

October 1999

# CONTRACT MANAGEMENT

## Pilot Program Needed to Improve DOD Identification of Warranty Claims







**United States General Accounting Office**  
**Washington, D.C. 20548**

**National Security and  
International Affairs Division**

B-282104

October 29, 1999

The Honorable John W. Warner  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Floyd D. Spence  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

Section 391 of the Fiscal Year 1998 National Defense Authorization Act (P.L. 105-85) authorized the Secretary of Defense to carry out a pilot program to use commercial sources to improve the collection of Department of Defense (DOD) claims under aircraft engine warranties. The act required that, if established, the pilot program, and program contracts, terminate on September 30, 1999. However, on October 5, 1999, section 382 of the National Defense Authorization Act for Fiscal Year 2000 (P.L. 106-65 ) extended the termination date of the pilot program until September 30, 2000. Although authorized, neither act requires a pilot program.

The legislation directs us to review the results of the pilot program. Since DOD has not yet initiated a pilot program, we are providing this interim report that (1) identifies the benefits obtained by some private sector users of aircraft engine warranty services and (2) assesses the efforts DOD has made to evaluate the feasibility of establishing a pilot program.

Generally, a warranty requires that a manufacturer repair or replace defective goods covered by the warranty without cost to the purchaser or pay the purchaser's costs of correcting a defect. Defects or deficiencies may be caused by poor design, faulty manufacturing processes, or the use of materials that do not meet contract specifications.

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## Results in Brief

Some commercial airlines have benefited from the use of outside firms to identify failed engine parts and recover the cost of correcting such parts from manufacturers. Officials from United Parcel Service, United Airlines, and America West told us that their engine warranty recoveries increased over internally identified recoveries when they supplemented internal efforts with an outside firm. In one case, warranty recoveries increased threefold over recoveries identified internally.

To date, DOD has performed a limited review of the feasibility of establishing a pilot program, but has not established one. The Army and the Navy made a limited assessment of a potential pilot program and concluded that it would likely not be useful to them. They believe any additional claims that may be identified and amounts recovered would not be worth the anticipated cost to execute a pilot program. The Air Force sought industry's interest in a pilot program by synopsisizing the program's requirements in the Commerce Business Daily in November 1998. However, the Air Force did not issue a request for proposals, in large part because of concerns that the program could not be executed in the 10 months remaining before authority to conduct a pilot program was set to expire on September 30, 1999. Concerns that contractors would not be paid after that date was also a factor.

Experience from the private sector suggests that contracting for engine warranty administration can improve warranty recoveries over internal efforts. This includes collecting claims on past engine repairs even though the warranties are no longer active. However, it is unknown whether the results achieved by some commercial airlines can be replicated in DOD since a pilot program has not been implemented. The Congress recently extended the authority for a pilot program until September 30, 2000. However, the additional time may still not be sufficient. This report suggests that the Congress consider expanding the pilot program to test whether DOD could benefit from using commercial sources to increase recoveries on aircraft warranties.

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## Background

In December 1997, a firm submitted an unsolicited proposal to the Air Force to provide warranty recovery services for aircraft engines. The firm currently provides services to commercial airlines and operates under a contingency contract, receiving a fee based on net collected funds. Therefore, its customers incur no financial burden. Hourly rates or other

related costs, such as equipment, staffing, and data processing, are not associated with a contingency fee contract.

The Air Force rejected the unsolicited proposal because it failed to meet the first criterion of a valid unsolicited proposal, as defined by the Federal Acquisition Regulation. The Federal Acquisition Regulation states that a valid unsolicited proposal must be innovative and unique. According to the Air Force, the proposal merely offered services the Air Force already had and was not innovative and unique.

The Senate Committee on Armed Services, in its report accompanying the Fiscal Year 1998 National Defense Authorization Act, expressed concern that DOD was not receiving appropriate refunds for repair of systems covered by warranties. In June 1996,<sup>1</sup> we reported that warranties on weapon systems returned only about 5 cents for every dollar spent on the warranty. One cause for the low return was the low rate of claims submitted on warranted items. Both the fiscal year 1998 and the 2000 authorization acts allow the Secretary of Defense to enter into contracts under a pilot program to provide for the following services:

- Collecting on warranty claims.
- Determining the amounts owed DOD for repairs of aircraft engines covered by warranties.
- Identifying and locating information sources relevant to collecting claims under aircraft engine warranties.
- Suggesting training programs to improve DOD's collection of warranty related information needed to process warranty claims.

The legislation requires that a contractor be paid a percentage of any amounts recovered as deemed appropriate by the Secretary of Defense.

