ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

4560.1B

3/10/89

SUBJ: POLICIES AND PROCEDURES COVERING THE PROVISIONING PROCESS DURING THE ACQUISITION OF FAA MATERIEL

1. PURPOSE. This order prescribes policies and procedures applicable to the provisioning process that shall be followed during the acquisition of Federal Aviation Administration (FAA) materiel for which the FAA Depot has supply support responsibilities. It outlines implementing procedures that tailor the provisioning process to the complexity of the materiel acquisition, and it identifies the specific agency organizational elements responsible for each implementing action.

2. DISTRIBUTION. This order is distributed to the branch level in the Acquisition and Materiel, Air Traffic Operations, Air Traffic Plans and Requirements, Program Engineering, Automation, Advanced System Acquisition, Systems Maintenance, and Flight Standards Services; in the regions to the branch level of Airway Facilities, Logistics, Air Traffic, and Flight Standards Divisions; and to the branch level in the Aviation Standards National Field Office, the FAA Depot at the Aeronautical Center, and the Acquisition and Materiel Services Division at the FAA Technical Center.

3. CANCELATION. Order 4560.1A, Initial Provisioning for Support of Facilities, Facility Components, Aircraft and Avionics Equipment, dated March 2, 1983, is canceled.

4. EXPLANATION OF CHANGES. This revision incorporates those additional provisioning techniques required to implement the National Airspace Integrated Logistics Support (NAILS) policy established by Order 1800.58, National Airspace Integrated Logistics Support Policy, and defines provisioning procedures applicable to acquisitions of various classes of FAA materiel by the tailoring of requirements from applicable specifications and standards. The order focuses policies, procedures, and responsibilities on specific organizations to assure that provisioning planning and coordination of requirements are accomplished prior to solicitation and acquisition.

5. BACKGROUND.

a. FAA policy requires that all support resources and elements to operate and maintain the National Airspace System (NAS) be acquired in an effective and economical manner to minimize the aggregate life-cycle cost of the NAS. To achieve effective and economical support of the more complex systems being developed for the NAS upgrade, an FAA policy on NAILS has been established and must be applied to all future NAS subsystem acquisitions. For those acquisitions, the policy requires that data needed to provision each subsystem be developed through the application of Logistic Support Analysis (LSA) and documented in a Logistic Support Analysis Record (LSAR). LSA tasks shall be selected and applied in accordance with Military Standard MIL-STD-1388-1A, Logistic Support Analysis.

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Initiated By: ALG-220

b. Documentation of data developed from LSA shall be formatted in accordance with Military Standard MIL-STD-1388-2A, DOD Requirements for a Logistic Support Analysis Record (LSAR).

c. A benefit of this policy is the development of an automated data file for each subsystem which can be manipulated to generate repair level analysis results and spares quantification decisions through the knowledge of total applications of each part. Several outstanding subsystem acquisitions already incorporate these military standards which will result in formation of automated data files for those NAS materiels.

d. Generating the same beneficial results from the provisioning effort for acquisitions of less complex materiel items (i.e., subsystem items procured separately, modifications, test equipment, and Schedule "A" items) requires tailoring of the requirements in the Department of Defense (DOD) standards to provide a provisioning process that is cost effective for this less complex materiel. This directive has been expanded to direct those provisioning techniques required to apply NAILS policy to all NAS subsystem acquisitions and to outline a provisioning process that applies a tailored NAILS policy to acquisitions of all other NAS materiel for which the FAA Depot has supply support responsibilities.

6. DEFINITIONS. Appendix 1, Definitions, contains definitions of terms essential to understanding this order.

7. SCOPE. This order applies to all offices involved in the acquisition of NAS subsystems (including aircraft and avionics); NAS subsystem modifications, test equipment, and Schedule "A" working equipment; and those items of materiel that are a part of a NAS subsystem, but procured separately, items providing an interface between subsystems, and items needed to adapt subsystems to site support characteristics. It applies also to the FAA's assumption of ownership of non-Federal navigational aids and air traffic control facilities as gifts or donations under Section 303(C)(1) of the Federal Aviation Act (see Order 6700.20, Non-Federal Navigational Aids and Air Traffic Control Facilities). This order is not applicable to offices involved in field evaluations of engineering development programs, since supply support for those programs is accomplished under Order 4250.13, Supply Support for Field Evaluation of Engineering Development Programs.

8. PROVISIONING POLICY. The Acquisition and Materiel Service (ALG) is responsible for developing, monitoring, and maintaining policies, standards, plans, and implementation directives covering provisioning of FAA materiel. Provisioning is defined as the process of determining the range, quantity, and delivery scheduling of parts, subassemblies, assemblies, units, special tools, test equipment, and soft consumable items for the support and maintenance of an end article. It also includes the determination of provisioning documentation requirements, methods, and actions required to assure availability of spares and method of providing logistics support. The following policies apply to the provisioning process for all FAA materiel acquisitions.

a. To ensure the availability of spare parts-peculiar needed in supply system stock at the time of first installation of an end article (i.e., NAS subsystem, subsystem item, modification kit, Schedule "A" equipment, or item of test equipment), the acquisition document for the end article shall always include a biddable line item calling for delivery to the FAA Depot of a quantity of spare parts-peculiar computed in accordance with FAA Specification FAA-G-1375c, Spare Parts-Peculiar for Electronic, Electrical and Mechanical Equipment. Additional quantities of spare parts-peculiar needed for FAA Depot stock to maintain the end article throughout its life-cycle shall be identified during the provisioning process through the use of a repair level analysis model and a spares quantification model authorized by the acquisition document or as provided by the FAA Depot.

