

**AD HOC GROUP OF THE STATES PARTIES
TO THE CONVENTION ON THE PROHIBITION
OF THE DEVELOPMENT, PRODUCTION AND
STOCKPILING OF BACTERIOLOGICAL
(BIOLOGICAL) AND TOXIN WEAPONS
AND ON THEIR DESTRUCTION**

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**THE ROLE OF TRIAL INSPECTIONS IN INFORMING ARMS CONTROL
NEGOTIATIONS AND IMPLEMENTATION, WITH PARTICULAR EMPHASIS ON THE
BIOLOGICAL AND TOXIN WEAPONS CONVENTION (BTWC)**

INTRODUCTION:

In the past decade or so, considerable effort has been directed to the conduct of “trial inspections” in relation to various multilateral arms control agreements such as the Chemical Weapons Convention (CWC) and the Treaty on Conventional Armed Forces in Europe (CFE), also including the Open Skies Treaty equivalent in the form of “trial overflights”. In the case of the CWC, the vast majority of these trial inspections occurred while the agreement was being negotiated. With regard to CFE and Open Skies, a good deal more of the action came between signature and implementation. More recently, another variant has surfaced in the form of trial inspections conducted with respect to the possible strengthening of an existing agreement lacking effective verification provisions: the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (BTWC).

The notion of a “trial inspection” requires some elaboration, although not necessarily precise definition. With its use during the CWC negotiations, the term evolved to approximate an operational inspection of a civilian or government facility, or geographical area, according to some (loosely) agreed procedural framework, and this notion has spilled over to other arms control contexts. One possible by-product of a desire to be able to compare the procedures and results of trial inspections is that some particularly valuable experience may be lost if one applies the (loosely defined) terminology too rigorously, as will be mentioned at appropriate points below.

This paper¹ provides an overview of the purposes associated with decisions to conduct trial inspections. The following two groupings might apply to these purposes:

- inspections during the negotiation phase to inform the negotiation and propose a means to implement an eventual agreement. Such inspections may serve political or practical purposes, or both; and

- preparation for implementation after an agreement is concluded.

There is no doubt that much of the public record of trial inspection experience in a multilateral setting emphasizes trial inspections intended to inform (perhaps even to influence) in some way the course of the various negotiations. Less is publicly known about post-agreement trial inspections, falling between the negotiation and implementation phases, although this was an area that received considerable attention in the CFE context as it has also received in the run-up to Open Skies implementation. Consequently, this paper will have somewhat less to say on the post-agreement aspect of the subject. It does not address the growing, and already very substantial, body of experience deriving from actual treaty implementation inspections.

The source material for this analysis can be found in various national papers submitted in relation to the CWC, CFE and Open Skies Treaty, including Canadian papers in each of those venues. However, since the largest and most varied body of experience relates to the CWC, it should not be surprising that this paper does draw considerably upon that experience. The paper concludes with the BTWC and a detailed report of the results of the trial inspections reported in the context of the Experts' study on verification of that Convention (VEREX: 1991-93). Those results are augmented with a brief synopsis of the report submitted by the delegation of the United Kingdom at the BTWC Special Conference in September 1994.

THE CHEMICAL WEAPONS CONVENTION:

Opened for signature: 13 January 1993

Entry into force: Pending ... will enter into force 180 days after the date of the deposit of the 65th instrument of ratification, but in no case earlier than two years after its opening for signature.

A fairly quick examination of the Conference on Disarmament (CD) documentation from 1979 through 1992 will reveal that some 30 countries² have conducted "trial inspections" and reported on them to the CD. Although most of the activity fell within the period 1988-1992 -- with a loosely agreed framework having been established in CD/CW/WP.213 of 19 September 1988 -- there was also important activity that preceded those dates and the new terminology. Such "visits" and "workshops", if one recalls the earlier descriptive terms, often had similar objectives to those that later came to be associated with "trial inspections": to demonstrate practicability or to identify potential problem areas.

To reinforce the point, it may be useful to identify a few instances of such earlier activity bearing a strong resemblance to a "trial inspection" :

- From 12-14 March 1979, the Federal Republic of Germany hosted an international workshop on the verification of the non-production of chemical weapons. Fifty-five participants from twenty-four countries had the opportunity to visit a production plant from a choice of three major chemical companies. The purpose of the visit was to become acquainted with the practice of international on-site

inspection, including due attention to identifying site signatures such as safety infrastructure and to the potential convertibility of commercial facilities to the production of chemical warfare agents. (See CD/37, 12 July 1979.)

