CHEMICAL WEAPONS CONVENTION BULLETIN

News, Background and Comment on Chemical and Biological Warfare Issues

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OVER THE IMPASSE

The dispute with the White House in which the Chairman of the US Senate Foreign Relations Committee blocked action on the Chemical Weapons Convention and other Executive Branch requests for most of this year has been resolved.

On the floor of the Senate early this month the Foreign Relations Committee Chairman, Senator Jesse Helms, announced that the Committee will resume hearings on the Convention in February and that the Convention will be moved out of committee no later than the end of April. As part of the agreement, the Senate Majority Leader, Senator Robert Dole, who controls floor scheduling, pledged to place the Convention before the full Senate within a "reasonable time period" after it leaves the Committee. This means that the Senate could vote on the Convention in May.

Present indications are that when finally put to a vote the CWC will receive the support of substantially more than the required two-thirds of the Senate. It is the intention of the White House to deposit the US instrument of ratification soon thereafter.

As of this writing, 45 states have deposited their instruments of ratification of the CWC. Even before the Senate deadlock was broken, the trigger point of 65 that starts the 180-day period before the CWC enters into force appeared likely to be reached sometime in the first half of 1996. Now that is even more certain [see box on page 3].

What messages do these developments carry for supporters of the Convention?

First, signatory states that have not yet ratified should do so soon. The greater the political momentum behind the Convention and the more it shows evidence of approaching universality, the more favourably will it be regarded in the deliberations of the US Senate early next year. The same reasoning applies to the way the Convention will be regarded in the Russian Federation, where the State Duma is also expected to be considering the treaty early in 1996.

Second, prospective original States Parties to the Convention must within the coming months complete and enact their domestic implementing legislation, establish their National Authorities and collect data for their declarations. Otherwise, owing to the time-consuming nature of these tasks, they risk being unable to comply with the Convention's requirement for submission of declarations within the first 30 days after entry into force.

Third, the Preparatory Commission needs to reach final decisions soon regarding management and technical matters that require decision well before entry into force. Such long lead-time matters include approval of the design and funding of the Information Management System which must be up and running before declarations containing confidential information can be processed by the Technical Secretariat; agreement on declaration-related and industry-related issues to allow States Parties sufficient time to prepare their declarations and facility agreements; and agreement on conditions of service for OPCW personnel so that recruitment of inspectors and others can proceed smoothly.

As the Provisional Technical Secretariat becomes increasingly occupied with its accelerating responsibilities for recruitment, training, data handling and other activities, it will have less time available for providing technical services to the Commission, making it all the more important for the Commission to accelerate its work now.

And fourth, the Commission must decide on additional space to accommodate the growing staff of the Technical Secretariat until its permanent headquarters can be built and occupied.

This is not to say that a great deal has not already been accomplished by the Commission and the Secretariat. Moreover, on many outstanding issues, the Secretariat has delineated a range of workable solutions that now require political choice by the Commission. So, the main job of determining when and how successfully the CWC enters into force lies in national capitals.

Editorial	1
Guest Article by Sergei Baranovsky	2–3
Forthcoming Events	2
CWC Ratifications	3
Progress in The Hague: 12th Quarterly Review	4–10
News Chronology: August–November 1995	11–31
CWC Non-Signatory States	29
Recent Publications	31–32

GREEN CROSS RUSSIA AND THE DESTRUCTION OF CHEMICAL WEAPONS

Professor Sergei Baranovsky

Executive Director, Green Cross Russia

As Russia's preparations to ratify the Chemical Weapons Convention and to begin the destruction of its chemical weapons enter their final stages, it becomes essential that there be a credible independent source of information on the problems of chemical weapons destruction. Green Cross Russia is attempting to develop such information and to make it available for public education and for the design and evaluation of chemical weapons destruction measures that protect public health and ensure ecological safety.

Green Cross Russia is an affiliate of Green Cross International, an international organization with offices in 18 countries working to bring together decision-makers, independent experts and grassroots movements from all sectors of society to find and implement practical measures for environmental protection and sustainable development. The uniqueness of Green Cross lies in its focus on conflict prevention and the need for reconciliation of competing perspectives through information and dialogue, not through confrontation.

Green Cross Russia has close contacts with non-governmental environmental organizations, scientific institutions and governmental authorities at local and national levels. Earlier this month, it supported the passage at first reading of draft legislation in the State Duma that provides a legal basis for the destruction of Russia's chemical weapons and will work for enlightened environmental and public health provisions in the law as it works its way through the remainder of the legislative process.

A major Green Cross activity is the Legacy Programme, intended to facilitate environmentally sound cleanup of toxic hazards resulting from the Cold War. The programme was proposed by Mikhail Gorbachev, President of Green Cross International, and is being implemented through three GCI affiliates — Green Cross Russia, Global Green USA and Green Cross Switzerland.

One of the most active Legacy Programme activities, operated by Green Cross Russia with financial support from Green Cross Switzerland, is CHEMTRUST, promoting safe practical solutions to problems of chemical weapons destruction.

A Presidential Decree of 24 March 1995 requires that all chemical weapons destruction be conducted in the regions where the weapons are presently stored, comprising 7 sites within the Russian Federation. The decree also created a high-level Interdepartmental Commission on Chemical Disarmament to oversee and expedite Russia's chemical demilitarization activities.

As a first step, CHEMTRUST developed a computerized data base containing geological, ecological, demographic, medical and other information for analysis of possible risks associated with the stockpile of 6400 tons of lewisite (an arsenic-containing blister agent) stored in bulk containers at a site near the town of Kambarka in the Udmurt Republic. CHEMTRUST is also gathering data on public health in Saratov Oblast, near the former chemical weapons test site at Shikhany and also in the vicinity of the town of Gornyi, near which some 1200 tons of lewisite and mustard are stored.

Russian Green Cross has established Udmurt and Saratov local affiliates in order to insure and grass-roots participation and local credibility in its CHEMTRUST projects. Openness is all the more important because, until the beginning of *perestroika* and the visit of international observers to Shikhany in 1987, the public was kept in ignorance even of the existence of massive stocks of chemical warfare agents in our country.

Effective forms and methods of public education and participation are essential to the successful introduction of the new safe technologies of chemical weapons neutralization and destruction. Toward this end, Green Cross Russia organized a two-day open hearing on the destruction of chemical warfare agents stored at Gornyi, namely lewisite and mustard. The hearing, held during 17–18 October 1995 in the city of Saratov on the Volga river, sought to establish mutual understanding between local citizens and environmental NGOs on the one side and authorities and ministries on the other, leading to practical steps for safe destruction of the Gornyi chemical weapons stocks.

Participants in the Saratov hearing, entitled "From Confrontation to Cooperation", included individuals from the

Forthcoming events

The Council for Arms Control and CDISS, Lancaster University, are organizing a joint seminar on the control of chemical & biological weapons to be held at King's College London on 18 January 1996. Contact +44 1249 782542 for details.

A Regional Seminar on the CWC organized by Austrian authorities in conjunction with the OPCW PTS will take place in Vienna on 6–8 March 1996. A similar seminar will be held in Tehran during February on dates yet to be announced.

The thirteenth plenary session of the OPCW Preparatory Commission will be held in The Hague during 18–22 March 1996. The fourteenth will take place on 22–26 July, and the fifteenth is scheduled for 9–13 December 1996.

Saratov Regional Duma, the Saratov Regional Administration, the Saratov Regional Committee on Nature Protection, the Saratov Medical University, the administration of the Krasnopartisanskiy District (in which the CW agents are actually located), the State Duma of the Russian Federation, the Ministry of Defense, the Ministry for the Environment and Natural Resources, the Ministry of Public Health, the Interagency Commission on Chemical Weapons Destruction, the Presidential Committee on the Chemical and Biological Weapons Conventions, the State Scientific Research Institute of Organic Chemistry and Technology (GosNIIOKhT), the Russian Academy of Sciences, the industrial consortium MetalChim and representatives of Green Cross International and Green Cross Russia.

The Saratov hearings discussed the complex of political, ecological, social, medical, economic, technological and other problems, connected with the chemical weapons destruction stored on the territory of the Saratov oblast.

Specific subjects addressed included issues of plant construction and operation in Gornyi, public health, remediation of the Gornyi site, and specific CW weapons destruction technologies and their features. Notably, representatives of Ministry of Defense took an active part and addressed numerous questions posed by other participants and by members of the audience.

Although important questions remain, the Saratov hearing clearly served to open valuable new channels of communication. Many participants expressed the view that it cleared up certain misunderstandings and opened the way to cooperation in addressing the real problems of chemical weapons destruction. It was recommended that similar hearings be held at other locations of chemical weapons stockpiling and destruction. Accordingly, Green Cross Russia is planning to convene its next open hearing on chemical weapons destruction in Kambarka in May.

Deposited CWC Ratifications

as of 12 December 1995

Fiji — 20 January 1993 Mauritius — 9 February 1993 Seychelles — 7 April 1993 Sweden — 17 June 1993 Norway — 7 April 1994 Australia — 6 May 1994 Albania — 11 May 1994 Maldives — 31 May 1994 Cook Islands — 15 July 1994 Spain — 3 August 1994 Bulgaria — 10 August 1994 Germany — 12 August 1994 Sri Lanka — 19 August 1994 Mexico — 29 August 1994 Turkmenistan — 29 September 1994 Uruguay — 6 October 1994 Paraguay — 1 December 1994 Lesotho — 7 December 1994 Greece — 22 December 1994 Tajikistan — 11 January 1995 Mongolia — 17 January 1995 Armenia — 27 January 1995 Finland — 7 February 1995 Oman — 8 February 1995 Romania — 15 February 1995 France — 2 March 1995 Switzerland — 10 March 1995 Croatia — 23 May 1995

Monaco — 1 June 1995

Netherlands — 30 June 1995

Denmark — 13 July 1995

Peru — 20 July 1995
Algeria — 14 August 1995
Austria — 17 August 1995
Poland — 23 August 1995
Ecuador — 6 September 1995
South Africa — 13 September 1995
Japan — 15 September 1995
Canada — 26 September 1995
Argentina — 2 October 1995
Slovak Republic — 27 October 1995
El Salvador — 30 October 1995
Georgia — 27 November 1995
Namibia — 27 November 1995
Italy — 8 December 1995

Imminent Ratifications

Belarus
Benin
Brazil
Cameroon
Côte d'Ivoire
Czech Republic
Ethiopia
Hungary
India
Latvia
Papua New Guinea
Saudi Arabia
United Arab Emirates
United Kingdom

Progress in The Hague

Building the Organization for the Prohibition of Chemical Weapons

As 1995 draws to a close and the Preparatory Commission in The Hague completes its third year of existence, initial forecasts predicting that the Chemical Weapons Convention would have entered into force by now have not come to be realised. While the reasons for the slower than expected pace of ratifications are complex, it is in part a reflection of the reality that at the Preparatory Commission and in terms of national implementation procedures, preparatory work has been unexpectedly complex. However, with the number of ratifications now standing at 45, and there being promising signs that the deadlock in the United States has been resolved, it is becoming increasingly likely that the trigger point of 65 ratifications will be reached by mid 1996. The need to resolve the few remaining outstanding issues is therefore becoming increasingly urgent. These tasks include finalising the Inspection Manual, reaching agreement on technical aspects of declaration requirements and finding solutions to ongoing disputes relating to challenge inspections, old and abandoned chemical weapons and chemical weapons production facilities.

Actions by the Preparatory Commission

The Preparatory Commission held its Twelfth Session in The Hague from 11–14 December 1995. The Session was attended by 87 Member States. The Executive Secretary presented his report reviewing developments over the past year and the activities of the Commission since its last session in July. In the course of his report, the Executive Secretary noted that while there has been some areas of achievement, the progress of some Expert Groups in resolving outstanding issues has been less than satisfactory. He expressed the hope that the increased urgency created by the increasing number of ratifications will foster a willingness to compromise and thereby resolve these remaining difficult issues.

Many delegations, in the course of statements made to the Commission, stressed the need to renew efforts to find political compromises in order to complete the work of the Expert Groups and in particular, called on the United States and the Russian Federation to ratify the Convention at the earliest possible date.

In addition to discussing the need to resolve current outstanding matters, the Commission also agreed on the need to begin preliminary consultations for identifying and resolving issues related to the first Conference of States Parties. To that end, the Executive Secretary is to prepare a list of these issues so that the subject can be discussed by the Commission at its Thirteenth Session. (18–22 March 1995)

The Commission also dealt with the election of the Chairman and other Officers of the Commission — Ambassador Dato Sallehuddin Bin Abdullah of Malaysia, the nominee of the Asian Group, was elected Chairman of the Commission for the six-month period commencing on 8 February 1996. The representatives of Côte d'Ivoire, China, Croatia, Uruguay and the United States of America, representing the African, Asian, Eastern European, Latin American and the Caribbean and the West European and Others Group respectively were elected as Vice-Chairmen for the same period. Dr. Radoslav Deyanov was appointed as Chairman of Working Group B. The Commission renewed the appointment of Mr. Ian R. Kenyon as Executive Secretary for a further one-year period commencing 11

February 1996. The Executive Secretary was authorised to appoint Mr. Shaukat Umer of Pakistan, the nominee of the Asian Group, as the new Deputy Executive Secretary, a post that has remained vacant since March 1995.

Actions by Member States

Signature and Ratifications 45 Member States have now deposited their instruments of ratification with the Secretary-General of the United Nations, only 20 short of the trigger point of 65 at which the 180-day countdown to entry into force (EIF) will begin. Uzbekistan signed the Convention on 24 November, bringing the total number of signatory states to 160. In addition, many Member States are close to depositing their instruments of ratification or completing their national legislation. In Italy, legislation was approved by Parliament on 8 November, and the remaining formalities were completed to allow the instrument of ratification to be deposited on 8 December. In the United Kingdom, the enabling legislation is now in the House of Lords, having cleared the House of Commons after amendment on 6 December; ratification is expected in February 1996. The New Zealand Chemical Weapons (Prohibition) Bill has been introduced into Parliament and referred to the Foreign Affairs and Defence Select Committee for public submissions and comment. In India, legislation is pending before Parliament and it is hoped that it will be considered before the end of this Winter Session. Legislation is also before the Czech and Brazilian legislatures. Other states such as Cameroon, Côte d'Ivoire, Ethiopia, Hungary, Latvia and Papua New Guinea are also close to completion and may be in a position to deposit their instruments of ratification early in 1996. On this basis, it is possible that the trigger point of 65 deposited ratifications will be reached by mid-1996, with the Convention entering into force in late 1996 or early 1997.

International Courses and Seminars The United Kingdom put on an international training course for National Authorities during 6–17 November at the Royal Military College of Science, Shrivenham. The course focused on the inspection process and on issues of trade and export/im-

port controls, with an emphasis on the practicalities of both routine and challenge inspections, including a visit to a private chemical firm. The Republic of Argentina began preparations for a National Authorities Escort Training Course commencing on 4 March 1996. The course will have a maximum duration of 30 days and will focus on issues such as background information on the Convention, the system of verification and technical issues relating to handling toxic agents. The course will include practical exercises including routine and challenge inspections.

Actions by the Provisional Technical Secretariat

Troika Initiative A serious issue facing the Commission at this time is the position of the United States and the Russian Federation as regards ratification of the Convention. It was proposed during the Eleventh Session of the Preparatory Commission that the outgoing Chairman, Ambassador Finn K Fostervoll of Norway, the present Chairman, Ambassador Zachariah J de Beer of South Africa, and the Executive Secretary, Mr Ian Kenyon, visit Washington and Moscow in a diplomatic effort to promote ratification and early entry into force of the Convention. The objectives of the visits were to bring the issue of the Convention to the attention of senior government officials and parliamentarians; to identify political or other problems that present an obstacle to ratification, and to stimulate broader public awareness of the need to bring the Convention into force at the earliest possible date. What was known as the "Troika delegation" visited top officials in the United States during 18–21 September. Meetings were held with top level officials including the Secretary of State, Assistant to the President for National Security Affairs, the Deputy Secretary of Defence and the Chairman of the Joint Chiefs of Staff. Meetings were also held with Senators and senior staffers of the Senate Foreign Relations Committee, representatives of the US chemical industry and media. In Moscow, visits were undertaken during 10–13 October. Meetings were held with top level officials including National Security Adviser to the President, Chairman of the Presidential Committee on Convention Related Issues of Chemical and Biological Weapons, First Deputy Minister of Defence and Acting Chief of Staff of the Russian Armed Forces.

Throughout the meetings, the Troika delegation stressed the importance of the United States and the Russian Federation, as the two major declared possessors of chemical weapons, being among the first 65 states to ratify the Convention. The growing concerns of other delegations were expressed as well as the fact that all work being undertaken in The Hague is on the assumption that these will be among the first 65 ratifying states. In both Moscow and Washington, the delegation was briefed on the progress being made towards ratification and the difficulties involved in that process were explained and discussed. In both capitals, all Executive branch officials reiterated the support of their governments for ratification.

Basic Course for Personnel of National Authorities
The Technical Cooperation and Assistance Division held a
course for personnel of National Authorities during 11-29
September primarily aimed at National Authorities' person-

nel of those future States Parties with no chemical weapons and limited declaration requirements. The three-week course was attended by 49 participants from 38 Member States, 14 belonging to the African Group, 9 to the Latin American and Caribbean Group and 5 each to the remaining three Groups. A large number of teachers were from the Secretariat. Additional teachers were provided by the Netherlands, the UK, the USA and SIPRI.

Communications Workshop The Secretariat held a Trial Declaration Exercise on Communications during 12–18 October, the purpose of which was to explore possible transmission methods for the submission of declarations. Participating Member States tested several communication methods such as hard copy format and/or removable storage medium by regular postal service or diplomatic pouch, facsimile, electronic mail and Internet. The trial was very useful and highlighted the need to formulate procedures necessary for sending and receiving declarations which would include internal procedures and equipment that need to be set up in a National Authority to prepare for the submission of declaration data as well as procedures in the Secretariat for the receipt of such submissions. The Secretariat intends to conduct more trial exercises on declarations and related communications issues.

The Secretariat held a second Communications Workshop on 6–8 November the main focus of which was to exchange views on the Trial Declaration Exercise on Communication. The methods of communication used in the trial exercise were evaluated and the practical communication needs of the National Authorities and Technical Secretariat were stressed. The Secretariat intends to convene another communications workshop in the next intersessional period and to conduct another trial exercise on communications in the first half of 1996.

Regional Seminar in Addis Ababa The Fourth African Regional Seminar on the Chemical Weapons Convention and its National Implementation was held in Addis Ababa, Ethiopia during 27–29 November. The aim of the Seminar was to encourage participating states to exchange information and experiences relating to their respective national implementation processes and in that way promote early implementation and ratification of the Convention. The Seminar focused on practical aspects of implementation and to that end, much work was undertaken through workshops in order to promote discussion.

Other Outreach Activities The Executive Secretary addressed the First Committee of the UN General Assembly on 16 October in New York and stressed that the absence from the list of ratifications of the United States and the Russian Federation, who are looked upon as leaders by a number of other countries, would seriously affect the meaningful implementation and entry into force of the Convention. In The Hague, the Executive Secretary received visits from senior government officials of Member States. Secretariat officials paid a number of visits to signatory States to meet with relevant governmental authorities to discuss issues of national implementation.

