Part IV: Airports and Aeronautical Users

Chapter 7. Airport Operations and Maintenance

7.1 Introduction.

This chapter contains guidance on an airport sponsor's airport operations and maintenance responsibilities. This chapter does not cover the additional requirements that 14 CFR part 139 (Part 139), Certification of Airports, imposes on airports serving certificated scheduled air carriers.[1]

Airport sponsors are required, under 49 U.S.C. § 47107(a)(7), to suitably operate and maintain the airport and facilities on or connected with the airport, with consideration given to climatic and flood conditions. This applies to equipment and facilities regardless of the funding source. Under that statutory authority, Grant Assurance 19, *Operation and Maintenance* requires the airport, and all facilities needed to serve aeronautical users, be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable federal, state, and local agencies.

7.2 Roles and Responsibilities.

It is the responsibility of the FAA Regional Airports Divisions (Regions) and Airports District Offices (ADOs) to ensure that the airport sponsors operate and maintain their airports in accordance with federal grant assurances and federal transfer agreement obligations, including those related to aircraft operations and airport safety.

7.3 Controlling Grant Assurances and Federal Guidance.

a. Grant Assurances.

(1) Grant Assurance 19, *Operation and Maintenance* is the most encompassing federal grant assurance related to airport operations and maintenance. It requires the sponsor to operate and maintain the airport's aeronautical facilities – including pavement and airfield lighting and related systems in a safe and serviceable condition in accordance with the standards set by applicable federal, state, and local agencies. FAA pavement guidance applies. Specifically, this grant assurance states:

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[1] Contact the FAA Airport Safety and Operations Division, AAS-300, in Washington DC, for additional information on Part 139 matters.

The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary.

In furtherance of this assurance, the sponsor will have in effect arrangements for:

1. Operating the airport's aeronautical facilities whenever required;
2. Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
3. Promptly notifying pilots of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood, or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.

(2) Grant Assurance 20, *Hazard Removal and Mitigation* requires:

[The Sponsor] will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

(3) Grant Assurance 11, *Pavement Preventative Maintenance-Management* requires:

> With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

As explained in this chapter, to comply with the grant assurances, an airport sponsor must have in effect arrangements for (1) operating the airport's aeronautical facilities whenever required (*e.g.*, nighttime); (2) promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; (3) promptly notifying pilots of any condition affecting aeronautical use of the airport, and (4) ensuring proper coordination with the FAA when there are operational impacts. In addition, from a policy perspective, the FAA expects airport sponsors to make available the equipment, personnel, funds, and other resources, including contract arrangements, to implement an effective maintenance program for the airport and its facilities, including adequate preventive maintenance processes to carry out its commitment under the grant assurances.

Although an acceptable level of maintenance is difficult to express in measurable units, the FAA will consider a sponsor compliant with its federal maintenance obligation when the sponsor does the following:

(1) Fully understands that airport facilities must be kept in a safe and serviceable condition.

(2) Makes available the equipment, personnel, funds, and other resources, including contract arrangements, to implement effective self-inspection and maintenance programs.

(3) Adopts and implements a detailed program of cyclical preventive maintenance that is adequate to ensure the airport complies with its obligations.

b. 47 CFR part 17, *Construction, Marking, and Lighting of Antenna Structures*.

Under 47 CFR part 17 (Part 17), the Federal Communications Commission (FCC) has the authority to issue public radio station licenses and prescribes procedures for antenna structure, registration, and standards. Antenna structure registration application requirements are outlined in 47 CFR § 17.4, *Antenna structure registration*. The types of antenna construction or alteration that require notification to the FAA are outlined in 47

CFR §17.7, *Antenna structures requiring notification to the FAA*. If the FAA determines that an antenna structure constitutes a hazard to air navigation, or there is a reasonable possibility it will constitute a hazard, Part 17 requires painting or illuminating the antenna structure.

Aeronautical facilities that do not exist at the time the application for an antenna structure is filed will only be considered if the proposed airport construction or improvement plans for these facilities are on file with the FAA as of the application filing date for the antenna structure.

c. FAA Advisory Circular 150/5300-13, *Airport Design*.

This AC provides guidelines and standards for the design of civil airports. The FAA approved Airport Layout Plan (ALP), to the extent practicable, should conform to the FAA airport design standards existing at the time of its approval. (*See* AC 150/5300-13, paragraph 5.a). The sponsor should apply these standards consistently and in a manner that supports the development and operation of the airport. However, introducing weight limitations after a runway or taxiway is constructed to the FAA standards may be considered an access restriction. Accordingly, coordination with the FAA's Office of Airports Compliance and Management Analysis (ACO) is highly recommended to ensure compliance with federal obligations. (*See* chapter 10, *Reasonable Commercial Minimum Standards*, section 10.5.c, *Developing and Applying Minimum Standards, Aircraft Weight Restrictions*).

7.4 Federal Government Use during a National Emergency or War.

a. Airports Subject to Federal Property Instruments of Transfer.

Practically all War Assets Administration (WAA) Regulation 16 and Surplus Property Act of 1944, Pub. L. No. 80-289 instruments of disposal of real and related personal property also contain the National Emergency Use Provision (NEUP). Under this provision, the United States has the right to make exclusive or nonexclusive use of the airport or any portion thereof during a war or national emergency (*see* 14 CFR § 155.9). This provision is similar in all such instruments. (*See* chapter 3, *Federal Obligations from Property Conveyances*).

The NEUP represents the U.S. Government's interest in and ability to reactivate an airport as a military facility in case of war or national emergency. One example is the former Naval Air Station (NAS) Miami, which in 1952 was reactivated as a Marine Corps Air Station during the Korean War. The Navy Department took over the facility from its civilian sponsor from 1952 and 1958, after which it was returned to civilian control. In other cases, old World War II installations decommissioned after the war were never reactivated. Since many had excessive parcels of land, the FAA granted many releases for disposal over the years and, when permitted by DoD, released the NEUP as well.

b. Airports Subject to Grant Agreements.

FAA grant agreements do not contain any provision authorizing military agencies to take control of the airport during a national emergency.

c. Negotiation Regarding Charges.

Negotiations under war or national emergency clauses will be between the federal agency requiring the use of the airport and the sponsor. The only compliance responsibility the FAA has regarding such clauses is releasing the property from its federal obligations. (*See* chapter 22, *Land Use Changes and Releases of Federally Acquired and Federally Conveyed Land*).

7.5 Airport Maintenance Federal Obligations.

a. Agreements Involved.

Most airport agreements with the federal government impose on the sponsor a continuing federal obligation to preserve and maintain airport facilities in a safe and serviceable condition. An exception may exist in instrument of transfer documents conveying federal lands under the authority of section 16 of the Federal Airport Act of 1946 (1946 Airport Act), section 23 of the Airport and Airway Development Act of 1970 (1970 Airport Act), and section 516 of the Airport and Airway Improvement Act of 1982 (AAIA). This current provision is codified at 49 U.S.C. § 47125. However, these transfers are normally followed with development grants that impose federal maintenance obligations.

Where section 16, 23, or 516 conveyances are made under circumstances that do not involve a follow-on development agreement, the maintenance and operation grant assurances should be incorporated into the instrument of transfer document as a special condition.

b. Airport Facilities to be Maintained.