- From 14-16 March 1979, the United Kingdom hosted participants from nineteen countries to an inspection of a former nerve agent production plant in the process of demolition at Nancekuke, and to a tour of a civilian chemical factory. (See CD/15, 24 April 1979.)
- From 15-16 November 1983, the United States of America hosted forty-one participants from twenty-five countries to a workshop at its chemical weapons destruction facility at Tooele, Utah, to give CD delegations a first-hand look at the actual procedures used by the United States for destruction of chemical weapons and to provide a forum for discussion of various means of verifying destruction of chemical weapons. (See CD/424, 20 January 1984.)

These were followed by other such contributions. As mentioned earlier, it was not until September 1988 that a CD working paper presented suggestions -- said not to be binding or mandatory -- listing issues of relevance to trial inspections.³ The paper was divided into three parts, with the first part providing a general approach to the development of scenarios for trial inspections; the second part providing a detailed approach in the form of a checklist for the elaboration of procedures for the conduct of trial inspections; and the third part providing a list of issues which might be addressed by trial inspections.

Besides assisting states in preparing their trial inspections, this CD working paper was also implicitly intended to facilitate greater comparability in structure and content of subsequent national reports; and to facilitate drawing conclusions related to the adequacy of procedures under discussion with regard to the conduct of routine and challenge inspections. Without repeating the objectives appearing in the working paper, it may suffice to say that the intention was to assess the degree of detailed examination required to determine that the facility and materials were being used in a manner consistent with declarations or, more generally when declarations were not available, with purposes not prohibited by the (future) CWC. Specific attention was to be given to assessing the relationship between the necessary assurance of compliance and the protection of commercial confidentiality.

Subsequent trial inspection reports made an effort to conform to this loose framework, while addressing quite a variety of facilities that could potentially be subject to routine or challenge inspections. For example, such facilities included:

- Schedule 2 and Schedule 3 chemical producing plants;
- phosphorus-based insecticide production plants;
- single-purpose production facilities;
- multi-purpose production facilities;
- military ammunition depots;
- military operational airbases and army bases;

- a military single small-scale facility preparing Schedule 1 chemicals for research for protective purposes;
- pharmaceutical production facilities;
- nuclear weapon storage and research/development sites;
- civilian nuclear facilities;
- sensitive communication centres; and
- a command and control facility.

Similarly, the operational scenarios and inspection modalities varied considerably and included:

- strictly national inspections;
- inspections by one country of another country;
- joint (multinational) inspection team working as a unit to inspect a facility;
- inspections allowing free interchange between inspection team and facility personnel, to attempt to maximize feedback and the mutual learning experience in a short period of time (the UK conducted a half-dozen “walk-through talk-through” inspections); and
- inspections involving rigorous role-playing, sometimes with anomalies built into pre-inspection declarations or exercise activity.

Drawing upon the various trial inspection reports, it might be possible to distil the following purposes, characterized for simplicity as “political” or “practical” for discussion only:

Political:

- To provide a “jolt of energy”, by demonstrating to senior negotiators, and technical advisors from capitals, that there are practical solutions to problems that negotiators had only considered up to that time in theoretical terms, e.g. the ability to follow and account for the destruction of quantities of weapons.
- To target key political issues extending beyond the scope of the particular negotiation but very much of concern to it, as in the case of ensuring that unrelated national security information (NSI) as well as sensitive commercial proprietary information (CPI) could be protected while still meeting the verification requirements of the treaty under consideration. Multinational inspections were seen by some to be particularly relevant to such issues.
- To broaden international commitment to and involvement in the negotiations, not only by encouraging national government submissions but also by promoting multinational efforts.

- To engage, at the national level, other government departments as well as representatives of industry so as to increase awareness about the negotiations, to promote contributions to national submissions or to international round-tables (e.g. on legal matters, on inspection procedures, and on commercial confidentiality concerns).

