

CONFIDENTIAL CONFERENCE NOTES

Wilton Park CBW Arms Control Seminar III, Wiston House, 25-27 September 1992

Prof Bryan BARRASS [CBDE Porton Down, and UNSCOM Commissioner]

- 1 UNSCOM experience that is relevant to OPCW (and BWCTO): (a) need for continuity in inspectorate, (b) the safety document for inspection developed by UNSCOM, (c) UNSCOM's experience with its database management system, and (d) UNSCOM's *regional* office in Baghdad.
- 2 Instability of the Iraqi GB was due to the unorthodox sequence in which orthodox precursors were used. If the Iraqis had reordered their reactions, the product would have been more stable.
- 3 The Iraqi FFC of June 1992 turned out to lack information on suppliers and to have various other gaps.
- 4 UNSCOM could find no indications of any Iraqi R & D on BW defence equipment--masks, detectors, vaccines.
- 5 [From D Griffiths' notes] Badly corroded and unstable chemical agent munitions, such as the 122mm rockets, which could not be transported to Al Muthanna have been destroyed on site using a technique described as "Explosive Demolition and Incineration". The method employed was to place these rockets, ten at a time, in a pit dug in the desert and both warhead and propellant were subjected to simultaneously detonated explosive charges. A quantity of fuel was placed in a container in the pit beneath the rockets so that, as the explosive blew the warheads and motors apart, the fuel ignited and the issuing agent destroyed in the fireball. This rather spectacular technique was carefully monitored by arrays set up at a distance of 200 metres and 1500 metres down wind and in no case has any trace of agent been detected. The Inspection Team experts believe that this technique has been fully proven as safe and fit to use.
- 6 The temperature inside the fireball used to destroy Iraqi CW rockets exceeds the working temperature of the mustard-incinerator that is being built. And since no agent has been detected downwind of the fireball, it seems a good cheap chemdemil technique. But is it "open pit burning" in the sense of the CWC?
- 7 The place where CS munitions was stored was Muhamadiyet, which was very heavily bombed during the war, destroying most of the stocks. But this has not yet been verified by UNSCOM. If any CS stocks are left, incineration will be the preferred way to get rid of them.
- 8 On CW matters, UNSCOM found the Iraqi technical people to be "brisk, businesslike and cooperative". This was not the case for nuclear and ballistic-missile matters, to the point of active deception, a track on which the Iraqis had also set out in regard to BW.
- 9 The Iraqi binaries used a 50/50 by weight mix of cyclohexanol and isopropanol.

Tim TREVAN [UNSCOM]

- 1 UNSCOM had found three undeclared strains of BW agent.
- 2 The French BWC CBM-F speaks of research "in support of capability" during 1981-83.
- 3 Plant chemdemil at Muthanna began yesterday (24 Sep 92), with the hydrolysis of a 350-litre batch of GB/GF. As the process is proved, the batch-size will be increased. The start of mustard incineration is expected, tentatively, in early November.

Nikita SMIDOVICH [UNSCOM]

- 1 UNSCOM currently costs about \$2 million per month.

Johan MOLANDER [Swedish Foreign Ministry]

- 1 The Muthanna establishment was well known outside Iraq even before CW was used against Iran.
- 2 Main flaw of the CWC is that it may not be cost-effective. This is something which the PREPCOM and the OPCW must remedy.
- 3 Export controls must be continued, for the CWC is not enough. But CWC-parties *must* be treated better than non-parties--in which regard NPT experience has not been good.

Kathleen BAILEY [National Inst for Public Policy Inc]

- 1 Spoke of a hidden stockpile in Iraq of high-purity mustard gas. Spoke also of a GB production plant still concealed in Iraq despite UNSCOM's efforts.
- 2 Her cheating study had taken MSQ of CW agent to be 100 tons.
- 3 Her presentation dwelt in some detail on the costs of CWC implementation, which she estimated (citing H Beck) at \$145.8M per year. She differentiated categories of cost: financial vs information-loss vs constitutional. [D Griffith's typescript of her full presentation is appended]

↳ to be E2.6 copy

John NICHOLS [FCO/ACDD no 2]

- 1 EG(C)O amendments will be coming in later this year that will extend CW dual-use technology controls and exert the first BW-related controls.
- 2 He heads the UK delegation at the Australia Group.
- 3 I asked him why, if the UNSCOM/OMV list included cyclohexanol, the Australia-Group list didn't.

Iain McCRORY [FCO/ACDD, CBW proliferation policy]

- 1 He had read my paper on the Australia Group and agreed with it.
- 2 The Australia Group is set to expand this December.
- 3 He was the author of that DTI-released paper on CW export controls.
- 4 Neither France nor Italy is able to exert catch-all controls: illegal for them.
- 5 France has some CW precursors on both its civil and its military list.
- 6 France is not able, under domestic law, to identify particular end-countries as targets for export controls.