This section applies to all airport facilities shown on the Airport Layout Plan (ALP) as initially dedicated to aviation use by an instrument of transfer or federal grant agreement. This means that the sponsor cannot discontinue maintenance of a runway or taxiway or any other part of the airport used by aircraft until the FAA formally relieves the sponsor of the federal maintenance obligation. The federal obligations of the sponsor remain in force throughout the useful life of the facility. (*See* chapter 4, *Federal Grant Obligations and Responsibilities*, section 4.4, *The Useful Life of Grant Funded Projects*).

If land was acquired with federal assistance the obligations on the land remain in effect until released by the FAA. (*See* chapter 4, *Federal Grant Obligations and Responsibilities*, section 4.3, *Duration of Federal Grant Obligations*).

For private airports, the useful life of project items installed within a facility, or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project, shall be no less than 10 years from the date of acceptance of the Federal aid project. If land was acquired with federal assistance, the federal obligation to maintain and operate the airport will remain in effect until released by the FAA. (*See* Grant Assurance B, *Duration and Applicability*).

In all cases, the actual obligating documents should be reviewed to ensure the exact terms of the grant agreement are applied. An airport sponsor cannot shorten its obligations by allowing projects to deteriorate. The FAA Regions make the determination of when the useful life has expired on a federally funded project that needs reconstruction, rehabilitation, or major repair in order to continue serving the purpose for which it was developed. (*See* chapter 4, *Federal Grant Obligations and Responsibilities*, section 4.4, *The Useful Life of Grant Funded Projects*).

Most airport agreements impose on the sponsor a continuing federal obligation to preserve and maintain airport facilities in a safe and serviceable condition.

7.6 Maintenance Procedures.

Generally, airport grant agreements require the sponsor to carry out a continuing program of preventive and remedial maintenance. The maintenance program is intended to ensure that the airport facilities are at all times in good and serviceable condition to use in the way they were designed. This includes maintenance of airport pavement. (*See* section 7.7, *Airport Pavement Maintenance Requirement*). In addition, the FAA recommends that airport sponsors must maintain an Airport Safety Self-Inspection program as further described in section 7.10, *Airport Operations Requirements*. This includes but is not limited to inspection and maintenance of paved and unpaved areas, segmented circles and wind cones to ensure accurate readings, and drainage structures. Additionally, the airport agreement may express or imply requirements and include specific federal obligations such as:

- Frequently check all structures for deterioration and repair.
- Inspect paved and unpaved (gravel, turf, etc.) runways, taxiways, and common-use areas at regular intervals to ensure compliance with operational and maintenance standards, to prevent progressive deterioration of operation areas,

and to make routine repairs such as filling holes, mowing, grading, and crack sealing etc.

- Maintain airfield signage in a safe and operable condition at all times.
- Frequently inspect segmented circles and wind cones to ensure accurate readings and proper functioning.
- Frequently inspect all drainage structures including subdrain outlets to ensure unobstructed drainage.
- Identify and address wildlife hazards (s*ee* section 7.12.d, *Hazards and Mitigation. Wildlife Hazards*).
- Frequently check all approaches to ensure conformance with federal obligations.
- Frequently check airport markings, lighting, signs, and visual and radio navigational aids, to ensure in conformance with federal obligations.

7.7 Airport Pavement Maintenance Requirement.

A parallel assurance to Grant Assurance 19, *Operation and Maintenance*, is the airport sponsor's federal obligation to maintain a pavement preventive maintenance program under Grant Assurance 11, *Pavement Preventive Maintenance*. This assurance requires sponsors with federally funded pavement projects for replacement or reconstruction approved after January 1, 1995, to implement an effective pavement maintenance and management program that runs for the useful life of any pavement constructed, reconstructed, or repaired with federal financial assistance.

Sponsors must comply with FAA Advisory Circular AC 150/5380-7, *Airport Pavement Management* (PMP) for all projects funded with AIP funds. This AC sets forth the minimum requirements of a pavement maintenance program.

a. Guidelines for Inspecting Pavement.

Failing to provide basic pavement maintenance can be a compliance concern to the FAA. Lack of adequate and timely maintenance is the greatest single cause of pavement deterioration and, as a result, loss of federal investment. As such, the FAA places a high priority on the upkeep and repair of all pavement surfaces in the aircraft operating areas. Properly maintained pavements also ensure safe aircraft operating areas. While deterioration of pavement due to usage and exposure to the environment cannot be completely prevented, a timely and effective maintenance program can reduce this deterioration. As discussed in AC 150/5380-7, all federally obligated airports must perform a detailed inspection of airfield pavements at least once a year for the Pavement Management Program (PMP).

Many failures of airport pavement and drainage features have been directly attributed to inadequate maintenance characterized by the absence of a PMP. The FAA recognizes that a maintenance program, no matter how effectively carried out, cannot overcome or compensate for a major design or construction inadequacy. Nonetheless, an effective maintenance program is critical in preventing pavement failure that may result from design or construction deficiencies. PMP inspections can reveal problems at an early stage and provide timely warning to permit corrective action. Postponing even minor pavement maintenance can develop into the need for a major pavement rehabilitation or replacement project.

The following FAA Advisory Circulars provide guidelines and procedures for inspecting airport pavements and can be found at:

(1) AC 150/5320-6, *Airport Pavement Design and Evaluation*

(2) AC 150/5380-6, *Guidelines and Procedures for Maintenance of Airport Pavements*

(3) AC 150/5380-7, *Airport Pavement Management Program (PMP)*

(4) AC 150/5200-18, *Airport Safety Self-Inspection*

(5) AC 150/5340-26, *Maintenance of Airport Visual Aid Facilities*

b. Pavement Inspection Procedures.

Pavement maintenance is a continuous function and the responsibility of the airport sponsor. For a maintenance program to be effective, a series of scheduled, periodic inspections or surveys conducted by experienced engineers, technicians, or maintenance personnel is required. These surveys must be controlled to ensure that (i) each element or feature being inspected is thoroughly checked, (ii) potential problem areas are identified, and (iii) proper corrective measures are recommended. The maintenance program must provide adequate inspection follow-up to ensure corrective work is expeditiously accomplished and recorded. Although the organization and scope of maintenance activities will vary in complexity and degree from airport to airport, the general types of maintenance are relatively the same regardless of airport size or extent of development.

c. Pavement Inspection Schedules.

The airport sponsor is responsible for establishing a schedule for inspections. The pavement inspection should be scheduled to ensure that all paved areas, particularly those that may not come under day-to-day observation, are thoroughly checked. Thorough inspections of all paved areas should be scheduled at least twice a year. In temperate climates, one inspection should be scheduled for spring and one for fall. Any severe storms or other conditions that may have an adverse effect on the pavement

may also necessitate a thorough inspection. In addition, visual pavement inspections should be included in the airport sponsor's self-inspection.

d. Pavement Recordkeeping.

Airport sponsors should record and maintain complete information concerning all pavement inspections and maintenance performed. The severity of existing pavement problems, locations, probable causes, remedial actions, and results of follow up inspection and maintenance should be documented. In addition, records should contain information on potential problem areas and preventive or corrective measures identified. Records of materials and equipment used to perform all maintenance and repair work also should be maintained for future reference. Such records can be used later in identifying materials and remedial measures that may reduce maintenance costs and improve pavement serviceability.

