



Testimony



STATEMENT OF
DONALD MANCUSO
DEPUTY INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
BEFORE THE
SUBCOMMITTEE ON NATIONAL SECURITY,
VETERANS AFFAIRS AND INTERNATIONAL RELATIONS
HOUSE COMMITTEE ON GOVERNMENT REFORM
ON
COMBATING TERRORISM: INDIVIDUAL
PROTECTIVE EQUIPMENT FOR U.S. FORCES,
INVENTORY AND QUALITY CONTROLS

Report No. D-2000-154

DELIVERED: June 21, 2000

Office of the Inspector General
Department of Defense

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to appear before your Committee today to address your questions regarding the status of individual equipment intended to protect our military forces from chemical and biological attacks. I share your concerns with respect to the Department's inventories, quality controls, and serviceability of equipment.

The threat of chemical and biological weapons is clearly increasing in range and frequency in the world today. There are over twenty countries with known or suspected chemical and biological weapons programs, and these weapons constitute one of the greatest threats to the United States and to our military forces. Because the countries which are of greatest concern to the United States are also in regions in which we have well defined national security interests, we must demonstrate our resolve to protect our forces with the best available individual equipment to protect our military forces from chemical and biological attacks. However, despite this critical force protection requirement, the business of protecting our forces from chemical and biological attacks is expensive and vulnerable to fraud, waste, and mismanagement.

My office has made efforts, through audits and criminal investigations, to address the potential for fraud, waste, and abuse in individual protective equipment. We have conducted many audits since the establishment of the Office of Inspector General in 1982 concerning such equipment, to include the five audits your invitation letter specifically requested me to discuss. A criminal investigation that my office recently completed also concerned contractor fraud in the manufacture of protective suits. I will start with a discussion on the two reports addressing inventory management of chemical protective suits and the related criminal investigation.

Chemical Protective Suit Inventory Accuracy

Report No. 97-102, Inventory Accuracy at the Defense Depot, Columbus, Ohio, February 27, 1997

As part of the annual audits required by the Chief Financial Officers Act of 1990 and related legislation, during mid-1996 we audited the accuracy of inventory records for materiel stored at the Defense Depot in Columbus, Ohio. Depot inventory records, which are maintained in the automated Defense Logistics Agency Distribution Standard System, are used for both item management purposes and for compiling financial statements. The Defense Logistics Agency reported the value of materiel stored at the

Depot during that timeframe as \$756 million. About 268,400 types of materiel were stored in over 700,000 warehouse locations on the Depot's premises.

For the audit, we selected 44 items listed on the inventory records to determine whether those records matched physical counts taken by Depot personnel. The sampled items included six types of chemical protective suits (hereinafter referred to as protective suits), for which another Defense Logistics Agency component, the Defense Supply Center, Philadelphia, Pennsylvania is the purchasing activity. In accordance with standard procedures for this type of audit, we observed the counts as the Depot personnel performed them.

The Distribution Standard System records indicated that the Depot had 2,178,583 suits of the six types in our sample at 1,043 warehouse locations. The physical counts at those locations, however, identified major discrepancies. The actual inventory for four types of protective suits was so much lower than reflected that a \$46.4 million adjustment for losses was required. Conversely, records for two other types of protective suits required \$24.6 million of adjustments for gains, indicating protective suits on-hand that were not on the records. On a net basis, there were 423,062 fewer protective

suits actually on-hand than in the records for those locations. At 728 other locations that were not identified as containing protective suits, we found an additional 696,380 protective suits, worth \$51 million, that were not on the inventory records. This was such a poor result that, instead of merely incorporating the matter into the annual financial statement audit report, we issued a separate report specifically on this issue.

