



Federal Aviation Administration

Memorandum

Date: DRAFT

To: All Airports Regional Division Managers

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Subject: Engineering Brief No. 112: *Remote Airport Traffic Control Tower Systems Installation, Maintenance, and Airport Operations Considerations*

This Engineering Brief (EB) provides standards and guidance for the planning, design, and construction of airport infrastructure in support of Remote Tower (RT) Systems (referred to herein as RT systems). In addition, this EB includes a series of considerations for installing, maintaining, and airport operations pertaining to an RT System.

Note: The FAA is in the process of transitioning from the term “remote tower” to “digital tower.” The Office of Airports Safety and Standards will incorporate this terminology change in the published EB. The FAA is also updating Order 6480.4C, Siting of Airport Traffic Control Towers (ATCTs), to allow digital towers to be sited using the processes established in the order

Attachment



**FAA
Airports**

ENGINEERING BRIEF #112

Remote Airport Traffic Control Tower Systems Installation, Maintenance, and Airport Operations Considerations

I Purpose.

This EB provides standards and guidance for the planning, design, and construction of airport infrastructure in support of RT Systems. In addition, this EB includes a series of considerations for installing, maintaining, and airport operations pertaining to an RT system.

II Background.

RT Systems are a technological solution to provide airport traffic control tower (ATCT) services via a network of cameras, sensors, displays, and other support equipment. RT systems provide Air Traffic Control Specialists (ATCS) with the visual information they need to supply ATCT services, as shown in Figure 1-1.

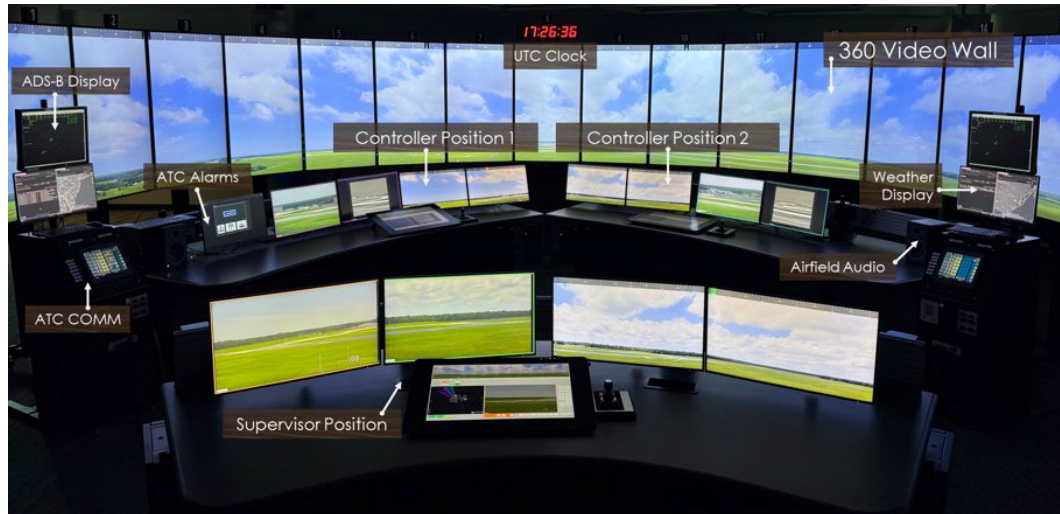
Figure 1-1. Example of RT System (not to scale)



RT cameras/sensors will be used to provide the information that controllers presently gather by looking out the windows of traditional ATCTs, as shown in Figure 1-2.

Because RT technology eliminates the need for ATCSs to look out a physical window overlooking the airport, ATCSs control traffic entirely through dedicated digital displays. The RT cameras can be installed on existing or stand-alone infrastructure.

Figure 1-2. ATCS view from RT Center (RTC)



RT Systems may serve as an alternative to traditional brick-and-mortar ATCTs. RT systems will initially be integrated at airports in Class D airspace at Non-Federal Control Towers (NFCTs) or Airport Sponsor-owned FAA Contract Towers (FCT). Currently, RT systems are not Federal Aviation Administration (FAA) owned systems; however, there are current efforts to evaluate feasibility as FAA owned RT Systems. RT Systems may be installed at airports that are in Class E and G airspace that would like to transition to Class D airspace.

This EB provides the standards and guidance needed to support initial infrastructure development in support of RT Systems, as well as considerations to operate and maintain the RT Systems. FAA research efforts are underway to better understand the performance capabilities and design characteristics of RT Systems. The FAA Office of Airports (ARP) is working with the FAA's Air Traffic Organization and Airspace Modernization Office (AMO) to develop performance-based airport infrastructure required to support the installation of RT systems. This will require continued coordination within the FAA across the various FAA Lines of Businesses (LOBs) as well as external collaboration with manufacturers and other stakeholders.

III Application.

This EB is intended as standards and guidance for airport infrastructure and maintenance supporting RT systems until a more comprehensive performance-based Advisory Circular (AC) is developed. The guidance herein is not legally binding in its own right and will not be relied upon by the FAA as a separate basis for affirmative enforcement action or other administrative penalty.

Conformity with this EB is voluntary, and nonconformity will not affect rights and obligations under existing statutes and regulations, except for as described below:

1. The standards and guidance contained in this EB are practices the FAA recommends establishing for an acceptable level of safety, performance, and operation of a new RT system. This EB does not prescribe any guidance for the operation of an RT System (i.e., controlling air traffic).
2. This EB provides one, but not the only, acceptable means of meeting the requirements of Title 14 Code of Federal Regulations (CFR) Part 139, Certification of Airports.
3. Use of these standards and guidance is mandatory for projects funded under certain Federal grant assistance programs including, but not limited to, the Airport Improvement Program (AIP). See Grant Assurance #34. Airport sponsors should familiarize themselves with the obligations and assurances that apply to each grant program from which they obtained grant funds.

Airport sponsors proposing an RT System installation that does not meet the installation performance criteria per this EB or System Design Approval (SDA) should begin coordination with the applicable FAA Regional Airports Division and District Offices (ADOs) early in the planning and design process.

IV Questions.

For any questions about this EB, please contact the FAA Office of Airports – Airports Safety and Standards Branch (AAS).

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V Effective Date.

This EB is effective after signature by the Manager of the FAA Airport Engineering Division, AAS-100.

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CHAPTER 1. INTRODUCTION

1.1 EB Guideline Justification.

Currently, RT System design data is still under development to validate their operational, performance, and safety characteristics. Consequently, this EB is limited to the airport's ancillary infrastructure to ensure a reliable installation of the RT System. As this technology continues to evolve, Airport Sponsors are encouraged to coordinate with the FAA's Office of Airports Safety and Standards for any unique infrastructure requirements (e.g., physical security, mast location(s), etc.) not addressed in this EB.

This EB represents a continued move toward performance-based design criteria leveraging the data collected as part of the system design approval process. However, while valuable data has been collected, more data is needed for comprehensive performance-based design criteria.

This EB is intended for Airport Sponsors installing an FAA-approved RT System at their facilities. It provides standards and guidance for the planning, design, and construction of airport infrastructure supporting RT systems.