Actions in Brussels

The Chairman of the Preparatory Commission, Ambassador Zacharias de Beer of South Africa, addressed the Committee of ACP (African Caribbean and Pacific) Ambassadors in Brussels on 19 October. In the course of his address, the Chairman urged all ACP countries to speed up their ratification of the Convention. The Chairman addressed the European Parliament Subcommittee on Security and Disarmament on 31 October, outlining information on the Convention and updating the Subcommittee on work being undertaken by the Preparatory Commission in The Hague. It was agreed in the course of that meeting to put forward a resolution in the European Parliament calling for speedy ratification. On 16 November such a resolution was passed by the European Parliament. It called upon those few remaining EU Member States (Belgium, Ireland, Italy, Luxembourg, Portugal and the United Kingdom) that had not then ratified the Convention to do so with all possible speed. It requested the European Council to ask the United States and the Russian Federation to ratify as a matter of urgency. It requested the European Commission to prepare a report on the legal aspects of the implementation of the Convention in Member States to allow coördination of their chemical export controls and other regulations in this area in line with their individual commitments under the terms of the Convention.

A Workshop on National Implementing Legislation was held at ACP House in Brussels on 25 October, organised by the Secretariat in coöperation with the Harvard Sussex Program. The Workshop was oriented towards Member States with no chemical weapons and a small/medium chemical industry. Delegations from 27 Member States and 2 nonsignatory states participated. The aim of the Workshop was to facilitate discussions relating to practical issues arising in the drafting and enactment of national implementing legislation. Topics discussed included the importance of the General Purpose Criterion, the different legislative options available in implementing the Convention at a national level, the requirements of the Convention in respect of both prohibited and controlled activities, the structure and power of the National Authority and penal legislation. The workshop was a useful exercise both in terms of the practical discussions undertaken and as part of the larger efforts being undertaken to assist those Member States based in Brussels and not in The Hague.

The Secretariat organised two briefings in Brussels on the inter-sessional activity of the Preparatory Commission. The first took place on 4 December at ACP House and the second was held on 8 December, hosted by Slovenia. The purpose was to update those delegations based in Brussels on the intersessional activities in preparation for the Twelfth Session of the Preparatory Commission.

Actions by Subsidiary Bodies of the Commission

Committee on Relations with the Host Country

This met on 1, 14 and 29 September, 30 October and 9 November 1995. The Committee also met on 21 November 1995 to discuss outstanding issues concerning the OPCW Building and on 12,13 and 14 December in the course of the

Twelfth Session of the Commission. Unfortunately, it has not proved possible to conclude work on the legal arrangements essential for the realisation of the OPCW building. Two issues remain to be resolved. The first relates to the mechanism for readjustment of the rent and the second relates to who should bear the costs resulting from the delay in starting construction. The Committee requested the Executive Secretary to consult urgently with concerned delegations and the developer with a view to achieving an agreement. The Committee is to meet again on the 19 January 1996.

Progress has been made in other matters. Nine tenders were received for the provision of consultancy services (site monitoring, supervision etc.) during the construction phase of the building. Three of these have been shortlisted and will be presented to the Committee on Contracts for a final decision. The Committee received regular briefings of the work of the Building Steering Group which is primarily responsible for monitoring and controlling the technical aspects of the project from the initiation of design work through to the completion of construction. The Committee was advised that good progress had been made with regard to the detailed development of the design and that detailed specifications and specification drawings were substantially complete.

As regards the OPCW Laboratory and Equipment Store at Rijswijk, Kottermann Laboratoriumtechniek BV has been selected to oversee work relating to ventilation and filtration systems, replacement of gaslines, installation of fume cupboards and the provision of the necessary laboratory furniture. The evaluation of tenders for mechanical, electrical, construction, sanitary and security work on the building is currently being undertaken.

The Host Country has provided, at no cost to the Commission, an expert to assist in determining the needs for interim accommodation — a matter that is to be afforded high priority during the next intersessional period. The Conference Facilities Steering Group reported to the Committee concerning the preparations for the First Session of the Conference of States Parties. The Committee received the reports of the External Relations Division on issues being pursued with the authorities of the Host Country concerning the implementation of the Headquarters Agreement between the Commission and the Kingdom of the Netherlands, including matters relating to taxation and visas. The Committee indicated that it wished to receive similar reports at its future meetings.

Working Group A In accordance with the new pattern of work by subsidiary bodies of the Commission, consultations were conducted by the Chairman of Working Group A on 13 October and 10 November in the course of which the Working Group was updated on the work which its Expert Groups had been doing. In addition, the recruitment process of the Secretariat was discussed and different views were expressed regarding the transparency of the process. There was a detailed discussion relating to a Working Paper presented by India entitled "Proposal for Establishment of a Recruitment Advisory Committee by the Preparatory Commission for the OPCW", since published as a plenary paper.

Another issue considered by the Working Group was the need to begin consultations relating to the substantive tasks requiring completion in the 6 months prior to, and 6 months after, entry into force of the Convention. These tasks include preparing the structure and contents of the Final Report of the Commission, the draft agenda and draft rules of procedure of the Conference and deciding on the necessary sequence of decisions and other actions by the Conference at its First Session so as to ensure timely commencement of the verification activities of the Organisation. The Group requested the Executive Secretary to prepare a draft list of tasks to be accomplished during the above mentioned period and to indicate possible problem areas.

At the consultations of the 10 November, the Executive Secretary provided the Group with the latest update on inspector candidate interviews. The Executive Secretary reported that as of 2 November, 246 interviews had been completed, with a further 58 candidates to be interviewed from Africa and the Indian sub-continent in New Delhi, and 34 to be interviewed in The Hague in late November. Of the candidates already interviewed, 63.7 per cent were found to be suitable; 14.1 per cent were found to be borderline and 21.5 per cent were assessed as not suitable. The results of the interviews so far are giving rise to concerns that there will be a shortage of suitably qualified candidates for the positions of industry inspectors, chemical production logisticians, and industrial chemists. However, for the non-industry specialities there are sufficient well qualified candidates for selection. The Executive Secretary also noted that candidates had expressed some concerns in the course of the interviews, including uncertainty about the timing of recruitment, probable terms and conditions of employment, and levels of emoluments being offered.

Expert Group on the OPCW Headquarters Agreement This Group held open-ended consultations on 5 October and formal meetings on 10 and 28 November to discuss the draft agreement. The Group invited representatives of the Host Country and the Secretariat to continue consultations on the Draft in cooperation with interested delegations and report back to the Group at its next meeting.

Consultations on Visa Matters These were held on 2 October to discuss unresolved issues and possible solutions relating to visa and travel documents for OPCW inspectors. It was agreed that a number of practical issues need to be addressed by Member States and the Secretariat to ensure implementation of the obligations in the Convention to provide appropriate visas to inspectors and inspection assistants by States Parties. It was recognized that it will be necessary to prioritize the handling of visas so that all applications are not filed together and with that in mind, priority ought to be given to visas for inspector trainees. It was agreed that more time was needed to discuss these issues fully. To that end, the Secretariat was requested to approach Member States that have not yet provided answers to the questionnaire with a view to collecting more factual information about visa practices. On 22 November, consultations relating to visas for training inspectors were held with representatives from some Member States who would be providing training for future inspectors.

Finance Group This met during 30 October–3 November. It considered the Draft OPCW Financial Regulations and made detailed comments and recommendations to the Expert Group on Administrative, Financial and Personnel Matters for its consideration and approval. The Group also reviewed the first draft of the proposed OPCW Financial Rules and recommended a number of changes. The Group recommended that the draft OPCW Financial Regulations include additional regulations on procurement, on reimbursable expenses with regard to inspection of facilities and on the establishment of a Special Fund for Challenge Inspections. It requested the Secretariat to prepare such detailed rules for consideration at its next meeting.

The Group considered the Secretariat paper "Methodology and Assumptions for the First OPCW Budget". This paper includes a recommendation that the objectives of the OPCW as a whole and for each main programme be defined with a mission statement giving the broad purpose, specific objectives, and desired results. The activities necessary to achieve each of these objectives should then be identified and in turn broken down into tasks, identifying the number and level of posts required to achieve the stated objectives. The paper goes on to set out the format of the Budget, which is to be divided into two separate chapters, one relating to verification costs and one relating to administrative and other costs. The paper then sets out the basic assumptions underlying the Budget. Among these are the assumptions that EIF will occur in late 1996 or early 1997; that there will be 80 States Parties at entry into force and at least 95 by the end of the first year of the OPCW; that the United States and the Russian Federation will be among the first 65 countries to ratify; that the bilateral agreement of June 1990 between the Russian Federation and the United States on destruction and non-production of chemical weapons will be in force at the time of EIF; that a Special Fund for Challenge Inspections will be in place (to cover the costs of Challenge Inspections); that 400 facility agreements will be concluded in the first year of the OPCW and various assumptions relating to how often and for how long the Conference of States Parties, Executive Council, Scientific Advisory Board and Confidentiality Commission will meet during the first year after EIF.

The Finance Group also briefly considered the transitional arrangements that need to be addressed and recommended that a detailed list of the problems, questions and issues together with proposals on how to address them be prepared. The Group considered a Note by the Executive Secretary entitled "Issues Facing the Secretariat Regarding the 1995 and 1996 Budgets" and recommended the establishment of a Holding Account, to which would be credited the 1995 excess of income over expenditure and any other unspent balances for carrying forward to 1996. In addition, the Group discussed various issues arising from the 1995 Budget, including the status of the Special Account for Laboratory Equipment, the status of the budgetary appropriation for laboratory and inspection equipment, costs relating to the OPCW Laboratory and Equipment Store and the projected 1995 budget surplus. The Group undertook a detailed discussion of the financial, budgetary and administrative implications of fixing the OPCW salary scales and benefits in Dutch Guilders at entry into force and of adjusting these amounts, where appropriate, to include the cost of living in the Netherlands on an annual basis. The Group invited the Expert Group on Administrative, Financial and Personnel Matters to take a note of the Group's comments, set out in their Report. In respect of transfer of funds, the Group recommended that Reports of the Executive Secretary on transfers should include a concise justification incorporating, as a minimum, the reason for the requested transfer and the status of the appropriation for the recipient programme and/or object of expenditure.

Expert Group on Administrative, Financial and Personnel Matters This Group met formally on 9 October and 9 November. In addition to formal meetings, con-

ber and 9 November. In addition to formal meetings, consultations were held five times; 28–31 August, 25–28 September, 10–12 October, 31 October and 6–8 November. The Group did not issue a report on its work during this intersessional period. The Group continued to work on the Draft Financial Regulations which are now in their fourth revision and are almost complete, with only a few outstanding issues requiring resolution prior to final agreement. These issues include agreement on the establishing and mandate of a subcommittee of the Executive Council to deal with administrative and budgetary matters and the question of acceptance of gifts by the Director General, in particular whether the prior approval of the Conference of States Parties is required. The Basic OPCW Staff Policy was also discussed in the course of the consultations, with attention being focused on the tenure of staff contracts in the OPCW. Attention was also given to options for achieving greater cost efficiency. The Group continued to work on the OPCW Staff Regulations. Work on the Draft Letter of Appointment for Inspector Trainees is also almost complete. One issue which remains outstanding is the need to develop a mechanism to discourage trainees from either not completing training once it has commenced, or refusing an offer of appointment by the OPCW in the event that they have satisfactorily completed the training course. The Group discussed the Vacancy Notice in respect of the appointment of a Director for the Inspectorate in the context of the wider issue of Phase II appointments and the significance or otherwise of the status of ratification of the appointee's country. Discussions continued on the top structure of the OPCW with another option being proposed by the Chairman. Several options are now being considered with the aim of combining the functional and political requirements of the top structure.

Expert Group on Data Systems This Group met on 17 November to consider the Report of the Task Force on Data Systems and to discuss the budgetary requirements of Information Systems Branch of the Secretariat. The Task Force in its report reviewed the IMS Security Study undertaken during the intersessional period; it agreed that the study represents a reliable basis for the establishment of the security environment and definition of the security measures for the different parts of the IMS and should serve as a guide for the Secretariat in the process of its development. The Expert Group asked that the Secretariat distribute the Task Force Report to Member States so that comments can be received. The Expert Group also asked that the Secretariat

prepare a detailed cost analysis of implementing the recommended security measures specified in the Security Study and provide it to delegations in advance of the next Task Force meeting. In relation to budgetary matters, the Secretariat gave a presentation indicating its view that the funds assigned to the IS Branch in the 1995 and 1996 Budgets will be insufficient for the establishment of an Information Management System, which, in the Secretariat's view, is necessary for the implementation of the Convention.

Expert Group on Programme of Work and Budget

This Group met on 21–22 November and produced its Twelfth Report. The Group considered the proposal by the Executive Secretary to carry forward into 1996 unspent 1995 funds for activities of the 1995 Programme of Work and Budget which were approved and funded for 1995 but will not be completed by the end of 1995, as well as for the funding of certain additional activities which are currently not included in the 1996 Budget. After intensive consultations, the Expert Group recommended that the Commission, through Working Group A, authorize the Executive Secretary to establish the following three special accounts: the first will comprise unobligated funds in the current Special Account for the Procurement of Inspection and Laboratory Equipment and in the allocation in Part I of the 1995 Budget except for the running costs of Dfl. 693,108; the second will comprise both the unspent obligated balance for the fit-up costs of the OPCW Laboratory and Equipment Store and the unobligated balance appropriated for the OPCW Laboratory and Equipment Store in Part I of the 1995 Budget; the third will comprise the unobligated balance of Part I of the 1995 IS Branch budget and some IMSrelated funds from Part I of the 1995 budget of the External Relations Division. These special accounts will be available until 31 December 1996, after which any funds remaining unspent will be surrendered to Member States in accordance with the Financial Regulations and Rules. The Executive Secretary is to report periodically to the Commission on the status of each of these three accounts.

The Group discussed the Executive Secretary's Note on the "Methodology and Assumptions of the OPCW Budget", noted a revised version of this Note circulated as a Chairman's Non-Paper, and decided to reach a conclusion on the matter during the next intersessional period. The Group also discussed the issue of a new P-3 position in the Legal Division and recommended that the Commission, through Working Group A, authorize the Executive Secretary to establish a new P-3 position in the Legal Division during 1996 subject to any savings within the 1996 Budget and in accordance with the Financial Regulations and Rules of the Commission. The Group further recommended that the Secretariat prepare a detailed list of the budgetary and financial problems, questions and issues related to the transition from the Preparatory Commission to the OPCW, together with proposals on how to address them.

Working Group B Following the appointment of Mr S Gizowski of Poland as Special Assistant to the Executive Secretary, with effect from 1 October, Dr R Deyanov of Bulgaria served as Acting Chairman of the Group, pending a formal decision by the Twelfth Session. Consultations

were conducted on 15 September, 27, 30 and 31 October, and on 3 and 13 November. The Working Group was updated on the work performed by the Expert Groups and received an overview by the Executive Secretary on the main activities of the Secretariat in areas under the purview of Working Group B. The consultations also addressed the issues of vacancies of Chairpersons for the Expert Groups on Chemical Industry Issues, Chemical Weapons Issues and Confidentiality; improvements in the Commission's method of work; and time requirements and priorities for the next intersessional period.

Expert Group on Technical Cooperation and

Assistance The Group met on 19 October following open-ended consultations on 18-19 October. At the consultations prior to the Expert Group meeting, a paper entitled "Guidelines for the Development of Procedures for the Annual Provision of Information on National Programmes for Protective Purposes under Article X, Paragraph 4" was discussed. The Group agreed to continue its deliberations on outstanding issues relating to Articles X and XI in the course of the next intersessional period. At the Expert Group meeting, the Group agreed that the Basic Course for Personnel of National Authorities had been useful and there was no need to revise the present curriculum. It was proposed that in addition to such courses, one-day seminars and five-day courses could be given by Member States but that these should remain supplementary to the existing three-week curriculum. The Group had a thorough exchange of views about the Internet Website and in particular whether it should be for the sole access of National Authorities or for others as well and issues relating to the Confidentiality Policy and the Media and Public Affairs Policy. It was agreed that the experimental Website should be maintained but that implementation guidelines should be developed by the Secretariat and in the meantime no new information should be added except in accordance with existing policies. The Group also recommended that the Secretariat make more documents accessible to delegations via electronic mail under Lotus Notes.

Expert Group on Challenge Inspections This met on 16–17 October. It agreed, after some modifications, to the list of illustrative examples of the type of information which might be included under "All appropriate information on the basis of which the concern (of possible non-compliance) has arisen". Article IX.9 requires the requesting State Party "to provide in the inspection request all appropriate information on the basis of which a concern has arisen regarding possible non-compliance with this Convention" and the list prepared by the Group, which is neither comprehensive nor prescriptive, provides illustrative examples of the type of information which the requesting State Party could provide. The Group recommended that the list as agreed be adopted by the Commission at the next Session.

The Group also completed its work on the "Format of an Inspection Mandate for the Conduct of a Challenge Inspection" and recommended that this be forwarded to the Commission for approval at the next Session. The Group continued discussions relating to the question of possible abuse of the right to request a challenge inspection and cost

aspects in case of abuse. The Group asked that a background discussion paper be prepared and agreed to discuss the issue further during the next intersessional period.

Expert Group on Safety Procedures This Group met on 1 November. It again considered, but was unable to approve, the draft OPCW Health and Safety Regulations and decided to convene further informal consultations to address outstanding issues. The Group received the third report of the Task Force on Medical Treatment and, on the basis of its report and recommendations, the Group approved two documents: "Principles of the Medical Treatment of Chemical Poisoning" (this document will be used as guidance in preparing detailed guidelines on the treatment of chemical poisoning for the use of medical personnel in the support of OPCW inspections) and "Medical Fitness Standards for Employees of the OPCW" (this document will be used as guidance for the development of medical standards for the OPCW). In respect of the second document, the Group drew the attention of the Expert Group on Administrative, Financial and Personnel Matters to the legal implications of the provision in the document for termination of employment for medical reasons. The Group also drew the attention of the Legal Adviser of the Commission to the legal consequences of the possible division of responsibilities of medical treatment between the OPCW and the inspected State Party. Finally, the Group recommended that the Secretariat, using contributions from Member States, complete the document "Principles of diagnosis of chemical exposure" to serve as guidance in considering diagnostic methods.

Expert Group on Inspection Procedures This Group met on 2 November. On the basis of work undertaken by the Task Force on Inspection Equipment issues, the Group agreed to technical specifications for two further items on the list of inspection equipment: sample transport kits for small and large samples. In addition, the Group approved the contents of the GC/MS Sample Preparation Kit and requested the Task Force on Inspection Equipment to clarify specifications relating to the equipment item "X-ray equipment" and the item "alleged use sample collection kit". The Group agreed to return to the issue of the operational requirements and technical specification of the inspection equipment item "team decontamination kit" at its next meeting. The Group drew attention of the Expert Group on Programme of Work and Budget to the Secretariat's inability to purchase for evaluation and training purposes all items on the approved list of equipment due to a lack of agreement on some operational requirements and technical specifications. The Expert Group on Programme of Work and Budget subsequently recommended that the unspent funds for the procurement of equipment from the 1995 budget be placed in a special account and be made available until December 1996.

The Group also received and discussed the report of the Specialist Task Force on Analytical Issues on the basis of which it encouraged the participants in the Third OPCW/PTS Inter-Laboratory Comparison Test: Trial Proficiency Test to provide the Secretariat with their comments. The Group also discussed the "Standard Operating

Procedure for Sample Preparation for OPCW/PTS Proficiency Tests" and "Performance Rating Criteria for OPCW/PTS Proficiency Testing". The Group went on to discuss costs of the tests on the basis of a background paper provided by the Secretariat and was informed that the Secretariat is unable to conduct any more tests during 1995 on a cost-free basis. The Group agreed that the tests were important to ensure an adequate basis for the certification and designation of laboratories in accordance with the Convention and the Secretariat was therefore requested to prepare a discussion paper containing proposals of how the tests could continue within existing budgetary limits.