Protective suits are a critical war reserve item and the supply community must be able to respond rapidly and efficiently to requests for protective suits from units that are either deploying or on standby to deploy. Protective suits have specified shelf lives and samples are periodically inspected in a quality surveillance program. For this reason, the general lack of adequate inventory control over protective suits was very surprising. If anything, one would have expected more emphasis than usual on these items. Instead, the auditors found a series of poor inventory management practices. For example, some storage locations for protective suits were improperly marked and therefore none of their contents were listed in the records. Organizational realignment at the Depot and staffing reductions contributed to these poor practices. Significantly,

the Depot's Inventory Integrity Branch had been reduced by 74 percent.

We made four recommendations to regain inventory control for the chemical protective suits. Managers implemented each recommendation or took an acceptable alternative action. The Defense Logistics Agency subsequently advised us that all protective suits had been located, inventoried and posted to inventory records by the Defense Depot, Columbus, as of November 24, 1997. Shortly thereafter, as part of the effort to consolidate overall supply depot operations, the protective suits were transferred to the Defense Depot, Albany, Georgia.

Followup Audit on Chemical Protective Suits

Report No. D-2000-086, Assuring Condition and Inventory Accountability of Chemical Protective Suits, February 25, 2000

During late FY 1999, again as part of our annual financial statement audits, we observed the physical inventory count for 158 items stored at Defense Depot, Albany. We later discovered that, instead of improving inventory management, the transfer of the protective suits to Defense Depot, Albany, had the opposite effect. The inventory records for one of those items, a type of chemical protective suit, were materially inaccurate. Although

the records indicated 225,202 protective suits on hand, the physical count was 31,277 less. Depot personnel attributed the problem to the large volume of protective suits transferred from Columbus in a short period of time. Due to a lack of staffing, the quantity of each of the 20 types of protective suits transferred to Albany was never verified. According to the inventory records, however, there were another 1.14 million protective suits of 19 other types in stock at the Depot. We recommended a wall-to-wall inventory of all protective suits, research to determine the causes of inaccuracy in the records and correction of those records. The Defense Logistics Agency concurred.

The wall-to-wall inventory was completed in January 2000. Of the 31,277 protective suits, 23,488 were found misplaced in other storage areas. The remaining discrepancy of 7,789 protective suits was caused, according to the Defense Logistics Agency, by an incorrect count when the material was received.

During the audit, we also observed that the Defense Logistics Agency had failed to separate potentially defective protective suits from the active inventory. The potential defects were the focus of an on-going criminal investigation, which I will discuss next. The auditors recommended that efforts to identify

and separate protective suits purchased under two suspect contracts be completed and those protective suits be removed from active inventory. We also recommended that the Defense Logistics Agency alert all DoD activities to whom protective suits from those contracts had been issued. The Defense Logistics Agency agreed with those recommendations and has advised us that segregation of the potentially defective protective suits was completed. Final disposition instructions were provided in May 2000.

Isratex Case

The aforementioned criminal investigation was initiated in May 1993 as a result of a Defense Logistics Agency fraud referral regarding a company called Isratex, Incorporated. The referral was directed to the Defense Criminal Investigative Service, the criminal investigative arm of our office, and alleged that a Puerto Rico based subsidiary of Isratex (Isratex-PR) was providing defective and non-conforming coveralls and coats to the Department of Defense. During the Government inspection process, employees of Isratex-PR allegedly provided items of clothing that were manufactured to contract specifications to the Government Quality Assurance Representative for acceptance inspection. Once the acceptance inspection was completed, however, Isratex-PR employees actually shipped other items of

clothing that were knowingly made with non-conforming materials and assembled in a substandard manner.

Our investigation, which included subsequent testing of Isratex-PR manufactured coveralls and coats stored in Defense depots, established there were significant defects in workmanship and the material used to manufacture these items. The investigation determined that managers of Isratex-PR, as well as corporate officers of the parent company in New York, were implicated in the scheme to provide defective clothing to the Military Services and Federal Prison Industries.