Michel FERRIER [SGDN France, Chairman of the French Export Control Committee]

- 1 Effectiveness of an export control system depends on (a) intelligence and (b) governmental will
- 2 The economic impact of the Australia Group and the CWC is/will be low. Both are driven by political considerations.

Ambassador KAMAL [Pakistan]

- 1 Says that phosgene is extensively used in his country as a fumigant in silos. The CWC will increase its costs considerably, thereby having a substantial impact on the country's economy.

Ambassador Sergei BATSANOV [Head of Russian CD delegation]

- 1 The Soviet data to be exchanged under the Wyoming MoU had had to be declassified first, of course, for release to the USA. There had been some problems in doing so. But Russian authorities subsequently reclassified the data. They are now having to be declassified all over again.
- 2 Russian industry is not listening to government the way it did in the past.
- 3 Ukraine will join the CWC.
- 4 "Within Russia there are serious problems" about signing the CWC. Pressure has developed against the treaty within the bureaucracy during the past couple of

- months. Some of the opposition is expressed in terms of security--e.g. no verification of the development prohibition, and also the fact that the economic weakness of Russia precludes rapid CW rearmament. But most of the criticism of the CWC is economic/financial--e.g. the \$1 bn it is said that Art IV/V verification alone will cost, and the preclusion of conversion. Maybe, the way the CWC has ended up, the Art IV/V verification provisions are overdone, especially in view of the weakened challenge provisions.
- 5 As for proliferation, Russia has things under rather good control--except for the scientists. There had been no large USSR/Russian interests vested in chemical exports; and Russia has managed to reconstruct the prior Soviet export-control structures.
 - 6 He spoke of Soviet BWC violation. In Russia, however, the political leadership had finally prevailed over "some more narrow interests". Admission of Soviet violation is contained in the Russian BWC CBM-F declaration. What is needed now is "careful work on clarifying the situation"--not emotional responses, which might well lead to additional troubles. The USSR had some BW-related facilities in non-Russian republics: some of these had been declared closed, "but again the problem remains".
 - 7 During discussion of the recent trilateral BWC-compliance statement, he said all three sides had made mistakes and that the whole thing could have been handled better. About three years ago there had been exploratory US/SU bilateral consultations on BWC verification. A number of possible measures had been discussed, and the consultations had been useful in generating ideas and for subjecting them to professional criticism. If something had resulted from those talks, a channel for addressing compliance concerns less emotionally might have been created.
 - 8 He had with him a copy of the recent CIS agreement on CW, which he showed me. The typed-in spaces for signatures were empty only in the cases of Belarus and Ukraine.
 - 9 "Politically very difficult to argue against [CWPF] conversion in Russia today", and dangerous. The original owner of the chemical weapons production facilities was the USSR Ministry of Chemical and Petrochemical Industry. The facilities still remain unprivatized, meaning that decisions about their future are state decisions.
 - 10 Russian cooperation with USA on chemdemil is still rather limited. Russian gut preference is for hydrolytic methods rather than incineration.
 - 11 Responding to a question from Graham PEARSON about the absence of FSU chemical weapons outside Russia (in contrast to FSU nuclear weapons), he suggested that this was because the weapons were withdrawn into Russia in anticipation of CWC destruction/verification.
 - 12 Sees a BWC verification regime as being ten years away. Not obvious that the OPCW should take it on since there are bound to be very large differences between CW and BW inspections.

Col Dr Volker BECK [German Defence Ministry]

- 1 At the end of WW2, a trainload of CW munitions en route to their Baltic dumping ground caught fire. The CW agents were effectively incinerated. No casualties.
- 2 He asked if I knew of the ALSOS BW review. I promised to send him a copy, implicitly in return for a copy of the French BWC CBM-F.
- 3 He spoke of a US Army BW history.
- 4 The toxin most heavily produced in Germany is tetanus toxin. The data available on this production provide a way for differentiating civil/defence from military/offense exploitations.

Prof Jack MELLING [Acting Director, CAMR Porton Down]

- 1 The factor differentiating offensive from defensive BW production is $10^4 - 10^5$.

John BARTLETT [Senior Adviser for Strategic Studies, CBDE Porton Down]

- 1 Porton reckons the MSQ of a modern CW agent to be 1000 tons, *pace* Kathleen BAILEY's 100 tons. This is based on the estimate that the minimum weight of a single tactically sound CW attack is about one ton.
- 2 Sees very little transferability of CWC verification technique to BWC verification.

Graham PEARSON [Director-General, CBDE Porton Down]

- 1 VEREX II is set for 23 November - 4 December. VEREX III/IV in March 1993, probably.
- 2 Dwells on a concept of "national profile" for BWC verification, the profile being the baseline against which possible perturbations, indicating noncompliance, may be sought.