The Group also discussed the report of the Specialist Task Force on Analytical Databases and approved the document "Results of the Evaluation of the MS and IR Spectra" and (following revisions) "Procedure for the Provisional Certification of the Central OPCW Analytical Database". The Group agreed that the transfer of data in an electronic format from the central OPCW Analytical Database to States Parties will be only in the agreed data formats and on suitable media.

In the context of alleged use issues, the Group continued their discussions relating to the status of "qualified experts". The Director-General has the power (Paragraph 7 of Part XI of the Verification Annex) to select "qualified experts whose particular field of expertise could be required in an investigation of alleged use of chemical weapons" where the Director-General is of the view that the required expertise for the proper conduct of a particular investigation is not available among inspectors already designated. The Group reached an understanding as to the status of these qualified experts, that is, that they become members of the inspection team for all intents and purposes and they will be subject to the obligations of inspectors. The Group also approved the document "Sampling and Analysis During Investigations of Alleged Use of Chemical Weapons" and recommended that this document together with their understanding on the status of qualified experts be forwarded to the Commission for adoption.

Expert Group on Training The Group met during 30 November-1 December to continue discussions on issues related to the implementation of the General Training Scheme. The Group reviewed the status of training offers and noted that for Module 2, some tentative offers as regards Block G (Non-Specialist Health and Safety) and Block J (Specialist Health and Safety) need to be finalized and certified. Because another Member State has regrettably had to withdraw its offer of Module 2 Block D (Chemical Production Technology) and Block E (Chemical Production Logistics) for Training Group B, the Secretariat is actively pursuing alternatives. In Module 3, a formal offer is still needed for on-site trial inspection training at CW storage, production and destruction facilities. More generally, the Group discussed the issue of training costs and cost-effectiveness analysis of the General Training Scheme. The Group acknowledged that while training costs can now be estimated more accurately, the continuing shortages in Modules 2 and 3 stand in the way of costing the course from a reimbursement point of view. The Expert Group recommended that the Secretariat redouble its efforts

to identify and cost alternatives to training offers from Member States, and to develop contingency plans in the event that one or more of the required training courses remains uncertified or is no longer available when it is time to begin inspector/inspection assistant training.

The Workshop relating to Harmonization of Module 1 Training Courses was held by the Secretariat from 18-22 September. Participants reached common understandings on important issues relating to the screening and harmonization of teaching materials, the balance between lectures and practical exercises, the procedures for interim and final examinations and a proposal to provide trainees with an advanced training information package. The planned Module 2 Workshop was postponed as there were no M2 courses that were being offered by more than one Member State.

The Secretariat hosted a Trainee Evaluation Workshop during 20–22 September in the course of which procedures to be followed in conducting performance evaluations of trainees during Module 1 and 2 courses were discussed. Participants also refined the draft trainee performance evaluation document which the Expert Group subsequently reviewed at their meeting. The Group recommended that the Secretariat continue to refine the document at a second Trainee Performance Evaluation Workshop scheduled during the next intersessional period drawing on advice and recommendations of interested Member States.

Expert Group on Old and Abandoned Chemical

Weapons The Group did not hold a formal meeting during this intersessional period but consultations were held during which Sections E1 and E2 (relating to Old and Abandoned Chemical Weapons) of the Declaration Handbook were discussed. However, there was no general consensus and the Secretariat was requested to produce a revised version of these sections.

Expert Group on Chemical Industry Issues The Chair of the Group undertook Consultations during 5–7 September. There was some discussion on outstanding declaration issues and a continuing debate on the draft model facility agreement for Schedule 2 plant sites. In the course of the consultations a background paper prepared by the Secretariat on the issue of Low Concentrations of Schedule 2 and 3 Chemicals was distributed for discussion. The Group also met for consultations on 21 September to discuss a revised draft model facility agreement for Schedule 2 plant sites but did not complete this work, and thus did not issue a report.

Expert Group on Chemical Weapons Issues Consultations were held on 12–14 September and 30 October. The Group met formally on 3 November but did not issue a report. The main focus of discussion was on the issues relating to chemical weapons production facilities and costs of verification. Important differences remain on the verification requirements in relation to the destruction or conversion of former chemical weapons production facilities, the draft model facility agreement for chemical weapons destruction facilities, and the costs of verification.

This review was written by Treasa Dunworth, the HSP researcher in The Hague.

News Chronology

August through November 1995

What follows is taken from the CBW Events data-base of the Sussex Harvard Information Bank, which provides a fuller chronology and more detailed identification of sources. See Progress in The Hague (above) for coverage of OPCW-related developments. The intervals covered in successive Bulletins have a one-month overlap in order to accommodate late-received information. For access to the data-base, apply to its compiler, Julian Perry Robinson.

- **1 August** In Croatia, government forces shelling Croatian Serb defence lines on Mount Dinara use projectiles with poison gas charges, according to the information service of the Serb Krajina army general staff. {Radio Krajina 2 Aug in BBC-SWB 4 Aug}
- 1 August In Russia, the government's Commission for Operative Issues, which is chaired by First Vice Prime Minister Oleg Soskovets, considers the country's readiness to implement the Chemical Weapons Convention. It receives a report from the Chief of the General Staff of the Russian Armed Forces, General Mikhail Kolesnikov. Reportedly, the general casts doubt on the country's ability to destroy its stockpile of chemical weapons, and speaks of its increasing vulnerability to theft. He says that only 30 percent of the 1994 chemdemil budget had been funded, while of the R153 billion (\$33 million) requested for 1995 only R13.1 billion had thus far been provided, and in 1996 R509.6 billion will be sought. He is quoted, too, as saying that the cost of destroying the entire stockpile will be less than \$3.5 billion [see also 6 Jul], a figure which he contrasts with the \$12 billion that has been quoted [see 13 Jul] for the US chemdemil programme. The Commission has reportedly instructed the Finance Ministry to earmark special funds for eliminating the stockpile. {ITAR-TASS 1 Aug in BBC-SWB 3 Aug}
- **1 August** In the United States, sarin nerve-gas leaking from M55 rockets stored at Anniston Army Depot, Alabama, causes one worker to be kept in hospital for observation and forces the evacuation of 60 others. {Reuter 2 Aug}
- 1 August In the US Senate, Majority Leader Robert Dole sets aside the Foreign Relations Revitalization Bill, despite its approval by the Foreign Relations Committee in May [see 17 May], as having insufficient support to survive a Democrat-led filibuster. Reportedly, this action later causes the committee chairman, Senator Jesse Helms, to freeze all treaty-ratification and nomination business currently before the Committee, including the Chemical Weapons Convention, in order to pressure Democrats to drop their threat of filibuster. Talks between the White House and Congress on a compromise are later said to be under way. Of the currently blocked treaties, Senate consideration of START II is expected to take precedence over the CWC when the deadlock is finally broken. {New York Times 20 Aug, Inside the Pentagon 24 Aug and 7 Sep}
- **1 August** In Washington, the Operation Desert Shield/Desert Storm Association begins a six-day meeting of veterans, some representing state or local groups, to develop a coördinated strategy for securing better treatment for veterans afflicted by the putative Gulf War Syndrome. {Gannett News Service 2 Aug, London *Guardian* and *Hartford Courant* 3 Aug}

The Defense Department this same day releases a report setting out further findings from its Comprehensive Clinical Evaluation Program [see 9 Mar], in which 10,020 veterans and family members complaining of one or more of a variety of symptoms have now been examined. The Assistant Secretary of Defense for Health Affairs, Dr Stephen Joseph, tells reporters that the on-going study "continues to show no clinical evidence for new or unique illnesses or syndromes among Persian Gulf veterans" — even though veterans have been found suffering from real ailments. {AP in New York Times 2 Aug}

2 August At Harbin in China, a three-day symposium on Unit 731 — the principal biological-warfare element of the Japanese Imperial Army [see 10 Feb] — comes to an end. It has been jointly sponsored by a the History Research Institute of the Heilongjiang Academy of Social Sciences and a Japanese international symposium committee. There have been some 80 Chinese and 100 Japanese participants, the former including victims of BW experiments, the latter including high-school and university educators and researchers. Participation from other countries had been disallowed by Beijing authorities. *(Mainichi Daily News* 26 Jul, Kyodo 2 Aug, UPI 8 Aug, Xinhua 11 Aug in BBC-SWB 14 Aug)

Institute deputy director Xin Peilin identifies other Japanese BW units of the World War II period as: Unit 1855 in Beijing (North China Expeditionary Force), Unit 1644 in Nanjing (East China Expeditionary Force) and Unit 8604 in Guangzhou (South China Expeditionary Force). Xin Peilin also refers to Unit 9420, a BW element of the Japanese Southern Army which had taken over a mental hospital in Singapore, and says that all these units, with their associated sub-units and experimental laboratories, formed a strategic bacteriological warfare network across China and southeast Asia. It is said that more than 10,000 Chinese, Dutch, Korean, Mongolian and US prisoners were killed by Unit 731. {Xinhua 10 Aug in BBC-SWB 14 Aug}

One of the Japanese papers presented, by Yoshiaki Yoshimi of Chuo University, is reported to cite documentary evidence on biological warfare conducted in China in 1940 with cholera and plague bacteria by Unit 731 showing, for the first time, that it was a campaign staged under the formal chain of command of the Imperial Army, directed by the General Staff Office, and specifically approved by the Emperor. The paper refers to BW operations planned for the period 1942–44, but not executed, in the Philippines, Australia, Hawaii, Burma, Guam and elsewhere. {Kyodo 28 Jul, Xinhua 10 Aug in BBC-SWB 14 Aug}

A researcher from the Chinese Academy of Military Sciences, Guo Chengzhou, has recently concluded that, in all, Japan used BW weapons in 20 provinces and autonomous regions of China during the 1937–45 war, killing hundreds of

thousands of Chinese civilians, so the official Chinese news agency Xinhua reports. {Xinhua 2 Aug in Kyodo 3 Aug}

Chinese news media are publishing reports from these and other studies of Japanese BW {e.g. China Radio International 8 Aug in BBC-SWB 12 Aug, Xinhua 15 Aug in BBC-SWB 16 Aug}, and a Sino-Japanese group of scholars is conducting joint research {Kyodo 14 Aug in FBIS-EAS 15 Aug}. In addition to the Unit 731 museum in Harbin, Chinese authorities are currently building an exhibition room in Changchun on the site of Unit 100, another secret Japanese BW institute {Xinhua 10 Aug in BBC-SWB 12 Aug}.

With the approach of the 50th anniversary of the end of World War II, the public record of Japanese human experimentation for BW and other purposes has been increasing, and continues to do so, as additional [see 10 Feb] former members of the Japanese biological-weapons programme, and victims of it, publish reminiscences or talk to journalists. {Washington Times 21 May, San Francisco Examiner 9 Jul, US News & World Report 31 Jul, Kyodo 6 Aug, Kyodo 12 Aug} [See also 19 May]

- **2 August** In Moscow the commander of the Russian Radiation, Chemical and Biological Protection (RKhB) Protection Troops, Col Gen Stanislav Petrov, speaks in interview of the need for additional state expenditure on security at CW weapon sites. He cites the recent publication by an environmentalist group of a map showing the storage locations as an encouragement to the "country's criminals". {TASS 2 Aug in BBC-SWB 4 Aug} [See also 30 Jul]
- **2 August** The US Senate votes down an amendment to the FY 1996 Defense Authorization bill that would have eliminated an expansion of the nationwide anti-ballistic-missile system. Expansion has already been supported by the House of Representatives despite the arguments of Administration officials that it would violate the 1972 ABM Treaty, thus jeopardizing the START agreements. Supporters of the expansion have cited an increasing missile threat to the continental United States from countries with access to weapons of mass destruction. {International Herald Tribune 4 Aug}
- **3 August** President Clinton, in a formal report to Congress, states that Iraq remains a threat to regional peace and security, for which reason his administration will "continue to insist that the sanctions be maintained until Iraq complies with all relevant provisions of UN Security Council resolutions". {AFP 4 Aug}

The US Representative to the United Nations, Ambassador Madeleine Albright, in testimony to the Senate Foreign Relations Sub-Committee on Near Eastern and South Asian Affairs, characterizes the compliance of Iraq with UN resolutions as "grudging, slow, sporadic and insufficient". On biological weapons, she says: "We believe that the Iragis began their biological warfare program much earlier than they have admitted, and that more biological agents were manufactured and many more facilities and people involved than Iraq has revealed". She states that "the Iraqis have admitted to producing more than 500,000 litres [but see 5 Jul, and see also 17 Jul] of anthrax and botulinum toxin at the Al Hakam facility". She says that, if the oil embargo were to be lifted, "Iraq could then rebuild its weapons of mass destruction programs, a process that would take: less than a year for Irag's biological weapons program; two to three years for its chemical weapons program; and five to seven years, with foreign help, for a first nuclear device".

On chemical weapons, she adds: "The Habbanayah II facility produced CW agent precursor chemicals before Desert Storm. The Iraqis have rebuilt the main production building and the chlorine plant and have added a phenol production line as well as a ferric chloride line. These production lines contain dual-use equipment that, in the absence of UNSCOM, could easily be converted to CW agent or precursor chemical production." She displays an aerial photograph of the facility [see also 21 Mar]. {Prepared statement on FDCH Congressional Testimony, *New York Times* 4 Aug}

3 August The US Defense Department announces that, in order to assist inquiries into Gulf War syndrome, it is setting up *Gulf Link*, a World Wide Web site on the Internet through which anyone can access a data-base of declassified Gulf War documents, mostly intelligence-related information. The URL is http://www.dtic.dla.mil.gulflink. {Reuter 3 Aug}

One of the newly available documents is a mid-December 1990 report to the Defense Secretary from a special Interagency Intelligence Community working group on Iragi CBW capabilities [see also 28 Dec 90, UK and US]. This report stated that Iraq had actually weaponized anthrax, botulinum toxin and Clostridium perfringens (the causative agent of gas gangrene) and that these agents were being produced in four facilities, two of them at Abu Ghraib where a state-of-the-art backup plant, disguised as an infant formula factory [see 23 Mar 91], was also ready to begin production, and others at Salman Pak and Taii. Research on viral agents was in progress at the Tuwaitha nuclear research centre. Biological weapons were stored at 17 locations across the country, in 35 refrigerated bunkers. The report said that "Iraq would consider using BW as a weapon to save the regime from falling". A later report speaks of the discovery in January 1991 of a fifth biological-weapons production facility, at Latafiyah.

In a background paper produced shortly after the war for the Joint Chiefs of Staff, the working group reported that 11 of the 13 buildings at the five production sites had been completely destroyed by bombing, with severe damage to the other two. All but two of the storage bunkers were gone. Iraq would need upto eight years and \$200 million to restore its BW programme to where it had been. {Gannett News Service 3 Sep}

- 4 August In Moscow, the head of the Russian RKhB Troops, Col Gen Stanislav Petrov, states that there is no possibility of a leakage of CW agent from chemical weapons stored in Russian military bases. He is commenting on the recent report of such a leakage at Anniston Army Depot in the United States [see 1 Aug]. TASS reports him as saying that "firstly, all Russian toxic substances are kept in steel tanks, which have a longer operational life than the aluminium ones used in America, and, secondly, that there is strict monitoring of all toxic substances at Russian facilities and bases". {TASS 4 Aug in BBC-SWB 8 Aug}
- **4 August** The US Senate votes down an amendment to the FY 1996 Defense Authorization bill that would have eliminated funding for preparations for low-yield nuclear tests. {International Herald Tribune 5–6 Aug} Arguments recently heard in America in favour of testing include the need to design such new nuclear weapons as the so-called "counterproliferation weapons" for destroying underground factories or storage depots for weapons of mass destruction. {Jessica Mathews in International Herald Tribune 14 Jun}

But President Clinton, a week later, announces a new US position for the Geneva talks on a Comprehensive Test Ban: "The United States will now insist on a test ban that prohibits any nuclear weapons test explosion or any other nuclear explosion. I am convinced this decision will speed the negotiations so that we can achieve our goal of signing a comprehensive nuclear test ban next year." {London *Financial Times* 12–13 Aug}

4 August In the United States, a federal grand jury returns indictments against two Minnesotans on charges of violating the Biological Weapons Anti-Terrorism Act of 1989, which is the legislation that implements the Biological Weapons Convention into US domestic law. The people indicted are associates, in the tax protest group called the "Patriot's Council", of the two men who were convicted under the Act five months previously for producing ricin from castor beans for other than peaceful purposes [see 18 May]. {Star Tribune 5 Aug}

4-6 August In Baghdad, UNSCOM Executive Chairman Rolf Ekéus, accompanied by a team of six including three biological experts (AFP 4 Aug), meets with Deputy Prime Minister Tareq Aziz and Oil Minister Amir Mohammed Rasheed for a further round of talks [see 30 Jun]. Early in the visit, he is given what Iraq describes as the promised full, final and complete disclosure of its past BW weapons programme [see 5 and 17 Jul]. On the following day, Tareq Aziz reaffirms [see 17 Jul] his government's deadline of the end of August for UNSCOM to complete its work. At the close of the visit, Ambassador Ekéus speaks to reporters about the new BW disclosure, which is some 530 pages long, saying: "According to our first glance, it is of course not thoroughly complete". However, he goes on to say that his experts have found that it "contains very important information which will be helpful to sort out remaining problems under the cease-fire resolutions". He also says that, during the talks, the two sides had concentrated on "conceptual clarification", which Iraq still needed to supply. {Reuter 6 and 8 Aug, Reuter in International Herald Tribune 7 Aug)

6 August In Iran, the managing director of Keshavarz Chemical Plant at Alborz industrial city in Qazvin [see 21 Feb 92 and 13–17 Nov 93], Mohammad Nabi Parvin, denies reports that his plant has been producing chemical weapons. He says that it makes only pesticides for farmlands and homes, and that it imports 40 percent of its feedstock from Europe, Japan, India and China. The plant had been damaged by a fire on 14 July. {Xinhua 7 Aug}

8 August In Iraq, the second UNSCOM biological monitoring team, BG-2, commences activities from its base in the Baghdad Monitoring and Verification Centre. The first such team [see 4 Apr], BG-1, had completed its mission the day previously. {S/1995/864}

8 August From Iraq, Lt-Gen Hussein Kamel Hassan al-Majid, who heads the Ministry of Industry and Minerals to which the Military Industrialization Organization had been attached a month previously [see 30 Jun–2 Jul], flees to Jordan accompanied by his brother. Both are married to daughters of President Saddam Hussein, and arrive in Jordan with their wives, children and 15 army officers. They are granted asylum. The general is described by UNSCOM Executive Chairman Rolf Ekéus, speaking to reporters in New York two days later, as having

been the "mastermind" behind Baghdad's "remarkably successful" missile programme and at various times in charge of its chemical, biological and nuclear programmes. The general is said to have brought "crates of documents" with him, including papers identifying Western supplier companies. He is also reported to have been responsible for one of the biggest atrocities in recent Iraqi history, when he suppressed the Shi'ite uprisings in Kerbala and Najaf in the immediate aftermath of the Gulf War [see 7 and 7–20 Mar 91]. {Reuter in London *Guardian* 10 Aug, Reuter 10 Aug, AFP 12 Aug, London *Observer* 20 Aug, Patrick Cockburn in London *Independent* 22 Aug}

Among the many explanations being suggested for the general's defection, one is his worsening relations with the President's son Uday, the fact of which he confirms during his first press conference in Amman. An element of this is said to have been a falling out over how much information Iraq should give UNSCOM about it biological-weapons programme. A spokesman in Damascus for the Iraqi opposition group SAIRI says: "Hassan's group was convinced, contrary to Saddam, that there was no other way around the UN demands and they had to conform to the international resolutions". {AFP 10 and 12 Aug, London *Financial Times* 11 Aug, CNN News 12 Aug, *New York Times* 13 Aug}