Practical:

- In the first instance, to develop a general appreciation of resource requirements (e.g. types of equipment and equipment capabilities, personnel numbers and skills), and of operational modalities (e.g. timelines for notice and conduct of inspection, amount of access and to what, range of on-site activities, command and control of inspection activity, and logistics backup).
- Later, to test procedures gaining some currency in the negotiations, according to proposed guidelines (CD/CW/WP.213).
- To develop new procedures for possible incorporation into the text of the treaty where no procedures existed (e.g. securing the site, sampling, transport of samples, analysis, protection of NSI and CPI consistent with the effective verification requirements of the treaty).
- To determine the utility and practicality of records auditing while also protecting CPI.
- To assess difficulties/modalities associated with the question of the presence and role of an Observer from the State requesting a challenge inspection.
- To train the participants in organizing and carrying out inspections or, alternatively, in escorting inspection teams (and to help in the development of related training programmes).
- To assess the utility of different types of equipment (e.g. personal protective equipment, alarms, detection equipment including ultrasonic or radiographical methods, sampling and analysis equipment).
- To consider procedures related to the receipt of an inspection team at the point of entry and at each subsequent stage of the inspection, including data requirements for on-site briefings.

At a seminar held in The Hague on 2 October 1993 on the subject of national trial inspections, the Seminar Chairman and others pointed to the continuing need for trial inspections now that the CWC has been opened for signature. He particularly emphasized the need to acquaint national chemical industries with the implications of the Convention, although it was clear that he was also anxious that all (eventual) States Parties understand

what to expect once the CWC enters into force. This Seminar also provided an opportunity to point to the role that each National Authority will have to play in ensuring that inspections proceed smoothly.⁴

Judging from the papers that were distributed at the seminar, few participants were in a position to report on any trial inspection activity undertaken since the CWC was opened for signature on 13 January 1993. A French paper briefly described its “present programme”, intended to test the “new” challenge inspection provisions agreed in the negotiation end-game as well as to prepare the training programme offered by France to candidates from signatory countries. Inspector training will undoubtedly provide one main motivation for trial inspections, at least in those countries that have contributed or will contribute training programmes to the Organization for the Prohibition of Chemical Weapons (OPCW).⁵

One can eventually expect to see some focus on trial inspection activity that will have less to do with industry familiarization and inspector training than it will with the development and refinement by signatories of “managed access” procedures in order to protect national security information (NSI) unrelated to the CWC. Perhaps it is worthwhile to recall what the CWC has to say about the Conduct of Challenge Inspections Pursuant to Article IX:

“38. The inspected State Party shall provide access within the requested perimeter as well as, if different, the final perimeter. The extent and nature of access to a particular place or places within these perimeters shall be negotiated between the inspection team and the inspected State Party on a managed access basis.”⁶

It would seem that the UK and the USA are well ahead of others in considering such matters, but eventually they will attract attention elsewhere too. Because there is only the mere outline of managed access procedures appearing in the CWC⁷, some of this experience may eventually be shared. In particular, it will be necessary for all parties to be clear about the boundaries of what would be an acceptable managed access proposal by the inspected State Party, and what would be unacceptable. It is likely that some of this will be learned through trial and error after entry into force of the Convention, which would be an argument for greater national attention now -- including in training courses.

TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE (CFE):

Opened for signature: 19 November 1990

Entry into force: 17 July 1992 (provisionally; all subsequent timings based on this date)
9 November 1992 (officially)

Prior to the Treaty’s opening for signature 19 November 1990, a number of countries had already set in place courses to begin the task of establishing a roster of inspectors. More interesting for the purposes of this paper is the activity undertaken between the Treaty’s opening for signature and its (provisional) entry into force twenty months later on 17 July 1992.

In Canada's case, the slate of international activities began quickly in January 1991 with a Canadian team inspecting an army base and an airbase in The Netherlands (with observers from Western European Union countries present). The purpose of this inspection, as in the case of others that were to follow elsewhere, was twofold:

- to test the provisions of the Protocol on Inspection of the CFE Treaty for possible areas of ambiguity or potential difficulty; and
- to train inspecting and hosting personnel.

Often, in thinking of trial inspections, one tends to focus on the tasks to be performed by the inspectors and the inspection team as a whole. Equally important, of course, is the role to be played by the host/escorts, who must be fully conversant with the Treaty obligations and operational procedures -- and have the ability (and authority) to resolve potential areas of dispute and find acceptable solutions on the spot when different understandings might arise.