b. Quantities of parts common required for FAA Depot stock during the first year's operation of the end article shall be identified during the provisioning process through the use of a repair level analysis model and a spares quantification model that are authorized by the acquisition document, or as provided by the FAA Depot. Parts common for which the end article contractor is sole source may be acquired under the end article acquisition document in the quantities identified by the modeling process as modified by the FAA Depot in consideration of the agency stockage criteria. Parts common manufactured by sources other than the end article contractor shall not be purchased under the end article's acquisition document, but shall be acquired by the FAA Depot as a separate action at the time and in the quantities determined to be appropriate for support of the end article's first year of operation. Any deviation from this policy must receive prior authorization from the manager of the FAA Depot.

c. Provisioning documentation requirements and the provisioning method shall be determined by the FAA Depot in coordination with the initiating office for each acquisition of an end article for which the FAA Depot has supply support responsibilities. The complexity of the end article and the type of contractual vehicle used shall determine to what extent elements of NAILS policy can be applied cost effectively to each acquisition. Those LSA tasks of MIL-STD-1388-1A, whose performance will generate the data elements needed to support the provisioning documentation decision, shall be required by the acquisition document. Data elements generated shall be formatted in accordance with MIL-STD-1388-2A and prepared in a medium compatible with entry into the FAA's LSA automated data base. The FAA Depot shall provide for backloading of provisioning data into the FAA LSA automated data base for those acquisitions for which the contractor can deliver only in hard copy form.

9. FUNDING FOR PROVISIONING.

a. Acquisition of data to support the provisioning process and procurement of spare parts, both parts-peculiar and parts common, shall be funded under the F&E appropriation in accordance with Order 2500.8, Operations vs F&E Funding, when the end article being provisioned is procured under that appropriation.

b. The appropriate program office, when transferring F&E funds to initiating offices outside the Washington headquarters (Mike Monroney Aeronautical Center or the regional offices), shall include funding for the acquisition of data to support a tailored provisioning process; the procurement of spare parts-peculiar in accordance with FAA Specification FAA-G-1375c to support the end article's life-cycle or forecasted 8-year requirement, whichever is shorter; and the procurement of parts common required to support the first year's operation of the end article.

10. PROVISIONING PROCEDURES. A general policy of Order 1800.30, Development of Logistics Support for FAA Facilities and Equipment, calls for logistics support requirements to be delivered in time to permit effective operational use of agency facilities and equipment. Fundamental logistics support requirements that must be delivered on time from an acquisition contract to permit effective operational use of each delivered end article are parts-peculiar, test equipment, and data concerning the characteristics of the end article and its Line Replaceable Units (LRU) from which quantity and range of parts common and Schedule "A" working equipment can be determined. The following provisioning procedures shall be followed for all acquisitions by Washington headquarters, the Mike Monroney Aeronautical Center, or the regional offices, to ensure the FAA Depot can meet its supply support responsibilities.

a. The initiating office shall develop a plan for the provisioning process consistent with the complexity of the end article and the type of contractual vehicle planned for the acquisition. For NAS subsystem acquisitions, planning for the provisioning process shall be included in the supply support element of the formal Integrated Logistics Support Plan (ILSP) required by Order 1800.58 through its reference to the NAILS Master Plan. An initiating office responsible for the acquisition of a subsystem item to be procured under a separate contract, and which is supported by a system engineering integration contractor, also may outline its planning for provisioning in a formal ILSP covering the subsystem item being procured.

b. Whether incorporated in an ILSP or developed as a separate plan, the planning for the provisioning effort shall outline how the provisioning policies in paragraph 8 concerning the acquiring of spare parts-peculiar up front, the identification and ordering of parts common, and the delivery of provisioning documentation/data will be implemented for the acquisition of each end article. This plan or portion of the end article ILSP shall include the detailed requirements to be placed on the contractor for use in preparing the Request for Proposal (RFP), Invitation for Bid (IFB), or purchase order, and therefore, should be scheduled so as to be completed prior to starting the solicitation phase. A plan for the provisioning process is required also for assumption of ownership of non-Federal facilities. Appendix 2, Minimum Planning Requirements for the Provisioning Process Appropriate to the Acquisitions of Various Classes of Materiel, details the preparation of provisioning plans tailored to the complexity of the end article and the type of contractual vehicle to be used for the acquisition.

c. The initiating office shall coordinate its plan for the provisioning process with the FAA Depot to ensure the provisioning policies of paragraph 8 are fully implemented. This coordination effort should be accomplished for NAS subsystem acquisitions as a part of the review of the ILSP by a National Airspace Integrated Logistics Support Management Team (NAILSMT). The FAA Depot shall have a provisioner and an engineer as members of the NAILSMT responsible for review of the provisioning/supply support/depot level maintenance functions in the ILSP. For other acquisitions and for assumptions of ownership of non-Federal facilities, the FAA Depot shall review the plan and recommend changes, if required, to meet provisioning policy.

d. The initiating office shall incorporate the contract line items, Statement of Work (SOW) requirements, and Contract Data Requirements List (CDRL) items identified in the provisioning plan into the draft of the Procurement Request (PR) and provide copies to the FAA Depot and ALG-220. For aircraft and avionics procurements, one copy each shall be sent to the FAA Depot, Attention: AAC-482 and AVN-300. For other FAA materiel procurements, one copy each shall be sent to the FAA Depot, Attention: AAC-485 and AAC-445. The FAA Depot and ALG-220 shall advise the originator, within 10 work days from the date of receipt, of any additions or clarifications for inclusion in the procurement request to be submitted to the procurement office for formal action. Requirements in a plan covering assumption of ownership of non-Federal facilities shall be incorporated in the negotiations for the ownership assumption.

