
June 27, 2003



Acquisition

Summary Report on the
Joint Review of Selected DoD
Purchase Card Transactions
(D-2003-109)

Department of Defense
Office of the Inspector General

Quality

Integrity

Accountability

Report Documentation Page

Form Approved
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 27 JUN 2003	2. REPORT TYPE N/A	3. DATES COVERED -	
4. TITLE AND SUBTITLE Acquisition: Summary Report on the Joint Review of Selected DoD Purchase Card Transactions (D-2003-109)		5a. CONTRACT NUMBER	
		5b. GRANT NUMBER	
		5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)		5d. PROJECT NUMBER	
		5e. TASK NUMBER	
		5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) DoD-IG ODIG-AUD (AFTS) Secondary Reports Distribution 400 Army Navy Drive (801) Arlington, VA 22202-4704		8. PERFORMING ORGANIZATION REPORT NUMBER D-2003-109	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)	
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited			
13. SUPPLEMENTARY NOTES			
14. ABSTRACT Policy makers, senior managers, purchase card program managers, approving officials, and cardholders should read this report to help improve any deficiencies in the internal control structure of the DoD Purchase Card Program. This report cites examples of potentially inappropriate and fraudulent use of purchase cards by DoD cardholders. The potentially inappropriate and fraudulent use was detected using data mining techniques, which support data mining as a control mechanism of identifying purchase card transactions with a higher probability of being fraudulent, wasteful, or abusive.			
15. SUBJECT TERMS			
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	UU
			18. NUMBER OF PAGES 24
			19a. NAME OF RESPONSIBLE PERSON

Additional Copies

To obtain additional copies of this report, visit the Web site of the Inspector General of the Department of Defense at www.dodig.osd.mil/audit/reports or contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

Suggestions for Future Audits

To suggest ideas for or to request future audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

ODIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General of the Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA 22202-4704

Defense Hotline

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to Hotline@dodig.osd.mil; or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

Acronyms

DFAS	Defense Finance and Accounting Service
GAO	General Accounting Office
GSA	General Services Administration
OIG DoD	Office of the Inspector General of the Department of Defense
PMO	DoD Purchase Card Joint Program Management Office



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

June 27, 2003

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (ACQUISITION,
TECHNOLOGY, AND LOGISTICS)
UNDER SECRETARY OF DEFENSE (COMPTROLLER)/,
CHIEF FINANCIAL OFFICER)
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
NAVAL INSPECTOR GENERAL
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Summary Report on the Joint Review of Selected Purchase Card
Transactions (Report No. D-2003-109)

We are providing this report for your information and use. This report addresses the requirement in section 1007 of the National Defense Authorization Act for FY 2003, which requires that the Inspector General of the Department of Defense perform periodic audits of purchase card usage.

We appreciate the courtesies extended to the staff. Questions should be directed to Colonel William J. Kelley at (703) 604-9312 (DSN 664-9312) or Ms. Lisa M. Such at (703) 604-9284 (DSN 664-9284). See Appendix D for the report distribution. The team members are listed inside the back cover.

David K. Steensma

David K. Steensma
Deputy Assistant Inspector General
for Auditing

Office of the Inspector General of the Department of Defense

Report No. D-2003-109

June 27, 2003

Project No. D2002CM-0117.0001

Summary Report on the Joint Review of Selected DoD Purchase Card Transactions

Executive Summary

Who Should Read This Report and Why? Policy makers, senior managers, purchase card program managers, approving officials, and cardholders should read this report to help improve any deficiencies in the internal control structure of the DoD Purchase Card Program. This report cites examples of potentially inappropriate and fraudulent use of purchase cards by DoD cardholders. The potentially inappropriate and fraudulent use was detected using data mining techniques, which support data mining as a control mechanism of identifying purchase card transactions with a higher probability of being fraudulent, wasteful, or abusive.

Background. This report addresses the requirement in section 1007 of the National Defense Authorization Act for FY 2003 that the Inspector General of the Department of Defense perform periodic audits of purchase card use. The purchase card is a commercial charge card available to Federal agencies to pay for official Government purchases. The DoD Purchase Card Program Office reported that in FY 2002, about 214,000 DoD cardholders used the purchase card to make approximately 11 million purchases valued at \$6.8 billion.

In December 2001, the Office of the Inspector General of the Department of Defense, the Defense Finance and Accounting Service, and the DoD Purchase Card Joint Program Management Office agreed to initiate an automated oversight program for determining whether anomalies that indicate potential fraud, waste, and abuse in purchase card transactions, could be detected using data mining techniques. Business rules that identified potentially inappropriate transactions were applied to the millions of purchase card transactions. The process ultimately resulted in selection of 1,357 purchase cardholders for an in-depth review. The Office of the Inspector General then provided to each of the Services and the Defense agency auditors or investigators a cardholder profile. The profile contained flagged transactions as well as the transactions the cardholders made from October 1, 2000, through December 31, 2001.

