March 2000

FINANCIAL MANAGEMENT

Differences in Army and Air Force Disbursing and Accounting Records
Contents

Letter 3

Appendixes
Appendix I: Objectives, Scope, and Methodology 22
Appendix II: Comments From the Department of Defense 25
Appendix III: GAO Contacts and Staff Acknowledgments 28

Related GAO Products 29

Tables
Table 1: Fiscal Year 1997 MOCAS Transactions That Were Recorded Differently or Could Not Be Located in Accounting Systems Used for Army 11
Table 2: Examples of Differences in Contract ACRN Balances Between MOCAS and Accounting Records 14
Table 3: Strata for Army Sample of 534 Fiscal Year 1997 MOCAS Transactions 23
Table 4: Strata for Air Force Sample of 523 Fiscal Year 1997 MOCAS Transactions 23

Abbreviations
ACRN Accounting Classification Reference Number
DCMC Defense Contract Management Command
DFAS Defense Finance and Accounting Service
DOD Department of Defense
DPPS Defense Procurement Payment System
EOR element of resource
MOCAS Mechanization of Contract Administration Services
NULO negative unliquidated obligation
March 7, 2000

The Honorable Charles E. Grassley
United States Senate

Dear Senator Grassley:

The reliability of contract disbursing data is critical to the ability of the Army and the Air Force to (1) effectively account for and control billions of dollars in budget authority and (2) prepare reliable financial information on the results of operations to support management and congressional decision-making on programs, operations, and budget requests. In response to your request, this report discusses Army and Air Force accounting for contract disbursements. As noted in your request, we previously reported serious problems in accounting for Department of Defense (DOD) contract disbursements. (See the “Related GAO Products” list at the end of this report.) For example, we reported¹ that the appropriation initially charged for a disbursement in the DOD disbursing system was changed for 17 percent of the transactions when they were subsequently recorded in the responsible Army units’ accounting records.

The Defense Finance and Accounting Service (DFAS) payment center in Columbus, Ohio, makes contract payments for the Army, the Air Force, and other DOD organizations. In fiscal years 1997 and 1998, DFAS Columbus contract payments totaled a reported $69 billion and $70.5 billion, respectively. DFAS Columbus relies on the Mechanization of Contract Administration Services (MOCAS) system to process DOD contract payment transactions. MOCAS transactions are to be recorded in DFAS accounting systems used for the Army and Air Force, which maintain the official accounting records, including the availability and status of funds.

Our objectives were to determine (1) if, and to what extent, contract payment transactions recorded in the Army and the Air Force official accounting records differed from MOCAS disbursing system records, (2) the types of differences between the disbursing and accounting systems and, to the extent possible, the causes for the differences, and (3) the

potential effect any identified deficiencies may have on DOD’s planned contract payment system improvements.

Results in Brief

Our sample results showed billions of dollars of differences in the way contract payment transactions were originally recorded in MOCAS and the applicable accounting systems prior to the mid-1990s for the Air Force and prior to fiscal year 1999 for the Army. These differences related primarily to manual processes for recording MOCAS transactions in the accounting systems, which resulted in DFAS accounting station officials making a different determination about how the transactions were to be recorded. Our sample of fiscal year 1997 Army contract payment transactions showed that an estimated $6.7 billion\(^2\) in MOCAS disbursement and collection transactions were recorded differently or could not be located in the DFAS accounting systems used to record Army transactions, including $2 billion recorded to different appropriations in MOCAS and Army’s accounting records. The current electronic processes for recording MOCAS transactions in the applicable accounting systems should reduce significantly the opportunity for such differences. However, existing differences will ultimately result in the need for adjustments to reconcile accounting and disbursing records and to resolve uncertainties concerning the status of appropriated funds. For example, a DFAS Army accounting station recorded one disbursement transaction totaling $4.3 million to the fiscal year 1995 “Procurement of Weapons and Tracked Combat Vehicles, Army” appropriation, while DFAS Columbus recorded this same transaction to the fiscal year 1991 “Other Procurement, Army” appropriation in MOCAS.

\(^2\)The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of MOCAS transactions that were recorded differently or could not be located in the DFAS accounting system for Army was between $5.9 billion and $7.6 billion.
Further, our analysis showed that about one of every two dollars processed by MOCAS was for adjustments to previously recorded disbursement transactions and that billions of dollars of MOCAS adjustments were not recorded in DFAS Army accounting station records. Prior to February 1999, DFAS Columbus did not send most MOCAS adjustments to the DFAS accounting stations that processed Army transactions because, according to DFAS Columbus officials, the accounting stations did not generally accept MOCAS adjustments. Based on our sample, we estimate that DFAS Columbus did not report $21.6 billion of these transactions to DFAS Army accounting stations. Unlike the Army adjustment transactions, most of the Air Force adjustment transactions in our sample were recorded in Air Force accounting records.

In addition to transaction-level differences, contract balances (including obligations, disbursements, and unliquidated obligations) also differ between MOCAS and the DFAS accounting systems used to process Army and Air Force transactions. Differences in contract balances represent timing differences and the cumulative effect of differences in the way that disbursement and obligation transactions were previously recorded in MOCAS and the accounting systems. Accurately maintaining these balances is critical to ensuring that disbursements do not exceed available budget authority and that the disbursements are made within the constraints imposed by law. For the contract accounting lines associated with the transactions in our Army sample, actual differences in balances amounted to about $909 million in obligations and about $908 million in disbursements between MOCAS and the DFAS accounting systems used to process Army transactions. For the contract accounting lines associated with the transactions in our Air Force sample, actual differences amounted to about $1.3 billion in obligations and about $1.4 billion in disbursements.4

DOD has a number of initiatives planned or under way to address acknowledged deficiencies in its contract payment processes. One of the initiatives involves a new contract payment system currently targeted to

3The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of adjustments that were not reported to DFAS Army accounting stations would be between $20.1 billion and $22.7 billion.

