ORDER

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

6000.5D

9/23/05

SUBJ: **FACILITY, SERVICE, AND EQUIPMENT PROFILE (FSEP)**

1. PURPOSE. This order sets forth policy, roles and responsibilities for the maintenance of the Facility, Service, and Equipment Profile (FSEP). It also prescribes data elements, classification structure and codes for use in the collection, classification, and reporting of facility data in Federal Aviation Administration (FAA) data systems formerly described in Order 1375.4A, Standard Data Elements and Codes – Facility Identification and Supplemental Standards.

2. DISTRIBUTION. This order is distributed to branch level in Washington headquarters and the regions; to section level at the William J. Hughes Technical Center and Mike Monroney Aeronautical Center; and to all Technical Operations field offices with a standard distribution.

3. CANCELLATION. Order 6000.5C, Facility, Service, and Equipment Profile, dated January 29, 1993, and Order 1375.4A, Standard Data Elements and Codes – Facility Identification and Supplemental Standards, dated April 27, 1984, are cancelled.

4. EFFECTIVE DATE. This order is effective as of the issuance date.

5. EXPLANATION OF CHANGES.

a. Incorporates guidance for establishing facility identification standards previously defined in Order 1375.4A.

b. Establishes SOP# 200-FSEP, FSEP (FFA/FPF) Database Management Standard Operating Procedures. This SOP is available on http://interweb.faa.gov/ats/aaf/aop/200/FSEP/.

c. Addition of FSEP Identification Process (FIP).

d. Clarification of responsibilities and authority.

e. The FSEP Desk Guide is now referred to as FSEP Entity Descriptions (FED).

f. Provides intranet address for FED sheets, Facility Identification Codes (FIC), forms, and Standard Operating Procedures (SOP).

g. Introduction of WebFSEP application and National Airspace System (NAS) Operations Inventory (NOI).

h. Staffing information removed; refer to Order 1380.40, Airway Facilities Sector Level Staffing Standard System.

i. Uniform terms – Facilities Master File (FMF) information will be identified as Facility/Service File Update (FFA) and Precommissioned Facility File (PFF) information will be identified as Precommissioned Facility File Update (FPF).

j. Identification of entity versus facility. Entity/entities are used throughout this order for generalization of facility/facilities. This order identifies entity/entities, as they relate to FSEP, as facility, system, subsystem, equipment, services, etc.

k. Establishes SOP #200-DBM, Database Management Standard Operating Procedures. This SOP is available on http://interweb.faa.gov/ats/aaf/aop/200/FSEP/.

l. System code definitions have been updated and redefined.

m. Power source code definitions have been moved to Order 6950.2, Electrical Power Policy Implementation at National Airspace System Facilities.

n. Addition of Location Identifier Process.

6. SCOPE AND USE OF THE FSEP. Title 49 of the United States Code requires the FAA to manage the use of national airspace and the movement of air traffic in that airspace. The NAS is a complex collection of facilities, systems, procedures, aircraft, and people. These components work together as one system to ensure that safe and efficient services are provided to the flying public, airlines, and airports. The physical components of the NAS, excluding people, which provide for safe separation and control over aircraft are referred to as the NAS Infrastructure. The FSEP provides an accurate inventory of the NAS Operational Infrastructure, pseudo-cost entities (Technical Operations organizational levels), and the National Airspace Performance Reporting System (NAPRS) pseudo-services. Non-Federal entities inspected by Technical Operations personnel are identified in FSEP. An approved list of FSEP Entity Description (FED) types are posted at http://interweb.faa.gov/ats/aaf/aop/200/fsep/index.htm.

a. Various national and local programs, internal and external to the FAA, utilize FSEP data. FFA information in FSEP is used by other subsystems of MMS and/or NIMS (e.g., the periodic maintenance (PM)/certification scheduling subsystem and the logging activity (LOG) subsystem) to tie maintenance activities with NAS facilities and services.

b. FFA/FPF data is used in the automated modification and the Direct Distribution System to define replacement and modification programs, determine costs of operation, energy use, and other programs such as staffing, training, logistics, etc.