e. The initiating office shall incorporate the additions or clarifications submitted by the FAA Depot and ALG-220 into the procurement request and provide it to the procurement office. The procurement office shall forward copies of all IFB's, RFP's, and purchase orders resulting from these PR's to the FAA Depot and ALG-220 prior to processing a solicitation. For aircraft and avionics procurements, one copy each shall be sent to the FAA Depot, Attention: AAC-482, AAC-490, and AVN-300; for other FAA materiel procurements, one copy each shall be sent to the FAA Depot, Attention: AAC-485, AAC-445, and AAC-490. To ensure expedient processing of a solicitation, the FAA Depot and ALG-220 shall respond within 10 work days from the date of receipt with any additions or clarifications to the proposed solicitation.

f. Prior to award, the procurement office shall resolve all outstanding issues related to Provisioning Technical Documentation (PTD) which may have arisen during the solicitation phase.

g. After award, the procurement office shall provide copies of the contract to the FAA Depot. For aircraft and avionics procurements, one copy each shall be sent Attention: AAC-482, AAC-490, and AVN-300. For other FAA materiel procurements, one copy each shall be sent Attention: AAC-485, AAC-445, and AAC-490. An additional copy of the contract shall also be provided at the same time to ALG-220.

h. The procurement office shall advise the FAA Depot, Attention: AAC-480, of the name of the FAA Quality and Reliability Officer (QRO) at the contractor's plant and forward to the initiating office and the FAA Depot, Attention: AAC-480, AAC-445 (or AVN-300), a copy of all approved Engineering Change Proposals (ECP) and NAS Change Proposals (NCP), correspondence, and reports (including contract progress reports) affecting provisioning actions and schedules.

i. The procurement office shall arrange and conduct provisioning conferences with the contractor as required by the Provisioning Requirements Statement (PRS) included in the contract and as requested by the FAA Depot.

j. The FAA Depot shall review the spare parts-peculiar list provided by the contractor and verify that items so identified are compatible with the definitions and requirements of FAA Specification FAA-G-1375c.

k. The FAA Depot shall acknowledge receipt of the PTD to the contracting officer and review the documentation for compliance with the requirements on the contract. The FAA Depot shall inform the contracting officer of its acceptance/rejection.

l. The FAA Depot shall furnish the procurement office, the initiating office, ASM-120, and ALG-220 with a copy of all correspondence relating to PTD.

m. The FAA Depot shall coordinate closely with the initiating office and the applicable maintenance office to ensure program and maintenance considerations are reflected in provisioning decisions. The FAA Depot shall advise the procurement office (which shall coordinate with the initiating office and the appropriate maintenance and engineering offices) when a provisioning conference is required, and provide the primary provisioning assistance to the contracting officer.

n. The engineering offices shall counsel the FAA Depot on all engineering matters pertaining to the selection of contract items required for the support inventory taking into consideration design parameters affecting parts-peculiar, and any other engineering factors bearing on parts replacement decisions. The engineering offices shall provide the FAA Depot, Attention: AAC-480, by the response date specified, recommendations on parts design or use factors that may affect provisioning actions and participate in provisioning conferences, when appropriate.

o. The maintenance offices shall determine and document the need for a maintenance technical review of a new acquisition during the provisioning phase to adequately identify and inform the FAA Depot of maintenance support requirements.

p. The maintenance offices shall provide the FAA Depot with the list of working equipment classified as Schedule "A" items for which the FAA Depot has responsibility. The list shall be provided in sufficient time to permit cataloging action on Schedule "A" items, and for the acquisition and distribution of Schedule "A" items to assure on-site availability, as required. If a Schedule "A" items list will not be furnished for supply support purposes, the decision and supporting rationale shall be documented and provided to the FAA Depot. The maintenance offices shall participate in provisioning conferences when appropriate.

q. Based on data obtained from the provisioning process, the FAA Depot shall determine the range and quantity of spare parts required, both parts common and parts-peculiar, and initiate procurement of required parts common using F&E funds provided by the initiating office. Additional parts-peculiar identified by the process as needed for FAA Depot stock shall be procured from the end article contractor by the initiating office.

r. The FAA Depot shall review the data provided on each non-Federal facility or regionally procured equipment. Based on this data, the FAA Depot will determine the requirements for spare parts, initiate procurement of spare parts utilizing regional funds made available by the initiating office, catalog the parts, and perform other supply support functions.

11. RESPONSIBILITIES. Specific responsibilities of each organization involved in the provisioning process are detailed in the following paragraphs:

a. The FAA Depot is responsible for establishing continuing life-cycle supply support capability for all agency-owned materiel; for end articles on loan to the agency; and whenever such responsibility is designated by agreement with other Government agencies, foreign governments, or civil aviation interests. Excluded are articles for research, development, and experimentation. The capability shall be maintained by establishing FAA Depot inventories consistent with agency logistics objectives and/or other compatible means of effective item acquisition and distribution. In accomplishing these functions the FAA Depot shall:

(1) Assist the initiating office in the development of the provisioning plan or supply support portion of the ILSP for each programmed end article acquisition or modification. Ensure the availability of spare parts-peculiar at the time of first installation by requiring their acquisition in accordance with FAA Specification FAA-G-1375c. This activity will be accomplished in coordination with other NAILSMT members from the applicable initiating, engineering, and maintenance offices when a NAS subsystem is being acquired.

