ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

1370.76A

12/4/98

SUBJ: AIRCRAFT CERTIFICATION INFORMATION RESOURCE MANAGEMENT (IRM) PROGRAM

1. PURPOSE. This order identifies the objectives, responsibilities, strategy, and general requirements for the Information Resource Management (IRM) program of Aircraft Certification Service (AIR). The order also describes the process by which automation projects within AIR are initiated and implemented.

2. DISTRIBUTION. This order is distributed to the branch level within the Aircraft Certification Service in Washington and Brussels, the Aircraft Certification Directorates in the regions, and the Regulatory Support Division at the Aeronautical Center. This order is also distributed to the regional Financial and Information Resources Divisions, Office of Regulation and Certification, IRM offices, and the Office of Information Technology (AIT).

3. CANCELLATION. Order 1370.76, Aircraft Certification Automation Program, dated January 21, 1992, is cancelled.

4. BACKGROUND. The Aircraft Certification Service IRM Strategic Plan provides the strategic overview and systems plan for the application of state-of-the-art computer technology to satisfy the information needs of AIR. This plan stresses how each person's work environment and how they do their jobs can be impacted. Participation from all levels within the organization is essential in order to achieve the challenging goals and objectives of this program. AIR believes that the future of IRM in the FAA is the development of information support systems that are user approved. AIR recognizes that information management can only be effective if automatic data reporting processes are developed by those who have manually executed those same processes repetitively. The long term goal of Aircraft Certification is to develop and implement a cost-effective, fully integrated, comprehensive, and automated certification and safety information system that will meet the needs of all organizational elements within the Service and its customers. The Information Systems Steering Group (ISSG), a management-level group within the Aircraft Certification Service, was established to provide strategic oversight of the IRM program, e.g., electronic telecommunications capability, standards, automation project development oversight.

5. DEFINITIONS. This section provides definitions of terms that are used throughout this order.

a. Automatic Data Processing (ADP) includes five main functions which encompass the collection, communication, computation, control, and coordination of information. These functions are described further as:

(1) Collection of information through data collection equipment.

(2) Communication between man-machine, man-man, and machine-machine, through generating and regulating the flow of data collected.

(3) Computation with the information, such as data logging, data analysis, and data processing with the help of mathematical formulations.

(4) Control of operations, both human and mechanical, on the basis of information analysis.

(5) Logical coordination among the preceding four functions.

b. Business Plan - Within the Aircraft Certification Service, this is the synthesis of its fiscal year budget and strategic plan.

c. Compatibility - Compatibility is a term applied to both hardware and software systems to describe the ease with which a computer program running on one machine may be made to run on another machine. Hardware compatibility is achieved through similarity of instruction sets (or the ability to simulate similarity of instruction sets), whereas software compatibility deals with the use of a language that can be translated into the (perhaps very different) instruction sets of several machines. Two computers are said to be software compatible with respect to a particular language if a source program from one machine in that language will compile and execute to produce acceptably similar results on the other. Computing equipment and compilers of particular manufacturers have been deliberately designed so that programs running on competitive equipment can be easily converted to run on their systems. Conversely, equipment and systems have also been designed to maximize the difficulty of converting programs so that they cannot be run on competing equipment or systems. The result has been that true compatibility is almost never achieved between equipment from different manufacturers.

d. Hardware - The equipment that is used to run the software programs, i.e., computer/terminal, printers, plotters, cables, etc.

e. Information Resource Management (IRM) - The planning, budgeting, organizing, directing, training, promoting, controlling, and management activities associated with the collection, creation,

use, and dissemination of information by agencies, and includes the management of information and related resources, such as Federal information processing resources.

f. Interchangeability - Interchangeability when used in automation has the same meaning as used in other disciplines. It is permitting mutual substitution without loss of function or suitability.

g. Local Automation Programs - Programs that are established to develop, implement, and automate processes and information systems that will reside on hardware within the interfacing office and will not interface with systems outside the office.

h. National Automation Programs - Programs that are established to develop, and implement, automated work processes and information systems that are relevant to the Aircraft Certification Service and its customers.

i. Portability - It often happens that a program that runs on one computer is required on a second computer that is of a type different from the first. If the program has been written in a flexible way and such a transfer can be made easily, the program is said to be "portable." A program written in an assembly language is tied to a particular computer and therefore is not portable. On the other hand, a program encoded in a machine-independent, higher level language may be portable. When talking of portability, one cannot ignore the question of efficiency. If a program is transferred from one computer to another, but runs unnecessarily slow or occupies excessive storage on the second computer, then it is not truly portable.

j. Regional Automation Programs - Programs that are established to develop, implement, and maintain automation and information systems that are controlled by the regional Resource Management Divisions, AXX-40, in the Central, Southwest, New England, and Northwest Mountain Regions.

k. Software - The instructions used by computer hardware to process pre-programmed commands and the supporting documentation, including user manuals, templates, etc.

