# OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR Occupational Safety and Health Administration

**DIRECTIVE NUMBER:** FAP 01-00-005] **EFFECTIVE DATE:** June 22, 2009

**SUBJECT:** FAA Airport Traffic Control Tower Monitoring Program (AIRTRAF)

## ABSTRACT

**Purpose:** This Instruction continues OSHA's nationwide inspection targeting program of airport traffic control towers (ATCTs) for fiscal year 2009. This annual program, known as AIRTRAF, monitors the compliance of Federal Aviation Administration (FAA) ATCTs with providing employees a means of tower egress in accordance with 29 CFR 1910 Subpart E, *Means of Egress*, or FAA *Alternate Standard for Fire Safety in Airport Traffic Control Towers*, established in 1998 as per 29 CFR 1960.17, *Alternate Standards*. This Instruction provides guidance to conduct monitoring inspections of FAA owned and operated ATCTs. Furthermore, it provides an inspection list and cycle by OSHA Regions.

**Scope:** OSHA-wide.

**References:** *Occupational Safety and Health Act of 1970*, Section 19, *Federal Agency Safety Programs and Responsibilities; Executive Order 12196*, February 26, 1980, *Occupational Safety and Health Programs for Federal Employee*; Title 29 Code of Federal Regulations (CFR) 1910.35, *Compliance with NFPA 101-2000, Life Safety Code*; 29 CFR 1910 Subpart E, *Means of Egress*; 29 CFR 1960, *Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters*; 29 CFR 1960.17, *Alternate Standards*; *The* [FAA] *Alternate Standard for Fire Safety in Airport Traffic Control Towers;* OSHA Instruction ADM 03-01-005, *OSHA Compliance Records*, August 3, 1998; OSHA Instruction CPL 02-00-135, *Recordkeeping Policies and Procedures Manual*, December 30, 2004; OSHA Instruction CPL 02-00-025, *Scheduling System for Programmed Inspections*, January 4, 1995;

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| | OSHA Instruction CPL 02-00-148, *Field Operations Manual*; OSHA Instruction FAP 01-00-003, *Federal Agency Safety and Health Programs*, May 17, 1996; and National Fire Protection Association (NFPA) 101-2000, *Life Safety Code*® – 1970, 1997 and 2000 editions. |
| **Cancellations:** | OSHA Instruction FAP 01-00-004, *FAA Air Traffic Control Tower Monitoring Program* (AIRTRAF), January 3, 2008. |
| **State Plan Impact:** | This Instruction applies solely to federal agency worksites and does not impact State Plan programs. |
| **Action Offices:** | National, Regional, and Area Offices. |
| **Originating Office:** | Directorate of Enforcement Programs. |
| **Contact:** | Directorate of Enforcement Programs<br>Office of Federal Agency Programs<br>200 Constitution Avenue, NW, Room N-3622<br>Washington, D.C. 20210<br>(202) 693-2122 |

By and Under the Authority of

Jordan Barab
Acting Assistant Secretary

## Executive Summary

On May 6, 1998, the U.S. Department of Transportation, the Federal Aviation Administration (FAA) and the Occupational Safety and Health Administration (OSHA) signed *The Alternate Standard for Fire Safety in Airport Traffic Control Towers* (Alternate Standard) (available on the OSHA IntraNet*)* along with a schedule for compliance progress. The Alternate Standard allows for a single means of egress with qualifying conditions. FAA airport traffic control towers (ATCTs) were thereby permitted to comply with the Alternate Standard rather than with *29 CFR 1910,* Subpart E, the general industry standard regarding *Means of Egress.*

Following the signing of the Alternate Standard, the FAA submitted requests to OSHA for additional variances. There are six variances, each of which applies to numerous towers, and another twelve variances that are more restricted in their application. The FAA has requested extensions for completing tower upgrades or replacement.

Since 1998, the Office of Federal Agency Programs has received reports from the FAA certifying that 190 towers have been brought into compliance with the Alternate Standard. Of these 190 towers, 88 have variances which apply to them. According to the FAA Report to OSHA, *Summary of Inspection Activity for FAA AIRTRAF Monitoring Program for FY 2008*, there are 386 towers covered by the Alternate Standard.

This Instruction sets out monitoring procedures to determine whether these towers are fully compliant with 29 CFR 1910, Subpart E, or both the Alternate Standard and their designated variances. The monitoring program will also verify whether those ATCTs still awaiting corrective action are meeting the interim procedures developed to achieve equivalent protection until compliance can be accomplished.

## Significant Changes

This Instruction institutes administrative changes previously made to the *Standard Alleged Violation Elements* (SAVEs) standard language for the *OSHA – 2H, Notification of Unsafe or Unhealthful Working Conditions*.

This Instruction modifies OSHA Instruction FAP 01-00-004, *FAA Airport Traffic Control Tower Monitoring Program* (AIRTRAF), January 3, 2008, Section IX.E., concerning the issuance of a *Notice of Unsafe or Unhealthful Working Conditions, OSHA-2H Form,* (OSHA Notice). This will ensure consistency and accuracy in retrieving historical data related to violations.

The issuance of this Instruction has been changed from calendar year to fiscal year to align the Program with the Agency's Annual Plan.

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I. Purpose. This Instruction establishes the monitoring program of Federal Aviation Administration (FAA) airport traffic control towers' (ATCT) compliance with providing a safe means of exit in case of fire and other emergencies in accordance with 29 CFR 1910, Subpart E or [t]he *Alternate Standard for Fire Safety in Airport Traffic Control Towers*.

II. Scope. This Instruction applies OSHA-wide.

III. References.

A. Occupational Safety and Health Act of 1970, Section 19. *Federal Agency Safety Programs and Responsibilities.*

B. Executive Order 12196, February 26, 1980, *Occupational Safety and Health Programs for Federal Employees.*

C. 29 CFR 1910.35, *Compliance with NFPA 101-2000, Life Safety Code®*.

D. 29 CFR 1910 Subpart E, *Means of Egress.*

E. 29 CFR 1960, *Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters*, October 21, 1980; and as amended.

F. *The* [FAA] *Alternate Standard for Fire Safety in Airport Traffic Control Towers*, May 6, 1998.

G. National Fire Protection Association (NFPA) 101-2000, *Life Safety Code®* – 1970, 1997 and 2000 editions.

H. Directives

- OSHA Instruction ADM 03-01-005, *OSHA Compliance Records*, August 3, 1998.
- OSHA Instruction FAP 01-00-003, *Federal Agency Safety and Health Programs*, May 17, 1996.
- OSHA Instruction CPL 02-00-025, *Scheduling System for Programmed Inspections*, January 4, 1995.
- OSHA Instruction CPL 02-00-135, *Recordkeeping Policies and Procedures Manual*, December 30, 2004.
- OSHA Instruction CPL 02-00-148, *Field Operations Manual*, March 26, 2009.

IV. Cancellations. This Instruction cancels OSHA Instruction FAP 01-00-004, *FAA Air Traffic Control Tower Monitoring Program* (AIRTRAF), dated January 3, 2008.

V. Federal Program Change. This Instruction applies solely to federal agency worksites. It does not impact State Plan programs.

VI. Background.

On May 6, 1998, after negotiations with the Department of Transportation (DOT), the Federal Aviation Administration (FAA) and two unions, OSHA signed *The Alternate Standard for Fire Safety in Airport Traffic Control Towers* (Alternate Standard). The Alternate Standard became effective on July 1, 1998, allowing for a single means of egress under qualifying conditions. It also contained abatement reporting requirements. A copy of the Alternate Standard is available on OSHA's IntraNet and is included in this Instruction (see Appendix A).

In January 2008, OSHA implemented an inspection program, known as AIRTRAF, designed to verify FAA compliance with the Alternate Standard through the inspection of selected ATCTs. The Program was designed to determine whether the FAA was adequately protecting its employees from the hazards associated with fire and egress, and provided guidance to the field for conducting monitoring inspections of both certified and uncertified ATCTs (see paragraph IX, *Definitions*, of this Instruction). The AIRTRAF inspection schedule included ATCTs that were certified as being in compliance with the Alternate Standard, as well as ATCTs awaiting replacement or rehabilitation. The latter were subject to interim protective measures as indicated in the Alternate Standard.

