harming the efforts to achieve a truly universal CW-ban. How can effective political pressure for universal adherence to a convention be applied when the great powers are not prepared to commit themselves to the goal of that convention -- namely a ban on all use of chemical weapons? The whole undertaking of a Chemical Weapons Convention will remain in doubt until the great powers renounce use. The political and moral significance of becoming a Party to the Convention is that a State proudly and freely undertakes not to use such weapons without any crossed-finger reservations. The Convention transcends the right, embedded in international law, of retaliation in kind. That means that the eye-for-eye philosophy should no longer prevail to the detriment of achieving a Chemical Weapons Convention.

Now is the time for the great powers to abandon the shadowboxing language they normally spare for the CW-section of their jointcommuniqués and to come out clearly renouncing all use of chemical weapons under all circumstances. In the multilateral negotiations in Geneva, they should unequivocally support a provision containing an undertaking not and never to use chemical weapons. They should simultaneously declare that the very day the Convention enters into force for them, they will withdraw their reservations to the Geneva Protocol. Such actions by the two great powers would open up a window of opportunity. All the negotiating partners could then join forces and unhesitatingly and in good faith work to overcome the last obstacles in the way of a convention that could attract universal or near-universal adherence.

Our contemporary civilization by now must have assimilated the lessons from Ypres. Belief in the possibility of progress for the society of nations depends upon whether those nations can make use of their collective experience to create new and higher standards. A society that is proud of its scientific and cultural achievements does not respond to hostage-taking by hostage-taking. Therein lies moral defeat. The stigma attaching to the use of chemical weapons must be upheld. Renouncing the "right of retaliation" would be a bold act by the great powers, but also a profoundly wise one.

*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.*

**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 upon entry into force of the CWC {NYT 3 Dec, FT 4 Dec, DN 11 Dec}. An agreement to this end might be signed at the next summit meeting, in June 1990 {WP 3 Dec, 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" {G, IHT & NYT 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 says that both ministers agreed that "production of chemical weapons, including binary weapons, should be terminated after the [CWC] 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 Bern, there are Soviet-Swiss consultations on matters relating to the ban on CW weapons. {TASS 7 Dec in FBIS-SOV 12 Dec}

**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}.

**13 December** The *Washington Post* reports that the US Arms Control & Disarmament Agency had altered the record of what William Burns, then its director, had told the Senate Foreign Relations Committee on 25 January [q.v.] in testimony on CW-weapons proliferation prior to publication of the record by the Committee. The Agency had justified its action as correction of "an inadvertent misstatement." General Burns, however, stood by his original testimony, which he said was based on US intelligence reports. An unidentified Agency official reportedly said that the change had presumably been made after protests from elsewhere in the government because the original testimony "did not reflect what we are saying about this now."

The *Post* prints the following: [Director Burns] "had said that 'we believe only a small portion' of the 20 nations capable of building poison gas weapons actually stockpile such arms. 'We are talking in terms of no more than a handful--five or six' nations besides the Soviet Union and the United States, he said, with

chemical stockpiles .... But the printed record of [his] testimony has him saying that 20 nations have 'embarked' on poison gas production programs and that 'most of these [20] countries have some [poison gas] stockpiles at present.' The record adds, 'We believe a small portion of these countries actually have significant chemical weapons stockpiles,' injecting a distinction missing from the actual remarks." {WP 13 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].

**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 of the potential CW-agent precursors chloroethanol, dimethylamine, dimethylammonium chloride and potassium fluoride are being extended to cover all foreign destinations {DTel 16 Dec}. Its instrument, the Export of Goods (Control) Amendment no. 6 of 13 December, also adds *tris*-ethanolamine to the control list, but provides for an Open General Export License in respect to these and the other CW-agent precursors already subject to *erga omnes* export controls if they are destined for an Australia-Group country {Chemistry in Britain Feb 90}.

**15 December** The 44th UN General Assembly adopts without vote the three resolutions on CBW weapons recommended by its First Committee. Of these, Resolution 44/115B is particularly significant,

for its effect is to add a degree of verifiability to the Geneva Protocol. It authorizes the Secretary-General to investigate alleged violations of the Protocol (as did the corresponding resolution of the 43rd Assembly) and then welcomes, "in that regard, the proposals [see 4 Oct] of the group of qualified experts concerning technical guidelines and procedures to guide the Secretary-General in the conduct of timely and efficient investigation," calling upon all States to consider providing the recommended investigators and facilities. {A/RES/44/115B}

Resolution 44/115A calls, among other things, for the CD to adopt a full negotiating mandate for its work on the CWC, stating that the 1990 session "will be of pivotal importance" {A/44/PV.81, A/RES/44/115B}. Resolution 44/115C, on the Biological Weapons Convention, "requests the Secretary-General to circulate to the States parties to the Convention not later than four months prior to the convening of the Third Review Conference a report on the implementation of the confidence-building measures agreed upon by the *Ad Hoc* Meeting of Scientific and Technical Experts from States Parties" [see 30 Oct]. {A/RES/44/115C}

**18-19 December** Bilateral US-Soviet 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. {TASS 21 Dec in FBIS-SOV 22 Dec}

**19 December** In Belgium, the Defense Ministry tells Parliament it has no plans to remove the CW munitions lying off Zeebrugge in the North Sea {*Vragen en Antwoorden, Kamer* 19 Dec}. It is believed that some 35,000 tonnes of munitions, one-third of them chemical, were dumped there in 1920. The Defense Ministry later says that, in 1972, the CW munitions, resting on a sandbank at 4-5 metres depth, some still in their wooden crates, were in good condition {*Vragen en Antwoorden, Kamer* 13 Feb 90}.

**20 December** In Belgium, two new Ministerial Orders issued by the Ministry for Economic Affairs on 29 November enter into force. They extend the existing export controls on CW precursors, applicable to the nine chemicals in the Australian Group core list, to cover goods transiting the country. {*Het Belgisch Staatsblad* 20 Dec}

## GLOSSARY OF ABBREVIATIONS FOR NEWS CHRONOLOGY

ACR	<i>Arms Control Reporter</i>	DS	<i>De Standaard</i> (Brussels)	LAT	<i>Los Angeles Times</i>
AFP	<i>Agence France Press</i>	DW	<i>Defense Week</i>	MENA	Middle East News Agency (Cairo)
AN	<i>Atlantic News</i>	DTel	<i>Daily Telegraph</i> (London)	NYT	<i>New York Times</i>
AP	<i>Associated Press</i>	FBIS	Foreign Broadcast Information Service (Washington)	Obs	Observer (London)
BG	<i>Boston Globe</i>	FR	<i>Frankfurter Rundschau</i>	SASC	Senate Armed Services Committee
BS	<i>Baltimore Sun</i>	FT	<i>Financial Times</i> (London)	SFC	<i>San Francisco Chronicle</i>
CBW	Chemical/biological warfare	G	<i>Guardian</i> (London)	SovN	<i>Soviet News</i> (USSR Embassy, London)
CD	Conference on Disarmament	HADS	House Appropriations Defense Subcommittee	ST	<i>Sunday Times</i> (London)
CD/	CD document series	HansC	<i>Hansard</i> (Commons)	SZ	<i>Süddeutsche Zeitung</i>
C&EN	<i>Chemical &amp; Engineering News</i>	HansL	<i>Hansard</i> (Lords)	TL	<i>Times</i> (London)
CQ	<i>Congressional Quarterly</i>	HASC	House Armed Services Committee	TZ	<i>Tageszeitung</i> (West Berlin)
CR	<i>Congressional Record</i> (Daily Edition)	IDR	<i>International Defense Review</i>	SovR	<i>Sovetskaya Rossiya</i>
CW	Chemical warfare	IHT	<i>International Herald Tribune</i>	STel	<i>Sunday Telegraph</i> (London)
CWC	The projected Chemical Weapons Convention	INA	Iraqi News Agency (Baghdad)	UN	United Nations
CWCB	<i>Chemical Weapons Convention Bulletin</i>	Ind	<i>Independent</i> (London)	UPI	United Press International
DerS	<i>Der Spiegel</i>	JANA	Jamahiriyyah News Agency (Tripoli)	USIA/S	US Information Agency/Service
DieZ	<i>Die Zeit</i>	JDW	<i>Jane's Defence Weekly</i>	WP	<i>Washington Post</i>
DN	<i>Defense News</i>	MEED	<i>Middle East Economic Digest</i>	WT	<i>Washington Times</i>
DPA	<i>Deutsche Presse Agentur</i>			WSJ	<i>Wall Street Journal</i>

**21 December** In Romania, during the revolutionary fighting, poison is apparently introduced into the municipal water supply in the city of Sibiu. A team of *Médecins sans Frontières* doctors, arriving 2 days later, arrange for analyses of water and blood samples at the University of Cluj; these are said to show traces of organophosphate poison {ST 4 Feb 90}. There had been fighting between Army and Securitate forces for control of the municipal water towers {DS 30 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 Kirchheim-Boland, 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}. Completion is planned for late September, according to a later press report {*Mainzer Rhein-Zeitung* 19 Jan}.

**26-28 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** In Belgium, the Flemish daily newspaper *De Standaard* publishes details of the draft of a government bill to prohibit "the export and transit of chemical weapons" in "the strictest sense of the term." The projected legislation will require a report by the government to Parliament twice a year {DS 29 Dec}. Subsequent reporting of the bill says that it provides for the establishment of a scientific committee to give advice to the government regarding production of CBW weapons and to collect data on products which could be used for purposes prohibited by the Geneva Protocol; a stringent export/import control regime is to be instituted {DS 3 Jan 90}.

**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] {statement of USSR CD Representative Batsanov in the Ad Hoc Committee on Chemical Weapons, 26 Jan 90}. The exchange takes place simultaneously in Moscow and Washington, in the latter, at a meeting between ACDA Director Ronald Lehman and USSR Ambassador Dubinin.

**3 January 1990** In Seoul, figures are published indicating that South Korean riot police have used an average of 511 tear-gas shells per day, in addition to tear-gas canisters and grenades, over the past 10 years. {AP as in DTel 4 Jan}

**8 January** In Helsinki there are bilateral Finnish-Soviet consultations on organizing the "cooperation in the area of developing procedures and means of [CW] verification" which had been agreed in October, during the visit of President Gorbachev to Finland. {Statement of USSR CD Representative Batsanov in the Ad Hoc Committee on Chemical Weapons, 26 Jan}

**9 January** The Bulgarian ambassador to London tells UK Foreign-Office Minister William Waldegrave that a commission of inquiry is to be established to investigate the death of Georgi Markov, the Bulgarian dissident killed with a poisoned umbrella in London in 1978 {DTel 10 Jan}. Later it is reported that Bulgarian officials

are intending to seek the cooperation of the London police {Obs 28 Jan}.

**10 January** In Bonn, Federal Chancellor Dr Helmut Kohl tells a press conference that he is optimistic that the worldwide chemical-weapons ban will be brought decisively nearer during 1990. He adds: "In this context I want to remind you that all American chemical weapons will be withdrawn totally from the FRG this year without replacement." {*Pressemitteilung* 10 Jan}

**12 January** In Moscow, Soviet CD representative Serguei Batsanov tells a news conference that bilateral US-Soviet contacts on the CW weapons ban have intensified since the Baker-Shevardnadze talks in Wyoming the previous September, and that the possibility for advancing new joint initiatives aiming to accelerate conclusion of the CWC were now being studied; US and Soviet proposals will be considered at the new round of ministerial talks shortly to take place in Moscow.

