# Appendix I. Establishing a Non-federal System

## 1. Process Overview.

Requesting approval to establish a non-federal system requires that you submit a variety of documents and information to the FAA. There are also regulations and policy you should consider.

### a. Formal Request.

Send a formal request to the FAA with your project plan.

(1) Submit "pre-commissioning data." I.e., the project/system information needed to assess and approve your planned installation, including, but not limited to, information you will provide with the following required submissions.

(2) Request a siting airspace study, if applicable, to determine the feasibility of installing a system on or off airport property. Provide the following forms to your Non-federal PIM:

(a) Form 7460-1, *Notice of Proposed Construction or Alteration* (for all systems);

(b) Form 7460-2, *Supplemental Notice: For Advance Notice of Actual Construction or Alteration* (if the location of your system will not be on the airport);

(c) Form 7480-1, *Notice for Construction, Alteration, and Deactivation of Airports* (if you are constructing, altering the layout of, or deactivating a civil or joint {civil/military} use airport).

(3) Submit the latest version of your Airport Layout Plan (ALP).

### b. Secure an FCC License.

Request FAA assistance in securing a Federal Communications Commission (FCC) frequency license, if your system transmits radio signals.

### c. Standard Instrument Approach Procedure (SIAP).

Request FAA development and/or modification of a Standard Instrument Approach Procedure (SIAP), if applicable.

### d. Compliance Directives.

To ensure that you safely operate and maintain your non-federal system, the FAA will require you to comply with certain FAA regulations, policy directives ("orders"), and advisory circulars (ACs). We encourage you to familiarize yourself with the requirements of Title 14 Code of Federal Regulations, Part 171, *Non-Federal Navigation Facilities*, and the most recent version of FAA Order 6700.20, *Approval, Operation, and Oversight of Non-federal Systems*. Order 6700.20 references additional guidance documents.

### e. Public Website.

You may also find it helpful to explore the Advanced Systems Design Service (ASDS) Team Non-federal Program public website: www.FAA.gov/Go/NonFed.

## 2. What Type of System are You Establishing?

Different types of non-federal systems have different requirements for establishment. For the purposes of this document, non-federal systems fall into three categories.

**a. Visual Aids (VisAids)**.

Lighting systems used for visual flight rule approaches. These are not associated with a landing system.

**b. Navigation Aids (NavAids)**.

Systems that directly support an Instrument Flight Procedure (IFP). For the purposes of this document, "NavAids" will include Approach Lighting Systems (ALS) associated with a landing system.

(1) ALSF (ALS with sequenced flashing lights)

(2) MALS (Medium-intensity ALS)

(3) MALSF (MALS with sequenced flashing lights)

(4) MALSR (MALS with runway-alignment indicators)

**c. Other Systems**.

Systems that are neither NavAids nor VisAids. Ex. Automated Weather Observing System ("AWOS").

**3. Different Requirements for Different System Types.**

The commissioning process for any type of system varies; each project is unique and the review and approval of the project must be complete before you start. In addition to the requirements outlined in the Process Overview, you must also follow the directions provided in this section, listed separately by system type.

**a. VisAids not Associated with a Landing System**.

*The Office of Airports, Safety & Standards, Airport Engineering Division typically regulates these types of VisAids (not the ASDS Non-federal Program). We share the following information with you as a courtesy. To the best of our knowledge, it is accurate as of the date of this document.*

(1) Ensure that the system is FAA approved for use, per the most recent version of AC 150/5345-53, *Airport Lighting Equipment Certification Program*.

(2) Ensure your project construction and installation meets the guidance in the most recent version of AC 150/5300-13, *Airport Design*.

(3) Familiarize yourself with the responsibilities involved in maintaining the system, per the most recent version of AC 150/5340-26, *Maintenance of Airport Visual Aid Facilities*.

(4) Ensure the system meets the specifications in the most recent version of AC 150/5340-30, *Design and Installation Details for Airport Visual Aids*.

