

## Acquisition Management Policy - (10/2016)

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## **4 Policy for Critical Lifecycle Management Functions and Disciplines** Revised 1/2012

Sound acquisition management requires that service organizations integrate and manage many critical functions and disciplines working to the common purpose of fielding high-quality, trouble-free products and services. These disciplines vary, depending on the type of investment program, but typically include configuration management, real property, integrated logistics support, test and evaluation, independent operational assessment, deployment planning, human factors, environmental, occupational safety and health, and energy considerations, information technology, systems engineering, security, system safety management, risk management, and data standardization. The following specific policy requirements apply to these functional disciplines. FAST contains additional guidance.

### **4.1 Configuration Management**

#### **4.1.1 Scope** Revised 1/2008

Configuration management applies to all systems, sub-systems, equipment, components, and assets captured in the FAA Enterprise Architecture. This includes all NAS and non-NAS information technology hardware, software, firmware, documentation, interfaces, standards, test and support equipment, facility space, spares, training and courseware, and manuals. Configuration management begins with the baselining of requirements documentation and ends with decommissioning of physical assets or the termination of services. Before introducing new equipment or software, the responsible solution provider must prepare a change proposal and have it approved by the appropriate configuration control board. This is required for expenditure of both operations and facilities and equipment funding. Configuration management of FAA systems and equipment complies with all agency safety and security requirements. Detailed lifecycle configuration management policy and procedures are in [FAA Order 1800.66](#).

##### **4.1.1.1 Configuration Identification**

Service organizations, regions, and other solution providers shall identify configuration items and shall develop appropriate configuration documentation to define each configuration item. This activity includes the development of a product top-down structure that summarizes the total units and configuration documentation for the system or configuration item, and the assignment of unique identifiers, which identify units, and groups of units, in a product. Configuration identification and product information shall be maintained and readily available to all FAA decision-makers. Baselined documentation shall be provided to the appropriate program, service organization, or national program support library, and shall be maintained with all necessary links to the CM information management system. To ensure configuration management information is available to all decision-makers and CM practitioners in the FAA community, the central configuration management authority shall be responsible for providing the necessary facilities and electronic tools to document, monitor, and CM information in the NAS.

##### **4.1.1.2 Configuration Status Accounting**

Service organizations, regions, and other solution providers shall develop and maintain configuration information for their configuration items or products in a systematic and disciplined manner in accordance with this policy and national configuration management process and procedures. Status accounting information includes developing and maintaining site configuration data, and the incorporation of modification data on systems and configuration items. This configuration information must be available for use by decision-makers over the lifecycle of the product.

#### **4.1.1.3 Configuration Control Boards**

A configuration control board with an approved charter and operating procedures shall be the official FAA-wide forum used to establish configuration management baselines and to approve / disapprove subsequent changes to those baselines. Proposed changes to configuration management baselines must be submitted to the appropriate configuration control board on the FAA-approved case file - NAS Change Proposal (NCP) form. A configuration control board shall document its approval / disapproval decision on the FAA-approved configuration control decision form.

#### **4.1.1.4 Commercial Off-The-Shelf, Non-Developmental Items, and Commercially Available Software**

After FAA acceptance, Commercial Off-The-Shelf (COTS), Non-Developmental Items (NDI), and Commercially Available Software (CAS) systems shall be maintained under configuration control. This control shall entail the management of a performance specification, and a data package, if available. Control will require the establishment and maintenance of records indicating the version of COTS / NDI / CAS at specific locations. When identifying COTS as a proposed solution, Service organizations and other solution providers shall analyze and consider the impacts of vendor modification of COTS / NDI / CAS products during vendor production and routine vendor maintenance. Appropriate constraints and notification requirements of vendor changes shall be incorporated into purchase agreements to enable management of product changes to the maximum extent possible.

#### **4.1.2 Application** Revised 1/2008

A configuration control board with an approved charter and operating procedure is the official agency-wide forum for establishing configuration management baselines and approving or disapproving changes to those baselines. Configuration control board charters and operating procedures record board membership and the programs and configuration items managed by the board. Proposed changes and associated decisions to configuration management baselines are submitted to the appropriate configuration control board on the appropriate agency-approved form.

#### **4.1.3 Structure and Responsibilities** Revised 11/2009

FAA configuration management has an enterprise-wide, multi-layer structure with each layer managing an increasing level of detail. The specific responsibilities of each layer are as follows:

#### FAA Configuration Management Authority:

- Coordinates the development and establishment of FAA configuration management policy, processes, and guidance;
- Assists lines of business, staff offices, service organizations, service areas, and other solution providers with development of CCB charters and operating procedures;
- Provides training, facilities, and electronic tools to document, monitor, and report configuration management information;
- Maintains a mechanism for assigning hardware names, asset tags, and identifiers for systems, interface documentation, and system documentation;
- Make accessible the NAS-MD-001, NAS Master Configuration Index Subsystem Baseline Configuration and Documentation Listing, using data available from the CM information management system. All configuration control boards follow the direction of the FAA Configuration Management Authority regarding the type, content, and availability of information in the information management system to ensure validity of data in NAS-MD-001.

A cross-functional team comprised of senior managers advises the Configuration Management Authority, serves as forum for addressing and resolving issues, and assists in the implementation of configuration management policy and solutions.

#### NAS Configuration Control Board:

- Controls changes to NAS systems and associated documentation not assigned to a lower-level CCB or not identified for control by the Joint Resources Council;
- Baselines Interface Requirements Documents and controls non-FAA or non-baseline system interfaces to the NAS;
- Approves service organization, service area, and other solution provider CCB charters and updates;
- Resolves problems regarding NAS system requirements among service organizations or other solution providers;
- Approves changes to NAS technical documentation and ensures traceability of requirements from the NAS level to the system and subsystem level;
- Manages changes to the final program requirements document, and notifies the investment decision authority if those changes affect cost, schedule, or performance.

#### Service Organization Configuration Control Boards:

- Approve or disapprove proposed changes to configuration items under their purview for the lifecycle of the configuration item;
- Ensure all changes have been fully analyzed and coordinated with all organizations affected by the change;
- Refer to the NAS Configuration Control Board proposed changes that exceed their approval authority;
- Establish functional, allocated, product, and operational baselines for all NAS systems;
- Manage the site configurations of FAA facilities in accordance with FAA-STD-058,

## FAA Standard Facility Configuration.

### Service-Area Configuration Control Boards:

- Control changes to facility equipment layout drawings, critical power panel designations, and unique regional equipment, as identified in their charters;
- Regularly validate the accuracy of baselined facility space and power panel documentation.

The service-area configuration management plan identifies the facilities that are subject to verification and audit and specifies the audit interval. The plan also documents the configuration management program, including the methodology and processes used to accomplish service-area configuration management tasks.

### Non-NAS Information Technology Configuration Control Board:

- Manages non-NAS information technology systems and associated documentation not assigned to a lower-level CCB or not identified for control by the Joint Resources Council except for data exchange standards;
- Baselines Interface Requirements Documents to non-NAS systems;
- Approves line of business staff office and other solution provider CCB charters and updates;
- Approves changes to non-NAS information technology technical documentation and ensures the traceability of requirements;
- Baselines the final program requirements document or specification.

### Non-NAS Line of Business Staff Office or Solution Provider Configuration Control Boards:

- Approve or disapprove proposed changes to configuration items under their purview for the lifecycle of the items;
- Ensures all changes are fully analyzed and coordinated with all organizations affected by the change;
- Refers changes to the Non-NAS IT CCB proposed changes that exceed their approval authority;
- Establish functional, allocated, product and operational baselines for all non-NAS systems. This includes establishing and documenting site configurations, including as-built equipment layout drawings and critical power panel designations, and creating baseline documentation for FAA information technology facilities.

### NAS and Non-NAS Information Technology Acquisition-Level Configuration Management:

Service organizations, LOB staff offices, and other solution providers charged with providing solutions to Enterprise Architecture requirements do the following:

- Establish, implement, and maintain configuration management plan(s) that document the configuration management program, including the methodology and processes used to accomplish configuration management tasks;
- Include requirements for configuration management planning, process, procedures and products in all acquisition contracts;
- Document transition plans and activities for field organizations; and
- Manage the lifecycle of configuration items and associated baseline documentation,

which may include training material, courseware, and logistics support documentation assigned to them.

#### **4.1.4 Activities** Revised 11/2009

FAA lines of business, staff offices, service organizations, service areas, and other solution providers develop the infrastructure, processes, and documentation necessary to conduct the following configuration management activities:

**Planning and Management:** Plan, coordinate, document, and manage all tasks necessary to manage the configuration of assigned enterprise architecture products throughout all phases of the lifecycle management process. A configuration management plan formalizes processes and procedures and roles and responsibilities, and ensures continuity of configuration management practices at all levels of management.

**Configuration Identification:** Identify the configuration items of the total product and develop documentation to define each. This activity includes development of a top-down configuration management structure for the product, and the assignment of unique identifiers for the units and groups of units in the product. Configuration identification and product information is maintained and be readily available to all FAA decision-makers.

**Baseline Management:** Establish and maintain a configuration baseline that represents technical aspects of approved product requirements. Baselined documentation is maintained by the appropriate line of business program office, staff office, or service organization, and is accessible in a secure environment through the program support library.

**Configuration Change Management:** Identify, document, coordinate, evaluate, and adjudicate proposed changes to a configuration baseline. Approved changes are documented, implemented, verified, and tracked to ensure incorporation into all impacted assets and their support infrastructure.

**Configuration Status Accounting:** Capture, store, and access the configuration information needed to manage products and product information. Configuration information must be electronically available for use by decision-makers over the lifecycle of the asset.

**Configuration Verification and Audit:** Periodically audit operational products to ensure consistency between the product and its baseline documentation. This activity includes verification of facility baselines, the incorporation of approved modifications, and product audits after commissioning.

**Information/Data Management:** Manage configuration data and information according to requirements in FAA Order 1375.1, Information/Data Management Policy.

#### **4.1.5 Commercial Off-The-Shelf, Non-Developmental Items, and Commercially Available Software** Revised 1/2008

Commercial off-the-shelf, non-developmental items, and commercially available software are



maintained under configuration control after acceptance into use by the FAA. This control requires management of the performance specification and data package, if available, and the establishment and maintenance of records indicating the version at specific locations. When identifying COTS as a proposed solution, FAA lines of business, staff offices, service organizations, and other solution providers must analyze and consider the impact of vendor modification of products throughout the intended service life. Appropriate constraints and notification requirements of vendor changes must be incorporated into purchase and maintenance agreements.