Further, Minister Batsanov says that a majority at the CD expect the CWC to be completed within the next 18 months. {TASS 12 Jan in FBIS-SOV 16 Jan}

**12 January** The UK submits a report to the CD Ad Hoc Committee describing findings from investigations under way in Britain on nonintrusive and nondestructive analytical techniques that could be used in CWC verification procedures for monitoring the contents of sealed containers, such as munitions. The report addresses X-ray methods, ultrasonic methods and neutron activation analysis. {CD/CW/WP.269}

**16 January** In Geneva, the CD Ad Hoc Committee on Chemical Weapons resumes its intersessional work [see 14 Dec 89].

**16 January** USSR CD representative Serguei Batsanov, in an interview broadcast on Moscow domestic radio, comments as follows on the US proposal for bilateral agreement on 80-percent cuts in CW stocks [see 14 Dec 89]: "We do believe ... that we should go further here. Thus the Soviet Union is proposing that bilateral agreements of this kind with the United States should include three basic elements: (1) A radical reduction in chemical weapon stocks on a bilateral basis. (2) Obligations not to produce chemical weapons .... (3) A refusal by the USSR and the United States to use chemical weapons, and what's more, an absolute refusal should be formulated within such an agreement. It is known that both sides are also bound by the 1925 Geneva Protocol, but, like many other parties to that protocol, both the USSR and the United States reserved the right to counteruse chemical weapons in the event that such weapons were used against them or against their allies. I think the time has come to abandon these conditions and the Soviet Union, in any case, would be ready to do so, on a reciprocal basis." {Moscow domestic service 16 Jan in FBIS-SOV 18 Jan}

**16 January** A US Congressional Research Service publication includes the following: "Before the Senate Governmental Affairs Committee, the Army Intelligence Agency provided the following categorization of CW proliferation. (1) Confirmed possessors: United States, Soviet Union, Iran, and Iraq. (2) Countries suspected of possessing chemical weapons or in the process of acquiring them: Bulgaria, Burma, China, Czechoslovakia, Egypt, Ethiopia, France, Hungary, Indonesia, Israel, Laos, Libya, North Korea, Romania, South Africa, Syria, Taiwan, Vietnam, and Yugoslavia. (3) Countries being monitored for a CW acquisition program: Argentina, Brazil, Chile, India, Pakistan, Peru, Saudi Arabia, South Korea, and Thailand." {*CRS Issue Brief*, no. 1B89042}

**22 January** In the CD Ad Hoc Committee, the Technical Group on Instrumentation, chaired by Dr Marjatta Rautio of Finland, produces its final report, which provides, for the first time in a CD document, a methodical survey of the scientific procedures and

technical facilities which implementation of the CWC may necessitate. {CD/CW/WP.272}

**22 January** The British Army magazine *Soldier* publishes an account of the recently concluded Exercise Perfumed Garden, a month-long trial at the Soltau-Lüneberg training area in West Germany "designed as a degradation exercise to allow a variety of scientists to study at first hand the difficulties faced by troops fighting in NBC kit and respirators." {*Soldier* 22 Jan}

**22 January** In Angola, the Chief of the FAPLA General Staff denies reports disseminated by UNITA [see also 28 Aug 89] that the Angolan air force had used chemical weapons in Cuando Cubango province on 17 January. {Luanda domestic service 23 Jan in FBIS-AFR 23 Jan}

**23 January** Egypt furnishes the CD Ad Hoc Committee on Chemical Weapons with a report on its National Trial Inspection {CD/958}. The trial had been conducted in late summer 1989 at a multipurpose facility owned by the Ministry of Industry located in a Cairo suburb {CD/PV.533}, with production there of sodium toluene sulphonate being taken as the model. The report reiterates the government's earlier statement that "Egypt neither possesses nor produces chemical weapons," but adds that the "plant under inspection is fully capable of producing chemical weapons of all kinds."

**26 January** The Soviet Union informs the CD Ad Hoc Committee on Chemical Weapons that it is prepared to have specific toxins listed in Schedule 1 [see 30 Oct].

In what appears to be an allusion to the "two-percent solution" to the problem of securing CWC universality which the United States has been broaching outside the CD [see 2-3 Dec], the Soviet statement continues: "We are deeply convinced that such a convention should provide for the complete destruction of all CW stocks and CW production facilities over the first ten years after its entry into force as well as the cessation of CW production upon the entry of the convention into force. The agreements reached in this regard as already contained in the draft convention are of fundamental importance. The right to maintain any CW stocks, even though minimum, would mean perpetuation of the threat of CW use and provide the pretext for renouncing the complete destruction of chemical weapons. This will inevitably result in a situation wherein the existence of chemical weapons will become politically and legally admissible. We think that the convention should provide for the absolute and unconditional prohibition of CW use." {Statement of USSR CD Representative Batsanov in the Ad Hoc Committee on Chemical Weapons, 26 Jan}

**27-28 January** In Geneva, the Pugwash CW Study Group holds its 15th workshop. It is attended by 65 participants from 25 countries. {*Pugwash Newsletter*, Apr 90}

**29 January** In Washington, the US Defense Department releases figures for the amounts being sought in the 1991 defense budget for CW weapons. They are as follows (with the current-year figures included for comparison), in millions of dollars:

	FY 1990	FY 1991
-- 155mm GB2 projectile production, Army	47.0	\$74.3
-- Bigeye VX2 spraybomb production, Navy	0	8.9
-- Bigeye VX2 spraybomb production, Air Force	6.8	57.8
-- MLRS IVA2 warhead RDT&E, Army	-----	27.8

{*Department of Defense Budget for Fiscal Year 1991*}

**1 February** In Geneva, the CD Ad Hoc Committee on Chemical Weapons concludes its intersessional session [see 16 Jan] and thus its work under its 1989 mandate and chairmanship. It adopts a report to the CD which includes, as Appendix I, a new Rolling Text for the draft CWC. {CD/961}

A "Protocol on Inspection Procedures" now forms part of the draft CWC. Although not yet complete, it outlines, as the Chairman later expresses it, "a code regulating the practical arrangements for inspections, the precise conduct of inspectors in terms of their rights and duties, and the obligations of States" {CD/PV.534}. Among other important features of the new Rolling Text are (a) its registering of agreement on the specific conditions that are to govern limited production of Schedule-1 chemicals, including general agreement not to seek controls over laboratories that synthesize less than 100 grams per year of them; (b) the institution of a Scientific Advisory Board, which has now been generally accepted as a vehicle for engaging the international scientific community in the CWC regime; and (c) completion of the structure of the treaty's final clauses. There are, in addition, some notable accomplishments in the thorny area of challenge inspection, recorded in Appendix II.

France submits a report on a second National Trial Inspection, saying that a further one is to be conducted. {CD/960, CD/CW/WP.274}

**1 February** In Washington, US Secretary of State James Baker includes the following in testimony to the Senate Foreign Relations Committee: "Building on the President's recent initiative at the UN, we are working in Geneva for a multilateral chemical weapons convention that would call for weapons destruction down to 500 tons after eight years. It would then require the total elimination of stocks once all CW-capable states have joined."

**2 February** In Turkey, government authorities seal off the Kurdish refugee camp at Diyar Bakir where as many as 2500 refugees have reportedly fallen sick. There are rumors of poisoned bread having been the cause -- a repeat of an incident the previous year when a thousand people in another camp apparently fell victim of organophosphate poisoning. {*Reuter* as in LAT 3 Feb, Ind 3 Feb, Obs 4 Feb}

In London the following day, the medical journal *The Lancet* publishes findings from a scientific inquiry into the latter episode {*The Lancet* 3 Feb}. The findings are inconclusive but do not exclude the possibility of deliberate poisoning.

**5 February** In West Germany, *Der Spiegel* reports that, in January, the Federal Secret Service (the BND) had declared that the CW-weapons plant at Rabta in Libya had been removed but that it would be re-established elsewhere {*DerS* 5 Feb}. Soon afterwards, an unidentified US official is quoted by news media as saying that Libya had been producing "very small" amounts of chemicals at the Rabta plant for about a year, possibly for weapons use. It is also reported that, in West Germany, the Greens say they have received information that the plant has produced enough poison gas for a thousand artillery shell {WP 10 Feb, DPA as in FR 9 Feb, *Pressemitteilung* 15 Dec}.

**5 February** The Recombinant DNA Advisory Committee of the US National Institutes of Health relaxes, at the request of the Defense Department, its safety guidelines for research on the viruses of yellow fever and Venezuelan equine encephalitis, thus enabling the Army to conduct animal and insect studies of the diseases at Plum Island, off New York. {*Federal Register* 4 Jan, *Salt Lake Tribune* 9 Feb, *Technology Review* May/June 90}

**6 February** In Geneva, the CD reconvenes for its 1990 session. It is addressed by the Foreign Ministers of the Netherlands and Austria, both of whom reiterate earlier offers that their countries host the projected international Organization for the Prohibition of Chemical Weapons {CD/PV.532}. A subsequent Austrian aide-mémoire enlarges upon the projected Austrian contributions associated with the offer of Vienna as the seat of the Organization {CD/972}.

The Netherlands Foreign Minister warns of biological-weapons proliferation and advocates international consultations on strengthening the 1972 Biological Weapons Convention (whose

third review conference is to be held in September 1991), adding: "I am considering making a Dutch contribution to this process by inviting a number of interested countries to attend a seminar-type conference on this vital issue in the Netherlands."

The Group of 21 neutral and nonaligned member states issues a statement calling for a full negotiating mandate for the Ad Hoc Committee on Chemical Weapons, and one that includes reference to the prohibition of use of chemical weapons {CD/PV.532}. China later aligns itself with this statement {CD/PV.533}.

**7-9 February** In Moscow, CW weapons are on the agenda of talks between USSR Foreign Minister Eduard Shevardnadze and US Secretary of State James Baker {WP 10 Feb}. An official joint statement on chemical weapons is released the following day {Reuter as in WP 11 Feb, TASS 10 Feb}. It reads:

"The [two] sides are determined to work to conclude and bring into force a multilateral, effectively verifiable Chemical Weapons Convention banning the development, production and use of chemical weapons and eliminating all stocks on a global basis. To this effect they will work to expedite the negotiations in Geneva with the view to resolving main outstanding issues as soon as possible and to finalizing the draft convention at the earliest date.

"Even as these multilateral negotiations proceed, the sides will work out a bilateral agreement on reciprocal obligations pending the international Convention, including, *inter alia*, the destruction of the bulk of their chemical weapons stocks to equal low levels. They will proceed with the objective of completing and signing such an agreement at the June 1990 summit meeting.

"The agreement would establish a program of cooperation on technology and procedures for safe and expeditious as well as economically and environmentally sound destruction of chemical weapons.

"When the Chemical Weapons Convention enters into force, the sides will further reduce their CW stocks to equal levels at a very small fraction of their present holdings over the first eight years of operation of the Convention. All remaining CW stocks should be eliminated over the subsequent two years. Of course, all CW-capable states must adhere to the Convention. Efforts to this effect are to begin without delay. The sides share the view that both nations should remain among the original parties to the Convention whose ratification would be necessary for its entry into force.

"The multilateral Convention shall contain the provision that all production of chemical weapons will halt upon its entry into force.

"The sides will work out common principles that will guide their efforts to prevent the proliferation of chemical weapons."

**7 February** The British Government tells Parliament that a private company is seeking to buy the Centre for Applied Microbiology and Research (CAMR) at Porton Down {HansC 7 Feb}. These facilities, prior to their transferral to the Public Health Laboratory Service in the 1970s, used to be the Defence Ministry's Microbiological Research Establishment, built for biological-warfare research.

**8 February** Brazil, at the CD, urges rapid progress on the CWC, regretting the dissipation of momentum during 1989. Addressing the question of achieving universality (a matter to which the Ad Hoc Committee will be giving particular attention during the Spring session), its representative says that "a draft [treaty] of this breadth would command such immediate and overwhelming support that no country could afford to be perceived as a non-signatory," and he speaks of a treaty-signing conference being convened "at the highest level" to this end. Further, in an allusion to the "two-percent solution" [see 26 Jan], he cautions that, at the present juncture, "further ideas and constructs" might become counter-productive. {CD/PV.533}

**13 February** At the CD, the Chairman of the 1989 Ad Hoc Committee on Chemical Weapons, Pierre Morel, introduces his new

Rolling Text [see 1 Feb]. Then, speaking personally, he cautions that completion of the CWC negotiation does not depend only on a few political decisions, adding: "It is a fact that the major questions can be truly settled only if we embark on in-depth work, where the precision of what is known as technical work necessarily has a place. But it is equally true that a number of other technical issues related to the smooth application of the convention can, with the agreement of all delegations, be detached from the negotiations proper and settled in parallel, without being deferred until later." {CD/PV.534}

The CD formally adopts the Ad Hoc Committee's report, including its new Rolling Text, on 20 February. {CD/PV.536}

**13 February** Romania reaffirms to the CD its declaration that it possesses no chemical weapons and now adds that it "has no intention of producing or acquiring chemical weapons in the future." Further, it advocates early conclusion of the CWC and deplores "artificial linkages." {CD/PV.534}

**13 February** The new US representative, Ambassador Stephen Ledogar, addresses the CD for the first time. He notes and welcomes the presence with the US delegation of Congressman Martin Lancaster, appointed by the Speaker of the US House of Representatives as a special arms-control observer for the CW negotiations. He states the US interpretation of the recent joint US-Soviet ministerial statement [see 7-9 Feb], saying that, after the major elimination of stocks during the first eight years of the CWC's life, "we commit ourselves ... to complete elimination during the subsequent two years, if possible." This he goes on to elaborate in the following statement of the US position: "Our proposal to destroy all but a very small portion of CW stocks in the first eight years of a convention, we believe, puts this convention on a faster track than the ideas some of our countries talked about before, which would have delayed entry into force until all essential States adhere. What we are now saying is -- let us get the convention into force right away with the United States and the Soviet Union on board so that the benefits can be realized right away, and we can work hard to get the other necessary States on board. If we succeed over the first 8 years we can all go to zero in 10 years; if not, it is the United States interpretation that we will have to keep at it. At least we will have the convention with its reductions, production ban, export controls, secretariat, etc." {CD/PV.534}

**13 February** At the CD, Iran finally agrees to join the consensus that all States which have applied for participating nonmembership status during 1990, including Iraq and Israel [see 29 Jun 89], should be admitted *en bloc* {CD/PV.534}. Development of the consensus had been initiated some months previously, within the First Committee of the UN General Assembly.