That accounts for the fact that CFE trial inspections were as often devoted to multilateral exercises as they were to bilateral efforts. To give an example, the Canadian Forces Base in Lahr, Germany, prior to its recent closure, contained a few USA buildings within a small secure compound on the larger base. In planning to receive an inspection at this Canadian establishment, all three countries -- Germany and Canada, and possibly the USA in the event the inspection team were to wish to examine the American buildings -- would have had roles to play. This interaction needed to be exercised to ensure that all obligations could be met within the required timelines and as laid out in the Treaty. At the same time, considerable emphasis was also placed on exercising multinational inspection teams as a form of mutual instruction and in order to ensure inter-operability when the opportunity would arise to field multinational teams under the terms of the Treaty.

To summarize the purposes of the ten CFE bilateral or multilateral trial inspections in which Canada participated over the period January 1991 - April 1992, these were:

- to train national inspectors and national inspection teams;
- to evaluate the Protocol on Inspection;
- to prepare to host/escort inspections, both nationally and multinationally;
- to lay the groundwork for multinational inspection teams and to address questions related to inter-operability; and
- to assist other countries in the development of their inspecting or escorting procedures.

THE OPEN SKIES TREATY:

Opened for signature: 24 March 1992

Entry into force: Pending ... will enter into force 60 days after the deposit of 20 instruments of ratification (as of 15 December 1994, 15 instruments have been deposited).

In September 1989, Prime Minister Brian Mulroney announced that Canada would host the first international conference with the purpose of negotiating an Open Skies regime embracing nations of the North Atlantic Treaty Organization (NATO) and the Warsaw Treaty Organization (WTO). In anticipation of the conference opening on 12 February 1990, Canada and Hungary conceived the idea of conducting a trial overflight of Hungary.

The first Open Skies trial overflight took place on 6 January 1990. A Canadian Forces CC130 Hercules transport aircraft flew a large figure-eight pattern over Hungary, covering a number of Hungarian and Soviet military facilities. Though of only limited significance for any purely technical accomplishments, the trial overflight provided a symbolic and hopeful note upon which to open a conference that would, a little more than two years later, lead to a treaty heralding a new dimension in East-West transparency. It would not do justice to the trial overflight, however, to think of it only as a political gesture, although the political dimension was indeed important. It was also an important event in terms of military-to-military exercise planning; flight planning and implementation; and in the development of trust between the two States, since there were no formal “rules of the game” to guide the event. The trial hit upon many of the points that would later become the subject of much detailed negotiation, and included:

- transit overflying of another state (Czechoslovakia);
- flight planning involving overflights of military and civilian aerodromes, flying on and off commercial routes, and changing altitudes in the vicinity of commercial airways;
- addressing flight safety concerns;
- conducting a short (hence essentially simulated) technical inspection of the aircraft.⁸

In December 1991, an invitation was extended to Hungary to conduct a reciprocal trial overflight of Canadian territory involving an enhanced technical programme. This came at a time when some delegations allowed privately that they believed the negotiations were “bogged down”, especially on the issue of the sensor package that could be carried by the overflying aircraft. The overflight then provided the opportunity to test many of the provisions then under negotiation.

The aims of the trial overflight, which took place over two days 15-16 January 1992, were:

- to demonstrate certain sensor capabilities and limitations (synthetic aperture radar with 6 metre resolution, fixed optical camera RC-10, low level light TV, and standard video cameras);
- to simulate the exchange of flight recorded data; and
- to present the results to the negotiators in Vienna (and the full report was tabled in Vienna within two weeks of completion of the overflights).⁹

There have since been many more trials: some bilateral and some multinational, some in the form of trial overflights to test some or all procedures from arrival to departure, and some to test specific sensor packages in tightly controlled conditions. These have been particularly rigorous technical tests, conducted in a multilateral “arms control” setting. The political and practical motivations already enumerated in the earlier sections of this paper are also readily discerned with regard to the Open Skies experience and need not be repeated here.