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## Private Sector Finds Value in Contracting for Warranty Services

United Parcel Service, United Airlines, and America West contracted with a private firm<sup>2</sup> that provides aircraft engine warranty services. United Parcel Service and United Airlines officials said they hired this firm because it offered a no-cost service to determine if their warranty administration

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<sup>1</sup> *Weapons Acquisitions: Warranty Law Should Be Repealed* (GAO/NSIAD-96-88, June 28, 1996).

<sup>2</sup> This is the same firm that submitted the unsolicited proposal to the Air Force.

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departments were identifying all defective warranted parts and then recovering the cost to fix such parts from the manufacturer. America West contracted with this same firm because its aircraft engine warranty department was backlogged.

Each of the airlines found that this firm increased engine warranty recoveries over recoveries found internally.

- At United Parcel Service, this firm increased warranty recoveries more than threefold, from June 1998 through March 1999. As a result, the company decided to contract its engine warranty administration to this firm.
- At United Airlines, the firm increased warranty recoveries just under 2 percent, or approximately \$500,000, from June 1998 to February 1999. United decided to continue contracting with this firm. United believes the combined efforts of its warranty administrators and this outside firm maximizes the identification and recovery of warranty claims.
- At America West, this firm increased warranty recoveries, but officials would not quantify the increase because their company policy is not to discuss their supplier relationships with third parties. America West contracted with this firm from July 1997 through July 1998 but decided not to continue contracting with any engine warranty recovery company. It would not provide a reason but America West officials did state that currently about 71 percent of their 276 engines are maintained by engine manufacturers under a power-by-the-hour program. This program precludes the need for warranty coverage because, for a fixed price, the engine manufacturer provides engine maintenance.

Airline officials told us that, initially, the outside firm needed time to learn where company engine maintenance data was stored and how to retrieve it. After the initial learning period, the firm's activities were transparent and not disruptive to normal company operations. They also confirmed that the firm was successful in getting manufacturers to pay claims on past engine repairs and overhauls even though engine warranties were no longer active. The collection process, they said, was not contentious.

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## DOD Has Performed a Limited Review of Pilot Program Feasibility

The services performed a limited review of the feasibility of a pilot program. The Army and the Navy made a limited assessment of a potential pilot program and concluded that it would likely not be useful to them. They believe any additional claims that may be identified and amounts recovered would not be worth the anticipated cost to execute a pilot

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program. Army and Navy officials stated that although the pilot program is intended to be a no-cost effort, costs would be incurred in the form of

- issuing and evaluating a request for proposals,
- awarding a contract, and
- supporting a contractor in the contractor's effort to (1) understand how engine maintenance data is maintained and then (2) collect the data for the contractor's review.

This support, these officials said, would be labor intensive because much of the data is in both paper and electronic files and is located at military bases throughout the world.

In addition, Navy officials emphasized that DOD and commercial warranties differ. For example, DOD warranties often have a time limit for filing claims. These officials also pointed out that the military environment is less predictable than the commercial environment and may lead the military to operate engines at performance levels that could invalidate warranties.

In October 1998, the Army and the Navy gave their views on establishing pilot programs in a memorandum to the Director of Defense Procurement. The Army stated it had no need to participate in a pilot program because it had no outstanding warranty claims. As noted previously, the legislation was not restricted to collection services, and a specific purpose of the legislation is the identification of potential claims. The Navy stated it could not identify any engines to use in a pilot program, but it was continuing to explore possible opportunities. No Navy engines have yet been identified, and Navy officials told us they believe a pilot program covering commercial equivalent engines, such as those bought by the Air Force for cargo and transport aircraft, would be more likely to succeed.

Air Force officials also expressed concern about the differences between DOD and commercial warranties and questioned whether the anticipated cost to execute a pilot program would exceed the amounts recovered. However, the Air Force decided to further explore the feasibility of a pilot program and synopsisized the requirements of the pilot program in the Commerce Business Daily. The Commerce Business Daily announcement was a request for information to obtain industry's input and concerns and to determine if there was enough interest in a pilot program given its requirements.

Four firms responded to the request for information and, although interested, believed the proposed requirements presented a high-risk program. For example, one firm questioned whether the program could be executed because the period for implementation was so short. The synopsis was published on November 26, 1998, and the authority to conduct a pilot program was set to expire 10 months later, on September 30, 1999. During the 10-month period, the Air Force would have to issue a request for proposal, select a contractor, and execute the program. The contractor would have to become familiar with Air Force electronic databases and document filing systems, identify and document warranty claims, collect amounts due, and then be paid.