#### **4.1.6 Local Changes** Added 1/2008

Local changes affecting in-service baselined systems must be evaluated by the appropriate line of business, staff office, or service organization and can be authorized only by the responsible configuration control board.

#### **4.1.7 Operational Configuration Management Policy** Added 1/2008

AMS configuration management policy applies to all operational assets. Detailed operational NAS configuration management policy is in Order 1800.66, paragraph III-4. Detailed operational non-NAS IT configuration management policy is in paragraph III-4.

#### **4.1.8 Non-NAS IT CM for Enterprise Data Centers and Other IT Facilities** Added 1/2008

Line of business/staff office configuration management personnel validate, on a regular basis, baselined facility space and power panel documentation for accuracy. The line of business/staff office configuration management plan identifies the baselined facilities subject to verification and audit and specifies the audit interval. The plan also documents the configuration management program, including the methodology and processes used to accomplish IT facility configuration management tasks.

### **4.2 Real Property**

#### **4.2.1 Applicability** Revised 1/2008

This policy applies to the acquisition, management, and disposal of real property interests by lease, purchase, condemnation, or otherwise, as well as services related to such acquisition, management, and disposal, other related services, and utilities. This policy codifies the authority for real property transactions by FAA; however, it must be read in conjunction with Procurement Policy 3.0. In the event of a conflict between these provisions and Procurement Policy 3.0, these provisions will govern. Roles and responsibilities in real property transactions, and definitions of real property terms are found in Appendix 1 of this Chapter. For clarification of real property terms and to obtain real property information not found in this Chapter, contact ALO-200.

#### **4.2.2 Guiding Principles** Revised 1/2012

The acquisition of real property interests differs from other procurement types in important ways. For example, FAA's need for a specific site, location, or other mission-driven requirement, may limit the alternatives available for consideration in the real property acquisition process. FAA's primary goal is to acquire necessary real property interests to meet mission requirements. FAA is committed to meet applicable sustainability acquisition and management requirements, to the extent practicable. To that end, FAA shall be a good steward of the real property interests/assets acquired for the mission throughout the asset lifecycle, including the acquisition process, in-service management of the asset, and disposal or other final disposition of the asset/interest. The acquisition process requires sound business judgment and a competent and professional staff having the highest integrity, with authority delegated to the lowest responsible level. In addition to the Guiding Principles provided in Acquisition Management System Policy Section 3.1.3, Fundamental Principles, the FAA real property guiding principles will:

- Enable the selection of the lessor with the best value to satisfy FAA's mission;
- Focus on timely, cost efficient, and quality contract performance;
- Promote discretion, sound business judgment, and flexibility at the lowest levels while maintaining fairness and integrity;
- Provide streamlined methods and initiate innovative processes to conduct timely and cost-effective procurements;
- Promote open communication and access to information throughout the procurement process and encourage use of electronic methods for information exchange;
- Encourage competition as the preferred method of contracting;
- Permit single-source contracting when necessary to fulfill the FAA's mission;
- Allow the use of a range of lease types and transactions best suited to a particular procurement;
- Provide an internal process for resolving protests and disputes in a timely, cost-effective and flexible manner;
- Promote high standards of conduct and professional ethics;
- Require appropriate file documentation to support business decisions;
- Assure adequate checks and balances;
- Ensure public trust; and
- Promote and increase sustainable real property acquisition, management and disposal practices throughout the asset lifecycle, to the extent feasible and practicable within the agency mission and budget constraints.

#### **4.2.2.1 Contracting Authority** Revised 10/2014

The FAA Administrator has been given broad statutory acquisition authorities in Title 49 United States Code. Pursuant to the provisions of Title 49, the Administrator is the final authority for carrying out all functions, powers, and duties of the FAA Administration relating to the acquisition and maintenance of property and equipment. The Administrator has broad authority "to enter into and perform such contracts, leases, cooperative agreements, or other transactions as may be necessary to carry out the functions of the Administrator and the Administration . . .with any Federal agency, or any instrumentality of the United States, any territory, or possession, or political subdivision thereof, any other governmental entity, or any person, firm, association,

corporation, or educational institution, on such terms and conditions as the Administrator may consider appropriate." (49 U.S.C. 106(l)(6).) In addition, the Administrator has the authority to enter into leases that require the use of appropriated funds for terms of up to 20 years. (49 U.S.C. 40110.)

The FAA Administrator may establish contracting activities and delegate to the Acquisition Executive broad authority to manage FAA contracting functions. The Acquisition Executive is authorized to appoint Chiefs of the Contracting Office (COCOs) and redelegate the contracting authority to them. The COCO may redelegate the contracting authority to individuals within their management area who have met the training requirements of the AMS and have demonstrated the appropriate knowledge and experience needed to execute this authority on behalf of the Government. Those who have been delegated contracting authority include procurement and real estate contracting officers (RECOs), logistics management specialists, and managers of the purchase card program.

The delegation of contracting authority to the RECOs, like that to COs and other qualified persons is by written warrant or other certificate of appointment. Contracts, leases, agreements, grants and other transactions may be entered into and signed on behalf of the FAA only by RECOs with a written certificate of appointment. The certificate of appointment or RECOs warrant must expressly state the types of transactions authorized by the delegation, and any limitation to the authority granted. If the authority is not specified in the warrant or certificate of appointment, that authority does not exist. The delegated authority of individual employees below the COCO is not transferable. For further information, please see "Warrant Levels for RECOs." Information on the limits of the contracting officer's authority shall be readily available to the public and FAA personnel.

The RECO must have warrant authority commensurate with the total estimated potential value (see 6.0 Training, in Real Estate Guidance) of a transaction. Modifications after the original award are considered standalone actions when calculating the total estimated potential value; therefore, a Contracting Officer's warrant needs to have a dollar limitation sufficient to award the total of a modification, but not the entire value of the contract, order, lease or agreement.

Key contracting duties and responsibilities for fund certification, are to be separated among individual people. For a particular requirement, the same person must not requisition, certify funds availability, approve, and obligate funds.

Acquiring real property interests and utilities is a time-consuming process, and involvement of the Real Estate Contracting Office (RECO) at the earliest opportunity will expedite the procurement. Such early involvement will allow for needed planning and coordination, and will ensure that all applicable statutory and regulatory requirements are met and the acquisition is completed in sufficient time to meet the FAA's needs.

#### **4.2.2.2 Real Property Definition** Added 10/2008

Real property is defined in Appendix C of AMS policy.

### **4.2.3 Policy** Revised 1/2008

The procurement process is to be conducted following best commercial business practices, in a fair and equitable manner. Real property interests, related services, and utilities will be acquired by the competitive method whenever practical and reasonable. All real estate transactions (acquisition, management and disposal) will comply with all Federal statutes, Executive Orders, Federal regulations, FAA Orders and the Acquisition Management System (AMS). If there is a conflict between the AMS and FAA Orders, the AMS provisions will govern.

#### **4.2.3.1 Legal Coordination of Real Property Actions** Revised 7/2016

Certain real property actions will be reviewed in accordance with the legal coordination policy set forth in 1.2.14 of AMS policy and Real Property Guidance Section 7.0. Legal coordination is required for: 1) all non-competitive acquisitions of real property having a total value exceeding \$10,000; or 2) all competitive real property acquisitions, including, but not limited to, new or succeeding leases, lease renewals, and lease modifications having a total value over \$100,000; 3) all condemnations, purchases and disposals of interests in real property; and 4) all additions and revisions, other than those revisions to correct typographical errors, to the published real property document provisions/clauses.

#### **4.2.3.2 Request** Revised 1/2008

The acquisition process may start with an informal request; however, prior to issuance of a Solicitation For Offer or proposed Lease contract, a signed request from the using service/requiring office must be received. If rental or other costs are involved in the acquisition, a certification of funding must be received prior to any obligation of funds or award of a lease/contract. One document may serve as both the request and the funding certification.

#### **4.2.3.3 Requirements** Revised 1/2012

Real property requirements must be fulfilled by a competitive process whenever practicable and in the best interest of the FAA. The RECO and the program office requiring the asset will meet as early as possible to do the following: review, clarify and streamline acquisition requirements and determine the options available to 1) ensure that special requirements and alternative solutions, where appropriate, are considered; 2) define the appropriate area of geographic consideration (i.e., delineated area); and 3) ensure that FAA-mandated requirements are met, including incorporating sustainability/environmental/energy principles in the acquisition process, if practicable. The RECO may begin the initial acquisition process with a Purchase Request for any amount, including zero dollars from the using service/requiring office. However, the RECO must not issue any formal requests for information, quotes or Solicitation for Offers (SFO) until the requirements are finalized, any required business case approvals are received and it has been confirmed that certified funds for the current fiscal year are available for obligation. The RECO may provide preliminary market information for purposes of supporting business cases if requested by the requiring office.

#### **4.2.3.3.1 Succeeding Leases/Renewal Leases** Revised 7/2012

Prior to determining whether to enter into a succeeding lease (i.e., the lease expires at the end of the term and no renewal option(s) remain), or to renew an existing lease (i.e., the exercise of an option to stay in the existing location), the RECO must consult with the using service/requesting office and obtain a statement of continuing need. Additionally, in the case of space leases, the facility subject to the expiring lease must be in compliance with current life safety, seismic safety, and to the extent practicable high performance sustainable building (HPSB) requirements.

If the agency is considering remaining at the current location, then the current Lessor must be contacted regarding potential upgrades to the real property, to ensure that the space will comply with all requirements contained in the proposed new lease, and that the Lessor is willing to execute the proposed lease. If the Lessor is unable or unwilling to support the necessary improvements, or other changes necessary to meet the FAA's current requirements, then the FAA must either:

1. Relocate to another location, or
2. The Spaceholder's Council may consider mission-related reasons to stay. In this case, the justification to stay must be documented in the project's business case and approved by the appropriate Spaceholder's Council. Alterations, upgrading, and expansion/reduction of requirements must also be considered and included, as appropriate, in the subsequent acquisition and final documentation.

When fulfilling the using service/requesting office requirements, the RECO **must** use the standard land lease, space lease, utilities and outgrant templates and associated forms for all new, succeeding and renewal lease acquisitions.

*In accordance with the provisions of 49 USC 40110(c)(1), the RECO may enter into a lease with a term of up to 20 years, regardless of whether appropriations sufficient to pay the rent for the lease term have been obligated. Thus, the RECO is authorized to award a lease without having any funds on the date the lease is signed (i.e., the RECO can sign a lease in the current fiscal year, even though rent commencement does not occur until the next fiscal year).*

The RECO must ensure that all clauses incorporated in the succeeding lease agreement are current and applicable. In addition, if the term of a cost lease is less than 20 years, including all renewal options, and if the RECO determines that the best method to fulfill a short term continuing need is by extending the current lease, the Supplemental Lease Agreement must contain all current clauses. However, if the lease has been effective for over 20 years, the RECO must negotiate a new or succeeding lease.

