DOT/FAA/AR-01/101

Office of Aviation Research Washington, DC 20591

Human Factors Contract Management Handbook

Michael J. Barrientos Melissa Dixon, Ph.D. Brenda A. Klock Susan Morgan Eric C. Neiderman, Ph.D. Josh Rubinstein, Ph.D Mike Snyder

Aviation Security Research and Development Division Federal Aviation Administration William J. Hughes Technical Center Atlantic City International Airport, NJ 08405

May 2001

This report is approved for public release and is on file at the William J. Hughes Technical Center, Aviation Security Research and Development Library, Atlantic City International Airport, New Jersey, 08405.

This document is also available to the U.S. public through the National Technical Information Service, Springfield (NTIS), Virginia 22161.



U.S. Department of Transportation **Federal Aviation Administration**

NOTICE

This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for the contents or use thereof. The United States Government does not endorse products or manufacturers.

		Technical Report Documentation Page
1. Report No.	Government Accession No.	Recipient's Catalog No.
DOT/FAA/AR-01//101		
4. Title and Subtitle		5. Report Date
Human Factors Contract Mana	gement Handbook	May 15, 2001
		6. Performing Organization Code
		AAR-510
7. Author(s)		Performing Organization Report No.
	Dixon, Ph.D., Brenda A. Klock,	DOT/FAA/AR-01/101
C ,	man, Ph.D., Josh Rubinstein, Ph.D.,	
Mike Snyder		
9. Performing Organization Name and Address		10. Work Unit No. (TRAIS)
U.S. Department of Transporta		
Federal Aviation Administration		
William J. Hughes Technical Center		11. Contract or Grant No.
Atlantic City International Airport, NJ 08405		DTFA03-00-D-00014
12. Sponsoring Agency Name and		13. Type of Report and Period Covered
U.S. Department of Transporta		
Federal Aviation Administration		Final Report
Associate Administrator of Civil Aviation Security, ACS-1		
800 Independence Ave., S.W.		14. Sponsoring Agency Code
Washington, DC 20590		ACS-1
15. Supplementary Notes		•
Prepared by: Hawa K. Bond		
Dynamic Securit	y Concepts, Inc.	
	· · · · · · · · · · · · · · · · · · ·	

5749 Main Street

Mays Landing, New Jersey 08330

16. Abstract

The Federal Aviation Administration's (FAA's) Acquisition Management System (AMS) was established to dramatically improve the agency's acquisition process by creating a framework for informed and innovative decision-making. The AMS provides extensive guidance regarding the FAA's procurement system. The stated goal of the procurement system is "to obtain high quality products, services, and real property in a timely, cost effective manner, at prices that are fair and reasonable". The Aviation Security Research and Development Division (AAR-500) recognized the need to supplement the policy and guidance provided by the AMS by identifying internal processes. This Handbook meets that need by clearly defining AAR-500 personnel roles, responsibilities, and process activities that uphold the procurement policy of the agency.

17. Keywords		18. Distribution Statement		
Contracts, procurement, interagency	This document is available to the public through the National			
card, grants, Cooperative Research	and Development	Technical Information Service,		
Agreements (CRDAs), International Agreements, delivery		Springfield, Virginia, 22161		
orders.				
19 Security Classif. (of this report) 20. Security Classif. (of this page)	21. No. of Pages	22. Price
Unclassified	Unclassified		47	

TABLE OF CONTENTS

		Page
	CCUTIVE SUMMARY RONYMS	v vi
1.	INTRODUCTION 1.1 Purpose 1.2 Background	1 1 1
2.	HOW TO USE THIS HANDBOOK	1
3.	PROCUREMENT LIFECYCLE 3.1 Phase 1: Need Establishment 3.2 Phase 2: Vehicle/Method Selection 3.3 Phase 3: Supplier Evaluation and Selection 3.4 Phase 4: Post Award Monitoring	2 3 3 5 5
4.	VEHICLE/METHOD PROCESSES 4.1 Roles and Responsibilities 4.2 Process Descriptions 4.2.1 Credit Card Purchases, Up to \$10K 4.2.2 Credit Card Purchases, Up To \$100K 4.2.3 Delivery Orders on Existing Commercial Contracts 4.2.4 New Commercial Contracts 4.2.5 Interagency Agreements 4.2.6 International Agreements 4.2.7 Cooperative Research and Development Agreements (CRDAs) 4.2.8 Grants	5 6 7 7 10 14 18 22 26 30 31
5.	CONCLUSION	33
6.	REFERENCED DOCUMENTS	33
APP	ENDICES	
	A – Commercial Credit Card Approval Sheet B – Requisition Request Form C – Document Change History	

LIST OF FIGURES

Figure		Page
1	Four-Phased Procurement Lifecycle	3
2	Process Diagram Legend	6
3	Credit Card Purchases, Up to \$10K Process Diagram	8
4a	Credit Card Purchases, Up to \$100K Process Diagram	11
4b	Credit Card Purchases, Up to \$100K Process Diagram (continued)	12
5a	Delivery Orders on Existing Commercial Contracts Process Diagram	15
5b	Delivery Orders on Existing Commercial Contracts Process Diagram (continued)	16
6a	New Commercial Contracts Process Diagram	19
6b	New Commercial Contracts Process Diagram (continued)	20
7	Interagency Agreements Process Diagram	24
8	International Agreement Element Relationships	27
9	International Agreements (Memorandum of Cooperation) Process Diagram	27
10	Grants Process Diagram	31
	LIST OF TABLES	
Table		Page
1	Credit Card Purchases, Up to \$10K Process Description	9
2	Credit Card Purchases, Up to \$100K Process Description	13
3	Delivery Orders on Existing Commercial Contracts Process Description	17
4	New Commercial Contracts Process Description	21
5	Interagency Agreements Process Description	25
6	International Agreements Process Description	28
7	Grants Process Description	32

EXECUTIVE SUMMARY

The Federal Aviation Administration (FAA) has executed contracts and agreements to acquire products, services, and real property for many years. The FAA's Acquisition Management System (AMS), established on April 1, 1996, introduces new policy, guidance, and tool sets for an agency-wide procurement system. The stated goal of this procurement system is "to obtain high quality products, services, and real property in a timely, cost-effective manner, at prices that are fair and reasonable." According to former Acquisition Executive, George L. Donohue, the AMS has greatly improved the FAA's acquisition process and allows for informed and innovative decision-making.

The Aviation Security Research and Development Division (AAR-500) recognized the need to supplement the policy and guidance provided by the AMS. The goal was to create a resource that would clearly define personnel roles, responsibilities, and process activities for AAR-500 Programs related to procurement activities that support and uphold the FAA's new procurement policy. The resulting Contract Management Handbook provides detailed guidance for purchasing goods and services from external suppliers. More specifically, the handbook describes the four-phased procurement lifecycle and the eight major vehicles/methods employed by AAR-500 Programs to procure external goods and services. Process flow diagrams followed by textual details provide the tools necessary to ensure repeatability of the vehicle/method process throughout the organization.

ACRONYMS

ADR Alternative Dispute Resolution
AIA Office of International Aviation
AMS Acquisition Management System

ASD-500 International Research and Acquisitions Office

ASTI Airport Security Technology Integration

COCO Chief of the Contracting Office

COTR Contracting Officer's Technical Representative CRDA Cooperative Research and Development Agreement

DOT Department of Transportation

DPA Delegation of Procurement Authority

DSR Display System Replacement
FAA Federal Aviation Administration
FCO Funds Certification Officer
GCE Government Cost Estimate
ISMT In-Service Management Team
MOC Memorandum of Cooperation
MOU Memorandum of Understanding

ODRA Office of Dispute Resolution for Acquisition

POC Point of Contact

R&D Research and Development

RE&D Research, Engineering and Development

RFP Request for Proposal

SIR Screening Information Request

SOW Statement of Work

WJHTC William J. Hughes Technical Center

1. INTRODUCTION

1.1 Purpose

This Contract Management Handbook provides detailed guidance for purchasing goods and services from external suppliers. This handbook provides criteria for selecting the most appropriate vehicle/method, and flow diagrams with textual details for individual procurement processes. Additionally, this document describes the roles and responsibilities of key process participants, and includes references to external documents for additional guidance.

1.2 Background

The Federal Aviation Administration's (FAA's) Acquisition Management System (AMS) was established on April 1, 1996, to dramatically improve the agency's acquisition process by creating a framework for informed and innovative decision-making. These acquisition reforms, along with anticipated budget reform, were designed to move the agency closer to the congressional goal of providing the agency with a "new way of doing business" to meet the challenges of a dynamic and growing aviation industry while ensuring the safety of the traveling public.

The AMS provides extensive guidance regarding the FAA's procurement system. The stated goal of the procurement system is "to obtain high quality products, services, and real property in a timely, cost-effective manner, at prices that are fair and reasonable." The procurement system is designed to provide policy and guidance for executing contracts and agreements to acquire products, services, and real property.

The Aviation Security Research and Development (AAR-500) Division recognized the need to supplement the policy and guidance provided by AMS by identifying internal processes. The goal was to create a resource that would clearly define personnel roles, responsibilities, and process activities for all AAR-500 personnel related to procurement activities that support and uphold the procurement policy of the agency. The strategy for meeting this goal included process meetings, information coordination, and the development of this Contract Management Handbook.