Another firm responded that the pilot program was high risk because the potential base for warranty recoveries was small. The Air Force selected only one engine with an active warranty for the program, precluding coverage of other engines and of engines whose warranties had expired. This firm claimed the basis of its success is its ability to obtain higher warranty recoveries than its customers recover through their own efforts, including validating claims on past engine repairs after a warranty has expired.

The other two firms expressed concern about recovery of their fees after the program terminated. The request for information advised that contractors were to be paid from amounts recovered only until the expiration of the pilot. Therefore, any funds recovered later would be returned to the Treasury.

In January 1999, the Air Force Materiel Command concluded a warranty claims recovery pilot program would be impractical and recommended that the Air Force not pursue a contract.

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## Conclusions

The time needed for DOD to award a contract and for a contractor to become familiar with DOD records suggests the need for a longer implementation period for the pilot program than the additional 1 year provided by the fiscal year 2000 act. Additional authority is also needed to clearly allow contractors to be paid for claims outstanding at the end of the pilot program (once collections have occurred). Also, private sector experience has shown that warrantors will pay claims on past engine repairs and overhauls, even though engine warranties are no longer active.

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## Matters for Congressional Consideration

In order to fully test the concept of using the private sector to increase warranty recoveries, the Congress may want to

- require that the Department of Defense undertake a pilot program;
- authorize a 2-year pilot program;
- authorize contractors to be paid, at least in part, for claims identified but not recovered by the end of the pilot program (once those recoveries are made); and
- direct that the program be structured to allow the review of both active and expired aircraft engine warranties.

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## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD stated that (1) evidence presented by the draft report showed that only one of three private firms benefited significantly from the use of third-party warranty services; (2) the report does not fully address differences in the operational requirements, warranty provisions, warranty administration practices, and operational environment (including the location of deployed equipment at sea or in combat zones) and does not substantiate that DOD would benefit from such services; and (3) the report does not address fully the costs of obtaining third-party warranty services because the unsolicited proposal included a separate payment in addition to the contingency fee. DOD disagreed with the desirability of allowing contractors to be paid, at least in part, for claims identified but not yet recovered by the end of the contract period, saying that contractors should be paid for recoveries, not claims. DOD also disagreed with our suggestion that the pilot program should cover expired as well as active warranties because it would increase the administrative burden. (DOD's comments are reprinted in app. I.)

The point of a pilot program is to test the costs and benefits of a practice that has been successful in the private sector. We believe the evidence provided in this report supports establishing a pilot program and we modified the matters for congressional consideration to suggest that the Congress require DOD to implement a pilot program. The report demonstrates that a similar program provided benefits when used in the private sector. The benefits in the form of increased recoveries were significant enough for commercial airlines that two of the three airlines discussed continued the third-party warranty recovery program. While the third airline did not continue the program, it did indicate that recoveries increased and stated that 71 percent of its engines are maintained under a power-by-the-hour program, precluding the need for warranty coverage.

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While there are differences in the environment in which DOD operates, the purpose of the pilot program is to test the significance of these differences. And while aircraft are deployed worldwide, the bulk of maintenance work for a specific aircraft takes place at particular depots and particular bases, making the worldwide deployment of DOD aircraft less of an obstacle than portrayed by DOD.

The unsolicited proposal received by the Air Force did include a separate payment for performance of recovery work. We were told by the firm that submitted the proposal that Air Force officials suggested that a separate payment be included because it was difficult to price a contingency fee contract without the special authority provided by the pilot program. Air Force officials confirmed this statement.

We agree with DOD that contractors should be paid for recoveries, not claims. DOD misinterpreted our recommendation. We are recommending that authority be provided so that contractors can be paid (on claims identified during the pilot program) for recoveries that occur after the pilot program has ended. We have modified our recommendation to clarify this point.

Finally, we believe that the pilot program should include coverage of expired warranties based on the experience of commercial airlines. At commercial firms, claims were identified and collected for both active and expired warranties. We believe the purpose of a pilot program is to test the value of different approaches so a more informed program design can be developed.

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## Scope and Methodology

To assess DOD's efforts to evaluate the feasibility of establishing a pilot program, we obtained information on the process the Office of the Secretary of Defense and the military departments went through to assess feasibility. We also interviewed responsible officials to obtain their views on the merits of the proposed pilot. To examine private sector experience with warranty recovery, we interviewed officials from a firm specializing in aircraft warranty recoveries and three of its customers—United Parcel Service, United Airlines, and America West.

We performed our review from February 1999 through August 1999, in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Honorable William Cohen, Secretary of Defense; the Honorable F. Whitten Peters, Secretary of the Air Force; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; Lieutenant General Henry T. Glisson, Director of the Defense Logistics Agency; the Honorable Jacob Lew, Director of the Office of Management and Budget; and other interested parties. We will make copies available to others upon request.

