SUBJ: Aircraft Certification Service (AIR) Information Technology (IT) Agility

1. Purpose of This Order. This order establishes the organizational and procedural framework for implementing and maintaining the development of IT tools/systems within the Federal Aviation Administration's (FAA) Aircraft Certification Service (AIR) in order to address immediate and long-term IT needs. It incorporates by reference FAA and AIR Information Technology governance.

2. Audience. All AIR employees who interface with AIR IT tools and systems.

3. Where Can I Find This Order? You can find this order on the MyFAA Employees website at http://www.faa.gov/regulations_policies/orders_notices.

4. Additional Reference. The processes, roles and responsibilities of this order align with and compliment FAA orders pertaining to IT in addition to Order 1375.1E, *FAA Information/Data Management* and can be found at: http://www.faa.gov/regulations_policies/orders_notices.

5. AIR's Approach to Development under AIR IT Agility. IT assets play an increasingly important role in AIR's daily business and operations. Our business processes have become more dependent on both FAA developed IT applications and Commercial off-the-Shelf (COTS) software and hardware provided to our employees. As our business processes transform, we need our IT systems to be able to transform as well. To accomplish this, AIR will: (1) increase our communication within the FAA and with industry, collaborating better to ensure our technology is strategically developed with the needs of the aviation industry in mind; and, (2) revise our policies, business processes and organizational structures to meet this transformation with IT and business agility. AIR developed the concept of IT agility as a holistic system for how AIR will address its IT needs at the local, national and enterprise levels in order to meet its strategic priorities. This concept will leverage innovation and skills within the AIR workforce to help better meet our IT needs.

6. AIR IT Solution Delivery – Three Tiers. In an effort to make our IT solutions more agile, flexible, and responsive to the changing environment, AIR has defined three tiers of IT application development:

a. Tier I – Local Application Development. Development of applications by AIR employees who develop, maintain, and support an IT solution that automates a specific task or function to support the local needs of a particular branch. In some instances, these "locally

developed" IT tools may become a viable solution for the same or similar activity in another AIR office. The approval of Tier I occurs within the local office.

   b. **Tier II – National Application Development.** Development of applications by AIR employees in order to provide IT solutions that are scalable, and can meet the needs of multiple offices. This increased scope and complexity will require greater oversight and coordination and utilizes AIR-900 development processes.

   c. **Tier III – Enterprise Application Development.** Development of applications in which AIR engages with AIT to create IT solutions to meet the needs of AIR. These projects typically employ the use of AIT to manage the project, AIR to act as subject matter experts, and software development contracts to develop the system.

Table 1, Application Tiers defines the characteristics of the three tiers. Appendix B, Determination of Application Tiers defines the criteria used to determine the appropriate tier. Simple IT solutions that do not meet the criteria of a Tier I, II, or III application are outside of the scope of this order. For information on IT development requests, see Appendix C, AIR IT Development Request Process.

Table 1. Application Tiers

	Tier I	Tier II	Tier III
Scope	Single branch	Multiple branches	All of AIR, and may include other services
Developed and maintained using	AIR employee, usually within the branch with the need	AIR-900 development processes	A partnership with AIT, usually using contractors
Tools used to develop	Typically COTS, may use FAA-approved development tools	Typically FAA-approved development tools, may incorporate COTS	At the discretion of AIT and resources
Decision authority	Local branch only	AIMEC	AIMEC and AIT

COTS = Commercial Off The Shelf software
AIMEC = AIR Information Management Executive Committee

7. **AIR IT Governance.**

   a. **Oversight.** The AIR Information Management Executive Committee (AIMEC) provides executive-level oversight, policy and direction for AIR's IT Agility Program.