2. HOW TO USE THIS HANDBOOK

This handbook is designed to serve as a handy desktop resource for AAR-500 Program team members who are responsible for purchasing and acquiring external goods and services. There are several vehicles/methods that can be employed to make such purchases. The vehicles/methods are listed in section 3, "Procurement Lifecycle," which describes the lifecycle that all procurements follow. Guidance for selecting the most appropriate vehicle/method and supplier is also provided. Section 4, "Vehicle/Method Processes," provides flow diagrams along with textual descriptions of each vehicle/method. Roles and responsibilities of process participants are also identified.

The William J. Hughes Technical Center (WJHTC) Logistics Division, ACT-50, serves a key role in several of the contracting processes. With regard to certain credit card purchases, commercial contracts, and Interagency Agreements, this handbook will be used in conjunction with the ACT-50 Logistics Division contracts processes listed below:

- ACT-50 Logistics Division Management Process
- ACT-50 Logistics Division Pre-Award Process
- ACT-50 Logistics Division Evaluation and Award Process
- ACT-50 Logistics Division Credit Card Purchase with Template/Form or Procurement Request Process
- ACT-50 Logistics Division Post Award Contract Management Process
- ACT-50 Logistics Division Revision (Modification) and Delivery Order Contract Management Process
- ACT-50 Logistics Division Interagency Agreement/Reimbursable Agreement Process
- The Display System Replacement (DSR) In-Service Management Team (ISMT) and ACT-50 Logistics Division Credit Card Purchase Process

These processes are available at the WJHTC intraweb site and are referenced specifically in the associated AAR-500 processes described in section 5 of this handbook.

3. PROCUREMENT LIFECYCLE

All procurement activities, regardless of the vehicle/method of choice, follow the same overall lifecycle. The lifecycle, as shown in figure 1, is characterized by the following four phases: Need Establishment, Vehicle/Method Selection, Supplier Evaluation and Selection, and Post Award Monitoring. Each phase is described in the following sections.

Phase 1 Need Establishment

This phase typically occurs early in the project planning, the need for a specific product or service is identified.

The need can arise as a result of programmatic requirements, or to satisfy the requirements of an individual project. Phase 2 Vehicle/Method Selection

This phase begins when the requester solicits the help of other team members to determine the most appropriate vehicle/ method.

Phase 3
Supplier Evaluation and Selection

This phase occurs when competent suppliers are sought, evaluated, and selected. Evaluation criteria can be simple or complex, and provide a basis for making the best selection.

Phase 4
Post Award Monitoring

During this phase, the product or service purchase is followed to closure. For product purchases, activities include monitoring invoices and maintaining a reconciliation log. For services, activities include periodic reviews with the supplier, and monitoring project activities.

FIGURE 1. FOUR-PHASED PROCUREMENT LIFECYCLE

3.1 Phase 1: Need Establishment

During Phase 1 of the procurement lifecycle, a need for the product or service is formally identified. Typically, this is completed once a concept has been approved as a formal project. Specific products or services may require external development and support once project needs and available resources have been analyzed. A detailed technical description of the goods or services is developed in addition to a list of assumptions and constraints. The Concept Evaluation Sheet and individual project plans capture needs and provide the data necessary to begin defining the technical requirements for contract solicitation.

3.2 Phase 2: Vehicle/Method Selection

There are eight major vehicles/methods employed by AAR-500 Programs to acquire needed goods and services. These vehicles/methods are described below. Each description includes information that can be used to select the most appropriate vehicle/method for a particular need. The process for using each vehicle/method can be found in this handbook in the section indicated.

Vehicle	Description	Section
Credit Card Purchases, Under \$10K	FAA credit cards can be used to purchase goods and services that do not exceed \$10K (per single order of one or many items). This is the procurement method of choice for acquiring small scope (time and dollars) products and services from suppliers that do not have a contract vehicle in place.	4.2.1

Vehicle	Description	Section
Credit Card Purchases, Under \$100K	FAA credit cards can also be used to purchase goods and services that do not exceed \$100K (per single order of one or many items). Although a new contract vehicle can be used for these purchases (when a current vehicle does not exist), this is the procurement method of choice to avoid a lengthy contracts process. Additionally, this credit card procurement method is used to purchase goods and services valued under \$10K when the monthly credit card limit has been reached.	4.2.2
Delivery Orders on Existing Commercial Contracts	The Program typically has several active contracts that provide contractor support for project initiatives. When needed goods or services fall within the scope of an existing contract, it is beneficial and preferred to acquire the goods or services by drafting a delivery order on that existing contract.	4.2.3
New Commercial Contracts	A new commercial contract may be sought when needed goods or services exceed \$100K and do not fall within the scope of an existing commercial contract.	4.2.4
Interagency Agreements	Interagency Agreements allow AAR-500 Programs to obtain services and supplies from other Federal agencies. It is beneficial to establish such an agreement when the needed product or service is unique to the expertise of another agency and is not typically commercially available.	4.2.5
International Agreements: Memorandum of Cooperation (MOC) or Memorandum of Understanding (MOU)	An MOC is a legally binding research and development agreement between the FAA and a foreign entity (government or private). These agreements are entered into when there is a recognized benefit for mutual cooperation and are recognized as treaties. An MOU is not legally binding and may be appropriate for agreements that do not have well defined requirements and do not require an immediate commitment.	4.2.6
Cooperative Research and Development Agreements (CRDAs)	CRDAs allow the FAA to share facilities, equipment, services, and personnel resources in cooperation with private industry, academia, or state/local government agencies.	4.2.7
Grants	AAR-500 Programs can take advantage of the Aviation Research Grant Program. All colleges, universities, and legally incorporated nonprofit research institutions qualify for research grants and cooperative agreements. Individuals and private "for-profit" businesses are generally ineligible, although research grants can be awarded to organizations proposing research in aviation security technologies.	4.2.8

3.3 Phase 3: Supplier Evaluation and Selection

According to the FAA's AMS, it is policy to procure products and services from sources that offer the best value to satisfy the FAA's mission need. It is also policy to provide reasonable access to competition for firms interested in obtaining contracts.

During Phase 3 of the procurement lifecycle, "Supplier Evaluation and Selection", competent suppliers are sought and evaluated using the appropriate vehicle/method process. The technical requirements developed in the first phase are used as the basis for evaluation. For service contracts, initial cost, technical capabilities, and lifecycle costs are the primary criteria that drive the selection and award. A kickoff meeting is conducted after the award and formal communications are established. For product purchases, total cost, quality and availability are the primary criteria that drive the selection.

Section 3 of the AMS, Procurement Policy, provides source selection guidance including the use of Screening Information Requests (SIRs) to solicit information and criteria for evaluating and selecting sources for the award of complex and noncommercial competitive contracts. The AMS document provides checklists to support decision activities.

3.4 Phase 4: Post Award Monitoring

During this final phase of the procurement lifecycle, appointed Program personnel monitor all aspects of the original agreement to ensure that the product or service meets contractual requirements. For service contracts, this includes review of all pertinent planning documentation and verification of all work products. Status and review meetings are a critical part of this monitoring phase and are an integral part of the overall project management. For product purchases, post award monitoring involves resolving any disputes and reconciling invoices.

4. VEHICLE/METHOD PROCESSES

This section describes the process activities that must be performed once a vehicle/method has been selected. Section 4.1, Roles and Responsibilities, begins with a description of the roles and responsibilities of the key process participants. Section 4.2 continues with process descriptions for each of the eight vehicles/methods. These descriptions include process diagrams followed by the textual details of responsibilities, activities and reference documents. Each process starts with entry criteria and continues with several consecutive, iterative and/or concurrent steps. Key decision points are identified and indicate all possible paths. Each process ends with the exit criteria. The legend in figure 2 applies to all process diagrams.

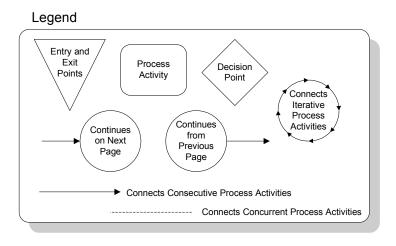


FIGURE 2. PROCESS DIAGRAM LEGEND

Textual details of each of the process diagrams are provided in the form of a three-column table. The first column provides the step identification number, which corresponds to the numbered activities in the flow diagram. The second column describes the individual(s) responsible for completing the activity. The third column provides a detailed description of the process step, including any special tools and reference documents.

4.1 Roles and Responsibilities

There are several roles that appear across each of the processes, and others that are specific to the selected vehicle/method. Each of those roles and corresponding responsibilities are described below. Any authority (e.g. approval authority) is also identified.

Role	Overall Responsibility and Authority
Requester	The requester is any member of an AAR-500 Program who identifies the initial need for a good or service. Typically, this person is responsible for initiating and coordinating any forms and signatures that must be completed.
Program Lead	The Program Lead is the first level of approval authority and provides signatures to signify approval that the product or service is required and necessary on that project.
Funds Certification Officer (FCO)	The FCO is the AAR-500 representative who verifies the availability of funds for purchases (e.g. credit card purchases) and assigns an appropriations number. The FCO has the authority to postpone or reject a request for lack of funds.