The CD formally agrees to invite the 30 applicants {CD/PV.534}. Others apply later, and by March there are 36 observer states: Austria, Bahrain, Bangladesh, Cameroon, Chile, DPR Korea, Denmark, Finland, Ghana, Greece, Holy See, Honduras, Iraq, Ireland, Israel, Jordan, Kuwait, Libya, Malaysia, New Zealand, Norway, Oman, Portugal, Qatar, R Korea, Senegal, Spain, Sudan, Switzerland, Syria, Tunisia, Turkey, United Arab Emirates, Uruguay, Vietnam and Zimbabwe {CD/INF.23/Add.1}.

**14 February** The Japanese Government announces that new chemical export monitoring rules, discussed with other governments at the December 1989 meeting of the Australia Group, are starting to be implemented by the Ministry of International Trade and Industry. Kyodo news agency reports that, according to the government, the "rules will present 22 examples of scenarios which could lead to chemical weapons production, including insufficient explanation about chemical materials and purpose of their usage." {Kyodo 14 Feb in FBIS-EAS 15 Feb}

**14 February** The USSR furnishes the CD with a report on the practice challenge inspection which it had conducted at a military



facility the previous year [see 22 Jun 89] during 15-20 May. Among the conclusions of the report are (a) that "inspections to clarify situations involving the suspected covert storage of chemical weapons are likely to be among the most complicated and labor-intensive types of challenge inspection"; and (b) that in order to "reduce the level of disclosure of sensitive information which is not CW-related, the management of a facility being inspected must be able, during the inspection, to propose alternative measures as a substitute for access by the inspectors to particularly confidential information." {CD/966, CD/CW/WP.275, CD/PV.536}

**15 February** In Geneva, the CD formally reestablishes its Ad Hoc Committee on Chemical Weapons for 1990, with Ambassador Carl-Magnus Hyltenius of Sweden as its chairman, this time with a full negotiating mandate [see 15 Dec 89 and 6 Feb] {CD/PV.535}. The words "except for its final drafting" used in the 1989 mandate [see 16 Feb 89] no longer appear {CD/968}. But this is the only substantive change; the new mandate makes no mention of the CWC prohibiting use of chemical weapons, indicating that the opposition to doing so, led by the United States, has once again prevailed {CD/PV.535}.

**15 February** In Washington, the US Army publishes its draft environmental impact statement on the projected chemdemil at Johnston Atoll in the Pacific of the CW weapons it currently stores in West Germany {BS 16 Feb}. Further, the Army announces that its new chemical-weapons incinerator on Johnston Atoll in the Pacific will commence operations later in the year {DTel 16 Feb}.

**16 February** Libya transmits to the CD a statement issued three days previously by its foreign ministry concerning the joint US-Soviet communiqué on CW following the Moscow ministerial meetings [see 7-9 Feb]. The substance of the statement is as follows:

"1. The Socialist People's Libyan Arab Jamahiriya [the SPLAJ] welcomes the content of [the US-Soviet communiqué] and hopes that it will be fully applied.

"2. The [SPLAJ] has already clearly stated its position in regard to these and other types of weapons of mass destruction and calls for the adoption of more far-reaching measures for the elimination of chemical, biological and nuclear weapons and the destruction of the stockpiles of these weapons in order to protect mankind from their dangers and preclude any possibility of their use.

"3. The Jamahiriya and the Arab nation as a whole are particularly well aware of the dangers posed by these weapons of mass destruction in view of their possession by the Zionist enemy in occupied Palestine, which is threatening the security of the region and also affecting world peace and security.

"4. The [SPLAJ], having shown the world the nature of the plant at Rabta, takes this opportunity to invite the States and companies throughout the world, which are concerned with the production of pharmaceuticals, to participate with us in the production of medicines and medical equipment." {CD/970}

**17 February** In Bulgaria, the Ministry of Internal Affairs announces that neither the Bulgarian Government nor its secret police had had anything to do with the assassination of Georgi Markov [see 9 Jan] {BTA 17 Feb in FBIS-EEU 20 Feb, Reuter as in DTel 19 Feb, G 23 Feb}.

**18 February** In New Orleans, during the annual meeting of the American Association for the Advancement of Science, there is a panel session entitled "Chemical Weapons Proliferation or Chemical Disarmament?" A panel the previous day had been devoted to Lessons of the Iran-Iraq War.

The AAAS presents its 1990 Scientific Freedom and Responsibility Award to Matthew Meselson, citing "his comprehensive study of the use of herbicides by the US military in Vietnam; his key role in influencing the US government to renounce biological warfare; and his persistent questioning -- in the face of hostile

criticism -- of claims that the Soviet Union was supporting the use of so-called yellow rain as a weapon in Southeast Asia .... Meselson challenged the claims by the US government that the Soviets were supporting the use of chemical weapons in Southeast Asia, and ... he and his colleagues used laboratory and field research to prove that the actual source of the yellow rain was bee excrement." {AAAS Press Release, 4 Dec 89}

**19 February** Hungary fulfills the promise its Foreign Minister had made at the UN General Assembly [see 29 Sep 89], providing the CD with an itemized declaration of Hungarian production, consumption, import and export of Schedule-2 and Schedule-3 chemicals in accordance with the CWC as envisaged in the current Rolling Text. The chemicals on which data are declared are 2-N,N-dimethylaminoethyl alcohol, the hydrochloride salts of 2-N,N-diisopropylaminoethyl chloride and 2-N,N-diethylaminoethyl chloride, phosgene, phosphorus oxychloride, phosphorus trichloride, dimethyl phosphite, diethyl phosphite and thionyl chloride. {CD/969, CD/CW/WP.277, CD/PV.537}

**20 February** European Economic Community foreign ministers-meeting today have on their agenda, so it is reported on 9 March, the question of Libyan CW production at Rabta [see 5 and 16 Feb. {La Republica 9 Mar in FBIS-NES 12 Mar}

**20 February** US-Soviet bilateral consultations on the banning of CW weapons resume in Geneva, in their 14th round. According to TASS, the agenda is focussed on ways to speed up the CWC negotiation and on the projected [see 7-9 Feb] "bilateral agreement on mutual Soviet-US obligations before the convention enters into force." {TASS 20 Feb in FBIS-SOV 21 Feb}

**20 February** Finland, at the CD in Geneva, offers the resources of the Finnish Research Project on the Verification of Chemical Disarmament, both scientific know-how and material facilities, for use "as the core of the central laboratory of the CWC organization." The CD is also told that the first course of the Finnish program for training analytical chemists from developing countries in CW verification methods is now under way; during 1990, one chemist each from Brazil, India, Iran, Kenya, Nigeria and Pakistan (selected out of 25 applicants from 9 countries) are to receive training in two four-month courses. {CD/PV.536}

**20 February** The *Washington Post* reports that the US Department of Agriculture has recently increased to \$6.5 million the research budget for its program for developing chemical and biological anticrop agents for use against drug-plant cultivations, such as those in Peru and Bolivia. {WP 20 Feb, SFC 10 Mar}

**20 February** The US Congress receives testimony from the Chief of Naval Operations, Admiral C A H Trost, that "14 countries worldwide now have chemical weapons," with 11 more "suspected" of developing them, and that "3 countries worldwide now have bacteriological weapons," with 15 others "suspected" of developing them. {Prepared statement before the HASC}

Three weeks later, the Director of Naval Intelligence, Rear-Admiral Thomas A Brooks, presents this testimony: "At present, no fewer than 16 countries are assessed to have chemical weapons. Others are suspected of having them. This list includes 12 Third World states which have either achieved or are developing CW capabilities" {prepared statement before the Seapower, Strategic, and Critical Materials Subcommittee of the HASC, 14 Mar}. In contrast to the corresponding testimony he gave a year previously [see 22 Feb 89] when he named 13 such Third World countries, these states remained unidentified, with the exceptions of Iraq, Iran, Syria, Libya and North Korea.

**21 February** In Moscow, USSR Foreign Minister Eduard Shevardnadze receives the visiting Libyan Minister for Petroleum, Fawzi Shakshuki. According to a subsequent official Soviet report, the

Foreign Minister welcomes "Libyan initiatives ... in support of a ban on chemical weapons." {SovN 28 Feb}

**22 February** Angola is once again [see 22 Jan] accused of using chemical weapons against UNITA insurgents: it is reported in the press that the Belgian toxicologist Aubin Heyndrickx, leading a private European medical team to Angola, had announced that the team's "clinical and toxicological study show clearly that the chemical bombs have gassed the population in this region." {Reuter as in Ind 22 Feb, *De Morgen* (Brussels) 22 Feb}

One member of the team, Professor Gerhard Freilinger of Vienna, subsequently tells reporters that analyses conducted in Vienna of blood and urine samples showed high concentrations of phosphine [*sic*]. {DS 15 Mar}

Later, reacting to allegations repeated in the press that Angolan government troops had been using Soviet-made chemical weapons {*Diario de Noticias* 9 Mar in FBIS-AFR 20 Apr}, USSR Foreign Ministry spokesman Gennadiy Gerasimov speaks as follows at a news briefing in Moscow: "The Soviet Union did not and does not have chemical weapons beyond its borders. It did not hand them over to anyone, including Angolans and Cubans, and does not intend to do so." {TASS 14 Mar in FBIS-SOV 15 Mar}

**22 February** Hungary speaks at the CD in support of the proposal that Austria should host the CWC international organization [see 6 Feb]. Further, it announces that, "as a part of the Hungarian initiative [see 19 Feb], a national body will be set up in the near future to continue the work which has been carried out informally in the last four years by an inter-departmental commission, and perform provisionally some of the duties of the national authority to be established in accordance with the convention." {CD/PV.537}

**22 February** East Germany reiterates at the CD its proposal that there should soon be a meeting of the CD at foreign-minister level, suggesting informal consultations on the proposal. It states, too, that the GDR is applying "strict export controls to dual-purpose chemicals." {CD/PV.537}

**23 February** President Bush transmits to the US Congress his administration's latest annual report on "Soviet Noncompliance with Arms Control Agreements," as required by Public Law 99-145. It reaffirms the US Government's earlier interpretations of the Southeast Asian "yellow rain" and Sverdlovsk anthrax episodes as Soviet violations of the CBW treaties, and states once more that "contrary to Soviet claims, the Soviet Union has maintained an active offensive BW program and capability in violation of the 1972 Biological and Toxin Weapons Convention." The report adds: "We judge that the Soviet capability may include advanced biological and toxin agents of which we have little or no knowledge, and against which the US has no defense," saying that some of the work on these weapons was believed to have been conducted at facilities not covered by Soviet information-disclosures in accordance with the confidence building measures agreed at the Second BWC Review Conference.

The report also referred to the Wyoming bilateral Memorandum of Understanding [see 22-23 Sep 89] and to the data which, under it, the Soviet Union had provided on 29 December [q.v.]: "These data are presently being studied; preliminary indications are that these data differ in a number of respects from our understanding." {White House press release of 23 Feb}

**27 February** The Chinese Foreign Minister, Qian Qichen, addresses the CD in Geneva. He refers to China as "a non-chemical-weapon State." Speaking of the CWC, he says: "our basic position is that we are in favour of an effective, reasonable and feasible verification regime under the convention, including challenge inspection. In the mean time we maintain that challenge inspection should not go beyond the purposes, objectives and scope of the convention, and that its possible abuse must be

strictly guarded against. Specific provisions should ensure a balance between the rights and obligations of the requesting State on the one hand and those of the requested State on the other, and give full play to the role of the future organization." {CD/PV.538}

**27 February** In Geneva, US Ambassador Stephen Ledogar announces to the CD that destruction of the US stockpile of the incapacitant BZ had been completed "just a few weeks ago." He repeats his government's position that it "no longer insists that all CW capable states be parties to the [CWC] from the beginning" [see 13 Feb], adding that the United States "will become a party at the outset" provided the Soviet Union does so too. He states that, "provided that all CW-capable States have become parties," the United States would destroy the last two percent of its stockpile "by year 10 of the convention," saying that this "two percent residual is intended to provide an incentive to hold-out states to become parties to the convention." He then speaks of the "more than 20 States that have or are seeking chemical weapons," some of which have delegations "present here in this room today": "I address myself to the co-ordinators of the regional groups that represent [the] more than 20 capable states here in this chamber. When they feel the need to give advice in the name of their groups to the United States and, I imagine, also to the Soviet Union, they should bear in mind, as we do, that they speak also on behalf of at least several CW-capable states."