1.2 Explanation of Terms.

Terms used in this EB:

1. *Ancillary Infrastructure* – Ancillary Infrastructure provides capabilities required for the RT system to perform its intended function but are separated from the RT system and its components. Ancillary infrastructure is provided by the Airport Sponsor and may include alternating current (AC) power infrastructure, network infrastructure, mast(s), control building, etc.
2. *Remote Airport Traffic Control Tower System (RT system)* – An RT system may consist of one or more types of optical sensors and displays to provide the necessary visual information to ATCS to provide RT System services. Optical surveillance sensors can include but are not limited to optical day/night cameras or infrared/thermal cameras. These sensors will be used to replace the information controllers presently gather by looking out the tower cab windows.
3. *Airport Sponsor* – A sponsor is any public agency that applies for federal financial assistance, or private owner of a public use airport, as defined in the Airport and Airway Improvement Act of 1982, codified at 49 U.S.C. § 47102(26).

The Airport Sponsor will be the non-federal entity that procures, owns, and is responsible for the safe operation, maintenance, and use of a non-federal system/service in the NAS.
4. *Manufacturer* – The company or companies that design, manufacture, and provide a system/service for non-federal use in the NAS.

- 173 5. *National Airspace System (NAS)* – A “network of both controlled and uncontrolled
174 airspace, both domestic and oceanic. It also includes air navigation facilities,
175 systems, equipment and services, airports and landing areas, aeronautical charts,
176 information and services, rules and regulations, procedures and technical information,
177 and manpower and material”, per [FAA.gov/air-traffic/nas](https://www.faa.gov/air-traffic/nas).
- 178 6. *Network Passive Device* – A device, part of a network infrastructure, that doesn’t
179 process or amplify an electronic signal. Instead, it organizes and/or terminates cables
180 providing a physical pathway for data transmission relying on the inherent properties
181 of the medium, like fiber optics, to carry the signal from one point to another.

CHAPTER 2. PLANNING AND SITING OF RT SYSTEM INFRASTRUCTURE

Planning and siting of an RT System involves a variety of stakeholders and processes. This section includes information on resources that can support RT System planning and siting, selecting an RT System, and airspace re-classification (if applicable).

2.1 Resources.

The successful establishment of an RT System requires the support of multiple stakeholders with Subject Matter Expertise (SME). The Airport Sponsor is responsible for identifying and coordinating with the applicable FAA offices as well as providing their own resources to support the planning, siting, and installation of an RT System. These resources will provide critical guidance, feedback and in some cases approval for RT System installations.

The Airport Sponsor should consider the following personnel resources and stakeholders who are listed/discussed below:

2.1.1 FAA Resources.

1. Airports District Office (ADO): The Airport Sponsor's focal point for obtaining federal funding and coordinating the approval of airport layout plans (ALP) updates, review and acceptance of construction safety and phasing plan (CSPP), facilitating Title 14 CFR Part 77, Safe, Effective use, and Preservation of the Navigable Airspace, evaluations, safety assessments, etc. See Regional Airports Division and District Offices (ADOs) for additional information.
2. Non-Federal Program Implementation Manager (PIM): The Airport Sponsor's focal point for establishing a non-federal RT System in the NAS. Sponsors can identify their PIM by visiting the Contact the Non-Federal Program webpage. In addition, the PIM can assist the Sponsor with identifying other FAA Resource points of contact. See Non-Federal NavAids, AWOS & Other Systems for additional information. The 'Audiences' section has information geared towards Airport Sponsors.
3. Technical Operations Non-Federal Inspector: The Airport Sponsor's focal point for coordinating commissioning and reoccurring inspections. Assigned by the Non-Federal PIM.
4. FAA Contract Tower (FCT) PIM: The Airport Sponsor's focal point for establishing an FCT and associated Air Traffic Control (ATC) support. See FAA Contract Tower Program for additional information.
5. Proficiency Managers: The Airport Sponsor's focal point for the Control Tower Operator (CTO) program and designating CTO Examiners. See Air Traffic Safety Oversight Credentialing and Control Tower Operator Certification Programs for additional information.

6. Airspace Services (AJV) Airspace and Procedures Specialist: The Airport Sponsor's focal point to establish Class D Airspace (if necessary).

7. NAS Planning Team: The Airport Sponsor's focal point for establishing a reimbursement agreement to site the RT System.

8. Terminal Facilities Planning and Controls Service Area Lead: The Airport Sponsor's focal point for the siting assessment. Terminal Facilities determine the priority for siting assessments. The FCT/NFCT Airport Sponsor must submit a written request (for example, e-mail) for a siting assessment to the applicable Terminal Facilities Planning & Controls Service Area Lead.

2.1.2 Sponsor Resources.

- RT Manufacturer: The RT manufacturer will assist the Airport Sponsor and the FAA with providing specific information regarding their RT System. This information will help with planning, installing, and maintaining the RT System.
- Airport Personnel: Provide dedicated airport personnel (e.g., operations, engineering, maintenance, planning, environmental, etc.) who will assist during the planning, siting, and oversee installation of the RT System.

2.2 **Planning.**

The process to establish an RT System starts with an airport identifying the need to establish ATC services at an airport (i.e., transitioning from Class E/G airspace to Class D airspace) or to replace an existing brick-and-mortar control tower in Class D airspace.

The sponsor is responsible for researching approved RT manufacturers and their products. See FAA Order 6700.20, Approval, Operation, and Oversight of Non-federal Systems, Appendix H – FAA Approved Systems for Non-federal Use, for a list of approved manufacturers/systems. After the sponsor selects a manufacturer, they should coordinate with the FAA Regional Airports Division (RO)/Airports District Offices (ADOs) and Non-Federal PIM (section 2.1.1) and secure/obtain necessary resources, discussed in section 2.1.1 and 2.1.2.

During the planning phase, the sponsor is responsible for researching and collecting information about the installation of an RT System and determining what resources are necessary to successfully implement their chosen RT System and depict it on the ALP. Lastly, the Airport Sponsor should advise airport stakeholders of their plan to install an RT system.

2.2.1 Airspace Reclassification.

If applicable, the sponsor should contact the FAA's Airspace and Procedures Specialist (See Section 2.1.1 in this EB, FAA Resources) to initiate reclassification of the airspace as Class D. Airspace reclassifications can be a lengthy process and can have interdependencies that must be negotiated or scheduled around.

2.2.2 Airport Layout Plan (ALP).

The ALP is the foundational planning document that depicts existing airport facilities and proposed future improvements. It provides the FAA with the framework necessary to assess whether a proposed development is consistent with airport design standards, instrument procedure criteria, and the safe and efficient use of the navigable airspace. If the RT system is not reflected on the ALP, the Airport Sponsor must coordinate any updates and changes with the ADO prior to initiating a planning project.

Updates to the ALP to reflect the RT System, must be completed in accordance with AC 150/5070-6, Airport Master Plans, Standard Operating Procedure (SOP) 2.0 - FAA Review and Approval of Airport Layout Plans, and Order 1050.1, National Environmental Policy Act Implementing Procedures.

The Airport Sponsor must submit the updated ALP to the RO/ADO for review. The RO/ADO, in accordance with AC 150/5300-20, Submission of On-Airport Proposals for Aeronautical Study, and SOP 9.2 - FAA Aeronautical Study, Coordination, and Evaluation, will submit the updated ALP to the Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) Web Portal under *Airport Planning and non-Part 77 Notices*. This assessment determines whether the proposed permanent location of the RT System is viable before any approval of the ALP.

When the ADO submits the updated ALP through OE/AAA, the remarks section should clearly indicate that the submittal involves a proposed RT System. This notation ensures that FAA reviewers are alerted to the nature of the development at the outset of their review.

After the Airport Sponsor receives the ALP approval, they must submit notices under Title 14 CFR Part 77 for permanent and temporary construction. Refer to Chapter 3, Airspace Approval Process and Coordination.