   b. **Partnership – AIR and Office of Finance and Management (AFN), Information & Technology Services (AIT).** AIT is responsible for FAA IT governance and IT tools/systems development. In recognition of the need to apply the principles of IT governance and to ensure continued collaboration on development of AIR's IT needs, AIR and AIT will ensure the mutual support needed to ensure successful IRM implementation, including AIR IT agility.
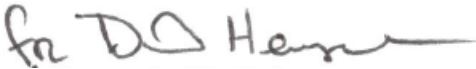
8. AIR IT Development Processes. In order to address Tier II IT development needs, AIR-900 will provide employees with appropriate corporate knowledge and IT processes to deliver solutions that support AIR's IT agility needs. AIR employees will work in partnership with AIR-900 on IT development projects, and they will follow AIR and FAA/AIT requirements, policies, and standards. The following are key elements of AIR IT development:

    a. Adherence to Policy and Procedures. AIR and FAA/AIT requirements, policies, and standards will be followed on all Tier II IT development projects. Throughout the lifecycle of IT development projects, processes will be followed to collaborate with affected stakeholders, AIR-900, and AIT to ensure the IT tool meets the needs of the requesting office and satisfies all AIT development requirements.

    b. Oversight. AIR-900 provides oversight of the AIR IT development processes. In coordination with AIT, AIR-900 will monitor IT development projects and deployed tools to ensure compliance with AIR and FAA IT governance, policies and standards. AIR-900 will coordinate knowledge sharing between AIR employees to foster a collaborative development environment. If AIR IT development processes are not followed on an IT development project, AIR-900 may remove access to development servers and IT tools when deemed necessary to protect the integrity of the FAA's IT enterprise.

9. Applicability. This order applies to all AIR offices and employees.

10. Distribution. Distribute this order to all the branch level offices within the Aircraft Certification Service, and the Regulatory Support Division at the Aeronautical Center, and to the Office of Finance and Management (AFN), Information & Technology Services (AIT).

Dorenda D. Baker
Executive Director
Aircraft Certification Service

Appendix A. AIR IT Agility Roles and Responsibilities

These Roles and Responsibilities are in addition to the procedural steps defined in Appendices B and C.