In addition, all proposed permanent changes to the standard lease clauses must be approved by ALO-200 and AGC-500. The RECO must maintain signed approvals in the lease file.

*Note: Any changes to lease clauses that are to be applied to a single case must be approved by Regional Counsel each time they are proposed.*

#### **4.2.3.3.1.1 Timing of renewal/succeeding lease efforts** Added 1/2008

In order to complete a renewal or succeeding lease transaction prior to the lease expiration date and prevent FAA from becoming a holdover tenant, the RECO must commence the renewal process, or the process of entering into a succeeding lease, at least 18 months prior to the lease expiration date for all FAA direct land and space leases. For all GSA controlled space, the RECO must commence the renewal process at least 24 months prior to the lease expiration date. This 18-month period is a suggested minimum. Each lease transaction should be considered individually by the RECO and the RECO may determine to afford the transaction additional time if the RECO is aware of issues that could jeopardize timely completion of the lease transaction.

#### **4.2.3.3.1.2 Emergency Reservation of Expiring Funds for Continued FAA Occupancy**

Added 1/2008

If a continuing need has been determined and it appears the lease will expire without a Supplemental Lease Agreement for a short term extension, or succeeding lease has not been awarded, then

- The RECO must notify his manager, regional counsel, and the LOB Budget office of issue.
- The RECO must continue negotiating an extension via an SLA for continuing payments at the current lease rental rate.
- If the lessor still refuses to sign a temporary agreement, then the RECO must take steps to ensure that sufficient funds are either reserved, or set aside for settlement of the holdover period. A holdover period should not exceed 6 months.
  - If extensions go on longer than 6 months or if the lessor wants the FAA to leave the premises, the RECO may be in a condemnation posture. The RECO needs to prepare the affected LOB and discuss setting aside funds for a potential condemnation. See Real Estate Guidance 1.1.19: Condemnation
- During the 6 months of continued occupancy past the expiration date, the RECO will continue to negotiate an extension or new lease agreement.
- However, prior to the end of the current fiscal year, the RECO will notify the affected LOB of the potential need to reserve the minimal funds necessary to pay for the FAA's occupancy during the continued occupancy period, and provide an estimate. If the LOB wishes to reserve funds from the soon to be expiring budget year, they shall provide a requisition to the RECO, and the RECO will reserve the estimated rent as an emergency contract. The RECO will send a formal memo to the Accounting office of the emergency reservation of funds, and to await further instructions from the RECO on when to make any payments. Note: The RECO must document in the file a justification for the emergency reservation of funds.
- If the LOB validates, it can pay the back rent from current year funds, it is not necessary to perform the emergency reservation of funds.
- Once a final lease agreement is negotiated, the RECO must perform a modification to the emergency lease to document the conversion to a fully executed lease contract. Any difference in lease rental payment should be settled and paid at that time.
- For additional information please see guidance on hold over tenancy. See Real Estate Guidance 1.1.5.2: Succeeding Leases/Lease Renewals

#### **4.2.3.3.2 Other Requirements to consider** Added 1/2008

##### **4.2.3.3.2.1 Administrative Space Order 4665.4 and GSA-Controlled Space Request**

Revised 7/2016

The RECO and the LOB must use the guidelines from the FAA Order 4665.4A Federal Aviation Administration (FAA) Administrative and Technical Space Standards. This order provides standards for the construction, reconfiguration and consolidation of administrative and technical spaces; promotes workforce mobility and workplace flexibility; and improves the Agency's space utilization rate.

This order applies to those responsible for planning, procuring, implementing, maintaining, or occupying administrative and technical spaces in the FAA. It also applies to any other person or entity who has a formal written agreement with the FAA to plan, implement, or maintain FAA space.

##### **4.2.3.3.2.1.1 General Services Administrative (GSA) Space Request** Revised 7/2016

Requesting Line of Business (LOB) office must obtain prior approval for space requests from the ALO-200 Strategic Planning by submitting a documentation for the space which contains the following: a completed SF-81/SF- 81A or a written document with space request, justification/reason for request, complete staffing (workstation patterns, floor plans if available), office space per person, support space, special space by type, number of parking spaces required for government owned vehicles.

For all new, renewal, and lease expiration for General Services Administration (GSA) controlled space, the RECO must notify ALO-200 for prospectus projects at a minimum of 36 months and non-prospectus projects at a minimum of 18 to 24 months, prior to execution of a GSA Occupancy Agreement (OA). Prior to making any commitment to the Regional GSA regarding prospectus level projects, the point of contact (POC) for the National GSA Rent Program must notify ALO-200. Notification must take place at a minimum of 36 to 60 months prior to execution of a GSA OA.

The LOB servicing office must ensure the use of available Government-owned space before leasing or otherwise acquiring space. The LOB office must follow the guidance for "Chief Financial Officer Review of GSA Space Request over \$10 Million" for all GSA-controlled space.

##### **4.2.3.3.2.3 Rural Development Act Requirements** Added 1/2008

The FAA requesting office/using service must give first consideration to rural areas when searching for locations for new space, other facilities (i.e. research and development facilities, warehouses, labs, clinics, etc.), and land acquisitions, unless mission or program requirements call for urban areas. A rural area is defined as a city, town, or unincorporated area that has population of 50,000 inhabitants or less, other than an urbanized area immediately adjacent to a city, town, or unincorporated area that has a population in excess of 50,000 inhabitants.

#### **4.2.3.3.2.4 Security** Added 1/2008

In developing & finalizing lease requirements, the RECO must coordinate with both the LOB and the Servicing Security Element (SSE) to comply with the personnel requirements of FAA Order 1600.72A, Contractor and Industrial Security Program and the facility security requirements of FAA Order 1600.69B, Facility Security Management Program. It is the responsibility of the SSE to classify the users, the risk and the accessibility levels of the tasks to be performed and determine whether an FAA badges should be issued to the contractor employees.

Prior to executing any lease or lease renewal requiring access to programs or resources located in the leased space, the RECO must have a FAA Form 1600-77 Contractor Position Risk/Sensitivity Level Designation Record signed off by the SSE (see FAA Order 1600.72A). If the SSE makes changes to the 1600-77 submitted for their signature, the RECO will accept changes.

#### **4.2.3.3.2.5 Seismic Safety** Revised 10/2014

It is FAA policy to provide/acquire space that complies with current federal standards for seismic safety. This policy is applicable to all space, whether such space is newly leased space, leased space subject to renewal, the purchase or construction of new buildings, or space undergoing major, renovations, where cost exceeds 50% of replacement value, in existing buildings. This policy is in accordance with the requirements of Executive Order (E.O.) 12699, E.O. 12941 and P.L. 101-614. In existing buildings, FAA follows National Institute of Standards and Technology (NIST) RP-8, [Standards for Seismic Safety for Existing Federally Owned or Leased Buildings, December 2011](#). RP-8 requires a "Seismic Safety Certification" that complies with the requirements of the American Society of Civil Engineers (ASCE) Standard 31-03, *Seismic Evaluation of Existing Buildings*, to be performed by a qualified structural engineer, prior to signing a new lease, renewing an existing lease, or granting rights to locate a privately owned structure on federal property. For new construction, the minimum standard for seismic compliance is the current edition of the International Building Code (IBC). In addition, the construction must be certified by a licensed structural engineer as meeting the requirements of the IBC.

RP-8 Section 1.3 lists exemptions from the seismic compliance requirements, and an exception that may relieve an Agency of the seismic safety certification requirement. However, these exemptions must be applied on a case-by-case basis. Further details on Seismic Safety procedures are found in Real Property Guidance section (2.4.8 Appendix H: Seismic).

#### **4.2.3.3.2.6 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (49 CFR Part 24)** Added 1/2008

To the extent that it is applicable to FAA real property transactions, FAA RECOs shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (promulgated in 49 CFR Part 24). See [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr24\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr24_main_02.tpl) and [http://www.fhwa.dot.gov/real\\_estate/archives/uafn199.cfm](http://www.fhwa.dot.gov/real_estate/archives/uafn199.cfm). Provisions of the Uniform Act are mandatory and are applicable to each Federal agency that administers programs or provides



financial assistance for projects, which involve land acquisition or relocation assistance.

#### **4.2.3.3.2.7 Vehicle Policy** Added 1/2008

To the extent that parking space is available and affordable, it is the policy of the FAA to provide adequate parking for official Government vehicles and adequate free parking for employee vehicles at all FAA-owned and leased facilities. In order to promote fuel conservation, reduce traffic congestion, reduce demand for parking spaces and reduce air pollution, the FAA will make available as many parking spaces as possible for the use of vanpools/carpools. For more information please see vehicle guidance (2.4.2 Appendix B Vehicle Parking Guidance).

#### **4.2.3.3.2.8 Environmental / Sustainability / Energy Considerations** Revised 7/2016

The FAA supports, to the extent financially feasible and allowable by its mission, all environmental, energy savings and sustainability laws, regulations, and orders applicable to environmental/energy/sustainable areas. The RECO must follow the requirements as outlined below and in the corresponding provisions in the Real Estate Guidance. FAA SOs/LOBs must use an ISO 14001 Environmental Management System (EMS) to manage their environmental aspects, including Environmental Requirements, Energy and Sustainability aspects described in Sections A, B and C, below. For further information, please review the real estate guidance for land and space.

##### A. Environmental Requirements.

1. Environmental Due Diligence: FAA real property transactions are subject to the requirements of FAA Order 1050.19B, Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions, in order to identify and minimize potential environmental liabilities associated with the condition of the property and past activities at the site. Environmental due diligence requirements must be completed prior to executing contracts for the initial acquisition or disposal of real property, including the conveyance, sale or transfer of any FAA land, buildings, and structures.
2. National Environmental Policy Act (NEPA): Before acquiring (by lease, purchase, or otherwise) any additional land (new sites or to expand existing sites), the FAA must comply with all applicable requirements of the National Environmental Policy Act (NEPA) in accordance with the latest version of FAA Order 1050.1, *Environmental Impacts: Policy and Procedures*. The appropriate level of environmental review must be determined by the program office Environmental Specialist or the project designated Environmental Specialist. The RECO must obtain written notification from the program office that all applicable NEPA requirements have been met prior to proceeding with the land acquisition. The written notification must be placed in the real estate file.