(2) Identify the specific provisioning method of MIL-STD-1561B, Provisioning Procedures Uniform DOD, and the requirements for provisioning and cataloging documentation for all end items to be supported by the FAA Depot. Coordinate requirements with the initiating office and NAILSMT members, when applicable, for their incorporation into the SOW and the CDRL of the RFP or other applicable acquisition documents.

(3) Review the draft procurement request, the proposed solicitation, and the contract and provide comments to the initiating and procurement offices within the specified timeframes.

(4) Determine initial stock requirements for the FAA Depot based upon the maintenance program and following the plan for the provisioning process. Initiate the appropriate acquisition action.

(5) Obtain technical assistance from appropriate engineering and maintenance offices to assure provisioning decisions reflect the maintenance program being implemented.

b. Initiating offices are responsible for management of the acquisition of their assigned NAS materiel. To achieve their responsibilities, initiating offices shall:

(1) Provide timely data on each project's program and plans related to end article acquisition or modification (including test equipment and working equipment) and the installation and commissioning schedules.

(2) Develop the ILSP or provisioning plan for each end article acquisition or modification. Coordinate its development with the other members of the NAILSMT or the FAA Depot to ensure supply support efforts needed to accomplish provisioning are integrated into the total logistics support effort.

(3) Incorporate into acquisition documents the provisioning method and requirements for provisioning and cataloging documentation prescribed by the FAA Depot. Determine the range and quantity of replaceable modules and/or printed circuit boards comprising a set of spares selected for delivery prior to contract award to each site to ensure meeting the system's maintainability requirements.

(4) Ensure the availability and provide funds for provisioning technical documentation, spare parts, assemblies, units, working equipment, and supplies selected by the FAA Depot in support of the end article.

(5) Ensure the availability of system/equipment instruction books and special test equipment.

c. Engineering offices are responsible for the overall engineering effort required for their assigned materiel. In support of NAILS policy, the engineering offices shall:

(1) Develop the maintenance concept in support of the stated operational requirements in coordination with the cognizant maintenance office.

(2) Provide engineering advice to the FAA Depot on all projects as required.

d. Maintenance offices are responsible for establishing maintenance programs for assigned projects. The maintenance offices shall:

(1) Develop a maintenance program implementing the established maintenance concept and coordinate with the FAA Depot on its implementation in terms of supply support.

(2) Ensure, when appropriate to the procurement, that the specific maintenance engineering analysis efforts providing the data base for subsequent provisioning decisions are incorporated into the SOW and the CDRL of the RFP or other applicable acquisition documents.

(3) Furnish technical assistance and advice on maintenance programs and objectives as they relate to the end article's operational requirements.

(4) Establish uniform standards for working equipment at NAS facilities and coordinate requirements with the FAA Depot to permit timely action to initially equip each facility.

e. Procurement offices are responsible for entering into, modifying, interpreting, and administering contracts for the acquisition of assigned materiel. The procurement offices shall:

(1) Forward copies of all IFB's, RFP's, purchase orders, contracts, and modifications pertaining to end article procurements to the FAA Depot and ALG-220.

(2) Resolve all outstanding issues relative to provisioning technical documentation which may have arisen during the solicitation phase.

(3) Advise the FAA Depot of the name of the FAA QRO at the contractor's plant.

(4) Forward to the initiating office and the FAA Depot a copy of all approved ECP's, NCP's, correspondence, and reports (including contract progress reports) affecting provisioning actions and schedules.

(5) Arrange for and conduct provisioning conferences with the contractor.

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Administrator

APPENDIX 1. DEFINITIONS

1. COMMERCIAL OFF-THE-SHELF (COTS). Equipment fully developed and manufactured by a commercial vendor and for sale to the general public in the course of normal business operations at prices based on established catalog or market prices.

2. ENGINEERING DRAWINGS. An engineering document disclosing (directly or by reference) by means of pictorial or textual presentations, or combinations of both, the physical and functional end-product requirements of an item.

3. ENGINEERING OFFICE. The headquarters office, FAA Depot, or regional office responsible for the overall engineering effort for new, additional, or modified facility components and equipment (including test equipment). In some instances, the engineering office may also be the initiating office.

4. INITIATING OFFICE. The headquarters office, FAA Depot, regional office, ASM-150 and ASM-160, or others having responsibility for initiating action to acquire or fabricate end articles (facilities and equipment) or to modify existing articles which will require future supply support by the FAA Depot.

5. INTEGRATED LOGISTICS SUPPORT PLAN (ILSP). A plan describing the Government's detailed approach for integrating logistics considerations and logistics planning into the engineering and design process for each NAS subsystem.

6. ITEM. A non-specific term used to denote any product, including systems, materials, parts, subassemblies, sets, accessories, etc.

7. ITEM LEVELS. Item levels from the simplest division to the more complex are defined in MIL-STD-280A, Definitions of Item Levels, Item Exchangeability, Models and Related Terms, as:

Part
Subassembly
Assembly
Unit
Group
Set
Subsystem
System

8. LINE REPLACEABLE UNIT (LRU). An item which may consist of a unit, an assembly (circuit card assembly, electronic component assembly, etc.), a subassembly, or a part, that is removed and replaced at the site maintenance level in order to restore the system/equipment to its operational status.