The suggested procedures for performing a pavement condition survey are included in AC 150/5320-6, Airport *Pavement Design and Evaluation*, and AC 150/5380-7, *Airport Pavement Management Program (PMP)*. The results of a pavement condition survey can inform pilots of existing pavement surface conditions and to help airport sponsors plan and prioritize pavement maintenance and replacement. Based on data collected from such surveys, surface pavement conditions are reported as a numerical ranking known as Pavement Condition Index (PCI). The PCI is a rating of the surface condition of a pavement and is a measure of functional performance with implications of structural performance. Periodic PCI determinations on the same pavement will show the changes in performance level with time.

7.8 Major Pavement Repairs.

a. Unpreventable Deterioration.

The federal obligation to maintain the airport does not extend to major rehabilitation of a facility that has become unusable due to normal and unpreventable deterioration or through acts of God. (*See* Grant Assurance 19, *Operation and Maintenance*). Therefore, a sponsor's federal maintenance obligations do not include such requirements as restoring a building destroyed by fire, earthquake, or hurricane winds, nor do they include undertaking a major rehabilitation of a portion of the airfield inundated by floods. Likewise, airport sponsor federal obligations do not include the complete resurfacing of a runway unless it is the result of obvious neglect of routine maintenance over time. Failure to perform day-to-day airport maintenance, however, may have a cumulative effect, resulting in major repairs and reconstruction that will fall under the sponsor's federal obligations.

b. Pavement Overstressing.

The sponsor has a commitment to prevent gross overstressing of airport pavement beyond load bearing capacity. If airport pavement deteriorates and the sponsor is not prepared to strengthen the pavement, then the sponsor must limit the pavement's use to aircraft operations that will not overstress the pavement, while the sponsor addresses the issue. Should failure occur because the sponsor failed to take timely corrective action after being advised of the pavement limitations, restoration of the failed pavement to a satisfactory condition may not be eligible for AIP funding.

7.9 Unpaved Landing Areas.

Airports can safely accommodate most general aviation activities. Aeronautical users, operators, and the airport sponsors should collaborate to find a reasonable location on the airport for safe operation of the activity, which may include unpaved landing areas. Airport sponsors have a variety of FAA regulations, policy, and guidance at their disposal to assist in safely accommodating general aviation operations from unpaved areas. Reasonable accommodations may mean providing access to areas other than the runways or taxiways as designated operating areas.

In those cases where an airport imposes a restriction on these operations, or an aeronautical user files a complaint, the FAA will review the matter. In coordination with Flight Standards, ARP will review the proposed restriction and balance the (1) specific circumstances of the case, (2) airport compliance requirements, (3) Flight Standards oversight of operational safety determinations, and (4) as applicable, the role of the airport design standard(s).

7.10 Airport Operations Requirements.

A fundamental obligation of the sponsor is to keep the airport open for public aeronautical use. Grant Assurance 19, *Operation and Maintenance*, requires the sponsor to operate the airport and all facilities necessary to serve the aeronautical users of the airport at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable federal, state, and local agencies for operation. This includes adopting and enforcing rules, regulations, and ordinances as necessary to ensure safe and efficient flight operations.

The sponsor must use its AIP-FAA funded equipment for the purpose specified in the grant agreement. It must maintain the equipment in accordance with appropriate advisory circulars and manufacturer recommendations. Refer to the actual grant agreements to confirm that the equipment acquired with FAA funds and reported in the airport's inventory is the same as listed in the sponsor's grant agreements during the useful life of the equipment. (*See AIP Handbook*, Order 5100.38, Table 5-31 *Project Physical Completion Requirements*, *(c) Equipment Acquisition*).

Accordingly, the sponsor is more than a passive landlord because the assurance federally obligates it to maintain and operate the aeronautical facilities and common-use areas for the benefit of the public.

This responsibility includes the following:

a. Safe Operations.

The sponsor should adopt and enforce adequate rules, regulations, or ordinances as necessary to ensure safety and efficiency of aircraft operations and to protect the public using the airport. When a proposed action would directly impact the flight of an aircraft, that action should be coordinated with FAA Flight Standards and/or Air Traffic Control, as well as the Region or ADO.

b. Operations in Inclement Weather.

The federal obligation to maintain the airport does not impose any specific responsibility to remove snow or slush or to sand icy pavements. Nonetheless, when the airport is expected to have snow and ice operations on a seasonal or regular basis, and AIP equipment and development has been funded for that purpose, the airport is obligated to develop snow and ice airport maintenance procedures. The sponsor is responsible for providing a safe, usable facility. A safe and usable facility includes protection of runway safety areas and other areas that may be compromised if snow berms are left adjacent to the pavement edge. (*See* AC 150/5200-30, *Airport Field Condition Assessments and Winter Operations Safety*). Where climatic conditions may affect the decision of flight, the sponsor must promptly issue a Notice to Airmen (NOTAM) and, if necessary, close all or part of the airport until unsafe conditions are remedied. Additional NOTAMs may need to be issued as field conditions change. Such NOTAMs should be canceled promptly when the airport reopens, and operations return to normal. The sponsor should correct unsafe conditions within a reasonable amount of time.

c. Airport Self-Inspections.

The FAA recommends that sponsors implement a safety self-inspection program that incorporates these requirements to operate an airport in addition to other safety items. This includes developing and using self-inspection checklist, as part of the airport's self-inspection program. The current edition of AC 150/5200-18, *Airport Safety Self-Inspection*, provides guidance on guiding airport self-inspections, including sample inspection checklists.

d. Airfield Lighting.

If airfield lighting is installed, the sponsor must ensure that the airfield lighting and associated airport beacon and lighted wind and landing direction indicators are operated every night of the year or when needed during low visibility conditions as described in

pilot publications. This means that the lights must be on at night or be available for use upon demand. This requirement can be effectively met by an attendant to turn on the proper lights when requested. The sponsor can also install pilot-controlled lighting system that uses an electronic device that permits remote activation of field lighting by radio equipment in an aircraft. Properly maintaining marking, lighting, and signs can reduce the potential for pilot confusion and prevent a pilot deviation or runway incursion.

At some locations, the sponsor may not need to operate the airfield lights every night. This might occur where the aeronautical demand is seasonal or where demand ceases after a certain hour each day. However, airport lighting is not only important during periods of darkness. Airport lighting is a safety enhancement during visual operations with partial weather obscurations such as rain, fog, or snow.

In very rare cases, circumstances may make using an airport undesirable during certain hours of darkness, such as when air traffic control is suspended during some part of the night and the local environment (obstructions or heavy enroute traffic) makes using the airport hazardous during that period. Under such circumstance, the FAA may consent to a part-time operation of airfield lights. The FAA's consent must be recorded in the form of a safety determination, where the FAA Flight Standards and other FAA offices had an opportunity to comment, such as an airspace study.

e. Warnings.

If any part of the airport is closed or if the use of any part of the airport is hazardous or unserviceable, including Navigational Aids (NAVAIDs), the sponsor must provide warnings to users, such as adequate marking and promptly disseminate airport condition information using the FAA's NOTAM system and follow local procedures to disseminate information to tenants. (*See* AC 150/5200-28, *NOTAMS for Airport Operators*).

f. Transportation Security Administration (TSA) Security Requirements.