OSHA's Office of Federal Agency Programs conducted several site reviews of ATCTs between 1998 and 2001 to evaluate the need for, and the protective value of, the permanent variances FAA had requested for 241 out of 386 ATCTs. The reviewers found the variances to be both needed and adequately protective of employees. Subsequently, four ATCTs were dropped from the initial list (these towers were not operated or owned by the FAA). Another tower was added to the list in 2006. As of August 2007, there were 190 ATCTs which FAA had certified as conforming to the Alternate Standard; 88 of which had applicable variances.

VII. Significant Changes. This Instruction institutes administrative changes previously made to the *Standard Alleged Violation Elements* (SAVEs) standard language for the *Notice of Unsafe or Unhealthful Working Conditions, OSHA – 2H* (OSHA Notice).

This Instruction modifies OSHA Instruction FAP 01-00-004, *FAA Airport Traffic Control Tower Monitoring Program* (AIRTRAF), January 3, 2008, Section IX.E., concerning the issuance of an OSHA Notice, thereby ensuring consistency and accuracy in retrieving historical data related to violations.

The issuance date of this Instruction has been changed from calendar year (CY) to fiscal year (FY) to align the program with the Agency's Annual Plan.

VIII. Action Required.

A. Responsible Office. The Directorate of Enforcement Programs (DEP), Office of Federal Agency Programs (OFAP), coordinates the AIRTRAF program.

B. Action Offices. All National Office Directorates and Offices, Regional Offices, and Area Offices involved in the implementation of the AIRTRAF program must comply with this Instruction.

C. Information Offices. The OSHA Training Institute (OTI), Compliance Assistance Coordinators, Compliance Assistance Specialists, Federal Agency Program Officers (FAPOs), and Regional Enhanced Enforcement Program Coordinators must be aware of the AIRTRAF program.

IX. Definitions.

A. *Airport Traffic Control Tower (ATCT).* An *ATCT* is "…an enclosed, independent structure or portion of a building with elevated portions for support of equipment or occupied for observation, control, operation, signaling, or similar limited use, and not open to the general public. An ATCT is a tower used for aircraft control and related activities." (Alternate Standard, 1998). The acronym "ATCT" and the word "tower", as used in this Instruction, are synonymous and interchangeable.

**Although the Alternate Standard addresses ATCTs that are "Federally operated and owned," the scope of this monitoring program will be limited to towers that are both operated and owned by the FAA[1].**

B. *Alternate Standard.* The phrase, *Alternate Standard,* is the abbreviated reference to *The Alternate Standard for Fire Safety in Airport Traffic Control Towers* signed by the DOT, the FAA and OSHA on May 6, 1998. It is an alternative to the requirements of 29 CFR 1910.36(b)(8) in effect at that time. In 2002, Subpart E, *Means of Egress*, was updated allowing for a single exit route under qualifying conditions as per 29 CFR 1910.36(b)(3).

C. *Alternative A Tower.* An *Alternate A Tower* is an ATCT having a single exit route and a total occupant load of fewer than twenty-five (25) occupants. (For additional requirements, see Appendix A, *The Alternate Standard for Fire Safety in Airport Traffic Control Towers*, paragraph C.3., *Alternatives).*

D. *Alternative B Tower.* An *Alternate B Tower* is an ATCT constructed before the year 2001, having a single exit route and a total occupant load of twenty-five (25) or more occupants. (For additional requirements, see Appendix A, *The Alternate*

1. Prior to initiating an inspection under this monitoring program, the CSHO must verify that the ATCT is **operated and owned** by FAA. The ATCTs on the randomly generated inspection list may only meet one of these two criteria. Contact your Regional Federal Agency Program Officer to request additional ATCT(s) if the selected tower does not meet both criteria.

*Standard for Fire Safety in Airport Traffic Control Towers*, paragraph C.3., *Alternatives).*

E. *Certified ATCT*. A *certified ATCT* is a tower for which the FAA has submitted signed documentation verifying that the ATCT is in compliance with the Alternate Standard.

F. *Uncertified ATCT*. An *uncertified ATCT* is a tower for which the FAA has not indicated the tower's compliance with the Alternate Standard and for which a petition for modification of abatement has been submitted.

G. *Variance*. For the purposes of this Instruction, a *variance* means a previously approved variation from the requirements of [t]he *Alternate Standard for Fire Safety in Airport Traffic Control Towers*.

X. Description of the FAA Airport Traffic Control Tower Monitoring Program (AIRTRAF).

A. Scope. OSHA inspection personnel will conduct monitoring inspections of randomly selected FAA ATCTs to determine their compliance with a means of egress status. A minimum of three towers per fiscal year will be inspected in each Region. Regions with adequate resources may conduct additional inspections. Only towers that are both operated and owned by FAA will be inspected.

B. Primary Inspection List. Each fiscal year, a primary inspection list will be developed by OFAP for each Region consisting of three randomly selected towers. The primary inspection list will include at least one certified ATCT and one uncertified ATCT. A package of information for each listed tower will be sent to the Regional Offices. The packages will include the applicable variances.

C. Secondary Inspection List. A secondary inspection list will be developed by OFAP for Regional or Area Offices, at their request, based on the same random selection used for the primary inspection list.

XI. Scheduling.

A. General.

OSHA's National Office will provide each Regional Office with a list of three randomly selected FAA ATCTs within its coverage area. On request, the National Office will also provide each Region with additional inspection cycles. The number of towers in the cycle will be determined by the requesting Region.

Usually, the Region will complete inspection of the towers listed on the primary inspection list prior to initiating inspections from a secondary inspection list. A secondary inspection cycle may be opened before completion of the primary list if either of the following conditions applies:

- When needed to improve efficiency; or
- To continue federal agency inspection activity if inspections at some of the primary sites are deferred.

Once any inspection cycle is opened it must be completed.

B. Maintaining Inspection Lists/Cycles and Documentation.

The Area Director is responsible for maintaining documentation necessary to demonstrate that the FAA ATCT inspection lists and cycles have been used in accordance with the requirements of this Instruction. Documentation should include a rationale for all deletions, deferrals, or other modifications, such as a reason for expanding specific inspection(s) to cover health hazards, based on either:

1. The prior inspection history of the tower, or
2. Current knowledge concerning the AIRTRAF monitoring program.

In accordance with CPL 02-00-025, paragraph B.1.b.(1)(c)3, the Area Office must maintain all inspection lists, cycles, and documentation for a period of three years after completing all the inspections conducted under the current AIRTRAF program. For record disposition schedule, see ADM 03-01-005, Appendix D, *Compliance Records Disposition Schedule*.

XII. Inspection Priority.

A. Normally, an Area Office's first inspection priority is to conduct unprogrammed inspections[2]. The inspection priorities, as described in CPL 02-00-148, will be followed, with the following additional guidance.

1. All ATCTs on the primary inspection list must be inspected during the fiscal year unless, in view of resource considerations, the Regional Administrator has received special approval (generally in advance) from the Assistant Secretary to conduct fewer inspections. The rationale for the reduction should be documented according to paragraph XI.B. of this Instruction.

2. Area Offices that have started but have not completed an AIRTRAF cycle of monitoring inspections must normally complete the current cycle before beginning a new cycle. Carryovers will be handled in accordance with CPL 02-00-025, *Scheduling System for Programmed Inspections*, paragraph B.1.b.(1)(e)1, or as outlined below.

2 This directive does not cover issues arising from complaint inspections relating to ATCTs. Further information and instruction from OFAP may be required to adequately prepare for complaint inspections.

3. Secondary inspection cycles do not have to be completed before the beginning of the new fiscal year. However, if a cycle has been started, all ATCTs within the cycle must be inspected prior to initiating inspections under a new fiscal year's AIRTRAF program. An open secondary inspection cycle should be completed prior to initiating additional cycles.

4. Area Offices will continue to conduct other programmed inspections under National Emphasis Program (NEP) or Local Emphasis Program (LEP) initiatives, as the Regional and Area Office goals dictate.

XIII. Deletions.

An ATCT is to be deleted from the inspection list if the following two criteria are met.