6. OBJECTIVES.

a. The objectives of this order for the IRM program are to ensure that:

(1) The benefits of automation and information systems exceed the the cost to develop and maintain these sytems. An appropriate analysis should be conducted which weighs the system benefits to the Service versus the total cost of ownership.

(2) Adequate policies, procedures, and guidelines are developed for the use of automation and information systems.

(3) All aspects for implementing a new system are addressed, i.e., training, workload, assignments, responsibility, maintenance, human resources, etc.

(4) Automation programs support AIR's business plans and the FAA's Strategic Plan.

(5) Automation programs are given adequate priority throughout their life cycle.

b. Automation programs for the Aircraft Certification Service will provide:

(1) Tools to assist in the accomplishment of the Aircraft Certification Regulatory Program, to increase personnel productivity, and to accumulate information for the purpose of resource justification and management decision making.

(2) Assistance to the work force in their accomplishment of the day-to-day activities by automating their tasks where appropriate.

(3) An accessible repository of information resulting from the accomplishment of the above activities that will satisfy the information needs of the FAA and of the aviation community.

(4) For minimal data input from those performing aircraft certification regulatory tasks to provide resource utilization information required for budget justification and resource allocation decision making.

7. RESPONSIBILITIES. An Information Systems Steering Group (ISSG) will manage the automation programs for the Aircraft Certification Service through the policies, procedures, and guidelines established by this order. The ISSG is a management-level group composed of the Assistant Manager of each of the directorates, AIR-100, AIR-200 (management selected representative); Manager, Automated Systems Branch, AIR-520; Manager, Engineering and Manufacturing Branch, AFS-610, Aircraft Certification Management Team (ACMT) linking member, Aircraft Certification Office Management Team (ACOMT) linking member, and Administrative Support Team (AST) linking member. The group will be accountable to the ACMT. The ISSG will be supported by the Planning and Program Management Division, AIR-500, Information Systems Users Groups, and Information System Focal Points (ISFP). Observers from recognized management teams are invited to attend pending approval of the ISSG.

a. Information Systems Steering Group (ISSG). The Information Systems Steering Group will be chaired by the Manager, Automated Systems Branch, AIR-520, and is responsible for:

(1) Recommending policies, procedures, and guidelines for automation programs within the Aircraft Certification Service.

(2) Recommending budget criteria for automation programs throughout the annual budget formulation process.

(3) Approving the automation requirements, design, and implementation plans developed under the direction of the Planning and Program Management Division, AIR-500.

(4) Evaluating the progress of automation programs on a minimum semiannual basis and determining any changes that may be necessary to the policies, procedures, and guidelines.

(5) Appointing representatives from within their respective component of the Aircraft Certification Service organization to serve on Information Systems User Groups (ISUG) and as Information Systems Focal Points (ISFP).

(6) Prioritizing automation programs.

(7) Recommending new national subsystems and resource commitments to the Director of Aircraft Certification Service through the ACMT. For local automation programs, the respective ISSG member and ACMT member will be responsible for making the final decision on their Directorate's system go-head when resources are committed within their own program.

(8) Working with the AST to ensure that the IRM budget and the operational budget combine to properly reflect AIR business needs and priorities.

(9) Establishing a Strategic Plan that supports the objectives of this Order.

(10) Informing respective directorate and division management teams (MT's) of the activity within the IRM program.

b. ISSG Project Sponser. The ISSG Project Sponsor is a member of the ISSG and is identified with an automation project as that project's management level stakeholder. The member is responsible for:

(1) Attending Information Systems User Group (ISUG) meetings for projects the member has been assigned as sponsor.

(2) Ensuring that ISUG members are able to productively contribute to the project.

(3) Ensuring that the ISUG functions within its charter.