(1) General Information.

The safe operation of a federally obligated airport may require compliance with federal airport security requirements, as required under TSA regulations.

TSA prescribes security requirements for airport operators serving certain types of air carrier and on-demand charter operations. These requirements are contained in 49 CFR part 1542, *Airport Security*. Generally, airports that serve air carrier and charter operations required by TSA to have a security program under 49 CFR part 1544, *Aircraft Operator Security: Air Carriers and Commercial Operators*, and 49 CFR part 1546, *Foreign Air Carrier Security*, and are also required to comply with Part 1542. Additional information on airport security requirements is available at TSA's website.

TSA also publishes security guidelines for general aviation (GA) airports. These guidelines, Security Guidelines for General Aviation Airports, provide a set of security best practices and methods for determining when and where these enhancements would be appropriate. These guidelines are located on the TSA website and are periodically updated.

(2) Compliance.

The relevant compliance implications of TSA security for federally obligated airports are in the form of security requirements imposed by an airport sponsor upon airport users. When a complaint is brought to the FAA's attention, the FAA will attempt informal resolution. This process should involve the airport, TSA, and the impacted users. The FAA may be asked to render a preliminary decision on whether the security requirements imposed by the airport are consistent with the airport's other federal obligations. Most likely, this will involve the requirements for reasonable and not unjustly discriminatory terms and conditions for using the airport. Coordination with ACO-100 is recommended when encountering complaints involving TSA requirements.

7.11 Local Rules and Procedures.

One of the most important functions of local regulations is to control the use of the airport in a manner that will eliminate hazards to aircraft, people, and structures on the ground.

For example, if aircraft are allowed to park too close to an active runway, aircraft themselves become a hazard to other aircraft. Rules and procedures that implement FAA airport design standards will ensure adequate separation of aircraft during ground operations. To keep motorists, cyclists, pedestrians, and animals from inadvertently wandering onto the airfield or areas designated for aircraft maneuvering, the sponsor should install adequate controls such as fencing and signage.

As in the operation of any public service facility, there should be adequate rules covering vehicular traffic, sanitation, security, crowd control, access to certain areas, and fire protection. The sponsor is also expected to ensure services such as fueling aircraft, storing and dispensing hazardous materials (*e.g.*, aircraft fuel and lubricants, oxygen, deicing materials), and aircraft painting adhere to local fire safety, environmental and building codes to protect the public.

Sometimes, additional measures are needed to reduce the likelihood of a runway incursion or address a rise in unsafe occurrences. For example, if a runway safety problem is identified at an airport, the FAA compliance personnel should coordinate corrective action not only with the airport but also with the FAA Airport Certification and Safety Inspector for an airport certificated under 14 CFR part 139, and other FAA lines

of businesses, including the Regional Runway Safety Program Office, Flight Standards and/or Air Traffic. When possible, action should also be coordinated with the local Runway Safety Action Team (RSAT). Repeated incidents where the RSAT safety recommendations have been ignored by the sponsor may be a violation of Grant Assurance 19, *Operation and Maintenance*.

Often, local air traffic patterns are needed to establish uniform and orderly approaches and departures from the airport. Establishing nonstandard air traffic patterns to mitigate aircraft noise and overflight may be a violation of Grant Assurance 19 and the FAA safety standards. Controlling aircraft operation is an authority preempted under federal law and is the exclusive responsibility of the FAA. When working on local air traffic procedures, the sponsor must coordinate with the FAA Flight Standards or/and Air Traffic to ensure safe operations.

Controlling aircraft operation is an area preempted under federal law and is the exclusive responsibility of the FAA.

The FAA has a number of initiatives underway to prevent runway incursions. Several FAA documents address the airport operator's opportunity to help reduce the potential for runway incursions. These discuss runway incursion prevention measures airport operators should consider implementing.

7.12 Hazards and Mitigation.

Grant Assurance 20, *Hazard Removal and Mitigation*, requires airport sponsors to protect terminal airspace. Accordingly, the sponsor must protect instrument and visual flight operations, including established minimum flight altitudes. Adequate protection includes clearing, removing, lowering, relocating, marking, lighting, or mitigating existing airport hazards. It also includes prevention of future airport hazards, including wildlife hazards.

NOTE: Zoning is one means to protect against obstructions outside the airport property but may not be the best means in all cases; zoning can change, and property owners may receive variances. Avigation and clearing easements may be a more effective means of protection.

If a sponsor has zoning authority and permits an obstruction to be erected near the airport that is found to be a hazard under 14 CFR part 77, *Objects Affecting Navigable Airspace*, or that results in penetration or in any other impact upon the airport's approaches or use the FAA may find the sponsor in violation of Grant Assurance 20, *Hazard Removal and Mitigation*.

The FAA will confirm that airport sponsors develop a plan for removing or mitigating obstacles and hazards to air navigation. An airport sponsor with unmitigated obstacles will develop an Obstacle Action Plan (OAP) that details how and when each of the surfaces will be cleared and maintained.

a. FAA Guidance.

The FAA published the following advisory circulars relating to obstruction hazards.

(1) AC 150/5190-4, *Airport Land Use Compatibility*

This advisory circular provides airport sponsors with an effective zoning ordinance that can be used at the local level to protect the airport from obstructions.

(2) FAA Order JO 7400.2P, *Procedures for Handling Airspace Matters*.

This order provides information regarding the requirements for notifying the FAA of proposed construction or alteration under 14 CFR § 77.13. (*See* also FAA Order 8260.3, *United States Standard for Terminal Instrument Procedures (TERPS) for Obstacle Clearance Surfaces*.)

(3) AC 70/7460-1, *Obstruction Marking and Lighting*.

This advisory circular describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, and supporting structures of overhead wires.

(4) FAA Airports Standard Operating Procedure (SOP) 9.2, *Standard Operating Procedures for FAA Aeronautical Study, Coordination and Evaluation*.

This SOP establishes procedures for the collection, maintenance, and resolutions of airport data in the FAA's Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) system and coordination of this data in required airport planning, design and construction documents, including ALPs.

(5) AC 150/5370-2, *Operational Safety on Airports During Construction*.

This advisory circular provides guidance on developing Construction Safety and Phasing Plans to ensure safety temporary construction activities does not jeopardize operational safety.

b. Preexisting Obstructions.

(1) Acknowledgement of Existing Obstructions.

Some airports were developed at locations where preexisting structures or natural terrain (*e.g.,* hill tops) would constitute an obstruction by currently applicable standards. If the grant agreement did not specify the removal of such

obstructions as a condition of the grant and the ALP did not show the removal, its execution by the federal government constitutes an acknowledgement that the removal was not reasonably within the power of the sponsor at that point in time. Future master plan studies and ALP updates should re-evaluate existing obstructions to determine if they can be mitigated or removed.

(2) Threshold Displacement.