9 August In Chechnya, an official working for the humanitarian rescue service Exparc, Alexander Gzovsky, tells reporters in Grozny that aid workers had found evidence suggesting that toxic chemicals might have been used several times during the fighting in Chechnya [see also 8 May and 24 Jul]. This evidence, including widespread skin complaints, had been found in the areas of Avtury (50 km southeast of Grozny), Shatoi (80 km south of Grozny), Roshni-Chu (60 km south of Grozny) and Nozhay-Yurt (120 km southeast of Grozny). There were also eye-witness accounts. Samples had been gathered, and were now being analysed in Moscow. Gzovsky says: "It is hard to say at this stage which side used the gas". Exparc volunteer worker Yelena Petrova is reported to have said that "special chemical containers of the kind used for chemical warfare" had been found in the Shatoi area in May by Exparc workers, and two more had recently been found near Avtury. (AFP 9 Aug) She later says that a container found in Avtury with remnants of an unknown chemical has been sent to Switzerland for an "independent analysis". She also says she has information suggesting that the chemical in the container had been used against Avtury's population in May and June. (Interfax 19 Aug in BBC-SWB 21 Aug}

An Izvestia reporter is later taken by Chechen militants to a site in the Avtury area where he finds "pieces of green plastic shaped like huge winged maple seeds". Chechens tell him that these had been dropped in clusters from Russian planes during an air raid in May, shortly before the military campaign ceased. Eyewitnesses say that some time after the "seeds" reached the ground they began exploding; inside each one was a small capsule filled with liquid which smelled strongly of garlic and caused severe burning in contact with skin. {Alexander Mnatsakanyan in Moscow Izvestia 24 Aug} [See also 8 May] Commenting on this report, Col Gen Stanislav Petrov, commander of Russian RKhB Protection Troops, dismisses it as ridiculous, adding: "There were never any chemical weapons dumps in Chechnya at all. And all Russia knows from the press where these chemical weapons are stored. It is simply blasphemous to say that the Russian army or the Russian Internal Troops are using chemical weapons." {Ekho Moskvy 24 Aug in BBC-SWB 25 Aug}

Moscow Echo radio reports anonymous sources in the Russian secret services as saying that, in several regions of Chechnya, some Russian fighting units had employed household chemicals inserted into shaped-charge antitank grenades, and that similar weapons had also been used by Chechen forces. {AFP 24 Aug}

9 August UNSCOM Executive Chairman Rolf Ekéus, now back in New York after receiving receiving Iraq's "full, final and complete disclosure" of its BW programme [see 4–6 Aug], tells reporters that the disclosure is incomplete. He says that a list of its shortcomings has been handed to Iraq, but doubts whether the processes of rectifying them and verifying new information can be completed before the Security Council's next 60-day review of sanctions, due on 9 September. {Reuter 9 Aug, *New York Times* 10 Aug}

Next day he briefs the Security Council, primarily in order to convey the message from Deputy Prime Minister Tariq Aziz, reiterated by personal message the day previously, that Iraq is serious about the 31 August deadline, and also to report the new disclosure. He speaks about the latter at a subsequent press conference. He says that, although the disclosure includes information on Iraq's biological-weapons research, development and production, it has shortcomings and contradictions, and leaves doubts. Thus there is still no accounting for some 20 percent of the bacterial growth media imported by Iraq, and no convincing evidence (such as the written orders) is presented to show that the BW agents said to have been produced were indeed destroyed in October 1990. Weaponization work on BW agents is not described. {DPA, Reuter and Xinhua 10 Aug}

11 August In Chechnya, at the village of Avtury in Shali, 192 people, mostly women and children, are taken sick apparently after exposure to an unidentified chemical. Doctors at the local hospital speculate that such an exposure might have been due either to a leak from a nearby chemical plant, or to the heavy use of pesticides earlier in the year, or to the employment of chemical weapons in the vicinity, either by Russian or by separatist forces [see 9 Aug]. Next day the Russian government sends in a special joint Russian—Chechen commission to investigate. {TASS 12 Aug}

The special commission soon reports that there has been an outbreak of skin disease in the area. It might have been caused such things as lack of clean water or allergy, but there is no evidence pointing to use of chemical weapons. A special medical investigation is needed. Lt-Gen Vladimir Shumov, who is deputy head of the Russian territorial administration in Chechnya and a member of the commission, tells reporters that rumours about the use of chemical agents by Federal troops are spread by those who do not want the situation in Chechnya to stabilize. {TASS 12 Aug}

A team of Russian doctors and scientists, including CW experts, arrives in Avtury on 19 August to investigate. This special commission also includes two people from Worldwide Television News. {Interfax 19 Aug in BBC-SWB 21 Aug, Alexander Mnatsakanyan in Moscow *Izvestia* 24 Aug} Five days later, the head of the commission, Dr Yuri Musiichuk, who is director of the St Petersburg Institute of Hygiene and Occupational Pathology, announces that 110 of the 226 Avtury residents examined by his medical team were suffering from

scabies, and that no evidence at all of chemical-weapons use had been found. A final report will be issued after laboratory analysis of the water, soil and vegetation samples collected. Dr Musiichuk reportedly says: "It is obvious that the Russian Army has not used any toxic substances. Those who doubt the competence of my conclusions can carry out their own on-site studies". {TASS 25 Aug, Moscow *Segodnya* 25 Aug, Inter Press Service 30 Aug}

- 13 August Iraqi Deputy Prime Minister Tareq Aziz announces that he has sent an "urgent invitation" to UNSCOM Executive Chairman Rolf Ekéus and IAEA Director General Hans Blix to come to Baghdad in order to receive data on Iraq's past weapons programmes that had hitherto, he says, been withheld from UNSCOM and the IAEA on the orders of Lt-Gen Hussein Kamel Hassan [see 8 Aug]. Ambassador Ekéus announces his acceptance of the invitation, saying that it "is evident that there is some important and secret information that Baghdad is prepared to disclose" before General Hussein Kamel Hassan makes his own disclosures. Baghdad next day rescinds its end-August deadline for completion of UNSCOM's work [see 4–6 Aug]. {AFP 15 Aug}
- 13 August In Bosnia-Hercegovina, government forces have been using chemical weapons in artillery attacks on villages and civilian targets in the Ozren-Vozuca area of north-central Bosnia according to the Bosnian Serb news agency: "In these attacks the Muslims used shells filled with caustic soda, as is shown by parched grass and dead cattle. There were no casualties but the damage caused is considerable." {SRNA 14 Aug in BBC-SWB 16 Aug} [See also 9 Aug Chechnya]
- **13 August** In the United States, recently declassified state papers on Japanese use of prisoners, including American ones, for biological-weapons experiments during World War II [see *ca*15–17 Apr 92 and 20 Aug 93, and see also 31 Jul–2 Aug] are reported by the California newspaper *Mercury News* {13 Aug}. The papers appear to document something of the arrangement whereby, in return for experimental data, the head of the Japanese BW organization, Lt-Gen Shiro Ishii, was protected from prosecution as a war criminal. [See also 17 Dec 94]
- **14 August** Algeria deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention [see 29 Jan], becoming the 33rd signatory state to do so.
- 14 August In Washington, the President's Advisory Committee on Persian Gulf War Veterans Illnesses [see 23 May] convenes for its first meeting. It hears presentations from Hillary Rodham Clinton, who elaborates on the mandate of the committee and on the considerations that had guided the selection of its members; from top officials in the Departments of Health and Human Services, Veterans Affairs, and Defense, who pledge coöperation and outline what their officials have been doing, both departmentally and through the interagency Persian Gulf Veterans' Coordinating Board; from representatives of ailing veterans; and from governmental and nongovernmental investigators. {Gannett News Service 14 Aug}

The Institute of Medicine Committee to Review Health Consequences of Service during the Persian Gulf War [see 4 Jan] releases its second report. This had been completed a week previously and is critical of the recently published report from the Defense Department CCEP [see 1 Aug], describing as "not

well explained" its conclusion that no new or unique illness exists among the ailing veterans. {International Herald Tribune 16 Aug}

15 August The US Army awards an \$18.5 million contract to Hensel Phelps Construction Company of Irvine, California, to build the Life Sciences Test Facility at Dugway Proving Ground, first mooted in 1986 as a 'biological aerosol test facility' [see 19 Sep 88 and 29 Jun 93]. Ground will be broken in October, with completion scheduled for April 1997. {Salt Lake Tribune 17 Aug}

15 August On US television, NBC News Dateline carries a documentary on Japanese World War II BW activities. The work of Shiro Ishii and his Unit 731 [see 2 Aug] is described in detail. Parallels to German concentration camps are drawn. The reporter states, but without presenting evidence: "Japanese scientists across China conducted field tests on how best to disperse deadly bacteria, through water, in food, and the air. They dropped bombs filled with plague infected fleas, killing tens of thousands of people in their search for the most efficient way to spread germs to mass populations." Evidence is presented indicating that American prisoners of war were used as guinea pigs by Unit 731 [see also 13 Aug] — evidence, however, which a US Defense Department spokesman states is not sufficient to support their claims. Evidence is also presented of Cold-War-driven official US connivance in a post-war cover-up of the Japanese BW programme, including the following 6 May 1947 cable from Washington: "Recommendation approved. Information obtained from Ishii and associates on biological warfare will be retained in intelligence channels and will not be employed as 'war crimes' evidence." A Japanese Embassy spokesman confirms to camera that his government has neither acknowledged Unit 731 nor has it apologized for it. He says: "we haven't found sufficient official documents yet".

17 August China needs more than a billion US dollars to dispose of the chemical weapons abandoned by the Imperial Japanese Army [see 6 Jun and 19 Jul], according to an official newspaper, China Youth Daily. The newspaper describes how, for 15 years after World War II, the weapons were collected up and buried in deep pits - 1.8 million of them, with another 200,000 still stored in depots awaiting disposal throughout the northeast of the country, which was the beachhead of Japan's 8-year occupation. The newspaper also describes research done in Japanese archives by the Chinese historian Bu Ping, deputy director of the Heilongjiang Academy of Social Sciences [see 5 Dec 94 and 31 Jul-2 Aug], who had also conducted interviews with former workers and soldiers of Unit 516, an Imperial chemical weapons organization. Bu had documented the shipping of chemical-warfare agents from Japan to the northern city of Qigihaer in Heilongiang where they were filled into munitions. He had also learned of previously unknown Japanese chemical dump-sites in China. {UPI 17 Aug}

17 August Austria deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 34th signatory state to do so.

17–20 August UNSCOM Executive Chairman Rolf Ekéus is in Baghdad following the "urgent invitation" from Deputy Prime Minister Tareq Aziz [see 13 Aug]. He has a team of ten people

with him, experts in nuclear, biological, chemical and missile matters. {AFP 17 Aug} At the opening plenary session, the Deputy Prime Minister states that General Hussein Kamel Hassan had, unbeknown to the senior levels of the Iragi leadership, hidden information on the prohibited programmes, information which Iraq would now disclose to UNSCOM and IAEA. At the next meeting, given over to BW, Iraq discloses a BW programme much more extensive than that described in its "full, final and complete disclosure" earlier in the month [see 9 Aug]. There is discussion of what will be needed to verify the accuracy of this new disclosure. {S/1995/864} Later, UNSCOM is given new information on the missile programme. During the third day, it is announced from Jordan what had been widely supposed, that Ambassador Ekéus would shortly be meeting General Hussein Kamel Hassan in Amman. {AFP 19 Aug} On the final day Ambassador Ekéus tells reporters that UNSCOM teams of "very senior experts" will soon be coming to Baghdad. He also says that, on chemical weapons, he expected more Iragi information, but there had not been time for it. {Reuter 20 Aug)

While he is still in Baghdad, the Washington Post {19 Aug} quotes unidentified "diplomatic sources" as saying that, on biological weapons, the new disclosure included the information that Iraq had worked on aircraft bombs and warheads for ballistic missiles as delivery vehicles for BW agents; that production of BW agents had taken place at a previously undisclosed site; and that the quantity of agent produced exceeded that which Iraq had declared in July.

18 August Iraq has stored hundreds of CBW warheads in underground desert caches as well as at least 32 Scud missiles, so the Shi'ite leader of the London-based Free Iraq Council, Saad Salih Jabr, tells Israeli television. He says that the hidden weapons represent a last resort of Saddam Hussein, who, once he knows his regime is doomed, will order their use against Israel in order to instigate a major Iraqi-Israeli confrontation. {Israel TV Channel 1 18 Aug in BBC-SWB 21 Aug}

20 August In Iraq, UNSCOM Executive Chairman Rolf Ekéus, as he is about to leave the country, and after having given his final press conference [see 17-20 Aug], is told that important documents have just been found at a farm 50 km from Baghdad owned by General Hussein Kamel Hassan. He is taken to the farm where he is shown 8 room-sized containers and 148 metal boxes full of documents, computer-disks and videos stored in two locked poultry-brooding buildings. They contain particulars of Iraqi mass-destruction weapons programmes, and had apparently been taken to the farm by security forces on 10 August. They are handed over to Ambassador Ekéus, who later says they appear to have been "hastily sanitized". They are taken to UNSCOM's Baghdad Monitoring and Verification Centre to be inventoried. {Amman Al-Ra'y 22 Aug in FBIS-NES 23 Aug, Time Magazine and Der Spiegel 4 Sep, Patrick Cockburn in London Independent 5 Sep, Newsweek 9 Oct}

Next day, Lt-Gen 'Amir Muhammad Rashid [see 30 Jun-2 Jul] tells Jordanian reporters that Hussein Kamel will furnish to the UN "false and deceptive information with the aim of prolonging the embargo imposed on the Iraqi people, although we have definitely deprived him of all his information weapons". He continues: "I have worked with Husayn Kamil for seven years. He used to give orders to the Military Industrialization Organization directors asking them to conceal information on

the biological, chemical and nuclear programs from the UN Special Commission. He used to tell them that he speaks on behalf of President Saddam Husayn. He also sent for certain people in the MIO asking them for classified information they know about old and recent armament programs and facilities concerned with manufacturing and construction." {Amman Al-Ra'y 22 Aug in FBIS-NES 23 Aug}

20-22 August In Monterey, California, a conference on The Nunn-Lugar Cooperative Threat Reduction Program: Donor and Recipient Country Perspectives is sponsored by the Center for Nonproliferation Studies of the Monterey Institute of International Studies and the Center for Science and International Affairs of Harvard University. Officials and technical experts from Belarus, Kazakhstan, Russia, Ukraine and the United States participate. Touched on is the lack of progress on the CW side of the Nunn-Lugar Program, on which the conference summary report says: "participants detailed several problems in getting chemical weapons (CW) destruction underway, among them disagreements between the United States and Russia on the technical means of destroying CW stocks, disagreements over proposed work plans and contracting mechanisms to oversee destruction, and a lack of clear bureaucratic lines of responsibility for CW destruction in the Russian government. These disagreements and delays, as other participants emphasized, have much broader implications for the success or failure of the Chemical Weapons Convention."

There is comment on the relative underfunding of the CW side of the Nunn–Lugar Program, and discussion of whether multilateral organizations, such as the World Bank, should become involved. In this regard, one participant observes that some of the more than \$150 million devoted by the World Bank to environmental cleanup in the Volga River Basin might properly support chemdemil operations in the region.

21-23 August In Jordan, UNSCOM Executive Chairman Rolf Ekéus is in Amman to speak with General Hussein Kamel [see 17-20 Aug]. Upon arrival he reportedly says to his Jordanian hosts: "We want to see files in his possession and to hear the data he has for us. What we want is to compare documents in his possession with those we have obtained from the Iraqi authorities." Next day he meets with the general, but afterwards declines to tell reporters what transpired. Subsequently, however, he says that the general had provided information additional to that received in Baghdad, but that "there were no major contradictions" — though he also reportedly says that "the documents [the general] brought along exceeded anything that we knew or suspected about the biological weapons of the regime in Baghdad". {AFP 22 Aug, London Financial Times 24 Aug, Paris Liberation 29 Aug, London Al-Sharq Al-Awsat 31 Aug in FBIS-NES 1 Sep, Der Spiegel 4 Sep}

At a news conference, and in interviews, Ambassador Ekéus speaks of the disclosures on biological weapons which Iraqi authorities had just made to him in Baghdad: "Now they admit that these types of agents have been put on ammunition, including missile warheads, on bombs, and this is, of course, a major admission. That means also that the Iraqi weapons programme was very much advanced". Also: "Iraq has produced more anthrax than [it had previously] stated". {London Daily Telegraph 22 Aug, New York Times 23 Aug, AFP 23 Aug}

22 August In Baghdad, a team of six UNSCOM biological-weapons experts (BW 27, UNSCOM 125) arrives for further

talks with Iraqi officials [see 17–20 Aug]. Baghdad newspapers are reporting that, at a meeting chaired by President Saddam Hussein on the previous evening, the Iraqi leadership had decided to "continue cooperation with UNSCOM with full transparency to fill in any objective gap in [weapons] files. The new BW team is led by Richard Spurtzel of the United States, who tells reporters: "We are here to follow up on the recent disclosure made by the Iraqis to Chairman Ekéus" — when more than a hundred boxes of additional BW information had been furnished [see 20 Aug]. {AFP and Reuter 22 Aug, Los Angeles Times 23 Aug}

Something of what the team will be investigating is described in interview by UNSCOM Deputy Executive Chairman Charles Duelfer. He says that the Iraqi government has now acknowledged "a much more extensive programme" than UN-SCOM had been able to piece together through the process of gathering independent information outside the country and then confronting the Iraqis with it. Grounds for suspecting BWagent weaponization work had increased some years previously when Iraq had admitted to the production of two different types of missile warhead both of which were said to be for delivery of chemical agents [see also 29 May-1 Jun and 11-16 Jun]. And he says that the Iraqi government, contradicting an earlier statement [see 5 Jul], now says that its stocks of BW agents and weapons were not in fact destroyed before the start of the Gulf War, in October 1990. {New York Times 23 Aug} UNSCOM spokesman Tim Trevan subsequently tells reporters that, according to the latest disclosure, Iraq did not actually destroy its BW weapons until July 1991. {AP 24 Aug}

- **22 August** In Israel, the Chief of Staff of the Defence Forces, Lt-Gen Amnon Lipkin-Shahak, says to the Knesset Foreign Affairs and Defence Committee: "According to our understanding [the Iraqis] have no more chemical weapons, no Scuds and only a very few Scud launchers". {Jerusalem Post 23 Aug}
- **23 August** In Japan, new export controls are due to come into force, including controls on certain items of equipment applicable to the development of chemical weapons. {Kyodo 3 Aug in BBC-SWB 5 Aug}
- **23 August** Poland deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 35th signatory state to do so.
- **24 August** In the United States findings are released from *Global 95*, the annual wargame sponsored by the Naval War College which had taken place during 9–31 July. Senior officials from the State Department, National Security Council and the intelligence community had taken part, as well as military officers. The Deputy Assistant Secretary of Defense for Counterproliferation Policy, Mitchel Wallerstein, tells *Defense News* that this year's "was the first extensive simulation of the implications of an adversary's use of nuclear, biological and chemical weapons". He continues: "We explored a wide range of issues, and gained good insight into the policy dimensions of some real operational challenges."

The wargame scenario comprised two major regional crises, one on the Korean peninsular, the other in the Persian Gulf. Chemical weapons were used in both, biological weapons only in the latter — an attack on US aircraft carriers by modified crop-dusting aircraft, a terrorist anthrax attack on Dhahran killing more than a million people, and attacks by Iraqi

terrorists on Norfolk and Washington. The responses of the US military had been explored in detail. The Persian Gulf scenario had culminated in a US nuclear attack on Baghdad. Serious questions had been exposed concerning the adequacy of US policy, military doctrine and operational planning in the face of adversary resort to weapons of mass destruction.