##### B. Energy Requirements

Energy Star certified spaces: Section 435 of the Energy Independence and Security Act of 2007 (EISA) prohibits Federal agencies from leasing buildings that have not earned an Energy Star label after December 19, 2010 unless the space requirement comes within the specific

exemptions provided in the EISA statute. For the list of exemptions, see Real Estate Guidance 2.4.1 Appendix A: Space Administrative Guidance. In order to ensure compliance with EISA Section 435, when a RECO leases space greater than or equal to 10,000 gross square feet, the building must have earned an Energy Star label in the most recent year, or the ownership must commit to earn the Energy Star label within one year following the lease execution. The RECO can determine the acquisition is financially feasible if the rental offered for a conforming building is no more than 10% over the market rate. If the RECO determines the cost of a conforming building is not financially feasible, documentation shall be maintained in the real estate file.

### C. Sustainability Requirements

Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade*, sets goals for federal agencies to make their building inventories compliant with the February 2016, *Guiding Principles for High Performance and Sustainable Buildings* (Guiding Principles). The Guiding Principles establish building standards for: integrated design, energy performance, water conservation, indoor environmental quality, environmental impact of materials, and climate resilience.

Leases are no longer included in calculating compliance with the Guiding Principles (only owned buildings are included). However, the RECO should strive to incorporate as many of the Guiding Principles as possible in new lease actions when financially feasible. This may include leasing in buildings that have received Leadership in Energy and Environmental Design (LEED) certification. The space acquisition shall be considered financially feasible if the rental offer for space in a conforming building is no more than 10% greater than the market rate for a comparable conventional building in the same rental market.

#### **4.2.3.3.3 Budgetary Review** Revised 4/2015

Funding requirements for all real property transactions must be submitted to Real Property Division, ALO-200, the appropriate budget office and the service area budget lead for review prior to the RECO committing the Government (signing the contract) to ensure compliance with 4.2.3.3.1 Succeeding Leases/Renewal Lease which states “In accordance with the provisions of 49 USC 40110(c)(1) , which references 1341(a)(1), a RECO may not make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation”. For further information see 3.1.4 Budget Review and Approval.

#### **4.2.3.4 Procurement Method** Revised 1/2012

The RECO makes the determination of whether the requirement will be satisfied through competition or single-source acquisition. A preliminary assessment, such as an informal market survey via phone calls of potential available sources within the geographic area of consideration (i.e., delineated area), may be needed to assist in the determination of the procurement method. When developing a lease procurement strategy, the RECO must first consider acquiring buildings that have earned the current year Energy Star label, and buildings conforming to the Guiding

Principles (LEED Silver and above certified buildings may be used to identify buildings that potentially conform to the Guiding Principles) as well as buildings that meet appropriate life safety and seismic certification requirements.

Competition is the preferred method of procurement and should be used whenever practicable and reasonable. Competition is obtained by providing two or more sources an opportunity to express an interest in satisfying FAA's requirements. Competition is appropriate when the requirement is not site or location specific and reasonable possibility exists that there is more than one provider that can meet the FAA's needs. Interest from potential sources may be expressed either orally or in writing.

The single-source method of procurement is appropriate when technical requirements, business practices, or programmatic needs have determined that a specific location, site, or unique need is required to meet the FAA's mission, or when it has been determined that only one source is reasonably available that can meet the requirement. Advertising is not required if the resultant acquisition is for a site-specific location and deemed a single-source procurement.

#### **4.2.3.5 Solicitation for Offers** Revised 1/2012

The RECO works with the program office to determine and define the delineated area required to acquire space that will fulfill the mission of the FAA and will consider buildings which meet Guiding Principles and EISA requirements when establishing the delineated area. For space leases, the delineated area must be of sufficient size to ensure competition between buildings that meet HPSB Guiding Principles and EISA requirements for Energy Star buildings, unless it has been demonstrated in the market survey, that there is no space available that meets the above criteria and that leased construction is not economically feasible. The SFO has been revised to include appropriate provisions ensuring compliance with sustainability requirements. Refer to the Solicitation for Offerors (SFO) template for further information.

The RECO is not required to solicit offers from all sources within the geographic area of consideration. It is only necessary that offers be solicited from a sufficient number of sources (at least two sources are sought, if possible) to promote competition to the extent practicable and reasonable.

Data obtained during the market survey, advertisement, and/or appraisal can also be used to determine a range of reasonable rents charged by Lessors within the area of consideration for space or land similar to that being acquired by FAA. (See below for more information.)

For single-source procurements, a market survey and/or appraisal should be conducted to determine or verify the reasonableness of the offer. At least three sources of data should be queried to ensure the validity of the data. If single-source procurement is selected, which is often the case for most FAA land acquisitions, the RECO must document the justification/determination for a single-source acquisition, and shall maintain the documentation in the lease file, under the Negotiator Report.

The RECO will send the Solicitation for Offerors (SFO) or proposed lease contract to those offerors who meet the requirements of the FAA, as described above.

#### **4.2.3.5.1 Market Survey/Advertisement/Appraisal** Added 1/2008

When utilizing the competitive method of procurement, the FAA must conduct a market survey to obtain market information and identify potential sources within the geographic area of consideration or market once the lease requirements have been finalized. Market survey data can be used to: determine the availability of properties within the area of consideration; eliminate unsatisfactory properties from consideration; determine the willingness of landowners to provide property for the FAA's use; determine fair market rents; determine suitability of responses to advertisements; and, determine the estimated cost for the leasehold. When possible, the survey should include on-site visits with the requesting office to determine if suitable properties are available, or if properties offered in response to an advertisement meet requirements. Prior to conducting the market survey, the FAA should have developed a draft Solicitation for Offer or a draft lease contract defining specific requirements. The draft SFO or draft lease contract should be reviewed with the offer or offeror's representative to ensure a full understanding of FAA's requirements.

As mentioned above, advertising is not required for the acquisitions of site-specific locations or those determined to be appropriate for single source procurement. Also the requirement need not be publicly advertised when the FAA determines that it is not warranted, or reasonable competition has been achieved without advertising. If the RECO determines that advertising is required, the publicizing method that should be used is that which is most likely to result in the receipt of offers appropriate to satisfy the specific requirement. Acceptable methods of advertisement include, but are not limited to, publication of the requirement in a newspaper in the jurisdiction where the requirement is located, and publicizing the requirement on a real estate or other website.

In addition to the market survey information, an appraisal may/should be obtained by the RECO to assist in the determination of the fair market rent, and of the value or just compensation for the purchase of a specific property. An appraisal is a formal written statement that a qualified appraiser prepares independently and impartially, giving an opinion, as of a specified date, of the defined value of a described parcel of real property, supported by the presentation and analysis of relevant market information.

#### **4.2.3.5.2 Use of Brokers/Agents** Added 7/2016

RECOs are prohibited from entering into any type of contract or agreement, including a letter contract, that acknowledges, authorizes, or any way states or implies that a real estate broker or a real estate agent represents the FAA or Government in a real property transaction. This prohibition does not restrict the RECO from contacting Listing or Cooperative Brokers or real estate agents to gather information concerning properties available for sale or lease within a particular geographic delineated area and/or from requesting or receiving market information and rental rates/sale prices with respect to that area. Neither does this section prohibit the RECO from acknowledging, if asked, that a Cooperative Broker was instrumental in bringing a particular property to the RECO's attention.

#### **4.2.3.6 Evaluation of Offer(s)** Revised 1/2008

If the competitive method is used, once offers are received, selection for final award may be made. Selection from the competitive method may be made based upon that proposed offer that best meets the FAA's requirements as defined in the SFO or proposed contract lease document. If the acquisition is being conducted using the single-source method, the RECO can begin negotiations with the single offeror immediately upon receipt of an offer.

##### **4.2.3.6.1 Negotiation** Added 1/2008

Based on the results of market surveys or appraisals, the RECO must negotiate with property owners to obtain the necessary land/space interests at a fair and reasonable cost. The RECO should remember that the value of the Government's enhancements to the property, or the intended use of the property by the Government, should not be considered in determining the procurement or lease cost of the real property. The offer(s) should be reviewed to determine which offer(s) best meets the requirements as indicated in the SFO and/or proposed lease contract. Any reasonable offer received up to the point of award may be accepted and considered at the discretion of the RECO. If the evaluations indicate that the offerors have different interpretations of the FAA's requirements, the RECO is encouraged to implement a process to clarify the ambiguities and allow offerors to revise their proposals in accordance with the clarifications provided.

The evaluation should include a full analysis of the total payment of rent and other costs to the FAA and the total cost of any alternatives considered. The reasonableness of specific costs should be evaluated against data from sources such as market surveys, appraisals, or Government estimates. The cost to the FAA should be based on the fair market value of the procurement, and not include any value created by the FAA's enhancements or intended use. This can be done by appraisal or use of market data. This is true for competitive or non-competitive space. The final selection should result in the best value to the FAA.

The RECO must use the [Negotiator Report](#) to document negotiations for all types of leases – space and land, cost and no cost. This document must be used for the entire process, i.e. before offers received, during evaluation and award recommendation and after award.

##### **4.2.3.6.2 Communication** Added 1/2008

All items may be communicated and discussed with offerors with the goal of clarifying the FAA's needs and providing a basis for the final contract to assure that all costs involved are fair and reasonable. Communications may continue up to the point of award and may be terminated at any time by the FAA.

During final communications, an offeror can be asked to lower the proposed price/rental to a stated rate.

At any time during the real property procurement process, if the parameters of a competitive offer have been determined, any offer falling within these parameters may be selected at the

discretion of the RECO for direct communication.

Communications with all potential offerors should take place throughout the competitive process. Communications may start in the planning phase and continue through contract award. All SFOs and/or proposed lease contracts should clearly inform offerors how communications will be handled during the initial screening phase.

The purpose of communications is to ensure there are mutual understandings between the FAA and the offerors about all aspects of the procurement, including the offerors' submittals. Information disclosed as a result of oral or written communication with an offeror may be considered in the evaluation of an offeror's submittal.

To ensure that offerors fully understand the intent of the SFO and/or proposed lease contract, the FAA may conduct one-on-one meetings with individual offerors. One-on-one communications may continue throughout the process, as required. Communications with one offeror do not necessitate communications with other offerors, since communications will be offeror-specific. Regardless of the varying level of communications with individual offerors, the RECO must ensure that such communications do not afford any offeror an unfair competitive advantage.

Communications may necessitate changes in the FAA's requirements. If, after release of a SFO and/or proposed lease contract, it is determined that there has been a change in the FAA's requirement(s), all offerors competing at that stage should be advised of the change(s) and afforded an opportunity to update their submittals accordingly. The RECO should be aware that depending on the scope of the change, the acquisition may have to start from square one again.