1. The ATCT has been inspected within 24 months prior to the start of the current inspection cycle; and

2. That inspection included a documented assessment of compliance for egress and fire protection.

The date when the ATCT is considered to have received an inspection will be the opening conference date.

Area Offices will be responsible for making appropriate deletions from the inspection lists (see *Footnote 1* for further guidance).

XIV. Inspection Procedures.

A. Scope. Inspections conducted under this Program will consist of a records review, to include a review of injury and illness recordkeeping documents, hazard communication program, the tower-specific emergency action plan, fire prevention program, training records, compliance plan, compliance status and abatement certification; and other records, as appropriate. This review will be followed by a compliance review addressing the ATCT's compliance with the Alternate Standard and applicable variances.

Where the CSHO observes contractors performing other work, such as construction or maintenance activity that is not being supervised by the federal agency, and if hazards are observed associated with that work, the CSHO may open an inspection of the contractor.

B. Compliance Safety and Health Officer (CSHO) Selection. CSHOs who satisfy the training requirements specified in paragraph XV. will be selected to conduct AIRTRAF inspections.

C. FAA Availability. At times, it will be necessary to make advance arrangements with FAA personnel. Advance notice may be necessary to avoid disturbing air traffic controllers in the performance of their primary duty (attending to air

traffic), or to assure the availability of a safety or fire engineering professional to participate in the inspection. The Area Office will determine when advance notification is deemed appropriate.

D. Employee Participation. The CSHO should pay particular attention to ensure employees participate in all phases of the inspection.

E. Issuance of OSHA-2H[3]. Under AIRTRAF, a *Notice of Unsafe or Unhealthful Working Conditions, OSHA-2H Form*, (OSHA Notice) may be issued for violations of the Alternate Standard or the ATCT's variance. In either situation, the OSHA Notice will be developed and issued in accordance with CPL 02-00-148, *Field Operations Manual*, and FAP 01-00-003 *Federal Agency Safety and Health Programs*, paragraph L. 1: *Issuance of the OSHA Notice*. The proceeding Federal Agency adjustments will be followed when issuing the OSHA Notice.

1. For violations of the Alternate Standard where requirements are also addressed in OSHA standards, the CSHO should: (a) cite the OSHA standard; (b) enter "As required by 29 CFR 1960.8(b)" in the SAVEs standard language section; and (c) reference the unmet provision of the Alternate Standard in the Alleged Violation Description.

2. For violations of a provision of the Alternate Standard that are not a requirement in 29 CFR 1910, the CSHO should cite 29 CFR 1960.8(a), and reference the violated paragraph of the Alternate Standard.

3. For violations of a requirement in 29 CFR 1910 that are not addressed in the Alternate Standard, the CSHO should cite the violated OSHA standard, and enter "As required by 29 CFR 1960.8(b)" to the SAVEs standard language section.

F. Site Selection. OFAP will provide each Region with a listing of three randomly selected ATCTs to be inspected. OFAP may provide this listing by e-mail.

In the event that a Region desires an additional (secondary) inspection list, the Regional FAPO, upon consultation with the Regional Administrator or designee, will notify OFAP. OFAP will develop a listing of additional towers according to the random order number previously assigned to the ATCTs. The applicable variances will be communicated by e-mail or facsimile.

G. Recordkeeping Violations. Whenever violations of 29 CFR 1960, Subpart I: *Recordkeeping and Reporting Requirements* are identified, appropriate notices will be proposed and supporting documentation will be provided in accordance with CPL 02-00-148.

3 Prior to issuing an OSHA Notice, a draft of the notice must be forwarded through the Regional Federal Agency Program Officer (FAPO) to OSHA's Directorate of Enforcement Programs (DEP), Office of Federal Agency Programs (OFAP), for review and concurrence. Additional documentation may be requested, if needed.

1. Recordkeeping Violations Found on the OSHA-300, *Log of Work-Related Injuries and Illnesses*. If the CSHO identifies recordkeeping violations on the OSHA-300 logs for CY 2006 to the present, the Area Director will issue notices in accordance with CPL 02-00-135, Chapter 2, paragraph II.B., or CPL 02-00-148, as appropriate.

2. Recordkeeping Violations for CY 2005. If the CSHO identifies recordkeeping violations for CY 2005, and there is evidence the employer has made a good faith effort to comply with the provisions of 29 CFR 1960, Subpart I, a notice will not be issued.

3. Failing to Retain Records for the Prior Five-year Period. If an employer is unable to produce copies of the OSHA Federal Agency Log or an OSHA-200: *Log and Summary of Occupational Injuries and Illnesses* used under the recordkeeping system in effect prior to January 1, 2005, the employer may be cited under 29 CFR 1960.69 for failure to retain required records.

4. When citing a recordkeeping violation, the appropriate paragraph of 29 CFR 1960, Subpart I is to be cited, with a reference to the paragraph in 29 CFR 1904 that has been violated.

XV. Training. CSHOs selected to conduct AIRTRAF inspections under this Program will receive program-specific training consisting of two (2) courses sponsored by the DEP/ OFAP and the DTE/ OSHA Training Institute. No CSHO will be permitted to conduct an inspection under this Program until both courses have been completed.

It is highly recommended that personnel who have previously completed OTI Course #2070 – *Fire Protection and Life Safety Code*, and are experienced in its application be considered for this assignment. The two mandatory courses are:

1. OTI Course #2070 – *Fire Protection and Life Safety Code* or equivalent should be completed prior to attending the program-specific training. An equivalent course may be obtained through a reputable source, as long as its content and scope satisfy the objectives of OTI Course #2070.

2. OTI Course #3170, *FAA Air Traffic Control Towers (ATCTs) Monitoring Procedures.* This course will cover the following topics:

   - Review of OSHA inspection procedures for federal agencies
   - Alternate Standards – General Background
   - The FAA Alternate Standard
     - Overview and Background
     - Alternative A Tower
     - Alternative B Tower
     - Variances within the Alternate Standard
     - Non-certified ATCTs - interim controls

- The ATCT Monitoring Program (AIRTRAF)
  - Site selection, supplemental lists
  - Advance notice
  - Inspection scope
  - Citation procedures

- The FAA will provide an overview of the following:
  - Design concepts of ATCTs
  - FAA operations and protocol

XVI. Relationship to Other Programs.

A. Unprogrammed Inspections. Unprogrammed inspections will be conducted in accordance with CPL 02-00-148 and/or other guidance documents. If the occasion for an unprogrammed inspection, such as a complaint or fatality, arises with respect to an ATCT that is also in the current inspection cycle under the current AIRTRAF inspection list, the two inspections may be conducted either concurrently or separately. See also paragraph XVII.B., of this Instruction.

B. Special Emphasis Programs. Some establishments may be selected for inspection under the AIRTRAF plan and also one or more other OSHA initiatives (NEP or LEP). Programs based on particular hazards or on particular industries can be run concurrently with the AIRTRAF monitoring program. CSHOs will apply all applicable IMIS codes to the inspection. See also paragraph XVII.C., of this Instruction.

XVII. Recording and Tracking.

A. FAA ATCT Monitoring-Only Inspections. The OSHA-1 Form must be marked as "programmed planned" in *Item 24*. In addition, the "*NEP*" box is to be checked and the value "AIRTRAF" recorded in *Item 25d*.

B. FAA ATCT Monitoring Combined with Unprogrammed Inspections. For all unprogrammed inspections conducted in conjunction with an AIRTRAF inspection, the OSHA-1 Form must be marked as "unprogrammed" in *Item 24* with the appropriate unprogrammed activity identified. In addition, the "*NEP*" box is to be checked and the value "AIRTRAF" recorded in *Item 25d*.

C. FAA ATCT Monitoring Combined with NEP or LEP Inspections. For all programmed inspections, such as NEPs and LEPs, conducted in conjunction with an "AIRTRAF" inspection, the OSHA-1 Form must be marked as "programmed planned" in *Item 24*. In addition, the "*NEP*" box is to be checked and the value "AIRTRAF" recorded in *Item 25d* along with all NEP and LEP IMIS codes applicable to the inspection.

D. FAA ATCT Monitoring Combined with Unprogrammed and Other Programmed Inspections. If an "AIRTRAF" inspection is combined with an unprogrammed inspection, such as an inspection generated through a complaint, and a programmed inspection, such as a NEP or LEP, *Item 24* must be marked "unprogrammed."