On ad-hoc verification, he says "we hope to provide the conference with a proposal to break the deadlock on this subject in the very near future." On order-of-destruction, he says "our approach [see 28 Aug and 14 Dec 89] will be introduced into the CW negotiations very soon," recalling that the Wyoming joint statement had recorded US-Soviet agreement on some procedures governing it. {CD/PV.538}

**1 March** Nigerian Foreign Minister Rilwanu Lukman, addressing the CD, speaks of the importance of "incentives such as assistance and co-operation in economic and technological development" in achieving universality for the CWC. He also advocates provision in the Convention for "collective and mandatory action in accordance with Article 51 of the United Nations Charter against any chemical weapon attack." {CD/PV.539}

**6 March** In the British parliament, the government is asked about its plans for reducing the annual budget of the Chemical Defence Establishment at Porton Down, currently some £20 million, now that the CW "disarmament talks in Geneva are leading to a treaty agreement." A junior defence minister states in response that the need for the CDE "is not removed by the developments in arms control negotiations." {HansC 6 Mar}

The government also responds to questions about BW proliferation amongst developing countries: "We are concerned about the possible development of biological weapons in several developing countries. We believe this is taking place, despite the 1972 Biological Weapons Convention .... It is not, however, our practice to comment on the detailed information available to the Government on such matters." {HansC 6 Mar}

**6 March** Bulgaria recommends to the CD "regional co-operative measures and activities before the conclusion" of the CWC, because "in view of the very nature of chemical weapons the most sensitive security concerns are likely to involve neighbouring states or states belonging to a given geographical region." {CD/PV.540}

**7 March** In Bonn, Federal German Defense Minister Gerhard Stoltenberg announces the plans for the removal of US CW weapons from West Germany by the end of the year. What is involved, he says, are some 400 tonnes of nerve gas held in about 100,000 artillery projectiles at Clausen in the Palatinate [see 25 Dec 89]. The weapons will be moved 25 miles in protected convoys of 70 lorries each to another US depot, where they will then be transported by train to the port of Nordenham for shipment to Johnston Atoll in the Pacific {FAZ, G, IHT & WT 8 Mar}. Further

details are disclosed the next day by US and Federal army officers and *Land* officials at a "media day" in Pirmasens {AP as in SZ 9 Mar, WP 9 Mar}.

**7 March** In Washington, White House spokesman Marlin Fitzwater confirms recent television and press reports of Libyan chemical weapons, saying that "the available evidence suggests that Rabta is producing" them {Federal News Service, transcript of the regular White House press briefing, 7 Mar}. The reports {ABC News 6 Mar, NYT 7 Mar}, denounced by Libya {JANA 7 Mar in FBIS-NES 9 Mar}, had cited classified Defense Department papers, including a January 1990 assessment by the Defense Intelligence Agency and information furnished by the Federal German government in early February [see 5 Feb], to the effect that Libya may have produced as much as 30 tons of mustard gas in 1989, starting late in the year, as well as small quantities of sarin (GB) nerve gas, and now appeared to be moving toward fullscale production, with increased efforts to purchase CW-agent precursors on the world market. The uploading of actual CW munitions had apparently been advancing, too. "Reportedly, the Libyans produced approximately 150 chemical-filled aerial bombs in 1989," said a US intelligence report according to the *New York Times*, adding that the US had information that indicated that Libya may be producing and filling the bombs at a rate of about five per day {NYT 8 Mar}. But US officials, speaking unattributably, indicated that there was much uncertainty in these estimates {WP 7 Mar}. It is later reported that the Federal German intelligence service, the BND, had estimated that up to 100 chemical bombs had by now been completed, each bomb containing 36 one-litre plastic bottles of mustard gas {DerS 12 Mar in FBIS-WEU 13 Mar}. The BND also states that it has no evidence of German firms still [see 15 Feb 89] being involved {SZ 9 Mar}, but an Israeli authority says that tens of German engineers and technicians continue to work at Rabta in a private capacity {*Le Figaro* (Paris) 9 Mar}.

Fitzwater says: "We have expressed our serious concern to various governments. The international community should step up its efforts to deny Libya the ability to continue operating the plant. This is a subject we have under continual discussion with our allies and others, and we intend to press ahead with those discussions in the coming days" {FT, G, IHT & Ind 8 Mar}. Disagreement is later reported between Washington and Bonn on how best to proceed, the former strongly rejecting the latter's proposal, made at a meeting of West European foreign ministers on 20 February [q.v.], that Libya be asked to receive an international on-site inspection team at the Rabta factory; instead, the US State Department wants the factory dismantled {NYT, WP & WSJ 8 Mar; Ind & TL 9 Mar}.

The Libyan foreign ministry says that the United States has levelled false accusations {Tripoli domestic service 8 Mar in FBIS-NES 9 Mar}. The Libyan UN representative declares his country's "support for any measures that might be adopted by the international community in regard to the verification and inspection of chemical weapons, provided that those measures were applied to all States" {CD/PV.542}.

**8 March** FR Germany submits to the CD a report on the practice challenge inspection which it had conducted at an Air Force ammunition depot the previous August. The report concludes that a challenge inspection, when conducted at such a facility, can dispel "with sufficient certainty" suspicions that chemical weapons are being produced or stored "without having to rely on sensitive information." The report continues: "Sensitive areas can be protected, without impairing the aims or proceedings of an inspection." In his presentation of the report, Ambassador von Stülpnagel sets out a detailed solution-orientated analysis of the challenge-inspection issue as it currently confronts the negotiators. He says that a series of additional practice challenge inspections is in progress. {CD/975, CD/CW/WP.278, CD/PV.541}

**8 March** The 14th round of US-Soviet bilaterals on the CWC [see 20 Feb] ends in Geneva. A joint report given orally to the CD by

the head of the Soviet delegation says that, further to the recent Moscow ministerials [see 7-9 Feb], work had continued "on a bilateral agreement on the reciprocal obligations of the USSR and the United States pending the international convention including, *inter alia*, the destruction of the bulk of their CW stocks to equal low levels. It is planned that an agreement of this nature will be signed in June 1990 at a summit meeting .... The parties firmly hold the position that the discharge of obligations under the bilateral agreement will not be a pre-condition for, and will not jeopardize, the conclusion and implementation of a multilateral convention banning chemical weapons."

The report speaks, further, of follow-up work to the Wyoming Memorandum of Understanding [see 22-3 Sep 89]: "Agreement was reached ... on an exchange of seven visits to three categories of facilities (chemical weapons storage facilities, production facilities and industrial chemical enterprises) under phase I of the arrangements agreed in the memorandum. It was agreed that the first exchange of visits will involve visits to chemical weapons storage facilities at the beginning of June this year."

There was also agreement on exchanges of visits "to appropriate facilities in the USSR and the United States" in connection with "matters of co-operation between the USSR and the United States on technology and procedures for safe and expeditious as well as economically and environmentally sound destruction of chemical weapons." {CD/PV.541}

**13 March** The US House of Representatives hears from its specially appointed observer, Congressman Martin Lancaster, about the state of the CWC negotiations in the CD, which he had just been attending [see 13 Feb]. His remarks included the following:

"The largest impediment to arriving at a convention continues to be the lack of a forceful enough indication of our resolve to conclude the negotiations. Several ambassadors indicated that a visit to Geneva by the President would be an important signal of the priority our country places on a quick conclusion to the negotiations.

"The consensus among the ambassadors was that our insistence on maintaining a stock of 2 percent of existing stocks after the signing of the convention and until all chemical-capable countries have signed the convention remains the major stumbling block to the negotiations. Furthermore, most ambassadors feel that this position will lead to more proliferation since chemical capable countries will want to match our stock ton for ton. A slightly less important stumbling block, in their opinion, is our continued insistence on the right to use chemical weapons in retaliation of their use by any other country. In the opinion of most participants, the convention would be concluded within a matter of months if President Bush would drop these two preconditions."

He also spoke of plans he had developed with USSR CD Representative Batsanov, and had put to the House leadership, for a US-Soviet interparliamentary meeting in Geneva, perhaps during the Fourth of July Congressional recess, to promote better understanding of CWC issues in the two legislatures, thereby helping "the ultimate approval of the CWC once negotiations are concluded." {CR 13 Mar, p H739}

**14 March** The Libyan chemical plant at Rabta [see 7 Mar] is on fire, according to Tunisian and Italian sources. Confirming the report, the press secretary of the Libyan UN mission, Mahmoud Az-zabi, says "there is speculation that it was possibly sabotage, somebody coming in from Tunisia." President Bush "absolutely" denies any American involvement. {NYT & WP 15 Mar} There are Israeli denials of involvement, as well {LAT 15 Mar, Jerusalem domestic service 15 Mar in FBIS-NES 15 Mar}.

The next day many hundreds of Libyans demonstrate outside the West German embassy in Tripoli, protesting Bonn's role in spreading rumors about the Rabta plant {Reuter 15 Mar in FBIS-WEU 16 Mar, Reuter as in WT 16 Mar, JANA 15 Mar in FBIS-NES 15 Mar}. Libyan leader Gadhafi threatens economic retaliation against West Germany if its agents are found responsible for

the fire, adding that "Libya on its own and by its own efforts needs another 20 years to produce a chemical bomb" {JANA 15 Mar in FBIS-NES 15 Mar}. The Federal German government denies involvement {AP and Reuter as in IHT 16 Mar; DTel, FT, Ind & TL 16 Mar}. The possibility of an accidental fire having occurred is discussed by analysts {DPA 15 Mar in FBIS-WEU 16 Mar, LAT 16 Mar, WP 18 Mar}. Exiled Libyan dissidents later suggest that Gadhafi himself had ordered the fire to forestall a US military attack on the factory {WP 25 Mar}.

A West German television report says that the fire had broken out in the storage-tank area where there were large stocks of heating oil and inflammable solvents, and had destroyed over 50 percent of the factory; poison-gas contamination of the area around Rabta was not thought likely, on the grounds that only one day's production of mustard was stored at the factory, the remainder being held elsewhere {DPA 15 Mar in FBIS-WEU 16 Mar}. US Defense Department officials, citing satellite imagery (delayed though it would have been {WP 17 Mar}), say the blaze destroyed enough equipment and raw materials to prevent production at the chemical plant; the nearby canister-production plant, however, had not been destroyed {WP 16 Mar}. According to one report, two people died in the fire {Reuter as in Ind 17 Mar}, but this is denied by the Libyan news agency {LAT 16 Mar}. US intelligence agencies are later reported to have concluded that there were two deaths and several hundred injuries {WT 19 Mar}. US officials speculate that the chemical plant is unrefurbishable without substantial foreign assistance {NYT 16 Mar}. Subsequently there is press-reporting that Gadhafi has sought help from China in rebuilding the plant and supplying chemicals for it {WT 19 Mar}.

Later, Libya suspends currency transfers to West Germany, payments on imports, and diverts a barter shipment of oil. {FT 21 Mar, Reuter as in IHT 22 Mar}

**15 March** The Foreign Minister of Iran, Dr Ali-Akbar Velayati, speaks to the CD of two options for his country's CW policy: "One is to follow logic and reason and convert capabilities and expertise in the field of chemical weapons acquired during the course of the war into practice as a deterrent *vis-à-vis* immediate and potential threats. The other is to follow our urge and set our hopes on a still ambiguous convention, and be prepared for a possible risk, or perhaps serious jeopardy, to our security. Despite the odds, we have decided to follow our urge, but we need assurances."

He says later: "To be frank, if the convention were ready today, the chances of its success in our region would be somewhere near zero," and would remain so for as long as the present "no war, no peace" situation continued. {CD/PV.543}

**15 March** Venezuela tells the CD that it is organizing a regional seminar for participants from Latin American and Caribbean countries "to familiarize the States that are not members ... with the scope, purposes and objectives of the [chemical weapons] convention, as well as the verification machinery that is to be established." The seminar will be held in Caracas in the middle of the year. {CD/PV.543}

**15 March** The Group of 21 neutral and nonaligned CD member-states issues a statement reaffirming "its position that the future convention on chemical weapons should prohibit the use of such weapons under any circumstance from the date the convention enters into force." {CD/PV.543}

**15 March** The US Army announces that contracts worth \$30.8 million for production and further development of its new NBC reconnaissance vehicle, for which the German-designed *Fuchs* system has been selected, have been awarded to General Dynamics Land Systems Division jointly with the West German corporation Thyssen Henschel. {DN 19 Mar, JDW 24 Mar, IDR vol 23 no 4}

**19 March** The Libyan ambassador to Italy, 'Abd-al-Rahman Shalqam, tells a press conference in Rome that the fire at Rabta [see 14 Mar] had apparently been set by a member of the plant's

technical staff using "very sophisticated devices, so that the sabotage appeared to be an accident." Several people have been arrested. He says that the fire had caused "damage of great proportions," but does not confirm (or deny) US reports that the plant was now inoperable {AFP 19 Mar in FBIS-NES 20 Mar, ANSA 20 Mar in FBIS-NES 20 Mar, G 20 Mar, AP as in IHT 20 Mar}. However, a spokesman for Spot Image, the French company that sells satellite imagery, says that photographs taken from the Spot I satellite show an undestroyed plant: "The principal structures ... don't seem to have been touched, and there are no traces on the ground ... of the existence of a fire .... If you judge by the overall appearance, nothing happened at al-Rabitah." {AFP 19 Mar in FBIS-NES 20 Mar; SFC 20 Mar} Speculation grows that a deception of some sort has been practiced. The British Foreign Office says it "had no reason to doubt" the view that the fire was not as serious as first thought {*Economist* 31 Mar}. And the US State Department says that, after all, the plant may still be operational, and that an elaborate hoax can not be ruled out {DTel, NYT & WP 31 Mar}

**20 March** In Hawaii there are public hearings on the US Army's draft supplemental environmental impact statement (EIS) on the planned destruction on Johnston Atoll in the Pacific of the nerve-gas weapons that are to be withdrawn from West Germany [see 15 Feb and 7 Mar]. There are strong expressions of disquiet from Marshallese and other Pacific islanders and from environmentalist organizations. Greenpeace International, on the basis of a technical review [see 31 Aug 89], calls into question the safety of the incineration technology that would be used, and argues that the weapons should remain in Germany until safer destruction technology has been developed. The Sierra Club argues that the Army had improperly rejected the option of destroying the weapons in Europe {ST 29 Apr}. Army responses are to be incorporated into the final supplemental EIS {Army testimony before the Subcommittee on Strategic Forces and Nuclear Deterrence, SASC, 5 Apr}.