(5) Understand that the FAA will not conduct commissioning nor periodic ground inspections.

(6) Understand that the system may require passing an FAA-performed commissioning flight inspection.

(7) Enter into a reimbursable agreement with Flight Program Operations (ATO/AJF), to compensate the FAA for flight-inspection costs, if applicable.

(8) Once you have met all of the FAA's requirements (including those listed above), the FAA will commission the system.

**b. NavAids (Including ALS Associated with a Landing System)**.

(1) SIAP Requests.

(a) The FAA Service Center IFP Validation Team will review all IFP requests in accordance with criteria outlined in FAA Order 8260.43, *Flight Procedures Management Program*. The purpose of the validation is to ensure that the FAA uses its resources efficiently to benefit the National Airspace System (NAS) and align with FAA national initiatives.

(b) *Request Approved*. If the Validation Team approves the request, the IFP Prioritization Team will prioritize the request and incorporate it into the national production schedule to ensure the FAA meets the safety, operational, and strategic needs of the NAS.

(c) The IFP process will take approximately 18 months from initial request to publication. The timeframe may increase depending on the type of request, complexity, environmental impacts, or community engagement.

(d) The FAA reviews all IFPs every two years to assess utilization and other factors. If the FAA determines that a procedure is a candidate for potential cancellation, the Agency will engage with the procedure's stakeholders to determine the appropriate path forward. Please address additional questions and/or general comments concerning IFP via email 9-AMC-Aerochart@faa.gov.

(e) *Request Disapproved*. If the IFP Validation Team disapproves your request, you may file an appeal in accordance with the guidance outlined in Order 8260.43. If the appeal receives a disapproval, you have the option to contract with an approved Non-FAA Procedure Development Service Provider for the publication of your IFP. Remember, there is a fee.

(f) If the system is for private-use only (i.e. not available for use by the public), the FAA requires you to obtain a "special" or "private-use" IFP. You must reimburse the FAA for all expenses associated with the development and maintenance of these types of procedures, along with the costs associated with all commissioning and recurring ground and flight inspections. Non-FAA Procedure Development Service Providers may publish these also.

(2) Installation & Commissioning.

(a) Hire a non-federal maintenance technician to maintain the system. The technician must have the appropriate qualifications to receive FAA-issued verification authority. The most recent version of Order 6700.20 provides guidelines for qualifications.

(b) Coordinate the request for the technician to receive verification authority.

(c) Site the system in accordance with the appropriate ACs and/or FAA orders.

(d) Sign an Operations and Maintenance Manual (OMM), which an FAA Inspector will prepare for you. A copy of the OMM must remain on site at all times, with the system's Facility Reference Data.

(e) The system must pass a commissioning ground inspection conducted by an FAA Non-federal Inspector and attended by your non-federally employed maintenance technician.

(f) The system must pass a commissioning flight inspection conducted by the FAA and attended by your non-federally employed maintenance technician.

(g) Upon completion of these steps, the FAA can commission the system. The IFP publication cycle is 56 days, but it could take longer depending on the actual project completion date.

**c. Other Systems**.

(1) Hire a non-federal maintenance technician to maintain the system. The technician must have the appropriate qualifications to receive FAA-issued verification authority. The most recent version of Order 6700.20 provides guidelines for qualifications.

(2) Coordinate and request that the technician receive FAA-issued verification authority.

(3) Site the system in accordance with the appropriate ACs and/or FAA Orders.

(4) Sign an OMM, which an FAA Inspector will prepare for you. A copy of the OMM must remain on site at all times, with the system's Facility Reference Data.

(5) The system must pass a commissioning ground inspection conducted by an FAA Inspector and attended by your non-federally employed maintenance technician.

(6) If required, the system must pass a commissioning flight inspection conducted by the FAA and attended by your non-federally employed maintenance technician. AWOS do not require flight inspection unless broadcasting over a NavAid.

(7) Once you have met all of the FAA's requirements, the FAA will commission the system.