The emphasis in the wargame on CBW had been intended to help US commanders in the new missions being assigned to them under the Defense Department Counterproliferation Initiative [see 7 Dec 93]. Two months previously, Defense Secretary William Perry had tasked the major regional commanders with developing operational plans and equipment requirements for counterproliferation. {Defense News 28 Aug and 11 Sep}

25 August UNSCOM Executive Chairman Rolf Ekéus reports to the UN Security Council on the new information about Iraq's biological weapons [see 22 Aug]. Particulars are subsequently disclosed to reporters by the US Representative to the United Nations, Ambassador Madeleine Albright, and also by Ambassador Ekéus.

It seems that, during December 1990, Iraq had actually filled 191 munitions — aircraft bombs, artillery shells and missiles — with BW agents and deployed them to two air bases. These munitions included 50 R-400 bombs and a dozen al-Hussein missile warheads charged with anthrax bacteria, and about 100 bombs and 50 other warheads charged with botulinum toxin. There were also munitions charged with aflatoxin. Weapons research had begun at least by 1976, becoming more systematic in 1985. Agent production began in 1989 involving five research and production units, and by the end of 1990 Iraq had 26,500 litres of culture, according to UNSCOM calculations, most of it in weapons. Verification of what ultimately happened to the weapons will clearly occupy UNSCOM for a considerable while yet. In addition, research had been proceeding into other mycotoxins and into plant pathogens, including diseases of wheat. Work had also been done on remote-controlled aircraft with spray nozzles, apparently for delivering disease agents. Biological weapons had been tested on sheep and monkeys in the Muthanna region.

In interview, Ambassador Ekéus is now stressing the surprisingly advanced state of the Iraqi BW programme: "Without wanting to anticipate the examination of our entire material, for me it is certain that Iraq's biological weapons were fully developed. Their use, which seems to have been possible at any time, would have killed milions of people... What shocks me in retrospect is the realization that the world was facing an enormous catastrophe, of which we did not even have a clue. Such a situation must be unique in the history of mankind." As to what prevented Iraq from using the weapons, he says: "We were told that they were afraid of a nuclear riposte by the Americans". He suggests that subsequent Iraqi strategy had been to get the UN sanctions lifted without revealing the secret of the biological weapons: "They kept biology as the prize". And he says: "The suspicion that Iraq is still concealing a great deal cannot be dismissed lightly. If you had seen the officers, who had denied everything until recently, admit the existence of biological weapons without blushing, without feeling any remorse, you would understand why many in the United Nations still have doubts about Iraq's credibility." {Reuter 25 Aug, AFP 26 and 27 Aug, Paris Liberation 29 Aug, DPA 29 Aug, AFP 3 Sep, Der Spiegel 4 Sep, Newsweek 4 Sep}

27 August Iran, having hired Russian experts, has made a "quantum leap forward" in the development of biological weapons, according to unidentified Western intelligence officials in Washington guoted by the London Sunday Times {27 Aug}, which states further that, with this Russian help, the Iranians "have saved years of experiments and have been able to go straight from basic research to production, and the development of an effective delivery system". The newspaper also asserts that "the germs are manufactured at Damghan [see 1 Jun], west of Tehran, and at another facility in Tehran". The head of Russian RKhB Protection Troops, Col Gen Stanislav Petrov, rejects the story, saying that the Russian army has long since ceased all work on biological weapons, and that, if Russian criminal groups had been providing the alleged assistance, Russian military intelligence would have discovered it. {Ekho Moskvy 28 Aug in BBC-SWB 30 Aug}

28 August In Cambodia, the Khmer Rouge once again issues a communiqué in which advocacy of a form of chemical warfare — hidden pits planted with poisoned punji stakes — is prominent in its exhortation of continuing armed insurrection [see 22 Aug 94]. {Khmer Rouge Radio 28 Aug in BBC-SWB 31 Aug}

28 August In Russia, on the day marking the 50th anniversary of the country's nuclear industry, Atomic Energy Minister Viktor Mikhaylov speaks to an interviewer about the studies his ministry has been performing during the past four years on the use of underground nuclear explosions to destroy chemical weapons [see 5 Mar 92]. He states that such a chemdemil method would be "approximately 100 times cheaper than any other means". {NTV 28 Aug in FBIS-SOV 29 Aug}

29 August In South Korea, the Ministry of Trade, Industry and Energy announces that a new export-control system will come into force on 1 October that will satisfy preconditions for the country joining the Australia Group and the other international regimes against proliferation of mass-destruction and other weapons. {Seoul *Korea Times* 29 Aug}

30 August In South Africa, the National Assembly votes to ratify the Chemical Weapons Convention. {AFP 30 Aug}

- **30 August** In the United States, the director of the Defense Department Advanced Research Projects Agency, Larry Lynn, speaks in interview of ARPA plans to increase its work on BW defence, seeking to shore up a "serious deficiency" in the Defense Department. He identifies this as one of ARPA's top ten priority areas. {*Aerospace Daily* 1 Sep}
- **31 August** In Uzbekistan the parliament passes the country's new military doctrine [see 7 Jun], which includes renunciation of nuclear and CBW weapons. {TASS 31 Aug in BBC-SWB 2 Sep} Uzbekistan has still to sign the CWC, however.
- **31 August** In Baghdad, the latest UNSCOM biological mission [see 22 Aug] completes its visit. Team leader Richard Spurtzel declines to speak to reporters on his way out. {AFP 31 Aug} Later, however, US officials disclose further information about the Iraqi BW programme, seemingly attributing it to this mission. Thus the *Los Angeles Times* reports that the programme involved up to 150 scientists and senior technicians plus support and security staff. Agents studied included wheat cover smut, camel pox, haemorrhagic conjunctivitis virus

(which causes temporary blindness), a virus causing chronic diarrhoea, Yellow Fever virus and Crimean Congo haemorrhagic fever virus. Weaponization work included adaptation of aircraft auxiliary fuel "drop tanks" for use as agent delivery vehicles. {International Herald Tribune 7 Sep} Chief Inspector Spurtzel tells Newsweek magazine {9 Oct} that the Iraqis had been experimenting with the potential use of the wheat smut against human beings — "I have no idea in what connection".

- **2–3 September** In Moscow there are talks between Chancellor Kohl of Germany and President Yeltsin. During his subsequent press conference, President Yeltsin says: "We reached a firm agreement that Germany will be involved in providing finance and technical support for the destruction of chemical weapons [see also 22 Oct 93]. This is a very important issue." {Russian Public TV 3 Sep in BBC-SWB 5 Sep} Chancellor Kohl makes no mention of chemdemil in his own press conference. {AFP 3 Sep}
- **3 September** In Viet Nam, the National Committee for the Investigation of Toxic Chemicals reports that, as of end-August, dioxins are still present at dangerous levels in more than 50 localities that correspond to areas of US chemical spraying during the war years. A one-hectare area of Bien Hoa airport is reported to be at a very dangerous level. {Voice of Vietnam 4 Sep in BBC-SWB 7 Sep}
- **4 September** The US Defense Department is about to reorganize its Counterproliferation Initiative, most probably by establishing a new top-level Counterproliferation Council chaired by Deputy Defense Secretary John White, so *Defense News* {4 Sep} reports. The new body would, according to one of the officials involved, serve "as a mechanism for orchestrating the Department's wide-ranging policy, operational, doctrinal and acquisition initiatives to meet the defense planning requirements created by the proliferation of weapons of mass destruction."
- 5 September The US Senate unanimously approves an amendment to its FY 1996 Defense Authorization bill calling for ratification of the CWC. {Congressional Record 5 Sep pp S12552-4 Proposed by Senator Carl Levin and subsequently amended by the Chairman of the Armed Services Committee, Senator Strom Thurmond, the amendment in its final form states: "It is the sense of the Senate that the United States and all other parties to the START II and Chemical Weapons Convention should promptly ratify and fully implement, as negotiated, both treaties". The White House issues a statement {on US Newswire 6 Sep} in which President Clinton welcomes the Senate action and says: "We must reduce the threat of weapons of mass destruction, whether nuclear, chemical or biological. START II and the CWC are critical steps on the road toward reaching this objective". The statement goes on to recall what the President had said in his US Air Force Academy commencement address on 31 May: "Both START II and the Chemical Weapons Convention will make every American safer, and we need them now".

Two days later, a spokesman for Senator Jesse Helms, who is still blocking Senate action on the CWC (and most other Foreign Relations Committee business) [see 1 Aug], nevertheless asserts: "There is no momentum in the Senate to pass this thing". The spokesman, Marc Thiessen, says that the Conven-

tion will almost certainly not be ratified this year and could be sidelined indefinitely. {*New York Times* 10 Sep}

- **5 September** In Quito, the heads of state and government of the 14 Latin American countries assembled for the 9th Rio Group summit Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad & Tobago, Uruguay and Venezuela adopt a declaration which includes the following: "We urge those countries that have not yet done so to promptly sign and ratify the [Chemical Weapons] Convention... We have decided to work together for the strengthening of the Biological Weapons Convention through the adoption of appropriate measures." {CD/1355}
- **6 September** In India, the Cabinet has approved plans for the ratification of the Chemical Weapons Convention, including a proposal for the implementing legislation. {All-India Radio 6 Sep in BBC-SWB 7 Sep}
- **6 September** The US Senate adopts its FY 1996 Defense Authorization bill. For the Nunn–Lugar Program [see 13 Jul], it fences all but \$52 million of FY 1996 funding for Former Soviet Union Threat Reduction until the President certifies: that the USA and Russia have successfully completed a joint laboratory study evaluating the proposed Russian neutralization chemdemil technology; that Russia is in the process of preparing a comprehensive plan to dismantle and destroy its CW stockpile; and that the USA and Russia remain committed to resolving outstanding issues under the 1989 Wyoming Memorandum of Understanding and the 1990 Bilateral Destruction Agreement. {Congressional Record 6 Sep S12651-3}

On anti-ballistic-missile defence [see 2 Aug], a compromise is reached that would allow development but not the actual building of a multi-site system that would protect the country against renegade states armed with nuclear or CBW missiles. {International Herald Tribune 7 Sep}

There is also a requirement in the bill as passed for a Defense Department study of the risks of transporting parts of the CW stockpile from one part of the country to another {Congressional Record 5 Sep S12539-40}

- **6 September** Ecuador deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 36th signatory state to do so.
- **8 September** In Slovakia, the National Council approves without debate ratification of the Chemical Weapons Convention. Of the 104 deputies attending this session of parliament, 103 vote in favour and one abstains. {TASR 8 Sep in BBC-SWB 9 Sep}
- **8 September** The UN Security Council conducts its 27th 60-day review of the sanctions imposed on Iraq, leaving them in place. {Los Angeles Times 9 Sep}
- **8–10 September** In Bad Homburg, Germany, the SIPRI-Sas-katchewan-Frankfurt Group on the National Implementation of the Chemical Weapons Convention convenes an international conference on *Effective Implementation of the Chemical Weapons Convention*. It is supported by the Volkswagen Foundation and the Canadian government. Participating are 88 people from government, industry and other nongovernmental organizations. The OPCW Preparatory Commission is also repre-

sented; its Executive Secretary, Ian Kenyon, is among the speakers. Almost all the OECD countries are participants, and there is also participation from developing countries. {Frankfurter Rundschau 11 Sep}

9 September In Texas, the class-action lawsuit being brought by sick Gulf War veterans against chemical and biological firms [see 3 Jun 94] has recently been returned from federal court to Texas state trial level, US District Judge Samuel Kent having rejected arguments by the defendants. The plaintiffs are being represented by two Houston attorneys — Frank Spagnoletti and Gary Pitts — and John Eaves, a Jackson, Mississippi, attorney. They expect that the number of defendant companies will ultimately be about 30; Thyssen of Germany and Rhône-Poulenc of France are already among them. The action claims \$1 billion from the companies for their part in enabling Iraq to acquire the weapons said to have been responsible for the plaintiffs' illness. The illness resulted, it is claimed, primarily from nerve gas and biological-warfare agents which Iraq had intentionally delivered in sublethal dosages, mainly from Scud missiles targetted on the Coalition rear. {Gannett News Service 9 Sep}

A British company, Oxoid [see 5 Jul], is to be joined in the suit, so it is reported some three weeks later. {London *Independent on Sunday* 1 Oct}

- **10–12 September** In Bosnia-Hercegovina, where NATO airstrikes are continuing, government forces use poisonous gas in their attacks on Serb positions on Mount Ozren, according to the Bosnian Serb army. Blister and choking gases, delivered by artillery, are referred to in the reports. {Tanjug 11 Sep in BBC-SWB 12 Sep}
- **10–29 September** In the Czech Republic, the Brno Military Academy hosts an international course for chemical specialists. The course includes demonstrations of Czech NBC defence techniques and equipments. The course is sponsored by the General Staff of the Czech Armed Forces as an activity within the NATO Partnership for Peace programme. Participating are 18 NBC protection specialists from the armed forces of Austria, Belgium, Canada, Denmark, France, Germany, Hungary, Italy, the Netherlands, Norway, Poland, Spain, Switzerland, Turkey, the UK and the USA.
- 11 September From Paris, *Le Monde* reports that the French external intelligence service DGSE had, in 1985, prepared to use a pathogenic virus against the crew of a Greenpeace ship docked at Curacao in the Dutch West Indies while sailing to the French nuclear-weapons test site in the South Pacific to take the place of the *Rainbow Warrior*, which French agents had bombed and sunk three months previously. The project was reportedly abandoned in favour of electronic jamming of Greenpeace communications in the test area. {*International Herald Tribune* and London *Guardian* 12 Sep, *Australian* 13 Sep}
- **11–12 September** In The Hague, preparations for the new international technology control regime that is to replace CoCom [see 30 Jun] are moved further forwards at a conference of the 28 prospective founder-members of what is provisionally called the New Forum. The 28 countries agree a set of political guidelines for establishing the new regime by the end of 1995. By a system of information-exchange and mutual consultation on

export-control policies applicable to conventional weapons and to associated dual-use technologies, the aim is to provide a mechanism for guarding against destabilizing buildups of weapons in regions of tension. For certain regions on what is to be a continually evolving list, it is agreed that there should be a presumption of denial of export-licence applications. With the initial exceptions of Iran, Iraq, Libya and North Korea, the plan is not to focus such constraints on particular countries. {Arms Control Today Oct}

- **11–14 September** In Osaka, the Japan Chemical Industry Association and the Ministry of International Trade and Industry jointly conduct a table-top exercise for the development of a facility agreement for Schedule 2 plant sites [see also 23 May]. Experts from the OPCW Provisional Technical Secretariat also participate.
- 11–29 September The Netherlands, in conjunction with the Technical Cooperation and Assistance Division of the OPCW Provisional Technical Secretariat, convenes a Basic Course for Personnel of National Authorities [see also 18 Jul 94] at the Royal Netherlands Air Force School in Woensdrecht. There are 49 participants from 38 member states. The course has been designed for personnel of the CWC National Authorities of member states that have no chemical weapons and only limited declarable activities; it does not address concerns of states parties that possess chemical weapons. Several member states provide teachers, as do such nongovernmental organizations as SIPRI, and monetary contributions have been made by the governments of Canada, the Netherlands, Norway and the Republic of Korea. {OPCW Synthesis 20 Nov}
- **12 September** The US Defense Nuclear Agency awards a further [see 27 Feb] \$6.37 million contract to Bechtel National Inc of San Francisco for support of the Russian-American Joint Evaluation Program (RAJEP) which is assessing the two-stage destruction process for organophosphorus CW agents [see 18 Nov 94 and 6 Sep]. {ASA Newsletter 11 Oct}
- **13 September** South Africa deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention [see 30 Aug], becoming the 37th signatory state to do so.
- **14 September** In Belgium, one element of the new chemdemil facility at Houthulst becomes operational. {*De Standaard* 14 Sep}
- **15 September** Japan deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 38th signatory state to do so.
- **16 September** Iraqi Finance Minister Ahmad Husayn Khudayyir has told the Cairo newspaper *Al-Ahram* that "the biological and germ weapons Iraq posesses are merely projects to produce these weapons", so the newspaper today reports. {MENA 16 Sep in BBC-SWB 18 Sep}
- **16 September** In Russia, President Yeltsin submits draft legislation to the State Duma *On the Destruction of Chemical Weapons*. His press service states: "The purpose of the draft federal law is to provide a legislative basis to the work on the destruction of chemical weapons stored on the territory of the

Russian Federation while ensuring the safety of the population and the environment". His representative during the parliamentary hearings on the subject is to be Pavel Syutkin, the chairman of the President's Committee on CBW Convention Problems. {Interfax 16 Sep in BBC-SWB 18 Sep}

16 September–1 October In China an official Japanese mission visits Heilongjiang, Jilin and Liaoning provinces to survey and seal chemical weapons abandoned by the Japanese Imperial Army. This is the third such mission in seven months [see 6 Jun]. The team seals, and confirms as Japanese in origin, six steel drums of mustard gas that had apparently been intended for aerial spraying, and 104 chemical shells, some containing mustard-lewisite mix, others containing irritant agent. There are plans for another ten or more locations to be surveyed over the coming year. {Daily Yomiuri 1 Oct}

16–20 September In Iraq UNSCOM conducts its 25th chemical-weapons inspection, UNSCOM 124. The main purpose is to resolve contradictions between the "full, final and complete disclosure" of the CW programme which Iraq had presented on 25 March (and augmented on 27 March and 29 May) and information found in the "chicken farm" documents [see 20 Aug]. In particular, what the chemical FFCD said about the VX programme [see 10 Apr] no longer appeared tenable. The mission receives new information from the Iraqi side. The VX programme appears to have run uninterrupted from May 1985 until December 1990, achieving industrial-scale production and solution of stabilization problems. For the programme, 65 tonnes of choline were produced during 1990, and Iraq was already known to have acquired more than 200 tons each of phosphorus pentasulphide and diisopropylamine. The accumulated stocks of all three of these precursors are said to have been destroyed. A 1989 document had proposed "the creation of strategic storage of [VX hydrochloride, one step away from VX itself] so it can be used at any time if needed". {S/1995/864}

17-20 September In Iraq an UNSCOM mission led by Deputy Executive Chairman Charles Duelfer meets with Iraqi officials for preparatory work on the next six-monthly report to the Security Council on the work of UNSCOM, due on 11 October. All aspects are covered but the main focus is on BW, in which regard Duelfer tells reporters upon arrival: "We have to verify the information the Iraqis provided to us and most important to verify the destruction of all the equipment [for making biological weapons]". He says that Iraq has now provided UNSCOM with 650,000 pages of documents. At the end of the visit he tells reporters that he has received new information about previously undisclosed flight tests of Scud missiles carrying chemical warheads, one of which had used actual CW agent. He also says that Iraq has revealed the existence of new BW-related sites, and that this will necessitate a revision of the ongoing monitoring and verification system. {AFP 17, 18 and 20 Sep, INA 19 Sep in BBC-SWB 21 Sep} One further purpose of this visit, it later transpires, is to urge Irag to abandon its pretence that, in the CW field, its programme for producing and weaponizing agent VX had been small and inconclusive [see 16-20 Sep]. {S/1995/864}

18 September In Beijing an exhibition opens on Japanese use of chemical weapons in China during the Sino-Japanese War. The weapons, used on more than 2000 occasions, are said to have caused at least 200,000 casualties, including

40,000 fatalities, among Chinese soldiers and civilians [see also 19 Jul]. {Xinhua 18 Sep in FBIS-CHI 20 Sep}

18 September In the United States, the President's Advisory Committee on Persian Gulf War Veterans Illnesses [see 14 Aug] is scheduled to hold hearings on Gulf War sickness in Charlotte, South Carolina. The administration has thus far turned down 72 percent of the 72,214 veterans that have sought benefits, mostly disability benefits, including the 13,495 who have complained of illnesses caused by environmental factors. {*Hartford Courant* 12 Sep}

18-22 September In Washington, a visiting high-level delegation from the OPCW Preparatory Commission meets with top administration officials and US senators to stress the need for timely ratification of the Chemical Weapons Convention by the United States. The delegation is a troika comprising Ambassador Zacharias de Beer of South Africa, who is the current Chairman of the Commission, his predecessor Ambassador Finn Fostervoll of Norway, and Executive Secretary Ian Kenyon. The delegation meets with: the Secretary of State, W Christopher; the Deputy Secretary of Defense, J White; the Assistant to the President for National Security Affairs, A Lake; the Chairman of the Joint Chiefs of Staff, Gen J Shalikashvili; the Director of ACDA, J Holum; the Adviser to Vice-President Gore, L Furth; Senators Kassebaum, Pell, Lugar and Feingold; and senior staffers of the Senate Foreign Relations Committee. {OPCW/PTS press release 25 Sep}

19 September In Washington the White House releases its new *National Security Science and Technology Strategy*, which has been two years in the making. Among other things, the strategy will guide 1997 spending priorities for antiproliferation efforts. {*Defense News* 25 Sep}

19–21 September In Winchester, England, there is an international workshop on anthrax attended by 124 specialists from 22 countries. Among them is Dr Max Sterne who, in South Africa in 1937, had developed the anthrax vaccine that bears his name. A presentation from the State Scientific Centre of Applied Microbiology at Obolensk in Russia describes how a vaccine strain had been genetically engineered for antibiotic resistance, such as could allow simultaneous anthrax prophylaxis and therapy in an emergency. The meeting has been organized, as was its predecessor in 1989, by Dr Peter Turnbull of the Centre for Applied Microbiology and Research at Porton Down. The first evening includes a roundtable on matters relating to biological warfare.