In November 1994, the focus of our investigative efforts shifted from non-conforming coats and coveralls to the manufacture of protective suits called Battle Dress Overalls (BDOs) by an Isratex facility in West Virginia. BDOs are a type of protective suit designed to be worn over a soldier's uniform to seal out biological and chemical agents. Isratex was awarded two contracts to produce BDOs, one in 1989 and the other in 1992. The contractor produced 605,854 BDOs valued at \$35 million under its 1989 contract and 173,070 BDOs valued at \$12.9 million under its 1992 contract.

In January 1996, a quality inspection of the BDOs manufactured under the 1992 contract was conducted by the Defense Logistics Agency, at our request. The inspection found significant defects, such as open seams, which by contract specification

called for the entire lot of BDOs to be withheld from distribution to the field. The Defense Logistics Agency initially segregated the BDOs that had been delivered under the 1992 contract, preventing operational distribution. However, three months later, they concluded that the BDOs were serviceable and returned them to regular stock, leading to the audit finding that I discussed previously.

On October 2, 1998, a 12 count Grand Jury indictment was unsealed against Isratex, its subsidiaries, two principal officers, and several of its employees charging conspiracy to submit false claims, false claims, and major fraud. In addition, a previously sealed information and the guilty pleas of three Isratex-PR officials for false claims and arson were unsealed. The October 1998 indictment was superseded on May 10, 1999, by a 23 count indictment with additional charges against company officials.

The corporation, its subsidiary in Puerto Rico, two principal officers and nine employees later pleaded guilty to various charges including making false or fraudulent claims, obstruction of justice, arson, and making false statements. Sentencing took place in April and May 2000. The corporation and its subsidiaries were fined \$266,825 and \$96,669, respectively. The principal officers and several employees received fines ranging from \$3,000 to \$40,000 and were ordered to pay \$195,000 in restitution. Eleven individuals were sentenced to

incarceration for terms ranging up to six months and one day or periods of probation of up to two years.

These protective suits were inspected again, at our request, in August 1999 by the U.S. Army Soldier Systems Center, Natick, Massachusetts and critical defects were found in addition to the defects already noted by the previous inspection. A quality inspection in May 2000, conducted by both the Army and the Defense Logistics Agency, of the BDOs manufactured under the 1989 Isratex contract found several critical defects similar to those in BDOs manufactured under the 1992 contract. On May 19, 2000, the Defense Logistics Agency issued a worldwide "Chemical Clothing Alert" regarding protective suits from both the 1989 and 1992 Isratex contracts. The alert advised the Military Services that these BDOs "must be designated for training only."

Chemical Protective Masks

Report No. 94-154, Reliability of M-17 Series and M-40 Chemical Protective Masks, June 30, 1994 (Secret)

Report No. 95-021, Defense Hotline Allegations Regarding DoD Fielding of Chemical Protective Masks, November 2, 1994 (Secret)

Report No. 99-061. M41 Protective Assessment Test System Capabilities, December 24, 1998

Let me now turn to the three reports on chemical protective masks (hereinafter referred to as protective masks). Those

reports were issued in June 1994, November 1994, and December 1998.

In July 1993, the Defense Hotline received allegations concerning problems with the serviceability and integrity of the chemical protective masks that were then in use. In addition, concerns were expressed about the design and production of new replacement protective masks. Our audit reports in response to the Hotline complaints were issued in June 1994 and November 1994. Because both reports were classified by the Department as Secret, we are constrained in terms of including certain details in this open hearing.

To assess the Hotline allegations, we selected and tested a random sample of Army M17 series and M40 protective masks. The Army provided funding for the testing, which was performed by the Marine Corps Test and Evaluation Unit. Both the M17 series and M40 protective masks were tested using Army-authorized chemical test equipment and production test criteria. These criteria were the same criteria used by the Army in determining requirements for its \$280 million program during the 1980's for testing and rebuilding M17 series protective masks, in an effort known as Operation Rock Ready. The test operators for our tests were certified on the test equipment by the Defensive Chemical Test Equipment Division, Pine Bluff, Arsenal. An Army representative from the Chemical and Biological Defense Command

and members of the audit team were present for oversight and verification at all test sites.

