

**BY ORDER OF THE COMMANDER
PACIFIC AIR FORCES**



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Civil Engineering

AIRFIELD PLANNING AND DESIGN

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This instruction implements policy guidance in AFPD 32-10, *Installations and Facilities*. Use this instruction with Unified Facilities Criteria (UFC) 3-260-01, *Airfield and Heliport Planning and Design* and AFI 32-7063, *Air Installation Compatible Use Zone Program*. This instruction implements policy guidance in AFPD 32-10, *Installations and Facilities*. This PACAFI outlines procedures for preparation and submittal of temporary and permanent airfield waiver requests for violations of airfield planning and design criteria and facility sitings for proposed facilities within the land use control portion of the Clear Zone and Accident Potential Zones. It applies to all PACAF airfields and base agencies having responsibilities for coordinating, processing, and managing these processes. References providing additional information are included in **Attachment 1**. This instruction does not apply to the Air National Guard (ANG) and the Air Force Reserve Command (AFRC) units. Send comments and suggested improvements on AF Form 847, *Recommendation for Change of Publication*, to **HQ PACAF/A7PI**, 25 E Street, Suite D-306, JBPH-H, HI 96853-5412. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>

SUMMARY OF CHANGES

This publication establishes command procedures to complement guidance contained in Unified Facilities Criteria UFC 3-260-01, *Airfield and Heliport Planning and Design*. This document

supersedes PACAFI 32-1056, 7 December 2006. Document revised on DATE to update responsible organization codes, addresses, and POC's; revise references for the updated UFC 3-260-01, 17 November 2008; provide instruction for multiple violations caused by a single obstruction; specify requirement for PACAF Airfield Obstructions System (AOBS); limit waiver review package requirement to within 90 days of wing change of command; eliminate the one year limitation for temporary waivers; provide clarification regarding Exemptions and Permissible Deviations; eliminate redundant language for non-standard waiver naming; specify the permanent nature of waiver naming; added instruction for waiver processing on Joint Bases; added instruction for Visual Air Navigation System Criteria; and instruction for Aircraft Arresting System criteria.

1. General Information. Waiver approval is reserved for significant mission requirements, conditions, and situations for which no viable and/or practical alternative exists. Requests for waivers of airfield and heliport planning and design criteria, other than construction and air show waivers, require PACAF/CV approval IAW UFC 3-260-01, Appendix B1-2. Waivers shall be submitted to HQ PACAF/A7P for review and coordination prior to PACAF/CV approval. Construction and/or alteration contracts cannot be finalized without PACAF/CV approval; same requirement for work executed by government personnel.

2. Waivers to Airfield Criteria. PACAF installations must ensure all violations of airfield planning and design criteria classified as permissible deviations comply with deviation criteria in UFC 3-260-01, Appendix B13. Additionally, all HQ PACAF approved waivers shall be managed so that all conditions included in the granting agency's original waiver approval, safety precautions, and additional conditions resulting from HQ PACAF waiver reviews, are met. All installation airfield waiver submittals shall be prepared electronically using the PACAF Airfield Obstructions System (AOBS) and be accompanied by the PACAF enterprise GeoBase standard map layer with all obstructions labeled to correspond to the PACAF Form 48 entries. If a waived obstruction violates more than one criterion, the most hazardous violation will be listed as the main entry in the Form 48; all other violation(s) will be listed in the remarks column of the Form 48.

2.1. Existing Waivers. Wing commanders must submit an airfield and airspace waiver review package for PACAF/CV approval within 90 days of accepting command. The review package shall include total number of waivers, number of new waivers for the past year, number of eliminated waivers for the past year, and be accompanied by the AOBS generated report of all waivers in PACAF Form 48 format and PACAF enterprise GeoBase standard map layer with all obstructions labeled to correspond to the PACAF Form 48 entries.

2.1.1. Limitations on Content. The airfield and airspace waiver review package(s) shall be limited to previously approved waivers only. New waiver requirements must be submitted separately as required by Section 2.2 below.

2.2. New Waivers. Waivers are required for airfield facilities and equipment when no other option exists, and when the facility or equipment must be sited in the immediate area for functionality. Requests for permanent airfield and airspace waivers must clearly show no other feasible alternative(s) exist, as well as the precautionary measures for mitigating the accepted risk. All waiver requests must be coordinated through the local Airfield and Airspace Working Group chaired by the Base Civil Engineer (BCE) or BCE designate (in writing), with representation from wing safety, TERPS (w/reach-back to HQ

PACAF/A3OA), security forces, airfield operations, and the airfield manager. If an agency non-concurs, their comments must be forwarded as part of the waiver request package.