4These differences represent only the balances associated with the accounting lines in our Army and Air Force samples for which data were available in both MOCAS and the accounting system. Therefore, the total differences in accounting line balances between MOCAS and the applicable accounting systems would be expected to be much greater in our sample as well as the total population.
begin implementation in June 2000. In March 1999, when we briefed DOD systems integration officials on the magnitude of the differences in contract payment data between MOCAS and accounting system records, DOD did not have a plan for ensuring the reliability of contract payment data before implementing the new system. As of August 1999, the Defense Contract Management Command had proposed an overall approach to help ensure the reliability of MOCAS data in the new system. The approach relies on accelerating the closeout of existing contracts in MOCAS to the extent possible and reconciling those contracts that would need to be loaded into the new system. However, this high-level approach has not yet been approved and incorporated into a detailed data conversion plan. This report discusses the basic steps necessary for developing such a plan, including (1) comparing the two sets of records to identify the magnitude of the differences between MOCAS and the accounting records, (2) stratifying the contracts by the number and amount of the differences so that priorities for data cleanup can be established, (3) developing a policy for addressing how the differences will be handled, and (4) for those existing contracts that will be entered into the new system, including steps in the plan to retain the transactional history of each contract, whether in MOCAS or by some other automated means.

We are making recommendations that address the need for DOD to develop a data conversion plan as part of its efforts to implement new corporate procurement and contract payment systems.

Scope and Methodology

Our results are based on a stratified random sample of 534 Army and 523 Air Force fiscal year 1997 MOCAS transactions totaling about $5.6 billion and $8.2 billion, respectively. Fiscal year 1997 data were the most current available for an entire fiscal year at the time we began our review. The universe of Army transactions totaled 474,448 in the amount of about $45.7 billion. The universe of Air Force transactions totaled 550,407 in the amount of about $84.9 billion.

As with any statistical analysis, the results are subject to some uncertainty or sampling error because only a portion of the universe was selected for review. Our projections are expressed as point estimates that fall within confidence intervals. This means that if you were to determine an estimate for 100 different random samples of the same size from this population, 95 out of 100 times, the estimate would fall within the confidence interval. In other words, the true value is between the lower and upper limits of the confidence interval 95 percent of the time.
Our work was performed from May 1998 through August 1999 in accordance with generally accepted government auditing standards. We performed our work primarily at the DFAS Columbus, Ohio, disbursement center; the DFAS St. Louis, Missouri, operating location; and the DFAS Dayton, Ohio, operating location. Further details on our scope and methodology are included in appendix I. We requested comments on a draft of this report from the Secretary of Defense or his designee. The Under Secretary of Defense (Comptroller) provided written comments, which are discussed in the “Agency Comments and Our Evaluation” section and are reprinted in appendix II. DOD’s technical comments are also discussed but are not included.

Background

DOD payment and accounting processes are complex, generally involving separate functions carried out by separate offices in different locations using different systems. For example, DOD has estimated that a dozen organizations may be involved in making a single payment on a complex weapon system and that over 31 different computer systems (feeder systems) are relied on to support the various phases of the contracting process. In addition, during fiscal years 1997 and 1998, DFAS accounting stations generally recorded Army contract payments in four major accounting systems and Air Force contract payments in two major accounting systems.

DFAS, created in 1991 to consolidate DOD payment and accounting functions under one organization, performs disbursing and accounting functions for the Army and the Air Force, as well as other DOD organizations. The various DOD organizations use different disbursement and accounting systems and processes, and different DFAS offices have been given responsibility for providing disbursing and accounting services for these organizations.

DFAS Columbus Center uses MOCAS to make payments on contracts for all DOD organizations, including the Army and the Air Force. As of June 1999, MOCAS contained about 342,000 contracts. After recording contract disbursements, collections, and adjustments, DFAS Columbus forwards transaction data to the DFAS accounting stations responsible for recording these data in the various DOD organizations’ accounting systems.

Operating locations, also known as OpLocs, are DFAS accounting and disbursing stations.
DFAS St. Louis operating location processes about 85 percent of the dollar value of Army transactions. During fiscal year 1997 and most of fiscal year 1998, DFAS Army accounting stations manually entered MOCAS contract payment transactions from hard-copy documents into the various accounting systems used to record Army transactions. DFAS Army accounting stations used a manual process because contract transactions are recorded in the accounting systems used for the Army at a greater level of detail than in MOCAS. In June 1998, DFAS initiated action to automate the contract payment reporting process for the five major Army commands. Due to system integration problems, most contract payment transactions were still entered manually during fiscal year 1998. However, as of August 1999, most MOCAS disbursement and collection transactions were being sent electronically to the DFAS Army accounting stations. According to DFAS officials, about 87 percent of the MOCAS contract payment transactions sent electronically to DFAS Army accounting stations were processed directly into the accounting system. The other 13 percent of the transactions sent electronically were rejected during accounting system edit checks and had to be entered manually.