Later the US embassy in the Marshall Islands announces that the chemical-weapons retrograde from Europe to the Pacific is planned for between July and September, final approval being "dependent upon finalizing the environmental documentation necessary for storage and disposal." {Reuter as in IHT 31 Mar-1 Apr}

In subsequent actions, the government of Micronesia says, in a detailed memorandum to the US government, that the incineration plans posed "an unacceptable risk of cataclysmic accident." Environmentalist groups in New Zealand and Australia express opposition, as well. The Australian government is reportedly making an independent scientific review of the US Army's belief that it can conduct the chemdemil in a "safe and environmentally acceptable manner." {IHT 22 May}

**20 March** Belgium reaffirms to the CD its offer to host the headquarters of the CWC international organization. {CD/PV.544}

**20 March** President Bush releases his *National Security Strategy Report*. On CW, it says: "Our primary goal is to achieve an effective, truly global ban on chemical weapons as soon as possible. Until such a ban is achieved, the United States will retain a small but effective chemical weapons stockpile to deter the use of chemical weapons against us and our allies. We will also continue our initiatives to protect our forces from chemical agents that could be used against them and to minimize the impact of being forced to operate in a chemical environment."

**20-21 March** The United States conducts a further National Trial Inspection [see 27 June 89] at facilities for the Schedule-2 chemical thiodiglycol, owned by Alcolac [see 30 Jan 89]. {ACR at p. 704.B.420}

**20-22 March** In Kosovo province, Yugoslavia, several hundred ethnic Albanian schoolchildren are taken to hospital complaining of severe stomach pains, Serbian authorities being accused of hav-

ing poisoned them {Tanjung 22 Mar in FBIS-EEU 23 Mar; TL 23 Mar}. There is a resumption of unrest and fighting throughout the province, and many more cases occur over the next few days {SFC 24 Mar, Reuter as in TL 24 Mar}. Troops are sent in to restore order {AP as in NYT 25 Mar, TL 26 Mar}. The Federal government speaks of a mass-poisoning hoax staged by ethnic Albanians {Tanjung 26 Mar in FBIS-EEU 28 Mar; DTel 27 Mar; Reuter as in Ind 28 Mar}. A Yugoslav Federal Commission says it found no evidence of mass poisoning or infectious disease. A Dutch doctor visiting Kosovo with a team from the International Helsinki Federation for Human Rights says: "I'm not saying the first few patients weren't poisoned, but the symptoms are now verging on mass hysteria" {FT 28 Mar, AP as in NYT 28 Mar}.

Two weeks later there is a new outbreak of the illness. {Belgrade domestic radio 2 Apr in FBIS-EEU 3 Apr, Reuter as in DTel 4 Apr}

**22 March** In West Germany, the former president of Imhausen-Chemie GmbH, Jürgen Hippenstiel-Imhausen, who has been held in investigative custody for the past ten months [see 10 May 89], is finally charged with violating Federal German export laws. Senior Mannheim Prosecutor Peter Wechsung says: "The investigation led to the conclusion that the Pharma 150 production facility in Rabta, Libya, wasn't only capable of producing highly toxic substances, but was especially designed and solely intended for the production of the chemical weapons substances Sarin, Soman and Lost" {WSJ 23 Mar}. Meanwhile, the firm itself flourishes {DieZ 30 Mar}.

**23 March** West German Foreign Minister Hans-Dietrich Genscher proposes, in a speech at the WEU Assembly, that the two German states make a joint declaration confirming their renunciation of the production and possession of nuclear, chemical and biological weapons. {AN no. 2206}

He repeats the proposal when speaking to the press in Washington two weeks later. {TL 5 Apr}

**25 March** In Moscow, a TASS commentary on the Biological Weapons Convention and the preparations now underway for its third review conference says: "The elaboration of a new effective mechanism to monitor compliance with the convention with an eye to the latest scientific discoveries in biology, gene engineering, in particular, is expected to become the main subject of discussion at the conference. It seems advisable for such forum to envisage such measures to verify compliance with the convention as on-site and challenge inspections that have already justified themselves during the implementation of other arms control accords." {TASS 25 Mar in FBIS-SOV 27 Mar}

**26 March** *Defense Week* reports that the Defense Department is contemplating legal action under the 1950 Defense Production Act against two chemical manufacturers who have refused to supply the Army with a nerve-gas precursor needed in the binary-munitions production program. The chemical is thionyl chloride. The companies, which are the only large-scale manufacturers of this chemical in the United States, are Occidental Chemical, a Dallas corporation, and Mobay Corporation of Pittsburgh, which is a wholly owned subsidiary of the German firm Bayer. Both companies say they have internal policies banning any involvement in CW-weapons production. {DW 26 Mar, NYT 27 Mar, WP as in IHT 28 Mar, G 28 Mar, DerS 2 Apr}

**27 March** Japan urges the CD to "pay more attention to tackling the key issues of a political nature"; for the "remaining technical questions, active participation by experts from industrial and academic circles" could then serve "as a lever for acceleration of the negotiation." It suggests that "under the recently proposed system of "technical support" for the Chairman of the Ad Hoc Committee, a data base on the chemical industry ... be worked out as one of its activities." {CD/PV.546}

**27 March** On Swiss television, a 15-minute current-affairs item is screened asking whether the new plant in which Ciba-Geigy is involved at Qazvin, Iran, is for pesticides or for CW weapons. {Rundschau 27 Mar, *Die Weltwoche* 5 Apr}

**28 March** In Belgrade, the spokesman for the Federal Secretariat of National Defense tells a news conference that the Yugoslav Peoples Army does not manufacture or possess toxic chemicals for military use {Tanjung 28 Mar in FBIS-EEU 28 Mar}. He repeats the statement a two weeks later at another news conference {Tanjung 11 Apr in FBIS-EEU 11 Apr}.

**29 March** Italy tells the CD that it "is ready to accede to the [CW] convention immediately when the time comes, within the desirable context of co-ordinated accession by a number of countries." {CD/PV.547}

**29 March** Asked in Parliament about the size of the Soviet CW stockpile, the British Government states: "Our current estimate of the stock of chemical weapons in Russia is about 50,000 tonnes. However, the Americans say that they are not optimistic about that and believe that the Russians could hold far more stocks." {HansL 29 Mar}

But subsequently the minister who made that response writes as follows to the questioner: "I fear that I may have misled you about the Government's position. We believe, as we said in last year's Statement on the Defence Estimates (para 219-220) [see 2 May 89], that the Soviet Union's stocks of chemical agent are in fact several times in excess of their stated stockpile of 50,000 tonnes."

**29 March** The US Centers for Disease Control finds, after five years of investigation, that veterans of the Vietnam War are more likely than non-veterans to contract non-Hodgkin's lymphoma, a relatively rare cancer of the lymphatic system, but that the frequency of this cancer among veterans could not be linked to exposure to a herbicide used during the war, Agent Orange. The incidence of five other cancers had also been studied, but veterans were found to be at no greater risk from them than non-veterans. {NYT & WP 30 Mar, *Nature* 5 Apr}

**30 March** Yugoslavia submits to the CD a report on a national trial inspection which had been conducted at an industrial facility in Baric, Belgrade, producing and processing phosgene. {CD/982}

**30 March** In Bonn, the coalition government finally agrees on a draft for the new arms-export-control legislation. {FR 31 Mar}

**1 April** President Saddam Hussein of Iraq, halfway through a long speech at a military award ceremony broadcast the next day on Baghdad Radio, says: "We do not need an atomic bomb. We have the binary chemical [al-kimawi al-muzdawij]. Let them take note of this. We have the binary chemical. According to our information only the United States and the Soviet Union have it. They still have not reached an agreement with respect to its disarmament. It exists in Iraq. So that the Iraqis may know, it existed during the last period of the war -- I believe during the last year of the war. It was there. In spite of this, we did not use it against the Iranians. We did not use it against the Iranians. We said that the weapons we had were more than enough, and hoped that God would enable us to liberate our land without it. Why, then, do we need the atomic bomb?" There is no further mention of CW weapons in his speech, but towards the end, returning to the allegations of an Iraqi nuclear-weapons program, he says: "They will be deluded if they imagine that they can give Israel a cover in order to come and strike at some industrial metalworks. By God, we will make fire eat up half of Israel if it tried against Iraq." {Baghdad domestic radio 2 Apr in FBIS-NES 3 Apr}

A brief summary released by the Iraqi News Agency places these two sets of remarks in close apposition and says the "President affirmed: ... Whoever threatens us with the atomic bomb, we

will annihilate him with the binary chemical" {INA 2 Apr in FBIS-NES 3 Apr}. It is this version that is the more widely reported by foreign news media {DTel, NYT, WP & Reuter as in WT 3 Apr}. An Israeli commentary says that the speech "leaves no doubt that in a future conflagration with Israel, Iraq will try to attack Israel's civilian population with toxic gases" {Yedi'ot Aharonot 3 Apr in FBIS-NES 4 Apr}

The Iraqi ambassador to Egypt, Nabil Najm, tells the Middle East News Agency that his President's speech should be understood to mean that Iraq will react violently and forcefully against anyone who considers attacking it. He is reported to have said, further: "Manufacturing chemical weapons so far has not been banned. Only their use is prohibited. In self-defense against nuclear weapons or some other very sophisticated weapon that the enemy might use against us, however, Iraq might have no choice but to use chemical weapons." {MENA 4 Apr in FBIS-NES 5 Apr}

This Iraqi stance attracts strong popular and other support in other Arab countries, so it is reported {WP 12 Apr, G 19 Apr}; thus, a senior PLO figure says that Saddam Hussein has "proclaimed the revolt of the Arab nation against limits to its power and brought to the Palestinian people in particular the good news that their struggle could now depend on a new balance of power" {Ind 12 Apr}.

**2 April** The British Defence Ministry releases its annual defence White Paper. Although the paper says "we continue to believe [the Soviet CW capability] exceeds that claimed in their public statements," it is conspicuously less combative in tone on this matter than the previous year's [see 2 May 89], and firmly restates the UK commitment to the CWC negotiations, dwelling on the practice challenge inspections that have now been conducted at Army, Navy and Air Force establishments. {Statement on the Defence Estimates 1990}

**3 April** In Geneva, the foreign ministers of Norway and Spain address the CD {CD/PV.548}. The former, Kjell Magne Bondevik, says that during February Norway had conducted its first national trial inspection, at an organic-chemical production plant consuming a Schedule-3 chemical (in fact thionyl chloride, imported from abroad); a report on the NTI is later submitted to the Ad Hoc Committee {CD/CW/WP.285}. Both ministers reaffirm their countries' declarations of nonpossession of CW weapons.

**3 April** Iraq tells the CD that the Chemical Weapons Convention "will be widely supported if it contains a binding commitment on the part of the nuclear-weapon states to take nuclear disarmament measures as a corollary to chemical disarmament measures." {CD/PV.548}

**4-5 April** In Amman there is a ministerial meeting of the Arab Cooperation Council (Egypt, Iraq, Jordan and North Yemen). Iraqi Foreign Minister Tariq 'Aziz reportedly states that Iraq is ready to destroy its chemical weapons provided Israel does the same and joins the nuclear-weapons Nonproliferation Treaty {Radio Monte Carlo 5 Apr in FBIS-NES 5 Apr 90, WT 5 Apr}. The final communiqué declares that "all kinds of destructive weapons, including nuclear, chemical and biological, should be prohibited in order to guarantee regional and international security" {LAT 6 Apr}.

