March 4, 2003

Testimony

Statement
of
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for Auditing
Office of the Inspector General
Department of Defense
to the
House Committee on Armed Services
on
U.S.-Russian Cooperative Threat Reduction
and Non-Proliferation Programs

D-2003-059-T

Report Documentation Page

Report Date	Report Type	Dates Covered (from... to)
12 Mar 2003	N/A	-

Title and Subtitle Testimony: Statement of David K. Steensma Deputy Assistant Inspector General for Auditing Office of the Inspector General Department of Defense to the House Committee on Armed Services on U.S.-Russian Cooperative Threat Reduction and Non-Proliferation Programs	**Contract Number**
	Grant Number
	Program Element Number
Author(s)	**Project Number**
	Task Number
	Work Unit Number
Performing Organization Name(s) and Address(es) OAIG-AUD(ATTN: AFTS Suggestions) Inspector General, Department of Defense 400 Army Navy Drive (Room 801) Arlington, VA 22202-2884	**Performing Organization Report Number** D-2003-059T
Sponsoring/Monitoring Agency Name(s) and Address(es)	**Sponsor/Monitor's Acronym(s)**
	Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited	
Supplementary Notes	
Abstract	
Subject Terms	
Report Classification unclassified	**Classification of this page** unclassified
Classification of Abstract unclassified	**Limitation of Abstract** UU
Number of Pages 16	

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to appear before the Committee today and address your questions regarding our reviews of the Cooperative Threat Reduction Program. Although progress is being made in destroying weapons of mass destruction, there is a need for additional management oversight of the country to country agreements, and more cooperative sharing of program risks.

Congress enacted Public law 102-228, the Soviet Nuclear Threat Reduction Act of 1991, to reduce the threat posed by the weapons of mass destruction remaining in the territory of the former Soviet Union. Objectives of the Act are to "destroy nuclear weapons, chemical weapons, and other weapons; transport, store, disable, and safeguard weapons in connection with their destruction; and establish verifiable safeguards against the proliferation of such weapons." The Act designated DoD as the executive agent for what came to be called the Cooperative Threat Reduction Program. The current objectives of the Cooperative Threat Reduction Program, are to:

- "Dismantle former Soviet Union weapons of mass destruction and associated infrastructure.

- Consolidate and secure former Soviet Union weapons of mass destruction and related technology and materials.

- Increase transparency and encourage higher standards of conduct.

- Support defense and military cooperation with the objective of preventing proliferation."

The annual reports on the Cooperative Threat Reduction Program show steady and consistent progress in destroying weapons of mass destruction within the former Soviet Union countries.

On March 18, 2002, the Deputy Secretary of Defense requested that the Office of the Inspector General of the Department of Defense:

- review problems that had been identified with the Cooperative Threat Reduction Program project to convert liquid propellant removed from intercontinental ballistic missiles in the Russian Federation (Russia) into a more benign substance;

- provide advice on protecting the Department of Defense from similar situations on other United States-funded projects that rely on Russian assurances; and,

- review the organizational arrangements between the Cooperative Threat Reduction Policy office within the Office of the Under Secretary of Defense for Policy and the Cooperative Threat Reduction Directorate at the Defense Threat Reduction Agency.

On September 30, 2002, we issued Report No. D-2002-154 "Cooperative Threat Reduction Liquid Propellant Disposition Project," that presented our conclusions on the project, including the nonavailability of the liquid propellant that prevented use of the facility built to convert the liquid propellant. I will discuss the issues identified in our review of the liquid propellant disposition project. In addition, I will also comment on our prior and ongoing work on the Cooperative Threat Reduction Program.

Liquid Propellant Project

The liquid propellant disposition project is managed under an implementing agreement commonly referred to as the Strategic Offensive Arms Elimination-Russia implementing agreement. The implementing agreement supplements the

umbrella agreement that was signed on June 17, 1992, and is known as the "Agreement Between the United States of America and the Russian Federation Concerning the Safe and Secure Transportation, Storage, and Destruction of Weapons and the Prevention of Weapons Proliferation."

Russia requested U.S. assistance to dispose of liquid fuel (unsymmetrical dimethyl hydrazine) as well as the oxidizers (dinitrogen tetroxide and mélange). In Russia, the liquid fuel and dinitrogen tetroxide are known as heptyl and amyl, respectively. Russia needed assistance with the disposal of heptyl and amyl (liquid propellant) to facilitate the disposal of intercontinental ballistic missiles and submarine-launched ballistic missiles. The liquid propellant disposition project includes removing the heptyl and amyl from missile sites, transporting the material to storage sites, and converting the material into commercial products.

Costs of the Liquid Propellant Disposition Program

As of July 2, 2002, the Department of Defense had obligated $164.5 million to assist Russia in the disposal of heptyl and amyl. That amount included:

- $94.4 million for the heptyl disposition facility and associated shipping and logistical support.