1. Requestor.

By approving the IT tool development request, the manager of the requesting office agrees to own and support the Tier I or Tier II tool during its development and lifecycle.
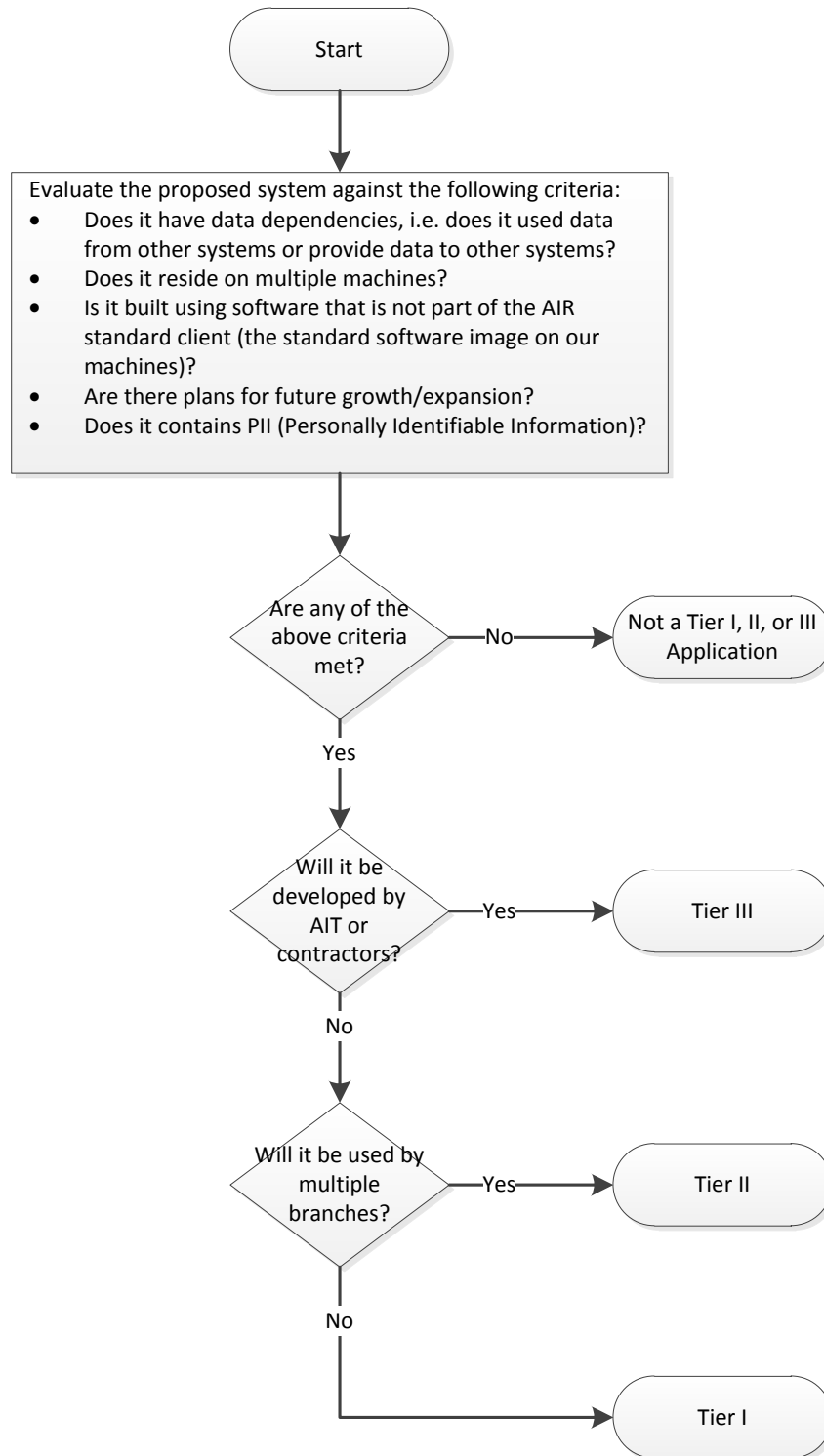
2. AIR-900.

a.   Provides support to and communicates with various stakeholders, such as the requestor, AIR employees, management, and AIMEC, in the project approval and tool development processes.

b.   Oversees access to development environments and tools to ensure the integrity of the FAA enterprise.

c.   Works with various stakeholders, including AIT, throughout the IT development to ensure adherence to IT development requirements, policies and standards, and to help ensure that user needs are met.

d.   Identifies and coordinates the funding needs and sources for IT development projects.

e.   Recommends to the AIMEC the order of priority for IT projects, considering both available funds and the need to fund maintenance of existing IT tools while also supporting the development of requested IT tools.

f.   Review and approve final delivered Tier II products before going to production.

g.   Maintain an inventory of AIR's Tier I, II, and III applications.

3. AIR Employee.

a.   Coordinates with AIR-900, other AIR employees, affected users, and other stakeholders on approved IT development projects.

b.   Complies with AIR-900 development processes and AIT IT development policies, standards, and guidance.

4. AIR IT Information Management Executive Committee (AIMEC).

a.   Provides executive direction and guidance for AIR's IT Agility Program.

b.   Approves Tier II and III projects.

c.   Serves as the final appeal authority regarding decisions made by AIR-900.