Prior to the mid-1990s, about half of the MOCAS contract payment transactions for the Air Force were manually entered in the applicable accounting systems, while the remainder of the MOCAS transactions were transmitted electronically. By fiscal year 1997, DFAS Columbus electronically transmitted most MOCAS transactions directly into the DFAS accounting systems used for the Air Force.

Unreconciled Differences Between MOCAS and Army and Air Force Accounting Records Affect Data Reliability

Our sample results identified billions of dollars of differences in the way contract payment transactions were recorded in MOCAS and the applicable accounting systems. These differences resulted primarily from the manual processes that were used to record MOCAS transactions in the accounting systems prior to the mid-1990s for the Air Force and prior to fiscal year 1999 for the Army. With the current electronic transmission of MOCAS data, most transactions are being recorded the same way in the DFAS accounting systems used to record Air Force and Army transactions. However, unreconciled discrepancies between these records resulting from the previous manual processes remain a significant factor in DOD’s ability to ensure appropriations control as well as the reliability of its financial reporting, including its annual financial statements.

Another significant factor that contributes to differences between these records is the number of adjustment transactions. Our analysis of Army
and Air Force transactions showed that about one of every two dollars processed by MOCAS in fiscal year 1997 was an adjustment to a previously recorded disbursement. Moreover, prior to February 1999, most MOCAS adjustments were not recorded in the accounting systems used for Army because, according to DFAS Columbus officials, these accounting stations did not generally accept MOCAS adjustments.

Timing differences and the cumulative effect of unreconciled differences in the way that transactions were recorded in the applicable accounting systems result in differences in obligation and disbursement balances charged to specific accounting lines. In addition, the reliability of program and object class data used for management decision-making and congressional oversight is affected by the ongoing differences in these two sets of records.

Differences in Recording Original Transactions

Our analysis of fiscal year 1997 Army and Air Force contract transactions, the most current fiscal year data available at the time we began our review, showed that Air Force disbursement and collection transactions were generally recorded the same way in MOCAS and the DFAS accounting systems used for Air Force; however, Army disbursement and collection transactions differed by billions of dollars between MOCAS and the applicable accounting systems. The nearly identical transaction posting in MOCAS and the Air Force accounting records is primarily attributable to the electronic transfer of MOCAS data to the accounting systems used for the Air Force. Army differences related primarily to manual processes for recording MOCAS transactions in the accounting systems used for the Army, which resulted in DFAS accounting station officials making a different determination about how the transactions were to be recorded. Specifically, our analysis of a stratified random sample of 534 fiscal year 1997 Army transactions showed that an estimated $6.7 billion in MOCAS transactions were recorded differently or could not be located in the DFAS accounting systems used for Army.

---

6DOD uses accounting lines to accumulate appropriation, budget, and management information for contract obligations and payments.

7Object classes, established by the Office of Management and Budget, are used to report obligations for each account, according to the nature of the services or articles procured.

8The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of MOCAS transactions that were recorded differently or could not be located in the DFAS accounting systems used for Army was between $5.9 billion and $7.6 billion.
disbursement and collection transactions were recorded differently or could not be located in the applicable accounting systems.

Of the estimated $6.7 billion in MOCAS transactions that were recorded to different accounting lines or could not be located in Army accounting records, we estimate that $2 billion\(^9\) was recorded to different appropriations in MOCAS and accounting systems used to record Army transactions. For example, of the transactions in our sample, we found that a DFAS Army accounting station recorded one fiscal year 1997 disbursement transaction totaling $4.3 million to the fiscal year 1995 “Procurement of Weapons and Tracked Combat Vehicles, Army” appropriation, while DFAS Columbus recorded this same transaction to the fiscal year 1991 “Other Procurement, Army” appropriation in MOCAS. The DFAS Army accounting station recorded another transaction totaling $242,051 to the fiscal year 1990 “Operation and Maintenance, Army” appropriation, while DFAS Columbus recorded this transaction to the fiscal year 1995 “National Guard and Reserve Equipment” appropriation in MOCAS.

In addition, we estimate that $1 billion\(^10\) of the $6.7 billion in MOCAS transactions could not be located in the accounting systems used to record Army transactions. DFAS St. Louis accounting station officials could not determine whether those transactions that could not be located were included in summary records or were not recorded at all in the Army’s accounting records. Summary records were used to record balances in the applicable accounting systems for accounting stations that closed as part of the effort to consolidate DFAS operations. As a result, detailed transaction data were lost. Table 1 identifies the types of differences associated with the transactions in our sample and provides our projection of the dollar impact of these differences on Army accounting records.

\(^9\)The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of differences between the appropriations charged in MOCAS and the DFAS accounting systems used for Army was between $1.6 billion and $2.4 billion.

\(^10\)The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of MOCAS transactions that could not be located in the DFAS accounting systems used for Army was between $0.8 billion and $1.3 billion.
As shown in table 1, based on our analysis of the transactions in our sample, we estimate that $3.7 billion\(^{11}\) in Army transactions was recorded to different accounting lines but to the same appropriation. These differences related to management and budget information, such as requisition number, budget activity code, and element of resource (EOR) code associated with contract deliverables. For example, our Army sample included transactions for other services, supplies, and equipment totaling $12.3 million that were recorded to different object classes in MOCAS and the applicable accounting systems.

- One transaction totaling $5.5 million was recorded to general equipment investment in MOCAS but was recorded to other contractual services in the accounting system used for the Army.
- Three transactions totaling $1.4 million were recorded to general supplies in MOCAS but were recorded to other contractual services in the applicable accounting system.
- Another transaction totaling about $1 million was recorded to other contractual services in MOCAS but was recorded to general equipment investment in the accounting system.