- $51.1 million for equipment (flatbed railcars, intermodal containers and cranes) and transportation services related to movement and storage of liquid propellant disposal, and transition, operation, and maintenance of the disposition facility.
- $17.8 million for designing and site preparation of the amyl disposition system.
- $1.2 million to maintain and secure the heptyl disposition facility, while the Department of Defense considered the future of the facility.

Heptyl and Amyl Disposition Facilities

The Defense Threat Reduction Agency's predecessor, the Defense Nuclear Agency, awarded a contract to Thiokol Corporation in April 1995 to design and construct the heptyl disposition systems to convert 30,000 metric tons of heptyl to industrial solvent at Krasnoyarsk, Russia. The heptyl disposition systems were ready for testing in January 2002 (pictures of the facility are at Attachment 1). However, at that time and unknown to the Defense Threat Reduction Agency, there was insufficient heptyl available to cost effectively operate the plant. Subsequently, the facility was never certified for use.

In June 1999, the Defense Threat Reduction Agency awarded a contract to Bechtel National, Incorporated, to design, fabricate, and test up to two mobile systems that would convert 43,000 metric tons of amyl and 80,000 metric tons of mélange into

nitric acid. Later, the Department of Defense agreed to a Russian request that the systems be permanent and located in the Russian cities of Aleksin and Krasnoyarsk. In February 2002, the Department of Defense removed the mélange-processing requirement because mélange was not considered a strategic missile oxidizer.

Department of Defense Learns that Heptyl is Not Available for Conversion

According to the Director, Cooperative Threat Reduction Directorate, Defense Threat Reduction Agency, the initial indication that heptyl would not be available for conversion was in January 2002 during informal discussions with Russian Aviation and Space Agency officials. Following those discussions, on February 13, 2002, the Director telephoned the Director of the Missile Technologies Division, Russian Aviation and Space Agency to obtain an explanation and to request a formal written response. According to the record on the telephone discussion, the Russian Aviation and Space Agency official confirmed that "the reprocessed heptyl was made available to the commercial Proton [commercial launch rocket] program and for missile development tests." He also stated that although heptyl tank farms were almost dry, the Russian Ministry of Defense saw a continuing need for the heptyl disposition facility because of uncertainties surrounding the number of future space launches. In a

letter dated May 24, 2002, the Director of the Missile Technologies Division provided the official response for Russia. In explaining why the Department of Defense was not informed, the Director stated, "However, practically speaking, given the extreme uncertainty of the constantly changing situation, it was very difficult for Russia to inform you properly without harming Russia's plans associated with strategic offensive arms elimination under START [Strategic Arms Reduction Treaty] I and II, since these plans made it possible to fairly fully load the two units being built in Krasnoyarsk with work."

Russian Launches of Heptyl-Fueled Vehicles

During 1992 when the Department of Defense and Russian officials were initially making decisions on the disposal of heptyl and amyl, Russia was experiencing a decrease in the number of heptyl-fueled space launches. However, while negotiations continued on how to dispose of the heptyl and amyl from Russian missiles, the United States and Russia were also negotiating Russia's entry into the commercial space launch business. In September 1993, the two countries signed the "Agreement Between the Government of the United States of America and the Government of the Russian Federation Regarding International Trade in Commercial Space Launch Services." That 1993 agreement, amended in January 1996, allowed Russia to launch up to 20 principal payloads for international customers through December 2000, when the agreement expired. Between

January 1995 through June 2002, Russia launched 102 heptyl-fueled rockets using an estimated 12,500 metric tons of heptyl. In addition, Russia could have used more than 12,500 metric tons of heptyl during that time for test firing of the rocket engines. According to a trip report prepared by a chemical engineer with the Science Applications International Corporation, officials from the Russian Aviation and Space Agency stated that Russia test fires each rocket engine using 100 percent of the fuel capacity.

Lack of Implementing Agreement Requirements

The agreements with Russia did not require Russia to provide the heptyl and amyl for conversion, including remedies for nonperformance, and did not provide the Department with adequate access rights to where the heptyl and amyl were stored.

The Strategic Offensive Arms Elimination-Russia implementing agreement did not require Russia to provide the heptyl and amyl for conversion, and neither that implementing agreement nor the umbrella agreement, provided adequate access rights to the Department of Defense. Also, the Strategic Offensive Arms Elimination-Russia implementing agreement did not include any remedies should Russia fail to use the United States provided equipment, services, and training. Agreements should have required that Russia provide the heptyl and amyl for

conversion and provide the Department of Defense with access to heptyl and amyl inventories as well as included remedies for nonperformance.