Role	
Credit Card Holder	The Credit Card Holder is authorized to make credit card purchases for the FAA. According to FAA Order CT4400.14A, all card holders must be provided with a fully executed Delegation of Procurement Authority (DPA) that is signed by the Chief of the Contracting Office (COCO) before any purchases can be made.
Branch Secretary	The Branch Secretary is primarily responsible for entering requests into the Acquire Database (using the appropriations number) and forwarding documents to other offices (e.g. the ACT-50 contracts office) when applicable.
Branch Manager	The Branch Manager is the second level of approval authority and provides signatures to signify this approval.
ACT-50 Contracts	ACT-50 becomes involved with certain credit card purchases (up to \$100K), Interagency Agreements, and commercial contracts. ACT-50 has the authority to reject any submissions, require the use of another vehicle/method, override the selected supplier and/or reject contractor proposals.
AIA Office of International Aviation	AIA is responsible for coordinating international research and development agreements based on requests from the programs. AIA acts as a buffer between the FAA program requester and the General Council (AGC-7) to coordinate and resolve legal issues. AIA is also responsible for coordinating financial issues (e.g. establishing reimbursable accounts) with the Budget and Finance staff (API-18).

4.2 Process Descriptions

4.2.1 Credit Card Purchases, Up to \$10K

Credit card purchases for products and services under \$10K (per order of one or many items) follow a process that is internal to the respective AAR-500 program. Unlike the other vehicles/methods, all of the activities are performed within the organization. Figure 3 is a flow diagram of this process, and is followed by a detailed textual description of the process in table 1.

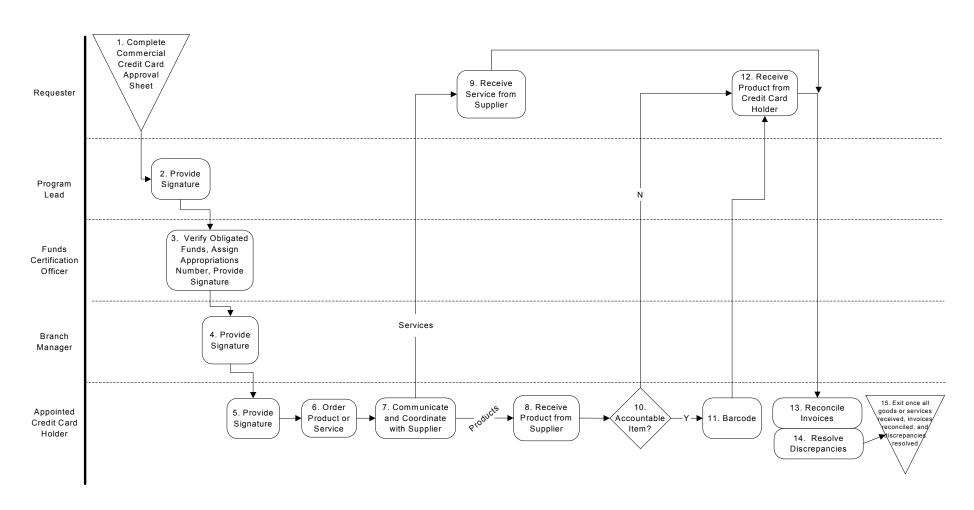


FIGURE 3. CREDIT CARD PURCHASES UP TO \$10K PROCESS DIAGRAM

TABLE 1. CREDIT CARD PURCHASES UP TO \$10K PROCESS DESCRIPTION

Step ID	Who	Description
1.	Requester	Complete Commercial Credit Card Approval Sheet This process begins when a member of the team completes a Commercial Credit Card Approval Sheet to purchase needed goods or services. The copy of the Commercial Credit Card Approval Sheet is included in the appendix of this handbook.
2.	Program Lead	Provide Signature The Program Lead reviews the completed Credit Card Approval Sheet and provides an approval signature. The Program Lead has the authority to reject the request and stop the process.
3.	Funds Certification Officer (FCO)	Verify Obligated Funds, Assign Appropriations Number, Provide Signature The FCO certifies that the funds are available and the proper accounting code is being charged. The FCO also assigns the appropriations number and signs the approval sheet to confirm these activities are complete.
4.	Branch Manager	Provide Signature The Branch Manager reviews the completed Credit Card Approval Sheet and provides an approval signature. The Branch Manager has the authority to reject the request and stop the process.
5.	Appointed Credit Card Holder	Provide Signature The Appointed Credit Card Holder reviews the completed and approved Credit Card Approval Sheet and signs to confirm receipt.
6.	Appointed Credit Card Holder	Order Product or Service The Appointed Credit Card Holder contacts the supplier and orders the requested products or services. The cardholder inventories all products or services ordered in the Cardholder Log Template and records all telephone orders in the Record of Telephone Credit Card Order Template. These templates are available in the FAA William J. Hughes Technical Center Purchase Credit Card Handbook for Simplified Purchases (located in Appendix 1 of FAA Order CT4400.14A).
7.	Appointed Credit Card Holder	Communicate and Coordinate with Supplier The Appointed Credit Card Holder is responsible for communicating with the supplier and coordinating deliveries. Product deliveries continue with step 8. Services continue with step 9.
8.	Appointed Credit Card Holder	Receive Product from Supplier The Appointed Credit Card Holder accepts delivery of all products (materials, supplies, etc.) before handing-off to the Requester. The Credit Card Holder references all invoices/billing statements and requestor requirements when the delivery of products is accepted.
9.	Requester	Receive Service from Supplier Once the Appointed Credit Card Holder has finished coordinating the services with the supplier, the Requester can begin using the services.
10.	Appointed Credit Card Holder	Accountable Item? The Appointed Credit Card Holder must determine whether or not the product is an accountable item. An attachment to FAA Order CT4400.14A identifies accountable items that must be barcoded. For accountable items proceed with process step 11. Otherwise proceed to step 12.
11.	Appointed Credit Card Holder	Barcode The Appointed Credit Card Holder is responsible for barcoding accountable items before delivering those items to the Requester.
12.	Requester	Receive Product from Credit Card Holder During this step, the Credit Card Holder physically hands off the product to the Requester.

Step	Who	Description
ID		
13.	Appointed Credit	Reconcile Invoices
	Card Holder	Order CT4400.14A Subj. Commercial Credit Cards Contains guidance on
		responsibilities related to reconciling invoices.
14.	Appointed Credit	Resolve Discrepancies
	Card Holder	Any discrepancies with regard to cost, and/or product or service delivery are to be
		resolved by the Appointed Credit Card Holder. The Requester does not communicate
		directly with the supplier to resolve such issues. A useful tool for resolving
		discrepancies is the FAA WJHTC Purchase Credit Card Handbook for Simplified
		Purchases Section: "How to Deal with Problems"
15.	Exit	This process is only exited when:
		All goods or services have been received, all invoices have been reconciled, and any
		discrepancies have been resolved.

4.2.2 Credit Card Purchases, Up To \$100K

Unlike the internal processes for credit card purchases under \$10K, the William J. Hughes Technical Center (WJHTC) Contracts Office must approve the goods, services, suppliers and/or the use of the selected vehicle for purchases exceeding \$10K. Figures 4A and 4B are a flow diagram of this process, and are followed by a detailed textual description of the process in table 2.

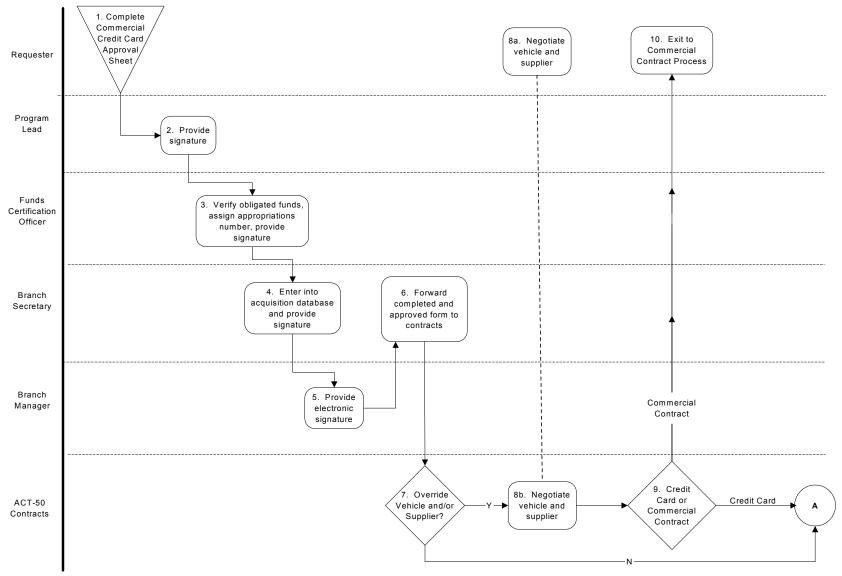


FIGURE 4A. CREDIT CARD PURCHASES UP TO \$100K PROCESS DIAGRAM

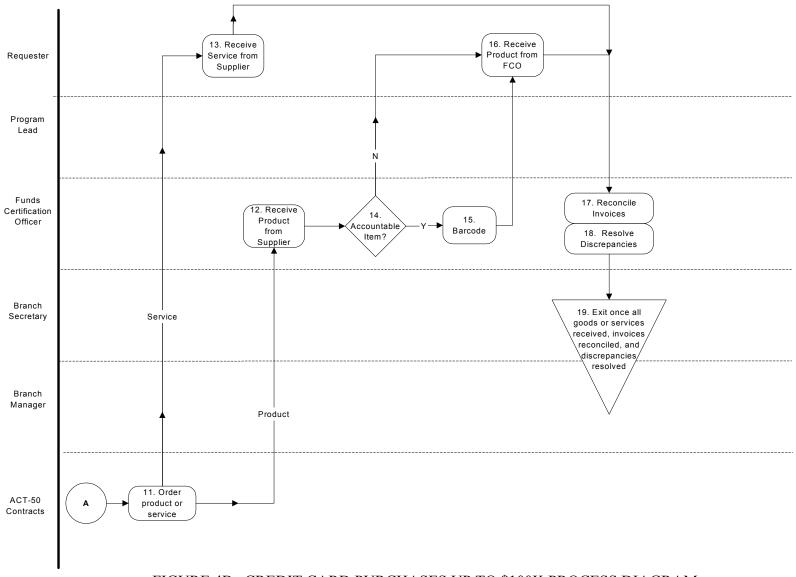


FIGURE 4B. CREDIT CARD PURCHASES UP TO \$100K PROCESS DIAGRAM (CONTINUED)