\(^{11}\)The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of MOCAS transactions that could not be located in the accounting system used for Army was between $3 billion and $4.4 billion.

### Table 1: Fiscal Year 1997 MOCAS Transactions That Were Recorded Differently or Could Not Be Located in Accounting Systems Used for Army

<table>
<thead>
<tr>
<th>Type of difference</th>
<th>Projected amount (Dollars in billions)(^a)</th>
<th>Percentage difference(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recorded to different accounting lines and different appropriations</td>
<td>$2.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Transactions not located in the accounting systems</td>
<td>1.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Recorded to different accounting lines but the same appropriation</td>
<td>3.7</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total recorded differently(^b)</strong></td>
<td><strong>$6.7</strong></td>
<td><strong>14.7</strong></td>
</tr>
</tbody>
</table>

\(^a\)The projections represent the mid-point between the upper and lower ranges of our confidence interval, at a 95-percent confidence level.

\(^b\)Each category of difference in the table is separately projected. Therefore, the total differences will not necessarily equal the sum of the categories.
We previously reported\(^{12}\) that inaccurate reporting by object class hampers congressional oversight. In addition, because the Congress has asked for and is using object class information for its oversight activities, it is important that these data be properly recorded.\(^{13}\)

DOD’s lack of adequate control over disbursements (outlays) of appropriated funds also affects any analyses based on DOD’s status of funds data. For example, congressional budget and appropriation committees and the Congressional Budget Office use historical outlay data in various analyses, including (1) baseline outlay projections,\(^{14}\) (2) scoring of outlays from appropriations,\(^{15}\) and (3) estimating the cost of legislative proposals. Unreliable DOD contract payment data can impact such analyses and the decisions based on the analyses.

### Differences in Recording Adjustments

Our analysis of Army and Air Force fiscal year 1997 MOCAS transactions also showed that about one of every two dollars in transactions processed was for adjustments to previously recorded disbursement transactions. For example, during fiscal year 1997, DFAS Columbus processed 101,012 Army adjustment transactions totaling $22.7 billion—about 50 percent of the $45.7 billion in Army transactions processed. Also during fiscal year 1997, DFAS Columbus processed 103,979 Air Force adjustment transactions totaling $41.5 billion—about 49 percent of the $84.9 billion in Air Force transactions processed—to revise disbursing records maintained in MOCAS. Because of the magnitude of MOCAS adjustments, we are continuing to review issues related to them.

---


\(^{13}\) Section 512 of Public Law 102-394 directed that OMB create a new object class for reporting actual and planned obligations for advisory and assistance services. In 1994, the Federal Acquisition Streamlining Act (section 2454) codified section 512 as 31 U.S.C. 1105(g).

\(^{14}\) Baseline outlay projections are based on spend-out rates, which vary by both organization and the appropriation involved. For example, spend-out rates would differ for Army and Air Force procurement.

\(^{15}\) Scorekeeping is the process of estimating the budgetary effects of pending and enacted legislation and comparing them to limits set in the budget resolution or legislation. Scorekeeping tracks data such as budget authority, receipts, outlays, the surplus or deficit, and the public debt limit.
Moreover, prior to February 1999, DFAS Columbus did not send most MOCAS adjustments to the DFAS Army accounting stations because, according to DFAS Columbus officials, the accounting stations did not generally accept MOCAS adjustments. For example, DFAS Columbus sent only 13 of the 231 MOCAS adjustment transactions in our sample to the DFAS Army accounting stations for recording in the accounting systems. The remaining 218 adjustment transactions totaling $5 billion were recorded only in MOCAS. Of the total $22.7 billion in MOCAS adjustment transactions, based on our sample, we estimate that DFAS Columbus did not report $21.6 billion\textsuperscript{16} to DFAS Army accounting stations. Unlike the Army adjustment transactions, most of the 237 Air Force adjustment transactions in our sample were recorded in Air Force accounting records, primarily due to the automated transmission of transactions.

According to DFAS St. Louis accounting officials, since a February 1999 DFAS directive, DFAS accounting stations responsible for Army transactions receive and record all MOCAS Army adjustment transactions in the accounting systems. However, if accounting station personnel believe that the adjustment is incorrect, they research the transaction, record any necessary adjustment, and are to send the corrected adjustment and supporting documentation to DFAS Columbus to help ensure that MOCAS and Army accounting records agree.

**ACRN-Level Balances Also Differ**

Accounting Classification Reference Numbers, two-digit codes representing accounting lines and commonly referred to as ACRNs, are a key element of Army and Air Force funds control. Obligations are established at the ACRN level to ensure that funds are available to cover disbursements. We found differences between contract ACRN balances (including obligations, disbursements, and unliquidated obligations) in MOCAS and the applicable accounting systems. Differences in ACRN balances represent (1) timing differences\textsuperscript{17} in recording transactions in MOCAS and the accounting systems and (2) the cumulative effect of

\textsuperscript{16}The range of our confidence interval, at a 95-percent confidence level, indicates that the actual amount of adjustments that were not reported to the accounting stations would be between $20.1 billion and $22.7 billion.

\textsuperscript{17}For the Army, timing differences for our sample of fiscal year 1997 transactions averaged 37 days due to the manual processes for recording MOCAS transactions in the applicable DFAS accounting systems. For the Air Force, DFAS officials stated that timing differences were generally limited to about 3 days.
differences in the way that disbursement and obligation transactions were previously recorded in MOCAS and the accounting systems.