A runway threshold is the beginning of that portion of the runway available for landing. A displaced threshold is located further along the runway and is apart from the physical end of the runway. Displacement of a threshold reduces the length of the runway available for landings. The portion of a runway prior to a displaced threshold is available for takeoffs in either direction and landings from the opposite direction. There are many former military airports acquired as public airports under the Surplus Property Act where the existence of obstructions at the time of development was considered acceptable. At such airports where these obstructions in the approach surfaces do not meet airport design standards, such as threshold siting requirements, but cannot feasibly be removed, relocated, or lowered, the FAA may consider approving a displaced or relocated threshold. This requires prior FAA approval, including an airspace evaluation and an update of the ALP and Airport Master Record showing the proposed displacement. For more information on displaced threshold, see the current edition of AC 150/5300-13, *Airport Design*.

c. Obstruction Hazards.

(1) Objects Affecting Navigable Airspace.

Airport sponsors are federally obligated to take appropriate action to assure that terminal airspace will be adequately cleared and protected by removing, lowering, relocating, marking or lighting, or otherwise mitigating the obstruction hazard as required to protect instrument and visual operations to the airport. (*See* Grant Assurance 20, *Hazard Removal and Mitigation*). The term “obstruction” refers to natural or manmade objects that penetrate surfaces defined in 14 CFR part 77, *Objects Affecting Navigable Airspace*, or other appropriate citations applicable to the agreement applied to the particular airport.

In agreements issued prior to December 31, 1987, sponsors agreed to prevent, as much as reasonably possible, the construction, erection, alteration, or growth of an obstruction either by obtaining control of the land involved, by acquiring and retaining easements or other land interests, or by adopting and enforcing zoning regulations. In many cases, uncontrolled growth of trees and vegetation can be a hazard. These hazards must be dealt with in conjunction with any applicable local or state requirements. The airspace allocated for protecting the airport will

vary from airport to airport. The FAA Region or ADO should contact the FAA Flight Procedures for guidance on how to apply this provision when an issue is raised. Additional information can be found in chapter 20, *Compatible Land Use*.

(2) Solar and Wind Farms. While the FAA supports solar and wind energy projects, these projects can, without proper planning, be hazardous to aircraft operations. In siting a proposed wind or solar energy system, the airport sponsor is responsible for limiting the potential for inference with Communication, Navigation, and Surveillance (CNS) facilities. The sponsor should do so by ensuring that the proposed system remains clear of the critical areas surrounding CNS facilities. (*See* AC 150/5300–13, *Airport Design*, Chapter 6, defines the critical areas for common CNS facilities located on an airport), Sponsors may need to coordinate with FAA Technical Operations for proposed projects off-airport.

The FAA's policy on *Review of Solar Energy System Projects on Federally-Obligated Airports* (*See* 86 Fed. Reg. 25801, May 11, 2021) should be used as a guide to submit the request to the FAA when considering the installation of a solar farm. Any construction or alterations, including wind farms that may constitute an obstruction according to 14 CFR part 77 must be submitted to the FAA for study within 45 days of construction or alteration. (*See* section 7.12.e, *Obstruction Evaluation/Airport Airspace Analysis (OE/AAA)*). As appropriate, the FAA will engage with other Federal agencies such as the Department of Defense, the Department of Homeland Security, the Department of Energy, and the Department of Interior to expedite any further regulatory modifications and improvements to 14 CFR part 77 to ensure there is a predictable, consistent, transparent, and timely application process for the wind industry.

d. Wildlife Hazards.

Wildlife collisions with aircraft (known as wildlife strikes) have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Further, hazardous wildlife attractants on or near airports can jeopardize future airport expansion, which makes proper community land use planning essential.

Most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. These areas can also present potential hazards to aviation if they encourage wildlife to enter an airport's approach or departure airspace or air operations area (AOA). In addition, an airport's proximity to landfills, wetlands, lakes, ponds, and certain crops may result in hazards to air navigation created by flocks of birds attracted to the landfills or water. Constructed or natural areas such as detention/retention ponds and wetlands can provide habitat for waterfowl and migrating bird species. Parking structures and tall lamp poles can provide roosting habitats for

many species of bird, including pigeons and large birds of prey. Human activities on aircraft ramps and hangar areas can attract wildlife, particularly uncovered or overflowing trash receptables. Wastewater treatment plants and agricultural or aquaculture activities, can provide wildlife with ideal habitat locations. Even stockpiles of construction materials, including old concrete slabs saved for aggregate, can create wildlife habitat.

The FAA maintains a comprehensive program to address wildlife hazards. Information on policy guidance, accident data, research and outreach can be found at the FAA's Wildlife Hazard Mitigation website. This website provides the FAA Wildlife Strike Database, resources, Research and Development, Frequently Asked Questions (FAQs), and Wildlife Management. It also provides links to the current editions of Advisory Circulars and other resources related to wildlife hazards. This includes AC 150/5200-33, *Hazardous Wildlife Attractants on or Near Airports*, which provides guidance on assessing and addressing potentially hazardous wildlife attractants when locating new facilities and implementing certain land-use practices on or near public-use airports. In addition, AC 150/5200-34, *Construction or Establishment of Landfills near Public Airports*, provides information for the construction or establishment of certain landfills near federally funded public airports that serve air carrier operations in aircraft with less than 60 seats.

Land use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes.

e. Obstruction Evaluation/Airport Airspace Analysis (OE/AAA).

In administering 14 CFR part 77, *Objects Affecting Navigable Airspace*, the FAA's prime objectives are to promote air safety and the efficient use of navigable airspace. To accomplish this mission, anyone proposing to construct or alter an object that affects airspace must notify the FAA prior to construction by filing FAA Form 7460-1, *Notice of Proposed Construction or Alteration* in accordance with 14 CFR part 77. Instructions for filing the FAA Form 7460-1, are described in the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) portal. The same filing contact information is used to notify the FAA of actual construction using FAA Form 7460-2, *Notice of Actual Construction or Alteration*.

The FAA's Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website provides detailed information on obstruction marking and lighting and provides the current forms and advisory circulars, including AC 70/7460-1M, *Obstruction Marking and Lighting* (*See* the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) portal). Typical projects include cell phone towers, top-mount antennas, hangars and other buildings, power lines, radio broadcast towers, and temporary construction equipment such as cranes. The purpose of Form 7460-1 notification is to allow the FAA to conduct an

obstruction evaluation on the proposal to determine whether the object will adversely affect airspace or navigational aids (NAVAIDs). Additional information relating to the airport sponsor's obligation to protect its airspace is available in chapter 20, *Compatible Land Use*.

If the proposed structure will emit any electromagnetic broadcast signals, the proponent must also specify which radio frequencies will be used. If the FAA determines that the proposed object will penetrate airspace or adversely affect NAVAID equipment, the FAA can require, as a condition to a no-hazard determination, that the proponent reduce the height of the object, change the broadcast frequency, or outfit the object with obstruction marking and lighting. In cases where the FAA determines the object will be a hazard to air navigation, the FAA can issue a hazard determination, which may have the effect of prohibiting the project from being constructed. A determination of "no hazard," however, does not ensure a safe environment. It is the role of the state sponsor to work to address those areas specified in the FAA's determination letter, including marking and lighting obstructions to ensure, ultimately striving for the highest level of safety between the pilot and the obstruction.