**4-6 April** In Washington, there is a further round of Baker-Shevardnadze ministerial talks during which guidance is developed for the next round of US-Soviet CW bilateral meetings. {CD/PV.544}

**5 April** Egypt recommends to the CD that, in order to encourage universal adherence to the CWC, all UN members should be involved in the actual preparation of the convention at a certain stage." It proposes an "open-ended preparatory commission to precede or follow a ministerial conference." Egypt expresses opposition, however, to the proposal currently before the CD that a new additional group be created in the context of the Ad Hoc

Committee on Chemical Weapons to provide "technical support to the chairman." {CD/PV.549}

**5 April** Argentina raises the question of whether, in view of the changing security context, the CD should not "envisage the simplification of the complex and burdensome mechanisms and procedures stipulated in the convention," adding that it "is highly unlikely that there could be a more effective guarantee of confidence than the transparency brought about by an international climate characterized by regional negotiations, the generation of a network of industrial, technical and scientific interests and intense international cooperation." Further, Argentina expresses support for the projected Venezuelan regional initiative [see 15 Mar]. {CD/PV.549}

**5 April** The Federal Republic of Germany submits a report to the CD on the second in its continuing series of practice challenge inspections [see 8 Mar], conducted the previous November. {CD/983, CD/PV.550}

**5 April** The West Berlin newspaper *Tageszeitung*, attributing US Defense Department testimony to the House Armed Services Procurement Subcommittee, reports that the withdrawal of US CW stocks from the Federal Republic [see 7 Mar] is to commence on 18 June, the first munitions arriving in the port of Nordenham around 30 July and on Johnston Atoll in September. {TZ 5 Apr}

**5 April** In Washington, the Senate Armed Services Subcommittee on Strategic Forces and Nuclear Deterrence holds a hearing on the CBW programs of the FY 1991 budget. A total of \$1159 million has been sought, 15.4 percent of it for CW retaliatory programs [see 29 Jan], 45.4 percent for chemical and biological defense programs, 1.9 percent for chemical treaty verification R&D, and 37.3 percent for the chemical demilitarization program, including the withdrawal of the stockpile in West Germany. {Prepared statement of Dr B Richardson, Deputy Assistant to the Secretary of Defense for Chemical Matters}

The Army testifies that "without circumventing safety and environmental requirements" it will be unable to meet the April 1997 completion date for destruction of the US stockpile of unitary chemical weapons as required by US public law {Prepared statement of Mrs Susan Livingstone, Assistant Secretary of the Army for Installations, Logistics and Environment}. The Army would like the deadline extended to December 1998 {DN 16 Apr}.

**6 April** At a Washington press briefing, US intelligence officials say that satellite photographs of the Libyan chemical plant at Rabta reportedly damaged by fire last month [see 19 Mar] show that burn marks had deliberately been painted onto the buildings. {WP 7 Apr, MEED 20 Apr}

**8 April** President Hosni Mubarak of Egypt declares his country's support "for ensuring that the Middle East become a zone free from all types of weapons of mass destruction" [see also 3 Apr (Iraq) and 4-5 Apr] {CD/989}. He had visited Baghdad the day previously {MEED 20 Apr}.

**9 April** Australia submits to the CD Ad Hoc Committee on Chemical Weapons a discussion paper on ad hoc verification which combines elements of the West German and British approaches {CD/PV.550}. The long-expected US draft to this effect [see 27 Feb] to replace the earlier US draft that had not found acceptance within the CD Western Group is still awaited. {ACR p. 704.B.427}

**9 April** The bilateral US-Soviet paper setting out a joint proposal for the order-of-destruction provisions of the CWC [see 27 Feb] has by now been transmitted to the relevant working group of the CD Ad Hoc Committee where multilateral work is beginning on its incorporation into the rolling text. {[CD]/CW/Group B/5/Rev.3}

**10 April** In Geneva the 15th round of bilateral US-Soviet consultations on the prohibition of CW weapons begins. {TASS 10 Apr in FBIS-SOV 11 Apr, Reuter as in WT 11 Apr, AN no. 2212}

**10 April** At the CD, the head of the Yugoslav delegation states that the "Socialist Federal Republic of Yugoslavia neither produces nor possesses chemical weapons." [See also 28 Mar] {CD/PV.550}

**10 April** FR Germany introduces into the CD a paper suggesting how its proposal for the establishment of national registers of chemical-industry facilities -- registers that could underpin the projected ad hoc verification system -- could be implemented in practice. {CD/984}

The FRG also invites CD member and observer states to participate in a workshop focussing on the technical aspects of verification, in particular the use of instruments and equipment, to be held in Munster during 14-15 June. {CD/PV.550}

**11 April** Italy submits a paper on the concept of production capacity to the CD Ad Hoc Committee {CD/CW/WP.287}, where renewed consultations among technical experts are in progress on the best way of defining the concept for the purposes of the CWC {[CD]/CW/Group B/12}.

**11 April** The CD Ad Hoc Committee receives a preliminary report on the international interlaboratory comparison test of procedures for sample pretreatment and analysis which Finland had proposed in 1988 and which had taken place from September 1989 to January 1990. Laboratories in Australia, Canada, Finland, France, FR Germany, the Netherlands, Norway, Sweden, Switzerland and the UK had participated, each receiving air and soil samples spiked with Schedule-1 chemicals. Finland, which coordinated the round robin, is to publish a more detailed report during the summer session of the CD. {CD/CW/WP.288}

**11 April** In the United States, NBC Television telecasts a report, apparently compiled with cooperation from the US intelligence community, about Iraq producing and stockpiling material for germ warfare at a complex near the village of Salman Pak [see 17 Jan 89], said to be fitted with equipment supplied from Western Europe. {NBC Nightly News transcript, TL 13 Apr}

**12 April** In the CD the representative of China elaborates on the principles which his foreign minister had earlier said [see 27 Feb] should govern challenge inspection under the CWC. He speaks of a requirement for "further in-depth study and consultation, as well as careful drafting."

He also speaks of the problem of "chemical weapons abandoned by foreign countries in the countries which have fallen victim to a CW attack," advocating an explicit stipulation in the CWC that such "CW-abandoning countries" be responsible for destroying the weapons. {CD/PV.551}

**12 April** In Iraq, a bipartisan group of five US senators led by Robert Dole, having earlier visited President Mubarak of Egypt and King Hussain of Jordan, meets with President Saddam Hussein; the visit has the approval and support of President Bush {WP 13 & 23 Apr}. Baghdad radio later broadcasts a transcript of what was said, including the following statements by the president:

"I also have said: if Israel uses atomic bombs, we will strike at it with the binary chemical weapon [see 1 Apr]. I reiterate now that if Israel does this, we will do that. We have given instructions to the commanders of the air bases and the missile formations that once they hear Israel has hit any place in Iraq with the atomic bomb, they will load the chemical weapon with as much as will reach Israel and direct it at its territory .... I know chemical weapons were prohibited by the Geneva Convention. I know and I do not forget our commitments, nor the fact we signed it. But are chemical weapons more dangerous for humanity than nuclear bombs?"

Later: "We ... thought about chemical weapons when Iran attacked us in al-Muhammarah [Khurramshahr] with chemical weapons. These facts were documented by the military during the war, but we did not announce them. It is I who prevented their announcement at the time because the weapons were new and I feared it might create panic within the armed forces. This took place in al-Muhammarah in 1980."

When asked by Senator Dole about the reports of Iraqi production of biological weapons: "We are aware of what the biological weapons mean. We are aware if such a method were used, the situation would become uncontrollable. Therefore, rest assured on this point. We speak about what we have. We also speak about what we will use if an aggression is mounted against us. Therefore, regardless of what is said in the papers, if we had biological weapons, we would have admitted it. If there is anyone in the world, if he is our enemy and fears biological weapons, let him come and together we will scrap biological weapons. Thus, we have no biological weapons, but we do have chemical weapons .... As to whether scientists have done research on this or that sort of germ, I do not give a guarantee in this matter, and I do not deny it .... I mean conventional scientific research, not germ warfare. I mean using germs for scientific purposes. I am aware that conducting research on germs for military purposes amounts to using them as a weapon."

The senators are also told that Iraq is prepared to join in establishing the entire Middle East region, including Iran, as a zone "free of all types of weapons of wholesale destruction" [see 8 Apr]. The president says: "we ought to promote the notion. I think the idea would prove favorable to the world and the region. It may be that the time is right to float such a proposal in Israel." {Baghdad domestic service 16 Apr in FBIS-NES 17 Apr}

**12 April** The Director of US Central Intelligence, William Webster, addressing the World Affairs Council of Boston, says: "There is a great need for international cooperation to control the spread of lethal technology. Countries are aggressively seeking to obtain what they need by clandestine means, making the procurement process extremely complex. They are using front companies, falsification of export documents and multiple transshipment points. We are also finding that regulations are being circumvented by ordering equipment or material that is just below the export guidelines but which, in the aggregate, would be subject to controls." On CW weapons in particular, he speaks of there being "about 20 nations today who are developing these weapons." {Prepared text, WP 13 Apr}

**16 April** The Egyptian proposal for a Middle Eastern mass-destruction-weapons free zone [see 8 Apr] is repeated in a formal communication to the United Nations Secretary-General: "President Mubarak emphasized the following: (1) All weapons of mass destruction, without exception, should be prohibited in the Middle East, i.e. nuclear, chemical and biological, ... etc. (2) All States of the region, without exception, should make equal and reciprocal commitments in this regard. (3) Verification measures and modalities should be established to ascertain full compliance by all States of the region with the full scope of the prohibitions without exception." {CD/989, Ind & WP 19 Apr}

**17 April** Poland provides the CD with data on its production and consumption of scheduled chemicals in the format proposed in CD/828. The data include declarations that "no chemical weapons are located in the territory of Poland" and that "Poland neither produces nor possesses" them. {CD/985}

**17 April** The Chairman of the CD Ad Hoc Committee, in an initiative on the currently blocked issue of challenge inspection [see 29 Jun, 25 Jul, 10 Aug, 28 Aug, 14 Dec, 1 Feb, 8 Mar (FRG) and 12 Apr (China)] puts forward a draft for Article IX of the CWC, building on his own and his predecessor's consultations with delegations. {[CD]/CW/Chairman/5}

**17 April** In the CD Ad Hoc Committee, open-ended consultations are held in Working Group A on the issue of ad hoc verification. They are based on the Australian discussion paper [see 9 Apr] and the FRG paper on the establishment of national registers [see 10 Apr]. {CD/JCW/Group A/8}

**18 April** President Saddam Hussein says on television that Iraq would retaliate with its full might against any country that attacked an Arab state. {Ind & Reuter as in NYT 19 Apr}

He is quoted by the Iraqi News Agency the previous day as follows: "If any party, anywhere in the globe, of whatever size, tries to attack any Arab that accepts our assistance, we will respond to the aggressor to the best of our ability. If we can throw stones at him, we will throw stones; if we can fire a missile, we will; if we can strike with all our missiles, bombs, and all our resources, then we will strike him with all our missiles, bombs, and resources, wherever he may be. We will chase him. We not only will strike him in his place, but we will chase him wherever he may be. We will make him unable to distinguish between day and night. We will narrow the globe on him wherever he may be." {INA 17 Apr in FBIS-NES 18 Apr}

**18 April** The British Defence Ministry announces that Guinard Island, now proven free of the anthrax organisms disseminated over it during biological-warfare trials in 1942 and 1943, is to be returned to civil use and ownership on 1 May. {G 25 Apr}

**19 April** Canada submits a report to the CD on a national trial inspection it had conducted in November 1989 at part of the research laboratory at Defence Research Establishment Suffield, this simulating a Single Small-scale Facility for Schedule-1 chemicals. {CD/987}

**19 April** India submits a report to the CD on a national trial inspection it had conducted during August 1989 [see 19 Sep 89] at a multipurpose facility in Bombay used for drug manufacture by Searle India Ltd. {CD/988}

**19 April** The United Kingdom shows the CD a video film on a practice challenge inspection [see 2 Apr], five of which it has now conducted.

**20 April** In the US Senate, a bill is introduced by Senator Alfonse D'Amato that would cancel all economic aid to Iraq unless it opens facilities suspected of producing nuclear, chemical or biological weapons to international inspection. Testifying before the Senate a few days later, Secretary of States James Baker says that, in response to recent actions by Iraq, his department is "taking a look" at a cutoff in loans and agricultural credits {WT 26 Apr}. But subsequent State Department testimony opposes such trade sanctions, saying that US relations with Iraq are in a trial period {FT 27 Apr}.

**23 April** Denmark provides the CD with data on its production and consumption of scheduled chemicals in the format proposed in CD/828. The data indicate no Danish production of any scheduled chemicals. {CD/991}

**23 April** The West German news weekly *Der Spiegel*, citing an intelligence report to the Chancellor's office the previous week, reports that surface-to-air missiles emplaced around the Libyan chemical factory at Rabta have been withdrawn and that Western intelligence services have noticed only "very limited activity" at the factory since the time of the reported fire there [see 6 Apr]. {DerS 23 Apr in FBIS-NES 24 Apr}

**24 April** The CD in Geneva concludes its Spring session.

**24 April** In testimony to the US Congress, the Office of the Secretary of Defense states: "More nations possess chemical and biological weapons today than at any other time in history .... Libya and Iraq are only the most visible examples of the more than 20 chemical capable states. The 1972 Biological Weapons Convention prohibits possession of biological weapons, but we know of at least ten countries with biological warfare programs. Most of the ten are signatories to the Convention."