**4. Submitting Required Information.**

Follow the steps below after identifying the type of system you are planning to establish.

**a. Submit Letter**.

Submit a signed letter to your FAA Non-federal PIM. The letter must include the following information:

(1) Provide the airport's name, airport identifier, city, and state

(2) Identify your project's funding source (e.g. AIP Grant, State funding)

(3) Identify the system type, including manufacturer and model

(4) Identify the type of airport: public-use or private-use

(5) Provide a point of contact, including name, phone number, and email address

**b. Complete Proper Forms**.

(1) Visit the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website for guidance on which forms and the supporting documents the FAA will need. AC 150/5300-20, *Submission of On-Airport Proposals for Aeronautical Study*, provides guidance to assist with ensuring you provide accurate and complete information.

(2) The OE/AAA site menu provides guidance and tools to help you select the right forms.

(3) If your project involves any of the following, be sure to use the additional tools provided on the website to assist in planning your project and developing your submission package.

(a) Establishing a system near a wind turbine, use the "Wind Turbine Build Out".

(b) Establishing a system on airport property, complete FAA Form 7460-1, Notice of Proposed Construction or Alteration and FAA Form 7480-1, *Notice for Construction, Alteration, and Deactivation of Airports* (if applicable).

(c) Establishing a system off airport property, complete FAA Form 7460-1 and FAA Form 7460-2, *Supplemental Notice: For Advance Notice of Actual Construction or Alteration*.

(d) Establishing a system offshore, use the "Distance Calculation Tool" to determine if your location is in international waters. If the location is in international waters, the FAA does not have jurisdiction and you do not need to submit information for approval of your project.

(4) *DO NOT* submit the forms via the OE/AAA website. Download copies of the forms from faa.gov/forms.

(5) After completing the forms, submit them to your Non-federal PIM along with the appropriate supporting documentation.

(6) The latest version of AC 150/5300-13, Airport Design, will guide you in preparing and gathering the appropriate information. Note: AC 150/5300-13, Table 3-4 provides standards for instrument approach procedures.

(7) If you must provide an Airport Layout Plan (ALP), be sure it is the most recent version and shows the following:

(a) The distance from the runway centerline(s) and threshold(s) to the location of the proposed system.

(b) The complete runway and taxiway configuration, apron areas, hangars, and administration building(s).

(c) Runway lengths, widths, elevations at runway ends, runway coordinates, and runway numbers.

(d) Coordinates of the proposed system. (All coordinates must be relative to the ALP's scope of work.)

**c. Systems with a Transmitter**.

If your system has a radio transmitter, use the FAA's Frequency Coordination Request tool (WebFCR) to begin the process of obtaining an FCC-issued frequency license. The Federal Communications Commission (FCC) will not grant you a frequency license unless you coordinate the request with the FAA.

**d. Requesting an IFP**.

If you need an IFP, submit your request(s) via the Instrument Flight Procedures Gateway. *The FAA recommends submitting your request(s) as early as possible*. You should factor in the IFP validation process and procedure development timeline when planning your project.

**5. When to Begin Installation.**

**a. Siting Study**.

(1) Upon completion of the siting study, you will receive a *Final Determination Letter*. This letter provides the results of the siting study and indicates if there are any objections to your project.

(2) The Final Determination Letter *is not* FAA approval to begin your project. There may be additional steps the FAA must complete before you may proceed, such as, engineering a frequency, approving your IFP request, etc.

**b. Project Approval**.

(1) The Non-federal PIM will send you a *Project Approval Letter* when all process steps are complete.

(2) The Project Approval Letter gives consent to begin your project. The Non-federal Program strongly discourages you from procuring your system before receiving the Project Approval Letter.

**c. Construction**.

When you are ready to begin construction, additional aeronautical studies may be necessary for any construction activities including the use of construction equipment.

(1) You must file these airspace studies 45 days prior to starting construction.

(2) You or your contractor will file these studies via the OE/AAA portal and not through the Non-federal PIM.