APPENDIX 1. DEFINITIONS (CONTINUED)

9. LOGISTIC SUPPORT ANALYSIS (LSA). The selective application of scientific and engineering efforts undertaken during the acquisition process, as part of the system engineering and design process, to assist in complying with supportability and other integrated logistics support objectives.

10. LOGISTIC SUPPORT ANALYSIS RECORD (LSAR). That portion of LSA documentation consisting of detailed data pertaining to the identification of logistics support resource requirements of a system/equipment.

11. MAINTENANCE OFFICE. The headquarters office, FAA Depot, or regional office responsible for establishing the maintenance program necessary to implement the maintenance concepts developed for FAA facilities and equipment.

12. MODIFICATION. Materiel procured to modify the configuration of the product baselined hardware.

13. NATIONAL AIRSPACE INTEGRATED LOGISTICS SUPPORT MANAGEMENT TEAM (NAILSMT). A management team formed to assist the program/project manager for each subsystem acquisition to:

a. Tailor and apply the NAILS process into the subsystem planning, procurement request, and request for proposal or invitation for bid.

b. Evaluate bids and subsystem contractor's integrated logistics support program and products.

14. PART COMMON. An item which is routinely and ordinarily obtainable from one or more sources, including the prime contractor at the time of contract award. The item must be listed explicitly in a vendor or supplier catalog or be readily available as a bona fide established stock item at the time of award of the contract or order and be recurringly manufactured, fabricated, or assembled for common use to Government, industry, or commercial specification, drawing, or standard.

15. PART-PECULIAR. Any item, from a simple part up to and including a unit, that can be defined or classified by one or more of the following statements:

a. An item that was designed, developed, assembled, or fabricated by the contractor or by a vendor to the contractor's procurement specifications and meets the criteria of paragraph b below.

b. An item not listed explicitly in a vendor or supplier catalog, or not readily available as a bona fide established stock item at the time of award of the contract or order.

APPENDIX 1. DEFINITIONS (CONTINUED)

c. A part common that has been modified in any way to accommodate a specific environment.

d. A part common that has been selected for closer tolerance than the commercial production tolerances.

e. Two or more parts common selected for identical tolerances so as to be used as a matched pair or set.

16. PROCUREMENT OFFICE. The FAA office representing the Government in procurement transactions, acting within the limitations of assigned authority; the agent of the Government authorized to enter into, modify, interpret, and administer contracts in accordance with laws and regulations.

17. PROGRAM OFFICE. The office or service which has a requirement to be met by an acquisition. The office develops the operational requirement, certifies the system requirement statement, and monitors progress of the acquisition to ensure that the requirement is being met.

18. PROVISIONING REQUIREMENTS STATEMENT (PRS). The contractual document by which the Government notifies the contractor of specific provisioning requirements.

19. PROVISIONING. The process of determining the range and quantity of parts, subassemblies, assemblies, units, special tools and equipment, soft consumable items and the delivery scheduling of such, for the support and maintenance of an end article. It also includes the determination of provisioning documentation requirements, methods and actions required to assure availability of spares, and the method of providing logistics support.

20. PROVISIONING TECHNICAL DOCUMENTATION (PTD). That documentation furnished by contractors for the purpose of identification, determination of spares requirements, cataloging, and contractual formalization of items to be procured through the provisioning process. As used in this order, provisioning technical documentation includes, but is not limited to, provisioning lists, engineering drawings, item identifications, and master patterns, as specified in the contract or order.

21. REPAIR LEVEL ANALYSIS (RLA). A term assigned to a technique which establishes:

a. Whether an item should be repaired.

b. At what maintenance level.

c. If the item should be discarded.

APPENDIX 1. DEFINITIONS (CONTINUED)

22. TEST EQUIPMENT. Electronic, electrical, mechanical, physical, or optical instruments, both common and specially designed, necessary for servicing, testing, adjusting, and maintaining the end article.

a. Special. Test equipment designed and developed by the prime contractor or his/her vendors to perform a specific operation on specific pieces of materiel and which are necessary for servicing, testing, adjusting, and maintaining the end article.

b. Common. That test equipment not covered in the definition of special.

23. TOOLS. Implements, electrical or manual, including jigs, alignment fixtures, and similar devices, both special and common, required for installing, servicing, testing, adjusting, and maintaining the end article.

a. Special. Tools designed and developed by the contractor or his/her vendors to perform a specific operation on special pieces of materiel and which are necessary to the installing, servicing, testing, adjusting, and maintaining of the end article.

b. Common. Those tools not covered in the definition of special.

24. UNIT. An assembly or any combination of parts, subassemblies, and assemblies mounted together, normally capable of independent operation in a variety of situations.

25. WORKING EQUIPMENT. Items specifically identified as essential to the accomplishment of the total range of equipment/facility maintenance activities. In general, working equipment items are of a durable nature having a useful life in excess of one year. Working equipment that lend themselves to efficient central supply management are classified as Schedule "A" items. Schedule "B" Items are those items that do not readily lend themselves to efficient FAA Depot supply, procurement, and distribution systems.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITION OF VARIOUS CLASSES OF MATERIEL

1. NAS Subsystem Acquisitions

a. Requirement for a Provisioning Plan. For each NAS subsystem acquisition, the plan for the provisioning process shall be included under the supply support element of its ILSP or as a separate attachment similar to the maintenance plan, ensuring supply support efforts and data needed for the provisioning process are integrated into the total logistics support effort.

b. Contract Line Item for Spare Parts-Peculiar. To ensure the availability of spare parts-peculiar in FAA Depot stock at the time of first installation of an end article, the ILSP shall identify the need for a contract line item in the solicitation requiring the contractor to deliver a quantity of spare parts-peculiar in accordance with FAA Specification FAA-G-1375c. Each contract line item should call for delivery of one lot of spare parts-peculiar for each different end article planned for acquisition under the solicitation.

c. Required Data from Reliability, Maintainability, and Maintenance Engineering Programs. FAA maintenance policy limits most maintenance at a site to the removal and replacement of LRU's. Reliability, maintainability, and maintenance engineering program data, therefore, are needed mainly at this level of hardware and planning for the data acquisition is required.