2.2.1. Temporary (Non-Permanent) Waivers. Installations shall request temporary waivers for deviations from the airfield and airspace planning criteria that are considered correctable and with limited time period. Each temporary waiver request must identify precautionary safety measures for the duration of the waiver. Requests for temporary (non-permanent) waivers, as defined in UFC 3-260-01, Appendix B1-2.2.1, must present compelling justification to violate airfield and airspace criteria, and contain information that clearly demonstrates that no viable, practical alternative exists to meet the criteria. Waiver requests must meet all requirements of UFC 3-260-01, Appendix B1-2, be prepared electronically using the PACAF AOBS, and be accompanied by the PACAF enterprise GeoBase standard map layer with all obstructions labeled to correspond to the PACAF Form 48 entries. With the exception of the following two categories (Airfield Construction and Air Show Waivers), waiver approval for temporary obstructions is retained by PACAF/CV. Waivers processed for MAJCOM consideration will be prepared, coordinated, and approved at the installation level, following locally developed procedures for processing and approving these types of waivers.

2.2.1.1. Airfield Construction Waivers. The Installation Commander is the approval authority for approving temporary waivers for construction activities on the airfield, as conveyed in UFC 3-260-01, Appendix B1-2.5.4.7.

2.2.1.2. Air Show Waivers. The Installation Commander is the approval authority for approving temporary waivers for air shows as conveyed in UFC 3-260-01, Appendix B1-2.3.4. Provide info copy of waiver with ORM assessment to MAJCOM 30 days prior to air show.

2.2.2. Permanent Waivers. Approval authority for permanent waivers to airfield criteria resides with PACAF/CV. Requests as defined in UFC 3-260-01, Appendix B1-2.2.2, must present compelling justification to violate the criteria, and contain information that clearly demonstrates no viable, practical alternative(s) exists to meet the criteria. Waiver requests must meet all requirements of UFC 3-260-01, Appendix B1-2, be prepared electronically using the PACAF AOBS, and be accompanied by the PACAF enterprise GeoBase standard map layer with all obstructions labeled to correspond to the PACAF Form 48 entries.

2.2.2.1. Facility Siting within the Land Use Control Area of the Clear Zone and Accident Potential Zones. PACAF/CV retains the approval authority for new use or facility construction within the Land Use Control Area of the 3000' x 3000' end of runway clear zone that violates land use guidelines in AFI 32-7063, paragraph 5.2.2 or within the Accident Potential Zones I and II that violate Air Installation Compatible Use Zone (AICUZ) land use compatibility recommendations. Locally approved siting requests must be submitted to HQ PACAF/A7P for final staffing and approval by PACAF/CV. Waiver requests must be submitted IAW paragraph 2.2.

2.3. Exceptions to Waivers. Certain obstructions violating airfield and airspace criteria do not require waivers. Examples include exemptions for facilities constructed to previous standards, UFC 3-260-01, Chapter 1-4.1; and permissible deviations to criteria, UFC 3-260-01, Appendix B13-2.

3. Waiver Request Format and Routing.

3.1. **Waiver Request Submission.** Each new waiver request must be submitted separately in a single package to HQ PACAF/A7P. The minimum requirements are listed in the following paragraphs and Table A2.1.

3.2. **Submittal Package Contents.** The following items are required for all waiver requests and notification actions. All waiver request and notification documentation shall be prepared electronically using the PACAF AOBS and be accompanied by the PACAF enterprise GeoBase standard map layer with all obstructions labeled to correspond to the PACAF Form 48 entries.

3.2.1. A complete description of the facility, equipment or condition requiring a waiver including, but not limited to, facility dimensions, construction materials, supporting equipment, utilities and appurtenances, height above ground level, facility use and contents, and number of occupants.

3.2.2. Detailed identification of all criteria that will be violated. Include the specific references from UFC 3-260-01.

3.2.3. Waiver type - either permanent or temporary (non-permanent), as defined in UFC 3-260-01, Appendix B1-2.2.

3.2.4. A site plan that portrays all proposed facilities, utilities, infrastructure, and support equipment (including, but not limited to, concrete slabs, bollards, generators, air conditioning units, external fuel tanks) in the clear zone with respect to the runway threshold, extended runway centerline, mandatory frangibility zone, and applicable imaginary surfaces. The site plan must be dimensioned or drawn to scale and submitted in a digital format executable in the PACAF software suite.