Results. The Services and the Defense agencies performed an in-depth review of purchase card transactions for 1,357 purchase cardholders identified through data mining techniques and determined that 182 cardholders potentially used their purchase cards inappropriately or fraudulently. As a result, the 182 cardholders expended about \$5 million in scarce resources on potentially fraudulent and inappropriate transactions. To assist program officials in identifying potentially inappropriate and fraudulent transactions in a more timely manner, data mining techniques should be used as a regular internal control. By implementing data mining tools, purchase card program officials will be better able to perform their oversight responsibilities, take appropriate corrective action in a timely manner, and perform the followup necessary for ensuring that

corrective action taken is appropriate and sufficient. Based on the actions DoD management has initiated or taken, this report makes no recommendation for corrective action. With the use of data mining and other management actions, the integrity of the purchase card program along with confidence in DoD to spend money prudently is improved.

Ongoing Management Actions. In an effort to address deficiencies in the purchase card program, the Under Secretary of Defense (Comptroller)/Chief Financial Officer established in March 2002 a Government Charge Card Task Force that would assess the DoD purchase and travel card programs and make recommendations for improvements. Subsequently, the Under Secretary of Defense for Acquisition, Technology, and Logistics established the DoD Charge Card Special Focus Group to achieve a balance between streamlining business processes and proper charge card use. An Integrated Product Team supports the Special Focus Group and is responsible for resolving policy and process issues related to implementation of the recommendations in the DoD Charge Card Task Force Final Report. Implementation of the recommendations in the DoD Charge Card Task Force Final Report should assist in reducing the number of questionable purchase card transactions discussed in this report.

The DoD Purchase Card Program Office, along with the Navy, also initiated actions that will strengthen internal controls by increasing the tools available to DoD managers. Those actions include data mining techniques designed to detect potentially inappropriate and fraudulent transactions. Specifically, the Navy initiated action to establish an automated and standardized process for reviewing high-risk purchase card transactions.

Table of Contents

Executive Summary	i
Background	1
Objectives	4
Finding	
Purchase Card Transactions	5
Appendixes	
A. Scope and Methodology	12
Prior Coverage	13
B. Scope of Review for DoD Purchase Cards	15
C. Report Distribution	16

Background

Section 1007, “Improvements in Purchase Card Management,” of the National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314, December 2, 2002), states:

That the Inspector General of the Department of Defense . . . [will] perform periodic audits to identify--

- (a) potentially fraudulent, improper, and abusive uses of purchase cards;
- (b) any patterns of improper cardholder transactions, such as purchases of prohibited items; and
- (c) categories of purchases that should be made by means other than purchase cards in order to better aggregate and obtain lower prices.

In December 2001, the Office of the Inspector General of the Department of Defense (OIG DoD), the Defense Finance and Accounting Service (DFAS), and the DoD Purchase Card Program Management Office (PMO) agreed to initiate an automated oversight program that could identify through data mining techniques anomalies in purchase card transaction data that might indicate potential fraud, waste, or abuse. This summary report discusses the results of the data mining effort, the disposition of the referred transactions, and the systemic problems related to the DoD Purchase Card Program.

The Federal Purchase Card Program. The purchase card is a commercial charge card issued through a Government contract to Federal agency employees to pay for official Government purchases. The General Services Administration (GSA) is responsible for the Government purchase card program and in 1989 awarded the first Government-wide purchase card contract. The goal of the purchase card program is to increase the efficiency with which Federal agencies can purchase goods and services directly from vendors. Specifically, the purchase card (Figure 1) enables agencies to expedite purchases, streamline payment procedures, and reduce administrative costs.



Figure 1. Government Purchase Card

The Federal Acquisition Streamlining Act of 1994 established \$2,500 as the threshold for micropurchases and eliminated most of the procurement restrictions for purchases identified within that threshold. Executive Order No. 12931, “Federal Procurement Reform,” October 13, 1994, directs that agencies expand the use of the purchase cards and delegates micropurchase authority to program officials. In 1995, the Federal Acquisition Regulation designated the purchase card as the preferred method for paying for micropurchases.

The GSA purchase card program consists of one contract with five banking vendors, and each agency, according to need, can choose one or more of the contracts for providing purchase cards to employees of the Federal Government. The GSA reported that in FY 2001 Government cardholders made more than 24 million purchases valued at \$13.7 billion. GSA further reported that by using the purchase card, the Government saved approximately \$1.3 billion annually in administrative costs, and DoD earned \$28 million in rebates.

Purchase Cards in DoD. The Under Secretary of Defense for Acquisition, Technology, and Logistics is responsible for purchase card policy and oversight, and coordinates with the Under Secretary of Defense (Comptroller)/Chief Financial Officer on purchase card-related finance and accounting issues. In March 1998, the Deputy Secretary of Defense centralized management for the purchase card program by establishing the PMO as the executive agent for DoD purchase cards. The PMO reports directly to the Director, Defense Procurement and Acquisition Policy within the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. The PMO establishes the policies and procedures for use of the purchase cards within DoD. More specifically, the PMO coordinates contract requirements with GSA, manages delinquencies, standardizes purchase card management and reconciliation, and establishes purchase card training throughout DoD. The PMO reported that in FY 2002, about 214,000 DoD cardholders used the purchase card to make approximately 11 million purchases valued at \$6.8 billion.