All determinations relating to changes in requirements, including waivers, will be documented in the negotiator report.

Where communications do not result in any changes in the FAA's requirements, the FAA is not required to request or accept offeror revisions. Technical leveling and auctioning techniques are prohibited.

#### **4.2.3.7 Utilities** Revised 4/2012

Like the acquisition of leasehold interests, the utility acquisition process must be conducted following the best commercial business practices in a fair and equitable manner, while complying with all applicable regulations. The utility guidance (4.1) addresses the acquisition, management and termination of utility services, i.e., electric, gas, water, refuse, and sewer in support of facilities constructed, operated, and maintained by the Federal Aviation Administration. The RECO/CO must follow the guidance. All new construction and major renovation projects at FAA facilities will include installation of advanced meters for electricity in accordance with the Energy Policy Act of 2005 (EPAct 2005), and gas and steam advanced meters in accordance with the Energy Independence and Security Act (EISA) 2007, Section 434(b). Advanced meters should also be considered to collect water use data for each water supply source (e.g., domestic potable water and non-potable water, including reclaimed water and rainwater). For existing FAA facilities where no major renovations are anticipated, advanced meters must be implemented where cost-effective and practicable. Cost-effectiveness must be determined on a 10-year simple payback, assuming annual savings of at least 2% or

higher depending on the use of the metered data to implement energy savings and other cost savings measures.

#### **4.2.3.8 Condemnation** Revised 1/2008

Eminent domain proceedings, in accordance with established procedures, should be initiated when negotiations have reached an impasse and a satisfactory conclusion to the procurement cannot be reached. Generally, protracted negotiations are not in the best interests of either party. Legal participation is required on all condemnations. The Department of Justice rules on condemnation and requirements for title must be followed when real property is acquired through purchase or condemnation proceedings. (1.1.19 Condemnation Guidance)

#### **4.2.3.9 Award** Revised 4/2008

Competitive awards must be made to the offeror whose offer best met FAA's requirements/needs as defined in the SFO and/or proposed lease contract. The offer selected should provide the best value to the United States, cost and other factors considered. The RECO shall document the objective criteria supporting the rational basis, i.e. the [Negotiator Report](#) and placed in the real estate lease contract file.

If award is made non-competitively, the reason(s) for a RECO's determination to make a single-source award must be documented in the negotiator report.

Any changes or additions, such as the addition of a requirement from the using service/requiring office, resulting from communications with the proposed awardees, or that are stated in the selected offer, should be made to the proposed contract prior to award. If such change is deemed outside the original requirements of the SFO and/or proposed lease contract, the RECO must start the procurement again. (Put that in above, too.)

Legal review of leases is required where there is deviation from the standard lease clauses. Legal review is required on all purchases of real property. The RECO is required to send three original copies of the proposed contract(s) to the property owner or provider for signature and returned for final execution by the FAA. The RECO should follow the guidance on recording leases and titles as mentioned in the land guidance 1.0.

After execution of the lease, the RECO must ensure that all information is entered into the real property database, i.e. REMS. RETS.

#### **4.2.3.9.1 Terms of Leases** Revised 4/2009

The RECO is authorized to enter into firm-term leases within established restrictions (2.4.4 Lease Terms). The RECO may award firm term leases not to exceed 20 years under the authority of 49 U.S.C. 40110(c)(1) without violating the Antideficiency Act. If a lease requires the payment of rent above a nominal amount—e.g., \$1.00 per year--a new lease must be procured when the existing lease contract has been in effect for 20 years.

The RECO must complete the Lease Evaluation Form as early as possible in order to determine whether the lease will be a Capital Lease in accordance with OMB Circular A-11, Appendix B. If determined to be a capital lease (3.1.5 Capitalization Guidance), the RECO will notify the Logistics Service Area Manager and must ensure with the program office that FAA has the adequate funding for the requirement.

#### **4.2.3.10 Alterations and Improvements** Revised 10/2012

All alterations and/or improvements, including Tenant Improvements (TIs), are required by FAA to make the leased premises acceptable for FAA occupancy, and post occupancy alterations and improvements must be based upon technical requirements, business practices, or programmatic needs. TIs are the finishes and fixtures that typically take space from the "shell" condition to a finished, usable condition.

Initial alterations, improvements, related items, and services associated with real property will be considered awarded through competition when included within the scope/requirements of the original procurement.

Alterations and improvements to an existing facility may be considered within the scope of a lease, if they are necessary to the operation of the facility as contemplated by the original procurement. In a leased facility, to minimize potential liabilities and restoration costs as well as other claims, the lessor should be considered the first choice for the provision of alterations. In making the determination of whether a lessor's proposed costs to make alterations and improvements to a leased facility are reasonable, the RECO should use a 1.) formal appraisal, 2.) construction data, 3.) cost to build publications, and/or 4.) an independent government cost estimate. If FAA makes the alterations, the lessor should be requested to waive any claims for restoration of the premises.

Any construction to leased or owned facilities must comply with the requirements of the Davis-Bacon Act. The Davis Bacon Act (40 U.S.C. 276a-278a-7) provides that contracts of \$2,000 or more to which the U.S. or the District of Columbia are a party for construction, alteration, or repair (including painting and decorating) of public buildings or public works within the U.S. must include provisions that no laborer or mechanic employed directly upon the site of the work will receive less than the prevailing wage rates as determined by Department of Labor.

If the lessor is unwilling or unable to provide the means to complete the improvements, and the property is leased for no or nominal consideration, then the FAA may exercise its authority under 49 USC Section 44502(a)(5) to make the required improvements.

A discussion of issues applicable to TIs, including the TI allowance often offered in the commercial market to encourage long term leases, is set forth in Real Estate Guidance 2.3.3, Tenant Improvements for Space Acquisition.

#### **4.2.3.11 Inspection and Acceptance** Revised 1/2008



The RECO, or designated representative, should arrange to inspect the real property sufficiently in advance of the occupancy date to ensure it is acceptable and ready for use. Substantial, non-punch list deficiencies that would impact FAA use and/or occupancy of the real property in support of its mission must be corrected before acceptance of the real property, related service, or utility service.

#### **4.2.3.12 Disposal of Real Property** Revised 1/2008

There are two sources of authority under which the FAA may dispose of real property:

1. Pursuant to 49 USC 40110, the FAA has the authority to dispose of airport and airway property and technical equipment used for the special purposes of the FAA for adequate compensation.
2. The second source of authority is through the General Services Administration (GSA) and is governed by the Federal Property Administrative Services Act of 1949, as amended. This Act authorizes the Administrator of GSA to dispose of real property.

Also the RECO must include an explanation of how the acquisition or disposal action complies with FAA established policy and guidance in the negotiator report.

#### **4.2.3.13 Documentation** Revised 1/2008

Sufficient documentation must be developed that explains and justifies the procurement action taken. These documents should be retained in the applicable real estate acquisition file. The RECOs must use a 6 part folder system for all their acquisition files. The RECO must use the land, space and/or utility checklist when putting together the documentation for the lease file.

##### **4.2.3.13.1 Accountability** Added 1/2008

Real Estate Managers and/or their designees are to ensure that adequate records are maintained for all FAA owned, leased, and utilized real property. Managers and team leads are responsible for the accuracy and quality of the work of the RECO and should review the lease document files to ensure compliance with AMS. Further the real estate managers should ensure the real estate employees are trained in accordance with the real estate competencies and curriculum.

##### **4.2.3.13.2 REMS** Revised 1/2010

All real property assets must be recorded in Real Estate Management System (REMS) in accordance with the [REMS User Guide](#) (FAA only). Land and space ownership must be recorded in REMS after the title passes to the Federal Government. Land, structure and space leases must be recorded in REMS after the lease is fully executed. Other real estate assets (i.e. structures) purchased by procurement contracting officers must be recorded in REMS after completion of the Joint Acceptance and Inspection (JAI), as part of the regular close out process.

The program office with management responsibility that authorizes a change of location of a structure must notify the Real Estate Contracting Officer (RECO) with the changed location information. The RECO will make the change in REMS following notification by the program office. Logistics personnel must ensure accurate and complete real property asset data entry into REMS. All lines of business must assist logistics personnel in the annual inventory to validate required data elements in accordance with Federal Real Property Council (FRPC) and the DOT Asset Management Plan (AMP).

#### **Lease Scanning in REMS:**

As of July 1, 2007, all new and renewal lease documents must be scanned at the point of origin (i.e., region-level, etc.) once the lease has been activated. The lease must be uploaded to the REMS server, and attached to the respective lease number. The lease document will be available for viewing from REMS screens. See Real Estate Guidance 3.1.7.1 for scanning instructions.

#### **4.2.3.14 Miscellaneous Provisions** Revised 1/2008

##### **4.2.3.14.1 Disclosure of Information** Added 1/2008

Source selection information and proceedings shall not be discussed outside the service organization. The Source Selection Officer (SSO) shall determine the extent to which source selection information is disclosed and shall execute a Certificate of Nondisclosure as appropriate.

##### **4.2.3.14.2 Procurement Integrity Act** Revised 10/2014

FAA is subject, with modifications as described in the Procurement Toolbox, to the Procurement Integrity Act (41 U.S.C. §§ 2101-2107).

##### **4.2.3.14.3 Organizational Conflicts of Interest** Added 1/2008

The policy of the FAA is to avoid awarding contracts to contractors who have unacceptable organizational conflicts of interest.

The FAA will resolve organizational conflict of interest issues on a case-by-case basis; and when necessary to further the interests of the agency, will waive or mitigate the conflict at its discretion.

##### **4.2.3.14.4 Conflict of Interest** Added 1/2008

Any service organization or Office of Dispute Resolution (ODRA) member who is a Federal employee that has a real or apparent conflict of interest must withdraw from participation in the procurement process when required by law (18 U.S.C. 208) or regulation (5 CFR Part 2635). Non-Federal service organization or ODRA members are held to the same standards in order to sustain the integrity of the procurement process.

#### **4.2.3.14.5 Electronic Commerce in Contracting** Revised 1/2008

FAA may, to the extent practicable and cost effective, use electronic commerce procedures and processes, including acceptance of electronic signatures, to conduct and administer procurement actions. The Electronic Signatures in Global and National Commerce Act (E-SIGN) provides an equivalency between legally-required written records and the same information in electronic form.