E. Strategic Management Plan. Enter any applicable Strategic Management Plan hazard/industry codes in *Item 25f* that were addressed during the inspection.

# Appendix A

# The Alternate Standard for Fire Safety in Airport Traffic Control Towers

Whereas, the agreement contained herein will provide a level of protection for occupants of airport traffic control towers equivalent to that of egress standards under 29 CFR Part 1910; and

Whereas, this agreement was reached in cooperation with employee and management representatives of the Federal Aviation Administration, the Office of the Secretary of Transportation, and the Occupational Safety and Health Administration;

Therefore, in keeping with this agreement, we the undersigned have affixed our signatures to this Alternate Standard for Fire Safety in Airport Traffic Control Towers, in Washington, D.C., on this the 6th day of May, 1998.

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| Mortimer L. Downey<br>Deputy Secretary of Transportation | Jane F. Garvey<br>FAA Administrator | Gregory R. Watchman<br>Deputy Assistant Secretary of Labor for Occupational Safety and Health |

I. The Alternate Standard.

A. Scope and Application. This standard applies to all federally owned or operated ATCTs. It sets forth minimum requirements essential to providing a safe means of exit in case of fire and other emergencies.

B. Definitions.

"Authorized Person" means an employee who has been specifically assigned by the employer to assure compliance with this standard.

"Base Building" means a structure including links and vestibules which connects with the ATCT and which may house administrative personnel, Terminal Radar Approach Control (TRACON), or passenger-related functions.

"Cab" means the primary operating space in the ATCT situated at a desired elevation above ground level and physically oriented relative to the primary runways, so as to obtain the best unobstructed view of the airport aircraft primary movement areas (taxiways, runways, and flight approaches and departures).

"Class A Finish" means any material classified at twenty-five (25) or less on the flame spread test scale and 450 or less on the smoke test scale described in 6-5.3.1 of NFPA-101.

"Class B Finish" means any material classified at more than twenty-five (25) but not more than seventy-five (75) on the flame spread test scale and 450 or less on the smoke test scale described in 6-5.3.1 of the NFPA-101.

"Emergency Action Plan" means a plan for a workplace, or parts thereof, describing what procedures the employer and employees must take to ensure employee safety from fire or other emergencies.

"Emergency Exit Route" means the route that employees are directed to follow in the event they are required to evacuate the workplace or seek a designated refuge area.

"Exit" means a portion of a means of egress which is separated from all other spaces of the structure by construction or equipment to provide a protected way of travel to the exit discharge.

"Exit Access" means a portion of a means of egress which leads to an entrance to an exit.

"Exit Discharge" means a portion of a means of egress between the termination of an exit and a public way.

"Fire Resistive" means the ability of materials or assemblies of construction to withstand exposure under standard fire test conditions for a prescribed temperature and period of time without structural failure. Fire resistive construction is that type of construction in which the walls, partitions, and structural members are of noncombustible materials which will withstand exposure to fire for a specified period of time without structural failure.

"Hazardous Areas" means rooms or areas that pose a degree of hazard greater than that normal to the general occupancy of the structure, such as those areas used for storage or use of combustibles or flammable, toxic, noxious, or corrosive materials, or use of heat-producing appliances.

"High Hazard Areas" means areas in structures used for purposes that involve highly combustible, highly flammable, or explosive products or materials that are likely to burn with extreme rapidity, or that may produce flame, poisonous fumes or gases, explosive or irritant hazards, including highly toxic or noxious alkalis and acids and liquids or chemicals; also those uses that cause division of material into fine particles or dust subject to explosion or spontaneous combustion, and uses that otherwise constitute a high fire hazard because of the form, character, or volume of the material used.

"Link" means a connecting passageway between an ATCT and a base building. Links are typically one occupied level in height with direct access to the exterior of the structure.

"Means of Egress (Exit Routes)" means a continuous and unobstructed way of exit travel from any point in a building or structure to a public way and consists of three (3)

separate and distinct parts: the way of exit access, the exit, and the way of exit discharge. A means of egress comprises the vertical and horizontal ways of travel and shall include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, escalators, horizontal exits, courts, and yards.

"Noncombustible" means the materials or assemblies that can not burn. Noncombustible construction is that type of construction in which the walls, partitions, and structural members are of material which inherently can not burn but does not qualify as fire resistive construction (i.e., the construction does not qualify as fire resistive because unprotected structural members may be damaged by heat generated by a fire).

"NFPA-l0l" means the 1997 code for safety to life from fire in buildings and structures.

"Protected Noncombustible Construction" means a construction in which all bearing walls or bearing portions of walls, exterior or interior are of noncombustible materials having a fire resistance of at least one hour and are stable under fire conditions; roof and floor construction and their supports have one hour fire resistance; and stairways and other openings through floors are enclosed with partitions having one hour fire resistance.

"Smokeproof Enclosure" means a stair enclosure designed so that the movement into the Smokeproof Enclosure of products of combustion produced by a fire occurring in any part of the structure is limited.

"Tower" means an enclosed, independent structure or portion of a building with elevated portions for support of equipment or occupied for observation, control, operation, signaling, or similar limited use and not open to the general public. An ATCT is a tower used for aircraft control and related activities.

"Tower Occupant Load" means the total number of persons permitted to occupy a tower or portion thereof at any one time.

"Type I Construction" means a construction whose structural members, including walls, columns, beams, floors, and roofs, are all of approved noncombustible or limited-combustible materials and have fire resistance ratings in accordance with NFPA 220, Table 2, 443 or 332.

"Type II Construction" means a construction not qualifying as Type I Construction in which the structural members, including walls, columns, beams, floors, and roofs, are of approved noncombustible or limited-combustible materials and have fire resistance rating in accordance with NFPA 220, Table 2, 222, 111, or 000.

"Type IV Construction" means a construction in which exterior and interior walls and structural members that are portions of such walls are of approved noncombustible or limited-combustible materials. Other interior structural

members, including columns, beams, arches, floors, and roofs, are of solid or laminated wood without concealed spaces and comply with the provisions of NFPA 220 Sections 3-4.2 through 3-4.6. In addition, structural members shall have fire resistance ratings not less than one hour.

C. Exit Route Compliance Alternatives.

1. General. Every ATCT facility shall be so constructed, arranged, equipped, maintained, and operated as to protect its occupants from fire, smoke, fumes, toxic emissions during the period of time reasonably necessary for escape from the building or structure in case of fire or other emergency. The FAA shall ensure that each ATCT where construction begins after January 2001, with a total occupant load of twenty-five (25) or more occupants, has two (2) separate exit routes which begin at the base of the cab and extend to ground level.

2. (i) Within one hundred and eighty days (180) from the effective date of this standard, the FAA shall submit in writing a list of all ATCTs indicating the alternative selected from paragraph C.3. or whether a request for a variance will be made. (ii) For each ATCT for which a variance has been requested, written details, and rationale for the request must be submitted within one year from the effective date of this standard.

3. Alternatives. The FAA shall ensure that compliance with the exit route requirements of this standard are achieved by using one of the following alternatives:

   i. Alternative A. For each ATCT having a single exit route and a total occupant load of less than twenty-five (25) occupants, the following requirements must be met (within one year from the effective date of this standard):

      A. The tower is not used for living or sleeping purposes;

      B. The tower is of Type I, Type II, or Type IV construction;

      C. The interior finish of the tower is Class A or Class B;

      D. There are no combustible materials in, or under the immediate vicinity of the tower, except for necessary furniture and office supplies; and

      E. There are no high hazard areas in, or under the immediate vicinity of the tower.

   ii. Alternative B. For each ATCT constructed before the Year 2001, having a single exit route and a total occupant load of twenty-five

(25) or more must meet the following requirements (within one year from the effective date of this standard):

A. The tower shall be of protected noncombustible construction except as follows:

1. All high hazard areas are constructed in accordance with paragraph J of this standard.

2. All vertical shafts shall be constructed in accordance with paragraph D.3. of this standard.

3. Fully sprinklered towers are permitted to be constructed of noncombustible materials.

4. Protected noncombustible construction is not required for steel beams in the upper cab areas.

B. The single exit shall be protected by a smokeproof enclosure constructed in accordance with NFPA-101, and must have a two (2) hour fire resistance rating throughout the enclosure. Exception: Exterior walls where the horizontal distance to the nearest structure is more than ten (10) feet. Additionally, the exterior walls of a tower must have at least a one hour fire resistance rating extending a vertical distance of fifteen (15) feet from the roof of an adjoining base building (or terminal), unless such a roof has at least a one hour fire resistance rating.