For the initial sample, we selected and tested 753 (376 M17 series and 377 M40) protective masks on the M14 Mask Leakage, the M4A1 Outlet Valve Leakage, and the Q204 Air Leak, Dry Bubble serviceability testers. The M14 tests the overall mask for leaks; the M4A1 tests the outlet valve for leaks; and the Q204 tests the drink tube quick-disconnect for leaks. A visual inspection test was also performed on all protective masks to identify defects and missing parts. In addition, from the initial sample of 753 masks, we selected 147 M17 series masks for further testing on the M41 Mask Fit Validation System, which in November 1994 was renamed the Protection Assessment Test System. The M41 is a portable instrument that measures the fit of a specific mask to a soldier. At the Army's request, we selected a second sample of another 154 M40 masks for testing on all four testers.

A variety of testing is performed throughout the life cycle of protective masks. First, there is quality assurance and acceptance testing at the factory. Mask condition is also tested periodically during its service life, in what would be termed surveillance or serviceability testing. When a mask has been issued to an individual, it needs to be checked for proper fit and serviceability.

Our June 1994 report was essentially a preliminary report on significant problems indicated by our testing and other data collection, which generally substantiated the Hotline allegations.

Our November 1994 report included four findings on mask design and production issues, acceptance testing, maintenance and periodic testing of fielded masks.

Design and Production Issues

Report No. 95-021, Defense Hotline Allegations Regarding DoD Fielding of Chemical Protective Masks, November 2, 1994
(Secret)

Our next report was the result of a review of Hotline allegations that specifically referred to design and manufacturing problems involving the M40 and M42 protective masks. The M42 is the combat vehicle crew version of the M40. These protective masks had troubled acquisition histories, with a wide variety of problems including significant schedule slippage; multiple contractor bid protests and termination disputes; and design and production defects. Although the Army, in response to our November 1994 report, stated that the program had been intensively managed and that repeated testing had corrected any design deficiencies, we identified several remaining problems. While classification issues preclude further discussion, we recommended that the Army develop and

implement an action plan to correct the outstanding deficiencies. The Army took responsive action.

Acceptance Testing

The Army did not ensure adequate acceptance testing of M40 and M42 masks at one contractor location. Those concerns became moot when that contractor was not selected for further M40 and M42 masks production.

Maintenance and Cyclic Testing

Much military equipment is "ruggedized" to withstand wear and tear and to function in difficult operating conditions. It is very difficult, however, to design protective masks that are impervious to environmental and operational factors, including heavy physical exertion, inadequate maintenance, or misuse by the wearer. For this reason, a major challenge exists in the area of Preventative Maintenance Checks and Services (PMCS), especially in units such as infantry.

We found strong indications that soldiers were not following prescribed procedures when performing PMCS on chemical protective masks or reporting maintenance problems as required by the Operator's Manual for Chemical-Biological Masks. The soldiers with the M40 masks selected as part of our test sample were instructed to perform PMCS before submitting their masks

for testing. In spite of PMCS allegedly being performed before testing, we found through visual inspection that many masks were not reassembled correctly. In addition, a visual inspection of the sampled masks identified conditions, such as cracked eye lenses and missing parts, that would not have existed if PMCS had been done properly.

It is our position that the adequacy of PMCS can best be determined by an aggressive program of periodic surveillance testing of masks whether in the hands of users or in war reserves. At the time of our audit, only the Marine Corps had a cyclic surveillance testing program. Throughout the ensuing six years, our primary goal has been for the Services to ensure that battlefield risk is minimized by verifying mask reliability often and rigorously. To assure testing rigor, it is clearly important that the performance criteria for the masks be standard, explicit, and demonstrably based on updated threat assessments.

Response to Our Audit Finding

During the audit, the Army took immediate action on one of our concerns by changing the standard for the first depot surveillance inspection of masks from 60 months to 24 months from the date of manufacture and packing. In our November 1994 report, we recommended ten additional actions, including the establishment of a standardized DoD-wide cyclic testing program

and the development of specific criteria for testing fielded masks.