Purchase Card Program Responsibilities. DoD Components are responsible for operating local purchase card programs that support the mission of each organization. Each Component must appoint an agency or organizational program coordinator that manages the day-to-day activities and ensures the overall integrity of the purchase card program. Program coordinators authorize purchase cards accounts, set spending limits, establish supplementary policies and procedures, and monitor the use of purchase card accounts. Approving officials are responsible for authorizing and approving purchases as well as certifying monthly billings for payment. Both the cardholder and the approving official must reconcile purchased goods and services with the bank statement before the invoice can be paid.

Prior Reviews and Identified Systemic Issues. The General Accounting Office (GAO) issued four reports and participated in three congressional hearings that relate to the DoD Purchase Card Program. In the reports issued between March 2002 and December 2002, GAO attributed the vulnerability of the DoD Purchase Card Program for the potentially abusive and fraudulent purchase card transactions to a weak internal control environment and breakdown of key internal control activities.

Between FY 1996 and FY 2002, IG DoD and the Military Department audit organizations issued more than 300 audit reports on purchase cards. IG DoD Report No. D-2002-029, "DoD Purchase Card Program Audit Coverage," December 27, 2001, identifies systemic issues in the purchase card program that include account reconciliation and certification, administrative controls, management oversight, property accountability, purchase card use, separation of duties, and training.

Congressional Interest. On October 8, 2002, the U.S. House of Representatives Committee on Government Reform, Subcommittee on Government Efficiency, Financial Management, and Intergovernmental Relations held a hearing regarding purchase card use and abuse. The hearing, the fourth in a series of charge card hearings, highlighted the need for continued program oversight, implementation of effective internal controls, and accountability. Senator Charles E. Grassley challenged the IG DoD to assist DoD with oversight efforts and spoke of a real-time, continuous, and sustained data mining operation as a means of monitoring charge card transactions. Senator Grassley stressed that, with constant surveillance, credit card abuse either will cease or at the very least, be held to a minimum.

Charge Card Task Force. The Under Secretary of Defense (Comptroller)/Chief Financial Officer established a Government Charge Card Task Force in March 2002 for assessing DoD purchase and travel card programs and recommending improvements. The task force evaluation focused on three key areas. Those areas of evaluation include management emphasis and organizational culture, compliance, and process and workforce developments. On June 27, 2002, the task force issued the DoD Charge Card Task Force Final Report, which contains 25 recommendations for improving the travel and purchase card programs. The report recommends strengthening internal controls and increasing tools available to managers for enforcing the controls, including the use of data mining technologies that could detect fraudulent or abusive purchase and travel card transactions.

Data Mining. Data mining is the process that discovers correlations, patterns, and trends by sifting through large repositories of data using pattern recognition technologies and statistical techniques. Data mining tools help predict future trends and behaviors as well as allow businesses to make proactive, knowledge-based decisions. Used primarily by companies with a strong customer focus such as retail, financial, communications, and marketing organizations, data mining has a variety of applications. Data mining is useful for identifying transactions that have a higher risk of being inappropriate. For example, transactions made by a medical facility to an upholsterer should be looked at more closely than transactions the medical facility made to a pharmaceutical supplier.

Objectives

The objective of the joint effort was to determine whether data mining techniques led to the identification of potentially problematic transactions. An additional objective was to identify ways to both strengthen internal controls and provide tools that managers could use for enforcing those controls.

Purchase Card Transactions

Analysis of purchase card transactions identified that 182 of the 1,357 cardholders reviewed had potentially used their purchase cards inappropriately or fraudulently. The potential misuse occurred because DoD did not implement adequate internal controls that would preclude and quickly detect potentially inappropriate or fraudulent use. Moreover, management lacked tools such as data mining techniques designed to maximize existing resources for overseeing the purchase card program and identify transactions that have a higher risk for abuse and fraud. As a result, the 182 cardholders expended scarce resources of about \$5 million in transactions that were potentially inappropriate and fraudulent. With the use of data mining and other management controls, the integrity of the purchase card program along with confidence in DoD to spend money prudently is improved.

Joint Purchase Card Project

In December 2001, the IG DoD, DFAS, and the PMO agreed to begin a joint purchase card project that would use data mining techniques to detect purchase card transactions that appeared potentially inappropriate or fraudulent and warranted additional field research. Purchase card experts from the audit and investigative communities met to develop and prioritize indicators that could detect anomalies in purchase card transaction data. Those experts coded the indicators, and combinations of the indicators were applied to purchase card transaction data from July 1, 2001, through December 31, 2001. The process resulted in selection of 13,052 purchase card transactions for review. The transactions totaled approximately \$38.3 million and related to 2,036 DoD purchase cardholders.