C. The smokeproof enclosure shall extend from the tower cab to the point where at least two (2) exits are available. Exception (1). A single exit is permitted for smokeproof enclosures which discharge directly outside the structure or to a public way. Exception (2). A single exit is permitted for those base buildings consisting of a single story above ground and having less than 350 square feet.

D. Structural Requirements.

1. Stairways. All stairways shall comply with 29 CFR 1910.36, except that, stairways located in smokeproof enclosures may be not less than twenty-eight (28) inches wide when measured from handrail to handrail. Circular stairs are exempt from the requirements for stairs.

2. Interior Finishes. All interior finishes of ATCTs must comply with NFPA-101, 6-5 for Class A or Class B flame spread ratings. Carpeting shall not be mounted on walls or ceilings.

3. Vertical Shafts Including Smokeproof Enclosures.

   i. All shafts in towers shall be enclosed with protected noncombustible materials in accordance with NFPA-101 requirements and with at least a two (2) hour fire resistive rating. All related material and construction shall have an equivalent fire resistive rating.

   ii. Shafts for elevators shall conform to the requirements of the American Standard Safety Code for Elevators, Escalators, and Dumbwaiters (ANSI A17.1).[1]

   iii. Shaft openings must be constructed in accordance with NFPA-101, 6-2.4.

4. Fire Walls. Partitions, and Fire Stops. Must be constructed and used in accordance with NFPA-l0l, 6-2.

E. Fire Detection and Alarm Systems. Each ATCT must be provided with a fire detection and alarm system in accordance with 29 CFR 1910.164 and 1910.165.

F. Fire Suppression Equipment. Suitable fire suppression equipment must be available in accordance with 29 CFR 1910.157. Extinguishers shall not be considered to be equivalent to an automatic sprinkler system for purposes of omitting the requirement for protected noncombustible construction required by this standard.

G. Compliance Program.

1. The FAA shall establish, within one hundred and eighty (180) days of the effective date of this standard, a written program describing the alternative selected from paragraph C above to be used to comply with this standard.

2. The written program shall include the following:

   i. The alternative provisions selected for exit routes;

   ii. A description of the worksite and the modifications to be made to comply with this provision;

   iii. Engineering plans and studies used to determine methods selected for achieving compliance with this provision;

   iv. A detailed schedule for implementation of the provisions; and

   v. Other relevant information.

1. For the purposes of this directive, the ANSI standard used will be the one in effect on 10/3/96 as amended in 1997, 1998, 1999 and 2000.

3. If the FAA has not achieved compliance with the selected exit route provision (one year from the effective date of this standard), the FAA shall then assess the effectiveness of the modifications already in place, and establish any additional measures to ensure that employees are provided equivalent protection until compliance can be achieved.

4. The written program shall be submitted upon request to the Assistant Secretary, and shall be available at the worksite for examination and copying by the Assistant Secretary, and affected employees or authorized employee representatives.

5. The plans required by paragraph G.2. shall be revised and updated at least annually to reflect the current status of the program.

H. Emergency Action Plan.

1. Application. The FAA shall ensure that a written emergency action plan is developed within ninety (90) days of the effective date of this standard for every ATCT. This plan must cover those designated actions the FAA and its employees must take to ensure safety from fire and other emergencies. The plan shall be made available in each facility in a location which is readily available for review and use by facility personnel.

2. Elements of the Plan. The plan shall include, at a minimum:

   i. Emergency escape procedures and emergency exit route assignments;

   ii. Procedures to be followed by employees who remain to operate critical facility operations before they evacuate;

   iii. Procedures to account for all employees after emergency evacuation have been completed;

   iv. Rescue and medical duties for those employees who are assigned to perform them;

   v. The preferred means of reporting fires and other emergencies; and

   vi. Names or regular job titles of persons or departments who can be contacted for further information or explanation of duties under the plan.

   vii. A plan or diagram of designated emergency egress routes shall be posted in a place readily available to employees.

3. Training.

i. Before implementing the emergency action plan, the FAA shall designate and train a sufficient number of persons to assist in the safe and orderly emergency evacuation of employees.

ii. The FAA shall provide emergency action plan training for each employee within one hundred and eighty (180) days of the effective date of this standard and annually thereafter. Training must also be provided:

A. Whenever the employee's responsibilities or designated actions under the plan change, and

B. Whenever the plan is changed.

4. Written Plan Availability.

i. The written plan shall be kept at an easily accessible location at the workplace and made available for employee review.

ii. The written plan shall be submitted upon request to the Assistant Secretary, and shall be available at the worksite for examination and copying by the Assistant Secretary, and ATCT employees or authorized employee representatives.

I. Fire Prevention Plan.

1. Application. The FAA shall develop and implement within ninety (90) days of the effective date of this standard a written fire prevention plan for every ATCT.

2. Minimum Requirements. The fire prevention plan, at a minimum, shall include the following elements:

i. A list of the major workplace fire hazards, and their proper handling and storage procedures, potential sources of ignition and their control procedures, and the type of fire protection equipment or systems which can control a fire involving them;

ii. Job titles of personnel responsible for maintenance of equipment and systems installed to prevent or control ignitions or fires; and

iii. Job titles of personnel responsible for control of fuel source hazards.

iv. The written plan shall be kept in an easily accessible workplace location and available for employee review.

3. Housekeeping. The FAA shall control accumulations of flammable and combustible waste materials and residues so that they do not contribute to

a fire emergency. The housekeeping procedures shall be included in the written fire prevention plan.

4. Training. The FAA shall provide fire prevention training within one hundred and eighty (180) days of the effective date of this standard and at least annually thereafter for all ATCT employees. At a minimum, the training must cover the fire hazards of the materials and processes to which employees are exposed.

J. High Hazard Areas. High hazard areas must be separated by enclosure or sectioning from the rest of the tower by fire resistive walls or partitions, ceilings, and floors. Openings in the separating construction shall be protected with fire doors and fire dampers having a fire resistance rating equivalent to the separation.

K. Fire Drills. The FAA shall establish a fire drill program for each ATCT and ensure that each ATCT employee participates, at least annually, in a fire drill.

1. Training Program.

i. The FAA shall provide each employee with training within one hundred and eighty days from the effective date of this standard, at the time of the employee's initial assignment to the ATCT, and at least annually thereafter.

ii. The FAA shall assure that each employee is trained in the following:

A. The content of this standard and its appendices;

B. The types of situations which could result in emergency evacuation;

C. The components of the emergency action plan as required by paragraph H of this standard.

D. The components of the fire prevention plan as required by paragraph I of this standard.

iii. The FAA shall make readily available to all ATCT employees a copy of this standard and its appendices.

iv. The FAA shall provide, upon request, all materials relating to the employee information and training program to the Assistant Secretary.

L. Recordkeeping. The FAA shall establish and maintain an accurate record at each facility of the following:

1. Training Program. The FAA shall maintain for each employee a written record of all training provided in response to this standard.

2. Emergency Action Plan. The FAA shall maintain a written record of the emergency action plan and any modifications to the plan.

3. Fire Prevention Program. The FAA shall maintain a written record of the fire prevention plan and any modifications made to the plan.

4. Compliance plans. The FAA shall maintain a written record of all compliance plans relevant to abatement of emergency egress hazards.

M. Compliance Status and Abatement Certification.

1. Existing ATCT Construction. The FAA shall provide for each facility, and make available at the facility, a biannual update for all existing ATCTs including at least the following information:

i. The location of the ATCT, including mailing address;

ii. The name of the authorized person;

iii. Status of the abatement;

iv. Completion date; and

v. Request for a Petition for Modification of Abatement, if the required abatement date can not be achieved.

vi. Certification by the authorized person that abatement has been completed and that the ATCT is in compliance with this standard.