TABLE 2. CREDIT CARD PURCHASES UP TO \$100K PROCESS DESCRIPTION

Step ID	Who	Description
1.	Requester	Complete Commercial Credit Card Approval Sheet This process begins when a member of the team completes a Commercial Credit Card Approval Sheet to purchase needed goods or services. Any technical requirements and specifications must be attached to the form before forwarding to the ACT-50 Contracts Office. A copy of the Commercial Credit Card Approval Sheet is included as Appendix A in this Contract
		Management Handbook. The FAA WJHTC Purchase Credit Card Handbook for Simplified Purchases identifies all purchases that require prior approval.
2.	Program Lead	Provide signature The Program Lead reviews the completed Credit Card Approval Sheet and provides approval signature. The Program Lead has the authority to reject the request and stop the process.
3.	Funds Certification Officer	Verify obligated funds, assign appropriations number and provide signature The Funds Certification Officer (FCO) verifies that the obligated funds are available and that the proper accounting code is being used. Finally, the FCO assigns the appropriations number and signs the Credit Card Approval Sheet to signify confirmation. The process may stop here if the funds are not available for the purchase.
4	Branch Secretary	Enter request into Acquisition Database and provide confirmation signature. The Branch Secretary logs the request in the Acquisition Database and signs the approval sheet as a confirmation. The Acquire Database is utilized for this purpose.
5	Branch Manager	Provide electronic signature The Branch Manager reviews the completed Credit Card Approval Sheet and provides an electronic approval signature. The Branch Manager has the authority to reject the request and stop the process.
6.	Branch Secretary	Forward completed and approved form to contracts The Branch Secretary verifies the signatures and forwards the completed Credit Card Approval Sheet and any additional attachments to the ACT-50 Contracts Office.
7	ACT-50 Contracts	Decision Point: Override vehicle and/or supplier? Although the Requester submits the request anticipating that it will remain a credit card purchase, ACT-50 has the authority to determine whether or not a commercial contract or other vehicle is more appropriate. During this step, ACT-50 can also override the Requester's suggested supplier and require the use of another. Go to steps 8a and 8b if the Contracts Office requires the use of another supplier and/or vehicle. Otherwise, skip to step 9.
8a.	Requester ACT-50	Negotiate vehicle and supplier The Requester may opt to negotiate with the Contracts Office to justify the original choice of vehicle and/or supplier.
8b. 9.	Contracts ACT-50 Contracts	Decision Point: Credit card or commercial contract? A commercial contract must exit this credit card process at step 10. Credit card purchases continue through this process at step 11.
10.	Requester	Exit to Commercial Contract Process If the Contracts Office ultimately decides that a commercial contract is a more appropriate vehicle, the Requester must reference the appropriate commercial contracts process. See "New Commercial Contracts" or "Delivery Orders on Existing Commercial Contracts" in this handbook.
11.	ACT-50 Contracts	Order Product or Service The Contracts Office contacts the supplier and places the order for the goods or services. The Contracts Office references any additional requirements or specifications that were provided by the Requester.

Step ID	Who	Description
12.	Requester	Receive service from supplier Once the Contracts Office finishes coordinating with the supplier, the Requester is cleared to begin using the services.
13.	FCO	Receive products from supplier Once the Contracts Office has finished coordinating with the supplier, the FCO accepts delivery of all products (materials, equipment, etc.) before they are forwarded to the Requester. The FCO references any invoices/billing statement and Requester requirements and specifications when accepting the products.
14.	FCO	Decision Point: Accountable item? The FCO must ensure that accountable items are barcoded prior to delivering those items to the requester. Accountable items continue through the process with step 15. Otherwise, proceed to step 16. An attachment to Order CT4400.14A"Subj. Commercial Credit Cards" identifies accountable items that must be barcoded.
15.	FCO	Barcode The FCO executes the FAA's barcoding process.
16.	Requester	Receive Products from FCO The FCO physically hands off the product(s) to the Requester.
17.	FCO	Reconcile Invoices The invoices are audited for accuracy and receipt of goods or services. The FCO notifies the Contracts Office and approves payment to the supplier. Order CT4400.14A "Subj. Commercial Credit Cards" offers guidance on responsibilities related to reconciling invoices.
18.	FCO	Resolve Discrepancies Any discrepancies with regard to cost, and product or service delivery are to be resolved by the FCO. The Requester does not communicate directly with the supplier to resolve such issues. The FAA WJHTC "Purchase Credit Card Handbook for Simplified Purchases" includes a guidance section to assist titled "How to Deal with Problems."
19.		This process is only exited when: • All goods or services have been received • All invoices have been reconciled • All discrepancies have been resolved. The purchase is also closed in the Acquisition Database at this time.

4.2.3 Delivery Orders on Existing Commercial Contracts

When a needed good or service falls within the scope of an existing contract, it may be beneficial to draft a delivery order on the existing contract. This may help expedite the process and minimize costs by "bundling" the goods or services with an existing contract vehicle. Figures 5A and 5B are a flow diagram of this process, and are followed by a detailed textual description of the process in table 3.

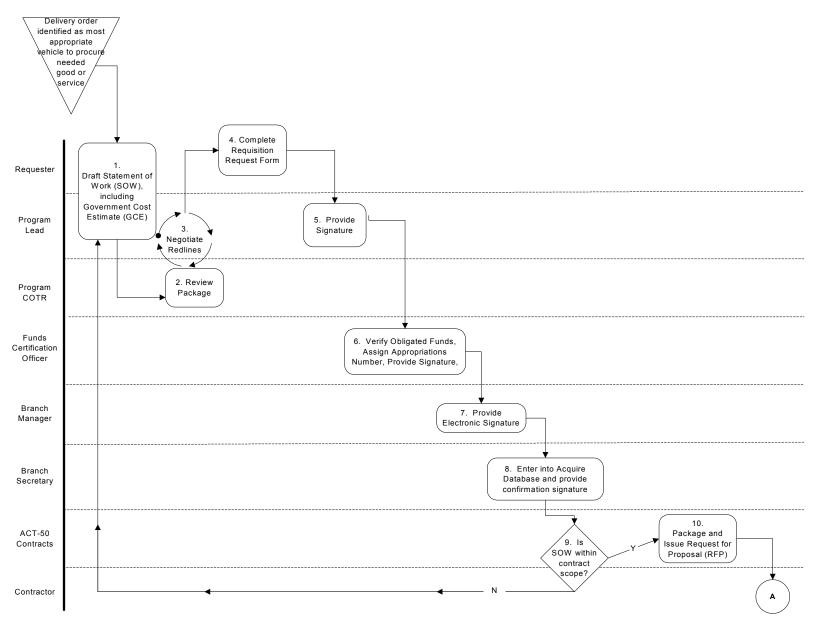


FIGURE 5A. DELIVERY ORDERS ON EXISTING COMMERCIAL CONTRACTS PROCESS DIAGRAM

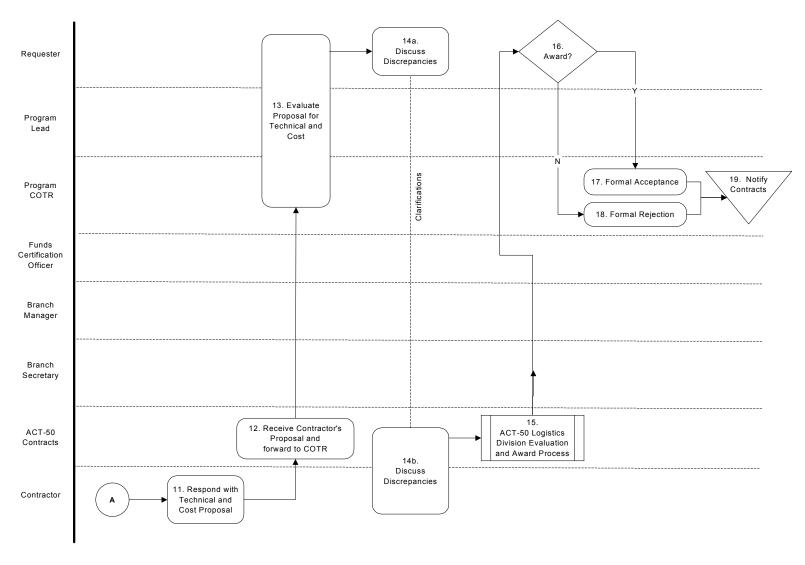


FIGURE 5B. DELIVERY ORDERS ON EXISTING COMMERCIAL CONTRACTS PROCESS DIAGRAM (CONTINUED)