#### **4.2.3.14.6 Disaster or Emergency Preparedness and Response** Added 8/2009

When an health-related emergency occurs and is declared by the United States Department of Health and Human Services Centers for Disease Control and Prevention (CDC) or other authorized Federal, state or local government official, the FAA Real Estate Contracting Officer (RECO) is authorized to acquire additional cleaning supplies or services in our leased facilities. For further information, please see Section 2.4.14, Appendix O: Disaster or Emergency Janitorial Services.

#### **4.2.3.15 Conveyance** Added 1/2012

Conveyance by transfer agreement of FAA real property may be practical in situations where transfer of ownership is in the best interests of the government, such as to facilitate airport improvements or to satisfy contract obligations. Conveyance is a real estate transaction subject to the requirements of FAA Order 1050.19B, Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions. Buildings and structures being considered for conveyance must be also screened by the appropriate FAA environmental and safety professionals for any environmental or safety issues that may require mitigation prior to transfer.

#### **4.2.4 Housing Policy** Added 10/2011

The purpose of the FAA Housing program is to provide housing for FAA employees supporting the National Airspace System (NAS) who are working in remotely located areas where commercial housing is not available. The guidance follows the mandate in OMB Circular A-45 and must be followed for the acquisition, management and disposal of FAA owned or leased housing facilities. These provisions are applicable to all Lines of Businesses (LOB) and organizational elements having a requirement for and using FAA housing quarters.

#### **4.2.5 Real Estate Certification and Warrant Requirements** Revised 7/2013

FAA requirements specify using a competency-based model to provide structure and logic for learning development for acquisitions professions to make reasonable, justified decisions to accomplish agency goals. FAA's mission-critical real property transactions are highly complex and challenging and require a skilled and knowledgeable workforce. Consequently, the FAA developed an acquisition career development program for many series, including the Real Estate Contracting Officers/Specialists (RECO/S).

Therefore, unless otherwise prohibited by existing law or regulation, or an existing collective bargaining agreement, all RECO/S must meet the training and experience requirements set forth in AMS Policy Section 5, Acquisition Career Program, to qualify for certification. Warrant level qualifications and designations are related directly to RECO/S certification. For more information, please see Section 6.1, Real Estate Career Development. Attaining a given level of certification or warrant does not, in and of itself, qualify an employee for promotion or selection to a position.

### **4.3 Integrated Logistics Support**

#### **4.3.1 Principles** Revised 4/2013

Integrated logistics support is the critical functional discipline that plans, establishes, and maintains an integrated logistics support system for the lifecycle all FAA products and services. The objective is to provide the required level of service to the end user at optimal lifecycle cost to the FAA for new investment programs and the sustainment of fielded products and services.

#### **Principles include:**

*Centralized management of integrated logistics policy and guidance* with the Vice President of Technical Operations serving as the key executive and the Associate Administrator for Regions and Centers providing support

*Logistics managers within each service team* responsible for defining, documenting, obtaining, and managing integrated logistics support for service-team products and services over their lifecycle

*Logistics managers document planning for integrated logistics support in an integrated logistics support plan*

**Collaborative logistics decision-making based on business case analysis results** to achieve high performance and best value for the agency

*Integration of operations and support requirements early in the program lifecycle* using the program requirements document

*Long-term strategic partnerships with suppliers and contractors* to achieve full lifecycle support for operational assets

*Managing and integrating supply support across the agency* to improve efficiency, save money, and minimize ownership costs

*Continuously measuring logistics performance against key organizational measures* to drive corporate decisions and tactically manage logistics services

*Training and certification of logistics specialists* so the best logistics systems can be determined, implemented, and operated over the service life of operational assets

*Developing and using logistics databases and tools* to manage assets, track outages and service delays, control inventory, and identify opportunities for improving logistics support

#### **4.3.2 Standard Elements of Integrated Logistics Support** Revised 10/2007

The standard elements of integrated logistics support are:

- Maintenance planning;
- Maintenance support facility;
- Direct-work maintenance staffing;
- Supply support;
- Support equipment;
- Training, training support, and personnel skills;
- Technical data;
- Packaging, handling, storage, and transportation;
- Computer resources support.

A definition of each element is in Appendix C.

#### **4.3.3 Logistics Management During the AMS Lifecycle** Revised 10/2007

Logistics elements are addressed during each phase of the AMS lifecycle management process (service analysis, concept and requirements definition, investment analysis, solution implementation, and in-service management). This entails managing the interdependencies among logistics elements; integrating the acquisition and lifecycle management of logistics support with the investment product or service; and adhering to the principles of supply chain management throughout.

##### **4.3.3.1 Service Analysis** Added 10/2007

The service team logistics manager analyzes support data collected on operational assets to determine logistics trends and service needs. Results are fed into service analysis by each service organization that determines and prioritizes overall service and infrastructure needs. Service analysis results across service organizations are integrated into the enterprise architecture roadmaps, which specify when highest priority service needs enter into the appropriate solution-oriented lifecycle management phase (e.g., concept and requirement definition, investment analysis, or solution implementation).

##### **4.3.3.2 Concept and Requirements Definition** Revised 4/2013

The service team logistics manager works with the CRD team to define preliminary logistics requirements and a maintenance concept of operation for the preliminary program requirements document. Preliminary requirements are not solution-specific and do not limit the search for alternative solutions to mission need.

#### **4.3.3.3 Investment Analysis** Revised 11/2009

The service-team logistics manager is a core member of the investment analysis team throughout initial and final investment analysis. During initial investment analysis, the logistics manager evaluates the maintenance concept of each alternative solution and reports implications to lifecycle support costs and benefits in the business case analysis report. Trade-off among RMA parameters (as lifecycle cost-reduction measures) is encouraged so long as minimum service performance thresholds are not breached.

During final investment analysis, the logistics manager:

Develops logistics elements for any screening information request issued by the service team in support of final investment analysis;

- Evaluates the logistics and support elements of contractor responses;
- Assists the investment analysis team in defining:
  - ILS-specific baseline measures for the acquisition program baseline;
  - Final logistics requirements in the program requirements document;
- Detailed logistics activities and milestones in the implementation strategy and planning attachment.
- Advises on preliminary disposal planning for the asset(s) under consideration for replacement;
- Identifies activities and establishes milestones for integrated logistics support elements of the In-Service Review (ISR) checklist; and
- Tracks completion of logistics support activities prerequisite to the final investment decision.

During competitive procurements, offerors are evaluated on the suitability of their maintenance and support plans and demonstrated ability to support other fielded systems, as well as compliance with contract technical specifications.

#### **4.3.3.4 Solution Implementation** Revised 10/2007

During solution implementation, the logistics manager verifies that contractor logistics product development and field installation are consistent with contract requirements and user needs through commissioning. The logistics manager also assists the service team in verifying that logistics-related activities in the ISR checklist are complete and the product or service is operationally suitable at the in-service decision.

#### **4.3.3.5 In-Service Management** Revised 10/2007

The logistics manager assists the service organization and its systems engineering efforts throughout in-service management in the collection and assessment of operational data for use in evaluating product or service effectiveness. These activities include:

- Tracking and evaluating RMA performance and supportability issues of fielded assets;
- Analyzing supportability issues caused by market-driven product, system, or subsystem

- obsolescence;
- Determining the most cost-effective means for avoiding supportability shortfalls;
- Assessing the logistics impact of obsolescence-driven product changes;
- Evaluating the impact of engineering changes, performance shortfalls, or technological opportunities on the integrated logistics support of operational products and services.

The logistics manager also participates in disposal activities of products scheduled for removal from service.

#### **4.3.4 Who Does It?** Revised 10/2007

Each line of business manages integrated logistics support for the products and services for which it is responsible. The ATO Technical Operations organization is the office with primary responsibility for logistics policy and guidance. The ARC organization provides in-house integrated supply chain management, depot support, and logistics services. The logistics manager is the focal point for logistics planning, implementation, and in-service management within the service team. The ARC logistic-element management team supports service-team logistics managers in logistics planning and management.

#### **4.4 Test and Evaluation** Revised 7/2016

Test and evaluation is planned and conducted in accordance with the guidelines, standards, and practices found on the FAA Acquisition System Toolset (FAST) to:

- Provide essential information in support of decision-making for investment programs;
- Provide essential information for assessing technical and investment risks;
- Verify the attainment of technical performance specifications and objectives; and
- Verify and validate that systems, solutions, and capabilities are operationally effective and suitable for the intended use.

The types of test and evaluation standards and processes to be followed for each investment program are based on the milestones and decision points they support and the type of investment program. These test and evaluation standards and processes address: NAS new investment, NAS modifications, and non-NAS programs.

The high-level test strategy is defined in the implementation strategy and planning document. The program management plan specifies how the test strategy will be executed. Based on complexity and criticality, new investments may be required to deliver a test and evaluation master plan (TEMP), as indicated on the ACAT designation form. For designated investment initiatives, the TEMP provides more detail than the ISPD and the PMP on contractor and FAA test needs, scope, planning and reporting.

The test and evaluation approach, level of analysis, and test criteria are determined by reporting requirements for program milestones and decisions. The requirements that need to be verified and validated form the basis for test criteria. The risks and complexity of the system, solution, or capabilities being tested drive the scope and robustness of evaluation methods, test cases, and

reporting structure.

#### **4.4.1 Service Analysis, Concept and Requirements Definition, and Investment Analysis**

Revised 7/2016

During service analysis, test and evaluation activities help identify and prioritize critical FAA service needs. During concept and requirements definition, test and evaluation helps to identify the best alternative solutions to those needs. During investment analysis, the criteria for testing operational effectiveness and suitability are expressed as critical performance requirements and critical operational issues in the program requirements document.

For investment programs designated to have a test and evaluation master plan a preliminary TEMP (pTEMP) is developed during initial investment analysis based on the concepts and functions documented in the preliminary program requirements document to support the initial investment decision. An initial TEMP (iTEMP) is developed during final investment analysis once program requirements are finalized and the identity of the most promising solution is known. The iTEMP describes the test program and establishes the basis for test requirements in the request for offer to industry and test costs/and schedules in the acquisition program baseline. The iTEMP is required to support the final investment decision. The ISPD and PMP define the plan and schedule for delivery of the final TEMP (fTEMP).

#### **4.4.2 Solution Implementation** Revised 7/2016

Solution implementation activities follow documented and structured T&E processes appropriate to the systems, solutions, and capabilities being tested. Early test and evaluation activity assesses potential operational, safety, and security risks and identifies opportunities for risk mitigation. Later test and evaluation examines performance and operational readiness (suitability and effectiveness) in support of decision-makers at the production, deployment, and in-service decisions.