(4) Keeping other ISSG members informed about the progress of the project.

(5) Working with AIR-520 project manager to ensure that the project is accomplished within the intent of the ISSG and to resolve ISUG process problems.

c. Planning and Program Management Division, AIR-500. AIR-520, a branch of the Planning and Program Management Division, AIR-500, is responsible for:

(1) Chairing the Information Systems Steering Group.

(2) Ensuring compliance with DOT/FAA directives and policies established by the Office of Information Technology relating to the automation programs within the Aircraft Certification Service.

(3) Assisting the ISSG in developing, maintaining, and executing the ISSG Strategic Plan.

(4) Assisting the ISSG in establishing the budget criteria for hardware, software, maintenance, training, etc., required for AIR national programs and to use this criteria when they are assessing the automation needs for the FY Call for Estimates.

(5) Organizing and chairing user groups that may be necessary to determine requirements for new automation programs. Notices and minutes of meetings will be sent to appropriate ISUGs or ISFP members with copies to Directorate Administrative Support Staffs (103's) and ISSG members.

(6) Providing guidance, direction, and technical expertise for implementing a computer application system which successfully serves the Aircraft Certification Service. Ensuring that applicable standards are met, and that compatibility, interchangeability, and portability features are considered.

(7) Coordinating the Aircraft Certification Service's requirements for automation programs with AVR organizational components and ensuring that these requirements are implemented properly.

(8) Assisting the Planning and Program Management Division in preparing an evaluation report of the IRM program for the ACMT periodically concurrent with regularly scheduled ACMT meetings.

(9) Meeting with the management teams and special subject teams, e.g. staffing standards team, to inform and obtain information regarding the AIR IRM program.

(10) Administering the budget resources for the execution of Aircraft Certification Automation Program and, as Information Resource Manager (IRM), approving the acquisition of all AIR automation hardware, software, telecommunications, and those support activities which impact national automation programs. The support activities include training methodologies, plans, and execution. (FAA policy requires IRM approval of all ADP

acquisitions. Directorates may use appropriate local IRMs to approve acquisitions that do not impact AIR national programs.)

d. Administrative Support Staff (AST). The AST includes the principals in each Division and Directorate responsible for budget formulation and execution. The Staff is responsible for:

(1) Budget formulation and acquisition of maintenance support for automation hardware.

(2) Budget formulation and acquisition of automated data processing equipment (ADPE) and relevant training in support of local needs.

(3) Assisting the ISFP's in ensuring that national IRM standards are maintained.

(4) Supporting deployment of national systems as required, e.g. training, travel.

(5) Working with ISSG to ensure that the IRM budget and the remaining operational budget combine to properly reflect AIR business needs and priorities.

e. Information Systems Focal Points (ISFP). ISFP's are knowledgeable in the technical hardware and software of automation computer systems and provide oversight of the day-to-day operations and advice on plans and specifications. ISFP's represent each AST member from each of the directorates and divisions. Information Systems Focal Points are responsible for:

(1) Implementing and controlling automation programs within their assigned directorates/divisions and for providing guidance to automation staff in remote field locations. This includes maintaining inventory records of computer hardware, software, and documentation, coordinating training programs, maintenance programs for hardware, procuring of supplies, maintaining system configuration, and general administration of local systems, etc.

(2) Assuring the maintenance of an on-site library pertinent to IRM that contains user manuals, microfiche, system descriptions, procedures, orders, directives, etc., that support on-the-job training (OJT) activities, standard operating procedures, and system configuration and maintenance activities.

(3) Establishing the specific requirements for implementing hardware and software necessary to implementing and maintaining local area networks where they are required.

(4) Facilitating the exchange of information between directorates, field offices, and headquarters relating to the implementation and operation of automation programs within the Aircraft Certification Service.

(5) Working with ISSG's to identify problems and/or enhancements with automation and information systems.

(6) Assuring the maintenance of security procedures for access to local systems and ensuring that procedures are defined for encouraging backup of all mass storage devices, e.g. hard disks.