2.3 **Siting.**

Siting an RT System is the most critical phase when establishing an RT System. Siting requires input from multiple stakeholders and SMEs to balance technical requirements, component constraints and limitations, as well as airfield/airspace configuration (i.e., what the ATCS needs to see to perform their duties). RT System airfield components are not fixed by function¹ such as a navigational aid, and therefore, must not be located within the runway and taxiway safety areas, runway and taxiway object free areas, or other protected surfaces (e.g., Part 77 airport imaginary surfaces that enter primary surface, 7:1 transitional slope, approach slopes, and inner horizontal surface; visual glide slope indicator obstacle clearance surface; etc.). In addition, the RT System must not be in-line or adjacent to a helipad. While a camera mast near the threshold may provide the best view at the runway threshold, there are no RT System level siting requirements that mandate camera location(s). Instead, the process is a trade-off of placing the camera(s) as close as possible to the area of interest while considering protected airport design

¹ Fixed-By-Function Navigational Aid (NAVAID). An air navigational aid positioned in a specific location in order to provide an essential benefit for aviation is fixed-by-function.

surfaces/Part 77 airport imaginary surfaces, availability of required utilities, and any specific RT manufacturers requirements for the system selected.

RT systems that are Federally funded must be sited in accordance with FAA Order 6480.4, Siting of Airport Traffic Control Towers (ATCT).

Note, Airport Sponsors that do not use federal funding for their RT System are not required to site the RT system as per FAA Order 6480.4, Siting of Airport Traffic Control Towers (ATCT). However, the FAA strongly encourages Airport Sponsors to reference Order 6480.4 as a guide when siting a non-Federally funded RT System.

2.3.1 Site Selection.

Siting an RT System typically begins with identifying at least three pre-site locations to help with the siting activities. The Airport Sponsor and RT manufacturer must work together during the siting process. An RT System that is funded by the AIP, FCT Competitive Grant Program, Airport Infrastructure Grant (AIG), or AIG Funding Reallocation (AFR) program must be located on airport owned property.

The Airport Sponsor must contact the Terminal Facilities Planning and Controls Service Area Lead to initiate the siting process. Thereafter, the Terminal Facilities and Controls Service Area will guide the Airport Sponsor through the pre-site selection process/siting as per Order 6480.4. The roles and responsibilities of the Airport Sponsor during the siting process are discussed in Order 6480.4 (see Chapter 2, Paragraph M).

The sections below include information about siting an RT system.

2.3.1.1 Airfield Components.

1. Lighting and atmospheric conditions may affect the RT system cameras/displays. These conditions include but are not limited to: on/off airport lighting, glare from natural/manmade surfaces, and local weather phenomena (e.g., recurring fog, haze, etc.). The presence of these conditions may affect the controllers' view of the airport property and surrounding airspace.
2. RT systems should not block or interfere with FAA equipment (e.g., airport surveillance radar, very high frequency omni directional range, localizer, glide slope, visual glide slope indicator obstacle clearance surface, etc.), or airport equipment (e.g., avian radar, foreign object debris detection equipment, unmanned aircraft system detection equipment, etc.).
3. The location(s) of the RT System should have adequate space to account for the RT camera washer system 'over-spray areas' and appropriate mitigations (if chemicals such as windshield washer fluid is used)².

2.3.1.2 ATC Operations (Airfield and Airspace).

The Airport Sponsor must provide the FAA's Airport Facilities Terminal Integration Laboratory or Virtual Immersive Siting Tower Assessment Team

² Note, reference washer fluid warning label.

332 with the data required to produce a full-scale 3-D model of the airport surface,
333 containing all existing and future buildings, including the proposed RT
334 System. This required data is found in Order 6480.4, Chapter 6, *Data*
335 *Requirements*.

CHAPTER 3. AIRSPACE APPROVAL PROCESS AND COORDINATION

The airspace approval process and coordination will take place after the RT System planning and siting processes are complete (Chapter 2 in this EB). Title 14 CFR Part 77 aeronautical evaluations fall into two categories:

- **Permanent Construction:** Evaluation of proposed permanent location and evaluation, including all appurtenances, of the RT System.
- **Temporary Construction:** Evaluation of the temporary construction work limits and associated construction equipment required for the installation of the RT System.

Prior to submitting a Title 14 CFR Part 77 airspace evaluation for the permanent location of the RT System, the Airport Sponsor must ensure that the proposed facility location is reflected on the approved ALP as identified in Section 2.2.2.

3.1 Notice of Permanent Construction (FAA Form 7460-1).

After the final, preferred permanent location(s) and configuration(s) of the RT System is determined, notice should be filed under 14 CFR Part 77. An aeronautical study must be filed for each camera mast (to include associated equipment and all appurtenances) at the location(s).

The FAA's tower siting team and Airport Sponsor should decide who will be the primary point of contact for FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, and submit it to the FAA via the OE/AAA Web Portal. The primary point of contact (or FAA Form 7460-1 "Sponsor") will be the proponent of the aeronautical study.

Appendix B outlines the OE/AAA Submittal Process.

3.1.1 Survey Accuracy.

The FAA encourages the proponent to submit a certified survey, signed by a licensed engineer or surveyor, with 1A Accuracy (± 20 feet horizontal and ± 3 feet vertical) in support of an accurate and efficient aeronautical evaluation.

Submittal of a 1A Accuracy Survey reduces the potential of unnecessary operational impacts to instrument approach procedures.

The FAA applies a default accuracy standard of 4D (± 250 feet horizontal, ± 50 feet vertical) to obstacles during evaluation, in accordance with AC 150/5300-20, *Submission of On-Airport Proposals for Aeronautical Study*, unless a certified survey has been received with the aeronautical study. Using a 1A accuracy survey provides the precise data needed during instrument flight procedure evaluations to prevent unnecessary increases to approach minimums and minimize operational disruptions.

Refer to AC 150/5300-20 for additional guidance.

3.2 Temporary Construction Analysis Requirements.

Before construction begins, the proponent must file Notice of Temporary Construction. Additionally, a CSPP may be required beforehand, contingent upon the type of funding.

3.2.1 Construction Safety and Phasing Plan (CSPP).

The CSPP documents scope of proposed construction activities including work area boundaries, staging areas, equipment operations, and the project's phasing sequences in accordance with AC 150/5370-2, Operational Safety on Airports During Construction.

For federally funded projects, the Airport Sponsor must develop a CSPP and have an aeronautical study performed in the OE/AAA Portal under *Airport Planning and non-Part 77 Notices* prior to submission of the Notice of Temporary Construction. After the CSPP Determination Letter has been issued, the Proponent will file the Notice of Temporary Construction.

Submission of Notice of Temporary Construction before the CSPP is approved introduces potential delays and may require additional filings by the proponent due to the results of the CSPP Determination Letter.

3.2.2 Notice of Temporary Construction (FAA Form 7460-1).

The proponent may file FAA Form 7460-1 for temporary construction either by submitting a paper form to the RO/ADO or electronically via the OE/AAA Portal as outlined in Appendix B, OE/AAA Submittal Process. It is highly recommended to submit the form through the OE/AAA Portal to allow for easy online tracking and follow-up actions. A case should be submitted for each temporary object or work area associated with the construction project to include the construction work area boundaries, staging areas, material stockpiles, cranes, drill rigs, and any other equipment operating on the airport.

