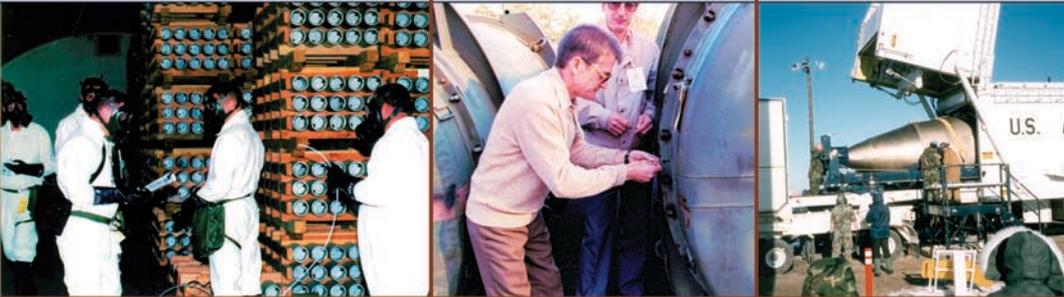


The Arms Control INSPECTOR

Product No. 406P



This pamphlet was prepared by the Defense Treaty Inspection Readiness Program (DTIRP) to increase **Readiness Through Awareness** throughout the Department of Defense (DoD) and defense-contractor community. Additional copies of this pamphlet and other materials on a wide range of arms control security-related topics are available through the DTIRP Outreach Program.

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INTRODUCTION

Since 1988 the United States has been deploying inspection teams and hosting inspectors from countries that are our treaty partners. The mission of an arms control inspector is to verify compliance with a particular arms control treaty or agreement. Some treaties, such as the Intermediate-Range Nuclear Forces (INF) Treaty and the Strategic Arms Reduction Treaty (START), began as bilateral agreements between the United States and the Soviet Union. After the Soviet Union dissolved in 1991, these treaties became multilateral agreements. In practice, however, the vast majority of inspections under START have continued to be conducted between the United States and Russia, with the inspectors coming almost exclusively from these two countries.

Other treaties, such as the Treaty on Conventional Armed Forces in Europe (CFE), the Chemical Weapons Convention (CWC), and the Treaty on Open Skies are strictly multilateral. The CFE treaty has 30 States Parties and the Treaty on Open Skies has 34. The CWC has more than 180 States Parties. In addition, although the U.S.-International Atomic Energy Agency (IAEA) Safeguards Agreement and the U.S.-IAEA Additional Protocol (AP) are bilateral agreements between the United States and the IAEA, all States Parties to the Nuclear Non-Proliferation Treaty (NPT) are either encouraged or obligated to conclude similar agreements with the IAEA. There are 190 States Parties to the NPT.

As the number of States Parties increases, security preparations at U.S. facilities become more challenging. With bilateral treaties, security planning could focus on inspectors coming from a single country. However, multinational inspection teams include inspectors from many different countries, each of which has a variety of military and economic interests. It is important to take all of these interests into consideration when assessing risks and implementing security countermeasures at facilities subject to on-site inspections and observation overflights.

This pamphlet describes the roles, capabilities, and identities of typical arms control inspectors and how these attributes may impact a number of on-site inspection environments. The important roles played by national escorts and the types of interactions they typically have with the inspectors and with site personnel are also discussed. The pamphlet ends with a list of features common to most types of arms control inspections.

¹ The INF treaty remains in force although inspection activities ceased on June 1, 2001.

THE INSPECTOR

Under treaties such as START, CFE, and the Treaty on Open Skies, inspectors and escorts work under the direction of their national governments. In the United States, the national organizations responsible for inspection and escort operations include the Defense Threat Reduction Agency (DTRA) and the Nuclear Risk Reduction Center (NRRC).

Inspection missions conducted under the CWC, the U.S.-IAEA Safeguards Agreement and U.S.-IAEA Additional Protocol utilize inspectors employed by an international treaty-implementation organization—the Organization for the Prohibition of Chemical Weapons (OPCW) or the IAEA. OPCW inspectors are international civil servants who receive their training, tasking, and direction during inspection activities from the OPCW, not from their national governments. The inspected State Party is the only country playing an active role during inspection activities. This role is operationalized by the escort team.