The IG DoD then provided to each of the Services and the Defense agencies a cardholder profile. The profile contained flagged transactions as well as the transactions the cardholders made from October 1, 2000, through December 31, 2001. Table 1 shows the cardholders and transactions flagged for review as well as the scope of work performed by each of the Services and the Defense agencies.

Table 1. Purchase Cardholders and Transactions Selected for Review and Work Performed

Agency	Flagged Cardholders	Flagged Transactions	Related Transactions	Total Transactions Available for Review	Cardholders Reviewed	Transactions Reviewed
Army	922	6,377	196,181	202,558	674	4,624
Navy	485	2,809	193,699	196,508	282	9,043
Air Force	492	2,776	116,878	119,654	264	2,625
Other Defense	137	1,090	42,689	43,779	137	1,330
Total	2,036	13,052	549,447	562,499	1,357	17,622

Inappropriate and Potentially Fraudulent Transactions

Analysis of purchase card transactions made by 1,357 DoD purchase cardholders identified 182 cardholders that potentially used their purchase cards inappropriately or fraudulently. Table 2 shows the results as reported by each Service and Defense agency.

Table 2. Purchase Cardholders with Inappropriate Card Use and Those Referred for Criminal Investigations

Cardholders			
	Reviewed	With Inappropriate Card Use	Referred to Investigations
Army	674	84	4
Navy	282	36	8
Air Force	264	17	24
Defense Agencies	137	4	5
Total	1,357	141	41

Army. The Army Audit Agency and internal review personnel reviewed 674 cardholders and 4,624 purchase card transactions totaling approximately \$20.1 million. The Army identified 88 cardholders and 284 transactions valued at approximately \$520,000 that were potentially inappropriate or fraudulent. Examples of reported problems follow.

-
- A cardholder purchased a Santa suit for \$232 with the Government purchase card.
 - A cardholder inappropriately rented a vehicle for \$910 using the Government purchase card.
 - A cardholder accessed possible pornographic sites and sports-related Web sites with the Government purchase card.

Navy. The Naval Audit Service reviewed 282 cardholders and 9,043 purchase card transactions totaling approximately \$5.95 million. The Naval Audit Service identified 44 cardholders and 7,758 transactions* valued at approximately \$3.17 million that were potentially inappropriate or fraudulent. Examples of reported problems follow.

- At a Navy facility, building renovations budgeted at more than \$500,000, were paid for with the Government purchase card by splitting the project into smaller transactions to stay below the \$2,500 micropurchase threshold.
- One Navy cardholder used the Government purchase card to purchase two automobiles, surgical enhancements, and a motorcycle. The cardholder made 59 fraudulent purchases that totaled more than \$132,000.

Air Force. The Air Force Audit Agency reviewed 264 cardholders and 2,625 purchase card transactions totaling approximately \$4.26 million. The Air Force Audit Agency identified 41 cardholders and 339 transactions totaling about \$554,000 that were potentially inappropriate or fraudulent. Examples of reported problems follow.

- A cardholder purchased personal goods and services such as meals, gasoline, and recreational activities with the Government purchase card. The cardholder made 29 inappropriate or unauthorized purchases that totaled about \$6,000.
- Unauthorized individuals used Air Force purchase card account numbers for 155 purchase transactions totaling \$30,196. The cardholders successfully disputed 118 of those charges, resulting in credits totaling \$28,365 (94 percent of the total loss). The transactions included charges to sexually explicit Internet Web sites and Internet gambling sites. Air Force auditors referred the transactions for further review to the Air Force Office of Special Investigation. Air Force Office of Special Investigation officials confirmed that the majority of the charges resulted from theft of the purchase card numbers. The Air Force Office of Special Investigation and Defense Criminal Investigative Service were reviewing

* Of the 7,758 transactions the Navy identified as potentially inappropriate or fraudulent, 7,667 transactions (99 percent) were related to 8 cardholders referred to investigations from October 1, 2000, through December 31, 2001.

the transactions to determine whether any of the cardholders were responsible and whether commercial entities intentionally billed fraudulent charges to Air Force purchase cards.

- One cardholder split a \$9,131 requirement into four separate transactions within the same day to purchase new uniforms for military personnel. In that instance, the cardholder believed the mission was accomplished but disregarded established policy by splitting requirements without review by a warranted contracting officer to determine whether lower prices could be obtained or to ensure that the purchases met statutory requirements.

Defense Agencies. The IG DoD and Defense agency personnel reviewed 137 cardholders and 1,330 purchase card transactions totaling approximately \$3.11 million. The Defense agencies identified 9 cardholders and 90 transactions totaling approximately \$840,000 that were potentially inappropriate or fraudulent. Examples of reported problems follow.