In accordance with 14 CFR §77.7, *Form and time of notice*, the notice must be submitted to the FAA at least 45 days before construction activity is scheduled to begin. Airport Sponsors are highly encouraged to submit notice much earlier.

The FAA will conduct an aeronautical study for each filing and issue a determination advising the sponsor of any operational impacts and conditions that must be observed before construction activity is authorized to proceed. If there are notice to airmen (NOTAM) requirement(s) from the final determination, the Airport Sponsor must initiate the NOTAM action in the OE/AAA Portal. Once the Airport Sponsor receives favorable aeronautical determination(s) from the temporary construction filing(s), the Airport Sponsor should coordinate with the RO/ADO for a notice to proceed with construction.

Reference AC 150/5300-20, Submission of On-Airport Proposals for Aeronautical Study, and SOP 9.2 - FAA Aeronautical Study, Coordination, and Evaluation for more information on filing temporary construction activities.

3.3 Notice of Actual Construction or Alteration (FAA Form 7460-2).

After construction is completed, the Airport Sponsor must file FAA Form 7460-2, Notice of Actual Construction or Alteration, in the OE/AAA Portal and include a certified 1A survey with the final above ground elevation of the RT System and all appurtenances.

3.4 Determination Letters.

After FAA has completed the aeronautical study, a final aeronautical determination letter will be issued to the proponent and will include any conditional provisions that are required to be met. The final aeronautical determination letter serves a specific purpose depending on the case type:

- **Permanent Construction (Section 3.1):** The determination clears the final configuration of the RT System. It does not authorize the proponent to begin construction.
- **CSPP (Section 3.2.1):** The determination identifies the safety concerns during construction while an airport is open to aviation activities. It does not authorize the proponent to begin construction; it outlines the boundaries established to maintain safety.
- **Temporary Construction (Section 3.2.2):** The determination analyzes airspace in association with the construction equipment that will be used during construction, the area the equipment occupies while the airport is open, and will outline if there are any NOTAM requirements. After the determination letter is issued, coordinate with the RO/ADO regarding notice to proceed, if applicable.

CHAPTER 4. SAFETY RISK MANAGEMENT (SRM)

RT installation may require a safety risk assessment. The RO/ADO will coordinate with the sponsor to initiate a safety assessment if the project meets the applicability triggers described in Order 5200.11, FAA Airports (ARP) Safety Management System (SMS).

For more information please see: Safety Management Systems (SMS) for Airports and Airport Projects.

CHAPTER 5. AIRPORT INFRASTRUCTURE GUIDANCE

An RT System requires adequate airport infrastructure to support proper installation. The following sections include information on airport infrastructure considerations such as: electrical power, telecommunications, security, RT System mast, RT System tower data center and control facility, and miscellaneous equipment.

5.1 Electrical Power.

Alternating Current (AC) power provides the appropriate power to the RT system and ancillary systems. This section discusses design considerations for power distribution systems used on RT Systems.

5.1.1 Power Distribution.

Independent AC power supply feeds to the RT system must be provided. The amount of power supply feeds must be consistent with manufacturer's specifications. FAA Order 6030.20, *Electrical Power Policy*, guidance should be followed for the installation of power cables.

5.1.2 Environmental Protection.

Cables must be installed in conduit or enclosed wire ways. Exposed RT System cables are permitted provided the space the cables are located within are restricted to authorized personnel and such installation is adequate for its operational environment.

5.1.3 Lightning and Surge Protection, Grounding, Bonding and Shielding.

The AC power and network communications infrastructure must comply with the requirements specified in the latest edition of FAA-STD-019 (*Lightning and Surge Protection, Grounding, Bonding, and Shielding Requirements for Facilities and Electronic Equipment*).

5.1.4 Continuous Load.

An RT System circuit is considered a continuous load by the requirements of the National Electrical Code (NEC). Continuous loads are those loads that operate continuously for three hours or more. Sizing of the feeder conductors must be designed to carry 125% of the actual full-load amperes imposed on the system. Also, sizing of the over-current protective device (circuit breaker or fuse) protecting the feeders must be designed at 125% of the full load current on the system.

5.1.5 Backup Power.

The RT System must be furnished with independent uninterruptible power supply(ies) (UPS) capable of providing backup power automatically and instantaneously in the event of primary power loss. The capacity and required number of UPS must meet the system resiliency specifications required by the system manufacturer and applicable electrical code requirements.

5.2 Telecommunications.

Network Communications provides the data infrastructure required to transmit data between the mast(s) and the data center. This section discusses design considerations for telecommunications and cybersecurity systems used on RT Systems.

5.2.1 Telecommunications Cabling Design.

Network Communications infrastructure must provide all data transfer by a closed, physically point-to-point network (no wireless communication allowed at this time). An independent fiber optic telecommunication feed between the RT System sensors and control room must be provided. The amount of telecommunication feeds must be consistent with manufacturer's specifications, Considerations of length of run, type of cable used, loop signal losses, and physical obstructions (above and below ground) must be evaluated. Fiber optic cabling design must be performed in accordance with FAA order FAA-STD-061 (*AIRPORT FIBER OPTIC TRANSMISSION SYSTEM (FOTS)*).

In addition, any network communications components used as part of the network infrastructure must be passive devices.

5.2.2 Environmental Protection.

Fiber optic cables must be installed in conduit or enclosed wire ways. Exposed RT System cables are permitted provided the space the cables are located within are restricted to authorized personnel.

5.2.3 Maintenance of Fiber Optic Communications Equipment.

The network communications infrastructure must provide latency consistent with RT System's requirements. To ensure this, appropriate maintenance practices must be established and followed. Please refer to FAA Order 6650.10, *Maintenance of Fiber Optic Transmission Systems (FOTS)*, and/or RT system manufacturer's recommended maintenance practices for guidance.

Maintenance procedures must be developed to ensure proper maintenance of fiber optics communication equipment including latency rates consistent with RT System requirements. The results from maintenance inspections must be documented in accordance with the airport's maintenance program.

5.3 Security.

Physical security and cybersecurity are interdependent as both measures ensure the safe incorporation and operation of RT Systems within the NAS. Airport Sponsors must evaluate airport-specific conditions when designing and establishing security measures and ensure compliance with all applicable security standards. Please refer to the RT System manufacturer's Installation Manual for security measures guidance.

5.4 Mast.

The mast is the mechanical structure used to hold the necessary RT System interface systems (e.g., cameras, microphone, infrared sensors, etc.) at the airfield on an elevated

platform. The mast may be new or existing (re-purposed) infrastructure. This section discusses the design considerations for RT mast structures.

5.4.1 Environmental Guidance.

The mast structure must be suitable for the intended environment, for example, wind conditions, operational temperature, humidity levels, and earthquakes. Please refer to the RT System manufacturer's Installation Manual for mast design guidance.

5.4.2 Mast Design Considerations.

Although mast designs are site-specific, it must be stable and designed in accordance with state and national construction standards. At a minimum, the following items must be taken into consideration when designing mast structures:

1. Type of mast must comply with RT manufacturer design specifications.
2. The mast(s) must be designed to survive 100 mile-per-hour winds from any direction, and ice loading as defined by American Society of Civil Engineers, Manual 74 - Guidelines for Electrical Transmission Line Structural Loading.
3. The mast(s) must be designed to withstand seismic forces and seismic relative displacement appropriate for the installation site, in accordance with *FEMA 302, NEHRP Recommended Provisions for Seismic Regulations for New Buildings and Other Structures.*
4. Electrical components provided with the mast(s) must comply with NEC.
5. The mast(s) must comply with the requirements specified in Order 3900.19, FAA Occupational Safety and Health Policy.
6. The mast(s) must be located and have a height determined by the siting process.
7. The mast(s) must accommodate all electrical wiring and cabling infrastructure to ensure proper installation and maintenance of the system.
8. The mast(s) must accommodate all cleaning equipment infrastructure necessary to ensure effective maintenance and reliability of the RT System.
9. The mast(s) must be stable while supporting manufacturers' specified payloads.
10. The mast(s) must be corrosion resistant as appropriate for the installation location.
11. Wildlife and ecology around the mast(s) area must be taken into consideration. Reference section 6.3 for more information on wildlife hazard management and tower designs.