SPECIALIZATION

For inspection activities conducted under the START and CFE treaties, inspectors are selected based largely on their relevant expertise, skills, and knowledge of treaty-limited activities, equipment, and armaments. In the United States, when inspection activities require missile expertise, for instance, DTRA relies on military personnel who have experience with various air-, ground-, and sea-based missile systems. DTRA inspection team chiefs are military officers who are either experts in missile systems or who possess Russian language skills and practical experience working as subject matter experts in Eastern Europe, Russia, Ukraine, and Kazakhstan. Other countries use a similar selection process for their inspectors.

Inspectors employed by international treaty-implementation organizations, however, are often required to have a larger skill set. Under the CWC, the States Parties recruit and nominate candidates to the OPCW who have specialized technical backgrounds. These candidates include chemical weapons and munitions specialists, chemical production technologists, analytical chemists, chemical production logisticians, medical specialists, and paramedics. Additionally, all OPCW inspectors are required to be



fluent in English and to have a good working knowledge of one of the five other official languages of the United Nations. The selection criteria includes education, experience, language skills, a university degree in chemistry or chemical engineering, and six years of professional experience in a related, specialized field.

FAMILIARIZATION WITH INDUSTRY

Under the START and CFE treaties, most inspections are conducted at military bases where equipment or weapons systems are deployed or at military storage, training, maintenance, elimination, or reduction sites. Only a few defense contractor sites are affected. In contrast, under the CWC, the Treaty on Open Skies, the U.S.-IAEA Safeguards Agreement, and the AP, defense and non-defense industry facilities could be subject to on-site inspection or overflight. Consequently, inspectors from the OPCW and the IAEA are required to be familiar with relevant technologies and industrial processes. These inspectors are likely to be nationals of countries that have similar industries, some of which may be in competition with sites being inspected.

TRAINING

U.S. inspectors for the Treaty on Open Skies, START, and CFE treaties are required to successfully complete a lengthy training program. This program requires inspectors to pass a formal treaty orientation course and to become familiar with all of the equipment and armaments subject to the Treaty. Inspectors also learn how to interpret and implement treaty provisions, including any inspection and elimination protocols, and to apply relevant verification methodologies. In addition, trainees are required to complete one or more inspection missions and a final “check ride” before they are qualified to serve as an official member of an inspection team.

Under the Treaty on Open Skies, inspectors also receive aerospace physiology training. This enables them to better understand the stresses they will encounter on extended flights. In addition, inspectors learn how to operate the imaging sensors on the observation aircraft used during overflight missions. Under START, inspectors are required to demonstrate their detailed knowledge of all possible types of inspection and escort missions before they become fully qualified. For these treaties, training averages about six months.

Mock inspection exercises and a series of individual and team activities also help inspectors to develop, refine, and maintain their skills. While U.S. inspectors rotate assignments approximately every three years, experience indicates that foreign inspectors remain in their positions much longer. For this reason, foreign inspectors can have a comparatively greater amount of inspection experience.

The OPCW Technical Secretariat provides 20 weeks of structured training to prepare its inspectors for their mission responsibilities under the CWC. The first seven weeks are dedicated to covering basic treaty topics such as the provisions of the Convention and its annexes, the role of the OPCW, different types of inspection activities, safety procedures, an overview of the chemical industry, and methods of destroying chemical weapons.

The next ten weeks focus on individual inspectors' areas of specialization to help them hone their inspection skills. The three remaining weeks are dedicated to realistic field-training exercises, which are similar to mock inspections. These exercises are conducted at chemical weapons production, storage, and destruction facilities and at chemical industry facilities having Schedule 1, 2, and 3 chemicals.

TECHNOLOGY

There are a number of safety and security concerns associated with the use of certain technologies during on-site inspection activities. High-tech equipment may only be used in environments where it can be operated safely and where its collection capabilities can be limited to collecting only the information required to verify treaty compliance—nothing less and nothing more.

During inspections conducted under the INF, START, and CFE treaties, technology plays a limited role. Prior to inspection activities ending under the INF treaty in 2001, radiation detection equipment (RDE) was used occasionally to measure warhead emissions. START inspectors also use RDE as well as global positioning system (GPS) receivers and low-tech equipment such as tape measures, plumb bobs, and flashlights.