(7) Keeping ISSG and AST members apprised of ISFP meetings and results of the meetings.

f. Information Systems User Groups (ISUG). Members should have working knowledge of the information requirements and/or work processes which are being automated or have been automated. Information Systems User Groups are supported by AIR-520 personnel, or their designees, and are composed of representatives from each of the directorates and headquarters divisions as appropriate. Representatives from AFS-610 will be requested by the ISSG sponsor to attend meetings of the User Group as appropriate. Representatives to each user group will be expected to be an active knowledgeable participant in the application of concern for the respective group. Each ISUG is responsible for:

(1) Establishing the detailed requirements for specific automation and information systems.

(2) Ensuring that detailed requirements established for specific automation and information systems comply with the automation environment established by this order.

(3) Ensuring that all the user requirements of automation and information systems are included in the Requirements Document.

(4) Ensuring the development of an orderly implementation program, assessing the benefits gained by the new system, identifying problems, appropriate training, and recommending enhancements and/or deficiencies to the Planning and Program Management Division, AIR-500, for corrective action.

(5) Keeping ISSG members apprised of meetings and results of the meetings.

(6) Select a system design that is cost/beneficial to AIR.

(7) Act as a change agent to successfully deploy the automated system. This will require that each member maintain constant communication with the organization represented respective to the decisions and progress made by the ISUG. In addition, the member is expected to solicit ideas, comments, and suggestions from peers and management concerning those same decisions as well as to be used as a basis for further ISUG decision making.

g. Staff Office, Office, and Branch Managers. Staff office, office, and branch office managers are responsible for:

(1) Supporting the Aircraft Certification Service automation programs by dedicating staff resources when required to formulate the requirements of a new system or enhancement of a production program.

(2) Ensuring that adequate procedures are in place for implementing a new system and that old procedures are terminated when replaced with new ones.

(3) Ensuring that the training required to support automation programs is provided.

(4) Ensuring the integrity and accuracy of data stored in information systems by monitoring the data through the use of information reports.

h. Users. Users are responsible for:

(1) Working with Information Systems User Groups and Information Systems Focal Points to identify program requirements for new systems and deficiencies with existing systems.

I. Management Teams. Management teams are ACMT recognized groups of peer level managers representing common functional organizations, e.g. ACOMT, MIMT, AST, SMT. Members of these groups have an important mission to play in the successful application of information technology (IT) to business processes. Members of these teams are responsible for:

(1) Providing to the ISSG linking member personnel to ISUG groups who has the knowledge, skills, and attitude that will productively contribute to the chartered mission of the ISUG.

(2) Proactively support deployment of new business process applications and automated information systems.

8. STRATEGY. The strategy for developing automation and information systems will be to establish an IRM strategic plan which is aligned with AIR's business plan and the agency's Strategic Plan. The IRM strategic plan will identify the appropriate areas which require the application of IT. The development of systems will use a structured systems analysis approach applying the principles of total quality management. Structured systems analysis breaks down a system into manageable pieces or modules that can be managed throughout the life expectancy of the system. Structured systems analysis uses data flow diagrams, a data dictionary, structured English, decision tables, and decision trees, in a controlled documentation environment to systematically analyze problems and determine their resolution prior to and after system design and implementation. It also provides a method for communicating a system's design among the members of a large design team and among the Information Systems User Groups. The principles of total quality management emphasizes

the need to identify customers for the purpose of addressing their needs as defined by them and establishing a feedback process for continous improvement.

a. General. This strategy focuses on those information systems where the Aircraft Certification Service is the source (and maintainer) of information. Automation programs where the source of information is from outside the Aircraft Certification Service, but whose information is of use to the Aircraft Certification Service, shall be coordinated with the appropriate organizations on a case-by-case basis. Similarly, AIR will work with customers desiring information generated by its own systems to ensure that the information is available, and, where cost-justifiable, can be integrated with the customer's automated system.

b. Baseline. The requirements for automation and information systems will be determined initially by identifying the current environment of manual processes and information requirements, and comparing that environment with the aforementioned strategic and business plan.

c. Standards. General and detailed standards are required to optimize system capability, enhance interoffice efficiency, reduce overhead activity, and minimize training impact. The standardization requirements must consider all aspects for automation and information systems, including human factors, data input, compatibility with national and regional level computer networks, and training.

d. Training. AIR personnel should work with their managers and training coordinators to include, as part of their full service office requirement and Individual Development Plan (IDP), an understanding of automation environments and skills necessary to use associated automated applications. The objectives for training for office personnel are divided into two categories: managers and non-managerial.