- Data mining techniques identified 6 Washington Headquarters Service cardholders and 79 purchase card transactions for review. To obtain additional confidence in the audit results, the audit team reviewed additional transactions for each cardholder. After questionable transactions were identified, nine additional cardholders at Washington Headquarters Services were reviewed. The review resulted in \$1.7 million in fraudulent purchases from May 1999 through August 2002 and at least \$201,000 in additional abusive, improper, and unauthorized purchases by employees. Of those cardholders reviewed, two Washington Headquarters Services employees used the purchase card to make about 500 fraudulent purchases of goods and services from a company created solely to facilitate fraud. DoD did not receive any goods or services from the sales charged to the card. The two cardholders plead guilty to the charge of theft of Government property. One cardholder was imprisoned and the other was sentenced to probation to include home confinement. Both were ordered to make full restitution to the Government.
- One cardholder used the purchase card 52 times in an 8-week period to make a single purchase for more than \$551,000. The cardholder potentially used the Government purchase card inappropriately to circumvent DoD acquisition regulations. The cardholder did so by splitting a single purchase into numerous transactions below the micropurchase threshold.

Purchase Card Controls and Oversight

GAO and IG DoD prior audits and reviews identified that inappropriate and fraudulent purchase card transactions generally occurred because local organizations failed to follow operating policies and procedures for the Government purchase card program. Specifically, the overall control environment was inadequate, the review and approval process was inefficient, and the program monitoring and oversight was ineffective. Management also did not dedicate adequate resources that would ensure compliance with internal controls,

and approving officials did not have tools, such as data mining techniques, that could identify transactions with a higher risk of being potentially fraudulent, wasteful, or abusive.

DoD management needs to establish and maintain a culture that promotes a positive and supportive attitude toward internal controls and conscientious management. Such an environment is the foundation for all other control standards that provide discipline, structure, and a climate that influences quality. To correct purchase card program deficiencies, DoD should as a part of its regular control activities implement automated data mining tools for continuously monitoring transactions for potentially fraudulent, wasteful, and abusive activity. By using data mining to assign risk to individual transactions, managers and supervisors are forced to perform their oversight responsibilities, take appropriate actions to correct improper use, and perform followup. In addition, the use of ongoing monitoring as a matter of normal operations reduces the chance that cardholders will act improperly without detection. In recent testimony before the Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform, House of Representatives, GAO supported the need for a continuous monitoring system and identified data mining as a critical audit and investigative tool, stating that the results of data mining show “real consequence or effect of breakdowns in internal controls.”

Management Actions to Implement a Continuous Monitoring Tool

DoD Improvements During This Review. In March 2003, the Under Secretary of Defense for Acquisition, Technology, and Logistics established the DoD Charge Card Special Focus Group to achieve a balance between streamlining business processes and proper charge card use. An Integrated Product Team supports the Special Focus Group and is responsible for resolving policy and process issues related to the implementation of the recommendations in the DoD Charge Card Task Force Final Report. One task that the focus group undertook was to identify practices that would best strengthen internal controls as well as increase available tools for managers to enforce internal controls. Part of the task included using data mining techniques that could detect purchase and travel card transactions with a high risk of being potentially fraudulent or abusive.

Navy Action. Based on recommendations by the IG DoD, the Navy initiated action to address purchase card fraud, misuse, and abuse by establishing an automated and standardized process for reviewing high-risk purchase card transactions.

Both the Navy and IG DoD envision a prototype system that would send an automated e-mail to the appropriate approving official requesting additional information for assessing the appropriateness of a transaction. The approving official’s response to questions will populate a database, which can be used for reporting trends, identifying deficiencies, and providing data for fraud or misuse improvement.

The first phase of the prototype focuses on approving official review of cardholder transactions, and the U.S. Marine Corps is field testing a pilot program at Camp LeJeune, North Carolina. The prototype system, although being developed by the Navy, has applicability throughout DoD.

Based on the actions the DoD Purchase Card PMO and the Navy have taken or initiated, this report makes no recommendations for additional corrective action. See Figure 2 for a diagram of the continuous monitoring system.