(1) Identification of LRU's for a New Design. Identification of LRU's for a new design NAS subsystem is a function of the design process evaluating candidate LRU's in terms of:

(a) Their failure rate generated in accordance with MIL-STD-785, Reliability Program for Systems and Equipment Development and Production;

(b) their criticality determined through the Failure Mode, Effects, and Criticality Analysis (FMECA) of MIL-STD-1629, Procedures for Performing a Failure Mode, Effects, and Critical Analysis;

(c) the maintenance tasks required to correct their failures based on performing subtasks 301.2.4.1, 301.2.4.2, and 301.2.4.3 of MIL-STD-1388-1A; and

(d) once the design of the new subsystem is baselined, the failure rate, criticality, and maintenance task data for each LRU on the design baseline must be documented in Data Records B, B1, B2, and D of the LSAR of MIL-STD-1388-2A. This ensures availability of the data for PTD preparations and use in the RLA and spares quantification models.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITIONS OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

(2) Planning for Data Acquisition for a New Design. The ILSP for a new design NAS subsystem shall identify the need to include in the solicitation under the SOW, the requirement to generate failure rates for LRU's; performance of FMECA; and maintenance task analysis (subtasks 301.2.4.1, 301.2.4.2, and 301.2.4.3 of MIL-STD-1388-1A down to and through the LRU level of the subsystem). The ILSP shall also identify the formatting of this data in accordance with MIL-STD-1388-2A, and how the solicitation must include specific CDRL items with their appropriate Data Item Descriptions (DID) and delivery schedules to ensure receipt of required data, on time, and in the appropriate format.

(3) Identification of LRU's and Data Acquisition for COTS Items. When a NAS subsystem is comprised mainly of COTS items, the contractors usually are no longer in the design phase for these items, and not receptive to performing the formal analyses required by MIL-STD-785, MIL-STD-1629, and MIL-STD-1388-1A. However, the failure rate, criticality, and maintenance task data for each LRU of a COTS item are still needed for PTD preparation and the modeling efforts of RLA and spares quantification. Therefore, the ILSP for a NAS subsystem comprised of COTS items shall identify the need to include in the solicitation under the SOW:

(a) The requirements for establishment of the failure rate/Mean Time Between Failure (MTBF) for each LRU in each COTS item from the application of measurement techniques on operating records or design predications;

(b) the development of possible failure modes for each LRU, its occurrence probability, and the criticality of each failure mode in terms of its impact on the performance of both the LRU and the COTS item from the contractor's operating and maintenance experience;

(c) the documentation of preventive and corrective maintenance tasks authorized or actually performed on each LRU taken from the contractor's design or maintenance experience; and

(d) the ILSP shall also identify the formatting of this data in accordance with MIL-STD-1388-2A, and how the solicitation must include specific CDRL items with their appropriate DID's and delivery schedules to ensure receipt of required data, on time, and in the appropriate format.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITION OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

d. Provisioning Technical Documentation. The ILSP for a NAS subsystem, whether a new design or COTS, shall identify those items of PTD from MIL-STD-1561B providing the FAA Depot provisioner with data needed to determine range and quantity of parts common and parts-peculiar, and to accomplish cataloging actions. It shall also identify those conferences and the specific provisioning method from this military standard applicable to the planned acquisition. The plan shall identify the documents that must be delivered by the contractor to provide the FAA Depot engineering office with the technical data required for verification of repair level analysis results and to develop appropriate repair procedures for LRU's designated repairable. The ILSP shall address specifically the need for the solicitation to include:

(1) DD Forms 1949-1, LSAR Data Selection Sheets, indicating the specific data elements of records A through H of MIL-STD-1388-2A, applicable to each level of materiel down to the piece part, the contractor will be required to develop.

(2) Requirements in the SOW for performance of subtasks 303.2.7, 401.2.3, and 401.2.8 of MIL-STD-1388-1A to generate repair level analysis results, identify tools and test equipment, and document this data in the LSAR.

(3) Specific CDRL items covering the delivery of LSAR data in the format of MIL-STD-1388-2A.

(4) CDRL item covering the engineering drawing package for repairable/replaceable LRU's including automatic test equipment software and documentation.

(5) CDRL item covering the master pattern and plan view of parts layout for each printed board.

(6) CDRL item covering program data for Read Only Memories (ROM), Programmable Read Only Memories (PROM), and Erasable Programmable Read Only Memories (EPROM) firmware devices.