A report from Washington on the workshop some ten days later in the London *Sunday Times* {1 Oct} excites much ridicule by portraying the Obolensk engineered vaccine strain as a "doomsday weapon".

20 September In Libya the government inaugurates a large new pharmaceutical plant built in a joint venture with an Egyptian company at Rabta, close to the chemical plant which US and other intelligence services had identified as a chemical weapons factory [see 27 Aug 93]. The inauguration ceremony is attended by the Health Ministers of Egypt and Morocco. {London *Times* 22 Sep, JANA 22 Sep in BBC-SWB 23 Sep}

22 September In Geneva the Conference on Disarmament adopts the report on the past year's work which it will be sub-

- mitting to the UN General Assembly. Among the agreements thereby registered is the decision to expand the membership of the Conference from 37 to 60 states at a time still to be decided. Of the 35 candidates, the new members will be Austria, Bangladesh, Belarus, Cameroon, Chile, Colombia, Finland, Iraq, Israel, New Zealand, North Korea, Norway, Senegal, Slovakia, South Africa, South Korea, Spain, Switzerland, Syria, Turkey, Ukraine, Viet Nam and Zimbabwe. {CD/1364}
- 23 September The Dutch salvage firm Wijsmuller, engaged by the International Maritime Organization to inspect sunken marine obstacles in the Persian Gulf, reports finding canisters of what might be chemical weapons on Iraqi boats sunk there in 1991. {New York Times 24 Sep} A statement issued ten days later by Iraqi Deputy Prime Minister Tariq Aziz says that "Iraqi ships which sank during that period did not carry any weapons or chemical materials". {Republic of Iraq radio 6 Oct in BBC-SWB 9 Oct}
- **25 September** In the United Kingdom, a BBC *Panorama* television documentary suggests that the apparently high incidence of certain birth abnormalities among offspring of British Gulf War veterans may be a consequence of the mutagenicity of mustard gas released during the bombing of Iraqi chemical-weapons sites. {London *Sunday Telegraph* 24 Sep, PA 25 Sep}
- 25 September US Secretary of State Warren Christopher, during his address to the UN General Assembly, says: "We should push for the earliest possible entry into force of the Chemical Weapons Convention. President Clinton has urged the United States to act promptly on its ratification and to stop holding the START II treaty as well as the Chemical Weapons Convention hostage to unrelated issues." {Federal News Service 25 Sep}
- **26 September** Canada deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 39th signatory state to do so.
- **26 September** The US National Academy of Sciences issues an interim report from its study of the potential health effects of the Army's release of zinc cadmium sulphide tracer during its BW field studies over St Louis and other cities during the 1950s and 1960s. The study has been requested by the US Congress [see 29 Jul 94]. The interim findings discern no reckless disregard for public health in the trials. {*St Louis Post-Dispatch* 27 Sep}
- **26–27 September** In Munich, at the Federal Armed Forces Medical Academy, the German Defence Ministry convenes its first Conference on Medical Chemical Protection. Papers are presented not only by German CW defence scientists but also by ones from allied countries, including Belgium, Britain and Canada.
- 27 September In Iraq, the fourth UNSCOM chemical monitoring team, CG-4, commences activities from its base in the Baghdad Monitoring and Verification Centre. The third team [see 16 Apr], CG-3, had completed its mission the day previously. During June and July it had detected the unauthorized movement and use of four major items of tagged equipment at two sites under monitoring. Iraqi authorities were at once instructed to return the equipment, which they did. {S/1995/864}

- 27 September At the University of London, in coöperation with its Centre for Defence Studies, the HSP London CBW Seminar meets to discuss the draft Chemical Weapons Bill [see 19 Jul] implementing the Chemical Weapons Convention in the UK. There are presentations both from officials responsible for the draft and from academics commenting on its content. {London Independent 3 Oct}
- **27 September–11 October** In Iraq UNSCOM conducts its 28th biological-weapons inspection, UNSCOM 126. {S/1995/864}
- 29 September In South Korea, Air Force Chief of Staff General Kim Hong-nae warns the National Assembly Defence Committee of the "serious military consequences" were North Korea to launch its 600-plus FROG and Scud missiles against the South armed with nuclear or chemical warheads. {Yonhap 29 Sep in BBC-SWB 2 Oct} Data on these weapons had been furnished a week previously to the National Assembly by the National Unification Ministry. {Yonhap 22 Sep in BBC-SWB 25 Sep}
- 29 September–1 October In Iraq an UNSCOM mission headed by Executive Chairman Rolf Ekéus pursues discussions with Iraqi officials prior to the next six-monthly report to the UN Security Council, which is due on 11 October [see 17–20 Sep]. Chairman Ekéus tells reporters at the outset that the mission will cover CW, BW and nuclear matters, but the BW will be the "most important". Iraq furnishes new information in all areas. {AFP 28 and 30 Sep, Reuter 29 Sep}
- **29 September** The US General Accounting Office issues a further report on the Cooperative Threat Reduction (Nunn–Lugar) Program [see 6 Sep] which is critical of some aspects of Defense Department reporting of the programme. {GAO/NSIAD-95-191}
- **30 September** The US administration has released further state papers relating to the immunity from war-crimes prosecution given to senior Japanese officers after World War II, including the leader of the Japanese BW programme, General Ishii [see 15 Aug]. Particulars are published by the San Jose, California, newspaper *Mercury News*, which has long been investigating the subject. {AFP 30 Sep, Kyodo 1 Oct}
- 30 September US Deputy Defense Secretary John White issues a decision memorandum increasing future-year funding plans for a variety of counterproliferation support programmes [see also 1 Nov 94]. An extra \$141.5 million is envisaged for FY97 through FY01 over and above the funding previously planned. According to Inside the Pentagon (5 Oct), the increase is to be spent on four different initiatives against weapons of mass destruction (WMD): first, to enable the Defense Department to "preposition chemical/biological explosive ordnance demolition equipment at Sigonella, Guam, and San Diego, to shorten response time in facing terrorist/paramilitary WMD threats"; second, "to develop and demonstrate technologies to detect, disarm, and defuse WMD devices"; third, to "create a rapid-reaction capability to package, protect, transport, and/or dispose of WMD-related materials"; and fourth, an effort "to expand the counterproliferation Advanced Concept Technology Development to include testing new capabilities against a simulated nuclear weapon facility".

- 29 September–1 October In England, at Wiston House, there is a Wilton Park Special Conference on *Verification of the Biological Weapons Convention*, convened in coöperation with the Chemical and Biological Arms Control Institute (CBACI) in the United States. There are 59 participants from Australia, Belgium, Germany, Hungary, the Netherlands, Norway, Russia, South Africa, Sweden, Switzerland, the UK and the USA. Among the presentations are ones by representatives of the American and British biotechnology industries. {*Chemical/Biological Arms Control Dispatch* 1–15 Oct}
- **2 October** Russia destroyed its experimental stocks of novel binary chemical weapons in 1993 and 1994 by detonating them in the open air at the Shikhany CW test site, according to an article by Dr Vil Mirzayanov [see 15 Feb] in publication from the Henry L Stimson Center in Washington. Another article in the publication, by Amy Smithson, details improvements in physical security that might be made at Russian storage facilities for chemical weapons. {*New York Times* 1 Oct}
- **2 October** Argentina deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 40th signatory state to do so.
- **3 October** President Clinton accepts the report of his Committee on Human Radiation Experiments, which had been investigating the experimental exposures of human subjects to radiation, including candidate radiological-warfare agents, during the Cold War period [see 17 Jul]. At a press conference he says: "While most of the tests were ethical by any standards, some were unethical not only by today's standards but by the standards of the time in which they were conducted. They failed both the test of our national values and the test of humanity." He goes on to say that he is instructing his Cabinet to find a way to compensate victims. {Reuter in London *Guardian* 4 Oct}
- 4 October In North Korea, the official newspaper of the Central Committee of the Korean Workers Party denounces a speech just made by South Korean Foreign Minister Kong Nomyong to the UN General Assembly, including its call for North Korea to sign the Chemical Weapons Convention. This the Party describes as "impudent", continuing: "We state again that we have no chemical weapon but oppose the development, production, stockpile and use of such kind of weapons. Whether we join an international convention or not is a matter pertaining to our sovereignty as an independent state." {Nodong Sinmum 4 Oct quoted by KCNA 4 Oct in BBC-SWB 5 Oct}
- **5 October** At Harvard University, in the Kennedy School of Government, the Executive Secretary of the OPCW Preparatory Commission, Ian Kenyon, addresses a session of the HSP Cambridge Colloquium. {ASA Newsletter 11 Oct}
- **5–7 October** In Piacenza, Italy, the 8th Amaldi Conference on Peace and International Security, *Overcoming the Obstacles to Peace in the Post Cold War Era*, includes a half-day session on biological warfare organized by the UK Royal Society.
- **6 October** In Scotland, beaches in the south-west are closed to the public while police and military bomb-disposal teams search for phosphorus munitions that are now being washed up

- in increasing numbers. Operations continue over the next two weeks, by which time several thousand munitions have been retrieved from along the Firth of Clyde and the Mull of Kintyre. even the islands of Arran, Islay, Jura and Gigha. (Economist 14 Oct, New Scientist 18 Nov The Scotsman newspaper {13 and 14 Oct} reports a connection between what is happening and ongoing operations to lay a gas pipeline between Scotland and Northern Ireland, suggesting that the ploughing of a trench on the seabed may have disturbed ocean burial grounds heavily used in the past for disposing of old weapons, notably at Beaufort's Dyke [see 27 Jan]. Large quantities of 5-inch phosgene rockets are known to have been dumped there. The government announces that, in mid November, a detailed survey of dump site areas will be conducted; its findings will be published. {Hansard (Commons) written answers 3 Nov and adjournment debate 15 Nov}
- **10 October** In Zagreb, a mission of the Council of Europe and of the OSCE that has been visiting Knin and Osijek is received at the Ministry of Defence. Croatian forces have now reoccupied Krajina. Reporting the meeting, Croatian Radio says: "A quantity of seized chemical weapons was also discussed. They are banned under international conventions so the Croatian Army will destroy them." {10 Oct in BBC-SWB 12 Oct}
- **10 October** In Bosnia-Hercegovina, government forces attack Bosnian Serb positions at Trnovo on the Sarajevo front with "shells filled with poisonous gas" according to the information service of the Main Staff of the [Bosnian] Serb Army. {SRNA 10 Oct in BBC-SWB 12 Oct}
- 10-13 October In Moscow, the visiting high-level delegation from the OPCW Preparatory Commission [see 18-21 Sep] calls for a rapid ratification of the CWC. {TASS and Reuter 12 Oct) The delegation meets with: the President's National Security Adviser, Y M Baturin; the Chairman of the President's Committee on CBW Convention Problems, P Syutkin; the First Deputy Minister of Defence and acting Chief of Staff of the Russian Armed Forces, Col Gen W M Zhurbenko; the Commander of the Defence Ministry RKhB Protection Troops, Col Gen S V Petrov; the Chief of the Defence Ministry Department of International Cooperation. Col Gen Kharchenko: the Director of the Foreign Affairs Ministry Security and Disarmament Department, S Kisliak; the Chairman and Deputy Chairman of the State Duma Foreign Relations Committee, V Lukin and V Nikinov respectively; the Deputy Chairman of the State Duma Committee on Defence and State Security, A Piskunov; the Chairman of the State Duma Sub-Committee on Arms Control, A Arbatov; and the Deputy Chairman of the Federation Council, V Viktorov. {OPCW Synthesis 20 Nov}

After the visit, Foreign Ministry spokesman Grigory Karasin speaks as follows at a press briefing: "During the meetings the delegation raised the question of the importance of the speediest entry into force of the [CWC], stressed the leading role and the responsibility of Russia in this field. The Russian side confirmed its adherence to the Convention but at the same time noted the need to take into account the legitimate economic interests of the Russian Federation in the process of chemical disarmament. The delegation was familiarized with the course of preparations for the ratification of the convention, in particular with the target-oriented federal program of destroying stockpiles of chemical weapons. We hope that the exchange of views will make it possible for the Preparatory Commission to

understand better the problems encountered by Russia in chemical disarmament and to take them into consideration in its activities." {Official Kremlin Int'l News Broadcast 24 Oct}

12–18 October The OPCW Provisional Technical Secretariat organizes a Trial Declaration Exercise on Communications, focussed on the exchange of information on CWC declaration-related data, with the participation of 15 countries. The results are to be discussed at the Second Communications Workshop during 5-6 November. *{OPCW Synthesis* 20 Nov*}*

13 October In Oslo, the Norwegian Nobel Committee announces that it "has decided to award the Nobel Peace Prize for 1995, in two equal parts, to Joseph Rotblat and to the Pugwash Conferences on Science and World Affairs, for their efforts to diminish the part played by nuclear arms in international politics and in the longer run to eliminate such arms".

13 October At the United Nations in New York, UNSCOM Executive Chairman Rolf Ekéus presents to the Security Council his eighth six-monthly report under resolution 715 (1991) on implementation of the plan for ongoing monitoring and verification of Iraq's compliance with the disarmament stipulations of the ceasefire agreement [see 10 Apr and 29 Sep—1 Oct]. The full written report had been distributed two days previously. In the chemical area, baseline inspections have now been completed at 62 chemical sites and 18 universities, colleges and research institutes, and more than 200 monitoring inspections have been conducted. Air-sampling equipment has been installed at 6 chemical production sites. On the biological side, a total of 79 sites throughout Iraq are now within the OMV regime, of which 9, including the Al Hakam facility, are in Category A, subject to the most intense monitoring.

The report not only covers OMV progress but also provides a detailed account of new information obtained on Iraq's past CBW and missile programmes. Here can be found confirmation and rather detailed expansion of recently acquired information which UNSCOM and others had been releasing informally since mid-August [see 17–20 Aug, 21–23 Aug, 22 Aug, 25 Aug, 31 Aug, 17–20 Sep].

As regards the enormous quantity of "chicken farm" documents [see 20 Aug], the report states that these have now been inventoried and are "being arranged, after scanning, on a priority basis for examination". Most but not all of the documents seem to relate to nuclear work. The report comments further: "the bulk of the material in the missile, chemical and biological fields comes from a number of the sites where Irag's proscribed programmes had been carried out, being more comprehensive in certain areas than in others. However, documentation from the Headquarters of the Military Industrialization Corporation is not included, nor are the relevant archives of the Ministry of Defence. From recent statements made by senior Iraqi officials. the Ministry's records are still intact and detailed." Of the categories of documentation which UNSCOM believes it could be shown, but has not yet been shown, the report notes production records and records of Iraq's overseas procurement networks and sources of supply. The report observes that, without such information, UNSCOM will not be able to verify Irag's latest "full, final and complete disclosures" at all quickly.

The report addresses the rationale for Iraq's CBW weapons, acknowledging that much of the information available is still conflicting. It says, nevertheless: "Certain documentation supports the contention that Iraq was actively planning and had

actually deployed its chemical weapons in a pattern corresponding to strategic and offensive use through surprise attack against perceived enemies. The known pattern of deployment of long-range missiles (Al Hussein) supports this contention. Iraq stated...that authority to launch biological and chemical warheads was pre-delegated in the event that Baghdad was hit by nuclear weapons during the Gulf War." The report then adds a qualification: "This pre-delegation does not exclude the alternative use of such a capability and therefore does not constitute proof of only intentions concerning second use". This is the closest the report comes to suggesting that the possibility of nuclear retaliation was what deterred Iraqi use of CBW weapons [see 25 Aug]. [Note: Despite the rather extensive detail given in the report about the CW and BW weapons programmes, there is rather little in it to indicate whether the CBW missile warheads referred to would in fact have worked or been deliverable with any accuracy. Iraq's weaponization of BW agents is rather closely reported, but there is no indication of whether the resultant Iraqi weapons could in fact achieve significant aerosolization of their payload in still-viable state. History indicates that such technology has not been at all easy to acquire.]

The report states that UNSCOM's total operational expenditures will have reached \$100 million by the end of 1995, exclusive of the services which governments individually have provided. The corresponding budget for the coming year is likely to be about \$20 million. The new Iraqi disclosures may turn out to necessitate new destruction work. {\$/1995/864}

In Baghdad, Vice President Taha Mohedeen Maarouf tells reporters that the UNSCOM Executive Chairman is a "big liar". {Reuter 12 Oct}

15–16 October In London, within the framework of the BWC Russia–UK–US trilateral process [see 19 Jul], there are tripartite consultations on problems of biological weapons and peaceful biology. They take place during the visit to London of Russian Deputy Foreign Minister Georgy Mamedov in preparation for the forthcoming summit meeting between Presidents Clinton and Yeltsin. {TASS 16 Oct}

16 October In New York, the Executive Secretary of the OPCW Preparatory Commission addresses the First Committee of the UN General Assembly. He observes that the absence of the United States and Russia from the list of CWC ratifiers would seriously affect the meaningful implementation and entry into force of the Convention. He also says that delay would encourage continued proliferation, increase the temptation to develop new types of weapons, and affect the political impetus to ban chemical weapons. {Atlantic News 21 Oct}

16 October US Central Command commander-in-chief General Binford Peay speaks to reporters about Iranian manoeuvres in the Persian Gulf involving "Iranian helicopters flying over their own ships while releasing some kind of spray from aerosols". He continues: "It's possible they are looking at this as a surrogate chemical warfare operation, but I can't say that with certainty". {Helicopter News 27 Oct}

16 October At US Army Pine Bluff Arsenal, Arkansas, there is an accident involving CS munitions: apparently a stray electrical charge had ignited a canister that was being dismantled. CS munitions are currently being shipped to the arsenal from other installations across the country for dismantling and then,

early in 1996, incineration. {Arkansas Democrat-Gazette 9 Nov}

ASA Newsletter {11 Oct} has just reported that the Defense Department "is exploring the use of supercritical fluids in their demilitarization of tear gas stockpiles".