7. FSEP Subsystems. FSEP is comprised of five major subsystems, two (FFA and FPF) are maintained in WebFSEP and three (FEQ, FMO and FPS) are maintained in MMS and/or NIMS. The subsystems are:

a. Facility/Service Update Records (FFA) contain entity information that is part of the NAS infrastructure, pseudo-cost entities for Technical Operations organizational levels, and NAPRS pseudo-services. FFA information is the official source of commissioned entities in the NAS for the FAA. FFA serves as the starting point for developing Technical Operations field staffing, training, certification, cost accounting and budgetary actions based on current NAS system configurations. Automated national outage reporting systems interface with FFA for measuring entity and service performance. FFA is used for scheduling technical inspections and performance evaluations, automated modification and directives distribution, etc. Various agency elements also use FFA in support and control of property management, accounting, and auditing systems.

b. Precommissioned Facility Records (FPF) contain precommission information on entities scheduled for installation or modification. The FPF data is used to predict future cost of operations, and energy use and to monitor replacement and modification programs. FPF is an automated system of selected information on equipment, systems, or support entities to be installed or modified which will affect future staffing allowances, training or budgetary actions. FPF also identifies future equipment replacements, commissioning/decommissioning status, changes to maintenance responsibilities, travel times, etc. These changes may be due to the Capital Investment Plan (CIP), imposition of contract maintenance, non-federal installation/ takeover, Technical Operations reconfigurations and/or consolidations, or local maintenance projects.

c. Equipment Detail File Update (FEQ) is the highest level of equipment information related to the FFA record. FEQ contains equipment FA/CA number, serial number, location, cage code, manufacturer's part number, certification statement reference, entity type, location identifier, short name and equipment identifier. There must be an FFA record before an FEQ record can be entered.

d. Module Detail File Update (FMO) is the equipment module information related to the FEQ record. FMO contains module description, serial number, cage code, manufacturer's part number, entity type, location identifier, short name, equipment identifier and module identifier. There must be an FEQ record before an FMO record can be entered.

e. Power and Environmental Subsystem Update (FPS) reflects power and environmental information related to the FFA record. FPS contains environmental system equipment, power and environmental system comments, engine generators and connected storage tanks, non-standard power distribution and storage tank information. There must be an FFA record before an FPS record can be entered.

8. NAS Operational Inventory (NOI). The increasing demand for FSEP data necessitates expanding and clarifying the NAS operational infrastructure. NOI realigns FSEP to support current business practices through an intricate combination of facilities, systems, subsystems and equipment. NOI is organized into capabilities and categories.

a. Capabilities are:

(1) Automation - Computerized systems, subsystems or equipment used to provide complex automated processing of data elements used in the NAS. Automation uses hardware, software, and various data type inputs such as communication, weather, surveillance, navigation, infrastructure, and flight information to provide a composite NAS product.

(2) Communication - Systems, subsystems or equipment used to transmit or receive voice or data intelligence.

(3) Navigation - Systems, subsystems or equipment used to provide guidance, navigational data or information accomplished either visually or electronically.

(4) Surveillance - Systems, subsystems or equipment used for real-time detection and/or display of airborne or ground positional information for air traffic control.

(5) Weather - Systems, subsystems or equipment used to provide meteorological information and data.

(6) Infrastructure - Environmental and power systems, subsystems, equipment or facilities used to support, house, or protect NAS systems, subsystems and equipment.

(7) Mission Support - Systems, subsystems, equipment and facilities that either by themselves or in combination with others supports the FAA mission.

b. Categories are:

(1) Facility - The infrastructure used to house, support and/or protect systems, subsystems or equipment.

(2) System - A combination of subsystem(s) and/or equipment(s) whose individual functions produce, by engineering design, a specific operating product in the NAS.

(3) Subsystem - A portion of a system that performs a specific function. A subsystem must relate to a higher level system in NOI.

(4) Equipment - A complete assembly operating either independently or within a subsystem or system, supporting a system or subsystem.

(5) NAPRS Services – Defined in the latest edition of Order 6040.15, National Airspace Performance Reporting System.

9. ROLES AND RESPONSIBILITIES.

a. Headquarters. The organization of primary responsibility (OPR) is the Washington headquarters, NAS Quality Assurance and Performance Team.

(1) Serves as National Program Manager in providing leadership and conducting business process re-engineering to facilitate accuracy and reliability of FSEP information.

(2) Manages the collection, integration and distribution of FSEP information residing in WebFSEP.

(3) Serves as national coordination point for all NAS customers (internal and external) for national FSEP information distribution.

(4) Ensures data collection is accurate and timely in support of independent and inter-dependent systems.

(5) Serves as the OPR for FAA Order 6000.5, SOP #200-FSEP and SOP #200-DBM. The OPR maintains and updates these documents.

