Attachment 2

This page intentionally left blank.

RECORDING REQUESTED BY)
AND WHEN RECORDED RETURN TO:)
Monterey County Resource Management)
Agency)
Land Use & Community Development Div'n)
Special Programs Section)
1441 Schilling Place South, 2nd Floor)
Salinas, CA 93901)
Attention: G.H. Nichols PE)
)

Grantor is a Government Entity and Grantee is an Incorporated Municipality of the State of California (Revenue & Taxation Code 11922)
_X_ Unincorporated Area or __ City of _____

No fee document pursuant to Government Code Section 27383

AVIGATION EASEMENT

THIS INDENTURE is entered into as of _____, 2017, by and between the SUCCESSOR AGENCY TO THE REDEVELOPMENT AGENCY OF THE COUNTY OF MONTEREY ("Grantor") and the CITY OF MARINA, an incorporated municipality in the State of California ("Grantee") on behalf of its Marina Municipal Airport.

WHEREAS, Grantor is the fee owner of certain real property located in the unincorporated area of the County of Monterey, California, more particularly described in **Exhibit "A"** attached hereto and incorporated herein by reference (the "Property") lying below the imaginary plane described below;

WHEREAS, Grantee is the owner and operator of the Marina Municipal Airport, situated in the County of Monterey, State of California, which is more particularly depicted on the Record of Survey recorded on September 6, 1995, in the Office of the Monterey County Recorder on Reel 3272, Page 715, together with any future expansion thereof or modification thereto;

WHEREAS, the Property is within the planning area of the City of Marina Municipal Airport as identified on Figure 4-1 of the Marina Municipal Airport Comprehensive Land Use Plan, dated November 18, 1996;

WHEREAS, the Board of Supervisors of the County of Monterey on October 4, 2005, adopted a resolution approving certain entitlements for the construction of what is commonly known as the East Garrison Project (Board of Supervisors' Resolution No. 05-267), and Condition No. 151 of the Combined Development Permit for the East Garrison Project requires that an overflight easement shall be established over the Property for the Marina Municipal Airport owner; and

WHEREAS, this easement is acquired on behalf of the Marina Municipal Airport. The City of Marina as owner of the Marina Municipal Airport is obligated to preserve airport property in accordance with federal and state grant assurances. Obligated airport property interests may not be sold or used for non-aeronautical purposes without prior written release approval by the Federal Aviation Administration.

NOW THEREFORE, Grantor, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement and right of way, as described below, over the Property, for the use and benefit of the Public.

1. The easement applies to the Airspace lying above an imaginary plane over the Property ("Airspace"). The "imaginary surfaces" within the Airspace are defined by Part 77 of the Federal Aviation Regulations (14 CFR 77.19 as the same may be amended from time to time, a copy of which is attached hereto as **Exhibit "B**," and incorporated herein by reference) applicable to the Marina Municipal Airport ("Airport"), which consist of horizontal, conical, primary, approach, or transitional surfaces. The elevation of the imaginary plane is based upon the Airport official runway end elevation of 137 feet Above Mean Sea Level ("AMSL"), as determined by the February 2008 Airport Layout Plan. The elevation of the imaginary plane above the center of the Property is approximately 352 feet AMSL.

2. The aforesaid easement and right-of-way includes the uses, rights, and restrictions described as follows:

    a. The easement and rights-of-way herein granted shall be deemed nonexclusive and appurtenant to, and for the direct benefit of the real property which constitutes the Marina Municipal Airport, in the City of Marina, State of California, and shall further be deemed in gross, being conveyed to the Grantee for the benefit of Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from, or operating such aircraft in or about the Marina Municipal Airport, or in otherwise flying through the Airspace; and

    b. For the unobstructed use and benefit of the public, for passage and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft of any kinds now or hereafter known, in through, across, or about any portion of the Airspace described in section 1 above. As used herein, the term "aircraft" shall mean any and all types of aircraft, whether now in existence or hereafter manufactured and developed, to include jet, propeller–driven, civil, military or commercial aircraft, and unmanned aircraft systems; helicopters, regardless of existing or future noise levels, for the purpose of transporting persons or property through the air, by whoever owned or operated; and

    c. The right of said aircraft to cause or create, or permit or allow to be caused or created within all space above the existing surface of the hereinabove described Property and any and all Airspace laterally adjacent to said Property, such noise, vibrations, fumes, currents and other effects of air illumination, electromagnetic emissions, communications signals, and fuel vapor particles and consumption as may be inherent in, or may arise or occur during the operation of aircraft of any

and all kinds, now or hereafter known or used, for navigation of or flight in air; and

d. A continuing right of the Grantee, at reasonable times and after reasonable notice to the Grantor, its successors and assigns, of the Grantee to clear and keep clear from the Airspace any portions of buildings, structures or improvements of any kind, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and

e. The right of the Grantee, at reasonable times and after reasonable notice to the Grantor, its successors and assigns, to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures or other improvements, trees or other objects, which extend from the Property into the Airspace; and

f. The right of ingress to, passage within, and egress from the Property for the purposes described in paragraphs (d) and (e) above at reasonable times and after reasonable notice. No notice shall be required if it is determined by the Grantee or its designee that the structure, object, vegetation, marking or lighting constitutes a clear and imminent danger requiring immediate action to prevent or mitigate the loss or impairment of life, health or aircraft safety.