(1) Guidance for Obstruction Evaluation. The FAA *Order JO 7400.2, Procedures for Handling Airspace Matters*, provides procedures for FAA's Air Traffic Control Organization (ATO) on handling airspace matters, including the evaluation of requests for airspace evaluations. As discussed above, AC 70/7460-1, *Obstruction Marking and Lighting*, also provides guidance on standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc.

(2) Filing Notice of Proposed and Actual Construction. As described above, sponsors must file a Form 7460-1, *Notice of Proposed Construction or Alteration* for an FAA airspace evaluation of any proposed on-airport construction or alteration. Instructions and electronic filing are available in the OE/AAA portal. The same filing contact information is used to notify the FAA of actual construction using FAA Form 7460-2, *Notice of Actual Construction or Alteration*.

Sponsors should immediately contact their ADO for on-going airport construction projects that were not evaluated by the FAA, such as private hangar construction. An airspace evaluation should be requested as soon as the sponsor discovers no airspace evaluation has been conducted as building and structure heights may have an immediate safety impact, such as raising decision heights for instrument approach and departure procedures.

f. Mitigation.

Zoning is one means to protect against obstructions outside the airport property but may not be the best means in all cases; zoning can change, and property owners may

receive variances. Avigation and clearing easements may be a more effective means of protection. If a sponsor has zoning authority and permits an obstruction to be erected near the airport that is found to be a hazard under 14 CFR part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*, or that results in penetration or in any other impact upon the airport's approaches or use to the approach and/or departure surface(s) contained in AC 150/5300-13, *Airport Design*, or a surface contained in the FAA Order 8260.3, *United States Standard for Terminal Instrument Procedures* (TERPS), the FAA may find the sponsor in violation of Grant Assurance 20, *Hazard Removal and Mitigation*. In addition, the FAA may find the sponsor is in violation of the aforementioned grant assurance if they permit an obstruction to be built on the airport without filing notice with the FAA in accordance with Part 77 or not adhering to the conditions of the FAA determination.

7.13 Use of Airports by Federal Government Aircraft.

Through various agreements, the federal government retains the right to use airport facilities jointly, either with or without charges. Both Grant Assurance 27, *Use by Government Aircraft*, and Federal property conveyance instruments require that the government retain the right to use facilities developed or conveyed with federal funds to perform government functions, unless the use is substantial. A governmental function is defined in 49 U.S.C. § 40125(a)(2) to mean "an activity undertaken by a government, such as national defense, intelligence missions, firefighting, search and rescue, law enforcement (including transport of prisoners, detainees,…), aeronautical research, or biological or geological resource management."

a. Federal Government Aircraft Definition.

For the purpose of Grant Assurance 27, *Use of Government Aircraft*, and Federal property conveyance obligations, government aircraft are aircraft that are owned, leased, or contracted, or chartered by the Federal Government to perform a federal mission under federal control (*e.g.*, DOD [including Air National Guard (ANG) and National Guard (NG) aircraft under 10 U.S.C. and 32 U.S.C.], U.S. Coast Guard, U.S. Forest Service (USFS), Customs and Border Protection (CBP), NOAA, NASA, FAA, Department of Agriculture Agricultural Research Service (ARS), U.S. Marshals Service, FBI, DEA, etc.). These are flights that the United States conducts or operates by its employees, or agents to execute its congressionally mandated mission for the "unique and sole purpose" of the United States. (*See United States v. King County*, 666 F.Supp. 3d 1134, 1148 (W.D. Wash. 2023), aff'd, *United States v. King County*, 9th Cir. Case No. 23-35362, Nov. 29, 2024 (2024 WL 4918128).

This includes charter flights and aircraft contracted by the Federal Government to perform governmental functions or missions (*e.g.*, firefighting, search and rescue, weather missions, mapping, transportation of prisoners, and immigration) with the

specific flights under government control. Government aircraft operations may also include government aircraft operating as public aircraft, certain Civil Air Patrol missions, activated Civil Reserve Air Fleet flights, and foreign military flights in U.S. airspace and at U.S. airports.

The key part of this definition is that government aircraft are aircraft that are owned, leased or contracted to perform a federal mission under federal control. For instance, a MITRE contractor-owned aircraft, usually used to transport company employees, could be contracted to perform a NAVAID calibration flight on behalf of the FAA in which case the contracted calibration flight would be considered a government aircraft operation. However, if that same aircraft is used to transport MITRE employees, even if that travel is part of a government contract, it is not a government aircraft operation during those flights because the purpose of the flight is not to execute an operation of the United States.

b. Under Grant Agreements.

Grant Assurance 27, *Use by Government Aircraft*, provides that the airport sponsor will:

> …make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that:
>
> a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
>
> b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

c. The Surplus Property Act.

49 U.S.C. § 47152, *Terms of Conveyances*, gives the federal government the right to make nonexclusive use of the landing area without charge – except the Secretary may limit use of the landing area if necessary to prevent unreasonable interference with other authorized aircraft. The federal government shall pay for substantial damage

caused by its use and contribute to maintaining and operating the landing area in proportion to its use.

Surplus Airport Property Instruments of Transfer issued under War Assets Administration Regulation 16 provide that the federal government shall at all times have the right to use the airport in common with others. The Secretary may limit such use to prevent interference with use by other authorized aircraft, so long as such limitations do not restrict federal government use to less than 25 percent (25%) of the capacity of the airport. The regulation further provides that federal government use of the airport to this extent shall be without charge of any nature, other than payment for any damage caused.

The Surplus Property Act gives the federal government the right to make nonexclusive use of the airfield without charge – except the use may not unduly interfere with other authorized aircraft, and the federal government shall pay for damage caused by its use.

d. Joint Use Agreements for Military and Civilian Flying Facilities.

In all cases where the airport sponsor proposes to charge the federal government for use of the airport under the joint use provision, the sponsor should negotiate directly with the federal government agency or agencies in question. In other words, the FAA does not assume the role of negotiator when it comes to rates and charges imposed upon other federal government agencies; rather, it oversees compliance with applicable requirements such as those under Grant Assurance 27, *Use by Government Aircraft*. It is important to remember that in cases involving military units, the military entity in question may be subject to military regulations relating to fee negotiations. Air Force Instruction 10-1002, *Joint Use Agreements for Military and Civilian Flying Facilities*, dated August 8, 2018. This publication implements Air Force Policy Directive (AFPD) Joint Use of Military and Civilian Flying Facilities. It provides guidance for negotiating fair and reasonable charges to the Government for joint use of the flying facilities of a public airport. It applies to Air Force personnel at all levels who are involved with Air Force operations on public airports, including the Air Force Reserve and Air National Guard. In addition, it applies to individuals involved with civil aircraft operations on Air Force airfields.

7.14 Land for Federal Facilities.

a. Grant Agreements.

Grant Assurance 28, *Land for Federal Facilities*, requires the sponsor to:

> . . . furnish without cost to the Federal Government for use in connection with any provide facilities for air traffic control or air navigation activities, or and weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

There are subtle differences in the terms of these assurances under the various grant programs. Therefore, when questions arise regarding the use of space, refer to the most current grant agreement.

b. No Requirement for Free Rent.