The systems must be marked and lit as per the final aeronautical determination. Installation of the obstruction light must be performed in accordance with AC 70/7460-1, Obstruction Marking and Lighting.

5.5 RT System Data Center and Control Facility.

The RT System data center and control facility must provide appropriate physical space and appropriate environmental conditions to the RT System equipment and its operator(s) to allow for optimal performance of necessary ATC functions. For the purpose of this EB, it is assumed that a physical facility already exists. Please refer to the RT System manufacturer's Installation Manual for guidance on the RT System data center and control facility.

At a minimum, the following items must be taken into consideration when designing the RT System data center and control facility:

1. Availability and requirements for power, telecommunications, data center and control room hardware (racks, displays, furniture, etc.) footprint relative to the available space, equipment and cable access, site access and physical security infrastructure.
2. Existing environmental controls (i.e., air conditioning) with respect to equipment cooling requirements under a nominal heat load.
3. Ability to adjust control room lighting for optimal display viewing (e.g., light dimmer switches, window shades, etc.).
4. Potential control room distractions caused by excessive noise or obnoxious odors/fumes.

5.6 Miscellaneous Equipment.

5.6.1 Camera Washer System.

The RT System may include a washer system for the RT System cameras. The washer solution must be appropriate for the intended installation location and environment (e.g., not freeze). Please refer to the RT System manufacturer's recommended maintenance practices for guidance.

5.6.2 Vault or Concrete Pad.

Construct the vault with a bill of materials to provide adequate structural strength for the conditions and installed location and with a fire rating as determined by the authority having jurisdiction. The electrical vault must also comply with NEC Article 110.31, Enclosure for Electrical Installations, Item (A) Electrical Vaults. Specifications and standards for structural concrete are available in AC 150/5370-10, Standard Specification for Construction of Airports, Item P-610.

CHAPTER 6. RT SYSTEM MAINTENANCE AND AIRPORT OPERATIONS/PART 139 GUIDANCE

The Airport Sponsor is responsible for maintaining and operating the RT System. This section includes information on routine system inspections, maintenance, and airport operations guidance.

6.1 RT System Maintenance.

The Airport Sponsor must follow recommended maintenance practices per the RT System manufacturers' maintenance manual. RT System maintenance must be performed by a credentialed maintainer with verification authority³.

In addition, maintenance procedures must be developed to ensure proper maintenance of the RT equipment and its associated infrastructure consistent with RT System requirements. The results from maintenance inspections must be documented in accordance with their maintenance program.

6.2 RT System Inspections.

Airport Sponsors should include RT Systems and associated infrastructure during airport safety self-inspections of airport operations. These inspections should include daily, continuous, special, and periodic. It is crucial to ensure these systems are incorporated into airport safety inspection checklists to maintain operational standards and compliance. Incorporating RT Systems into inspections is vital for ensuring the safety, security, and efficiency of airport operations. Responsibilities will vary depending on the agency and owner of the RT System. If airport owned and maintained, the Airport Sponsor's inspection process will be significantly more in-depth than an FAA owned and maintained system. If FAA property, the Airport Sponsor may have limited responsibilities as they have for FAA owned and maintained NAVAIDs (Navigational Aids) that may be defined in a Memorandum of Agreement or Letter of Agreement between the Airport Sponsor and FAA Air Traffic Organization.

By following the guidance outlined below, Airport Sponsors can effectively manage these systems, align with regulatory requirements, and uphold the highest standards of airport safety. The guidance discussed in sections 6.2.1 - 6.2.3 is not all-inclusive. Airport Sponsors may identify requirements that were not previously identified or captured by manufacturers, inspectors, or Letter of Agreement (LOAs)/ Memorandum of Understanding (MOUs).

³ As per Order FAA 6700.20, Approval, Operation, and Oversight of Non-federal Systems, Verification Authority is a term used for the authority the FAA gives to a non-federally employed maintenance technician, i.e., an employee of an entity other than the Federal Government. This authority allows that individual to perform maintenance on a specific non-federal system. This term does not apply to FAA systems.

6.2.1 Airport Sponsor Owned and Maintained RT Systems.

The Airport Sponsor should update inspection checklists to include remote air traffic control systems and infrastructure. The Airport Sponsor should reference the RT System maintenance manual when developing inspection checklists. When developing/implementing the RT inspection checklists, the Airport Sponsor should include, at a minimum, the following considerations:

- Ensure that the inspection team is trained in recognizing and assessing the operational status of RT Systems.
- Ensure the signal light gun and obstruction lighting are operational (if part of the RT System).
- Assess physical security measures protecting RT Systems.
- Confirm that emergency response protocols specific to RT System operations are in place and understood by all relevant personnel.
- Ensure RT System equipment and access roads are added to snow and ice removal priority listing/map, if necessary.
- Maintain thorough records of inspections, noting any discrepancies, corrective actions taken, and follow-up measures.
- Report significant issues immediately to appropriate authorities and stakeholders.
- Encourage feedback from inspection teams to refine and enhance inspection practices continually.
- Stay informed on technological advancements and regulatory changes affecting RT System operations.

6.2.2 RT Systems at CFR Part 139 Airports.

Airport Sponsors or operators holding an Airport Operating Certificate under Part 139 should review their existing Part 139 program to identify changes that may be needed to address the RT System.

6.2.3 FAA Owned and Maintained RT Systems.

For FAA owned and maintained RT Systems, the Airport Sponsor and contracted ATCT should establish a LOA or MOU that outlines any specific responsibilities the Airport Sponsor needs to accept. (e.g., snow removal, access road maintenance, inspections, etc.).

Reference section 6.2.1 for details on inspections.

6.3 **Wildlife Hazard Management.**

An RT System on airport property may potentially attract wildlife that could be hazardous to aviation. The Airport Sponsor and/or qualified airport wildlife biologist should assess the RT System to determine whether there are any areas that may be

susceptible to bird nesting, loafing, and perching. During this assessment, the Airport Sponsor should ask the RT manufacturer if the RT System has any flat or enclosed areas (e.g., ledges, cross bars, camera housing, etc.) that could provide an attraction for birds. Tower designs with a skeleton framework or flat surfaces can prove especially attractive to small flocking birds (e.g., European starlings, mourning doves, rock pigeons, etc.) as well as larger raptors and vultures. Therefore, Airport Sponsors should consider whether the mast type (e.g., skeletal, monopole, etc.) could result in a substantial level of attraction to known hazardous bird species at the airport (e.g., through surveys, wildlife strike data, etc.).

The Airport Sponsor may need to utilize deterrents to prevent loafing, perching, and nesting on/near the RT System. Examples of deterrents include but are not limited to the following:

1. Netting or other material to prevent access to hazardous wildlife.
2. Acoustic hazing such as pyrotechnics, propane cannons, directional sonic/hailing devices and other similar technologies.
3. Bird repellent spikes, angled ledges, tactile deterrents.
4. Other deterrent methods/techniques.