Because obligations are recorded at the ACRN level, maintaining these balances accurately is critical to ensuring that disbursements do not exceed available authority and that the disbursements are made within the constraints imposed by law. For the ACRNs associated with the transactions in our Army sample, actual differences in ACRN balances in MOCAS and the accounting systems amounted to about $909 million in obligations and about $908 million in disbursements. For the ACRNs associated with the transactions in our Air Force sample, actual differences in ACRN balances amounted to about $1.3 billion in obligations and about $1.4 billion in disbursements. However, data were not available in both MOCAS and the accounting systems for all of the balances associated with the ACRNs in our Army and Air Force samples. Therefore, the total differences in ACRN balances between MOCAS and the accounting systems would be expected to be much greater for the transactions in our sample as well as in the total population. Table 2 illustrates the differences in contract ACRN balances for an Air Force contract ACRN and an Army contract ACRN included in our samples.

Table 2: Examples of Differences in Contract ACRN Balances Between MOCAS and Accounting Records

<table>
<thead>
<tr>
<th></th>
<th>MOCAS balance</th>
<th>Accounting records balance</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Force example—F-15I Flight Test Ground Station ACRN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obligations</td>
<td>$729.9</td>
<td>$725.2</td>
<td>$4.7</td>
</tr>
<tr>
<td>Disbursements</td>
<td>$534.5</td>
<td>$508.5</td>
<td>$26.0</td>
</tr>
<tr>
<td>Unliquidated obligations</td>
<td>$195.4</td>
<td>$216.7</td>
<td>$21.3</td>
</tr>
<tr>
<td>Army example—Electronic communication equipment ACRN</td>
<td>$117.2</td>
<td>$82.5</td>
<td>$34.7</td>
</tr>
<tr>
<td>Obligations</td>
<td>$117.0</td>
<td>$79.9</td>
<td>$37.1</td>
</tr>
<tr>
<td>Disbursements</td>
<td>$0.2</td>
<td>$2.6</td>
<td>$2.4</td>
</tr>
</tbody>
</table>

Discrepancies in ACRN balances undermine the reliability of Army and Air Force account balances used for funds control and contract management
purposes. The Air Force example in table 2 shows that for the ACRN identified, there is a $21.3 million difference in the amount available for disbursement between what is recorded in MOCAS and the accounting records. Similarly, the ACRN identified in the Army example shows a difference of $2.4 million available to disburse for this equipment between MOCAS and the official accounting records. Table 2 also indicates that DFAS Columbus may have paid (1) $26 million more than what was recorded in the accounting system used for the Air Force for the F-15I ground station and (2) $37.1 million more for electronic communication equipment than what was in the applicable accounting system for the Army.

Conversely, more disbursements or less obligational authority could be recorded in the accounting records than in MOCAS in some cases. This could result in payments that exceed the available obligational authority reflected in the accounting records. DOD’s payment validation process is intended to ensure that specific ACRNs have available obligational authority before payments are made to avoid negative unliquidated obligations (NULOs).\(^\text{18}\) As of September 30, 1998, DFAS headquarters reported $311 million in Army NULOs and $228 million in Air Force NULOs based on accounting systems data. These amounts represent reported NULOs related to all Army and Air Force payment activity, including NULOs related to MOCAS contract payment transactions. As of the same date, MOCAS reported $198.8 million in Army NULOs and $115.8 million in Air Force NULOs related to contract payments.

DOD has a number of initiatives planned or under way that are intended to address acknowledged deficiencies in its contract payment processes, including staffing, training, contract writing, and systems improvements. However, DOD does not yet have a documented, detailed plan with milestone dates for transitioning from MOCAS to the new contract administration and payment systems, including resolving differences between MOCAS and accounting records as a basis for establishing the initial balances in the new system.

\(^\text{18}\)NULOs occur when recorded disbursements exceed recorded obligations, indicating that expenditures may exceed amounts obligated.
Planned Contract Payment System

One of DOD’s improvement initiatives is centered on a new contract payment system currently targeted to begin implementation in June 2000. According to DOD’s 1998 Biennial Financial Management Improvement Plan, the initiative would improve the accuracy and integrity of contract financial data, help to reduce problem disbursements, and reduce reliance on paper documents. According to DOD system integration officials, DOD’s new concept of operations envisions a single DFAS Corporate Database with end-to-end processing of electronic transactions—from the point of origin (such as approval of a purchase request) to obligation and control of funds (including prevalidation\(^\text{19}\)) to subsequent disbursing, accounting, and financial reporting.

In addition to the DFAS Corporate Database, the planned system is to include the Standard Procurement System,\(^\text{20}\) the Defense Procurement Payment System (DPPS),\(^\text{21}\) the Defense Standard Disbursing System, and the Defense Accounting System. The Standard Procurement System would replace the contract administration functions currently performed by MOCAS. DPPS would replace MOCAS contract payment functions, including computation of payment amounts, automatic response to prevalidation requests, and transmission of payment information to the Defense Standard Disbursing System for disbursement and the Defense Accounting System for entry into official accounting records.

According to a DOD system integration directorate official, DOD began testing the initial release of the corporate database in November 1999. DPPS will begin supporting the contract payment function in October 2000. At that time, all new contracts will be entered in the corporate database. However, existing contracts will be maintained in MOCAS until a majority

---

\(^{19}\)Prevalidation is a process whereby DOD disbursing stations prematch disbursements, subject to various dollar thresholds, with recorded obligations to ensure that agency funds are available.