Appendix B. Determination of Application Tiers

Figure B-1: Flow Chart

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                        ┌──────────┐
                        │  Start   │
                        └────┬─────┘
                             │
                             ▼
  ┌────────────────────────────────────────────────────────┐
  │ Evaluate the proposed system against the following      │
  │ criteria:                                                │
  │  •  Does it have data dependencies, i.e. does it used    │
  │     data from other systems or provide data to other     │
  │     systems?                                             │
  │  •  Does it reside on multiple machines?                 │
  │  •  Is it built using software that is not part of the   │
  │     AIR standard client (the standard software image on │
  │     our machines)?                                       │
  │  •  Are there plans for future growth/expansion?        │
  │  •  Does it contains PII (Personally Identifiable        │
  │     Information)?                                         │
  └────────────────────────────┬───────────────────────────┘
                               │
                               ▼
                    ◇ Are any of the                    ┌──────────────────────┐
                      above criteria ◇ ──No──►  │ Not a Tier I, II, or III │
                          met?                         │      Application        │
                                                       └──────────────────────┘
                           │
                          Yes
                           │
                           ▼
                    ◇ Will it be
                      developed by ◇ ──Yes──►  ( Tier III )
                        AIT or
                      contractors?
                           │
                          No
                           │
                           ▼
                    ◇ Will it be used by
                        multiple       ◇ ──Yes──►  ( Tier II )
                        branches?
                           │
                          No
                           │
                           ▼
                                               ( Tier I )
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Appendix C. AIR Local IT Development Request Process

Figure C-1: Flow Chart
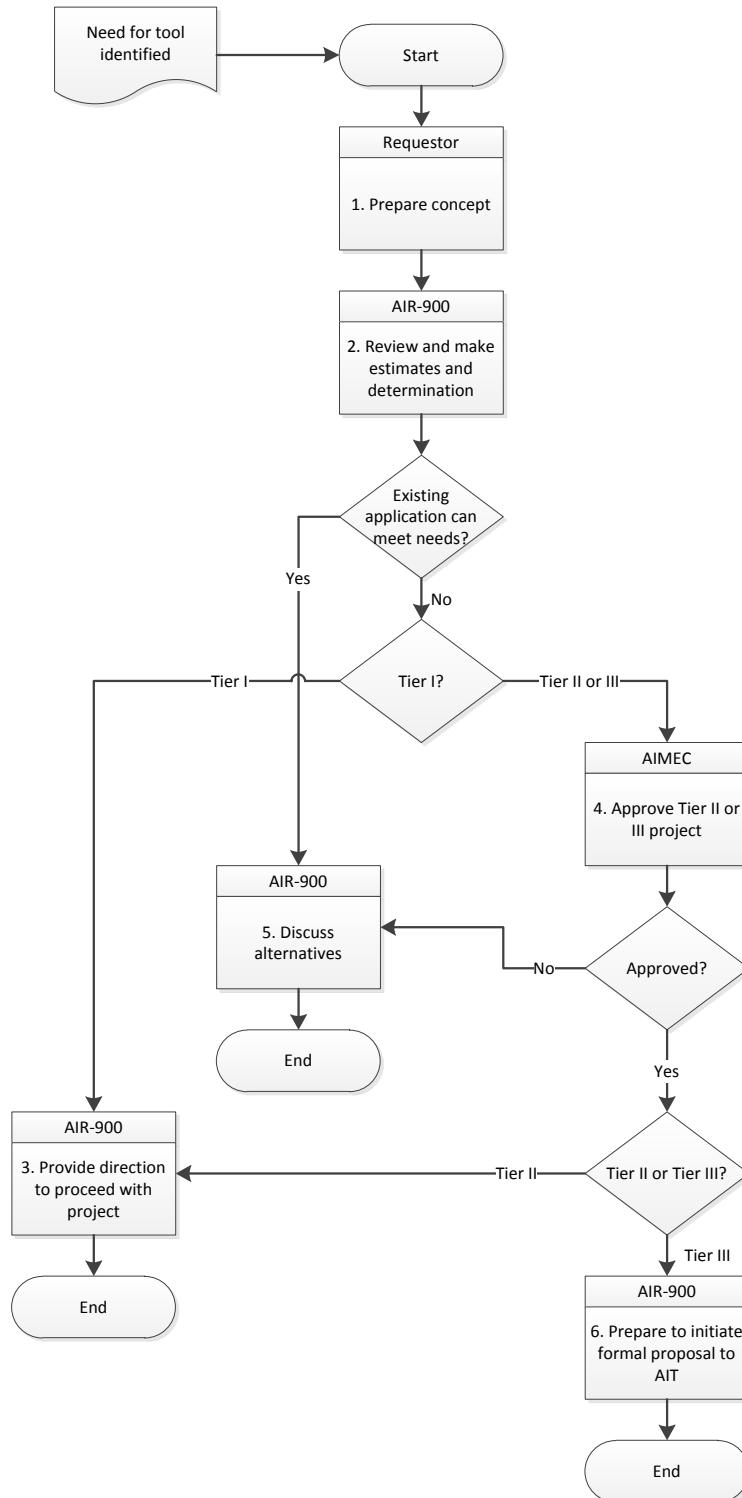
Process Narrative:

This section outlines the process for starting a new local IT development project. See Figure B-1 for the sequence of steps. The sections below provide additional details, if required, for the like-numbered process steps. Steps with an [R] are required.

1. **Prepare concept (Requestor).**

    a.   Optionally, discuss in advance with AIR-900 to understand if a similar tool already exists and what is expected in a concept of operation document.

    b.   [R] Obtain manager approval to request the development of a new tool.

    c.   [R] Obtain concurance of the business process owner if the proposed tool will automate part, or all, of a business process that the requestor does not own.

    d.   [R] Prepare a concept of operation document containing a brief description of the proposed application, the size of the anticipated user community, and what organizations will use the application. Provide document to AIR-900.

2. **Review and make estimates and determinations (AIR-900).**

    a.   Review the document to ensure that all necessary information has been provided. If necessary, contact the requestor for missing information or to recommend any modifications that would be needed for approval.

    b.   [R] Look into existing or legacy AIR applications to determine if any can satisfy the needs of the particular business area.

    c.   [R] Make the determination whether the request falls into Tier I, II, or III development.

    d.   Determine initial estimate of the level of effort and priority for the project.

    e.   Develop an initial cost estimate and identify possible sources of funding.

    f.   Determine the skills needed to develop the requested IT tool.

    g.   Recommends the appropriate resources to work on the project.

3. **Provide direction to proceed with project (AIR-900).**

    a.   Notify the requestor that the project has been approved.

    b.   Discuss with the requestor the determinations and estimates made regarding resources needed, skills needed, and potential funding sources.

    c.   Coordinate with the AIT POC for any current AIT requirements.

    d.   Notify the AVS Customer Representative (for courtesy and any needed guidance.)

4. Approve Tier II or III project (AIMEC).

a. [R] Make determination of whether or not the project will proceed.

b. Identify which offices will participate in the project.

c. Make decisions regarding resources and funding.

d. Define the priority of the project.

5. Discuss alternatives (AIR-900).

a. Where an existing or legacy AIR application can satisfy the needs, discuss with the requestor how that application can be used.

b. Where a request is not approved, notify the requestor and discuss with them any alternative methods that can be used to meet the needs.

6. Prepare to initiate formal proposal to AIT (AIR-900).

a. Work with requestor and AIMEC to prepare required documentation to submit formal Tier III proposal.

b. Submit the proposal to AIT for formal review.

Appendix D. FAA Form 1320-19, Directive Feedback Information

Directive Feedback Information

Please submit any written comments or recommendations for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: FAA Order 1370.122

To: AIR Directives Management Officer via email at 9-AWA-AVS-AIR-DMO@faa.gov or complete the online form at the FAA Directive Feedback System

(Please check all appropriate line items)

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows:
   (attach separate sheet if necessary)

☐ In a future change to this directive, please include coverage on the following subject
       (briefly describe what you want added):

☐ Other comments:

☐ I would like to discuss the above. Please contact me.

Submitted by: _____ Date: _____

FTS Telephone Number: _____ Routing Symbol: _____

FAA Form 1320-19 (10-98)