The Airport Sponsor and/or a qualified airport wildlife biologist should monitor the bird species/activity (e.g., numbers, local movements, and daily and seasonal occurrences) on and around the RT System and mitigate the wildlife risk, as necessary.

6.4 **Airport Data.**

The successful integration of an RT System into the NAS requires that accurate and current aeronautical data be reflected across all relevant FAA publications (e.g., Chart Supplement) and information systems. This section addresses the actions the Airport Sponsor must take to ensure proper documentation of the RT System, particularly the airport diagram/sketch update, and addition of a general remark in the Airport Master Record (AMR) for the RT System signal light gun. These updates are essential to inform pilots, air traffic personnel, and other stakeholders of the operational capabilities and physical configuration of the RT-equipped airport.

6.4.1 Chart Supplement – Airport Diagram/Sketch.

Airport Sponsors are strongly encouraged to update/create an airport diagram/sketch to include the location of the RT System that includes the signal light gun. Airport Sponsors should update/create airport diagrams as per FAA Order 7910.4, Airport Diagrams. Airport sketches are typically found in the Digital - Chart Supplement (d-CS).

Note, if the sponsor requests the FAA to update the airport diagram, the sponsor should provide the FAA with written documentation of the requested change.

To update/create a published airport diagram/sketch Airport Sponsors should visit Aeronautical Information Portal. Airport Sponsors should select the ‘Aeronautical Chart

Change' link as shown in [Figure 6-1](#). The Airport Sponsor will be re-directed to the Aeronautical Chart Change Form, as shown in [Figure 6-2](#).

Figure 6-1. Aeronautical Chart Change

The screenshot displays the 'Aeronautical Information Portal' interface. It is divided into two main sections: 'Aeronautical Inquiries' on the left and 'Submit Aeronautical Data' on the right. The 'Aeronautical Inquiries' section includes a description and links for 'Create New Inquiry' and 'My Inquiries'. The 'Submit Aeronautical Data' section lists three options: 'Airport Data Change (Public/Private)', 'Airport Data Change (Military)', and 'Aeronautical Chart Change'. The 'Aeronautical Chart Change' link is highlighted with a red rectangular box. Below this list is a link to 'See more forms on the AIS Website' and a 'My Data Submissions' link.

On the Aeronautical Chart Change Form, the Airport Sponsor should add their 'Contact Information' and complete the 'Aeronautical Chart Change Details', as shown in [Figure 6-2](#). The Airport Sponsor should complete the 'Aeronautical Chart Change Details' section as follows:

- **Product Category:** Select 'Airport Diagram/Sketch (CS, TPP)'.
- **Airport Location Identifier:** Use free text to enter the airport location identifier (e.g., KXYZ).
- **As Built Date:** Use the calendar to select the as-built date.
- **Description:** Use free text to enter the description of the aeronautical chart change: *Revise airport diagram (or sketch) to include the location of a new remote airport traffic control tower (R-TWR) that has the signal light gun.*

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Figure 6-2. Example of Aeronautical Chart Change Form

Aeronautical Chart Change Form

Instructions

- This form may be used to submit changes to supplementary aeronautical data contained on Airport Diagrams/Sketches, Military Training Routes, and 8260-2 forms (for Military Procedures, Special Procedures, and ATC Fixes).
- This form may be used to submit changes to information such as Special Notices, Area Notices, Regulatory Notices, and Graphic Notices contained in the Chart Supplement (CS). These notices require an Office of Primary Responsibility (OPR) to be published. See [Chart Supplement Notice Submission Requirements and Disclaimers](#).
- When submitting graphic chart changes, please submit a markup of changes to the original graphic in pdf format. You may submit supplemental information in DWG, DXF, DGN, SHP, JPG, TIFF, ZIP, PPT, or other PDFs.
- There is a 200MB size limit per upload.
- Changes to airport data published in the Chart Supplement should be submitted through the online [Airport Data Change Form](#).
- Review the [Aeronautical Data Team Cut-Off Dates](#) for submission of aeronautical data and chart changes.
- Please use the [Aeronautical Inquiry](#) form to report charting errors or discrepancies.

Contact Information

• First Name: • Email Address:

• Last Name: • Phone Number: x

• Organization: Alt Phone Number:

Position:

Note: contact information is automatically populated from your account. Goto your [account update page](#).

Aeronautical Chart Change Details

• Product Category:

• Airport Location Identifier:

• As Built Date:

• Description:

Note: Submitting aprons, blast pads, bridges, buildings, permanently closed pavement, concourse, construction areas, de-ice pads, fuel, hangars, hold lines, hotspots, islands, movement areas, overruns, aircraft parking, pavement, ramps, run-up pads, stopways, taxiways, control towers, turnarounds, wind cones, and windsocks will generate an add-on page in the [National Flight Data Digest \(NFDD\)](#). This information is not stored as data available at NFDC, but is made available as an add-on visual graphic for the NFDD consumer.

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Some airports may have multiple camera masts that are designed to provide adequate coverage of the airport environment. When updating/creating the airport diagram/sketch, the Airport Sponsor should only include the location of the remote tower with the signal light gun as a square and includes the text 'R-TWR'. Airport Sponsors should attach the updated/new airport diagram ([Figure 6-3](#)) or sketch ([Figure 6-4](#)) to the Aeronautical Chart Change Form.

Figure 6-3. Example of Updated Airport Diagram that shows the New R-TWR Location

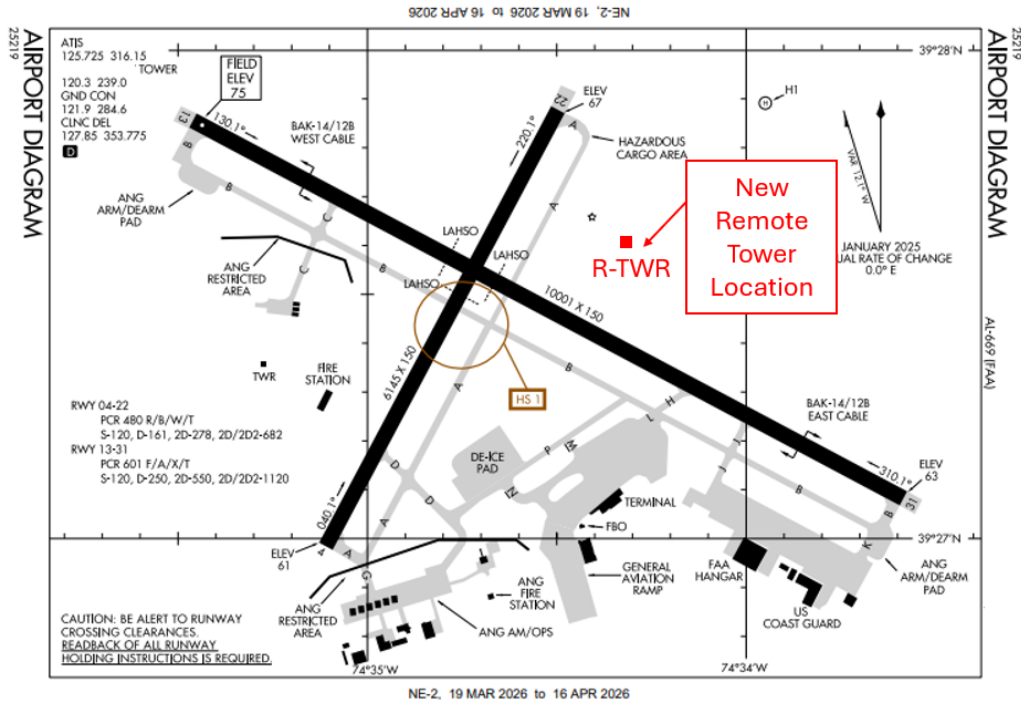
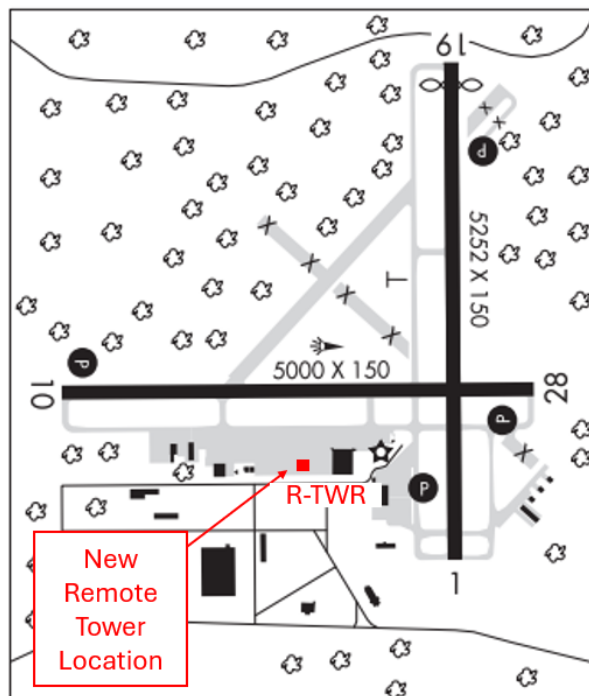