THE BIOLOGICAL AND TOXIN WEAPONS CONVENTION (BTWC):

Opened for signature: 10 April 1972

Entry into force: 26 March 1975

The BTWC includes an undertaking to consult and cooperate in solving any problems which may arise in relation to the objective of, or in the application of the provisions of, the Convention. It also makes provision for lodging a complaint with the Security Council of the United Nations in relation to a breach of obligations under the Convention. It makes no other provision for verification, and this fact has been a subject of much discussion leading to proposals from various quarters for strengthening the Convention.

In September 1991, the Third Review Conference of the BTWC agreed to establish an Ad Hoc Group of Governmental Experts, open to all States Parties, to identify and examine potential verification measures from a scientific and technical standpoint. This study, usually referred to as VEREX, met four times over the period March 1992 - September 1993, and the meetings themselves are often referred to as VEREX 1 through VEREX 4. At the last meeting in September 1993, the Experts’ Report was adopted by consensus, but that is getting ahead of the subject of this paper.

At VEREX II (23 November - 4 December 1992), two particular points stood out upon conclusion of the “Examination” of the 21 potential verification measures that had been selected at the previous meeting:

- Although the measures had been “Examined” singly, there would be the need at the next meeting, tasked with “Evaluating” the measures, to address them not only singly but also in combination; and

- Concern was expressed about the potential loss of confidential proprietary information (CPI) as a possible result of the application of certain verification measures.

These two threads were woven together to provide the context for the Netherlands/Canada trial inspection. Clearly, the interest in protection of CPI had to be addressed, since mere expressions of concern were insufficient. After all, we had gone through a similar process during the negotiation of the Chemical Weapons Convention; although in that case we had a half-dozen years of active consultation with industry, under the auspices of the Conference on Disarmament, during which new ground was broken in addressing the two sides of the issue of how to demonstrate compliance while also protecting CPI. In the case of the BTWC Verification study, there were only a few months between VEREX II and VEREX III (the latter scheduled to begin 24 May 1993) in which to begin the process of exploring the reality vs. the anxiety associated with the expression of similar concerns.

Before proceeding to a detailed discussion of trial inspection activity in relation to the BTWC, it should be noted that only two such trial inspections were in fact reported to VEREX.¹⁰ As a result, there is not a large body of publicly available material from which to distil lessons or describe motivations. It should also be mentioned, however, that a number of "trial visits" have been conducted independently by the Federation of American Scientists.

In early May 1993, a multinational inspection team -- including members from the Netherlands, Canada and the United Kingdom -- inspected a large commercial complex in the Netherlands in which state-of-the-art research, development, production and stockpiling of vaccines and pharmaceuticals take place. About 150 final products are handled at the site. A considerable amount of the research and production equipment can be described as multi-purpose in nature. Live and inactivated viral and bacterial vaccines are produced at the site.

The purpose of the trial inspection was to evaluate potential verification measures, both singly and in combination, against the criteria established in the mandate of the Verification study (VEREX). The following potential verification measures were employed:

- surveillance of publications;
- surveillance of legislation;
- declarations;
- surveillance by aircraft;
- interviewing;
- visual inspection;
- identification of key equipment;
- auditing;
- sampling and identification (procedures discussed only); and
- medical examination.

The report of the trial inspection comments on each of these measures and their utility, but the following paragraphs focus only on the “inspection” sub-set of on-site measures.

BTWC Trial Inspection Principal Findings and Conclusions:

- 1) In this trial inspection, the inspection team (IT) was able to determine, in the final analysis, that the activities, stocks of materials and products, equipment, development and production records were consistent with what one would expect in a vaccine production facility.
- 2) The IT was convinced that its suspicions would have been aroused had there been any significant diversion of activity, equipment or materials to the production of biological weapons or toxins at the vaccine production facility inspected.
- 3) A detailed facility declaration and the analysis of off-site information played important roles in the preparation of the IT. The more information available before or at the start of the inspection, the less time the inspection will likely take, and the more focused and efficient the inspection effort will be.
- 4) The most effective way to check the legitimacy of the facility’s activity was to perform cross-checks of data relating to different stages of activity/processing at the facility. This means that verification measures were applied in combination. It was concluded that the combining of measures would be essential to an effective on-site inspection.
- 5) During the trial inspection, issues relating to commercial confidentiality did not stand in the way of the effective conduct of the inspection. Some sensitivities were noted, but solutions were at hand.
- 6) In the case of ambiguities, clarification did require greater levels of detail in information provided by the facility. In general, this did not lead to problems of commercial sensitivity, although it sometimes required some effort and time to compile the necessary information.
- 7) Aerial surveillance: aerial photographs were useful in familiarizing the IT with the site prior to arrival, and in identifying recent construction/demolition at the site. There was no aerial surveillance during the inspection.
- 8) Interviewing (on-site) of personnel at different levels played a crucial part in cross-checking information. Language skills of the IT are important and/or translation may be required.