TABLE 3. DELIVERY ORDERS ON EXISTING COMMERCIAL CONTRACTS PROCESS DESCRIPTION

Step ID	Who	Description
1.	Requester (and other team members as needed)	Draft Statement of Work (SOW), including Government Cost Estimate (GCE) The Requester and other members of the team draft an SOW and GCE to procure a product or service under an existing contract. Content templates and other contract documents are used to complete this activity.
	Program Lead	
2.	Program COTR	Review package The COTR reviews the SOW and GCE package to verify that the requested product or service falls within the scope of the contract. The COTR can be held liable for approving requests that do not fall within the contract's scope.
3.	Requester Program Lead Program COTR	Negotiate redlines The COTR's review may result in a set of questions and/or comments. The team that drafted the SOW and GCE must negotiate the changes and incorporate the final results into the package.
4.	Requester	Complete Requisition Request Form Once the Requester and the COTR have resolved any issues regarding the content of the SOW and GCE package, the Requester completes a Requisition Request Form in preparation of package delivery to the ACT-50 Contracts Office. A copy of the Requisition Request Form template is available in the appendix of this Contract Management Handbook.
5.	Program Lead	Provide signature The Program Lead reviews the Requisition Request Form for completeness and accuracy, and provides an approval signature.
6.	Funds Certification Officer	Verify obligated funds, assign appropriations number, provide signature and forward to Contracts The FCO certifies that the funds are available and that the proper accounting code is being charged. The FCO also assigns the appropriations number and signs the approval sheet to confirm these activities are complete. The appropriations number database is utilized in this function.
7.	Branch Manager	Provides electronic signature The Branch Manager reviews the request and provides an approval signature. The Branch Manager has the authority to reject the request and stop the process.
8.	Branch Secretary	Enter into Acquire Database and provide confirmation signature. The Branch Secretary enters the request into the Acquire Database and signs the approval sheet to confirm that she has completed this step.
9.	ACT-50 Contracts	Decision Point: Is SOW within contract scope? The Contracts Officer reviews the package to ensure it falls within the scope of the existing contract. If it is within the scope, the process continues with step 10. If not, the package is returned to the COTR and the process goes back to step 1 for a rewrite.
10.	ACT-50 Contracts	Package and issue Request for Proposal (RFP) The contract office uses the information in the SOW and GCE package to issue an RFP and open the project to bids from outside contractors.
11.	Contractor	Respond with technical and cost proposal Contractor responses are submitted to the contract office.
12.	ACT-50 Contracts	Receive contractor's proposal and forward to COTR The contract office receives contractor proposals and forwards them to the Program COTR for technical and cost evaluation.

Step ID	Who	Description
13.	Requester	Evaluate proposal for technical and cost
	Program Lead	The original team who drafted the SOW and GCE reviews all contractor proposals for technical content and cost.
	Program COTR	
14a.	Requester	Discuss discrepancies
		The Requester is not authorized to communicate directly with the contractor during
	ACT-50 Contracts	contract negotiations. Any questions or comments must be channeled to the contractor
14b.		via ACT-50.
	Contractor	
15.	ACT 50 Contracts	ACT-50 Logistics Division Evaluation and Award Process
		ACT-50's Evaluation and Award process provides more details regarding the contracts
		office role in the evaluation.
16.	Requester	Award?
		If the proposal is accepted, the process continues with step 17.
		If the proposal is rejected the process continues with step 18.
17.	Program COTR	Formal acceptance
		Formal acceptance is non-verbal. This includes memos, email, etc.
18.	Program COTR	Formal rejection
		Formal rejection is non-verbal. This includes memos, email, etc.
19.	Program COTR	Notify Contracts Office
		The process is exited once the COTR forwards the award decision to ACT-50.

The SOW, GCE, and any other artifacts (e.g. communications with the contractor) should be added to the contracts folder. The COTR creates the contracts folder when a new contract is being structured, and is maintained throughout the life of the contract.

4.2.4 New Commercial Contracts

A new commercial contract is established when existing commercial contract vehicles are not suitable for obtaining goods and services that are required for a project. A commercial contract represents an agreement between the requesting AAR-500 Program and a commercial supplier that specifies products or services to be delivered by the commercial supplier. New commercial contracts are created to meet current project needs and to serve as vehicles to potentially address emerging needs. Figures 6A and 6B are a flow diagram of the process for establishing a new commercial contract. The diagram is followed by a detailed textual description of the process in table 4.

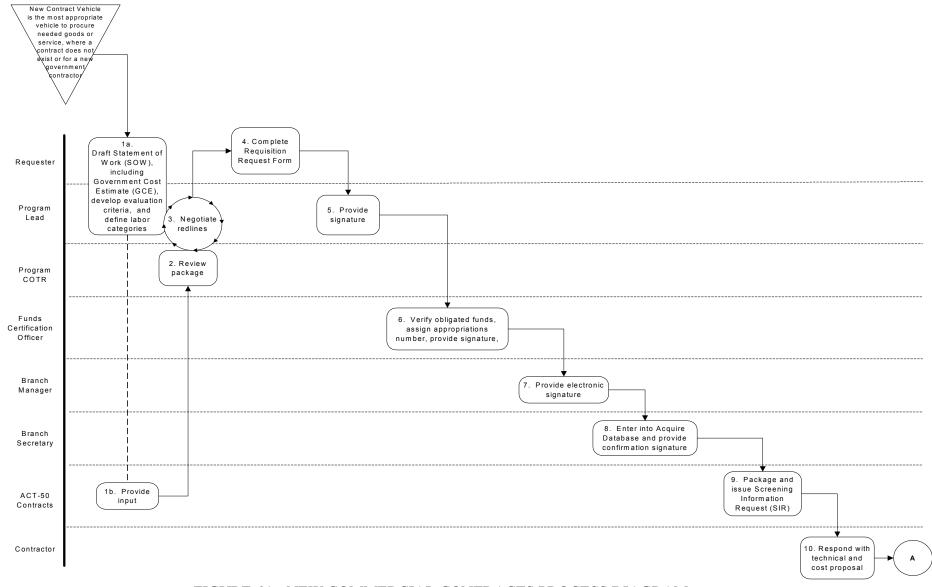


FIGURE 6A. NEW COMMERCIAL CONTRACTS PROCESS DIAGRAM

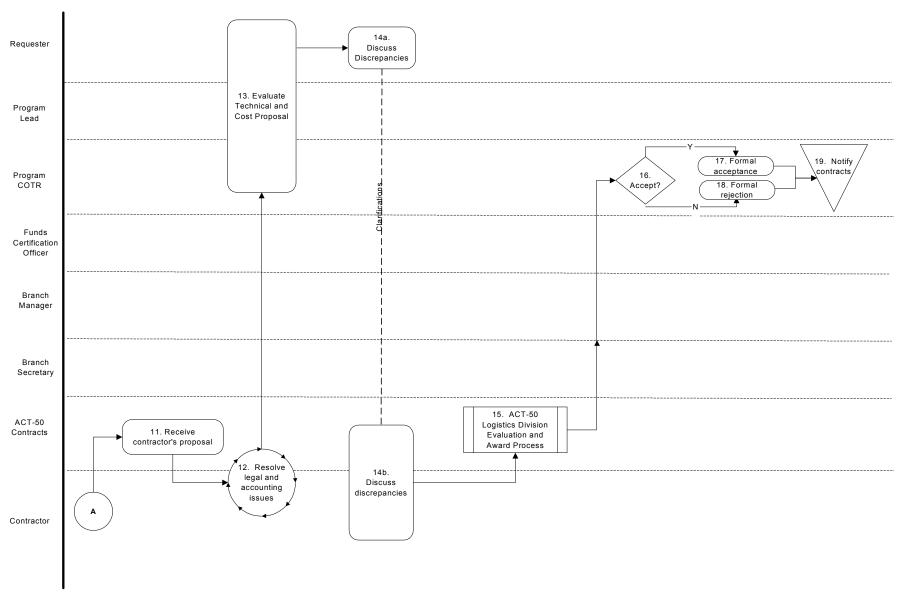


FIGURE 6B. NEW COMMERCIAL CONTRACTS PROCESS DIAGRAM (CONTINUED)

TABLE 4. NEW COMMERCIAL CONTRACTS PROCESS DESCRIPTION

Step ID	Who	Description		
1a.	Requester (and other team members as needed)	Draft Statement of Work (SOW), Government Cost Estimate (GCE), develop evaluation criteria and define the labor categories. The Requester, the Program Lead, and other appropriate members of the team begin		
1b.	Program Lead	a draft of the SOW, GCE, evaluation criteria and labor categories. For new contract vehicles, this is usually done with guidance and coordination from the ACT-50		
	ACT-50 Contracts	Contracts Office. The tools utilized to perform this function are the SOW and GCE templates.		
2.	Program COTR	Review package If the COTR was not a member of the original team that drafted the package, he/she reviews the finished package for completeness.		
3.	Program Lead	Negotiate redlines The COTR's review may result in a set of questions and comments. The team that		
	Program COTR	drafted the request must negotiate the changes and incorporate the results into the package before delivery to the Contracts Office.		
4.	Requester	Complete Requisition Request Form Once the Requester and the COTR have resolved any issues regarding the content of the solicitation, the Requester completes a Requisition Request Form. A copy of the Requisition Request Form template is available in the appendix of this Contract Management Handbook.		
5.	Program Lead	Provide signature The Program Lead reviews the Requisition Request Form for completeness and accuracy, and provides an approval signature.		
6.	Funds Certification Officer (FCO)	Verify obligated funds, assign appropriations number and provide signature The FCO certifies that the funds are available and that the proper accounting code is being charged. The FCO also assigns the appropriations number and signs the form to confirm that these activities are complete.		
7.	Branch Manager	Provide electronic signature The Branch Manager reviews the request and provides an approval signature. The Branch Manager has the authority to reject the request and stop the process.		
8.	Branch Secretary	Enter into acquisition database and provide confirmation signature. The Branch Secretary enters the request into the acquisition database and signs the approval sheet to confirm that she has completed this step.		
9.	ACT-50 Contracts	Package and issue Screening Information Request (SIR) The contracts office uses the information in the SOW and GCE package to issue a SIR and open the project to bids from outside contractors.		
10	Contractor	Respond with technical and cost proposal Contractor responses to the SIR are submitted to the contracts office, and must comply with the criteria and deadline outlined in the SOW.		
11.	ACT-50 Contracts	Receive contractor's proposal The contracts office reviews all submitted proposals for legal and accounting issues. This must be completed before the proposal can be forwarded to the Requester for a technical and cost evaluation.		
12.	ACT-50 Contracts	Resolve legal and accounting issues? The Contracts Offices collaborates with the Contractor to resolve any accounting		
13.	Contractor Requestor	and/or legal issues, and forwards the proposal to the appropriate Program COTR. Evaluate technical and cost proposal The original team who drafted the SOW and GCE reviews all contractor proposals		
	Program Lead	for technical content and cost estimates.		
	Program COTR			