Figure 6-4. Example of Updated Airport Sketch that shows the New R-TWR Location



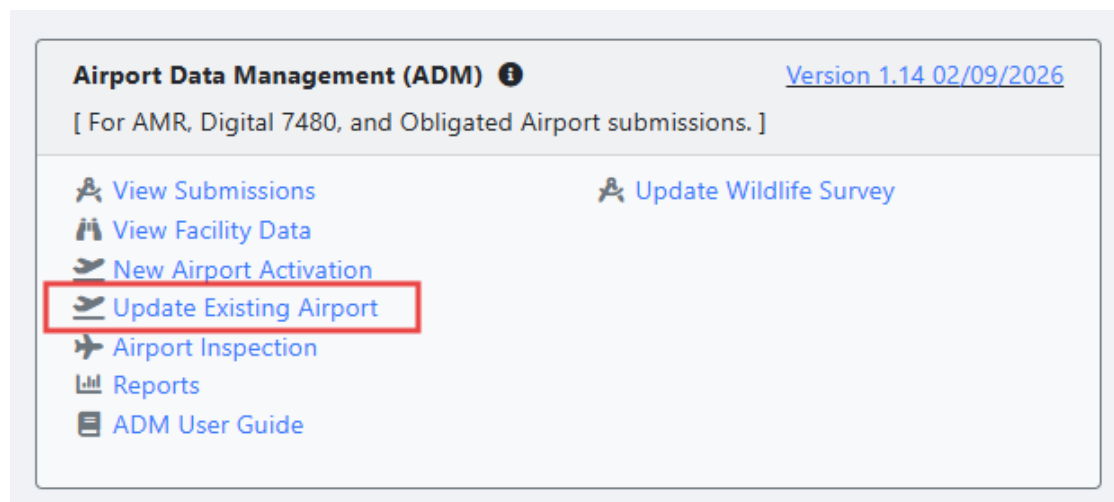
6.4.2 Chart Supplement – AMR – General Remark.

The Airport Sponsor should add a general remark to the airport's master record via the Airport Data and Information Portal (ADIP), as shown in Figure 6-5, identifying that the signal light gun is co-located with the remote tower. Note, as part of the remote tower commissioning, the FAA will publish the hours of the remote tower and applicable air traffic information to the Aeronautical Information Portal.

To update existing airport data, select *Update Existing Airport* within the *Airport Data Management (ADM)* module.

- Enter the Airport Loc ID.
- Review and acknowledge the message regarding documentation and requirements (if the airport is obligated).
- Select Edit Airport Data, then click Continue.

Figure 6-5. Airport Data Management (ADM)



Locate the view options at the bottom of the module control panel (on the left side of the primary workspace) and follow the corresponding path:

6.4.2.1 ADM View (Standard Workflow).

- Go directly to the *Remarks* tab in the primary workspace.
- Click Add General Remark.

6.4.2.2 Legacy View Path (Alternative Workflow).

- Select *AMR* in the module control panel.
- Go directly to the *Remarks* tab in the primary workspace.
- Click *Add General Remark*.

- In the *General Remark* field, enter this exact text,” Signal light gun co-located with remote tower (R-TWR), see airport diagram/sketch.”

Note: Once submitted and approved, this general remark will automatically appear in the Chart Supplement under ‘Airport Remarks’.

6.5 Standard Operating Procedures (SOP).

The Airport Sponsor should consider developing SOPs to ensure the safety of personnel working in the vicinity of the RT System, ensure these personnel do not adversely impact ATCS, and respond to airport operations/mechanical situations, and troubleshooting.

6.5.1 Occupational Safety and Health.

The RT System could include equipment that may adversely affect the safety of personnel working in the vicinity of the RT System. For example, some RT Systems are equipped with a camera washer system that uses fluid that may be harmful to human skin/eyes. For more information, reference the washer fluid warning label.

The Airport Sponsor should consider developing SOPs consistent with Occupational Safety and Health Administration regulations to ensure personnel accessing the RT System are equipped with necessary personal protective equipment to mitigate any possible occupational hazards.

6.5.2 Noise Mitigation Guidance.

Some RT Systems include a microphone(s) that are installed at the base of the camera mast(s), which provide airport ambient noise to the RTC. The Airport Sponsor should develop an SOP to ensure personnel working in the vicinity of the RT System are ‘quiet’ and keep conversations limited. If personnel plan to work in the vicinity of the RT System for a prolonged period of time, the Airport Sponsor should develop a SOP to notify the ATCS to mute/turn down the microphone when personnel are working. After work is complete, the sponsor should coordinate with the ATCS to return the microphone to its normal operating level.

6.5.3 Maintenance.

The Airport Sponsor may conduct routine maintenance/inspections around the base of the RT System. The Airport Sponsor should develop an SOP to advise ATCS that they will be working around the base of the RT system; therefore, ATCS should not activate the camera washer system.

In addition, some complex RT System maintenance/inspections may require personnel to operate near the RT System cameras, which may obstruct the ATCS view of the airport from the RTC. Such maintenance includes but is not limited to maintaining the following: cameras, camera washer system, lighting protection, obstruction lighting, cabling, etc. It may be necessary to conduct certain maintenance tasks when ATC services are not provided. The Airport Sponsor should develop an SOP between the Airport Sponsor and air traffic manager (ATM) that discusses when such maintenance activities will be conducted by the Airport Sponsor. This SOP/coordination will ensure that the ATCS view of the airport is not obstructed by maintenance activities/personnel.