In general, the Deputy for Chemical/Biological Matters, Office of the Assistant Secretary of Defense (Atomic Energy) and the Services agreed that maintenance practices and training needed improvement. The Deputy for Chemical/Biological Matters also agreed that valid concerns about the need for surveillance testing and what test standards were appropriate needed to be addressed, but the Army comments and actions on the testing issues were nonresponsive. To resolve the outstanding issues, in June 1995 the Department agreed to initiate a Pilot Retail Chemical Mask Surveillance Study. A Joint Service Mask Technical Working Group was established to conduct the study, under the auspices of the Joint Services Material Group. The IG, DoD, worked closely with the Working Group to formulate the sampling plans for the study and we also had a representative on the Working Group.

The results of the study were presented in the Final Mask Surveillance Pilot Program Report of November 15, 1999. In brief, results of this study released in November 1999 validated the concerns that we had reported in 1994. Of 19,218 masks that were tested, 10,322 had critical defects. However, the Deputy Assistant for Chemical/Biological Defense informed us in March 2000 that "there is no indication of extensive mask degradation over time or through field usage other than through wear and

tear which is exacerbated by a lack of field/fleet maintenance." Furthermore, on those grounds, the Deputy Assistant rejected the Working Group's recommendation for a centralized mask surveillance testing program. As a result of these decisions, mask defects continue to be viewed as a "logistics sustainment" issue, thereby relying on the individual Services to improve maintenance practices. The study also failed to produce agreed-upon test criteria, which I will address further in the context of our December 1998 report.

We were frankly disappointed that the Deputy Assistant was unable to provide us the details of what the Services were doing to address the alarming test failure rates and had taken the position that her office's responsibilities extended only to new equipment acquisition, not readiness oversight. We requested the Services provide details of their actions and plans and are generally satisfied with the responses. All Services now acknowledge the need for continued mask surveillance testing and are taking appropriate implementation measures. We intend to audit the effectiveness of these efforts after they have been implemented for a year or two. Depending on the results, it may be appropriate to revisit the issue of Office of the Secretary of Defense or Joint Staff level oversight in the future.

M41 Protection Assessment Test System Capabilities

Report No. 99-061, M41 Protective Assessment Test System Capabilities, December 24, 1998

Let me now turn to our December 1998 report on the M41 Protective Assessment Test System Capabilities. In November 1995, the Joint Service Mask Technical Working Group issued a report, "Mask Criteria Analysis and Test Requirements," stating that the M41 was appropriate for testing the combat readiness of negative pressure masks, such as the M17 series, M40, and M42 protective masks. According to that report, the combination of Preventative Maintenance Checks and Services and a mask fit verified with the M41 would be sufficient to assure mask readiness. This had been the Army position for several years. Based on what we had learned about the limitations of the M41 system during the 1994 audit and in Working Group discussions, we decided that a separate Inspector General, DoD, assessment of this testing device's capabilities would be useful.

Our review included obtaining input from 188 M41 operators at four Army bases and the Army Chemical School. The audit confirmed that the suitability of the M41 as a combat readiness tester was questionable because it was designed primarily as a mask fit tester in other than realistic battlefield conditions. We also reported that the Joint Service Materiel Group had not finalized fit factor criteria for the M41, testers were not being returned for calibration in a timely manner, and M41

operators were not sufficiently trained and making full use of the available testing equipment.

The issue of the lack of agreed-upon criteria for the testing of fielded masks has proven difficult for the Department to resolve. The Army criticized the more stringent production test criteria used by the Marine Corps for surveillance tests and for our 1994 tests, but offered no substitute criteria for testing fielded masks except an interim fit factor based on a outdated 1986 requirements analysis. The fit factor is the ratio between ambient air particles in the air outside the mask to particles in the air inside the mask. Our December 1998 report also pointed out vast differences between and within the services for programming the M41 system:

- The Army was using an outdated interim fit factor pass or fail criterion of 1,667 for fielded masks for all units except chemical surety sites and the Chemical Defense Training Facility, which used a fit factor of 3,000.
- The Marine Corps used the criterion of 6,667 for fielded masks until 1998, but changed to 3,000 to be consistent with the chemical surety sites and Chemical Defense Training Facility.
- The Air Force used a fit factor of 2,000 during a Pacific Air Force pilot program in 1998, but was not committed to extensive use of the M41.