Step ID	Who	Description
14a.	Requester	Resolve discrepancies
	ACT-50 Contracts	Any issues regarding technical and cost must be clarified and/or returned for clarifications. Since the requesting AAR-500 Program is not authorized to communicate directly with the contractor, comments and changes must be
14b.	Contractor	coordinated through the contracts office.
		As necessary, the contractor must make all necessary changes and resubmit the updated proposal through the contracts office for further review.
15.	ACT-50 Contracts	ACT-50 Logistics Division Evaluation and Award Process
		ACT-50's Evaluation and Award process provides more details regarding the contracts office role in the evaluation.
16.	Program COTR	Accept?
		If the proposal is accepted, proceed to step 17. If the proposal is rejected, proceed to step 18.
17.	Program COTR	Formal acceptance
		Formal acceptance is non-verbal. Notification can be given in the form of memos, emails, etc.
18.	Program COTR	Formal rejection
		Formal rejection is non-verbal. Notification can be given in the form of memos, emails, etc.
19.	Program COTR	Notify contracts
		The process is exited when the COTR forwards the award decision to ACT-50.

Contractors have the right to dispute proposal rejections. Initial disputes should be directed to the Contracting Officer for resolution. Issues that can not be resolved may be elevated to the FAA Office of Dispute Resolution for Acquisition (ODRA). The ODRA is established as an organization that is independent of agency organizations responsible for procurement actions. The ODRA director manages the dispute resolution process, promotes alternative dispute resolution (ADR), conducts dispute resolution proceedings and recommends action to the Administrator on matters concerning protests or contract disputes. Although the dispute process is external to AAR-500, appropriate team members may be called upon to provide input to the process when proposals are rejected based on the team's technical and cost evaluation.

All artifacts of this process must be maintained in a contracts folder until the contract is closed. Artifacts include, but are not limited to:

- POCs
- GCE
- SOW
- Contractor document review notes (e.g. Plans)
- Action items
- Coordination and status meeting minutes
- Award notice
- Records of disputes or discrepancies

4.2.5 Interagency Agreements

An Interagency Agreement allows the FAA to receive services, supplies, or facilities from another Federal Agency or that agency's contractor. Interagency Agreements may be entered into without public notice whenever it is in the best interest of the FAA. According to AMS

policy, a written statement describing the technical, program, or business reasons justifying the agreement should support each agreement.

Establishing an International Agreement is much like establishing a new commercial contract. Figure 7 is a flow diagram of the process for establishing Interagency Agreements. The diagram is followed by a detailed textual description of the process in table 5.

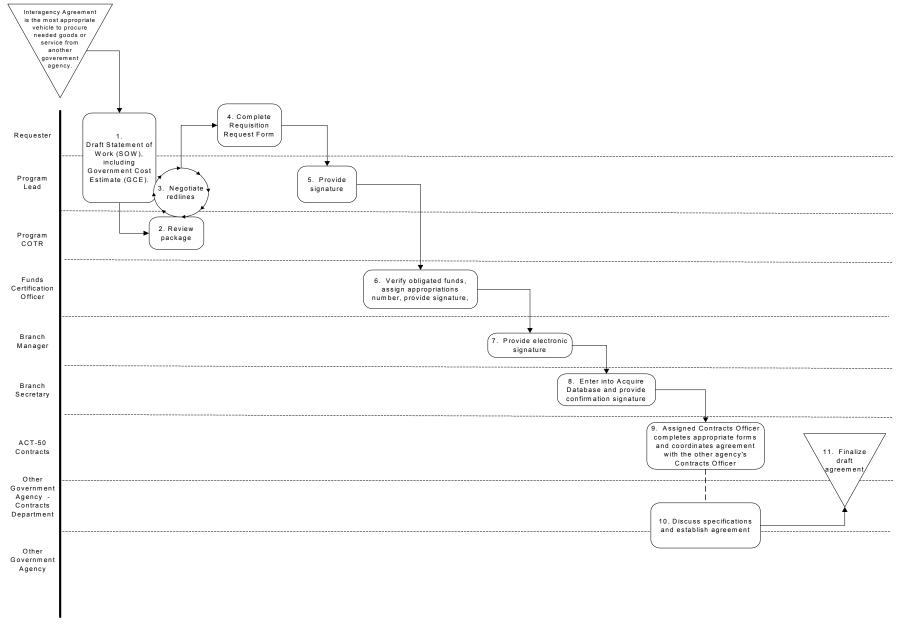


FIGURE 7: INTERAGENCY AGREEMENTS PROCESS DIAGRAM

TABLE 5. INTERAGENCY AGREEMENTS PROCESS DESCRIPTION

Step ID	Who	Description	
1.	Requester (and other team members as needed) Program Lead	Draft Statement of Work (SOW) including Government Cost Estimate (GCE), The Requester, the Program Lead, and other appropriate members of the team draft an SOW and GCE. A justification to engage another government agency, rather than the private sector, is also completed at this time. Entry into this process assumes the Requester has already made a technical contact in the other agency and there is a verbal agreement in place. It assumes the desire already exists, and the remainder of the process should cover documentation formalities and a final review of technical requirements. Content templates and other contract documents are used to complete this activity.	
2.	Program COTR	Review package If the COTR was not a member of the original team that drafted the package, he/she reviews the finished package for completeness.	
3.	Program Lead Program COTR	Negotiate redlines The COTR's review may result in a set of questions and comments. The team who drafted the request must negotiate the changes and incorporate the results into the package before delivery to the Contracts Office.	
4.	Requester	Complete Requisition Request Form Once the Requester and the COTR have resolved any issues regarding the content of the solicitation, the Requester completes a Requisition Request Form. Once all signatures have been provided, the process becomes external and negotiations are handled between the ACT-50 Contracts Office and the contract department of the other government agency.	
5.	Program Lead	Provide signature The Program Lead reviews the Requisition Request Form for completeness and accuracy, and provides an approval signature.	
6.	Funds Certification Officer (FCO)	Verify obligated funds, assign appropriations number and provide signature The FCO certifies that the funds are available and that the proper accounting code is being charged. The FCO also assigns the appropriations number and signs the forms to confirm that these activities are complete.	
7.	Branch Manager	Provide electronic signature The Branch Manager reviews the request and provides an approval signature. The Branch Manager has the authority to reject the request and stop the process.	
8.	Branch Secretary	Enter into acquisition database and provide confirmation signature. The Branch Secretary enters the request into the acquisition database and signs the approval sheet to confirm that he/she has completed this step.	
9.	ACT-50 Contracts	Assigned Contracts Officer completes appropriate forms and coordinates with other agency's Contracts Officer The contracts office completes any appropriate forms (e.g. the MIPR for agreements with the military) to initiate communications with the other agency.	
10	Other Government Agency – Contracts Department	Discuss specifications and establish agreement The remainder of the process involves coordination between the two contracts offices. Legal, accounting, and formal documentation issues are resolved at this level.	
11.	ACT-50 Contracts Other Government Agency – Contracts Department	Finalize draft agreement ACT –50 and the Contracts Department from the Other Government Agency coordinate to finalize the agreement.	

Artifacts of the Interagency Agreement process are maintained in a folder much like the contracts folder described in Section 4.2.4.

4.2.6 International Agreements

An International Agreement allows the FAA to enter into cooperative efforts with foreign entities. Agreements typically originate at the technical contact level as a result of international conferences, leads provided by technical publications and visitors from other countries. There are two major types of International Agreements, Memorandums of Cooperation ((MOC), described below) and Memorandums of Understanding ((MOU), described in Section 4.2.6.2).

4.2.6.1.Memorandum of Cooperation (MOC)

An MOC is a legally binding international executive agreement, and is recognized as a treaty. This type of agreement may or may not specify an exchange of funds between the FAA and the international party. An MOC represents an agreement where both parties agree to work cooperatively and share lessons learned, best practices, etc. A reimbursable MOC allows the FAA to provide services to another country and receive reimbursements for any costs. Additional steps must be taken to establish a Reimbursable Appropriations account from which project expenses are paid.

An MOC is structured much like a commercial contract. There is an original agreement that establishes the relationship between the FAA and the international entity. The agreement is the umbrella under which all tasks will eventually fall. Annexes are added under the original agreement (much like commercial contract delivery orders) to establish specific work areas. As a rule-of-thumb, annexes should be as inclusive as possible (e.g. cover a broader area of aviation security R&D as opposed to simply Human Factors in aviation security). Finally, appendices to the agreement provide the lowest level of detail, and are drafted in terms of specific technical goals for individual tasks. Figure 8 provides an overview of the relationship between an International Agreement (Memorandum of Cooperation), annexes, and appendices.