(6) Maintains national FSEP validation tables.

(7) Executes national FSEP quality assurance and conducts on-going national data integrity validations of FSEP data. These validations are the means to assure national data accuracy and consistency within the FSEP. The OPR will produce validation reports at the

national level and transmit them to the responsible offices for action.

(8) Serves as OPR for the standardization of FEQ and FMO files in MMS and/or NIMS.

(9) Manages and approves FIPs and FEDs for use in FSEP.

(10) Manages and serves as the focal point for the Location Identifier Process.

(11) Serves as OPR for Facility Identification Standards.

b. Service Area Office.

(1) Facility/Service Record also referred to as the FFA. Monitors the FFA to ensure accurate and current data before performing second level approval of FFA records. Second level approval shall not be delegated below the service area office. Initiates necessary follow-up actions, renders advice, and provides assistance to the field; reviews and authenticates data contained in the FFA; and accomplishes all necessary coordination with the OPR on matters relating to the FFA.

(2) Precommissioned Facility Record also referred to as the FPF. Updates and maintains the FPF to ensure accurate and current data. Second level approval of FPF additions/updates shall not be delegated below the service area office. On all approved Facilities and Equipment (F&E) Job Order Numbers (JON) or Job Control Numbers (JCN) from the Regional Tracking Program (RTP), CIP, or regional projects, the service area office is responsible for adding these projects to the FPF with the appropriate information. Initiates necessary follow-up actions, renders advice, and provides assistance to the field; reviews and authenticates data contained in the FPF; and accomplishes all necessary coordination with OPR on matters relating to the FPF.

(3) Location Identifier Process. Evaluates the Identifier Request Form to ensure the request meets the criteria within Order 7350.7, Location Identifiers. Serves as focal point for submitting Identifier Request Forms to the OPR for processing.

(4) FSEP Quality Assurance. Authenticates the FSEP data and requests the appropriate field level to make FFA corrections. FPF data corrections are the responsibility of the service area office. Upon receipt of any headquarters FSEP quality assurance inquiry, the service area office shall forward the inquiry to the appropriate field level for correction within 10 business days.

(5) FIPs for Use in FSEP. Evaluates and validates the FIP Form to ensure the request meets the criteria. Also serves as the focal point for field office submission of FIP forms to the OPR for processing.

(6) FEQ/FMO. Monitors the FEQ, initiates necessary follow-up actions, renders advice, provides assistance to the field; and accomplishes necessary coordination between the service area office and Washington headquarters offices on matters relating to the FEQ/FMO.

(7) FPS. Monitors the FPS, initiates necessary follow-up actions, renders advice, provides assistance to the field; and accomplishes necessary coordination between the service area office and Washington headquarters offices on matters relating to the FPS.

c. Field Office.

(1) The field office is responsible for the accuracy of the FSEP. Prior to making any changes to the FSEP, the field office shall coordinate with all the users to ensure there is no impact to their operations.

(2) FFA. Ensures the accuracy of the FFA and updates WebFSEP as events occur. First level approval shall not be delegated below the field manager's office.

(3) FPF. Monitors the FPF for accuracy and takes necessary action to correct errors.

(4) FSEP Quality Assurance. Upon receipt of any FSEP quality assurance inquiry, the field office shall review the inquiry and make the appropriate correction as directed by the service area office.

(5) FIPs for Use in FSEP. Completes and submits the FIP Form through the service area office for any proposed additions, changes, or deletions to entity types, facility codes, or classes.

(6) FEQ/FMO. Ensures the FEQ/FMO subsystems are in compliance with guidance and takes immediate action(s) to correct any error(s) in the FEQ/FMO equipment profile in MMS. This responsibility may be delegated to the individual assigned maintenance responsibility.

(7) FPS. Ensures population of the FPS subsystem is in compliance with guidance and takes immediate action(s) to correct any error(s) in the FPS subsystem. This responsibility may be delegated to the individual assigned maintenance responsibility.

10. LOCATION IDENTIFIER PROCESS. The following process outlines the basic steps to be used in determining the location identifier for entities identified in FSEP. This process is used when a new entity is installed in the NAS.

a. Review the latest edition of Order 7350.7, Location Identifiers, to determine the identifier to be used in FSEP.

(1) Is the entity listed in Order 7350.7, if so, use the established identifier. Entities located on and serving the runway must show the same runway number and location identifier as the ILS.