(1) Managers. Training objectives include, but are not limited to:

(a) Awareness of the FAA/AIR- wide standards and methodologies, along with the purpose of the standards.

(b) Familiarity with the current and planned FAA/AIR IT environment.

(c) A commitment to promote and support IT standards that will lead to a fully integrated, effective, and efficient FAA/AIR IT architecture.

(d) Knowledge of the costs and benefits of "cutting edge" information technologies and system development methodologies.

(e) Understanding the need for enterprise-wide architecture and security.

(f) Ability to use IT to maintain and increase productivity among the changing workforce.

(g) Identification of realistic opportunities to apply new technology.

(2) Non-managerial employees. The objectives for technical, program support and clerical/secretary personnel are similar, but they are met through different means:

(a) Understanding of automation technology and computer-based systems from the perspective of achieving and maximizing job performance.

(b) Understanding of the overall organizational goals, objectives, and priorities and where they fit into the organization.

(c) Familiarity of the FAA/AIR-wide standards and the purpose of the standards.

(d) A commitment to promote and support IT standards in the development and operation of information systems.

(3) Each division and directorate should prepare a training program implementation plan. The plan should include training requirements, deliverables with schedule. The new personnel and existing personnel, and methods and techniques used to develop the training program, e.g., interviews and observation. A documentation system will be used to define standard operating procedures helping users locate instructions on how to use a specific computer-based or manual system.

(4) Training and personnel coordinators within each division and directorate will develop a plan resulting in appropriate training.

(5) Alternatives for training are:

(a) On-the-job training using standard operating procedures (SOPs), classes, one-on-one training, new personnel orientation program, etc.

(b) Contract with professional and/or academic institutions.

(c) Computer-based instruction (CBI), self study guides, video.

(d) On-line help.

(e) Train-the-trainers approach.

(f) Combinations of any of the above.

(6) National systems developed by Aircraft Certification Service will provide for a training program which will include self-study materials and/or formal classroom training.

(7) Training for local systems will be the responsibility of the organization which developed the particular system.

e. Standard Operating Procedures. For their own local systems each division and directorate should develop standard operating procedures that identify responsibilities for personnel and define their interface with new or existing automated systems, i.e., who is responsible for data entry, ensuring data integrity, acquiring user IDs, etc. Procedures for national systems of interest only to Aircraft Certification will be developed by AIR-520 and approved by the ISSG or appropriate representatives. Procedures for other national systems will be developed in a coordinated effort with AIR-520 and other appropriate organizations, and appropriate Aircraft Certification Service personnel as determined by Division and Directorate managers and directors.

f. Deployment. Each division and directorate should prepare an implementation plan for the orderly deployment of hardware, software, and automated applications within their respective organization. The planning for deployment of national applications should be done in concert with AIR-520.

(1) The detailed plan should be based on needs, feasibility, and risk assessments. It will be the responsibility of each organization's respective ISSG member, AST member, and ISFP to act as a change agent and ensure that affected personnel are suitably prepared for ensuing changes.

(2) Management teams representing affected personnel will be brought into the deployment process and involved as an additional change agent. The team members will be an advocate for the new business process and will coach their personnel regarding their new responsibilities. Management team members will also be responsible for obtaining appropriate training for their personnel.

(3) The plan should comply with national and regional guidelines set forth in relevant IRM policy papers, this order, and other pertinent correspondence that identifies constraints and requirements for automation and information systems. Definition of constraints and requirements will be determined by the parties responsible for the design approval of the system.

g. Computer Inventory. Each division and directorate will establish an inventory of automation hardware and software. The inventory will comply with Federal guidelines for inventory control.

h. User ID's. Each division and directorate should ensure that each person has user ID's and passwords for the systems to be accessed.

9. REQUIREMENTS. This section identifies the general requirements to ensure an orderly development of national, regional and local automation programs.

a. General.

(1) Automation and information systems shall strive to provide an interface to the end-user that is user-friendly.

(2) A security system shall be provided to ensure protection and reliability of automation and information systems.

(3) Hardware and software chosen to be used for application development must adhere to applicable IRM standards. Only when waivers are specifically granted can exceptions be made. Waivers are granted by the Information Resource Manager.

(4) National and local systems should be designed with the expectation that they may have to interface with new and existing systems.

(5) Systems should be delivered with documentation to provide instructions of use and ability to maintain at minimal cost, e.g. program flow charts, program code.