On the binary chemical weapons production program, the testimony states that the currently projected binary stockpile is "less than one-fifth the tonnage of our unitary stockpile." The Big-eye bomb is scheduled to finish operational testing this year, with procurement beginning next year. The testimony describes this weapon as providing "a means with which light expeditionary forces could launch retaliatory chemical attacks with their largely sea-based supporting forces."

On the withdrawal of the US CW stockpile from West Germany [see 5 Apr]: "In compliance with Congressional wishes, agent destruction at the Johnston Atoll Chemical Agent Disposal System will be demonstrated prior to movement of any munitions from Germany. The final decision on movement of munitions to Johnston Atoll cannot be made until the global environmental assessment is completed. Our position continues to be that these munitions will be a reserve and be among the last destroyed." {Prepared statement of Dr B Richardson, Deputy Assistant to the Secretary of Defense for Chemical Matters, HADS, 24 Apr}

**25 April** In Belgium, the leading Flemish news weekly *Knack* suggests that Chemical Agent Monitors imported under licence from their British manufacturers by a toxicologist at the University of Ghent in 1987 had been illegally exported the following year to Iran and South Africa. {*Knack* 25 Apr}

**26 April** In Geneva, the 15th round of bilateral US-Soviet CW talks [see 10 Apr] comes to an end. The joint report on the talks which the leader of the US delegation makes to the CD indicates that an agreement between the two countries to limit their CW-weapons stocks to 5000 agent-tonnes each may be ready for signing at the Washington summit. The joint statement also announces agreement that once the multilateral CWC is in force its terms will have priority over those of the bilateral agreement {CD/PV.544, AN no. 2219}. But the leader of the Soviet delegation, Serguei Batsanov, subsequently tells reporters that he did not believe it would be "realistic to expect that the agreement would be signed" unless the United States first agreed to stop producing chemical weapons {Reuter as in IHT 27 Apr}. In Moscow, the Foreign Ministry says that bilateral discussions of the CW weapons ban are to continue at a regular foreign-ministers' meeting {SovN 2 May, TASS 26 Apr in FBIS-SOV 27 Apr}.

**27 April** The British Government, responding to a Parliamentary question, says: "We have alerted our Australia Group partners to the possibility of diversion of biotechnology equipment, material and know-how for use in biological warfare, and are taking parallel action with potential United Kingdom suppliers." {HansC 27 Apr}

**1 May** In the US House of Representatives, a Judiciary subcommittee holds hearings on the Kastenmeier bill, HR 237, to incorporate the 1972 Biological Weapons Convention into US domestic law. The administration recommends that the bill be amended to conform with the one already adopted by the Senate [see 21 Nov] {prepared statement of Thomas Graham, Jr, General Counsel, US ACDA}. The next day, the bill is considered by the full Judiciary Committee, which marks up an amendment in the nature of a



substitute bill identical to the Senate's. This is passed unanimously by the House on 8 May as the Biological Weapons Anti-Terrorism Act of 1989 {CR 8 May, pp H2065-8}. The bill now goes forward for signature by President Bush.

**2 May** In the US House of Representatives, a Veterans Affairs subcommittee holds hearings on a bill that would provide benefits to sick Vietnam-War veterans who claim that their illnesses have resulted from exposure to Agent Orange [see 29 Mar]. The Senate has already passed such a bill. Both bills would create an independent panel of scientists under the auspices of the National Academy of Sciences to review studies on health aspects of exposure to herbicides. A report by a private panel of seven scientists reviewing data on exposure to the Orange-contaminant dioxin had been released the day previously by its joint sponsors, the American Legion, Vietnam Veterans of America and the National Veterans Legal Services Project. {SFC 2 May}

**3 May** The *Washington Post* reports that in March, a few days before fire broke out in the Libyan chemical plant at Rabta [see 14 Mar and 6 Apr], the Libyan foreign ministry had proposed to West European diplomats that, if Western countries would pay for the construction of a new factory to manufacture medicines at a site under Western supervision, the Rabta factory would be closed down.

The *Post* also reports that a European diplomat who had just been taken to visit the Rabta plant had said that it appeared deserted, its military checkpoints gone, and its anti-aircraft defenses withdrawn {WP 3 May}. Later the West German weekly *Bunte* reports that Libya is building a new poison-gas factory at an underground site at Sebha, 650 km south of Tripoli, with German firms apparently again being involved {Deutschlandfunk 4 May in FBIS-WEU 4 May}.

The FRG embassy in Tripoli confirms that two West Germans are still being held without formal charge or explanation by Libyan authorities four weeks after being arrested [see 19 Mar] {G 3 May}. An official Libyan statement had just said that "investigations are continuing in order to reveal the circumstances of the fire" at Rabta, and that the two Germans were being interrogated in this connection {JANA 1 May in FBIS-NES 2 May}.

**3 May** The *Washington Post*, attributing an internal US Defense Department study of the Gulf War, says that the civilian poison-gas casualties at Halabja in March 1988 [see 18 and 21 Mar 88] had resulted from CW bombardments by Iranian forces as well as Iraqi. Evidence for this had apparently been drawn from the fact that Iran had said many of the Halabja victims had died from cyanide whereas, according to a Pentagon official, "we know Iraq does not use cyanide gas." The Pentagon study, described as an "operational history" of the decisive final stages of the war, is said to include a detailed reconstruction of the Halabja fighting based on undisclosed "highly classified sources." {WP 3 May}

The Iranian Government issues a strong denial. {Tehran domestic service 4 May in FBIS-NES 4 May}

**4 May** US Secretary of State James Baker III and USSR Foreign Minister Eduard Shevardnadze meet in Bonn prior to "two-plus-four" talks on German unification. It is later reported in the US press, with attribution to unidentified "senior US officials," that they had under detailed consideration a package of proposals regarding the projected bilateral CW agreement [see 26 Apr] which the US side had put forward in April, and that the package included an offer to halt production of CW weapons by a specific date provided the Soviet side agreed to other proposals in the package {WT 8 May}. Such an offer had evidently been sought by the Soviet side earlier [see 26 Apr]. A detailed Soviet response is

expected later in the month in Moscow, at the next round of ministerial talks.

**5 May** In Melbourne, the Administrative Appeals Tribunal rules that exposure to Agent Orange [see 29 Mar] during the Vietnam War contributed to the subsequent death of an Australian infantryman from a malignant schwannoma, a cancer of the nervous system, and that his widow was therefore entitled to a war-widow's pension. {*New Scientist* 12 May}

**8 May** US Secretary of Health and Human Services Louis Sullivan tells the World Health Assembly in Geneva that the United States intends to destroy its remaining stocks of live smallpox virus. He urges the Soviet Union, which has the world's only other repository for samples of the virus, to do the same. {Reuter as in WT 9 May}

**9 May** Press commentary on the reported US offer to stop production of binary munitions ahead of the CWC [see 4 May] includes speculation on what the US side is expecting in return from the Soviet side. One US report, attributing unidentified "Administration officials," says the USSR has been asked to commit itself to a specific schedule for the destruction of CW weapons under the bilateral agreement; and that the USSR has also been asked to accept, in the multilateral CWC negotiations, the US "2-percent solution" [see 27 Feb and 13 Mar]. {NYT 9 May}

Novosti Press Agency releases a statement by the head of the Soviet CD delegation, Sergei Batsanov. About the 2-percent solution it says: "The right to preserve chemical weapons, even if in small numbers, would mean the perpetuation of the chemical threat, the more so that the US intends to realize this right unilaterally, or jointly with the Soviet Union at the most. This could create a situation where the convention on the elimination of chemical weapons would not be carried out to the full. However, the US proposal is not bad overall. It has an aspect that concerns the need to guarantee the universal application of the convention and wide representation of states. Although the Soviet Union does not think that the preservation of 500 tonnes of toxic agents would encourage the participation of other States in the convention, as the US expects, this problem cannot be removed from the agenda. It should be settled politically, and efforts to this end are being made at the talks."

As to a specific Soviet chemdemil schedule, Minister Batsanov says that the Soviet Union would face difficulties "because the corresponding draft national programme is still being discussed by the USSR Supreme Soviet." {Novosti Press Agency, press release in London no PR06990}

**13 May** The West German minister of state in the Chancellor's office in charge of intelligence services, Lutz Stavenhagen, speaks as follows in Jerusalem, at a seminar at the Hebrew University: "We have reason to believe that [in Libya] a second [poison gas] plant similar to Rabta is being planned. We successfully managed to cut that part out in which German companies have been involved." The plant was, he said, at Sebha [see 3 May]. He also said that the Federal Republic was convinced that the fire that was initially thought to have destroyed the Rabta plant was a hoax intended to fool US reconnaissance satellites [see also 6 Apr] {DTel & Reuter as in IHT 14 May}. The day previously, *Die Welt* had reported action by the Federal government to block a shipment of equipment to the second plant. {*Die Welt* 12 May in FBIS-WEU 15 May}

**14 May** The lead editorial in the *New York Times* urges President Bush to abandon the 2-percent solution. {NYT 14 May}

**15 May** In west Germany, the environmental organization *BUND* advocates study of the on-site incineration option for destroying the US CW-weapons stockpile at Clausen in view of the dangers of transporting the weapons out of the country [see 24 Apr]. {*Pir-masenser Zeitung* 16 May}

**15 May** For a British television documentary screened today, the former Defense Minister of Israel, Yitzhak Rabin, had said: "If Iraq will do it, they'll get back a strike with the strength of a hundred times more." He was responding to a question about "Saddam Hussein's recent threat to use chemical weapons against Israel if the Israelis attack Iraq." {BBC 15 May in FBIS-NES 17 May}

**16-17 May** The US Senate considers S.195, its CW-counter proliferation sanctions bill [see 13 Nov] {CR 16 & 17 May}. The White House threatens to veto it {WT 17 May}, preferring the House bill [which would provide for discretionary rather than automatic sanctions]. The Senate nevertheless approves the bill, somewhat amended {CQ 19 May}.

**16-19 May** In Moscow there is a new round of Baker-Shevardnadze ministerial talks in preparation for the US-Soviet summit at the end of the month. Secretary Baker tells the press that a "trail-blazing" agreement on chemical weapons would be signed at the summit [see 4 May], saying: "I believe that this agreement is very significant, particularly as it provides a real pathway towards a global ban on horrific weapons that we already know from bitter experience actually get used" {transcript in NYT 20 May}. He says that, as part of the accord, the United States has agreed that its CW-weapons production should stop immediately {NYT & WP 20 May}.

*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.)*

**18 May** In the United States, Secretary of Veterans Affairs Edward J Derwinski decides that Vietnam veterans with soft-tissue sarcoma are to become eligible for disability payments. The day previously his department's Veterans Advisory Committee on Environmental Hazards had found from a literature review that there was "at least as likely as not" a significant statistical association between soft-tissue sarcoma and exposure to dioxin, a contaminant of the herbicide Agent Orange. [See also 2 May] {NYT & WP 19 May}

**26 May** In Bonn, the Greens in Parliament hold a public expert hearing on CW-weapons, and launch an appeal calling upon the Federal Government to postpone the retrograde of US stocks [see 24 Apr] pending further risk assessment. {TZ 28 May}

**28 May** An emergency summit meeting of the Arab League is held in Baghdad. President Saddam Hussein of Iraq says in his opening address: "We should announce clearly that if Israel attacks us, we are going to hit back fiercely, and if it uses weapons of total destruction against [the Arab] nation, we will use against it the weapons of total destruction which we have." President Hosni Mubarak of Egypt says that he wants to see the Middle East free of nuclear, chemical and biological weapons [see also 16 Apr]. {FT, IHT, Ind and NYT 29 May}

**31 May** In Nordenham, FRG, Federal and US officials host a media day on the projected retrograde of US CW-weapons through the port [via which the weapons had originally been introduced].

**31 May** In Washington, President Bush and President Gorbachev begin their 3-day summit meeting. They will, among other things, be signing an accord on chemical weapons [see pp. 19-22].

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## SOME FORTHCOMING EVENTS

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\* CD resumes work for its summer session on 12 June

\* As agreed under the September 1989 Memorandum of Understanding, officials from the US will visit chemical weapons storage sites in the Soviet Union from 6-8 June; a Soviet team will visit Tooele, Utah and other sites in the US during the week of June 18.

\* In Munster, FRG a workshop focussing on the technical aspects of verification, especially instrumentation and equipment will be held on 14-15 June. The meeting is open to CD member and observer states.