16-19 October In Paris the Australia Group [see 29 Nov-1 Dec 94] meets in plenary session at the Australian embassy. Participating are officials from the European Commission and 29 governments, including, for the first time, that of Romania. The UK Foreign and Commonwealth Office later issues the following account of the meeting: "In addition to the usual Policy Consultations, Information Exchange and Implementation/Enforcement Experts Meeting, the BW Experts Group met to review and revise the AG BW control lists. Interest in joining the AG had been expressed by several countries, all of which, as major suppliers and transhippers of chemicals, were credible candidates for membership. Discussion on the Australia Group's relationship with the Chemical Weapons Convention again dominated the agenda. Members agreed to a simple reaffirmation of the 1992 O'Sullivan statement at this stage. The Japanese briefed members on the Tokyo sarin gas attacks and the US presented a paper on CBW terrorism." {FCO Notes on Security & Arms Control Nov} The US administration later informs Congress that the Australia Group "agreed to a United States proposal to ensure the AG export controls and information-sharing adequately address the threat of CBW terrorism", adding: "This US initiative was the AG's first policy-level action on CBW terrorism". {US Newswire 9 Nov} The press release from the meeting reaffirms the intention of participating countries to be among the original states parties to the CWC. The next meeting is scheduled for October 1996.

17 October In Moscow an agreement is signed by the Russian Federation and the Republic of Udmurtiya which, among other things, gives the two sides joint authority over the destruction of chemical weapons in the republic. {Radio Russia 10 Oct in BBC-SWB 12 Oct}

17 October The World Health Organization announces that it has established a new rapid-response unit to combat the growing world-wide threat of emerging diseases. WHO Director-General Hiroshi Nakajima says: "WHO's involvement in recent epidemics of yellow fever in Kenya, plague in India [see 6 Jul] and Ebola haemorrhagic fever in Zaire have demonstrated a new and pro-active direction for WHO in responding to the needs of its member countries in combatting emerging and reemerging diseases." {Nature 26 Oct}

17–19 October In Russia, the 'First Public Hearing on the Problems of Chemical Weapons Destruction in the Saratov Region' takes place in Saratov under the co-chairmanship of the Rector of Saratov State Technical University, V Petrov, and the national coordinator of the Green Cross 'Legacy of the Cold War' programme, S Baranovsky. There are some 50 participants including officials, military, politicians, representatives of Russian and American public interest groups concerned with chemdemil questions, and private citizens. The focus of the conference is on environmental and public outreach issues, though there are scientific and technical presentations as well. {Russian Public TV 18 Oct in BBC-SWB 19 Oct}

18 October In Iraq, Oil Minister Amer Rashid issues a statement saying that Iraq no longer possesses weapons of mass destruction. It also says: "Iraq had no intention of using biological weapons unless the allies or Israel attacked Baghdad with nuclear weapons". {AFP in London *Daily Telegraph* 19 Oct}

18 October In Moscow the Deputy Chief of Russian RKhB Protection Troops, Maj Gen Viktor Kholstov, tells reporters that Russian chemical weapons are reliably controlled and guarded, meaning that all possibility of theft from storage sites is ruled out. {TASS 18 Oct in FBIS-SOV 19 Oct} He is commenting on a recent American publication [see 2 Oct].

18 October In The Hague, the Executive Secretary of the OPCW Preparatory Commission, Ian Kenyon, tells a press conference that he expects the 65th ratification of the CWC in May or June next year. In addition to the 40 signatory states that have so far deposited their ratifications, he says that "some 35 countries have assured us that they will either complete ratification before the end of the year or they will be among the first 65 to ratify". {Reuter 18 Oct}

18 October In Washington there is a meeting of the Presidential Advisory Committee on Gulf War Veterans' Illnesses [see 18 Sep]. {Gannett News Service 18 Oct}

19 October In Brussels, the Committee of ACP [African, Caribbean and Pacific] Ambassadors is briefed on the Chemical Weapons Convention by the Chairman of the OPCW Preparatory Commission, Ambassador Zacharias de Beer of South Africa. He urges all ACP countries to speed up their ratification of the treaty. {OPCW/PTS press release 20 Oct}

20 October In Russia, the Director of the Federal Security Service, Mikhail Barsukov, says in a letter to the Chairman of the Central Electoral Commission, Nikolay Ryabov, that the former chairman of the Presidential Committee on CBW Convention Problems, Lt-Gen Anatoliy Kuntsevich [see 4 Apr], is under criminal investigation in connection with the export of CW-related chemicals to the Middle East. According to the FSS, General Kuntsevich had sold 815 kilograms to a Middle East buyer in 1993; and the FSS had blocked a further 5-tonne shipment in 1994. {Interfax 22 Oct in FBIS-SOV 23 Oct} Kuntsevich is standing in the 17 December parliamentary elections as a candidate for Vladimir Zhirinovsky's Liberal Democratic Party. The party later announces that Kuntsevich will not be dropped from its list. (Under Russian law, convicted criminals are barred from running for office, but not people who are simply under investigation; if elected, they will then enjoy parliamentary immunity from prosecution.) {UPI 24 Oct} It is reported that Kuntsevich, at the time of his abrupt dismissal from the Presidential Committee in April 1994, had been said by officials to have been storing chemical weapons in an unnamed Russian city. {Reuter 22 Oct} Kuntsevich says in a radio interview that the new accusation is "a political settling of accounts, but it is hard to say which political forces are behind it". He adds: "It is no accident that this accusation was made the very night that the US Senate was discussing the ratification of the [CWC]. The aim is to make Russia the scapegoat for the collapse of the Convention and put Russia in a position of isolation." {Ekho Moskvy 23 Oct in FBIS-SOV 24 Oct}

The Middle Eastern country is later identified, on undisclosed authority, as Syria {Baltimore Sun 24 Oct}; the chemical

shipped there, as methylphosphonyl dichloride {Vil Mirzayanov in Senate testimony 1 Nov}.

20 October France, the UK and the USA announce their intention of signing the Protocols to the 1986 Treaty of Rarotonga, which establishes a nuclear free zone in the South Pacific. Protocol 2 of the Treaty commits its parties "not to use or threaten to use any nuclear explosive device" within the zone.

20 October President Clinton issues a statement in which he "urges the Senate Foreign Relations Committee to allow the full Senate to carry out its Constitutional responsibilities and to support the ratification of START II and the CWC this fall". {US Newswire 20 Oct A meeting of the Committee during which the CWC was to be discussed had, reportedly, just been cancelled: Committee chairman Senator Helms is continuing to block his committee's business [see 5 Sep], and the negotiations with him which Senator Kerry has been conducting on behalf of the White House have yet to bridge the impasse which has brought all this about. {Washington Post 21 Oct} Senator Helms responds to the President's implicit charge of irresponsibility by setting new conditions for the White House to satisfy before he will act on the CWC: he demands a review of the role of General Kuntsevich, whose chemical trading activities have just been publicized [see 20 Oct, Russia], in the negotiation of the treaty, saying: "Obviously, unless and until these concerns and those raised previously have been addressed, it would not be fair to the security and safety of the American people even to consider moving the Chemical Weapons Convention out of committee." {Reuter 26 Oct, Inside the Pentagon 2 Nov}

20 October In Cartagena de Indias, the 11th Summit of the Non-Aligned Movement ends with adoption of a long final communiqué that includes an *Appeal from Colombia*. The communiqué expresses concern at threats posed by nuclear weapons and toxic industrial waste, calling for international remedial action. It makes no mention of the CBW conventions. {Radiodifusora Nacional 20 Oct in BBC-SWB 23 Oct}

21 October In New York, where he is to participate in the ceremonial 50th anniversary session of the UN General Assembly, President Yeltsin assures UN Secretary-General Boutros Boutros-Ghali that Russia intends to ratify the Chemical Weapons Convention as soon as possible. {TASS 22 Oct in BBC-SWB 23 Oct}

23 October Presidents Clinton and Yeltsin meet for summit talks at Hyde Park, New York State. The question of US support for the Russian chemdemil programme appears to have been on the agenda. {Russian Public TV 19 Oct in BBC-SWB 21 Oct}

23 October President Clinton, in a formal report to Congress on the status of efforts to obtain Iraq's compliance with UN Security Council resolutions, says: "Iraq remains a serious threat to regional peace and stability. I remain determined that Iraq comply fully with all its obligations under the...resolutions. My administration will continue to oppose any relaxation of sanctions until Iraq demonstrates peaceful intentions through its overall compliance with the relevant resolutions." {US Newswire 24 Oct}

UK Foreign Secretary Malcolm Rifkind makes a similar statement two weeks later while visiting Saudi Arabia. {Compass 7 Nov}

23–27 October In Germany, an international trial inspection takes place in Munster, at the incineration plant and storage facility for old chemical weapons there. The inspection is conducted by technical experts from 19 member states of the OPCW Preparatory Commission and from the OPCW Provisional Technical Secretariat. The trial serves also as a German National Authority exercise, including training for escort-team personnel. {PC-XII/B/WP.8}

25 October In Brussels there is a workshop on National Implementation and Legislation of the CWC for member states of the OPCW Preparatory Commission whose representation is in Brussels rather than The Hague. The workshop is arranged by the Harvard Sussex Program under the auspices of the OPCW Provisional Technical Secretariat. The speakers are from the Secretariat, the Harvard Sussex Program and Frankfurt University. Participants are from 22 African, Caribbean and Pacific member states and also from two non-signatory states (Angola and Mozambique). {OPCW/PTS press release 26 Oct}

25 October In Belgium, in a field near the Flemish village of Krombeke, unused British CW artillery shells from World War I are found: 549 4.5-inch rounds reportedly filled with chlorine. {*Het Laatste Nieuws* 26 Oct}

25 October A US District Court in St Paul finds two Minnesotans guilty of violating the Biological Weapons Anti-Terrorism Act of 1989. The charges originate in a 1992 poison plot by a radical right-wing group involving ricin [see 4 Aug]. {Star Tribune 26 Oct}

26 October In Tokyo District Court, the trial begins of Shoko Asahara, leader of the cult Aum Shinrikyo [see 16 Jul], on charges of murder, attempted murder, abduction and production of illegal drugs. Other cultists have already appeared in court on charges arising out of the Tokyo subway and other gas attacks; more than 170 will be standing trial. {*Washington Post* 26 Oct, *International Herald Tribune* 28-29 Oct}

26 October In Moscow the Russian Government approves a draft of the new Federal programme for eliminating the country's chemical weapons, presented by Chief of the General Staff Gen Mikhail Kolesnikov. The chemdemil programme is costed at R16.6 trillion (\$3.68 billion) and plans the destruction of the 40,000 tonnes of chemical weapons in three stages ending in 2005 and the cleansing of storage areas by 2009. {UPI 26 Oct}

Addressing Russian ratification of the CWC when describing the plan at a press conference, the Chief of Russian RKhB Protection Troops, Col Gen Stanislav Petrov, says that he does not expect the Duma to ratify the treaty during its present session; he expects the question to come up before the next Duma. He urges the Duma to ratify as soon as possible. {Krasnaya Zvezda 28 Oct in FBIS-SOV 2 Nov}

26 October In Russia, at the Saratov RKhB Protection School, the second phase begins of the Russian–American Joint Evaluation Program (RAJEP) that is assessing the Russian two-stage process for destroying organophosphorus CW

agents [see 12 Sep]. {Krasnaya Zvezda 28 Oct in FBIS-SOV 2 Nov}

26–27 October In Washington at the National Defense University, the US Defense Department sponsors its second annual Counterproliferation Conference. The FY 96 Counterproliferation Support Program [see 30 Sep] is described by the Under Secretary of Defense for Acquisituion and Technology, Paul Kaminski. This \$108.2 million programme adds specific initiatives to the \$3.8 billion budgeted for FY96 in ongoing programmes, including several CBW-agent detection projects and also work on special warheads for destroying hardened or underground CBW facilities while minimizing any concomitant spread of chemicals or disease. {*Defense News* 6 Nov}

CIA Director John Deutch speaks of continuing work on CBW weapons by North Korea. He also speaks of Libya, estimating that the country has 100 tons of mustard and nerve gases in storage [see also 15 Jan 92] and saying that the Rabta plant [see 20 Sep] can readily be restarted. {Jane's Defence Weekly 11 Nov}

27 October The Slovak Republic deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention [see 8 Sep], becoming the 41st signatory state to do so.

28 October In Baku, nearly 300 people die when a subway train catches fire. Investigators from the Azerbaijani Ministry of Health Care initially attribute the high mortality to the use of nerve gas in some act of sabotage {Turan and Interfax 31 Oct in FBIS-SOV 1 Nov}, but this possibility is later ruled out when Defence Ministry experts fail to find any trace or residue of nerve gas {Interfax 3 Nov in BBC-SWB 3 Nov}.

30 October The International Court of Justice in The Hague opens two weeks of public hearings on the nuclear-weapons case that is now before it and in which there have already been written submissions from 43 governments. The case had been initiated in May 1993 when the World Health Organization had asked the court to rule on the following question: "In view of the health and environmental effects, would the use of nuclear weapons by a state in war or other armed conflict be a breach of its obligations under international law, including the WHO constitution?" A second question had been posed by UN General Assembly resolution the following December: "Is the threat or use of nuclear weapons in any circumstance permitted under international law?" The court's ruling, expected in January 1996, will be in the form of an advisory opinion. {Brahma Chellaney in International Herald Tribune 28-29 Oct, London Financial Times 31 Oct)

30 October El Salvador deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 42nd signatory state to do so.

30 October In the United States, CIA Director John Deutch is quoted on the relative merits of the different weapons of mass destruction: chemical weapons are "the weapon of choice"; nuclear weapons are too money-intensive: and biological armament "really has very little military utility when you get right down to it". {*Aerospace Daily* 30 Oct}

30 October Tokyo District Court orders the dissolution of Aum Shinrikyo [see 26 Oct]. Because Aum had made nerve gas, it must forfeit its status as a religious organization. {New York Times 31 Oct} The cult later files an appeal with the High Court. {International Herald Tribune 3 Nov}

31 October In Brussels, the Chairman of the OPCW Preparatory Commission, Ambassador de Beer of South Africa, addresses the Subcommittee on Security and Disarmament of the European Parliament.

31 October In San Diego, California, during the 123rd annual meeting of the American Public Health Association, there is a session on 'Epidemiologic studies regarding the health of veterans of the Persian Gulf War' with 12 presentations from a panel of civilian and military medical researchers. The early study results include a finding of higher mortality among Gulf War veterans as compared with soldiers who had not served in the Gulf. {*Hartford Courant* 1 Nov}

31 October–1 November In the US Senate, the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs holds hearings on 'Global proliferation of weapons of mass destruction'. The hearings take the Japanese cult Aum Shinrikyo [see 30 Oct] as a point of departure. Senator Sam Nunn, the ranking minority member, had initiated a lengthy staff investigation of the cult earlier in the year, the investigators travelling to Tokyo, Moscow, Bonn and New York to examine different aspects. In Japan they had been briefed by a number of key agencies and ministries. The study had been finished and its report is now released.

Giving evidence are 13 governmental and nongovernmental witnesses, including the leader of the New York City chapter of Aum Shinrikyo and officials of the Defense Department, CIA, FBI and Customs Service. One witness is Dr Vil Mirzayanov [see 15 Feb], who includes in his prepared statement the information that methylphosphonyl dichloride is a precursor for the synthesis of the still-secret Russian 'Novichok' CW agent [see 25 May 94] known as A-230. If this is indeed so, it would seem to follow that A-230 has not, after all, evaded the control schedules of the Chemical Weapons Convention: it would be captured by item 4 of Schedule 2. Dr Mirzayanov did not mention A-232.

Dr Milton Leitenberg, a senior fellow of the University of Maryland Center for International and Security Studies, testifies that the BW programme of the former Soviet Union "was apparently an order of magnitude larger than that of the United States at its pre-1969 peak", most of it established after the 1972 Biological Weapons Convention had been concluded, and much of it seemingly still intact despite President Yeltsin's assurances of elimination.

The Director of the CIA Nonproliferation Center, Dr Gordon Oehler, states that, besides Aum Shinrikyo, other groups have also begun using chemicals for terrorism. He cites press reporting of an incident in Turkey in which the Kurdistan Workers Party (PKK) is said to have used cyanide to poison a water supply.

1 November In Washington, a publication from the Henry L Stimson Center, *The US Senate and the Chemical Weapons Convention: The Price of Inaction*, warns that continued Senate delay [see 20 Oct] on ratification of the CWC may jeopardize America's own safety and security as well as international ef-

forts to eliminate a category of weapons that is universally abhorred. One of its chapters, by Amy Smithson, includes consideration of a scenario in which the treaty has entered into force without the United States having yet joined.

Also released by the Center is a compilation of *Views About the Chemical Weapons Convention*. Former Secretary of State Lawrence Eagleburger here states: "The [CWC] is an important part of an international structure that would increase US and global security in the next century. If we do not lead this effort to curb the proliferation of chemical weapons and initiate their global elimination, we increase the chances that we will encounter disasters in the 21st century reminiscent of those that occurred in the first fifty years of the 20th century."

2 November In the United Kingdom, the Department of Trade and Industry publishes a revised version of its draft Bill to implement the CWC [see 19 July]. The new draft, which has grown from 27 to 38 clauses, reflects comments received from inside and outside government. The DTI minister responsible, Mr Philip Oppenheim, later describes these comments to Parliament as follows: "In general, industry representatives indicated that they were in agreement with the provisions of the Bill. Other views emphasised the need for the operations of the DTI as national authority to be transparent, that it should be accountable, and that the Crown should be bound by the provisions of the Bill." {Hansard (Commons) written answers 23 Nov} The new draft has largely abandoned the concept of Crown immunity, which was one aspect of the initial draft that had been heavily criticized at the HSP London CBW Seminar [see 27 Sep]; and, by including a new "catch all" provision, responds to another Seminar criticism of the draft, that the powers it would make available would not be sufficient to support the "necessary measures" which, under Article VI.2 and VII.1 of the Convention, the UK would be required to adopt in order to implement its obligations. The new draft does not, however, incorporate transparency mechanisms to enhance accountability in regard to the strengthened powers. {ISIS Briefing 28 Nov}

The Department also produces a compliance cost assessment for the Bill. In regard to the information which the chemical industry will be required to provide in order to enable the UK to fulfil declaration requirements under the Convention, this assessment reckons that the industry will have to bear costs in the region of £9.6 million per annum. This is based on the estimate by the Chemical Industries Association that some 2000 UK plants will have to be declared. OPCW inspections might cost the industry upto another £0.1 million per year, exclusive of the costs that are refundable by the OPCW.