CFE inspectors typically use equipment such as binoculars, portable passive night vision devices, video and still cameras, dictaphones, magnetic compasses, and lap-top computers. However, although over time START and CFE inspectors have acquired significantly better information-collection and data-recording tools, they continue to rely on *observation* as their primary tool for collecting information

On the other hand, Treaty on Open Skies and OPCW inspectors rely heavily on high-tech equipment. To verify compliance with the CWC, inspectors may use a wide variety of technologies such as secure communications devices, chemical agent detectors, and decontamination equipment. Specific items may include portable satellite telephones, gas chromatography/mass spectrometers, individual chemical protection equipment, and computers. Non-destructive or non-damaging evaluation (NDE) equipment such as neutron interrogation systems, ultrasonic pulse echo systems, and acoustic resonance spectroscopy may also be used to safely and quickly identify munitions and the contents of bulk storage areas.

Under the Treaty on Open Skies, observation aircraft are equipped with a suite of imaging sensors. Sensors allowed under the Treaty include optical panoramic and framing cameras, video cameras with real-time display, infrared imaging equipment, and sideways-looking synthetic aperture radar (SAR).² Although sensor resolution is constrained, observation aircraft fly at low altitudes which allow the inspectors to collect images that are not available from satellites.

The use of sophisticated technologies during inspection activities places more pressure on inspected facilities and national escorts who are responsible for ensuring that this equipment is used safely and that national security, proprietary, and other sensitive information is protected.

INSPECTION MANDATE

Under most arms control treaties and agreements, when an inspection team is tasked with conducting a certain type of inspection, the team conducts inspection activities in accordance with the treaty's verification

² No countries are using or pursuing the use of SAR at this time.

and inspection protocols. When questions or issues arise during the course of the inspection, the team refers to the treaty for guidance. This reliance on the “letter of the law” provides facilities with a reasonable idea about what to expect when preparing for arms control inspections.

In addition to the Convention text, inspection teams from the OPCW are guided by a written inspection mandate specifying what needs to be accomplished during the inspection. Using this mandate, the inspectors may leverage access to the areas and information they need to see in order to verify treaty compliance. In practice, the inspection mandate is essentially a directive governing the inspection. When OPCW inspection teams are deployed, the inspector’s role is to fulfill the inspection mandate.

INSPECTION PREPARATION

Arms control inspectors begin preparing for an inspection by reviewing the known facts. Depending on the treaty and the type of inspection, the inspector’s primary task might be to inventory site holdings, or to ensure the accuracy of reentry vehicle attribution, or to observe the appropriate non-activity associated with the closed-out status of formerly declared facilities. This information will help the inspector determine what other inspection preparation activities may need to be conducted. It might be necessary to review the declarations submitted by the inspected State Party and to review the latest approved site diagram. It might also be necessary to review all national declarations and the nature and description of treaty-limited or monitored equipment or armaments.

An experienced inspector will also review earlier inspection reports for the same facility and use the experience of other inspectors who have been to the site on previous missions. This institutional knowledge aids the inspector in identifying past or recurring problems that could impact the inspection. Part of preparing for a Treaty on Open Skies mission is to coordinate with aircrews and support bases. Under the START and CFE treaties, among others, inspection teams may perform more than one inspection while on the territory of the inspected State Party (called sequential inspections). In this case, the inspectors will need to prepare for all of these inspections prior to their arrival on the territory of the inspected State Party.



The CWC requires States Parties to report and declare a variety of activities and facilities. The information provided in each facility's declaration is used to determine the nature and amount of inspection activities that may be conducted at that site. This, in turn, affects the level of inspection preparation activities a facility will need to undertake.

Inspectors preparing for an inspection at a declared chemical weapons storage facility will need to acquaint themselves with the declared chemical munitions located there. The inspectors will review the characteristics of the chemical munitions as well as the stockpile located at the inspection site. If a facility is a declared facility with scheduled chemicals, the type of facility and the particular chemicals located there will affect the inspectors' preparation activities and will determine which skills individual inspectors will need to possess.

During initial inspections at chemical weapons facilities and at Schedule 1 and Schedule 2 facilities, OPCW inspectors negotiated draft facility agreements. These facility agreements outlined the procedures to be followed during subsequent "routine" inspections. The degree of access and any sampling and analysis activities that may be conducted were negotiated and mutually agreed subject to final negotiations between the State Party and the OPCW. The types of documentation to be available for review and the types of personnel to be available for interviews were also negotiated and agreed during this process.