Please contact me at (202) 512-4587, if you or your staff have any questions concerning this report. Key contributors to this report were Charles W. Thompson, Karen S. Zuckerstein, and Daniel J. Hauser.

A handwritten signature in black ink that reads "David E. Cooper". The signature is written in a cursive, flowing style.

David E. Cooper  
Associate Director  
Defense Acquisitions

# Comments From the Department of Defense

Note: GAO's comment supplementing those in the report text appear at the end of this appendix.



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000

October 8, 1999

DP/DSPS

Mr. David E. Cooper, Associate Director,  
Defense Acquisition Issues  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Cooper:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "CONTRACT MANAGEMENT: Pilot Program Needed to Determine if Private Sector Practices Could Increase Identification of Warranty Claims," dated September 13, 1999 (GAO Code 707404/OSD Case 1893).

The first stated objective of the GAO report is to identify the benefits of third party warranty services in the private sector. The report indicates that only one of three private sector firms studied found significant benefit. The report does not address fully differences in operational requirements, warranty provisions, and warranty administration practices, between commercial air carriers and the military, and does not substantiate that DoD would benefit from third party warranty administration.

The primacy of fulfilling mission requirements in military operations (including the need to repair or replace parts in the field notwithstanding warranty implications), the location of deployed equipment at sea or in combat zones, and maintenance records located around the world, differentiate the military from the commercial sector, and adversely affect warranty administration, including third party tracking of warranties. Permitting third party access to military maintenance records on ships or in combat zones could be intrusive or impossible.

The draft report does not address fully the costs of obtaining third party warranty services. The draft report asserts that "[e]xperience from the private sector suggests that



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**Appendix I**  
**Comments From the Department of Defense**

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contracting for engine warranty administration can improve warranty recoveries over internal efforts" without having determined whether increases in recovery were due simply to application of additional resources (at some cost), or to application of specialized expertise not available within DoD. The report indicates the firm that submitted an unsolicited proposal "operates under a contingency contract, receiving a fee based on net collected funds" but failed to mention the firm also required a significant separate payment in addition to the contingency fee.

DoD has been unable to identify candidate programs expected to benefit from a warranty services pilot program and the military departments indicated the associated costs may exceed the benefits. The Department's requirements are different from commercial air carriers. Its contractual warranty provisions are tailored to its requirements, as are warranty administration procedures. Extension of the pilot program authority is not required. Additional comments are enclosed.

DoD appreciates the opportunity to comment on the draft report.

Sincerely,



Eleanor R. Spector  
Director, Defense Procurement

Enclosure:  
As stated

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**Appendix I**  
**Comments From the Department of Defense**

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General Accounting Office Draft Report  
"CONTRACT MANAGEMENT: Pilot Program Needed to  
Determine if Private Sector Practices Could  
Increase Identification of Warranty Claims,"  
Dated September 13, 1999  
(GAO Code 707404/OSD Case 1893):

DEPARTMENT OF DEFENSE COMMENTS  
TO THE GAO RECOMMENDATION TO CONGRESS

See comment 1.

BACKGROUND: The "Background" section of the draft report includes the statement: "In June 1996, we reported that warranties on weapons systems returned about 5 cents for every dollar on the warranty." (p. 3/Draft Report)

DOD COMMENT: This data is more than four years old and may have applied when DoD was acquiring warranties on every weapon system required by law. We agreed that many of the warranties we were buying were not cost effective. Since the law has been repealed, this data is no longer current.

RECOMMENDATION: To fully test the concept of using the private sector to increase warranty recoveries, the GAO stated that the Congress may want to:

1. Authorize a 2-year pilot program;
2. Authorize contractors to be paid, at least in part, for claims identified but not recovered by the end of the pilot program; and
3. Direct that, should a pilot program be established, the program be structured to allow the review of both active and expired aircraft engine warranties. (p. 8/Draft Report)

Now on p. 7.

DOD RESPONSE:

1. While contract lead time is longer than one year, it is not clear that a law is required at all.
2. Non-concur. Contractors should be paid for government recoveries, not claims.

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**Appendix I**  
**Comments From the Department of Defense**

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3. Non-concur. Inclusion of previously accomplished repair work on engines no longer under warranty would increase effort required of the contractor and the burden on DoD in locating, reviewing, and analyzing past records at multiple locations and training and assisting the contractor. Such activity may also interfere with closing out completed contracts.

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The following is GAO's comment on the Department of Defense's (DOD) letter dated October 8, 1999.

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**GAO Comment**

1. While the data is several years old, DOD did not make updated data available to us. We are not aware of any information that suggests that the situation is significantly different.

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