2. ATCT Towers Scheduled for Replacement. The FAA shall provide for each facility and make available to the Secretary a semiannual update for all ATCTs scheduled for replacement with at least the following information:

i. The location and mailing address of the ATCT being replaced and the location of the replacement facility;

ii. The name of the authorized person;

iii. Any written interim procedures which will be followed during the replacement period;

iv. The date that the replacement facility will be operational;

v. The disposition of the facility replaced; and

vi. Certification by the authorized person that the replacement ATCT meets the requirements of this standard.

vii. Certification by the authorized person that the interim protective measures are in place for the ATCT being replaced.

N. Effective Dates. This standard shall become effective on July 1, 1998.

1. All towers where construction begins after January 2001 and with twenty-five (25) or more occupants, must be constructed with two (2) separate means of egress;

2. Paragraph C.2(i) compliance is required by January 1, 1999. Paragraph C.2(ii) compliance is required by July 1, 1999;

3. Alternative A. Compliance is required (by July 1, 1999); and

4. Alternative B. Compliance is required (by July 1, 1999);

5. Written Compliance Program. Compliance with this paragraph is required by January 1, 1999.

6. Emergency Action Plan.

i. Written Plan. Compliance with this paragraph is required by October 1, 1998 for every ATCT.

ii. Training. Compliance with this paragraph is required by January 1, 1999 for every ATCT employee.

7. Fire Prevention Plan.

i. Written Plan. Compliance with this paragraph is required by October 1, 1998 for every ATCT.

ii. Training. Compliance with this section is required by January 1, 1999 for every ATCT employee.

8. Training Program. Compliance with this paragraph is required by January 1, 1999.

# Appendix B

# List of FAA Certified ATCTs by Region

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| **Region 1** | | | | | | |
| Eastern | ANE | BGR | Bangor International Airport | Bangor | ME | |
| Eastern | ANE | PWM | Portland International Jetport | Portland | ME | |
| Eastern | ANE | PVD | T.F. Green State Airport | Warwick | RI | |
| Eastern | ANE | BTV | Burlington International Airport | S. Burlington | VT | |
| **Region 2** | | | | | | |
| Eastern | AEA | EWR | Newark International Airport | Newark | NJ | |
| Eastern | AEA | JFK | J.F. Kennedy International | Jamaica | NY | |
| Eastern | AEA | SYR | Syracuse Hancock International Airport (New) | N. Syracuse | NY | |
| Eastern | AEA | FRG | Republic Airport | Farmingdale | NY | |
| Eastern | AEA | HPN | Westchester County Airport | White Plains | NY | |
| **Region 3** | | | | | | |
| Eastern | AEA | RDG | Reading Municipal Airport | Reading | PA | |
| Eastern | AEA | PIT | Greater Pittsburgh International | Pittsburgh | PA | |
| Eastern | AEA | PHF | Patrick Henry International Airport | Newport News | VA | |
| **Region 4** | | | | | | |
| Eastern | ASO | BHM | Birmingham International Airport | Birmingham | AL | |
| Eastern | ASO | MGM | Dannelly Field | Hope Hull | AL | |
| Eastern | ASO | HSV | Huntsville Intl./Jones Field | Huntsville | AL | YES |
| Eastern | ASO | SFB | Orlando Sanford Airport | Sanford | FL | |
| Eastern | ASO | FPR | St. Lucie County Intl. Airport | Fort Pierce | FL | Yes |
| Eastern | ASO | DAB | Daytona Beach Regional Airport | Daytona Beach | FL | |
| Eastern | ASO | FLL | Fort Lauderdale International | Ft. Lauderdale | FL | Yes |
| Eastern | ASO | PBI | Palm Beach International Airport | W. Palm Bch | FL | Yes |
| Eastern | ASO | JAX | Jacksonville International Airport | Jacksonville | FL | |
| Eastern | ASO | MCO | Orlando International Airport | Orlando | FL | |
| Eastern | ASO | MIA | Miami International Airport | Miami | FL | |
| Eastern | ASO | ORL | Orlando Executive Airport | Orlando | FL | Yes |
| Eastern | ASO | PIE | St. Petersburg-Clearwater Airport | St. Petersburg | FL | Yes |
| Eastern | ASO | RSW | Southwest Florida Intl. Airport | Fort Myers | FL | |
| Eastern | ASO | SRQ | Sarasota-Bradenton Airport | Sarasota | FL | Yes |
| Eastern | ASO | VRB | Vero Beach Municipal Airport | Vero Beach | FL | |
| Eastern | ASO | FXE | Fort Lauderdale Executive Airport | Ft. Lauderdale | FL | |
| Eastern | ASO | AGS | Bush Field Municipal Airport | Augusta | GA | Yes |
| Eastern | ASO | SAV | Savannah International Airport | Savannah | GA | |

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| Eastern | ASO | ATL | Atlanta Hartsfield Airport | Hapeville | GA | Yes |
| Eastern | ASO | PDK | Dekalb-Peachtree Airport | Chamblee | GA | Yes |
| Eastern | ASO | CVG | Cincinnati Northern Int'l Airport | Erlanger | KY | |
| Eastern | ASO | SDF | Standiford Field | Louisville | KY | |
| Eastern | ASO | LEX | Blue Grass Airport | Lexington | KY | Yes |
| Eastern | ASO | LOU | Bowman Field | Louisville | KY | Yes |
| Eastern | ASO | FAY | Fayetteville Reg./Grannis Field | Fayetteville | NC | Yes |
| Eastern | ASO | ILM | New Hanover County Airport | Wilmington | NC | Yes |
| Eastern | ASO | GSO | Piedmont Triad Intl. Airport | Greensboro | NC | Yes |
| Eastern | ASO | CLT | Charlotte-Douglas Intl. Airport | Charlotte | NC | Yes |
| Eastern | ASO | MYR | Myrtle Beach Jetport | Myrtle Beach | SC | Yes |
| Eastern | ASO | CAE | Columbia Metro Airport | W. Columbia | SC | Yes |
| Eastern | ASO | CHS | Charleston International Airport | Charleston | SC | Yes |
| Eastern | ASO | TRI | Tri-City Airport | Blountville | TN | Yes |
| Eastern | ASO | MEM | Memphis International Airport | Memphis | TN | Yes |
| Eastern | ASO | BNA | Nashville International Airport | Nashville | TN | Yes |
| **Region 5** | | | | | | |
| Central | AGL | RFD | Greater Rockford Airport | Rockford | IL | |
| Central | AGL | PWK | Palwaukee Airport | Wheeling | IL | |
| Central | AGL | EVV | Dress Regional Airport | Evansville | IN | |
| Central | AGL | ARB | Ann Arbor Municipal Airport | Ann Arbor | MI | Yes |
| Central | AGL | MKG | Muskegon County Airport | Muskegon | MI | |
| Central | AGL | PTK | Oakland/Pontiac Airport | Waterford | MI | |
| Central | AGL | STP | St. Paul Downtown Airport | Saint Paul | MN | |
| Central | AGL | MFD | Mansfield-Lahm Airport | Mansfield | OH | Yes |
| Central | AGL | YNG | Youngstown-Warren Reg. Airport | Youngstown | OH | |
| Central | AGL | MKE | General Mitchell Intl. Airport | Milwaukee | WI | |
| Central | AGL | MSN | Dane County Regional Airport | Madison | WI | |
| **Region 6** | | | | | | |
| Central | ASW | FSM | Ft. Smith Municipal Airport | Fort Smith | AR | |
| Central | ASW | LIT | Adams Field | Little Rock | AR | Yes |
| Central | ASW | BTR | Baton Rouge Metro/Ryan Field | Baton Rouge | LA | Yes |
| Central | ASW | MLU | Monroe Regional Airport | Monroe | LA | |
| Central | ASW | NEW | Lakefront Airport | New Orleans | LA | Yes |
| Central | ASW | OKC | Will Rogers World Airport | Oklahoma City | OK | Yes |
| Central | ASW | CRP | Corpus Christi International | Corpus Christi | TX | |
| Central | ASW | DWH | David Wayne Hooks Mem. Airport | Spring | TX | |
| Central | ASW | ELP | El Paso International Airport | El Paso | TX | Yes |
| Central | ASW | LBB | Lubbock International Airport | Lubbock | TX | Yes |
| Central | ASW | MAF | Midland International Airport | Midland | TX | Yes |
| Central | ASW | SAT | San Antonio International Airport | San Antonio | TX | Yes |