(2) Is not identified in Order 7350.7, however meets criteria for inclusion in the order. Complete the Identifier Request Form and submit to the service area office for evaluation and submission to the OPR.

(3) The entity does not meet criteria for inclusion and there is an identifier established, within 20 miles, from the location where it will be installed use the existing identifier. Entities (e.g., RTR) that are collocated at an ILS (e.g., LOC) that serve an airport and not the ILS, shall use the airport identifier.

(4) The entity doesn't meet criteria in 7350.7, and there is not an existing identifier. Complete the Identifier Request Form and submit to the service area office for submission to the OPR. The Identifier Request Form is located on http:/interweb.faa.gov/ats/aaf/aop/200/.

b. OPR Processing of Identifier Request Form.

(1) If the request meets criteria identified in Order 7350.7 then the Identifier Request Form will be forwarded to the National Data Center for assignment of a new identifier. Once an identifier is assigned, the OPR will notify the service area office of the assigned identifier.

(2) If the request doesn't meet criteria in Order 7350.7 then the OPR will assign a "Q" identifier and notify the service area office of the new Q identifier. A "Q" identifier is a three alphanumeric character that begins with the letter "Q". The "Q" identifier is reserved for Technical Operations issuance for entity locations not identified in the order such as communication, power, mobile entities, etc. A listing of assigned "Q" identifies is posted at http://interweb.faa.gov/ats/aaf/aop/200/FSEP/q_id.xls.

11. FACILITY IDENTIFICATION STANDARDS. Facility identification standards are provided for use in agency data systems for the purpose of identifying and classifying entity data. These standards provide for uniform accumulation and presentation of data in program and management data systems. The facility identification standards include entities associated with the NAS in an operating or supporting capacity, which are owned, maintained and/or inspected by Technical Operations personnel. The identifications contained in this order are the official agency identifications for the items prescribed by the standard. To prevent entry of uncoordinated identifications in data systems, deviation in agency data systems is unauthorized without prior approval of OPR.

a. Facility Type. An alpha contraction using up to five-characters to represent the type of entity in FSEP.

b. Coding Structure. This standard provides a data chain consisting of system, capability, type, model and class as a means of identifying entities in FAA data systems. The capability, type and model codes are the facility identification (four-position) code (FIC). The use of the FIC is mandatory in all data systems. To avoid confusion with the numbers "1" and "0", the letters "I" and "O" are not normally used. A complete list of FIC codes is posted at http://interweb.faa.gov/ats/aaf/aop/200/programs/ and is updated as appropriate.

(1) The following FIC structure is effective with the issuance of this order. FICs established prior to the release of this order do not meet the criteria outlined in the following paragraphs. These FICs will not be changed to conform to the criteria because of the workload required to convert records and files.

(2) System Code. A one position numeric code identifying how the system is used in the NAS.

FIGURE 1. TABLE OF DATA ITEMS FOR SYSTEM CODE

CODE	SYSTEM CODE DESCRIPTION
0	Miscellaneous Facility Systems. Equipment operated, maintained and/or supported by the FAA, but primarily sponsored and financed by other agencies, municipalities, or private concerns (e.g., NAS Defense).
1	En Route Air Navigation System. Equipment which provides guidance, orientation, and position for aircraft operating between terminal areas of the NAS or across international boundaries.
2	En Route Air Traffic Control System. The FAA entity organized and equipped to direct, control, and coordinate air traffic operation between terminal areas of the NAS.
3	Terminal Area Navigation System. Equipment which provides guidance, orientation, and position for aircraft operating within terminal areas of the NAS.
4	Terminal Area Traffic Control System. The FAA entity organized and equipped to direct, control, and coordinate air traffic operations within a terminal area of the NAS.
5	Combined Area Traffic Control System. The FAA entity equipped to coordinate and/or support air traffic operations (e.g., OCC, ATCSCC, NNCC and FMP).
6	RESERVED.
7	Flight Service Systems. The FAA entity organized and equipped to assist pilots operating aircraft under visual flight rules (VFR) in support of Flight Service operations.
8	RESERVED.
9	Support System. Those pseudo-cost entities used to identify organizational structure.

(3) Capability Code. The first position of the FIC is a one position alpha code that classifies the entity by its primary capability.