The process for establishing an International Agreement is fairly simple in terms of the requesting AAR-500 Program. It simply requires the requesting Program to recognize an opportunity, determine the interest of the international party and initiate the process if an interest is present. The requesting AAR-500 Program must identify the technical needs and requirements of the agreement. In cases where the international party agrees with the mutual benefit of the partnership, the most difficult aspect of establishing the agreement is the negotiation of the legal and financial terms between the countries. This could take months to years and is primarily coordinated and completed by AIA.

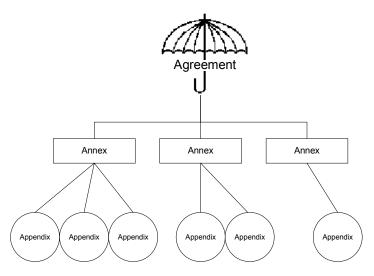


FIGURE 8: INTERNATIONAL AGREEMENT (MEMORANDUM OF COOPERATION) ELEMENT RELATIONSHIPS

Figure 9 is a flow diagram of the MOC process in terms of the requesting FAA program and is followed by a textual description in table 6. The additional step required by a reimbursable MOC is shaded. The remainder of this section provides an overview of the process once it has left the scope of the requesting FAA program's influence and tips that can help expedite the process.

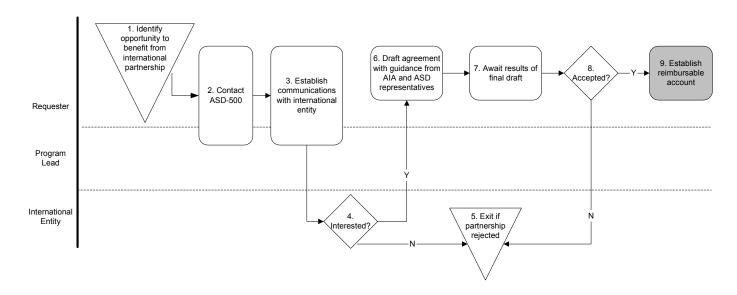


FIGURE 9. INTERNATIONAL AGREEMENTS (MEMORANDUM OF COOPERATION) PROCESS DIAGRAM

Each process activity is described in table 6 below.

TABLE 6. INTERNATIONAL AGREEMENTS (MEMORANDUM OF COOPERATION) PROCESS DESCRIPTION

Step ID	Who	Description	
1.	Requester	Identify opportunity to benefit from international partnership This process is entered when a member of the team recognizes an opportunity to benefit from partnership activities with an international entity. This entity can be an airline, airport, laboratory, etc. Part of identifying the opportunity entails evaluating possibilities in terms of technical and financial benefits. A Concept Evaluation Sheet should be completed to support the investment analysis	
_		decision.	
2.	Requester and/or Program Lead	Contact ASD-500 The International Research and Acquisitions office, ASD-500, must be contacted to initiate the agreement process. It is of key importance to do this early in the process expedite it, even before serious and pointed communications have been established with the international entity.	
3.	Requester and/or Program Lead	Establish communications with international entity The Requester and/or the Program Lead should make all possible efforts to establish communications with the international entity to promote interest in an agreement. Discussions should focus on mutual benefits and scope of the potential agreement. This activity should continue throughout the process to sustain and promote interest in the agreement. This helps expedite the process from start to finish.	
4.	International Entity	Interested? The international entity may not have an interest in entering an agreement with the FAA. In that case, the process would continue with process step 5. If the party wishes to further pursue the opportunity, the Requester should skip to step 6 and begin drafting the agreement.	
5.		Exit if partnership rejected The process is exited if the international entity has no interest in pursuing a partnership with the FAA.	
6.	Requester	Draft agreement with guidance from AIA and ASD representatives Once the international entity has expressed an interest in a cooperative effort with the FAA, the Requester can begin drafting the basic agreement. The Requester should concentrate on identifying the overall scope of the agreement, the mutual benefits and suggested ways to manage any associated costs. Additional accounting and legal aspects will be incorporated once AIA begins work on the agreement.	

Step ID	Who	Description	
7.	Requester	 Await results of final draft AIA executes a standard operating procedure for International Agreements while the Requester awaits a decision. The following is an overview of that procedure: A search is conducted to see if an agreement is already in place to accommodate the request. If an agreement is already in place, a second search is conducted to see if there is an applicable annex on that agreement to accommodate the request. Finally, if there is an annex in place, the process may only require the addition of an appendix. In cases when a new agreement is required, a cable is sent to the State Department to indicate the FAA's desire to enter into an international agreement. AIA also sends a cable to the international entity. If it is a foreign government, the cable is sent directly. In other instances, a cable is sent to the parent organization (e.g. a foreign ministry) and AIA awaits a response. This is where persistent communications between the Requester and the international party can expedite the process. Such communication encourages the international party to contact their government/sponsor and encourage a speedy response. If a favorable response is received, AIA uses a standard template to package the agreement (with draft annex) and sends the draft to the international entity. The negotiation of redlines between the countries can take a great deal of time. It is not unusual for a single iteration of the review cycle to take 4 months or more. There may be an indefinite number of iterations. The last step is for AIA to essentially "sell" the final agreement to the State Department. The State Department is ultimately responsible for all international agreements and activities. 	
8.		Accepted? Once the AIA process is complete, the international party may or may not accept the final agreement. If the agreement is rejected, exit the process (step 5). If the agreement is accepted, and requires financial reimbursements by the international party, proceed with process step 9.	
9.	Requester	Establish reimbursable account It is necessary for the Requester to establish a reimbursable account in the event the foreign party will be reimbursing the FAA for project activities. The Requester must deposit the necessary funds into the account to begin the project, and the money is reimbursed in the agreed upon terms of the agreement.	

Although much of the process for establishing International Agreements is completed by external organizations, there are several helpful tips that a Requester can follow to expedite the process.

- Although original requests are forwarded to ASD-500, it is helpful to contact the appropriate AIA Division with a "heads up" regarding the incoming request. Note, AIA is divided geographically. Each Division (e.g. 100, 200, 300) represents a different international region. The main office can direct all requests and can be reached at (201)-267-3213.
- Since international governments are not structured like that of the U.S., it may take some time to determine the actual entity that the desired agreement would fall under. Requesters should take extra time to identify the person, title, and organization.

- Time should be taken to identify existing and potential international sponsors as opposed to simply naming the end researcher. This can expedite the agreement by creating a pool of potential financiers and garner more support for the endeavor.
- A Requester often feels that his/her job is done once the request has been submitted. Continued communications with the international party are key in expediting the process.

There are two major factors that often delay the process but usually can not be avoided. They are:

- International entities are often opposed to the terms of the agreement that must be included by U.S. law, such as the liability clauses. Creative ways to avoid this are to (1) find ways that the costs can be shared and (2) suggest that private entities purchase liability insurance.
- An increasing number of international organizations are being privatized or cut off from their respective governments.

4.2.6.2.Memorandum of Understanding

Unlike the MOC, an MOU is not legally binding and does not follow the same protocol. MOUs are appropriate for agreements that do not have well defined requirements or require an immediate commitment. MOUs cannot specify deliverables and/or an exchange of funds. Although an MOU is not legally binding, FAA programs that wish to establish an MOU should contact the appropriate AIA organization for guidance in drafting any documentation.

4.2.7 Cooperative Research and Development Agreements (CRDAs)

Department of Transportation (DOT) FAA Order 9550.6A, "Technology Transfer Program," establishes the CRDA program and provides the policy, roles and responsibilities, award categories and procedures, etc. To help FAA technical personnel to prepare CRDAs, the Office of Research and Technology Applications (AAR-201) completed the CRDA Handbook and it's associated CRDA Generator software program. The CRDA Handbook, designed for use by FAA technical, scientific, and engineering personnel, is the basic reference book for all FAA personnel who participate in cooperative R & D activities. It provides an overview of technology transfer, defines and describes the CRDA vehicle, and addresses such topics as how CRDAs are developed, the CRDA process, and how to write a CRDA. The Handbook also provides a complete sample CRDA for a typical industry-FAA cooperative research project.

AAR-201 should be contacted for more information about the CRDA Handbook, CRDA Generator, necessary forms, and any other details.

4.2.8 Grants

A grant is a legal instrument that permits an executive agency of the Federal Government to transfer money, property, services, or anything of value to a grantee to carry out a public purpose of support or stimulation. DOT FAA Order 9550.7A, "Research Grants Program", establishes several grant programs, including the Aviation Security Research Grants Program. Grants under the Aviation Security Research Grants Program are to be awarded for the conduct of research, development, and implementation of technologies and procedures to counteract terrorist acts against civil aviation. One of the purposes for establishing the Aviation Research Grants Program was to create a future aviation research talent base for the FAA and the aviation community. All colleges, universities, and legally incorporated nonprofit research institutions qualify for research grants and cooperative agreements. Individuals are ineligible. Private "forprofit" businesses are generally ineligible, although research grants can be awarded to organizations proposing research in aviation security technologies.

Figure 10 is a flow diagram of the process used to evaluate, establish, and monitor grants. More details and inquiries regarding the grant subject matter should be directed to the Office of Research and Technology. All required forms are available from AAR-201 at the FAA Technical Center.

Each process activity is described in table 7.