Each test and evaluation program consists of developmental, operational and site testing as specified in the fTEMP (if required) and associated PMP and ISPD, as well as independent operational assessment for designated programs (see AMS Section 4.5). Developmental testing verifies requirements, functional design, and integration of the system, solution, or capability. Operational testing validates achievement of operational needs, as well as the effectiveness and suitability of the solution. For deployable products site testing verifies and validates requirements, design, and suitability of the solution in the fielded environment and configuration. As part of site testing, field familiarization testing may be required to support the site operational readiness decision.

#### **4.4.3 In-Service Management** Revised 7/2016

Developmental, operational and site testing are performed in accordance with documented, structured test processes defined by each in-service management organization in accordance with FAA Orders and Acquisition Management System Policy guidance. This applies to development and implementation of all NAS and non-NAS modifications during the in-service



management lifecycle phase. In-service management test processes include standard test approaches that define the phases and detailed activities to be included during testing. These processes also support/and ensure that safety risk management and information system security requirements are addressed.

#### **4.5 Independent Operational Assessment** Revised 10/2012

The FAA is committed to verifying that new solutions are operationally effective, suitable, and safe before deployment. The Chief Operating Officer, through the Vice President for Safety and Technical Training, designates solutions on which to conduct independent operational assessment. The decision to designate a solution for independent operational assessment is based on such factors as complexity, operational criticality, lifecycle cost, interoperability, and safety risk.

During the early stage of solution implementation, the Independent Safety Assessment Team identifies potential operational and safety risks and communicates them to the acquisition organization. Once acquisition test activities are complete, the Vice President of the acquisition organization will declare in writing to the Vice President of Office of Safety and Technical Training, via the Independent Operational Assessment Readiness Declaration, the readiness of the solution to enter independent operational assessment. Independent operational assessment provides decision-makers with an independent determination of operational readiness in support of production and in-service decisions.

#### **4.6 Deployment Planning** Revised 4/2009

Deployment planning prepares for and assesses the readiness of a solution to be implemented into the National Airspace System. Deployment planning is part of a continuous in-service review process that begins early in the lifecycle management process, usually during the development of requirements. All programs undergo some degree of deployment planning to ensure key aspects of fielding a new capability are planned and implemented, as well as to ensure the deployment does not create a critical deficiency in the National Airspace System. The level of authority for deployment readiness assessment and in-service decision (ISD) may vary from the service organization leader to the Joint Resources Council, chaired by the head of the sponsoring line of business.

The conduct of deployment planning involves coordination among and participation by many critical functional disciplines. Trade-offs among cost, schedule, performance, and benefits relative to these functional disciplines must also include the impact of deployment and implementation considerations. Deployment planning tools (such as a tailored in-service review checklist) must be used to assist in identifying, documenting, and resolving deployment and implementation issues. Methods and techniques include, but are not limited to, a tailored application of generic tools, the integration of checklist issues with other emerging issues (such as program trouble reports from test and evaluation), development of action plans for resolution of checklist and other items, and documentation of the results of issue resolution and mitigation. Consistent deployment planning must be visible in contractor "statement of work" and associated efforts. The status of deployment planning (and issue resolution) activities are briefed periodically (e.g. at service-level reviews), presented at the ISD meeting, summarized in the ISD memorandum, and audited during the post implementation review. The implementing service

organization is responsible for the successful completion of deployment planning activities. The operating service organization provides guidance and technical expertise related to ISR issues or other factors that may affect the ability to deploy and support the intended service, product, or requirement. All lines of business will resolve and close their respective ISR issues.

#### **4.7 Human Factors**

Human factors are a *critical* aspect of aviation safety and effectiveness. Service organizations must assure that planning, analysis, development, implementation, and in-service activities for equipment, software, facilities, and services include human factors engineering to ensure performance requirements and objectives are consistent with human capabilities and limitations. Human factors engineering should be integrated with the systems engineering and development effort throughout the lifecycle management process, starting with concept and requirements definition and continuing through solution implementation and in-service management ([Human Factors Guidelines](#)).

#### **4.8 Environmental, Occupational Safety and Health, and Energy Considerations**

Revised 1/2013

FAA investment programs shall comply with relevant federal, state, and local regulations, and FAA orders, specifications, and standards pertaining to environmental and occupational safety and health (EOSH) requirements, and energy and water requirements. FAA lines of business and staff offices must comply with all applicable requirements of the National Environmental Policy Act (NEPA) in accordance with the current version of FAA Order 1050.1, *Environmental Impacts: Policies and Procedures*. Service organizations responsible for implementing investment programs must consider EOSH and energy and water requirements, and address them throughout the lifecycle management process in order to:

- Ensure the installation and operation of systems, equipment, facilities, and related program activities will not adversely impact personnel safety and health or the environment; and
- Ensure the acquisition program baseline of the investment initiative reflects the schedule and cost of EOSH requirements.

Questions on the applicability of state and local EOSH requirements to federal acquisitions should be referred to the Office of the Chief Counsel for an evaluation of the supremacy clause and sovereign immunity implications.

#### **4.9 Information Technology**

Information technology represents a significant financial investment for the FAA, as well as a set of essential tools and services that support multiple FAA missions, functions, and activities. To develop, deploy, and manage information technology effectively, service organizations must apply sound information and engineering principles to the lifecycle planning and acquisition of information technology. Service organizations must also continuously involve users in the

development, operation, and maintenance of information and application systems. Service area plans should leverage corporate information technology capabilities such as FAA telecommunications, emphasize the use of open systems and shared data, implement recognized information technology standards, and take advantage of economies of scale.

#### **4.10 System Engineering**

Systems engineering management is conducted and documented throughout the lifecycle management process at all levels of management and integration, from individual investment programs to the National Airspace System as a whole. At the NAS-level, systems engineering management integrates across investment programs to achieve an efficient and fully interoperable National Airspace System. At the program level, it optimizes performance, benefits, operations, and lifecycle cost.

All organizations responsible for the development, implementation, and lifecycle management of FAA investment programs shall develop and institute a systems engineering management program consistent with guidance in FAST [[system engineering guidance](#)]. This includes organizations responsible for integrating investment programs into larger "system of systems" such as the National Airspace System. The systems engineering management program of each organization shall apply systems engineering activities such as functional analysis, requirements management, synthesis, and validation and verification throughout the lifecycle management process, consistent with the specific functions and responsibilities of the organization.

#### **4.11 Security** Revised 10/2016

##### **Introduction**

Service organizations and program offices must allow sufficient time and resources to address security laws, policies, and orders including the cost of implementing required security controls into acquired components. Security policy within the FAA is divided into information security; physical security, facility security, and personnel security; and sensitive information and personally identifiable information. There is overlap between the disciplines (for example, physical security is employed to protect classified materials), so all areas of security policy must be evaluated to ensure full compliance with the various orders and policies.

##### **Information Security Policy**

The Federal Information Security Modernization Act, 2014 (FISMA), Office of Management and Budget Circular A-130, Management of Federal Information Resources, National Institute of Standards and Technology (NIST) guidance, and other federal, departmental, and agency-level guidance and standards as amended, describe information system security (ISS) needed for all FAA information systems. FAA information systems reside in one of three domains: national airspace system (NAS), mission support/administrative, and research and development. They may consist of government-owned/managed components, contractor-owned/managed components, or combinations of these types. They are segregated into infrastructure for air traffic operations and infrastructures for information technology administrative support. The infrastructures exchange

information via authorized security gateways.

FAA ISS requirements are derived from NIST special publications and federal information processing standards. The FAA Office of Information Security and Privacy (AIS) defines and maintains the agency enterprise information security and privacy policy. Because the NAS is classified as critical infrastructure, NAS systems must comply with additional ISS requirements as defined by Air Traffic Organization Policies. These ATO policies can be found on the FAA's Website under policy and guidance and are designated with the letters "JO".

To receive a successful in-service decision, all FAA investment programs must undergo a security authorization that assesses outputs and products against mandatory security requirements. The security authorization process is defined in FAA Order 1370.82, Information Systems Security Program. The Security Authorization Handbook details the process for compliance with ISS requirements during solution implementation and in-service management. Investment programs must consult the Information Security Guidance for System Acquisitions (ISGSA) at each planning phase of the AMS lifecycle to ensure information security requirements and related information are included in acquisition artifacts, and to ensure the investment program is on track for a successful security authorization.

### **Physical, Facility and Personnel Security Policy**

The FAA must conform with national policy related to physical security of the aviation infrastructure including leased and owned facilities, the security of all information associated with operation of the FAA and aircraft operations, and personnel security. The FAA is also obligated to protect proprietary information to which it has access. Physical security is directly applicable to aviation industry operations and activities, and to supporting infrastructure such as communications, sensors, and information processing. FAA Order 1600.69, Facility Security Management Program, establishes both policy and guidance for physical security.

FAA Order 1600.1, Personnel Security Program, establishes both policy and guidance for FAA personnel security. In addition, detailed guidance to implement personnel and physical security with respect to contractors is in FAA Order 1600.72, Contractor and Industrial Security Program.

### **Classified National Security Information (CNSI) and Sensitive Unclassified Information (SUI) Policy**

In order to meet the spirit of Executive Order 13526 and 32 CFR Part 2001 to protect classified national security information from unauthorized disclosure. Systems containing or processing classified data are managed by the FAA Office of Security and Hazardous Materials Safety in accordance with FAA Order 1600.2, Safeguarding Classified National Security Information. FAA Order 1600.75 Protecting Sensitive Unclassified Information (SUI) is in effect.

The Privacy Act of 1974 and the E-Government Act of 2002 (Public Law 107-347) mandate protection of an individual's right to privacy and the prevention of unauthorized dissemination of personal information. FAA Order 1280.1, Protecting Personally Identifiable Information established both the policy and guidance for handling this type of SUI. In addition, it establishes the position of the FAA Privacy Officer with respect to information technology.

#### 4.12 National Airspace System Safety Management System Revised 1/2012

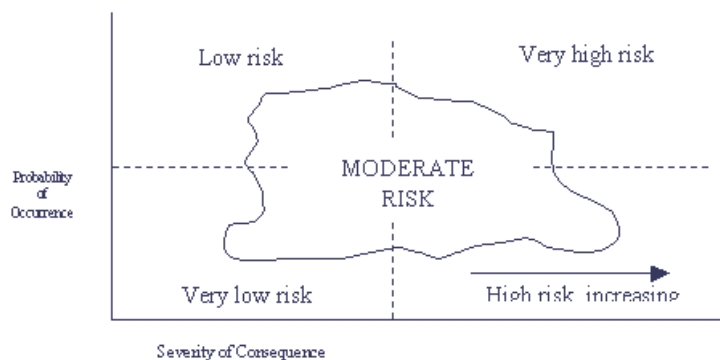
When new capital investments are determined to have an effect on the safety of the National Airspace System, safety management shall be conducted and documented throughout the lifecycle of a product or service in accordance with the FAA Safety Management System (SMS). The safety management system requires use of safety risk management to identify safety risks to the National Airspace System and to conduct product development at a rigor commensurate with the severity of the resultant hazard should that product experience failure. For software-intense systems, the establishment of a development assurance program in accordance with RTCA Document (DO) 278A, Software Integrity Assurance Considerations for Communication, Navigation, Surveillance and Air Traffic Management Systems, RTCA, Inc., is one acceptable means to demonstrate that a software product was developed at the appropriate level or rigor.