- 9) Visual inspection (on-site), applied in conjunction with other measures, was also an important element in conducting cross-checks. No problems relating to confidentiality were noted.
- 10) Identification of key equipment was an important aspect of the declaration prior to the inspection and in the pre-inspection briefing at the facility. Certain technical (and terminology) confusion in the specification of equipment was noted. These difficulties reflect the importance of ensuring that the facility declaration provides precision in the description of equipment to be declared, possibly in conjunction with the uses of such equipment of particular interest.
- 11) Sampling and identification was discussed with company executives. Confidentiality concerns depended very much on the type of microorganism handled, and the stage of the research/development/production process at which samples might be taken. Removal of live samples from the site would have been of great concern to the company. However, on-site analytical capability would have been provided by the facility had the IT required it. Removal of inactivated samples was not perceived to be a problem.
- 12) Auditing is a particularly important tool of the IT. It provides the basis for cross-checking at the different stages of operation at the facility. It also provides the opportunity to verify the conformity of research activities, as well as of developing and developed products, with national and/or international requirements.
- 13) Medical examination was limited during the inspection to the examination of personnel vaccination records. Medical examination of test animals could have been quite costly, had it involved the interruption of the animal experiments. However, visual examination of animals in the facility was carried out and revealed no indication of unusual activities.
- 14) In relation to the facility's costs involved in inspections, the company noted that these would fall under normal operational costs. Competitors would face the same costs. For this reason the company was not particularly concerned about the cost aspect, taking into account the supposedly low frequency of BWC inspections.

Although this paper could only comfortably draw in depth upon the Netherlands/Canada BTWC trial inspection experience, further insights can be obtained from a parallel reading of the United Kingdom report, which was also submitted to VEREX III. Two of the "key lessons" mentioned in that report of the inspection of a pharmaceutical pilot plant and its associated laboratories were:

- 1) "The IT was able to gather sufficient information to do its job effectively without compromising commercial confidentiality or Intellectual Property Rights."

- 2) “This practice inspection demonstrated clearly that on-site inspections are feasible in the BWC context.”

In returning to the motivations for these trial inspections, it is important to recall the “negotiating” climate prevailing at the time in VEREX. A great deal of scientific and technical material was channeled into four intense two-week meetings which, try as one might, could not be entirely divorced from political positions as well. One such topic overlapping the two domains had to do with delegations’ expressions of concern about the potential loss of commercial proprietary information in the course of any inspection activity. What was not clear was whether the delegations expressing such concerns had endeavoured to examine them in detail with industry in the context of one or more trial inspections, as had happened in the run-up to the Chemical Weapons Convention. It was with a view to contributing some substantive input to the communal discussion of such matters that the Netherlands/Canada and the United Kingdom trial inspections were conceived and executed. Clearly, more such work still needs to be done before Governments or industry could feel satisfied that concerns have been addressed and that legitimate interests can be adequately protected, and it would be fair to suggest that this is a view shared equally by the United Kingdom, the Netherlands as well as Canada.

Indeed, there has been some such further work, as was subsequently indicated by the report submitted by the United Kingdom to the BTWC Special Conference in September 1994, outlining its four practice compliance inspections at a variety of facilities.¹¹ Nationals from a number of countries were generously invited by the UK to participate, including from Canada. These inspections addressed four issues: access, compliance assessment, commercial confidentiality and logistics. The report indicated, *inter alia*, that:

- “Managed access techniques were important in negotiating access to buildings and to documentation.”
- “Provided the inspection team is given sufficient access, and the definition of this will vary from site to site, it is possible to determine with confidence that no non-compliant activities are being concealed.”
- “The legitimate need to protect commercial confidentiality presents few insurmountable obstacles to the conduct of an effective inspection.”
- “General logistical issues such as team size, escorting, briefing, safety, language and general equipment do not impose serious constraints on the conduct of inspections.”