Audits and Examinations

The umbrella agreement gives the Department of Defense the right to examine Russia's use of equipment, services, and training provided by the United States upon request and according to procedures to which both countries agree. The Strategic Offensive Arms Elimination-Russia implementing agreement provides procedures for conducting audits and examinations. That implementing agreement requires that the Department provide a 30-day written notice prior to performing an audit and examination, as well as specifying that audits and examinations are limited to no more than three each calendar year, and concurrently at no more than two sites. Both the umbrella and implementing agreements did not allow the Department access to conduct inventory inspections of heptyl and amyl at Ministry of Defense tank farms.

The Defense Threat Reduction Agency has not performed an audit and examination on equipment provided to Russia for transporting and storing the heptyl and amyl since June 1999. The three prior inspections performed prior to that date were not fully effective. Two inspections identified that Russia improperly used some intermodal containers for mélange, but those inspections

were not thorough enough to identify the extent of improper use of the equipment. The audits and examinations were limited to comparing the serial numbers on intermodal containers against the list of serial numbers the project manager provided, identifying the location, and noting the condition of each container. The audit and examination team did not verify the contents of the intermodal containers because team members did not have the equipment needed to safely examine the intermodal containers.

Program Risks

As early as December 1992, Russian officials had informed Department of Defense officials of plans to use some of the heptyl removed from ballistic missiles for space launches. At that time, Russian officials estimated that only 3,000 metric tons would be consumed. In 2000, the Defense Threat Reduction Agency started to include general and specific risks in its project plans for the heptyl disposition facility. General risks for that project included cost; project access, including the number of yearly visits by the project manager; time since the last audit and examination; site access restrictions; and project status. The specific risks for the heptyl disposition project were finding and training qualified Russian operators, and operational performance of the disposition facility. However, the project plans, which are updated annually, did not identify as a risk that Russia might use heptyl for other purposes. Other possible uses of heptyl

should have been identified as a risk for three reasons. First, Russian officials informed Department officials in 1992 of their plans to use for space launches some of the heptyl removed from ballistic missiles. Second, the Russian Aviation and Space Agency did not control the heptyl owned by the Ministry of Defense**.** Third, the Defense Threat Reduction Agency did not have the authority to inventory the heptyl that Russia was storing at Ministry of Defense sites.

Idle Disposition Facility

The heptyl disposition facility will not be used for its intended purpose. The Department of Defense now faced the decision on what to do with the heptyl disposition facility. After the Defense Threat Reduction Agency was notified about Russia's heptyl use, the Defense Threat Reduction Agency placed a stop-work order on the heptyl and amyl disposition facilities while the Department developed and considered its options. In February 2002, the Office of the Under Secretary of Defense for Policy drafted a list of options and associated costs for the heptyl and amyl disposition facilities. In July 2002, the Defense Threat Reduction Agency terminated the contract while the amyl disposition facility was still in the design phase. On February 4, 2003, the Deputy Secretary of Defense approved the "dismantlement and salvage where possible" of the heptyl facility.

Other Corrective Actions Taken

The Office of the Under Secretary of Defense for Policy is to be commended for establishing an Executive Review program to reduce program risks. The Executive Review program is designed to increase and improve communication between the Department of Defense and the Russian executive agents. The Executive Review program offers opportunities for the Department and Russian executive agents to identify and implement changes to project assumptions and objectives, obtain legally binding commitments, and avoid expenditure of funds if Russia cannot meet its commitments.

Other Cooperative Threat Reduction Program Reviews

A list of other prior reviews of the Cooperative Threat Reduction Program is at Attachment 2.

We are currently reviewing four other projects in the Cooperative Threat Reduction Program: the Biological Weapons Proliferation Prevention Program; the Chemical Weapons Destruction Facility; the Fissile Material Storage Facility; and the Solid Rocket Motor Disposition Facility. In addition, we are reviewing

the organizational arrangements within the Department for the Cooperative Threat Reduction Program. We plan to issue reports on those reviews later in 2003.

Thank you for considering the views of the Office of the Inspector General on the Cooperative Threat Reduction Program. This concludes my testimony.

Pictures of the Heptyl Disposition Facility Krasnoyarsk, Russia

Aerial view of the Heptyl Disposition Systems and Infrastructure

Ground View of the Heptyl Fuel Disposition System

Attachment 1

Office of the Inspector General, DoD
Reports on the Cooperative Threat Reduction Program

Report No. 03-OIR-03, "Classified Report," January 7, 2003

Report No. D-2002-154, Cooperative Threat Reduction Program Liquid Propellant Disposition Project, September 30, 2002

Report No. D-2002-033, Management Costs Associated with the Defense Enterprise Fund, December 31, 2001

Report No. D-2001-074, Cooperative Threat Reduction Program, March 9, 2001

Report No. D-2000-176, Defense Enterprise Fund, August 15, 2000

Attachment 2