\(^{20}\)The objective of the Standard Procurement System (SPS) is to establish a fully functional automated procurement information system, which will be used to prepare and administer procurement contracts. SPS is planned to replace DOD’s manual procurement systems and about 76 unique automated procurement systems that are used to prepare contracts, including the contract administration functions performed by MOCAS.

\(^{21}\)DPPS is intended to be the single standard DOD system for calculating contractor payments and generating accounting records. It is expected to standardize and improve contract payment processes by computing timely and accurate payments and making disbursement data available to DOD entities responsible for procurement, logistics, and accounting.
of the existing contracts are closed out. According to DFAS and Defense Contract Management Command (DCMC) officials working with the system integration team, conversion of MOCAS contracts to the corporate database is expected to be accomplished by September 2002. The DCMC official told us that DOD is preparing a Defense Reform Initiative Directive that will address the time frame for the MOCAS conversion.

DOD's planned corporate systems are designed to address some of the business processes that have resulted in unreliable contract payment data. For example, the new systems are to provide for electronic transfer of contract payment transactions to the accounting systems used to process Army transactions. The new systems are also intended to establish a single source of data entry for DOD's accounting lines, thereby eliminating errors caused by multiple entries of an accounting line to process a transaction.

Additional Actions Needed

In March 1999, when we briefed DOD systems integration officials on the magnitude of the differences in contract payment data between MOCAS and accounting system records, DOD did not yet have a plan for ensuring the reliability of contract payment data before implementing the new system. As of mid-August 1999, in response to an overall approach proposed by DCMC, DOD was considering options for accelerating the closeout of existing contracts in MOCAS and reconciling those contracts that would need to be loaded into the new system.

However, DOD did not yet have a documented, detailed plan with milestone dates for transitioning from MOCAS to the new contract administration and payment systems, including resolving differences between MOCAS and accounting records as a basis for establishing the initial balances in the new system. One of the basic principles of any systems conversion project is to ensure that accurate and complete data are entered in the new system. A contract payment data conversion plan would need to include the following basic steps.

- Comparing MOCAS data to accounting system records to identify the magnitude of the differences between the two sets of records.

---

22See, for example, Systems Auditability and Control Report, "Module 5: Managing Information and Developing Systems" (The Institute of Internal Auditors Research Foundation, December 1991).
Conclusions

DOD has not yet completed a strategy for addressing the fundamental problem of having two unreconciled sets of contract disbursing data for the Army and the Air Force. Specifically, it has not yet developed a data conversion plan to ensure the accuracy of contract payment data that will be loaded in the new DOD corporate systems. Unless DOD addresses this issue, inaccurate contract payment data will continue to (1) hinder DOD’s ability to accurately account for and report on contract disbursements and (2) affect the reliability of DOD’s financial reporting, including its reports on budget execution and annual financial statements. As DOD moves forward to implement its corporate procurement and payment systems, establishing contract payment data accuracy will be critical to ensuring that DOD can maintain accountability over its multibillion dollar annual contract payments.

Recommendations

In implementing DOD’s new corporate procurement and payment systems, we recommend that the Secretary of Defense direct the Under Secretary of Defense (Comptroller) and the DCMC to develop and implement a data conversion plan identifying responsibilities and milestone dates for resolving data reliability problems associated with existing contract payment data. In developing such a plan, the Under Secretary of Defense should:

- Stratifying the contracts by the number and amount of the differences so that priority can be given to data cleanup for those contracts with the largest imbalances.
- Developing a policy for addressing how the differences will be handled. The goal of this effort is to determine the best information on the status of funds available under the contract. For example, the policy may include a provision for certain contracts to be maintained outside of the new system. The criteria for such contracts should be specified. Also, the policy must address whether contract reconciliation will be required or whether certain records will be accepted as the best available information without a full reconciliation. Again, the basis for that determination should be included in the policy.
- Finally, for those existing contracts that will be entered into the new system, the plan should address (1) the feasibility of automating the data entry process and (2) determine whether complete contract histories or summary-level information will be entered in the new system. If the latter, the plan should include steps to retain the transactional history of each contract, whether in MOCAS or by some other automated means.
(Comptroller) and DCMC officials should consider the basic steps discussed in this report, such as (1) comparing the two sets of records to identify the magnitude of the differences between MOCAS and the accounting records, (2) stratifying the contracts by the number and amount of the difference so that priorities can be established, (3) developing a policy for addressing how the differences will be handled, and (4) for those existing contracts that will be entered into the new system, including steps to retain the transactional history of each contract, whether in MOCAS or by some other automated means.

Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD stated that the department already had developed and implemented strategies for resolving differences between MOCAS and applicable accounting systems. Such strategies include forming contract reconciliation teams, allowing accounting stations access into the MOCAS history files for research purposes, and implementing “fast track” contract reconciliation procedures. In addition, DOD’s response stated that DFAS has established a DPPS conversion team to assist in planning and overseeing the transition from MOCAS. A program management office has been chartered to work with DCMC and the military components to develop a strategy and more detailed supporting plans to better ensure that the transition from MOCAS to DPPS results in an accurate, complete database of information to support DPPS operations. According to DOD, these plans will take into account all of the factors identified in our report as well as methods for addressing each contract in force at the time of conversion. DOD’s response stated that this effort is formalized in a directive currently forwarded to the Deputy Secretary of Defense for signature.