Sponsors are not federally obligated to furnish space rent-free under the FAA Reauthorization Act of 2018 (Pub. L. 115-254), Section 147, *General facilities authority*. However, the sponsor is required to furnish to the federal government without cost any land necessary for the construction at federal expense of facilities to house any air traffic control activities, such as Very High Frequency Omni-Directional Radio Range Facilities (VORs), Air Traffic Control (ATC) Towers or Terminal Radar Approach Controls (TRACONs), or weather reporting and communication activities related to air traffic control. This may or may not include utility easements. The airport sponsor is not required to furnish land rent-free for parking or roads to serve the facility and may negotiate reasonable rates for utilities, janitorial services, or other similar services. Surplus and Non-Surplus property deeds may contain other contractual terms and/or requirements concerning rental rates for federal facilities on the deeded properties.

c. Other Federal Agencies.

Sponsors, on occasion, provide space to other federal government agencies such as postal, customs, FBI, or immigration services at no cost or at nominal rent. The FAA does not view leasing space at these rates for activities that complement or support aeronautical operations as violating the self-sustaining grant assurance. However, federal agencies may not lease airport property for administrative purposes beyond the federal agencies' operational needs at no cost or nominal rent; airports should limit the leasehold to the space necessary to conduct the federal aeronautical operations, which may include some administrative space necessary to serve the operations. Often, at commercial service airports, an airport sponsor does not bear the expense for the space leased for customs, immigration, or agriculture operations, but rather the costs are built into the airlines' cost structure and are assessed to the airlines.

7.15 Airport Layout Plan (ALP).

Pursuant to 49 U.S.C. § 47107(a)(16), the airport sponsor is required to maintain a current ALP. Grant Assurance 29, *Airport Layout Plan*, requires the sponsor to keep an up-to-date ALP showing the airport's boundaries, the location of existing and proposed airport facilities and structures, the location of all existing and proposed non-aviation areas and improvements thereon, and all proposed and existing access points used to taxi aircraft across the airport's property boundary. An FAA-approved ALP (signed and dated) is a prerequisite to the grant of AIP funds for airport development or for the modification of the terms and conditions of a surplus property instrument transfer. *See* FAA Advisory Circular 150/5070-6, *Airport Master Plans*, and FAA SOP 2.0, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)*, for guidance on the preparation of the ALP drawing set.

a. Compliance Requirements.

Federal grant agreements require sponsors to conform airport use and development to the ALP. The erection of any structure or any alteration in conflict with the plan approved by the FAA may constitute a violation of this federal obligation under Grant Assurance 29, *Airport Layout Plan*. The Airport and Airway Safety and Capacity Expansion Act of 1987 (Pub. L. 100-223) (1987 Airport Act) further strengthened the Airport Layout Plan assurance language. If the sponsor makes a change in the airport or its facilities that is within the scope of the FAA's review and approval authority that does not conform with the portions of the plan approved by the FAA, and the FAA determines the change adversely affects the safety, utility, or efficiency of aircraft operations or of any federally owned, leased, or funded property on or off the airport, the FAA may require the airport to eliminate the adverse effect, including the cost of mitigating that may be required.

Federal grant agreements require sponsors to conform their actions to the Airport Layout Plan. The erection of any structure or any alteration in conflict with the plan as approved by the FAA may constitute a violation of Grant Assurance 29, *Airport Layout Plan*.

b. Abandonment.

The sponsor may not abandon or suspend maintenance on any operational facility currently reflected on an approved ALP as being available for operational use. The conversion of any area of airport land to a substantially different use from that shown in an approved ALP could adversely affect the safety, utility, or efficiency of the airport and constitute a violation of federal grant obligations. Existing and proposed on-airport land uses are required to be shown on the ALP (normally depicted on a separate, dedicated land use drawing). All land that was federally acquired or federally conveyed is

considered reserved for aeronautical use unless prior approval allows use of the land for non-aeronautical purposes, or the deed of conveyance specifically allows non-aeronautical use. (*See also* chapter 22, *Land Use Changes and Releases of Federally Acquired and Federally Conveyed Land*). For example, the construction of a corporate hangar on a site identified on the ALP for future apron and taxiway use would be a departure from the controlling ALP. This could impair the utility of the airport and violate sponsor federal obligations. When making a periodic compliance review of an ALP, the inspector should consider whether grant acquired land is still needed for airport purposes, particularly when it is separated from the airport property by a highway or railway. Approval of the ALP does not constitute the FAA approval to use land for nonaeronautical purposes.

7.16 Exhibit "A" (Property Inventory Map) and Airport Property Map.

The Exhibit A (Property Inventory Map) is an exhibit to the grant application for AIP or Infrastructure Investment and Jobs Act (IIJA) funds. It delineates all airport property owned by the sponsor. An up-to-date Exhibit A (Property Inventory Map) must be on file with the ADO prior to issuing a grant at that airport because it is contractually referenced in the grant agreement. (*See* FAA Order 5100.38, *AIP Handbook*, Table 5-6 *Grant Application Contents*).

When the airport sponsor accepts the AIP or IIJA grant, this property is federally obligated to the terms of the grant assurances. The Exhibit A (Property Inventory Map) must be prepared in accordance with the current Standard Operating Procedure (SOP) 3.00 for *FAA Review of Exhibit A Airport Property Inventory Maps* and meet the requirements in the current version of Advisory Circular 150/5100-17, Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects.

The Exhibit A is an inventory of parcels that make up dedicated airport property. The Exhibit A indicates how the land was acquired, the funding source for the land and if the land was conveyed as Federal surplus land or Federal Government Property. Other detached parcels owned by the Airport Sponsor that are dedicated to airport purposes must also be shown on the Exhibit A. The Exhibit A must show all dedicated airport property regardless of the type of funds (AIP/ADAP/FAAP, state, local, etc.) used to acquire that property.

An Airport Property Map, on the other hand, is part of the Airport Layout Plan (ALP) drawing set. It is a drawing depicting the airport property boundary, land or property interests (including method of acquisition and type of interest), and future proposed land acquisition. The Airport Property Map is required as part of the Airport Layout Plan drawing set if any of the airport land was acquired with federal funds or through an FAA administered land transfer program. An Airport Property Map is not a substitute for an

Exhibit A (Property Inventory Map), but the Exhibit A may be used as a substitute for the airport property map in the ALP drawing set.

a. Land Accountability.

For compliance purposes, the airport sponsor needs to be able to account for land acquired with federal funds or federally conveyed. The ALP and Exhibit A (Property Inventory Map) together serve this purpose. The airport sponsor may also have additional documentation including copies of deeds regarding how various tracts of land were acquired and what federal grant or federal conveyance was used to acquire the land. Such complementary property map or land inventory map should be readily accessible to the FAA.

b. Excess Land.

If any grant-acquired land is found to be in excess of airport needs, both present and future, the sponsor may dispose of the excess land and comply with the FAA direction for returning or using the grant funds. Information on disposing of grant acquired land and is available in chapter 22, *Land Use Changes and Releases of Federally Acquired and Federally Conveyed Land*.

7.17 Temporary Closing of an Airport.

a. Closing for Hazardous Conditions.

Airport owners are required to physically mark and light any temporary hazardous conditions and to adequately notify airport tenants and warn users of current field conditions through the use of the FAA's NOTAM Manager systems. This also applies to temporary airport closures, including closures for hazardous conditions, such as conditions caused by extreme weather or natural disasters. Prompt action should be taken to restore the airport facilities to a serviceable condition as soon as possible.

b. Closing for Nonaeronautical Events.