Regardless of the treaty, the inspector's role and mission objective is primarily to collect the information needed to determine treaty compliance. To do so, the inspectors will exercise the full range of their treaty-authorized rights but they will also recognize the inspected State Party's rights to protect sensitive and proprietary information. When inspection activities are completed, the data collected will be included in an inspection report. This report will be used to support a judgment on treaty compliance.

Treaty on Open Skies missions are essentially confidence-building measures. Under this Treaty, a copy of all imagery collected during the observation flight is provided to the observed Party. Any other States Party may obtain a copy of this imagery by submitting a request and covering the costs associated with duplication.

CONFIDENTIALITY

As was mentioned earlier, in contrast to treaties like START, CFE, and the Treaty on Open Skies, the inspectors employed by the OPCW are international civil servants. Consequently, under the CWC, treaty negotiators recognized the needs of States Parties to protect the information provided in data declarations and collected during on-site inspection activities. As a result, Convention provisions require OPCW inspectors to respect and protect information designated by the inspected State Party as confidential.

The OPCW also requires its employees to sign secrecy agreements. These agreements remain in force during the entire time of employment with the OPCW plus five years thereafter. Inspectors and other OPCW employees are prohibited from communicating confidential information to any state, organization, or person outside the OPCW's Technical Secretariat.



THE NATIONAL ESCORT

National escorts facilitate the inspection activities conducted by inspectors from other treaty partners or treaty-implementation organizations. Under most treaties, inspectors are also trained to conduct escort operations. This cross-training is important because inspectors who also serve as escorts acquire skills that expand their abilities to perform each role. .

The role of the national escort team is not only to safeguard the interests of the inspected State Party, but it is also to ensure that the inspected State Party fulfills its treaty obligations. These responsibilities require the escort team to be sufficiently proficient with treaty provisions to be able to ensure that the inspection team is not provided with any information or access in excess of its full treaty rights. This proficiency also allows site personnel to rely on the national escort team for treaty expertise when preparing a site for inspection.

Relationships play an important role in the success of any inspection. A key to this success is the relationship between the Inspection Team Chief and the Escort Team Chief. A cordial, professional relationship not only sets the tone for the inspection, but also helps to avoid misunderstandings that could result in additional work for both teams and for site personnel. In addition, it is critical that site personnel and escort team members work together effectively. Most important, is for site personnel and escort team members to continually share information concerning the progress and conduct of the inspection.

COMMON FEATURES OF ARMS CONTROL INSPECTIONS

Although there are many different types of arms control inspections conducted under a variety of arms control treaties and agreements, the following features of inspection activities frequently pose security concerns for impacted facilities. It is recommended that each of these features be considered carefully when preparing a site for on-site inspection activities or when developing a facility inspection readiness plan.

Access – During an arms control inspection, the inspection team will almost always require access to one or more sensitive areas at your facility. Sufficient access will need to be granted to allow the inspection team to observe treaty-monitored activities to the degree necessary to determine treaty compliance.

Equipment – Inspectors will be allowed to use certain approved and certified items of equipment to collect treaty-related information and technical data. This equipment can be as simple as a tape measure or flashlight, or it may include portable satellite telephones, lap-top computers, chemical agent detectors, imaging sensors, and other high-tech devices. A concern is to ensure that all equipment is only used in areas where it can be operated safely and securely.

Photography – Taking photographs using still cameras, video cameras, and even aerial photography may be used in some cases to document activities inside and outside a facility. A security concern could arise if non-treaty related objects were inadvertently captured.

Personnel Interviews – Inspectors may be allowed to conduct interviews with facility personnel. A potential security concern would be that information beyond the scope of the treaty could be revealed inadvertently by a well-meaning employee.

Sampling – When inspectors take ground, air, or water samples, for example, a potential security concern arises regarding the possibility of proprietary data being revealed from the analysis of such samples.

Review of Documents and Records – Inspectors may have the right to review documents and records pertaining to treaty-related transactions. These records may also include other sensitive or proprietary information.



The challenge associated with preparing for any type of arms control inspection is to plan for all possible inspection-related activities. The measure of success is to be able to allow sufficient access to treaty-relevant information to demonstrate treaty compliance, while also protecting national security, proprietary, and other sensitive information from inadvertent disclosure.