- **3 November** Netherlands financial support for the Russian chemdemil programme [see 24 Apr] is the subject of an agreement signed in The Hague by Defence Minister Jorris Voorhoeve and the Chief of Russian RKhB Protection Troops, Col Gen Stanislav Petrov. Dutch experts are to visit Moscow and one of the Russian chemical-weapons storage facilities during the first half of December. {TASS 3 Nov in FBIS-SOV 6 Nov}
- **4 November** In Pyongyang, reports from South Korea that CBW weapons are being stockpiled in the North [see 29 Sep] are characterized as "shameless counter propaganda by warmongers" in a *Nodong Sinmum* commentary. Also: "During the past Fatherland Liberation War, the United States and its followers ignored the demands of international law and committed

a heinous atrocity of indiscriminately using biochemical weapons in opposing our Republic and our people. As a result, innumerable innocent people were mercilessly killed and wounded and were infected by various contagious diseases such as plague and typhoid... Our people, who were direct victims of biochemical weapons and who are continuously facing the threat of chemical weapons today, put forth a proposal to make the Korean Peninsula a nuclear-free peace zone where there are no nuclear and chemical weapons [see 26 Jan 89 and 28 Dec 91]. Our people did this in order to prevent the re-emergence of such a calamity, and are making all possible efforts to bring the proposal to fruition.... We make it clear again that we have no chemical weapons." {Central Broadcasting Station Pyongyang 4 Nov in BBC-SWB 6 Nov}

- **4 November** The *New York Times* publishes a statement urging swift action by the US Senate on the Chemical Weapons Convention. Action continues to be blocked by Senator Helms [see 20 Oct]. The statement, contained in a paid-for advertisement, is signed by a group of 64 prominent scientists, business leaders, and retired military and government figures. It is widely reported.
- 5 November UNSCOM Executive Chairman Rolf Ekéus speaks, in an interview published today, about the constraints on CBW rearmament that will operate in Iraq when the present phase of UNSCOM work is complete: "There is a monitoring system which we are very proud of. We have identified all or most of the dual capabilities — the facilities, factories, universities, breweries, hospitals, etc. We study all of them continuously, using cameras and tagging equipment. We will have an import-export control mechanism in place. We hope the Security Council will adopt a resolution soon. It would make it obligatory for all states in the world that trade with Iraq to notify us about sales of items that we have defined as having dual capabilities... We also have a team left in Baghdad. They will see where the new equipment ends up and make sure it's used for peaceful purposes. We think we will have a strong system." {Orlando Sentinel 5 Nov}
- **6–8 November** In The Hague, the OPCW Provisional Technical Secretariat holds its Second Communications Workshop [see 12–18 Oct] on the communications interface between the future Technical Secretariat and National Authorities. {PC-XII/B/2}
- **6–17 November** The United Kingdom runs an international training course for CWC National Authority personnel. Those taking the course are from Argentina, Armenia, Australia, Belarus, Bulgaria, China, Cuba, Czech Republic, Hungary, India, Russia, St Lucia, Singapore, Slovak Republic, South Africa, Thailand and the UK. The course, which is based at the Royal Military College of Science at Shrivenham, is taught mainly by UK officials, but the London School of Economics and the Harvard Sussex Program also contribute lecturers.
- **7 November** In the UK House of Commons, the Defence Committee releases the report of its inquiry over the past two years into Ministry of Defence responses to health problems reported by Gulf War veterans. The committee report, *Gulf War Syndrome*, praises the Ministry for its swift establishment of a Medical Assessment Programme [see 27 Jul] but criticises its "hopelessly inadequate" level of support. Comparing and

contrasting the attitudes of the Ministry and of the US Government, the report says: "Both are agreed that there is at present no medical evidence to support the existence of a single disease or syndrome related to service in the Gulf; but whereas the US Administration, at all levels, has displayed compassion for those affected, a commitment to finding the best treatments for them and a determination to investigate the possibility of a common cause, MoD's response has been reactive rather than proactive and characterised throughout by scepticism, defensiveness and general torpor."

The report states that French forces operating in the Gulf were given "no protective immunisations against chemical or biological agents, either before or during the Gulf conflict". The report observes that no French veteran has yet complained of the putative Gulf War Syndrome, and goes on to recommend that the Ministry of Defence "seeks to pursue with all Coalition partners the possibility of a link between medical counter measures against [CBW] and the symptoms associated with Gulf War Syndrome".

The report calls for resources to be allocated to current preliminary work sufficient to allow the rapid completion of a full, independently monitored, epidemiological study. The report also recommends that "a comprehensive programme of research is established at [CBDE] Porton Down designed to investigate the short term and long term effects of the full range of [CBW] countermeasures available to our Armed Forces, in a variety of operational environments, and that the results of such research — suitably declassified — be published." {HC Papers (session 1994/95) 197}

The report is characterized as "unhelpful and disappointing" by Armed Forces Minister Nicholas Soames, but it is welcomed by the Royal British Legion. A lawyer handling 680 claims for compensation, Hilary Meredith [see 27 Jul], comments: "The government must now take action to fund adequate investigation of Gulf-War-related illnesses. After all, it must be lack of funding only that is holding this back — if not, the implication must be that the government does not care about its veterans." {Press Association 7 Nov}

7 November In San Francisco there is another meeting of the Presidential Advisory Committee on Gulf War Veterans' Illnesses [see 18 Oct]. Dr Howard Urnovitz [see 11–12 Mar] reportedly suggests to the committee that the multiple immunizations given to US troops serving the Gulf may actually have made them more susceptible to ambient CBW agents by inducing a condition known as Immune Paralysis in which the immune system becomes suppressed. He cites his finding that 75 of the 100-odd sick veterans he has now examined have tested positive for antibodies that appear when toxins interact with human endogenous retroviruses. {Gannett News Service 3 Nov}

8 November In Italy, the lower house of parliament votes unanimously to adopt legislation enabling Italian ratification of the Chemical Weapons Convention. {AFP 9 Nov}

8 November The UN Security Council conducts its 28th 60-day review of the sanctions imposed on Iraq [see 23 Oct], leaving them in place.

At a pre-review press briefing the day previously, UNSCOM Executive Chairman Rolf Ekéus said that, in addition to all its other programmes of work on weapons of mass destruction [see 13 Oct], Iraq had apparently also been studying radiologi-

cal weapons, which are not specifically mentioned in the mandate he has from the Council. He also announced that Iraq has just submitted new "full, final and complete disclosures" of its CW and BW programmes, documents which were now on their way to New York. When received, they will be verified against all sources of information available to UNSCOM, including the "chicken-farm papers" [see 20 Aug]. {Los Angeles Times 8 Nov}

8 November President Clinton extends Executive Order 12938 for a further year, declaring that the state of emergency which necessitated both it and its predecessors [see 14 Nov 94] still existed, namely the continuing threat posed by proliferation of weapons of mass destruction. {US Newswire 9 Nov}

He also transmits to the Congress a report on activities under the order. Effective 18 May, sanctions had been imposed against two foreign companies — Mainway Limited [see 26 Apr] and GE Plan — found to have engaged in chemical weapons proliferation activities, the nature of which is described in a classified report to Congress.

President Clinton addresses the Chemical Weapons Convention: "I must report my disappointment that the United States is not yet among those who have ratified. The CWC is a critical element of US nonproliferation policy and an urgent next step in our effort to end the development, production, stockpiling, transfer, and use of chemical weapons. As we have seen this year in Japan, chemical weapons can threaten our security and that of our allies, whether as an instrument of war or of terrorism. The CWC will make every American safer, and we need it now." {US Newswire 9 Nov}

8–9 November In Munich, at the Federal Armed Forces Medical Academy, the German Defence Ministry convenes its Second Conference on Medical Biological Protection. The main topic is "New and re-emerging infectious diseases and their implications for medical biological protection". Papers are presented not only by German BW defence and other scientists but also by governmental and nongovernmental scientists from allied and other countries, including Austria, Canada, Russia, Turkey, the UK and the USA. The third conference in the series is scheduled for 6–7 November 1996.

9 November President Yeltsin issues a decree confirming the status of the Interdepartmental Commission on Chemical Disarmament which he had instituted earlier in the year [see 24 Mar] under the chairmanship of his National Security Adviser, Yuriy Baturin. According to a wire-service report, the basic functions of the Commission include: "drafting recommendations and proposals to the President and the Government of the Russian Federation on the main directions and organization of work linked to training the country for chemical disarmament, destroying chemical weapons stores, closing down or converting undestroyed production plants, providing for international inspections and implementing other international commitments in the field of chemical weapons". {TASS 9 Nov in FBIS-SOV 9 Nov}

9 November In the United Kingdom, at the army's Bramley Training Area near Basingstoke, Operation Cornelius is concluded: the removal of nearly 7000 rounds of buried ammunition including 250 rounds of suspected World War I chemical munitions. The latter have been sent to CBDE Porton Down for analysis and destruction. {PA 9 Nov}

9 November Chinese companies have been assisting a chemical-weapons programme in Iran, according to US Deputy Assistant Defense Secretary Bruce Reidel when testifying before the House International Relations Committee. He says: "Chinese firms have provided some assistance, both in terms of the infrastructure for building chemical plants and some of the precursors for developing agents.... We continue, when we become aware of such incidents, to raise them with the Chinese Government to the fullest extent we can while protecting intelligence sources and methods." He also says: "China's chemical industry is very rapidly growing at this time, and not all facets of it may be under the fullest scrutiny of the Chinese Government." {New York Times 10 Nov}

The Iranian Foreign Ministry issues a statement describing the testimony as "another baseless allegation that the US administration makes in order to garner votes". {*Tehran Times* 12 Nov as quoted by Xinhua 12 Nov as in BBC-SWB 13 Nov}

10 November Commonwealth heads of government, meeting in Auckland, New Zealand, issue a *Statement on Disarmament* in which, among other things, they urge ratification of the CWC at the earliest possible date and call again for the strengthening of the Biological Weapons Convention. {Xinhua 10 Nov}

13 November The US Army's operational requirement for a 100-km-range helicopter-carried BW detection capability which initiated the Counterproliferation LIDAR Program in April has brought two US national laboratories, Los Alamos and Livermore, into coöperation in a \$15 million 21-month technology-development effort. Field tests under ideal conditions at Dugway Proving Ground in 1993 showed that a Los Alamos system using commercial 1.06-micron lasers and a Sun workstation set up for back-scatter analysis, carried on a Black Hawk helicopter, could detect airborne aerosol 53 km away [see also 6 May 94]. Los Alamos is now building two "fully ruggedized" prototypes, while Livermore is developing a new eye-safe (1.5-micron) laser for the system. The task of characterizing the particles comprising the detected aerosol would fall to ground-vehicle-mounted Biological Identification and Detection Systems. {Aviation Week & Space Technology 13 Nov}

14–17 November US Army Edgewood Research, Development and Engineering Center hosts its annual Scientific Conference on Chemical and Biological Defense Research.

A paper from Germany describes how the fill of a 50-yearold 150mm chemical artillery shell recovered from Munsterlager CW proving-ground was found to comprise, not tabun or mustard gas as was relatively common, but sarin nerve-gas; and the sarin was of better than 80 percent purity.

A session of the Conference is devoted entirely to "Less-Than-Lethal". Besides papers on two liquid irritant agents — EA 4923 (a methoxycycloheptatriene) and Oleoresin Capsicum, sometimes known as agent OC — and the apparently potentiating effect of the muscle-relaxant vecuronium on the induction of sleep in mice by a mixture of the hypnotic etomidate and the neuroleptic azaperone, there is a review of past work at Edgewood, the abstract of which opens: "Among the most mature of Less-Than-Lethal technologies are antipersonnel chemicals that render an adversary incapable of carrying out a military mission or criminal activity without permanent harm to people or property. Potential military missions include peacekeeping operations; crowd control; embassy protection;

CWC Non-Signatory States

as of 12 December 1995

Bosnia-Hercegovina Macedonia, FYR of Yugoslavia

Bhutan

Iraq

Jordan

Kiribati

Lebanon

Niue

North Korea

Palau

Solomon Islands

Syria

Taiwan

Tonga

Tuvalu

Vanuatu

Andorra

Angola

Botswana

Egypt

Eritrea

Libya

Mozambique

Sao Tome & Principe

Somalia

Sudan

Antigua & Barbuda

Barbados

Belize

Grenada

Jamaica

Suriname

Trinidad & Tobago

160 states have signed the CWC, 45 of which have deposited instruments of ratification

and counterterrorism. Law enforcement applications include use by local, state and national law enforcement agencies in hostage and barricade situations; crowd control; close proximity encounters; prison riots; and to halt fleeing suspects. Depending on the specific scenario, several classes of chemical have potential use, to include: potent analgesics/anesthetics as rapid acting immobilizers; sedatives as immobilizers; and calmatives that leave the subject awake and mobile but without the

will or ability to meet objectives. Scientists at Edgewood have studied Less-Than-Lethal chemicals for over forty years." Elsewhere in the conference, Edgewood scientists present papers on medetomidine and carfentanyl congeners.

15 November The European Parliament adopts a resolution expressing deep concern that 6 of the 15 states members of the European Union have not yet ratified the Chemical Weapons Convention: Belgium, Ireland, Italy [but see 8 Nov], Luxembourg, Portugal and the United Kingdom [but see 2 Nov]. Further, the resolution calls upon "the Member States to ensure that sufficient powers and resources are available for the operation of an active, effective and transparent compliance-monitoring system in their territories". The resolution also calls upon the European Commission "to prepare a report on the legal aspects of the implementation of the [CWC] in the Member States to allow coordination of their chemical export controls and other regulations in this area in line with their individual commitments under the terms of the...Convention".

15 November In the United Kingdom, the 1995/96 session of Parliament is opened by the Queen. She announces that her government will introduce legislation to ratify the Chemical Weapons Convention. Next day, the Chemical Weapons Bill receives its First Reading in the House of Commons. The Bill is identical to the second draft which the Department of Trade and Industry had published two weeks previously [see 2 Nov].

A widespread expectation is that the Bill will become law in about February 1996, at which point the UK will be able to ratify the Chemical Weapons Convention.

16 November In China, coinciding with a visit by US Assistant Defense Secretary Joseph Nye, the State Council issues a White Paper on Arms Control and Disarmament. {Kyodo 16 Nov} In regard to chemical weapons, this reaffirms that China "does not produce or possess chemical weapons". It continues: "China demands that, in keeping with the stipulations of the [Chemical Weapons] Convention, the country leaving chemical weapons in other countries destroy all such weapons as soon as possible. China hopes that the Convention will go into effect at an early date and be thoroughly and effectively implemented." Details are given of the measures which China has adopted for controlling exports of dual-use chemicals and chemical technologies; the chemicals it has placed under such control are those listed in the CWC Schedules.

Later the White Paper says: "In 1984, China acceded to the [Biological Weapons] Convention...and since that date it has fully and conscientiously fulfilled its obligations under the Convention... China supports measures that help strengthen the effectiveness of the Convention. It will actively join in discussions of the Ad Hoc Group on promoting international cooperation, enhancing trust, strengthening verification and other issues." {Xinhua 16 Nov in BBC-SWB 17 Nov}

19 November UNSCOM Executive Chairman Rolf Ekéus arrives in Kuwait to begin briefing-vists to the six member states of the Gulf Cooperation Council. His aim is to consolidate political and financial support for the work of UNSCOM. {Reuter 20 Nov}

20 November In Kiev, the senior Ukrainian chemical CBW defence officer, Major General Viktor Litvak, tells a press con-

ference that Ukraine will be able to ratify the CWC next year. {TASS 20 Nov}

20 November The Sudanese Government attacks areas in the south of the country around the Namang mountains and outside Kadugali town with chemical bombs dropped from aircraft piloted by Iraqis, according to a statement issued five days later in Cairo by the opposition Ummah Party, quoting eye-witness accounts. {AFP 25 Nov}

20 November The OPCW Provisional Technical Secretariat currently has a staff of 115 people from 44 countries on fixed-term contracts. *(OPCW Synthesis* 20 Nov)

22 November The UK Government informs Parliament that details of declarations required from the UK under the Chemical Weapons Convention will be made available to the public when they are passed to the OPCW. {Hansard (Commons) written answers 22 Nov}

23 November In the UK House of Commons, the Chemical Weapons Bill [see 17 Nov] receives its Second Reading. It is clear from the debate, which is not, however, a confrontational one, that members are contemplating the tabling of several amendments to the Bill during the committee stage, especially as regards transparency mechanisms. {Hansard (Commons) 23 Nov cols 810–848} The Third Reading, immediately following the committee stage, is set for 6 December, after which the Bill will pass to the House of Lords for its First Reading there, with the Second Reading probably during the second week of January.

24 November Uzbekistan signs the Chemical Weapons Convention [see also 31 Aug], the 160th state to do so.

24 November In Sri Lanka, chemical weapons are reportedly used in fighting between Tamil Tiger guerrillas and government forces attacking the Tamil stronghold of Jaffna. {Reuter 25 Nov, AFP in London *Sunday Telegraph* 26 Nov} Rumours of imminent chemical use some weeks previously had caused the Army to issue gas masks to some of its troops, for in 1990 the rebels had reportedly used chlorine gas in an attack on an army camp. {Reuter 1 Nov} The chemical weapons now being used are later said to be volley-fired tear-gas canisters. {AFP 26 Nov}

26 November In Canberra, Prime Minister Keating announces particulars of the Australian initiative for a nuclear weapons free world. What is to be called the *Canberra Commission on the Elimination of Nuclear Weapons* is to comprise 15 eminent people from around the world. Its mandate is to include the development of recommendations on durable global and regional security arrangements, including study of the link with other weapons of mass destruction and their control or elimination. {Senator Gareth Evans in *International Herald Tribune* 5 Dec}

27 November Georgia deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 43rd signatory state to do so.

27 November Namibia deposits with the UN Secretary-General its instrument of ratification of the Chemical Weapons Convention, becoming the 44th signatory state to do so.

- **27 November** In Geneva, the Ad Hoc Group of BWC States Parties [see 10–21 Jul] reconvenes for its third session. The session will end on 8 December.
- 27 November On UK television, Granada *World in Action* reports that the former Yugoslavia had manufactured nerve gas and other chemical weapons, and that Serbia still has the capacity to do so. There is footage of samples being collected from the now-derelict pilot-plant facility at Potoci near Mostar in Bosnia-Hercegovina [see 7–8 Dec 93] from which, in 1992, equipment had been removed by the Yugoslav National Army. Analysis of these samples at the Swedish chemical defence laboratories had shown one of them to contain traces of sarin degradation product. The documentary estimates that there could now be at least 30 tonnes of nerve gas stored somewhere in Serbia. {*ASA Newsletter* 11 Oct, London *Independent* 27 Nov}
- **27–29 November** UNSCOM Executive Chairman Rolf Ekéus is in Baghdad for high-level talks. He receives new information on Iraqi CBW and missile programmes. {AFP 29 Nov}
- **27–29 November** In Ethiopia, the fourth African Regional Seminar on National Implementation of the Chemical Weapons Convention is held in Addis Ababa. {*OPCW Synthesis* 20 Nov} Opening the meeting, the Vice Minister of Foreign Affairs, Dr Tekeda Alemu, states that Ethiopia has accomplished most of the work necessary for ratifying the Convention. {*Ethiopian Herald* 28 Nov}

- **28 November** In Japan, the Cabinet approves an ordinance bringing into force the domestic legislation which had been adopted in 1982 to implement the Biological Weapons Convention. {Kyodo 28 Nov in BBC-SWB 30 Nov}
- 29 November In Brussels the NATO Defence Planning Group and the NATO Nuclear Planning Group meet in ministerial session. They issue a final communiqué which includes this: "16. We noted with satisfaction the Alliance work on the defence implications of the proliferation of nuclear, biological and chemical (NBC) weapons and their delivery means, and endorsed the recommendations of the Senior Defence Group on Proliferation (DGP), including on needed military capabilities. These military capabilities should support NATO's central objectives for dealing with proliferation: prevent proliferation from occurring or reverse it through diplomatic means, deter use, and protect NATO territory, populations and forces from NBC attacks. Prevention of proliferation remains our primary aim, but we noted that NBC proliferation poses a direct military risk to the Alliance and must be taken into account to maintain NATO's ability to safeguard the security of its member states. Alliance military preparedness to deal with this risk is an important aspect of NATO's adaptation to the new security environment. We agreed that an appropriate mix of conventional response capabilities and passive and active defences, coupled with effective intelligence and surveillance means, would complement Alliance nuclear forces and would reinforce the Alliance's overall deterrence posture against threats posed by proliferation." {Atlantic News 1 Dec}

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- Averre, D L. "The Mirzayanov Affair: Russia's 'Military-Chemical Complex", *European Security*, vol 4 no 2 (Summer 1995), pp 273–305.
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