3.2.5. A complete justification for the waiver including an explanation why all applicable criteria cannot be met. Funding will not be used as sole justification for waiver request.

3.2.6. The results of an alternatives analysis that includes, as a minimum:

3.2.6.1. Description of each alternative/site considered.

3.2.6.2. Risks and benefits associated with each alternative.

3.2.6.3. Rationale for selecting an alternative that violates criteria in lieu of an available option that does not.

3.2.7. Documentation of Risk.

3.2.7.1. An operational risk analysis shall be completed by the installation Airfield/Airspace Waiver Working Group in accordance with AFI 90-901, *Operational Risk Management*. The results shall include a description of all safety precautions and measures that will be implemented to minimize the risks associated with the violation. Examples include: obstruction lighting/markings, NOTAMs, identification on the Airport Diagram published in the DoD Terminal Flight Information Publication (FLIP), and/or airfield restrictions published in the Airfield Operations Instruction.

3.2.8. Documentation of Local Approval. A letter from the wing or installation commander showing the waiver request has been approved for submission and coordinated with all installation agencies identified in UFC 3-260-01, and this instruction.

3.2.9. Include a copy of FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, if project requires FAA notification in accordance with UFC 3-260-01, Chapter 1-10.

3.3. Additional Requirements.

3.3.1. Submittal for waivers due to airfield construction projects, air shows, and aircraft parking plan revisions will include an estimated date when the violation will begin.

3.3.2. For waivers classified as temporary (non-permanent), as defined in UFC 3-260-01, Appendix B1-2.2.1, indicate the estimated start date of the violation and programming actions that will be taken to eliminate the waived condition (include project number, description, programmed FY, estimated cost, and estimated completion date to eliminate the violation).

4. Coordination of External Airfield and Airspace Obstructions. The BCE must establish a procedure for notice of proposed construction between the wing and the local government (except Andersen, Hickam, and Alaska bases which will follow FAA guidance, FAR PART 77) for a notice of proposed construction within ten nautical miles of the base. The notice of proposed construction must identify obstructions that have a direct impact on terminal procedures for the airfield's approach-departure zones. As a minimum, the notice of proposed construction must identify the following:

4.1. Any construction or alteration of more than 200 feet in height above ground level at its site (water towers, buildings, antenna farms, etc).

4.2. Any construction or alteration impacting the airfield imaginary surfaces identified in UFC 3-260-01, Chapter 3.

4.3. Any highway, railroad, or transverse way for mobile objects or the height of the highest mobile object that would normally cross the traverse way that exceeds the standard of section 4.1 and 4.2 of this instruction.

4.4. Any construction for a laser beam facility (casinos, amusement parks, etc).

4.5. The BCE must coordinate the Procedure for Notice of Proposed Construction with the Operations Group Commander, Airfield Management (AM), TERPS (w/reach-back to PACAF/A3OA), Safety (flight, ground, and weapons), and Legal prior to wing commander review/approval. Provide info copies of the approved Procedure for Notice of Proposed Construction to PACAF/A3O/SE/A7P/CSS and NAF/A3/SE/A7.

4.6. Waiver requests concerning deviation of siting criteria for Air Traffic Control Towers or Air Traffic Control and Landing Systems (ATCALs) must be approved by HQ PACAF with info copy to the respective NAF/A3/SE/A7.

4.7. Temporary construction waivers will not be part of Map E-1 or the listing of approved waivers. Information copies of all approved temporary construction waivers shall be sent to

HQ PACAF/A30/SEF/A7P and the respective NAF/A30/SEF/A7. The BCE and flight safety office shall monitor construction activities on the airfield.

4.8. Where the U.S. Air Force is a tenant on an installation operated by the Republic of Korea Air Force (ROKAF), waivers shall be approved by the ROKAF Base Commander. However, the requesting agency shall obtain the concurrence of HQ PACAF/A30/SE/A7P and the respective NAF/A3/SE/A7 before coordinating with ROKAF.

5. Airfield Obstruction Reduction Initiative (AORI). All correctable violations of airfield criteria, regardless of classification (waiver, exemption, or non-classified), shall be programmed for elimination IAW HQ USAF AORI guidance and identified in the wing's AORI database.