CONCLUSION

This pamphlet focused on the roles, capabilities, and missions of arms control inspectors. It also described how these attributes have changed since 1988 when inspectors were first granted unprecedented access to missile operating bases, training areas, storage sites, and production facilities. In addition, the pamphlet discussed how arms control treaties have developed beyond bilateral agreements, such as START, to include multilateral agreements such as the Chemical Weapons Convention, which has more than 180 States Parties.

By becoming more aware of the inspectors' backgrounds and purposes, and by understanding the different types of inspection activities that may be conducted at your facility, you will be better able to improve your facility's readiness to appropriately manage the security challenges associated with hosting an on-site inspection or being overflowed during an observation mission flight.

If you would like more information about arms control security and treaty implementation, see the list of related materials provided on pages 15-17, or contact the DTIRP Outreach Program Coordinator at 1-800-419-2899 or by email at dtirpoutreach@dtra.mil.

You may also visit the DTIRP website at <http://dtirp.dtra.mil> or contact your local Defense Security Service (DSS) Industrial Security Representative or your government sponsor.



ABBREVIATIONS

CFE	Conventional Armed Forces in Europe Treaty
CWC	Chemical Weapons Convention
DTIRP	Defense Treaty Inspection Readiness Program
DTRA	Defense Threat Reduction Agency
IAEA	International Atomic Energy Agency
INF	Intermediate-Range Nuclear Forces Treaty
NRRC	Nuclear Risk Reduction Center
OPCW	Organization for the Prohibition of Chemical Weapons
START	Strategic Arms Reduction Treaty

RELATED MATERIALS

To order, contact the DTIRP Outreach Program Coordinator
by phone: 1-800-419-2899, email: dtirpoutreach@dtra.mil
or go to the DTIRP Website: <http://dtirp.dtra.mil>

Arms Control Security and General Reference

Videos on CD

Facility Protection Through Shrouding (908W)
Verification Provisions—Point and Counterpoint (936W)
The Technical Equipment Inspection (TEI) Process (950W)
Arms Control Site Vulnerability Assessments (951W)
Arms Control Security Countermeasures: Selection & Application (952W)
Arms Control Inspection: Site & Building Preparation (953W)

Automated Presentation CDs

The Arms Control OPSEC Process (930C)

Brochures

Why TEI? (954T)

Multiple Treaties

Searchable Reference CDs

Arms Control Treaties Information (407C)

Pamphlets

Arms Control Agreements Synopses (408P)
Quick Reference Guide to Arms Control Inspection Timelines (410P)

CFE

Pamphlets

Quick Reference Guide to CFE Inspections (701P)



CWC

Pamphlets

- Chemical Weapons Convention—The Impact (102P)
- CWC—Questions Facing the U.S. Defense Industry (108P)
- Managed Access under the Chemical Weapons Convention (112P)
- Features of Chemical Facilities (114P)
- Routine Inspections under the Chemical Weapons Convention (115P)
- CWC Challenge Inspection Planning Considerations (119P)
- CWC Inspector's Privileges and Immunities (152P)

Articles & Bulletins *(available only on the DTIRP Website)*

- Challenge Inspections under the Chemical Weapons Convention (101B)
- Role of the Requesting State Party Observer in CWC Challenge Inspections (133B)

Automated Presentation CDs

- CWC Challenge Inspection Facility Readiness Training (160C)

IAEA Safeguards

Articles & Bulletins *(available only on the DTIRP Website)*

- The U.S.-IAEA Additional Protocol—An Overview (610B)

Pamphlets

- Strengthened Safeguards System Operations Security Checklist (608P)
- Integrated Safeguards: U.S.-IAEA Safeguards Agreement and U.S.-IAEA Additional Protocol (612P)
- Complementary and Managed Access under the U.S.-IAEA Additional Protocol (613P)
- Understanding the U.S.-IAEA Additional Protocol National Security Exclusion (614P)

Treaty on Open Skies

Pamphlets

Treaty on Open Skies—The Impact (302P)

Guide for Treaty on Open Skies Observation Mission Flights (314P)

Open Skies Notification System (315P)

Articles & Bulletins *(available only on the DTIRP Website)*

Open Skies Observation Flights—What Will They See? (306A)

Videos on CD

The Treaty on Open Skies—Sensor Capabilities (308W)

START

Pamphlets

Strategic Arms Reduction Treaty—Special Right of Access Visits (SAVs) and Other Questions Facing the U.S. Defense Industry (206P)

Radiation Detect Equipment: An Arms Control Verification Tool (211P)

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