FIGURE 2. TABLE OF DATA ITEMS FOR CAPABILITY CODE

CODE	CAPABILITY CODE DESCRIPTION
A	Automation
C	Communication
I	Infrastructure
M	Mission Support
N	Navigation/Landing
S	Surveillance
W	Weather

(4) Type Code. The second and third positions of the FIC are an arbitrarily assigned alphanumeric code assigned by the OPR that uniquely identifies each entity within a capability.

(5) Model Code. The fourth position of the FIC is a one position alphanumeric code that provides specific identification of equipment models. Model codes are used to differentiate between entities that have the same facility identification but are significantly different in terms of their equipment composition. This standard provides a means to identify and differentiate between discrete configurations (models) of any given entity.

(6) Class Code. A one position alphanumeric code further identifying equipment as defined in the FED.

12. FSEP IDENTIFICATION PROCESS (FIP). The FIP establishes the method to enhance and expedite the creation of FSEP information. A FIP Form shall be submitted to the OPR for inclusion into FSEP for systems, subsystems, equipment and facilities that are owned, maintained and/or inspected by Technical Operations personnel. An electronic version of the FIP Form can be obtained via the OPR web site http://interweb.faa.gov/ats/aaf/aop/200/fsep. FSEP entries must fully meet one or more of the following criteria to be considered a valid FSEP entity:

a. NAS Related – Entities shall provide one or more of the following: electronic positional radar information, radar weather data, surface movement detection, electronic guidance to aircraft, lighted navigational or guidance information to aircraft, visual navigational or guidance information to aircraft, air-to-ground, ground-to-air and ground-to-ground communications services, satellite communications, satellite data transmission, geo-stationary satellite navigation services, weather information to aircraft, weather products to air traffic controllers, terminal navigational aid to aircraft, enroute navigational aid to aircraft, data to taxiing aircraft, data to airborne aircraft, data to air traffic controllers, aircraft conflict warning, aircraft conflict avoidance, monitoring of NAS systems, subsystems or equipment, remote control of NAS systems, subsystems or equipment, automated processing of radar information, automated voice

switching, offshore communications, offshore aircraft position prediction, international communications, emergency and natural disaster readiness, intra-facility or inter-facility communications.

b. NAS Support – Entities shall provide one or more of the following: standby power for electronic systems, subsystems, or equipment, conditioning of commercial electrical power, shelter for NAS systems, subsystems, or equipment, water, sewer, or sanitation for NAS facilities, vehicle or pedestrian access to NAS facilities, off-road transportation of personnel to NAS facilities, security of NAS facilities, personnel and operational systems, fire, smoke, and heat detection of NAS facilities, monitoring and control of critical NAS facilities, systems, subsystems, and equipment, cables, intra-facility or inter-facility communications.

c. The following process is required for the FIP:

(1) Any FAA organization planning to create or modify an entity in FSEP will submit a completed FIP Form including both a physical and functional description to the OPR.

(2) OPR will evaluate the request and coordinate with appropriate program offices.

(3) If disapproved, the appropriate offices will be notified.

(4) If approved, OPR will prepare a draft FED that will include the entity type, system code, FIC, classes and both a physical and functional description based on the initial FIP request.

(5) OPR will issue the draft FED to the appropriate FAA organizations for review and comment.

(6) FAA organizations will have 10 business days to review the draft FED and submit comments or concerns to OPR.

(7) Before finalizing the FED, OPR will evaluate comments/concerns and respond within 30 business days.

(8) Once approved, the OPR will update the appropriate WebFSEP validation files and post FED information to the official OPR web site.

13. FSEP ENTITY DESCRIPTIONS (FED). FED descriptions are located at http://interweb.faa.gov/ats/aaf/aop/200/fsep and contain the most current information specific to entity types (e.g. FIC, classes, travel standards, percent of contract maintenance, associated services/facilities, additional notes, etc.). The FED serves as the official source document for all FFA/FPF entries.

14. WebFSEP. WebFSEP is the technology providing the means for authorized users to update and review FFA and FPF data via a web-browser and is the application that assists the FAA with data integrity improvements by supporting a discrete review and approval process. WebFSEP eliminates transmission problems between Maintenance Processor Systems (MPS), provides immediate update of national validation files and is the centralized national database accessible via web-browsers on the FAA intranet. It also updates MMS and/or NIMS databases to provide

current and accurate FSEP data to all users. Refer to the latest edition of TI6030.9, Web Facility/ Service/Equipment Profile (FSEP) WebFSEP User's Manual for guidance on using the WebFSEP application.

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