6. Training. The BCE staff personnel assigned airfield planning and design responsibilities shall complete the AFCESA Airfield Criteria, Standards, and Facilities computer-based training (CBT) course.

7. Airfield and Airspace Waiver Working Group. The wing commander shall establish an Airfield and Airspace Working Group. At minimum, representation shall include members from SE, BCE, AM, TERPS (w/reach-back to PACAF/A3OA), and Operations. The working group shall be chaired by the BCE. Meeting minutes shall be submitted to HQ PACAF/A7P/A3O.

7.1. The wing commander or vice wing commander must ensure that the Airfield and Airspace Waiver Working Group review at least 25 percent of the wing's airfield and airspace waivers quarterly and brief and document the status of the review at each Airfield Operations Board (AOB) meeting. The airfield operations flight commander or a designated representative shall notify the BCE of the proposed AOB meeting. NOTE: Galena, Eareckson, and Wake Island designated OPRs for the Airfield and Airspace Working Group shall brief the wing commander and provide an informational copy of the working group meeting minutes to HQ PACAF/A30/SEF/A7P and the respective NAF/A3/SE/A7.

7.2. Training for members of the Airfield and Airspace Waiver Working Group must be accomplished and documented in the individual's training records. Each member shall receive recurring training on airfield and airspace waiver criteria on an annual basis. Members of each organization must brief the status of airfield/airspace waiver training at each AOB meeting. All Airfield and Airspace Waiver Working Group Members must complete the AFCESA *Airfield Criteria Course for Civil Engineers, Airfield Managers and Wing Safety* CBT for initial and annual recurring training. Completion will be documented in training records.

8. Waiver/Obstruction Naming Standards. To the maximum extent possible, installations shall use a waiver designator of alphanumeric characters directly followed by numbers with no spaces or hyphens between alphabetic and numerical characters. The standard will be: 'A' for apron, 'C' for clear zone, 'R' for runway, 'T' for taxiway, and 'AV' for airspace violations. Examples include: A34, T7, R19. Waiver naming is permanent and once a waiver is approved, it shall never be re-named.

9. Waiver Format. An electronically prepared waiver package will be used for all waiver requests and submissions. (See Attachment 2)

10. Joint Basing Requirements. Where the Air Force is the Supported Component on a joint installation, airfield operations and airfield management functions will be retained by the Air

Force. Installation level coordination of existing waiver reviews (Section 2.1) and new waiver requests (Section 2.2) shall be provided by the Supporting Component in accordance with applicable regulations including UFC 3-260-01 and PACAFI 32-1056. After installation coordination, the waiver documentation shall be submitted by the supported Air Force wing commander to HQ PACAF/A7P for coordination and approval by HQ PACAF/CV. For Andersen AFB/Joint Region Marianas the supported Air Force wing commander is the 36 WG/CC; for Joint Base Pearl Harbor-Hickam the supported Air Force wing commander is the 15 WG/CC; and for Joint Base Elmendorf-Richardson the supported Air Force wing commander is the 3 WG/CC.

11. Visual Air Navigation Systems. Requests for waivers of Visual Air Navigation System design criteria requires HQ PACAF/A7 approval IAW UFC 3-535-01, Paragraph 1-10. Waiver approval is reserved for conditions or situations where compliance is not practical or feasible. Funding or budgetary constraints normally are not adequate justification for granting a waiver. The waiver request must include all supporting documentation as required for airfield obstruction waivers described in section 3.2 of this instruction.

12. Aircraft Arresting Systems. When planning, installing and repairing aircraft arresting systems, the BCE shall insure that all work conforms to the most current standard design drawings which can be obtained from HQ AFCESA (<https://www.my.af.mil/gcss-af/USAF/ep/contentView.do?contentType=EDITORIAL&contentId=c6925EC17E18D0FB5E044080020E329A9&programId=t6925EC2B5BEB0FB5E044080020E329A9&channelPageId=s6925EC13537D0FB5E044080020E329A9&parentCategoryId=-1900281>).