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| **Region 7** | | | | | | |
| Central | ACE | ALO | Waterloo Municipal Airport | Waterloo | IA | Yes |
| Central | ACE | CID | Cedar Rapids Municipal Airport | Cedar Rapids | IA | Yes |
| Central | ACE | DSM | Des Moines Municipal Airport | Des Moines | IA | Yes |
| Central | ACE | ICT | Wichita Mid Continent Airport | Wichita | KS | Yes |
| Central | ACE | MCI | Kansas City International Airport | Kansas City | MO | Yes |
| Central | ACE | MKC | Kansas City Downtown | Kansas City | MO | Yes |
| Central | ACE | STL | Lambert International Airport (NEW) | Bridgeton | MO | Yes |
| Central | ACE | SUS | Spirit of St Louis Airport | Chesterfield | MO | Yes |
| Cenral | ACE | SGF | Springfield-Branson Reg. Airport | Springfield | MO | Yes |
| **Region 8** | | | | | | |
| Western | ANM | ASE | Aspen-Pitken County Airport | Aspen | CO | |
| Western | ANM | COS | Colorado Springs Municipal | Col. Springs | CO | |
| Western | ANM | PUB | Pueblo Memorial Airport | Pueblo | CO | |
| Western | ANM | BIL | Logan International Airport | Billings | MT | |
| Western | ANM | GTF | Great Falls International Airport | Great Falls | MT | |
| Western | ANM | HLN | Helena Regional Airport | Helena | MT | |
| Central | AGL | BIS | Bismark Municipal Airport | Bismark | ND | |
| Central | AGL | GFK | Grand Forks International Airport | Grand Forks | ND | |
| **Region 9** | | | | | | |
| Western | AWP | PHX | Sky Harbor International Airport (Old) | Phoenix | AZ | |
| Western | AWP | PHX | * Sky Harbor International Airport (New) | Phoenix | AZ | |
| Western | AWP | GCN | Grand Canyon Nat'l Park Airport | Grand Canyon | AZ | |
| Western | AWP | DVT | Deer Valley Airport | Phoenix | AZ | Yes |
| Western | AWP | APC | Napa County Airport | Napa | CA | |
| Western | AWP | BFL | Meadows Field | Bakersfield | CA | |
| Western | AWP | CRQ | McClellan-Palomar Airport | Carlsbad | CA | Yes |
| Western | AWP | LGB | Long Beach Airport | Long Beach | CA | |
| Western | AWP | LVK | Livermore Municipal Airport | Livermore | CA | |
| Western | AWP | RHV | Reid-Hillview Apt./Santa Clara Co. | San Jose | CA | |
| Western | AWP | POC | Brackett Airport | La Verne | CA | |
| Western | AWP | SBA | Santa Barbara Municipal Airport | Goleta | CA | Yes |
| Western | AWP | SJC | San Jose International Airport | Santa Clara | CA | |
| Western | AWP | VNY | Van Nuys Airport | Van Nuys | CA | |
| Western | AWP | SMO | Santa Monica Municipal Airport | Santa Monica | CA | |
| Western | AWP | HNL | Honolulu International Airport | Honolulu | HI | |
| Western | AWP | VGT | North Las Vegas Air Terminal | Las Vegas | NV | |
| **Region 10** | | | | | | |
| Western | AAL | ANC | Ted Stevens International Airport | Anchorage | AK | |
| Western | AAL | FAI | Fairbanks International Airport | Fairbanks | AK | Yes |

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| Western | AAL | MRI | Merrill Field Municipal Airport (NEW) | Anchorage | AK | |
| Western | ANM | TWF | Twin Falls-Sun Valley Airport | Twin Falls | ID | Yes |
| Western | ANM | HIO | Portland-Hillsboro Airport | Hillsboro | OR | |
| Western | ANM | GEG | Spokane International Airport | Spokane | WA | |
| Western | ANM | SEA | Seattle-Tacoma Intl. Airport | Seattle | WA | |

# Appendix C

# List of FAA Non-Certified ATCTs by Region

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| **Region 1** | | | | | | |
| **Region 2** | | | | | | |
| Eastern | AEA | CDW | Essex County Airport | Fairfield | NJ | Yes |
| Eastern | AEA | TEB | Teterboro Airport | Teterboro | NJ | Yes |
| Eastern | ASO | SJU | Puerto Rico International Airport | Carolina | PR | |
| Eastern | AEA | BUF | Greater Buffalo International | Cheektowaga | NY | |
| Eastern | AEA | POU | Dutchess County Airport | Wappingers Falls | NY | Yes |
| Eastern | AEA | ROC | Rochester-Monroe County Airport | Rochester | NY | |
| **Region 3** | | | | | | |
| Eastern | AEA | ABE | Lehigh Valley Airport | Allentown | PA | |
| Eastern | AEA | MDT | Harrisburg International Airport | Middletown | PA | |
| Eastern | AEA | PHL | Philadelphia International | Philadelphia | PA | |
| Eastern | AEA | PNE | Northeast Philadelphia Airport | Philadelphia | PA | Yes |
| Eastern | AEA | ORF | Norfolk International Airport | Virginia Beach | VA | |
| Eastern | AEA | CKB | Benedum Airport | Clarksburg | WV | Yes |
| **Region 4** | | | | | | |
| Eastern | ASO | MOB | Bates Field | Mobile | AL | Yes |
| Eastern | ASO | TMB | Kendall-Tamiami Airport | Miami | FL | Yes |
| Eastern | ASO | GPT | Gulfport-Biloxi Regional Airport | Gulfport | MS | Yes |
| Eastern | ASO | FLO | Florence Regional Airport | Florence | SC | Yes |
| Eastern | ASO | GSP | Greenville-Spartanburg Airport | Greer | SC | Yes |
| Eastern | ASO | CHA | Lovell Field | Chattanooga | TN | Yes |
| Eastern | ASO | TYS | McGhee Tyson Airport | Knoxville | TN | Yes |
| **Region 5** | | | | | | |
| Central | AGL | ARR | Aurora Municipal Airport | Sugar Grove | IL | Yes |
| Central | AGL | CPS | St. Louis Downtown/Parks Airport | Cahokia | IL | |
| Central | AGL | MDW | Midway Airport | Chicago | IL | |
| Central | AGL | MLI | Quad-City Airport | Moline | IL | |
| Central | AGL | FWA | Fort Wayne Municipal Airport | Fort Wayne | IN | |
| Central | AGL | IND | Indianapolis International Airport | Indianapolis | IN | |
| Central | AGL | LAF | Purdue University Airport | Lafayette | IN | Yes |
| Central | AGL | SBN | Michiana Regional Airport | South Bend | IN | |
| Central | AGL | DTW | Detroit Metro Airport | Detroit | MI | |
| Central | AGL | GRR | Kent County International Airport | Grand Rapids | MI | |
| Central | AGL | MBS | Tri-City Airport | Freeland | MI | |