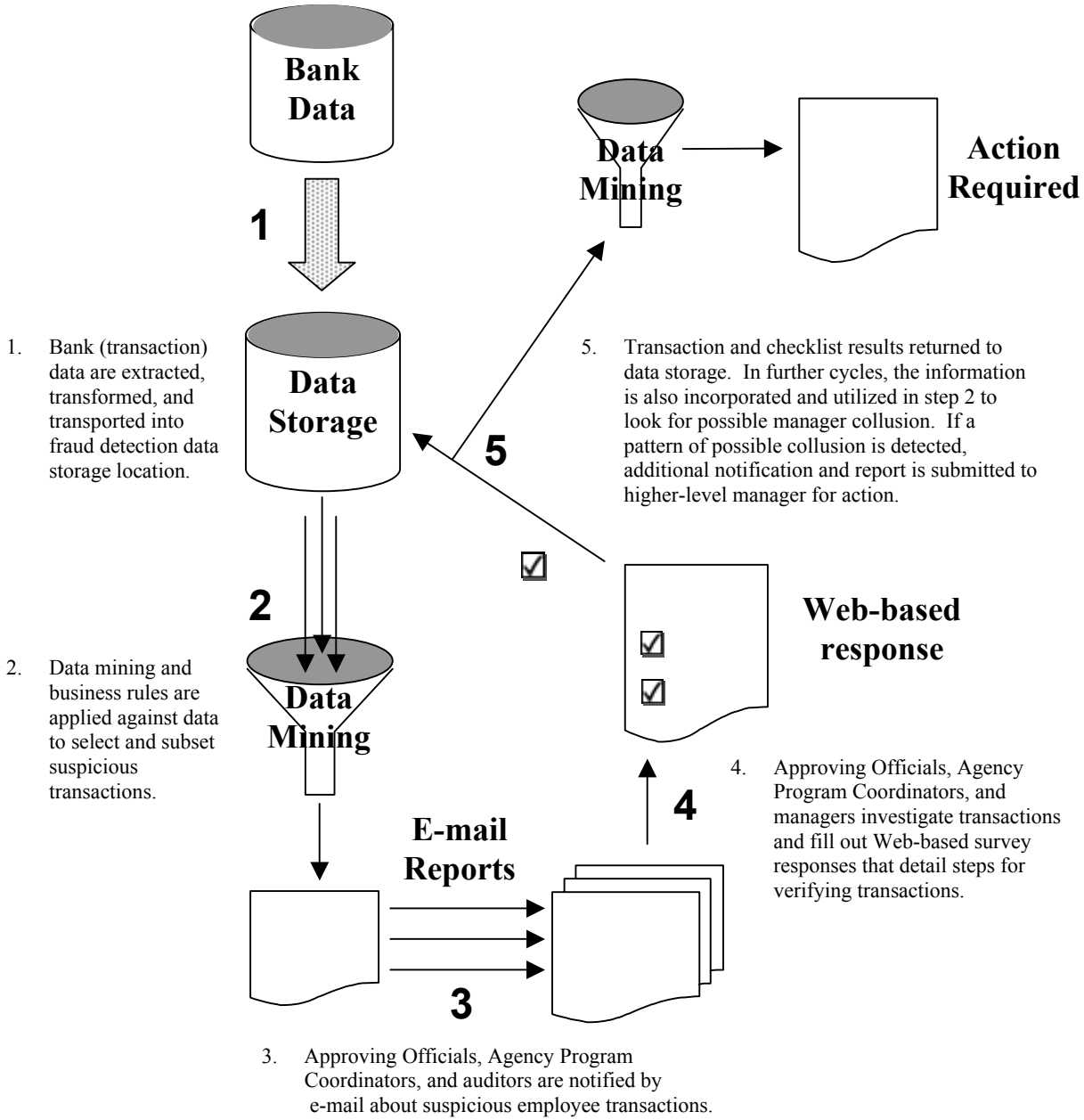


Figure 2. Continuous Monitoring System

Conclusion

The data mining effort identified transactions that were inappropriate or potentially fraudulent. Because DoD purchase cardholders continue to misuse the purchase card, continuous monitoring of the program is needed to maintain its credibility with Congress and the American public as a cost-efficient method of procurement. To ensure proper stewardship of the resources, DoD must implement effective internal controls and comply with established guidelines and standards. We believe effective controls can be facilitated by developing an automated oversight program using data mining techniques that can detect potentially fraudulent, wasteful, or abusive purchase card transactions. Increased surveillance can benefit management, allowing them to focus scarce resources on purchase card transactions with a higher risk of being potentially abusive or fraudulent. Based on the actions DoD management has initiated or taken, this report makes no recommendations for corrective action. The tool can eventually be refined and used to develop metrics that will assist management in resolving any weaknesses of internal controls as well as take timely action to correct deficiencies. Table 3 shows a comparison between the traditional oversight method that DoD currently uses and a continuous monitoring approach.

Table 3. Traditional Oversight versus Continuous Monitoring

Traditional Oversight Method	Continuous Monitoring Approach
<ul style="list-style-type: none"> • Manual inquiries for documentation 	<ul style="list-style-type: none"> • Automated e-mails • Standard response formats • Database format that facilitates data mining
<ul style="list-style-type: none"> • Responses often vague with little value 	<ul style="list-style-type: none"> • Responses objective • Querying and tracking mechanisms in place • Automated analysis capabilities
<ul style="list-style-type: none"> • Transactions dated (1 to 2 years old) 	<ul style="list-style-type: none"> • Most recent month's transactions
<ul style="list-style-type: none"> • Top down inquiries 	<ul style="list-style-type: none"> • Bottom up reporting to approving official

Appendix A. Scope and Methodology

We conducted this joint review with the Army Audit Agency, the Naval Audit Service, the Air Force Audit Agency, and other Defense agency internal review officials. We did not request that the Services or Defense agencies issue separate reports or focus on additional causative research.