(6) Systems will be developed using system life cycle methodology following Federal Information Processes Standards (FIPS).

b. National Automation Programs.

(1) All platforms, stand-alone microcomputers, local area networks (LAN), wide area networks (WAN), and mainframes, will be evaluated by AIR-520 for appropriate implementation of national automation programs.

(2) When national programs are designed, consideration must be given to the possibility of "queries" from within and outside the Aircraft Certification Service. This would include public access to public information.

(3) System life costs will be considered in the cost analysis of applications prior to decision to begin development.

c. Local Automation Programs.

(1) Software programs which reside on local area networks, and support national programs, must be standardized within each program function. This will ensure data integrity and allow for easy program maintenance on a national scale. The local area network will be capable of data transfer with national programs and other offices within the Aircraft Certification Service.

(2) Local area networks should be integrated with office automation applications such as word processing, spread sheet programs, database, graphics, security, etc., and other ADP capabilities such as printers, modems, etc., in order to effectively use the communication networks.

10. INFORMATION CURRENCY. Any deficiencies found, clarification needed, or improvements to be suggested regarding the content of this order should be forwarded to the Aircraft Certification Service, Automated Systems Branch, AIR-520, Attention: Directives Management Officer, for consideration. Your assistance is welcome. Federal Aviation Administration Form 1320-19, Directive Feedback Information, is located on the last page of this order for your convenience. If an interpretation is urgently needed, you may contact the Manager of AIR-520 for guidance, and you should also use the FAA Form 1320-19 as a follow-up to verbal conversations.

Frank P. Paskiewicz
Acting Director, Aircraft Certification Service

APPENDIX 1. ISSG OPERATING PROCEDURES

1. OPERATIONAL PROCEDURES FOR AUTOMATION PROJECTS. Project initiation will begin with a formal call to all members of the Aircraft Certification Service. This process would be utilized every 3-5 years to identify automation needs for AIR. New projects may also be proposed at any time through the ISSG resulting from Congressional, agency, or ACMT actions. The dates below refer to the chronological schedule for the year of the call.

a. Call for Projects (November 1 - November 22).

(1) The ISSG will initiate a Call for Automation Projects to the entire AIR workforce. This will be accomplished with a letter asking for ideas on national automation projects which would assist personnel in accomplishing their required work functions or providing information necessary for work performance.

(2) Responses to the Call will be accomplished by filling out the attached Project Concept Paper Form which will be forwarded to the relevant ISSG member in the Directorate/Division. Concept papers will be no longer than 3 pages and contain a narrative on the following elements:

(a) Statement of Need.

(b) Organizational Units Impacted.

(c) Description of Work to be Automated.

(d) Costs and Benefits.

(e) Description of Options Considered.

(f) Description of How Function is Currently Being Performed.

(g) Requester's Name, Routing Symbol and Position.

b. Evaluation and Consolidation (Nov. 22 - Dec. 15).

(1) The ISSG will consolidate the concept papers and evaluate each one. Evaluation criteria will include factors such as who would benefit from the proposal; the importance of the function being automated; the extent to which automation would facilitate work functions; and an initial assessment of cost and benefits.

(2) The ISSG will consolidate those concepts which best meet the evaluation criteria with existing automation projects identified in the latest list of project initiatives which will be referred to as the IRM operational plan.

(3) The appropriate ISSG member will notify the person suggesting the project of the disposition of the suggestion.

c. Revised Draft Operational Plan.

(1) The ISSG will develop a revised DRAFT operational plan which briefly describes each project, the intended customer, benefit, and identifies any changes to the existing operational plan. (December 15 - January 15)

(2) The DRAFT plan will be coordinated by AIR-500 and distributed to Field Office and headquarters Branch Level for input. (January 15 - January 29)

d. Finalized Operational Plan (January 29. - February. 14).

(1) The ISSG will consolidate input from Field Offices and Branches to finalize the AIR Operational IRM Plan for AIR-1 signature.

(2) The final AIR Operational IRM Plan will be distributed to all personnel.

NOTE: All dates are tentative.

2. ANNUAL PROJECT PRIORITIZATION (February 14 - March 1). (See paragraph 4 for prioritization criteria).

a. Annual review and prioritization. Annually, the ISSG will review all automation projects and prioritize activities between and within each system.