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| Central | AGL | TVC | Cherry Capital Airport | Traverse City | MI | Yes |
| Central | AGL | YIP | Willow Run Airport | Belleville | MI | Yes |
| Central | AGL | FCM | Flying Cloud Airport | Eden Prairie | MN | |
| Central | AGL | MIC | Crystal Airport | Minneapolis | MN | |
| Central | AGL | MSP | Minneapolis-St. Paul Intl. Airport | Minneapolis | MN | |
| Central | AGL | CMH | Port Columbus Intl. Airport | Columbus | OH | |
| **Region 6** | | | | | | |
| Central | ASW | MSY | New Orleans Intl./ Moisant Field | New Orleans | LA | Yes |
| Central | ASW | ABQ | Albuquerque International Airport | Albuquerque | NM | Yes |
| Central | ASW | ROW | Roswell Industrial Air Center | Roswell | NM | |
| Central | ASW | RVS | Riverside/R. L. Jones, Jr. Airport | Tulsa | OK | Yes |
| Central | ASW | AMA | Amarillo International Airport | Amarillo | TX | Yes |
| Central | ASW | DAL | Love Field | Dallas | TX | Yes |
| Central | ASW | DFW | Dallas-Ft. Worth (Center) | Dallas/Ft. Worth | TX | Yes |
| Central | ASW | HOU | William P. Hobby Airport | Houston | TX | |
| Central | ASW | IAH | Houston Intercontinental Airport | Houston | TX | Yes |
| Central | ASW | GGG | Gregg Count Airport | Longview | TX | Yes |
| **Region 7** | | | | | | |
| Central | ACE | SUX | Sioux Gateway Municipal Airport | Sioux City | IA | Yes |
| Central | ACE | LNK | Lincoln Municipal Airport | Lincoln | NE | Yes |
| Central | ASO | OMA | Eppley Airfield | Omaha | NE | Yes |
| **Region 8** | | | | | | |
| Western | ANM | BJC | Jefferson County Airport | Broomfield | CO | |
| Western | ANM | DEN | Denver International Airport | Denver | CO | |
| Central | AGL | FAR | Hector Airport | Fargo | ND | |
| **Region 9** | | | | | | |
| Western | AWP | FFZ | Falcon Field | Mesa | AZ | Yes |
| Western | AWP | PRC | Love Field | Prescott | AZ | Yes |
| Western | AWP | SDL | Scottsdale Municipal Airport | Scottsdale | AZ | Yes |
| Western | AWP | BUR | Burbank-Glendale Pasadena Apt. | Burbank | CA | Yes |
| Western | AWP | CMA | Camarillo Municipal Airport | Camarillo | CA | Yes |
| Western | AWP | CNO | Chino Airport | Chino | CA | Yes |
| Western | AWP | SNA | John Wayne Airport | Costa Mesa | CA | |
| Western | AWP | SEE | Gillespie Field | El Cajon | CA | |
| Western | AWP | EMT | El Monte Airport | El Monte | CA | |
| Western | AWP | MYF | Montgomery Field | Kearny Mesa | CA | |
| Western | AWP | ONT | Ontario International Airport | Ontario | CA | |
| Western | AWP | PSP | Palm Springs Regional Airport | Palm Springs | CA | |
| Western | AWP | PAO | Palo Alto-Santa Clara Co. Airport | Palo Alto | CA | |
| Western | AWP | SMF | Sacramento International Airport | Sacramento | CA | |
| Western | AWP | SAN | Lindbergh Field | San Diego | CA | Yes |

| FAA Service Area by Region | FAA Region | LOC ID | Facility Name | Location | State | Variance Submitted |
|---|---|---|---|---|---|---|
| Western | AWP | ITO | Hilo International/Lyman Field | Hilo | HI | Yes |
| Western | AWP | OGG | Kahului Airport (Maui) | Maui | HI | |
| Western | AWP | RNO | Reno Cannon International Airport | Reno | NV | |
| **Region 10** | | | | | | |
| Western | ANM | BOI | Boise Air Terminal/Gowen Field | Boise | ID | |
| Western | ANM | PDX | Portland International Airport | Portland | OR | |
| Western | ANM | MWH | Grant County Airport | Moses Lake | WA | |

# Appendix D

# List of Alternative B Towers

**Region 1**

Bradley International Airport – Windsor Locks, CT

**Region 2**

Newark International Airport – Newark, NJ
J.F. Kennedy International – Jamaica, NY

**Region 4**

Birmingham International Airport – Birmingham, AL
Sarasota-Bradenton Airport – Sarasota, FL
Bush Field Municipal Airport – Augusta, GA
Savannah International Airport – Savannah, GA
Fayetteville Regional/Grannis Field – Fayetteville, NC
Piedmont Triad Intl. Airport – Greensboro, NC
Tri-City Airport – Blountville, TN

**Region 5**

O'Hare International Airport – Chicago, IL

**Region 6**

Will Rogers World Airport – Oklahoma City, OK
San Antonio International Airport – San Antonio, TX

**Region 10**

Fairbanks International Airport – Fairbanks, AK
Seattle-Tacoma Intl. Airport – Seattle, WA

# Appendix E

# FAA Points of Contact

**FAA Eastern Service Area (ESA) – Includes 21 Eastern States and Puerto Rico**

| | | | |
|---|---|---|---|
| Alabama | Maine | New York | Tennessee |
| Connecticut | Maryland | North Carolina | Vermont |
| Delaware | Massachusetts | Pennsylvania | Virginia |
| Florida | Mississippi | Puerto Rico | West Virginia |
| Georgia | New Hampshire | Rhode Island | |
| Kentucky | New Jersey | South Carolina | |

**FAA ESA Fire/Life Safety Contacts**

| | |
|---|---|
| 1. Patti Tilson | 404-305-6598, 404-216-2275 |
| 2. Reggie Ruller | 404-305-6566, 404-216-2277 |
| 3. Charles Bragdon | 202-267-8692, 202-355-3740 |
| 4. Bill Cooper | 404-305-6569, 404-276-0068 |
| 5. Jeff Curtis | 202-646-2281, 202-431-2307 |

**FAA Central Service Area (CSA) – Includes 16 Central States**

| | | | |
|---|---|---|---|
| Arkansas | Kansas | Missouri | Oklahoma |
| Illinois | Louisiana | Nebraska | South Dakota |
| Indiana | Michigan | North Dakota | Texas |
| Iowa | Minnesota | Ohio | Wisconsin |

**FAA CSA Fire/Life Safety Contacts**

| | |
|---|---|
| 1. David Williams | 817-222-4741, 913-220-9351 |
| 2. Tom Allan | 817-222-4729, 817-909-6766 |
| 3. Charles Bragdon | 202-267-8692, 202-355-3740 |
| 4. Bill Cooper | 404-305-6569, 404-276-0068 |
| 5. Jeff Curtis | 202-646-2281, 202-431-2307 |

**FAA Western Service Area (WSA) Includes 13 Western States**

| | | | |
|---|---|---|---|
| Alaska | Hawaii | New Mexico | Wyoming |
| Arizona | Idaho | Oregon | |
| California | Montana | Utah | |
| Colorado | Nevada | Washington | |

**FAA WSA Fire/Life Safety Contacts**

| | |
|---|---|
| 1. David J. Powers | 425-227-1552, 253-208-7337 |
| 2. Vincent Collins | 425-227-1633, 425-466-1096 |
| 3. Charles Bragdon | 202-267-8692, 202-355-3740 |
| 4. Bill Cooper | 404-305-6569, 404-276-0068 |
| 5. Jeff Curtis | 202-646-2281, 202-431-2307 |

# Appendix F

# Hazard Alert Letter Template

***{Letterhead/Area Office Information}***

*Note: This letter must be adapted to the specific circumstances noted in each inspection. The letter below is an example of the type of letter that will be appropriate in some circumstances. If the agency has implemented, or is in the process of implementing efforts to address problem conditions, those efforts should be recognized and encouraged, if appropriate.*

***{Date}***

***{Address:***
***Federal Aviation Administration***
***Site Manager***
***Location site}***

***{Attention: FAA Regional Safety and Health Manager***
***Location}***

***Dear Mr/Mrs/Ms {Name}:***

An inspection of your workplace at ***{Location}*** on ***{Date}*** revealed that employees are exposed to hazards associated with ***{Description of hazards}***.

Our inspection found that you have not developed or implemented measures to protect employees from ***{name hazard}***. The employees ***{at the location}*** are exposed to ***{Describe the defect.}***.

At this time, we do not consider it appropriate to invoke the General Duty Clause or Basic Program 29 CFR 1960.8(a), Elements for Federal Employees Occupational Safety and Health Administration. However, in the interest of workplace safety and health, I recommend that you voluntarily take the necessary steps to eliminate or materially reduce your employees' exposure to ***{name hazard}***. Feasible methods to protect employees from ***{name of injury or illness}*** may include, but are not limited to, the following:

***e.g.: {Describe feasible abatement}***

For general guidance and recommended control measures, please refer to OSHA's website at http://www.osha.gov/SLTC/firesafety/index.html

If you have any questions, please feel free to call **{Area Director}** at **{Phone Number}**

Sincerely,

**{Name},** Area Director
***{Area Office}***

Attachments***: {List Resources}***