(7) CDRL items covering the installation materiel list and on-site spares list.

e. Waivers. Order 1800.58 authorizes a waiver procedure that applies when there is sufficient rationale to justify eliminating LSA efforts in accordance with MIL-STD-1388-1A and data formatting in accordance with MIL-STD-1388-2A. Waiving these NAILS requirements does not eliminate the provisioner's need for PTD, therefore, the initiating office shall identify the PTD items required for provisioning of the end article to be procured in accordance with FAA Specification FAA-G-1210d in place of MIL-STD-1388-2A and MIL-STD-1388-1561B. The initiating office must plan to provide funding to the FAA Depot for backloading the data into the FAA LSA automated data base.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITION OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

2. Acquisition/Fabrication of NAS Subsystem Items.

a. Requirement for a Provisioning Plan. For NAS subsystem items and items of similar complexity or essentiality to system performance, the plan for the provisioning process should be developed as part of a complete ILSP. However, if a formal ILSP is determined inappropriate, a plan limited to covering the provisioning process shall be prepared to ensure the provisioning policies of paragraph 8 will be achieved.

b. Contract Line Item for Spare Parts-Peculiar. To ensure the availability of spare parts-peculiar in FAA Depot stock, at the time of initial installation of the end article, the plan shall identify the need for a contract line item in the solicitation requiring the contractor to deliver a quantity of spare parts-peculiar in accordance with FAA Specification FAA-G-1375c.

c. Required Data from Reliability, Maintainability, and Maintenance Engineering Programs. FAA maintenance policy limits most maintenance at a site to the removal and replacement of LRU's. Reliability, maintainability, and maintenance engineering program data, therefore, are needed mainly at this level of hardware, and planning for the data acquisition is required. If the acquisition will involve design and development of the end article, the plan for the provisioning process shall duplicate the requirements outlined for a new NAS subsystem acquisition.

(1) Identification of LRU's for a New Design. Identification of LRU's for a newly designed item is a function of the design process evaluating candidate LRU's in terms of:

(a) Their failure rate generated in accordance with MIL-STD-785;

(b) their criticality determined through the performance of FMECA in accordance with MIL-STD-1629;

(c) the maintenance tasks required to correct their failures based on performing subtasks 301.2.4.1, 301.2.4.2, and 301.2.4.3 of MIL-STD-1388-1A; and

(d) once the design of the new item is baselined, the failure rate, criticality, and maintenance task data for each LRU on the design baseline must be documented in Data Records B, B1, B2, and D of the LSAR of MIL-STD-1388-2A. This ensures availability of the data for PTD preparations and use in the RLA and spares quantification models.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITIONS OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

(2) Planning for Data Acquisition for a New Design. The ILSP or the provisioning plan for a new NAS subsystem item shall identify the need to include in the solicitation under the SOW, the requirement to generate failure rates for LRU's; performance of failure mode, effects, and criticality analysis; and maintenance task analysis (subtasks 301.2.4.1, 301.2.4.2, and 301.2.4.3 of MIL-STD-1388-1A) down to and through the LRU level of the item. The plan shall also identify the formatting of this data in accordance with MIL-STD-1388-2A, and how the solicitation must include specific CDRL items with their appropriate DID's and delivery schedules to ensure receipt of required data, on time, and in the appropriate format.

(3) Identification of LRU's and Data Acquisition for a COTS Item. For a NAS subsystem item comprised of COTS, the contractor is usually no longer in the design phase for the item and not receptive to performing the formal analyses required by MIL-STD-785, MIL-STD-1629, and MIL-STD-1388-1A. However, the failure rate, criticality, and maintenance task data for each LRU of a COTS item are still needed for PTD preparation and the modeling efforts of RLA and spares quantification. Therefore, the ILSP shall identify the need to include in the solicitation under the SOW:

(a) The requirements for the establishment of the MTBF for each LRU in the COTS item from the application of measurement techniques on operating records or design predictions.

(b) The development of possible failure modes for each LRU, its occurrence probability, and the criticality of each failure mode in terms of its impact on the performance of both the LRU and the COTS item from the contractor's operating and maintenance experience.

(c) The documentation of preventive and corrective maintenance tasks authorized, or actually performed, on each LRU taken from the contractor's design or maintenance experience.

(d) The ILSP shall also identify the formatting of these data in accordance with MIL-STD-1388-2A, and how the solicitation must include specific CDRL items with their appropriate DID's and delivery schedules to ensure receipt of required data, on time, and in the appropriate format.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITION OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

d. Provisioning Technical Documentation. The ILSP for a NAS subsystem item, whether a new design or COTS, shall identify those items of PTD from MIL-STD-1561B providing the FAA Depot provisioner with data needed to determine range and quantity of parts common and parts-peculiar and to accomplish cataloging actions. It shall also identify those conferences and the specific provisioning method from this military standard applicable to the planned acquisition. The plan shall identify the documents that must be delivered by the contractor to provide the FAA Depot engineering office with the technical data required for verification of repair level analysis results and to develop appropriate repair procedures for LRU's designated repairable. The ILSP or the provisioning plan shall specifically address the need for the solicitation to include:

(1) DD Forms 1949-1, LSAR Data Selection Sheets, indicating the specific data elements of records A through H of MIL-STD-1388-2A, applicable to each level of materiel down to the piece part, that the contractor will be required to develop.

(2) Requirements in the SOW for performance of subtasks 303.2.7, 401.2.3, and 401.2.8 of MIL-STD-1388-1A to generate repair level analysis results, identify tools and test equipment, and document this data in the LSAR.

(3) Specific CDRL items covering the delivery of LSAR data in the format of MIL-STD-1388-2A.

(4) CDRL item covering the engineering drawing package for repairable/replaceable LRU's including automatic test equipment software and documentation.

(5) CDRL item covering the master pattern and plan view of parts layout for each printed board.

(6) CDRL item covering ROM's, PROM's, and EPROM's firmware devices.