Another document distributed at the Special Conference was the report of the Federation of American Scientists, looking to a “Compliance Regime” (a term coined by Canada at the Third Review Conference in 1991) and distilling five years of study by the FAS.¹² This report’s proposals also drew upon the experience of trial visits to biological facilities.

CONCLUDING COMMENTS:

Although this paper began by characterizing the purposes of trial inspections according to whether these might be “political” or “practical”, this approach really only serves as a starting point to a more serious discussion. In the sense that all trial inspections are intended to inform consideration of the verification requirements (or provisions) of a treaty, they inevitably have a political dimension no matter how technical, rigorous or objective they are designed to be.

After a reasonably extensive examination of trial inspection reports in a variety of contexts, there is one particular message that stands out: taken together, these reports constitute a little-known body of arms control literature, providing an exceptional testimony to the professionalism of the many people involved in the preparation and conduct of such endeavours. Yet it is a literature that is still rather sparse -- except, perhaps, in the files of consultants and their government sponsors. The knowledge-base of this effort risks being dissipated over time, as inspectors -- whether civilians under contract, military, or diplomats -- move on to other assignments. There are lessons to be learned from past activity, both with a view to refining existing practices and to informing future negotiations. The greater the variety of perspectives brought to bear on this analysis, the better.

It should also be mentioned that these trial inspections have been conducted at considerable expense to the Governments involved, as contributions to moving the arms control agenda forward on the basis of real experience rather than just theoretical arguments.

ENDNOTES:

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1. This is a pre-publication version of a paper prepared by Gordon K. Vachon for a conference at Southern Methodist University, Dallas, Texas. First written in late-1993, it was briefly up-dated in December 1994.
 2. This is an approximate number of the countries that have submitted trial inspection reports. Many countries have submitted multiple reports (in the case of Canada, reports on three inspections).
 3. CD/CW/WP.213* dated 19 September 1988.
 4. Opening remarks by Ambassador Sirous Nasser, Chairman of the Preparatory Commission for the OPCW, to the Seminar on National Trial Inspections, The Hague, 2 October 1993.
 5. Paper presented by the Delegation of France to the OPCW Seminar on 2 October 1993. There was also a Cuban paper describing their experience with a trial inspection that took place in September 1992, after the conclusion of the negotiations in the CD, but before it was formally opened for signature.
 6. Convention On The Prohibition Of The Development, Production, Stockpiling And

Use Of Chemical Weapons And On Their Destruction (hereafter "CWC"): Annex On Implementation And Verification (hereafter "Verification Annex"), Part X, C.38. (p.156).

7. CWC, Verification Annex, C.46-52. (pp.158-9).
 8. "Open Skies: Preparing For The 1990s. Backgrounder No.3 (Report On The Canada-Hungary Trial "Open Skies" Overflight, January 04-06, 1990)", as submitted to the inaugural Open Skies Conference in Ottawa in February 1990.
 9. "Open Skies. Backgrounder No.5 (Canada/Hungary Overflight January 1992)", as submitted in January 1992 to the negotiations in Vienna.
 10. Report by the Netherlands and Canada entitled "Bilateral Trial Inspection in Large Vaccine Facility", BWC/CONF.III/VEREX/6/WP.112; and Report by the United Kingdom entitled "UK Practice Inspection: Pharmaceutical Pilot Plant", BWC/CONF.III/VEREX/6/WP.141. COMMENT: Note that although the title of the Netherlands/Canada report uses the word "bilateral", this just denotes the fact that the preparations and arrangements were executed jointly. It does not mean that Canada inspected the Netherlands. In fact, it was a multinational team that conducted the inspection precisely to add that extra dimension.
 11. Report entitled "United Kingdom BTWC Practice Compliance Inspection (PCI) Programme. Summary Report", BWC/SPCONF/WP.2, 20 September 1994.
 12. "Beyond VEREX: A Legally Binding Compliance Regime For The Biological And Toxin Weapons Convention", Report of The Federation of American Scientists Working Group on Biological and Toxin Weapons Verification, July 1994.
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