Critical safety issues identified during service analysis are further addressed in: (1) an operational safety assessment; (2) a system safety assessment of alternative solutions to mission need reported in the business case; and (3) when service organizations provide program-specific safety risk management planning in the implementation strategy and planning document.

Each service organization involved in acquisition management shall institute a system safety program that includes at a minimum: hazard identification, hazard classification (severity of consequences and likelihood of occurrence), measures to mitigate hazards or reduce risk to an acceptable level, verification that mitigation measures are incorporated into product design and implementation, and assessment of residual risk. Status of system safety shall be presented at all decision points and investment reviews. Detailed guidelines for safety management are found in FAST, FAA SMS manual, SRMGSA, and RTCA DO-278A.

#### 4.13 Risk Management Revised 11/2009

Risk management is applied throughout the lifecycle management process to identify and mitigate risks associated with achieving FAA goals and objectives. Each line of business shall institute risk management processes that: (1) identify and assess risk areas; (2) develop and execute risk mitigation or elimination strategies; (3) track and evaluate mitigation efforts; and (4) continue mitigation activity until risk is eliminated or its consequences reduced to acceptable levels.



### Figure 4.13-1 Risk Characterization

Risk management applies to all levels of FAA activity, from small projects to large programs. It applies to such risk areas as cost, schedule, technical, system safety, all security disciplines, human factors, operability, producibility, supportability, benefits, management, funding, and stakeholder satisfaction (e.g., Congressional and aviation community priorities; union concerns). The following examples illustrate key elements of risk management:

- **Service-level risk management.** Risk management during service analysis identifies and characterizes risks to the FAA's ability to execute its legislated responsibilities and satisfy customer demands for service. Typically, these risks arise from changes in the operational environment and shortfalls in operational capability.
- **Investment analysis risk management.** Risk management during investment analysis shall ensure primary risks associated with alternative solutions to mission need are identified and evaluated fully. Sufficient time and money must be included in the acquisition program baseline of a solution selected for implementation to mitigate risk and achieve program success.
- **Program risk management.** Service organizations shall apply risk management throughout the lifecycle of their products and services. The focus is on early detection and reduction of risk to avoid the greatly increased cost of dealing with the consequences of risk later in the lifecycle. Risk management planning and risk-mitigation actions are documented in the OMB Major IT Business Case and the implementation strategy and planning document. Appropriate risk management requirements and activities are also included in any prime contract for products or services. Risk management continues throughout in-service management, with the assessment and adjustment of mitigation efforts to reduce the consequences of risk to an acceptable level.
- **Security Risk Management.** Vulnerabilities and risks within FAA programs must be reduced to acceptable levels for all identified threats that could result in quantifiable injury to personnel, loss or destruction of critical assets, or disruption of FAA information systems, including mission-critical NAS operational systems and mission support and administrative systems. Offices sponsoring or executing programs shall implement and maintain lifecycle security risk management for each investment program. Lifecycle security risk management shall be an integral part of program concept, planning, engineering design, and implementation, and shall be maintained and modified throughout the lifecycle, as required. The methodology for quantifying and measuring asset criticality, along with identifying levels of vulnerability and risk shall meet or exceed the lifecycle risk management process guidance in FAST.
- **Human factors risk management.** Human factors risk management shall ensure effective human / system interaction and performance. Human issues such as usability, operational suitability, personnel and training costs, and user performance must be evaluated during concept and requirements definition and investment analysis as FAA needs are defined and alternative solutions are evaluated. During solution implementation, human factors must be fully integrated into planning and execution of the overall program to foster safe, effective human / product performance and ensure user acceptance of the final product.

#### **4.14 Data Standardization and Management** Revised 7/2008

The FAA applies data standards to facilitate data sharing across systems, programs, government agencies, and industry. Data standardization improves the transportability of data, facilitates cost-effective development and re-engineering, and improves the quality, utility, and integrity of FAA information products and resources. The FAA data management program consists of data registration, data standardization, data certification, and lifecycle data management. Policy is in FAA Order 1375.1, FAA Information and Data Management. Guidelines and tools are in FAST.

#### **4.15 Post Implementation Review and Operational Analysis** Revised 11/2009

##### **4.15.1 Post-Implementation Review** Revised 1/2013

The post implementation review is typically a one-time review to determine the following:

- Are actual costs, performance, and benefits achieving baseline expectations and if not, why not?
- Is the asset enabling the agency to provide the intended service or do we need to make changes?
- Are there any systemic issues that need to be fixed before widespread deployment?
- Are there process or implementation issues we need to strengthen or improve?

The scope and content of the post-implementation review depends on the acquisition category to which the investment program is assigned. The PIR may include the examination of risks, requirements, customer feedback, and cost/schedule performance. The output is a comparison of actual program costs, schedule, performance, and benefits as specified in the business case and acquisition program baseline or execution plan, and actual results as deployed. PIRs may also be conducted on families of related programs intended to achieve composite service outcomes, as directed by the Joint Resources Council or Director of the performing organization.

The PIR is typically conducted 6 to 24 months after an asset first goes into operational service or as determined by the Joint Resources Council for families of related programs. The Director of the performing organization funds the review, determines the factors and sub-factors that comprise the review based on acquisition category, staffs the review team, plans the review, and executes PIR processes. The Director of the performing organization develops a plan of action and milestones to address findings of the review. The Director of the performing organization reports PIR exceptions, which cannot be managed by Directorate resources, to the Joint Resources Council, vice-president or equivalent, and/or key stakeholder organizations, as appropriate.

The PIR Quality Officer ensures the review is planned and conducted in an unbiased manner and consistent with agency standards. The PIR Quality Officer participates in PIR processes and maintains agency records of PIR strategies, plans, reports, exception reports, and plans of action and milestones. Go to [Post Implementation Review Guidance](#) to find out how to conduct a PIR and report results.

##### **4.15.2 Operational Analysis** Revised 11/2009

Operational analysis is the process by which FAA evaluates the ability of in-service assets to continue to provide the service for which they were procured. It answers the following questions:

- Are actual operating costs comparable to estimates in the business case analysis report?
- Is the asset operating with a sustainable design?
- Can the asset continue to meet the business needs and performance goals of the agency?
- Is the asset continuing to meet stakeholder needs?

Operational analysis consists of gathering and analyzing reliability, maintainability, and availability data (using the National Airspace System Performance Analysis System); managing supportability information to determine whether an operational asset can continue to provide the expected service for its intended life, monitoring cost data to ensure actual costs are in line with planned costs; and managing asset viability against stakeholder needs. Results are fed into the FAA's planning and investment analysis processes by the Directorate, when warranted, as a basis for determining whether an asset may need to be modernized, replaced, or removed from service. Operational analysis begins when an asset first goes operational and continues until it is removed from service. Operational analysis data is also used in the evaluation of asset readiness status. Operational analysis is the responsibility of the Directorate of the performing/service organization. Go to [Operational Analysis Guidance](#) to find out how to conduct operational analysis and report results.

#### **4.16 Earned Value Management** Revised 7/2016

Organizations responsible for FAA capital investment programs that involve development must comply with federal regulations as required by OMB Circular A-11 and other relevant OMB Memoranda regarding earned value management (EVM) as it applies to both government and contractor development efforts regardless of contract type. The FAA uses EVM to manage development activities by providing timely, accurate, and integrated cost, schedule, and technical performance information.

EVM requirements are documented in the EVM Determination for each program by the EVM Focal Point prior to a Joint Resources Council (JRC) Investment Analysis Readiness Decision (IARD), Initial Investment Decision (IID), Final Investment Decision (FID) or Baseline Change Decision (BCD). However, the JRC may designate any program for the implementation of EVM at the program level or to any type of development contract based on an assessment of cost, schedule, and technical risk of each effort.

##### **4.16.1 Program EVM Requirements** Revised 7/2016

All FAA programs identified as major programs for reporting to OMB must establish a program management and control system using the principles of an EVMS in Electronic Industries Alliance (EIA)-748. EVM data is extracted from the management and control system and reported to DOT for submission to OMB on a monthly basis. The program EVM system must be consistent with the program management and control strategy in the JRC approved implementation strategy and planning document. The program must create the necessary program management information, including the Program level Performance Measurement Baseline (PMB) and supporting



documentation for its program integrated baseline review (IBR). The program will facilitate the conduct of the IBR which will be overseen by an FAA team of subject matter experts formed and led by the EVM Focal Point as part of the oversight role.

The EVM Focal Point conducts program level surveillance on all major programs.

#### **4.16.2 Contractor EVM Requirements** Revised 7/2016

Implementation of EVM on development contract efforts is based on an assessment of cost, schedule, and technical performance risk of each contract. Implementation must be consistent with the program and contract management strategy in the implementation strategy and planning document.

Contractors are required to apply earned value management to development contracts over \$50 million and use a certified/validated EVM system (EVMS) for reporting. For development contracts between \$20 and \$50 million, the contractor management control system must comply with the EIA-748 guidelines as tailored by the program manager, contracting officer, and EVM Focal Point but a certification/validation of the contractor EVM system is not required.

The JRC may designate the application of earned value management to any development contract based on an assessment of cost, schedule, and technical risk of each contract. The contractor must provide an Integrated Program Management Report (IPMR) and participate in government led integrated baseline reviews.

The EVM Focal Point conducts contractor EVMS surveillance.

#### **4.16.3 Contractor Management Control System Certification** Revised 2/2015

The contracting officer assisted by the EVM Focal Point validates the contractor management control system as meeting contract management control requirements. The EVM Focal Point assesses contractor implementation of its management control system and monitors application to ensure compliance. Contractors not in compliance with the EVM requirements of a contract are subject to payment withholding in accordance with AMS clause 1.13-7 “Earned Value Management System – Withholding of Payment”. The EVM Focal Point determines whether a contractor requires an EVM system certification review or whether an existing certification is acceptable. The EVM Focal Point establishes agreements with other government agencies to recognize contractor EVM certifications and surveillance reports.