\* Senate Foreign Relations Committee hearings on sanctions against Iraq for its alleged chemical, biological and nuclear activities, 15 June

\* In Geneva, meeting of representatives of worldwide chemical industry, first among themselves, and then with CD experts to discuss CWC issues, 25-29 June

\* American Defense Preparedness Association is sponsoring a symposium on "Meeting the Chemical/ Biological Defense in the 90s," at the Naval Surface Warfare Center in Silver Spring, Maryland, 26-28 June. For more information, call Col.

Bruce Holt at the ADPA, (703) 522-1820.

\* In Geneva, the Pugwash/SIPRI thiodiglycol-project will hold its second meeting, 29 June-2 July

\* In Kühlungsborn, East Germany, the GDR Academy of Sciences Society for Physical and Mathematical Biology and the GDR Committee for Scientific Problems of Safeguarding Peace and Disarmament join in convening a large international conference on "Prevention of a Biological and Toxin Arms Race and the Responsibility of Scientists," 14-19 September

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# AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON DESTRUCTION AND NON-PRODUCTION OF CHEMICAL WEAPONS AND ON MEASURES TO FACILITATE THE MULTILATERAL CONVENTION ON BANNING CHEMICAL WEAPONS

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The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as "the Parties,"

Determined to make every effort to conclude and to bring into force at the earliest date a convention providing for a global ban on the development, production, stockpiling and use of chemical weapons and on their destruction, hereinafter referred to as "the multilateral convention,"

Aware of their special responsibility in the area of chemical weapons disarmament,

Desiring to halt the production of chemical weapons and to begin the destruction of the preponderance of their chemical weapons stockpiles, without waiting for the multilateral convention to enter into force,

Recalling the Memorandum of Understanding between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics Regarding a Bilateral Verification Experiment and Data Exchange Related to Prohibition of Chemical Weapons, signed at Jackson Hole, Wyoming on September 23, 1989, and

Mindful of the efforts of each Party aimed at the destruction of chemical weapons and desiring to cooperate in this area,

Have agreed as follows:

## I. General Provisions and Areas of Cooperation

1. In accordance with provisions of this Agreement, the Parties undertake:

- (a) to cooperate regarding methods and technologies for the safe and efficient destruction of chemical weapons;
- (b) not to produce chemical weapons;
- (c) to reduce their chemical weapons stockpiles to equal, low levels;
- (d) to cooperate in developing, testing, and carrying out appropriate inspection procedures; and
- (e) to adopt practical measures to encourage all chemical weapons-capable states to become parties to the multilateral convention.

2. Each Party, during its destruction of chemical weapons, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each Party shall destroy its chemical weapons in accordance with stringent national standards for safety and emissions.

## II. Cooperation Regarding Methods and Technologies of Destruction

1. To implement their undertaking to cooperate regarding the destruction of chemical weapons, the Parties shall negotiate a specific program of cooperation. For this purpose, the Parties may create special groups of experts, as appropriate. The program may include matters related to: methods and specific technologies for the destruction of chemical weapons; measures to ensure safety and protection of people and the environment; construction and operation of destruction facilities; the appropriate equipment for destruction; past, current and planned destruction activities; monitoring of destruction of chemical weapons; or such other topics as the Parties may agree. Activities to implement this program may include: exchanges of visits to relevant facilities; exchanges of documents; meetings and discussions among experts; or such other activities as the Parties may agree.

2. Each Party shall, as appropriate, cooperate with other states that request information or assistance regarding the destruction of chemical weapons. The Parties may respond jointly to such requests.

## III. Cessation of the Production of Chemical Weapons

Upon entry into force of the Agreement and thereafter, each Party shall not produce chemical weapons.

#### IV. Destruction of Chemical Weapons

1. Each Party shall reduce and limit its chemical weapons so that, by no later than December 31, 2002, and thereafter, its aggregate quantity of chemical weapons does not exceed 5000 agent tons. In this Agreement, "tons" means metric tons.

2. Each Party shall begin its destruction of chemical weapons by no later than December 31, 1992.

3. By no later than December 31, 1999, each Party shall have destroyed at least 50 percent of its aggregate quantity of chemical weapons. The aggregate quantity of chemical weapons of a Party shall be the amount of chemical weapons declared in the data exchange carried out on December 29, 1989, or declared thereafter, pursuant to the Memorandum, as updated in accordance with paragraph 6(b) of this Article.

4. In the event that a Party determines that it cannot achieve an annual rate of destruction of chemical weapons of at least 1000 agent tons during 1995, that Party shall, at the earliest possible time, notify the other Party, in accordance with Paragraph 10 of this Article.

5. Each Party, in its destruction of chemical weapons, shall also destroy the munitions, devices and containers from which the chemicals have been removed. Each Party shall reduce and limit its other empty munitions and devices for chemical weapons purposes so that, by no later than December 31, 2002, and thereafter, the aggregate capacity of such munitions and devices does not exceed the volume of the remaining bulk agent of that Party.

6. Thirty days after the entry into force of this Agreement, each Party shall inform the other Party of the following:

- (a) its current general plan for the destruction of chemical weapons pursuant to this Agreement and its detailed plan for the destruction of chemical weapons during the calendar year following the year in which this Agreement enters into force. The detailed plan shall encompass all of the chemical weapons to be destroyed during the calendar year, and shall include their locations, types and quantities, the methods of their destruction, and the locations of the destruction facilities that are to be used; and
- (b) any changes, as of the entry into force of this Agreement, in the data contained in the data exchange carried out on December 29, 1989, or provided thereafter, pursuant to the Memorandum.

7. Beginning in the calendar year following the year in which this Agreement enters into force, each Party shall inform the other Party annually, by no later than November 30, of its detailed plan for the destruction of chemical weapons during the following calendar year.

8. Beginning in the calendar year following the year in which this Agreement enters into force, each Party shall inform the other Party annually, by no later than April 15, of the following:

- (a) any further changes, as of December 31 of the previous year, to the data contained in the data exchange carried out on December 29, 1989, or provided thereafter, pursuant to the Memorandum;
- (b) the implementation during the previous calendar year of its detailed plan for the destruction of chemical weapons; and
- (c) any update to the general and detailed plans provided pursuant to paragraphs 6(a) or 7 of this Article.

9. Each Party shall limit its chemical weapons storage facilities so that, by no later than December 31, 2002, and thereafter, the number of such facilities does not exceed eight. Each Party plans to have all such facilities located on its national territory. This is without prejudice to its rights and obligations, including those under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on June 17, 1925.

10. If a Party experiences problems that will prevent it from destroying its chemical weapons at a rate sufficient to meet the levels specified in this Article, that Party shall immediately notify the other Party and provide a full explanation. The Parties shall promptly consult on measures necessary to resolve the problems. Under no circumstances shall the Party no experiencing problems in its destruction of chemical weapons be required to destroy its chemical weapons at a more rapid rate than the Party that has experienced such problems.

#### V. Inspection Activities

1. Each Party shall provide access to each of its chemical weapons production facilities for systematic on-site inspection to confirm that production of chemical weapons is not occurring at those facilities.

2. Each Party shall identify and provide access to each of its chemical weapons destruction facilities and the chemical weapons holding

areas within these destruction facilities for systematic on-site inspection of the destruction of chemical weapons. Such inspection shall be accomplished through the continuous presence of inspectors and continuous monitoring with on-site instruments.

3. When a Party has removed all of its chemical weapons from a particular chemical weapons storage facility, it shall promptly notify the other Party. The Party receiving the notification shall have the right to conduct, promptly after its receipt of the notification, an on-site inspection to confirm that no chemical weapons are present at that facility. Each Party shall also have the right to inspect, not more than once each calendar year, subsequent to the year of the notification and until such time as the multilateral convention enters into force, each chemical weapons storage facility for which it has received a notification pursuant to this paragraph, to determine that chemical weapons are not being stored there.

4. When a Party has completed its destruction of chemical weapons pursuant to this Agreement, it shall promptly notify the other Party. In its notification, the Party shall specify the chemical weapons storage facilities where its remaining chemical weapons are located and provide a detailed inventory of the chemical weapons at each of these storage facilities. Each Party, promptly after it has received such a notification, shall have the right to inspect each of the chemical weapons storage facilities specified in the notification, to determine the quantities and types of chemical weapons at each facility.

5. Each Party shall also have the right to inspect, not more than once each calendar year, subsequent to the year in which destruction begins and until such time as the multilateral convention enters into force, each chemical weapons storage facility of the other Party that is not already subject to annual inspection pursuant to paragraph 3 of this Article, to determine the quantities and types of chemical weapons that are being stored there.

6. On the basis of the reports of its inspectors and other information available to it, each Party shall determine whether the provisions of this Agreement are being satisfactorily fulfilled and shall communicate its conclusions to the other Party.

7. Detailed provisions for the implementation of the inspection measures provided for in this article shall be set forth in the document on

inspection procedures. The Parties shall work to complete this document by December 31, 1990.

## VI. Measures to Facilitate the Multilateral Convention

The Parties shall cooperate in making every effort to conclude the multilateral convention at the earliest date and to implement it effectively. Toward those ends, the Parties agree, in addition to their other obligations in this Agreement, to the following:

1. each Party shall reduce and limit its chemical weapons so that, by no later than the end of the eighth year after entry into force of the multilateral convention, its aggregate quantity of chemical weapons does not exceed 500 agent tons.

2. Upon signature of this Agreement, the Parties shall enter into consultations with other participants in the multilateral negotiations and shall propose that a special conference of states parties to the multilateral convention be held at the end of the eighth year after its entry into force. This special conference would, *inter alia*, determine, in accordance with agreed procedures, whether the participation in the multilateral convention is sufficient for proceeding to the total elimination of all remaining chemical weapons stocks over the subsequent two years.

3. The Parties shall intensify their cooperation with each other and with other states to ensure that all chemical weapons-capable states become parties to the multilateral convention.

4. The Parties declare their intention to be among the original parties to the multilateral convention.

5. To gain experience and thereby facilitate the elaboration and implementation of the multilateral convention, the Parties agree to conduct bilateral verification experiments involving trial challenge inspections at facilities not declared under the Memorandum or subsequently. The detailed modalities for such experiments, including the number and location of the facilities to be inspected, as well as the procedures to be used, shall be agreed between the Parties no later than six months after the signing of this Agreement.

## VII. Consultations

The Parties, in order to resolve questions related to this Agreement that may arise, shall use normal diplomatic channels, specifically-desig-

nated representatives, or such other means as they may agree.

### VIII. Relationship to Other Documents

1. After the multilateral convention enters into force, the provisions of the multilateral convention shall take precedence over the provisions of this Agreement in cases of incompatible obligations therein. Otherwise, the provisions of this Agreement shall supplement the provisions of the multilateral convention in its operation between the Parties. After the multilateral convention is signed, the Parties to this Agreement shall consult with each other in order to resolve any questions concerning the relationship of this Agreement to the multilateral convention.

2. The chemical weapons, chemical weapons storage facilities, and chemical weapons production facilities subject to this Agreement are those that are subject to declaration under the Memorandum.

### IX. Amendments

Each Party may propose amendments to this Agreement. Agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Agreement.

### X. Entry into Force; Duration; Withdrawal

1. This Agreement shall enter into force upon an exchange of instruments stating acceptance of the Agreement by each Party.

2. This Agreement shall be of unlimited duration, unless the Parties agree to terminate it after the entry into force of the multilateral convention.

3. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Agreement if it decides that extraordinary events related to the subject matter of this Agreement have jeopardized its supreme interests. It shall give notice of this decision to the other Party six months prior to withdrawal from the Agreement. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

DONE at Washington, in duplicate, this 1st day of June, 1990, in the English and Russian languages, each text being equally authentic.

FOR THE UNITED STATES OF AMERICA:  
George Bush

FOR THE UNION OF SOVIET SOCIALIST  
REPUBLICS: Mikhail Gorbachev

### AGREED STATEMENT IN CONNECTION WITH THE AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON DESTRUCTION AND NON-PRODUC- TION OF CHEMICAL WEAPONS AND ON MEASURES TO FACILITATE THE MULTI- LATERAL CONVENTION ON BANNING CHEMICAL WEAPONS

Paragraph 2 of Article VI of the Agreement stipulates that, "Upon signature of this Agreement, the Parties shall enter into consultations with other participants in the multilateral negotiations and shall propose that a special conference of states parties to the multilateral convention be held at the end of the eighth year after its entry into force. This special conference would, *inter alia*, determine, in accordance with agreed procedures, whether the participation in the multilateral convention is sufficient for proceeding to the total elimination of all remaining chemical weapons stocks over the subsequent two years."

In this connection, the Parties agree that an affirmative decision would require the agreement of a majority of the states parties that attend the special conference, with such majority including those states parties attending the special conference that had taken the following three steps:

- (a) presented officially and publicly, before December 31, 1991, before the Conference on Disarmament, a written declaration that they were at the time of that declaration in possession of chemical weapons;
- (b) signed the multilateral convention within thirty days after it was opened for signature; and
- (c) became a party to the multilateral convention by no later than one year after its entry into force.

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