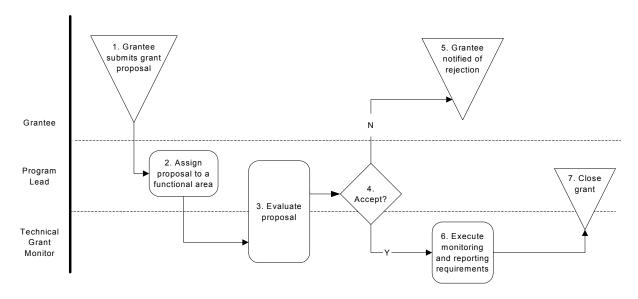


FIGURE 10. GRANTS PROCESS DIAGRAM

TABLE 7. GRANTS PROCESS DESCRIPTION

Step ID	Who	Description			
1.	Grantee	Grantee Submits Grant Proposal			
		This process is entered when a potential grantee submits a proposal to an AAR-500 Program for consideration.			
2.	Program Lead	Assign Proposal to a Functional Area			
		The Program Lead assesses the nature of the proposal and assigns it to a functional area (e.g. training). Once the functional area assignment has been made, the Program Lead selects a representative from that area to serve as the Technical Grant Monitor.			
		According to FAA Order 9550.7A, a technical monitor is a Federal employee who serves as the central point of contact for the technical aspects of the grant. This person is responsible for interacting with the grantee, monitoring technical aspects of the grant, and reviewing costs submitted for reimbursement.			
3.	Program Lead Evaluate Proposal				
	and Technical Grant Monitor	The Program Lead and the appointed Technical Grant Monitor review the proposal. The proposal review is conducted based on the current needs of the Program and evaluation requirements outlined in FAA Order 9550.7A. A Concept Evaluation Sheet can be used to capture key elements of the proposed research and support the investment analysis decision.			
4. Program Lead Accept?					
		If the Program Lead and Technical Grant Monitor agree to reject the proposal, proceed			
	Technical Grant	to process step 5 after preparing the formal rejection.			
	Monitor	If they agree to accept the proposal, proceed to process step 6.			
5.	Grantee	Grantee Notified of Rejection			
		For rejected proposals, the process is exited once notification has been forwarded to the			
6.	Technical Grant	potential grantee. Execute Monitoring and Reporting Requirements			
0.	Monitor	Accepted proposals are executed based on the terms of the grant document. The			
	Wiomtor	Technical Grant Monitor is responsible for monitoring performance and submitting reporting documents as required in FAA Order 9550.7A.			
7.	Program Lead	Close Grant			
	and Technical	The Program Lead and the Technical Grant Monitor review the success of the project at			
	Grant Monitor	the close, and the Technical Grant Monitor completes any necessary close-out forms.			

Other important points to note regarding grants include:

- Nearly all FAA research grants and cooperative agreements are funded using the project funds of the FAA's individual Research, Engineering and Development (RE&D) programs. Proposals must be approved and recommended by the RE&D program managers if they are to be funded. For this reason, it is to the benefit of the grant-seeking organization to make contact with the appropriate FAA RE&D Program Manager to discuss research plans and goals before preparing an official grant proposal.
- The FAA encourages cost sharing where both the FAA customer and the grantee provide a portion of the financial assets needed to fund the research projects, ensuring that both reap the benefits of the results.

- Order 9550.7A, "Research Grants Program", provides critical guidance, and includes specific information regarding:
 - ✓ Proposal submissions
 - ✓ Types of grants
 - ✓ Proposal reviews and evaluation
 - ✓ Grant awards
 - ✓ Payment requirements
 - ✓ Reporting requirements
 - ✓ Key roles and responsibilities of the FAA and the grantee
 - ✓ Monitoring project performance
- The FAA is moving towards a fully automated process for establishing grants. The system can be accessed at http://www.dot.gov/general/commerce for testing purposes only, and will be fully implemented some time in the future.

5. CONCLUSION

This Contract Management Handbook provides guidance to the AAR-500 personnel tasked to purchase goods and services from external suppliers, and the criteria for selecting the appropriate vehicle/method for procurement. The AAR-500 personnel and contractors will follow the processes provided in this handbook in conjunction with the ACT-50 Contracts Management Processes, and other applicable processes and guidelines. Adherence to these processes will ensure that the activities under contract are being performed in accordance with contractual requirements, and that evolving products and services will satisfy contractual requirements.

As a supplement to the FAA's AMS policy, this handbook meets AAR-500's goal of obtaining high quality products and services in a time, cost-effective manner, at fair and reasonable prices.

6. REFERENCED DOCUMENTS

The following documents are referenced in this Human Factors Contract Management Handbook:

- Display System Replacement (DSR) In-Service Management Team (ISMT) and ACT-50 Logistics Division Credit Card Purchase Process.
- Federal Aviation Administration, Acquisition Management System. (AMS) (1996).
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Credit Card Purchase with Template/Form or Procurement Request Process.</u>
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Division Management Process.</u>
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Evaluation and Award Process</u>.
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Interagency</u> Agreement/Reimbursable Agreement Process.

- Federal Aviation Administration, Logistics Division (ACT-50) <u>Post Award Contract</u> Management Process.
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Pre-Award Process.</u>
- Federal Aviation Administration, Logistics Division (ACT-50) <u>Revision (Modification) and Delivery Order Contract Management Process.</u>
- Federal Aviation Administration, Order CT 4400.14A Subj. Commercial Credit Cards.
- Federal Aviation Administration, Order 9550.6A. <u>Cooperative Research and Development Agreements (CRDAs).</u>
- Federal Aviation Administration, Order 9550.7A Research Grants Program..

APPENDIX A COMMERCIAL CREDIT CARD APPROVAL SHEET

AVIATION SECURITY R & D DIVISION, AAR-500 COMMERCIAL CREDIT CARD APPROVAL SHEET

Item Name: Stock/Part: Merchant Name: Is this a small business Type of Purchase being made: Subscriptions/Books Graphics/Visuals ADP Conference Space Furniture Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-14) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Merchant Name:	Phone: ase see Donna for an additional form to fill out. (Coordinated/Approved ACT-14) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Is this a small business If "No", pleated Type of Purchase being made: Subscriptions/BooksGraphics/VisualsADPConference SpaceFurnitureMedia HandoutsTrainingAccountable PropertyTest EquipmentPlant EquipmentSafety Items	(Coordinated/Approved ACT-14) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Type of Purchase being made: Subscriptions/BooksGraphics/VisualsADPConference SpaceFurnitureMedia HandoutsTrainingAccountable PropertyTest EquipmentPlant EquipmentSafety Items	(Coordinated/Approved ACT-14) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Subscriptions/BooksGraphics/VisualsADPConference SpaceFurnitureMedia HandoutsTrainingAccountable PropertyTest EquipmentPlant EquipmentSafety Items	(Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Graphics/Visuals ADP Conference Space Furniture Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Graphics/Visuals ADP Conference Space Furniture Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-141) (Coordinated/Approved ACT-141) (Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Conference Space Furniture Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-400) (Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Furniture Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-400) (Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Media Handouts Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated Washington PA) (Coordinated/Approved ACT-110)	
Training Accountable Property Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-110)	
Accountable Property Test Equipment Plant Equipment Safety Items		
Test Equipment Plant Equipment Safety Items	(Coordinated/Approved ACT-130) (Coordinated/Approved ACT-32)	
Plant Equipment Safety Items		
Safety Items		
	(Coordinated/Approved ACT-400)	
	(Coordinated/Approved ACT-400)	
Telecommunications	(Coordinated/Approved ACT-142)	
Justification		
Approvals: A. Requestor's Supervisor:		
B. AAR-500 Funds Certificati	ion Official:	
C. Funding Citation to be char	rged for purchase:	
	ving Manager:	

APPENDIX B REQUISITION REQUEST FORM

REQUISITION #:

<u>Instructions:</u> Please fill in the following information. Please remember to obtain your appropriate Program Lead approval **PRIOR** to asking your secretary to generate a Requisition. Program Lead and Donna **MUST** initial in below grid before you forward to your secretary.

PRE-APPROVAL		PROGRAM LEAD APPR DONNA SECRETARY	
NAME/ROUTING/	PHONE:		
		SS/PHONE:	
NAME OF BUYEF	R (IF KNOWN):	
ITEM:			
QUANTITY:			
UNIT COST:			
TOTAL COST:	From	BY	TO
DATE NEEDED B	Y:		
EXTENDED DESC	CRIPTION:		
ATTACHMENTS		ATTACHED FILE NAME (S	s):
Funding Cita	tion: 288/0/70	CA_/G26100/2596/T1801_S5	

APPENDIX C DOCUMENT CHANGE HISTORY

Version	Description/Author	Date(s)	FAA Approval
0.1	This first draft was written based on existing contract artifacts, FAA-iCMM requirements, and information gathered during Project Management facilitation sessions.	November 20, 2000 To December 29, 2000	None
0.2	This second draft was written based on comments received during the 12/20/00 to 01/08/01 period.	January 8, 2001	None
0.3	This third draft represents a complete rewrite after the eight major vehicles/methods were identified and processes were mapped for each. Additional inputs were received from AIA, and the ASTI program.	March 21, 2001	None
0.4	Handbook was updated as per comments received from Eric Neiderman Ph.D., Brenda Klock, and Diane Wilson on March 30, 2001. Changes include: • Global updates of "Secretary" to "Branch Secretary" • Global change of "Human Factors" to more general "Program" or "FAA Program" • Clarification of difference between MOU and MOC	April 4, 2001	None
0.5	Handbook updated as per redlines received during final quality review by Eric Neiderman Ph.D., Brenda Klock, and Diane Wilson	May 15, 2001	Version 0.5 delivered for FAA review, approval, and publishing.