For this review, purchase card experts from the audit and investigative communities met to develop and prioritize indicators that could detect anomalies in purchase card transaction data. DFAS Internal Review coded the indicators, and combinations of the indicators were applied to purchase card transaction data from July 1, 2001, through December 31, 2001. As a result, we identified for review 13,052 purchase card transactions, totaling approximately \$38.3 million. The 13,052 transactions related to 2,036 cardholders and 1,604 approving officials in 752 cities. See Appendix B for the scope of our review of the DoD Purchase Card Program based on location. For the purposes of this review, we excluded from the purchase card data all nonappropriated fund and overseas transactions.

The IG DoD provided each of the Services and the Defense agencies with a cardholder profile. The cardholder profile contained the flagged transactions as well as transactions cardholders made from October 1, 2000, through December 31, 2001.

During this effort, we coordinated execution of the review with the Army Audit Agency, the Naval Audit Service, the Air Force Audit Agency, and other Defense agency internal review officials. We also closely coordinated our efforts with personnel from the Defense Criminal Investigative Service, Military Criminal Investigative Organizations, the PMO, GAO, and GSA.

We performed this review from May 2002 through June 2003. Because this report is not an audit but is instead a summary of data, we did not meet generally accepted government auditing standards nor did we fully meet IG DoD audit standards. Specifically, we did not meet the evidence standard as set forth in Generally Accepted Government Auditing Standard 6.46 that we have incorporated into our audit standards. We were not able to fully verify all the data provided and contained in the report, and an experienced auditor having no previous connection with this review may have difficulty ascertaining from the working papers, evidence that supports the conclusions and judgments. However, we believe that the available verifiable information supports the finding and conclusions in this report.

We did not review the management control program because DoD identified the purchase card program as a systemic weakness in the FY 2002 Performance and Accountability Report. The FY 2002 Performance and Accountability Report recognizes that past audit coverage revealed that misuse, abuse, and fraud was caused by inadequate DoD emphasis on proper use, poor controls, and lax oversight of purchase cards. We did not assess management's self-evaluation.

Use of Computer-Processed Data. To achieve the objective, we relied on computer-processed data from U.S. Bank and Citibank, which were provided to us by the Defense Manpower Data Center. The DFAS Internal Review personnel applied data mining techniques that identified purchase card transactions with a higher probability for abuse and fraud. For example, we identified some inconsistencies in the data such as duplicate cardholders, incorrect single micropurchase limits, and monthly spending limits.

Although we relied on the data, we did not perform any formal reliability assessment of the computer-processed data. We were, however, able to establish data reliability for the information by comparing purchase card transaction data to source documentation. The comparison disclosed that the data were sufficient to support the conclusions.

Use of Technical Assistance. We received technical assistance from the Defense Manpower Data Center. The Defense Manpower Data Center provided us with the cardholder and transaction data from July 1, 2001, through December 31, 2001. The Defense Manpower Data Center is responsible for maintaining the DoD purchase card data, which are organized in three large repositories, categorized by transaction, cardholder, and approving official.

We also received technical assistance from DFAS Internal Review. DFAS coded the fraud indicators developed by the subject matter experts and then applied those indicators to purchase card transactions that could identify purchases with a greater likelihood of being potentially fraudulent or abusive.

General Accounting Office High-Risk Area. The GAO has identified several high-risk areas. This report provides coverage on the DoD high-risk area to improve processes and controls to reduce contract risk.