6.5.4 Responding to Airport Operations/System Failure Situations.

The Airport Sponsor should develop an SOP addressing operational and/or system failure situations. At a minimum, the ATM must be informed of what individual(s) at the airport authority should be contacted when a situation occurs. For example, on-site airport operator, maintenance personnel, or the sponsor's designed representative that can assist with responding to airport operational hazards (e.g., wildlife that are perching/loafing/nesting on the RT System, security breaches, heavy snow, etc.) and/or any RT System mechanical situations (e.g., power/network communications interruptions/outages, refill washer fluid, RT System failures, etc.).

The Airport Sponsor should also ensure that only trained and qualified individuals are allowed to troubleshoot the RT System. If the RT manufacturer or any third-party entity is used during troubleshooting, the Airport Sponsor must define their role and level of access to the system as part of the SOP.

CHAPTER 7. MINIMUM EQUIPMENT LIST (MEL)

An MEL must be developed and provided by the RT manufacturer. In addition to the manufacturer specific MELs, the FAA could also require additional MELs to ensure the continuous safe operation of the RT System. For the purpose of this EB, it is assumed that the Airport Sponsor evaluated and is able to comply with the MEL requirements defined by the RT manufacturer and/or the FAA (if applicable).

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APPENDIX A. ACRONYM LIST

790	AC	Advisory Circular
791	AC (power)	Alternate Current power
792	ADIP	Airport Data and Information Portal
793	ADM	Airport Data Management
794	ADO	Airports District Office
795	AFR	AIG Funding Reallocation
796	AIG	Airport Infrastructure Grant
797	AIP	Airport Improvement Program
798	AJV	Airspace Services
799	ALP	Airport Layout Plan
800	AMO	Airspace Modernization Office
801	AMR	Airport Master Record
802	ARP	Office of Airports
803	AAS	Airports Safety and Standards Branch
804	ATC	Air Traffic Control
805	ATCS	Air Traffic Control Specialists
806	ATCT	Airport Traffic Control Tower
807	ATM	Air Traffic Manager
808	CCR	Continuous Current Regulator
809	CFR	Code of Federal Regulations
810	CS	Chart Supplement
811	CSPP	Construction Safety and Phasing Plan
812	CTO	Control Tower Operator
813	EB	Engineering Briefing
814	FAA	Federal Aviation Administration
815	FCT	FAA Contract Tower Program
816	FEMA	Federal Emergency Management Agency
817	FOTS	Fiber Optic Transmission Systems
818	LOA	Letter of Agreement
819	LOB	Lines of Businesses
820	MEL	Minimum Equipment List

821	MOU	Memorandum of Understanding
822	NAS	National Airspace System
823	NAVAID	Navigational Aid
824	NEC	National Electric Code
825	NFCT	Non-Federal Control Tower
826	NEHRP	National Earthquake Hazards Reduction Program
827	NOTAM	Notice to Airmen
828	OE/AAA	Obstruction Evaluation / Airport Airspace Analysis
829	PIM	Non-Federal Program Implementation Manager
830	RO	Regional Airports Division
831	RT	Remote Tower
832	RTC	Remote Tower Center
833	RT System	Remote Tower System
834	R-TWR	Remote Tower
835	SDA	System Design Approval
836	SME	Subject Matter Expertise
837	SOP	Standard Operating Procedures
838	SRM	Safety Risk Management
839	UPS	Uninterruptable Power Supply

APPENDIX B. OE/AAA SUBMITTAL PROCESS

To file the submission within OE/AAA, the proponent will need to create an account at <https://oeaaa.faa.gov/>. Under User Activity, select *File Notice*. Click on *FAA Form 7460-1*, select “*Notice of New Construction*” from the dropdown menu, then click on *Next* as shown in Figure B-1.

Figure B-1. File Notice – Notice of New Construction

File Notice

What Type of Notice do you want to file? (select one and click next)

What are the different types of Notice I can file? ⓘ

☒ **FAA Form 7460-1** Notice of New Construction ▼

☐ **FAA Form 7460-2** Notice of Alteration

☐ **Other** Notice of New Construction

Notice of Existing ▼

FAA Form 7480-1: <https://adip.faa.gov/agis/public/#/public>

If there is a previous study associated with the case, you will have the option to link that case using the search function on the following page. If no previous study needs to be associated, click “*Next*”.

Contact Details will need to be inputted. In the OE/AAA system, the Proponent is referred to as “Sponsor”. The Representative can be the Proponent or a third party designated to answer questions if needed. Once the details have been entered for both contacts, click “*Next*”.

For the Structure Details, utilize the drop-down menu to select *Tower* from the variety of Tower options as shown in Figure B-2.

Figure B-2. RT Structure Type

Structure Details ⓘ

Notice of: Notice of New Construction

Structure Type: Tower

Structure Name:

Guy Wires: ☐

Structure Type Description: Tower - generic for any type of communication tower. If your project contains multiple structures of the same type that require notice to FAA, you can use the Import Spreadsheet function during the last step of e-filing to add them to your notice. Do not use this generic type if there is a type in this list that more accurately describes the type of tower for which you are filing notice to FAA. When filing notice for a Tower, enter one pair of geographic coordinates

Other Traverseway

TOWERS

Tower

ADLS Tower

Antenna Tower

Cell-On-Wheels

Met Tower

Non-Transmitting Tower

NATURAL

Terrain

Hill

Vertical Point

Vegetation

Tree

< Previous

Save and Next >

Input the Structure Name: “*Remote ATC Tower*”, as shown in [Figure B-3](#).

Figure B-3. Structure Name

Structure Details ⓘ

Notice of: Notice of New Construction

Structure Type: Tower

Structure Name: Remote ATC Tower

Guy Wires: ☐

Structure Type Description: Tower - generic for any type of communication tower. If your project contains multiple structures of the same type that require notice to FAA, you can use the Import Spreadsheet function during the last step of e-filing to add them to your notice. Do not use this generic type if there is a type in this list that more accurately describes the type of tower for which you are filing notice to FAA. When filing notice for a Tower, enter one pair of geographic coordinates

< Previous

Save and Next >

Next, you will need to select the location of the RT System. A single point can be inputted into the Location Map. If additional points are needed, they can be added later in this process.

- Latitude and Longitude: Inputs can be provided using spaces, dashes, or with the map utilizing the arrow button (↖+).
- Datum: Select appropriate Datum from the drop-down menu based on the supporting data you are providing. WGS84 is the default datum within the system.
- Total Structure Height: Provide the tallest height of the structure to include all appurtenances.

- Description of Location: Include the airport name and three-digit local ID and where on the property it will be located.

- Description of Proposal: Use “Proposed Remote Tower System Final Configuration”.

Once complete, click the validate button. This validation will provide the site information based on NGS. If site elevation data differs, you will be asked to provide justification. Once validated, select NEAR or ON airport and the Airport ID.

- ON Airport: With airport property boundary, as verified by the ALP and Exhibit A. Case designated as an NRA and will be managed by ARP.

- NEAR Airport: Off-airport property, as verified by the ALP and Exhibit A. Case will be designated as an OE and managed by the Obstacle Evaluate Group.

After inputting the point data, select Next to add additional details. Provide the proposed Duration, Marking Type, Lighting Type, Aircraft Detection Lighting System (ADLS), and Frequency/Power that may be transmitted as appropriate. If a frequency is to be transmitted, please provide the frequency band from the drop-down menu.

Once all data has been provided, the screen will display a draft of FAA Form 7460-1. At the bottom of the page, documentation can be added in support of the proposal. If there are multiple points, select the *Add Multiple Cases* option and download the *Case Data Spreadsheet* to upload additional project data. After all information has been provided, select *Submit* to provide notice to FAA for the RT System.