We are pleased that DOD is taking action to develop and document a comprehensive plan that encompasses DOD’s various contract reconciliation and MOCAS conversion activities. We will review the new directive when it is completed and approved.

DOD also provided several technical comments on the draft report, which we have incorporated as appropriate throughout the report. However, DOD made a comment regarding our sampling methodology that may indicate a misunderstanding of statistical sampling techniques and therefore warrants further explanation. DOD noted that the use of high-dollar, complex transactions in our stratified random sample may have overstated the projection of differences between MOCAS and the accounting stations. We disagree and reiterate that our sample provided accurate projected results.
The stratified random sampling method we used—classical variable sampling—is a commonly accepted statistical technique. This sampling procedure takes into account the size of each stratum and only projects a result within the individual stratum. The results of each stratum are then added together to get a total projected error rate. This method took into account the probability of an amount being selected and thus, is an effective and appropriate means of projecting the dollar amount of differences in MOCAS and the applicable accounting systems.

Further, DOD stated that the fiscal year 1997 data we reviewed were somewhat dated and that it should not be assumed that similar differences exist for more recent data. As stated in our report, the current electronic processes for recording MOCAS transactions in the applicable accounting systems should reduce significantly the opportunity for such differences. However, to the extent that the differences we identified in fiscal year 1997 data relate to contracts that remain open and unreconciled, the differences continue to exist. For example, in discussing the planned MOCAS transition, a DCMC official estimated that tens of thousands of MOCAS contracts will remain open and need to be transferred to the new systems. Existing differences will ultimately result in the need for adjustments to reconcile accounting and disbursing records and to resolve uncertainties concerning the status of appropriated funds.

We are sending copies of this letter to the Honorable William S. Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; the Honorable F. Whitten Peters, Secretary of the Air Force; and Thomas Blum, Director, Defense Finance and Accounting Service. We are also sending a copy of this report to the Honorable Jacob J. Lew, Director of the Office of Management and Budget, and to interested congressional committees.
Please contact me at (202) 512-9095 if you or your staff have any questions on this report. Other GAO contacts and key contributors to this report are listed in appendix III.

Sincerely yours,

Lisa G. Jacobson
Director, Defense Audits
Appendix I

Objectives, Scope, and Methodology

In response to your request, our objectives were to determine (1) if, and to what extent, contract payment transactions recorded in the Army and the Air Force official accounting records differed from MOCAS disbursing system records, (2) the types of differences between the disbursing and accounting systems and, to the extent possible, the causes for the differences, and (3) the potential effect any identified deficiencies may have on DOD’s planned contract payment system improvements.

Our results are based on a stratified random sample of 534 Army and 523 Air Force fiscal year 1997 MOCAS transactions totaling about $5.6 billion and $8.2 billion, respectively. Fiscal year 1997 data were the most current available for an entire fiscal year at the time we began our review. The universe of Army transactions totaled 474,448 in the amount of about $45.7 billion. The universe of Air Force transactions totaled 550,407 in the amount of about $84.9 billion. Specifically, through review of available data and discussions with DFAS officials, we

• performed a comparative analysis of contract disbursements by accounting lines associated with the transactions tested;
• analyzed the results of the comparison to characterize differences in terms of information in the two systems on both an individual transaction basis and on a cumulative summary contract accounting (ACRN) level; and
• identified (1) the type of differences (dollar amount, appropriation, fiscal year, and program) between disbursing and accounting station records and (2) the causes for the differences (to the extent possible).

As with any statistical analysis, the results are subject to some uncertainty or sampling error because only a portion of the universe was selected for review. Our projections are expressed as point estimates that fall within confidence intervals. This means that if you were to determine an estimate for 100 different random samples of the same size from this population, 95 out of 100 times, the estimate would fall within the confidence interval. In other words, the true value is between the lower and upper limits of the confidence interval 95 percent of the time. The following tables show the stratification of our Army and Air Force samples by dollar amounts.
To assess the potential effect of identified differences on the reliability of information recorded in MOCAS and the corresponding Army and Air Force accounting records, we projected the results of our samples and analyzed the extent and nature of the differences on Army and Air Force accounting records. We also considered the results of our past Army and Air Force work. We did not determine the accuracy of transactions recorded in MOCAS and the applicable DFAS accounting systems because DFAS was unable to provide us with adequate supporting documentation to make such a determination.

To determine the effect any identified deficiencies would have on DOD’s planned contract payment systems improvements, we reviewed the status of DOD’s efforts to develop a concept of operations for the development of
the Defense Corporate Database and its supporting systems. We also met with DOD’s systems integration team to discuss the impact of MOCAS data reliability problems on the planned systems.

Our work was performed from May 1998 through August 1999 in accordance with generally accepted government auditing standards. We performed our work primarily at the DFAS Columbus, Ohio, disbursing center; the DFAS St. Louis, Missouri, operating location; and the DFAS Dayton, Ohio, operating location.
Appendix II

Comments From the Department of Defense

UNDER SECRETARY OF DEFENSE
1100 DEFENSE PENTAGON
WASHINGTON, DC 20301-1100

JAN 31 2000

Mr. Jeffery C. Steinhoff
Acting Assistant Comptroller General
Accounting and Information Management Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Steinhoff:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "FINANCIAL MANAGEMENT: Differences in Army and Air Force Disbursing and Accounting Records," dated December 20, 1999 (GAO Code 918970/OSD Case 1932). The GAO stated that current electronic processes for recording Mechanization of Contract Administration Services (MOCAS) transactions into the Defense Finance and Accounting Service (DFAS) accounting systems have significantly reduced the opportunity for differences between MOCAS and the applicable accounting systems. Although, the subject draft report noted differences between the MOCAS and DFAS accounting systems, the GAO emphasized that such differences were caused by past (manual) practices. The GAO recognized that, overall, the Department, through its improved current processes, has made significant progress in eliminating such prior differences. For example, in-transit and problem disbursements have been significantly reduced—a 41-percent reduction in in-transit disbursements and a 39-percent reduction in unmatched disbursements were realized in fiscal year (FY) 1999.