- The Navy had not decided on a fit factor and also was considering alternatives to the M41.

In response to the December 1998 audit report, the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense directed in March 1999 that the M41 be referred to by its original nomenclature, a Protective Mask Fit Validation System, not a combat readiness tester. The Assistant tasked the Army to provide input so that the Joint Nuclear, Chemical and Biological Defense Board could try again to update the mask fit-factor criteria. The Army indicated in early June 2000 that the Services had agreed to a new fit factor based on updated threat data.

Most of the actions taken in reaction to our December 1998 report have been responsive, assuming the fit factor question is actually resolved. However, we remain concerned about the lack of consistent serviceability testing and the criteria used in that testing. It is also important to note the ongoing introduction into service of the TDA-99M Joint Service Mask Leakage Tester, a portable tester that has the combined capability of the entire family of previous test equipment for protective masks. This small "suitcase" tester may enable the type of aggressive readiness testing in the field, for both fit and condition, that would help the troops gain maximum confidence in their masks. Ironically, we have seen no

indication to date that the Army intends to acquire this equipment.

Other Chemical and Biological Defense Issues

In closing, it would be appropriate to note that chemical and biological defense has been a primary focus of Inspector General, DoD, readiness audits over the past few years. I have attached a list of these reports to this testimony. Given the importance of fully addressing the management challenges in this difficult area, we have attempted to maintain continuous coverage despite severe resource constraints and other requirements. Currently, we are auditing the National Guard Weapon of Mass Destruction Civil Support Detachments and will assess the chemical and biological defense readiness of the Reserves later this year. As previously mentioned, we will plan a follow-up audit on mask maintenance and surveillance testing. We will also initiate audits this summer discussing DoD efforts to acquire the next generation of protective masks and the Joint Biological Point Detection System as well as continue periodic reviews of Defense Logistics Agency inventory accuracy.

Thank you for considering the views of my office on these important matters. This concludes my statement.

Inspector General, DoD
Reports on Chemical and Biological Defense

Report No. 94-154, Reliability of M-17 Series and M-40 Chemical Protective Masks, June 30, 1994 (Secret)

Report No. 95-021, Defense Hotline Allegations Regarding DoD Fielding of Chemical Protective Masks, November 2, 1994 (Secret)

Report No. 95-224, Army Chemical Protective Mask Requirements, June 8, 1995

Report No. 97-018, The Patriot Advanced Capability-3 Program, November 4, 1996

Report No. 97-102, Inventory Accuracy at the Defense Depot, Columbus, Ohio, February 27, 1997

Report No. 97-217, Chemical and Biological Defense Readiness, September 19, 1997 (Secret)

Report No. 98-174, Unit Chemical and Biological Defense Readiness Training, July 17, 1998

Report No. 99-045, Chemical and Biological Warfare Defense Resources in the U.S. Pacific Command, December 3, 1998 (Secret)

Report No. 99-061, M41 Protective Assessment Test System Capabilities, December 24, 1998

Report No. 99-102, Chemical and Biological Defense Resources in the U.S. European Command, March 4, 1999 (Secret)

IG Semiannual Report to Congress for the Period Ending March 31, 1999, Focus Area on Chemical and Biological Defense

Report No. D-2000-086, Assuring Condition and Inventory Accountability of Chemical Protective Suits, February 25, 2000

Report No. D-2000-105, Contracting for Anthrax Vaccine, March 22, 2000 (For Official Use Only)

All reports listed above that are not
Classified or For Official Use Only
are available on the Internet at www.dodig.osd.mil.