KARL S. BOSWORTH, Colonel, USAF
Director, Installations and Mission Support

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 13-204 (Vol 1-Vol 3), *Functional Management of Airfield Operations*, 1 September 2010

AFI 32-1024, *Standard Facility Requirements*, 14 July 2011

AFH 32-1084, *Standard Facility Requirements Handbook*. 1 September 1996

UFC 3-260-01, *Unified Facilities Criteria Airfield and Heliport Planning and Design*, 17 November 2008

AFI 32-7061, *Environmental Impact Analysis Process (EIAP)*, 12 Mar 2003

AFI 32-7062, *Air Force Comprehensive Planning*, 1 October 1997

AFI 32-7063, *Air Installation Compatibility Use Zone*, 13 September 2005

AFI 90-901, *Operational Risk Management*, 1 April 2000

Abbreviations and Acronyms

AF—Air Force

AFCESA—Air Force Civil Engineering Support Agency

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AICUZ—Air Installation Compatibility Use Zone

ANG—Air National Guard

A OBS—Airfield Obstructions System

AORI—Airfield Obstruction Reduction Initiative

ASRR—Airfield Suitability and Restrictions Report

ATCAL S—Air Traffic Control and Landing System

BAOI—Base Airfield Operations Instruction

BCE—Base Civil Engineer

CBT—Computer Based Training

CE—Civil Engineering

CV—Vice Commander

DOD—Department of Defense

DOOA—Aerial Events Scheduling Branch

DORO—Airfield Operations Branch

FAA—Federal Aviation Administration

FLIP—Flight Information Publication

FY—Fiscal Year

HQ—Headquarters

IAW—In Accordance With

LGQM—Maintenance Policy Branch

NOTAM—Notice to Airmen

NAF—Numbered Air Force

OPR—Office of Primary Responsibility

ORM—Operational Risk Management

PACAF—Pacific Air Forces

PACAFI—Pacific Air Forces Instruction

TERPS—Terminal Instrument Procedures

UFC—Unified Facilities Criteria

USAF—United States Air Force

Terms

Airfield Obstructions System (AOBS)—A PACAF business process utilizing enterprise GeoBase map layers identifying obstructions in association with standardized data tables.

Airfield Obstruction Reduction Initiative—An USAF initiative launched to eliminate the most significant airfield obstructions from AF airfields.

Airfield Suitability and Restrictions Report—Provides basic airfield and suitability information, airfield restrictions, and other information for select airfields. It is available at <https://amc.scott.af.mil/do/doa/dovs.htm>.

Airport Diagram—The airport diagram is published in the Terminal High and Low Altitude FLIP booklets and most are accessible at <http://164.214.2.62/products/digitalaero/index.html>.

Base Airfield Operations Instruction—Defines local procedures for Airfield Management and Air Traffic Control at the base, to include among other things general information regarding airfield facilities and aircraft restrictions.

Notice to Airmen (NOTAM)—An unclassified notice, containing information concerning the establishment of, condition of, change in any aeronautical facility, service, procedures or hazards, the timely knowledge of which is essential to personnel concerned with flight operations. Flight Safety and Local NOTAMs can be viewed at the Defense Internet NOTAM Service website at <https://www.notams.jcs.mil/>.

Attachment 2

WAIVER REQUEST SUBMISSION

A2.1. Each waiver request must be submitted to HQ PACAF/A7 in a single package. A synopsis is provided in **Table A2.1** below. Details of the requirements are provided in paragraph 3.1 of this PACAF instruction.

Table A2.1. Waiver Categories and Required Submission Documentation

Waiver Type	Permanent	Construction	CZ, APZ1, APZ2 Site requirements	Air Show	Aircraft Parking Plans
Approval Authority	PACAF/CV	Installation/CC	PACAF/CV	Installation/CC	PACAF/CV
Action Req'd by Installation CE/CC	Waiver Request	Notification	Waiver Request	Notification	Waiver Request
Description (3.2.1.)	X	X	X	X	X
Criteria Violated (3.2.2.)	X	X	X	X	X
Requested Waiver Type (3.2.3.)	Permanent	Temporary	Permanent or Temporary	Temporary	Permanent or Temporary
Site Plan (3.2.4.)	X	X	X	X	X
Justification (3.2.5.)	X	X	X	X	X
Alternatives Analysis (3.2.6.)	X	X	X	X	X
ORM & Safety Plan (3.2.7)	X	X	X	X	X
Documentation of Local Approval (3.2.8.)	X	X	X	X	X
FAA Form 7460-1 (3.2.9.)	As Req'd	As Req'd	As Req'd	As Req'd	As Req'd
Estimated Start Date (3.3.1.)		X		X	X
Mitigation Plan (3.3.2.)		X			