The subject draft audit recommended that the Department develop a comprehensive plan to ensure that differences between MOCAS and applicable accounting systems are resolved before information contained in MOCAS is converted to the Defense Procurement Payment System (DPPS). The Department had been working on a comprehensive plan prior to the GAO report and will continue to work on its plan.

For the past several years, the Department has developed and implemented strategies for resolving differences between MOCAS and applicable accounting systems. Such strategies include, but are not limited to, using contract reconciliation teams, allowing accounting stations access into the MOCAS history files, and implementing Fast Track contract reconciliation procedures. Currently, a directive to better ensure that differences between MOCAS and applicable accounting systems are resolved, has been forwarded to the Deputy Secretary of Defense for signature. It is the Department's intent that the Standard Procurement System (SPS) and DPPS be populated with accurate and complete data. Additionally, the DFAS has established a program management office chartered to work with the Defense Contract Management Command and the Military Components to develop a strategy, and more detailed
supporting plans, to better ensure the transition from MOCAS to DPPS results in an accurate, complete database of information to support DPPS operations.

Effective with FY 2000, MOCAS disbursements over $500,000 are prevalidated against applicable DFAS accounting systems prior to payment. This prevalidation allows for MOCAS technicians and accounting station technicians to discuss, research and resolve obligation and disbursement data differences, if any, between the MOCAS and applicable accounting systems. Differences, if any, are resolved prior to payment. Current business practices, such as prevalidation and open document reviews, further ensure that differences, if any, between the MOCAS and applicable accounting systems are resolved.

The Department’s long-term solution is to reduce the number of systems and better integrate the remaining contract administration, payment and accounting systems. Once the Department’s planned new systems, such as the SPS, DPPS, and the Defense Corporate Database, are implemented, these systems should virtually, if not entirely, ensure that future disbursements are recorded consistently, and accurately, in applicable systems.

Enclosed are comments to the recommendation and other technical comments to the draft audit report.

The Department appreciates the opportunity to comment on the draft report. My point of contact on this matter is Ms. Sally Matiella. Ms. Matiella may be reached by e-mail: matiells@osd.pentagon.mil or by telephone at (703) 697-8281.

Sincerely,

William J. Lynn

Enclosure
General Accounting Office Draft Report
“FINANCIAL MANAGEMENT: Differences in Army and Air Force Disbursing and Accounting Records”
(GAO CODE 918970/OSD CASE 1932)
Dated December 20, 1999

DEPARTMENT OF DEFENSE COMMENTS TO
THE GAO RECOMMENDATION

RECOMMENDATION: The General Accounting Office (GAO) recommends that the Secretary of Defense develop and implement a data conversion plan identifying responsibilities and milestone dates for resolving data reliability problems associated with existing contract payment data. In developing the plan, the GAO recommends that the DoD Comptroller and the Defense Contract Management Command consider the basic steps discussed in the report, such as: (1) comparing the two sets of records to identify the magnitude of the differences between Mechanization of Contract Administration Services (MOCAS) and the accounting records, (2) stratifying the contracts by the number and amount of the difference so that priorities can be established, (3) developing a policy for addressing how the differences will be handled, and (4) for those existing contracts that will be entered into the new system, the plan should include steps to retain the transactional history of each contract, whether in MOCAS or by some other automated means.

DoD RESPONSE: Prior to the GAO review, the Department already had developed and implemented strategies for resolving differences between MOCAS and applicable accounting systems. These strategies were developed over the last few years. Such strategies include, but are not limited to, forming contract reconciliation teams, allowing accounting stations access into the MOCAS history files for research purposes, and implementing Fast Track contract reconciliation procedures. These strategies resulted in a 41-percent decrease in in-transit disbursements and a 39-percent decrease in unmatched disbursements in fiscal year (FY) 1999.

Additionally, the Defense Finance and Accounting Service (DFAS) has established a Defense Procurement Payment System (DPPS) conversion team at the DFAS Columbus Center to assist in planning and overseeing the transition from the MOCAS. Further, the DFAS established a program management office that is chartered to work with the Defense Contract Management Command and the Military Components to develop a strategy and more detailed supporting plans to better ensure that the transition from MOCAS to DPPS results in a accurate, complete database of information to support DPPS operations. These plans take into account all of the factors identified in the GAO report as well as methods for addressing each contract in force at the time of conversion. This effort is formalized in a directive forwarded to the Deputy Secretary of Defense for signature.
GAO Contacts

Gayle L. Fischer, (202) 512-9577
Keith E. McDaniel, (937) 258-7955

Acknowledgments

In addition to those named above, Brian Chan, Francine DelVecchio, James Loschiavo, Robert C. Sommer, and Evert A. Stevens made key contributions to this report.
Related GAO Products

- Contract Management: Fixing DOD's Payment Problems Is Imperative (GAO/NSIAD-97-37, April 10, 1997).