Prior Coverage

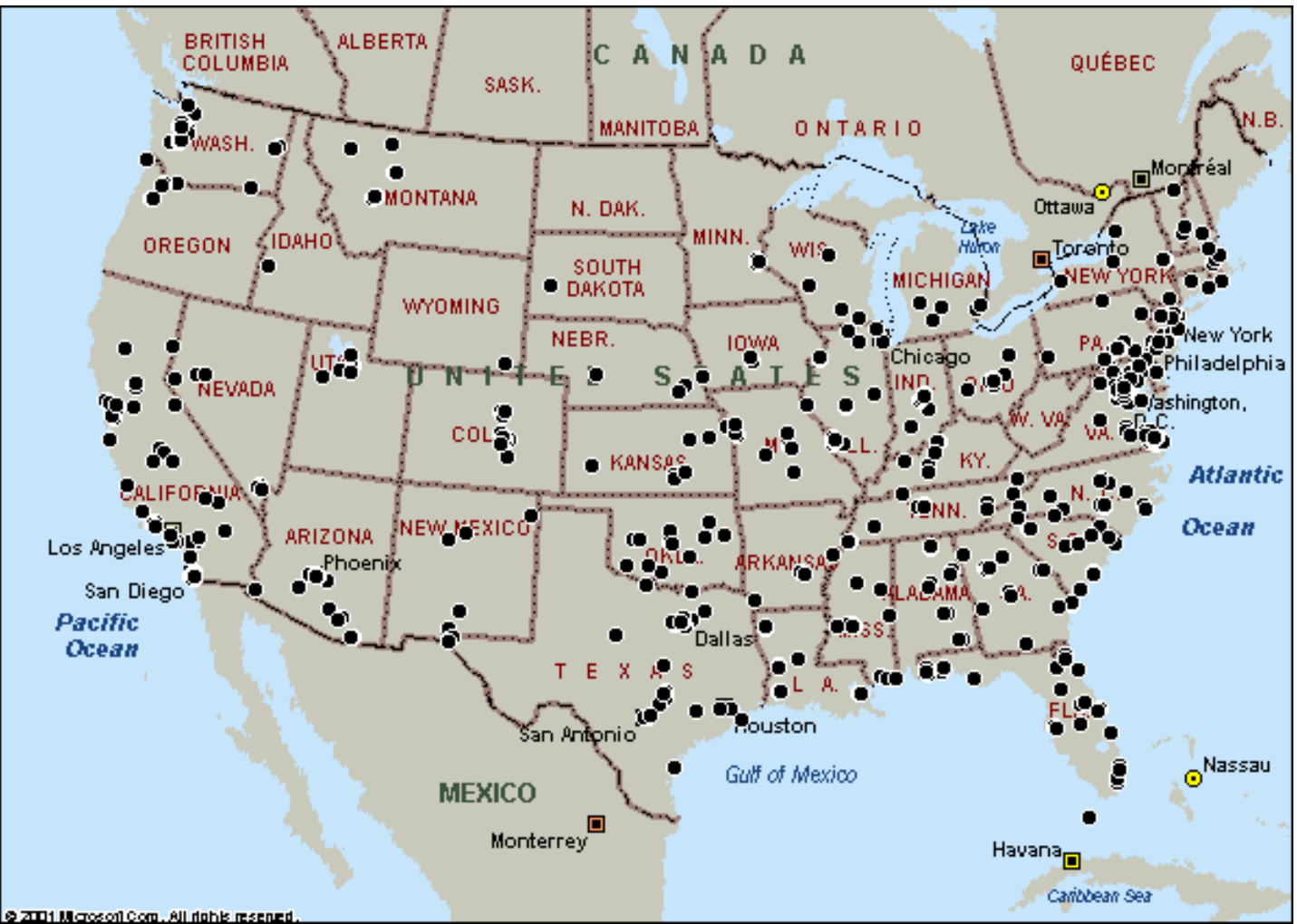
Between FY 1996 and FY 2002, more than 300 audit reports identified a wide range of implementation problems in the DoD Purchase Card Program.

General Accounting Office. GAO issued four reports and participated in three testimonies relating to the DoD Purchase Card Program. The most recent reports are GAO Report No. GAO-03-292, "Purchase Cards: Control Weaknesses Leave the Air Force Vulnerable to Fraud, Waste, and Abuse," December 20, 2002, and GAO Report No. GAO-03-154T, "Purchase Cards: Navy Vulnerable to Fraud, Waste, and Abuse but is Taking Action to Resolve Control Weaknesses," October 8, 2002. In addition, GAO issued a report on data mining, GAO Report No. GAO-03-591T, "Data Mining: Results and Challenges for Government Program Audits and Investigations," March 25, 2003. GAO reports can be accessed in the Internet at <http://www.gao.gov>.

DoD Audit Organizations. The IG DoD and audit organizations in Military Departments and the Defense agencies issued more than 300 reports on purchase cards between FY 1996 and FY 2002. IG DoD Report No. D-2002-0029, "Summary of DoD Purchase Card Program Audit Coverage," December 27,

2001, identifies systemic issues with the program. IG DoD Report No. D-2002-075, "Controls Over the DoD Purchase Card Program," March 29, 2002, identifies specific risk factors existing in FY 2001 that required more proactive oversight. IG DoD reports can be accessed on the Internet at <http://dodig.osd.mil/audit/reports>. The Military Departments and other Defense agency reports can be viewed from the DoD Internet Web site at <http://www.defenselink.mil/>.

Appendix B. Scope of Review for DoD Purchase Cards



Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
 Director, Defense Procurement and Acquisition Policy
 Director, Purchase Card Joint Program Management Office
Under Secretary of Defense (Comptroller)/Chief Financial Officer
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Commissary Agency
Director, Defense Contract Management Agency
Director, Defense Finance and Accounting Service
Director, Defense Information Systems Agency
Director, Defense Intelligence Agency
Director, Defense Logistics Agency
Director, Defense Threat Reduction Agency
Director, DoD Education Activity
Director, DoD Human Resources Activity
Director, Tricare Management Activity
Director, National Imagery and Mapping Agency
Director, National Reconnaissance Organization
Director, National Security Agency
Director, Washington Headquarters Service

Non-Defense Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Team Members

The Contract Management Directorate, Office of the Deputy Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

Colonel William J. Kelley
Lisa M. Such
Brett Ward
William H. Sterling
Michael L. Davitt
Dennis R. Wokeck
Pamela S. Varner
Curtis P. Greene
Justin C. Husar
Angela Kendera
Carol Brink-Meissner
Robert K. West