(1) Priority should be given to ongoing projects in development or test phases, and maintenance and enhancements to existing systems if they are warranted.

(2) Activities within projects can be prioritized as well.

b. Periodic review. The ISSG will conduct a periodic review of those systems not sponsored by AIR to determine the level of support by AIR; e.g., Enforcement Information System (EIS).

(1) AIR-520 will be requested to brief the ISSG on the status of projects.

(2) The ISSG will determine the need to provide a representative to FAA working groups for the projects of interest.

c. Recommendation of priorities. Priorities will be recommended to AIR-520 for input to the formulation of the AIR Annual Business Plan.

d. Revalidation of spending plans and review of project plans. Once funding levels are known, the ISSG will revalidate spending plans and review project plans.

e. Approval of and operation within priorities. Once the ACMT has approved these priorities, and the funding level for automation projects is resolved, the ISSG and AIR-520 are expected to operate within these priorities. If a change is warranted, AIR-520 on behalf of the ISSG must communicate significant changes in operational funding levels or project accomplishments through the AST to the ACMT.

3. PROJECT INITIATION, REVIEW, AND APPROVAL PROCEDURES.

a. Project Initiation.

(1) Initial Concept Paper Development. Projects will be initiated by ISSG approval or mandates from higher levels of authority. Each project will have an Initial Concept Paper containing the information on the attached form.

(2) Once a project has been initiated, the ISSG will establish and appoint members of the project's Information Systems User Group (ISUG). ISUG members will be selected based upon the following criteria:

(a) Members should have a critical operational interest in the proposed system.

(b) Members should have experience with the function being automated.

(3) An ISSG linking member will be identified for each system. The ISSG linking member should be familiar with the work function that is being automated, attend ISUG meetings, stay abreast of progress, and provide management emphasis and support to the ISUG and AIR-520. The linking member will also represent the system to other AIR managers and customers as needed, and assist with the deployment and operational use of the system.

b. Project Review and Approval.

(1) Refined Concept Paper development. Once a project has been initiated and preliminary requirements have been developed with the ISUG, AIR-520 will develop a Refined Concept Paper. This Refined Concept Paper will include all factors on the Initial Concept Paper and an initial exploration of automation options with corresponding rough estimates of costs and benefits. Options explored should include a review of existing software; costs and benefits should include both dollar and human resources costs associated with development and implementation of the system. This paper will be coordinated with the ISSG linking member. It is recognized at this point that the options and costs and benefits are rough estimates since the full requirements development process has not yet occurred.

(2) Concept paper approval. The ISSG linking member will submit the refined concept paper to the ISSG for approval. If the ISSG approves the concept paper, AIR-520 is authorized

to continue working with the ISUG and, as necessary, with the ISFP's on the requirements, design, and test documents as long as the project does not deviate significantly from the approved revised concept paper and the project remains funded.

(3) System Development Approval. As the ISUG and AIR-520 complete each phase of the system development life cycle (Requirements, Design, Test, Deployment Plan), a statement of declaration will be added to each document end product indicating that the project remains consistent with the Approved Refined Concept Paper. The document with the declaration will be sent to each ISSG member for signature giving affirmation of approval within ten working days of receipt. The signed document must be returned to AIR-520 project manager. Non-receipt of a declaration will assume approval. A copy of the final document will be provided to each ISFP, ISUG member, ISSG member, and AST member.

(4) Program Schedule. A milestone schedule should be prepared when appropriate and included as part of the refined concept paper.

(5) Ongoing status updates. The ISSG linking member will present status reports to the ISSG as requested. The status report will contain: a system description; proposed activity for the current fiscal year with milestones; proposed activity for the next fiscal year; and any issues of which the ISSG should be aware or needs to address.

(6) Deviations from the Approved Refined Concept Paper. At any time when the project deviates significantly from the Approved Refined Concept Paper, AIR-520 will notify the ISSG linking member. Together, they will identify the proposed changes to the ISSG, using the latest Approved Refined Concept Paper for the project and adding the proposed changes, the rationale for the proposed changes, and the implications of those changes. The ISSG will act in an expedient manner to resolve these changes. The Refined Concept Paper will be altered, if necessary, and approved by the ISSG. The Refined Concept Paper will therefore serve as an audit trail for automation projects.