(7) CDRL items covering the installation materiel list and on-site spares list.

e. Waivers. When the initiating office justifies not to use LSA tasks in accordance with MIL-STD-1388-1A to generate data, and its formatting in accordance with MIL-STD-1388-2A, the plan shall call for procurement of PTD in accordance with FAA Specification FAA-G-1210d in place of MIL-STD-1388-2A and MIL-STD-1561B. The initiating office in this case must plan to provide funding to the FAA Depot for backloading the data into the FAA LSA automated data base.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITION OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

3. Acquisitions of Test Equipment and Schedule "A" Working Equipment.

a. Acquisitions of these low complexity items still require planning of their provisioning process so data and materiel needed by the centralized supply support system can maintain and support them economically. Therefore, a simple plan covering the provisioning process shall be prepared outlining cost-effective achievement of provisioning policies.

b. The plan shall identify the requirement for a contract line item in the solicitation requiring the contractor to deliver a quantity of spare parts-peculiar, if any, in accordance with FAA Specification FAA-G-1375c.

c. The plan shall identify the need for the contract line item in the solicitation covering delivery of documentation to include:

(1) A document identifying the end article in terms of the manufacturer's name, Commercial and Government Entity (CAGE), and part number.

(2) A document or set of drawings providing a top-down breakdown of the end article to its lowest part level identifying LRU's, and those LRU's designated as repairable, if any.

(3) A listing of recommended spare parts including spare parts needed for repair of repairable LRU's, if any.

4. Assumption of Ownership of Non-Federal Navigational Aids and Air Traffic Control Facilities.

a. A plan shall be prepared covering the provisioning effort needed when assuming the ownership of a non-Federal navigational aid or air traffic control facility.

b. The plan shall state that during the early stages of negotiations leading to the assumption of ownership of a non-Federal facility in accordance with Order 6700.20, the initiating office shall provide the following data to the FAA Depot:

(1) End Article Identification
- (a) Equipment type and quantity
- (b) Manufacturer's name and address
- (c) Manufacturer's part number
- (d) Date of manufacture (contract/purchase order number, if available)
- (e) Part number of all major units

(2) Parts breakdown of the end article and each major unit to the LRU part level. (A top-down breakdown set of drawings is preferred.)

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITIONS OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

(3) A listing of spares (units, module circuit card assemblies, other LRU's, and any parts-peculiar) and working equipment being transferred to the Government with the end article.

(4) When available, the manufacturer's recommended allowance list of spare parts.

c. The plan shall include a schedule for the following actions:

(1) Provisioning of the end article by the FAA Depot and determination of range and quantity of both parts common and parts-peculiar.

(2) Regional funds made available to the FAA Depot for parts procurement.

(3) Delivery of spare parts compatible with the assumption of ownership schedule.

5. Acquisition of Modifications Initiated by National Airway Engineering Field Support Sector, ASM-150, and National Automation Engineering Field Support Sector, ASM-160.

a. Modifications to FAA materiel may involve acquisition of a variety of materiel ranging from a complex end article to a parts kit needed to correct a minor problem. In the majority of cases, the modification will cause a change in the supply support, technical instructions, engineering drawing packages, and data developed for support of the end article being modified. During the design period, the initiating office, either ASM-150 or ASM-160, will outline in the provisioning plan not only how provisioning policies will be achieved during acquisition of the modification but also identify planning for developing the changes to the end article's logistics support.

b. To ensure the availability of spare parts-peculiar in FAA Depot stock at the time of initial installation of a modification kit in its end article, the provisioning plan shall identify the need for a contract line item in the solicitation requiring the contractor to deliver a quantity of spare parts-peculiar in accordance with FAA Specification FAA-G-1375c.

c. If the acquisition will involve design and development of materiel comprising the modification kit, the provisioning plan shall identify the need to include in the solicitation under the SOW the requirement for generation of failure rates for the materiel comprising the modification kit and for development of possible failure modes, their occurrence probability, and the criticality of each failure mode in terms of the performance of the materiel comprising the modification kit.

APPENDIX 2. MINIMUM PLANNING REQUIREMENTS FOR THE PROVISIONING PROCESS APPROPRIATE TO THE ACQUISITIONS OF VARIOUS CLASSES OF MATERIEL (CONTINUED)

d. The plan will identify that the initiating office will generate and document the impact of incorporating the modification in the end article in terms of changes to the end article's failure rate; failure mode, effects, and criticality analysis; and repair level analysis and spares quantification models results.

e. The provisioning plan will identify those items of PTD needed to determine range and quantity of parts common and parts-peculiar, the specific provisioning method and required conferences, how deliverable data is to be formatted, and those documents to be delivered in hard copy. Modifications to end articles whose PTD was developed and delivered in accordance with FAA Specification FAA-G-1210d will plan to use this specification to define the provisioning effort for the modification.

f. If the end article was provisioned using MIL-STD-1561B for defining PTD requirements and MIL-STD-1388-2A for data formatting, then the provisioning effort for the modification should also use these standards. Whenever possible, the plan will identify the need for a CDRL item calling for delivery of the data elements of LSAR Data Record H of MIL-STD-1388-2A for each level of materiel down to the piece part in the modification kit. Delivery in this format will permit cost effective updating of the automated data base. Planning will also include the requirement for CDRL items covering updates to the following data generated in hard copy for the end article being modified:

(1) Engineering drawing package for repairable and replaceable LRU's including automated test equipment, software, and documentation updates.

(2) Master pattern and plan view of parts layout for modified printed boards and any new board.

(3) Program data for new or modified ROM's, PROM's, and EPROM's firmware devices and on-site spares lists.

(4) New or modified installation materiel list and on-site spares list.