49 U.S.C. § 47107(a)(8), implemented by Grant Assurance 19(a), requires that any proposal to close the airport temporarily for nonaeronautical purposes must be approved by the FAA.

On May 12, 2023, the FAA published its *Notice of Final Policy and Procedures on the Temporary Closure of Airports for Nonaeronautical Purposes* (*see* 88 Fed. Reg. 30640) (Policy on Temporary Closure for Nonaeronautical Purposes). As the policy states, each year sponsors of federally obligated airports request temporary closures of a ramp, taxiway, runway or an entire airport for a nonaeronautical event, typically for a period of one to three days. The FAA must approve any such request in advance before the event can take place.

The FAA's Policy on Temporary Closure for Nonaeronautical Purposes provides a detailed description of what is needed to support a request for temporary closure of airport facilities, and a clear listing of the obligations of an airport sponsor before, during and after a closure. Conducting an event on airport property is a complex undertaking. Whether the purpose is an aeronautical event (*e.g.*, air show) or nonaeronautical event, and whether the event requires a full closure of the airport or simply a closure of a ramp or taxiway, the event will require detailed planning and preparation that should not be taken lightly. The airport sponsor's primary responsibility is to operate a safe airport providing access to aviation community.

The FAA believes that the primary purpose of public airports is to serve aeronautical users and therefore, airports should remain open and available for aviation use. However, under certain circumstances, an airport sponsor may request the FAA's approval of temporary closures for non-aeronautical activities or purposes, such as car races/shows, county fairs, parades, model airplane events, running events and fireworks. The FAA will not approve a closure if it would result in a negative impact to civil aviation.

In most cases, the impact to aviation, safety, security, liability, and other risks will outweigh the financial and community goodwill benefits promised to the airport for non-aeronautical activities. Closures of entire airports or closures of the only runway at an airport should be highly scrutinized and only allowed when there is a net benefit to the airport. A non-aeronautical use of an airport should not prevent the airport from realizing its economic potential nor diminish its role in the system of airports.

Moreover, airport sponsors must not allow any non-aeronautical activity that will damage or impact the useful life of airport pavements, signs, markings, lighting, or other infrastructure. To ensure nonaeronautical events do not negatively impact the safe operation of the airport, the FAA may require the sponsor to submit an Event Ground Operation Plan to the appropriate Region or ADO for review and approval.

Under Grant Assurance 11, *Pavement Preventative Maintenance-Management*, airport sponsors are required to implement a pavement preventative maintenance program to ensure the useful life of the pavement is protected. As a result, auto racing events should not be approved on recently rehabilitated (resurfaced or reconstructed) pavements. Moreover, airports are generally unsuitable locations for high velocity auto

events, such as drag racing, and are likely to require additional liability insurance and crowd protection. These high-risk events should be highly scrutinized by both the sponsor and the Region or ADO.

Airport sponsors requesting a temporary airport closure must meet with the FAA at least 120 days prior to the event to discuss the plans and develop a timeline for the FAA review and approval. No less than 60 days prior to the event the airport sponsor must submit a written request including the specific information outlined in the Policy on Temporary Closure for Nonaeronautical Purposes. Airport sponsors must provide sufficient information and assurances to indicate that each requirement has been or will be satisfied. The Policy on Temporary Closure for Nonaeronautical Purposes provides a detailed list of what the written request must address and how each item may be addressed. (*See* 88 Fed. Reg. 30640, May 12, 2023). In Block Grant states, the State will review the written request to ensure it is complete and coordinate with the sponsor to address any missing information. The State also will provide input to the ADO. The ADO will provide final approval or disapproval of the proposal.

c. Closing for Aeronautical Events.

There are occasions when airports may be closed for brief periods for aeronautical events. Examples include an air show designed to promote a particular segment of aviation, annual fly-ins, and aviation conventions. In such cases, airport management should limit the period the airport will be closed to the minimum time consistent with the activity. Such closing should be well publicized in advance including issuing NOTAMs to minimize any inconvenience to the flying public.

While 49 U.S.C. § 47107(a)(8) and Grant Assurance 19 do not require ARP approval of the temporary closure of an airport for aeronautical events, Flight Standards Service (AFS), in the process of issuing an airshow waiver, will describe the safety conditions for the FAA's approval of the event. The AFS waiver relates to aircraft operations and the separation between aircraft operations and the viewing public. AFS will coordinate the ground operations plan with Regions or ADOs as appropriate. Events that are primarily nonaeronautical with an air show or other aeronautical event as an incidental activity should be reviewed by the Region or ADO. (*See* *Notice of Final Policy and Procedures on the Temporary Closure of Airports for Nonaeronautical Purposes*, 88 Fed. Reg. 30640, May 12, 2023).

(1) Air Show Coordination, Certificate of Waiver.

Airport sponsors proposing to hold an airshow at their airport must coordinate with the FAA in advance of the event and follow procedures on the FAA's National Aviation Events Program webpage. Airshows at any airport require a Certificate of Waiver or Authorization (FAA Form 7711-1) that has been approved and issued by the appropriate FAA Flight Standards District Office. Flight

Standards, however, will not issue a Certificate of Waiver or Authorization to applicants sponsoring the event at airports certificated under 14 CFR part 139 until the responsible Region or ADO has reviewed and approved the event ground operations plan.

(2) Air Show Coordination, Event Ground Operations Plan.

As part of the FAA Flight Standard's approval process, sponsors need to submit an Air Show Event Ground Operation Plan to their ADO for approval. This coordination must be initiated at least 90 days prior to the event.

For airports certificated under 14 CFR part 139, the assigned the FAA Airport Certification and Safety Inspector must review and approve the event ground operations plan (*see* Part 139 CertAlert 02-07). Once the event ground operations plan is approved, the Airport Certification and Safety Inspector will send a letter to the airport operator and notify the appropriate FAA Flight Standards District Office.

At a minimum, the Event Ground Operations Plan should address:

- Air carrier operations that will occur during the event.
- Prior coordination with local ATCT to close runway and taxiways.
- Description of how closed and unserviceable areas will be marked and lighted, including closed runways and taxiways.
- Description of how airport will maintain the integrity of RSAs, TSAs and object free areas during the event.
- Protection of NAVAIDS, wind indicators, lights, signs, and other equipment from the public, including equipment on runways and taxiways used for the event.
- Prevention of public access to open movement areas and safety areas.
- Procedures to ensure public protection during the event, including measures to provide public safety from aviation activities occurring in adjacent areas.
- NOTAMS for closed runways and taxiways.
- Procedures to ensure ARFF/emergency routes remain clear.
- Plan to conduct self-inspections before, during and after the event to ensure movement and safety areas are repaired and meet the FAA standards.
- Mitigation of wildlife attractants, including food service and trash during the event

7.18 Access by Intercity Buses.

Grant Assurance 36, *Access by Intercity Buses*, requires the airport sponsor to permit, to the maximum extent practicable, access to the airport by intercity buses or other modes of transportation. However, the airport sponsor has no federal obligation to fund special facilities for intercity buses or other modes of transportation.

7.19 through 7.23 Reserved.