4. PROJECT PRIORITY EVALUATION CRITERIA. The following criteria are areas to be considered in prioritizing automation projects:

a. Feasibility.

b. Willingness to commit to long-term development.

c. Ongoing or new project.

d. Benefit to workforce/number and quantity.

e. ACMT workload priorities.

f. Overall cost of development.

g. Operating cost.

h. Benefit to public, other FAA elements.

i. Criticality of work function.

j. Maintenance/enhancement to existing programs.

k. Termination vs. continuation of operation.

l. Complexity/risk.

m. Commercial availability of similar database.

5. PROJECT DEPLOYMENT AND IMPLEMENTATION. At the direction of the ISSG and AIR-520, the ISUG will develop a deployment plan for new automation programs.

a. Plan development. The plan will emphasize the benefits of the program and how it supports its intended customers. It will describe the training, manuals, equipment, and hotline support which will be provided. It will provide for:

(1) Informing users about the system.

(2) A method of providing feedback on acceptability of the system.

(3) If appropriate, a method for users to self-evaluate their proficiency in the use of the system.

(4) The designation of responsible organizations for actual implementation.

(5) Identification of personnel whose work processes will be altered by the deployed system.

(6) Schedule of deployment.

b. Plan implementation. Designated directorate and headquarters offices will implement the plan. ISSG members and management team members will participate in national or regional telecons to inform the organization of the forthcoming introduction of the system. The ISSG members, relevant management team members, and ISUG members will participate in briefings introducing the system to their organizations. Managers will participate in the introduction of the system to convey their support of the system and to ensure that the benefits of the system are described.

c. Monitoring progress. ISSG members will monitor progress and arrange to have local feedback on system deployment. Serious issues that warrant national attention will be brought to the attention of the AIR-520 Project Manager.

6. EVALUATION. An evaluation of operational programs will be conducted approximately 1 year after introduction. Follow-on evaluation should be conducted every 3 to 5 years or more frequently depending on the results of previous reviews. The evaluation will examine whether the system is being used, whether it is performing its intended function, the adequacy of training, the adequacy of support (hotline, operating manuals, equipment), operational resource needs, usefulness to personnel, and overall effectiveness of the complete system. An evaluation group will be formed and chartered by the ISSG to conduct the evaluation, report results, and make recommendations. The ISSG will determine the appropriate actions. Periodically the ISSG may initiate an evaluation of the IRM program, its mission, processes, accomplishments, policies, etc., for the purpose of continuous improvement.

7. NATIONAL IMPLEMENTATION OF NEW HARDWARE/SOFTWARE SYSTEMS. National implementation of new hardware/software systems will be preceded by the following:

a. Compatibility study of the interface of old and new systems. The study shall be conducted to ensure that continued functional capability exists and a plan to solve the identified problems will be formulated. This will be done by the ISFP and led by AIR-520.

b. Training. Training needs analyses shall be conducted and training will be timed to planned usage of the new systems. This will be the combined responsibility of the ISUG, AIR-520, and the ISSG linking member.

c. Transition plans. Transition plans for using the new systems will be developed locally and provide for accommodation of national requirements.

AUTOMATION PROJECT CONCEPT PAPER

ISSUE PAPER STATUS: __INITIAL __ REFINED __APPROVED

DATE: _____

1. STATEMENT OF NEED. (Indicate why this information, process, or procedure should be automated at the national level and what function it would fulfill).

2. ORGANIZATIONAL UNITS IMPACTED (CUSTOMERS). (Customers are defined as end-users of the proposed system. Identify internal customers by type; e.g., engineers in ACOs, policy staffs, principal inspectors; also identify any external customers; e.g., flight standards, public).

3. DESCRIPTION OF WORK TO BE AUTOMATED. (Briefly describe the major functions of the project. Please do not describe the automation process).

4. COSTS AND BENEFITS. (Describe possible benefits of automating this information, procedure or process).

5. DESCRIPTION OF OPTIONS CONSIDERED. (This is optional. If you have ideas on how this could be automated, please include).

6. DESCRIPTION OF HOW THE FUNCTION IS CURRENTLY BEING PERFORMED. (This is optional).

7. REQUESTER'S NAME, ROUTING SYMBOL, AND POSITION.

U.S. Department
of Transportation

Federal Aviation Administration

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: Order _____

To: Directive Management Officer, AIR-520

(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 folowing 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: _____