3. Grantor hereby covenants with Grantee that neither Grantor, nor its successors or assigns, will create any electrical interference with radio communications between any installation at the Airport and aircraft, construct, install, erect, place or grow in or upon the Property described and shown in said **Exhibit "B"**, nor will it permit or allow any building, structure, improvement, tree or other object to extend vertically into the Airspace or to constitute an obstruction to air navigation within the Airspace. In the event Grantee determines that such interference exists, Grantee shall deliver prompt notice to Grantor and provide Grantor with a reasonable time to cure. Unless otherwise stated in the notice, thirty days shall be deemed a reasonable time within which Grantor shall commence to cure the interference and thereafter completion of the cure shall be pursued with reasonable diligence.

4. The Property shall not be used for public assembly of over one-thousand (1,000) people. For purposes of this limitation, "public assembly" means: groups of people for scheduled or organized events for which a permit, license or other approval from a public entity is required; scheduled or organized events to which members of the public are invited by any means of communication; and events organized by any organization or entity, including any homeowners' association formed for the Property, or any portion thereof. This restriction shall not apply to a solely private gathering of people held by or for one or more residents at their places of residence, or to the use of the parcels, buildings and open spaces in the area commonly known as East Garrison lying outside the Property.

5. This Avigation Easement shall not operate to deprive the Grantor or its successors and assigns of any rights which they may from time to time have against any air carrier or public or private operator for negligent, unlawful operation or unauthorized operation of any aircraft or for damages to the Property or for other injuries to persons thereon.

6. Grantor, together with its successors in interest and assigns, hereby waives its rights to legal action against Grantee, its successors, or assigns, for monetary damages or other redress due to impacts, as described in paragraph 2(c) above of the granted rights of easement, associated with aircraft operations in the air or on the ground at the airport, including, but not limited to, future increases in the volume or changes in location of said operations. Furthermore, Grantee, its successors and assigns, shall have no duty to avoid or mitigate such damages through physical modification of airport facilities or modification of aircraft operational procedures or restrictions. However, this waiver shall not apply if the airport role or character or its use changes in a fundamental manner which could not reasonably have been anticipated at the time of granting of this easement and which results in a substantial increase in the impacts associated with aircraft operations. Also, this grant of easement shall not operate to deprive the Grantors, their successors or assigns, of any rights which they may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

7. These covenants and agreements run with the land and are binding upon Grantor's heirs, administrators, executors, successors and assigns until said Airport shall be abandoned or shall cease to be used for airport purposes. This easement shall exist in perpetuity until such time as Grantee records and delivers to Grantor an instrument terminating the easement.

   [Remainder of page intentionally left blank]

8. This Avigation Easement may be executed in counterparts each of which shall constitute an original and all of which when taken together, shall constitute a whole.

GRANTOR:
SUCCESSOR AGENCY TO THE REDEVELOPMENT AGENCY OF THE COUNTY OF MONTEREY

Dated: _____

By: _____
Mary L. Adams
Chair, Board of Directors

Approved as to Form:
COUNTY COUNSEL

_____
Brian Briggs,
Deputy County Counsel
Counsel for Grantor

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) SS.
COUNTY OF MONTEREY)

On _____ before me, _____,
a Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

(Seal)

ACCEPTANCE AND CONSENT TO RECORDATION

This is to certify that the interest in real property conveyed by the avigation easement dated _____, 2017 from the SUCCESSOR AGENCY TO THE REDEVELOPMENT AGENCY OF THE COUNTY OF MONTEREY to the CITY OF MARINA, a California incorporated municipality, is hereby accepted by order of the City Council of the City of Marina on _____, 2017, and the grantee consents to recordation thereof by its duly authorized officer.

GRANTEE
CITY OF MARINA

Dated: _____

_____
Layne Long
City Manager

Approved as to Form:
CITY ATTORNEY

_____

Dated: _____

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) SS.
COUNTY OF MONTEREY)

On _____ before me, _____,
a Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

(Seal)

EXHIBIT 'A'
LEGAL DESCRIPTION OF
AVIGATION EASEMENT

Being that certain real property situate in the unincorporated area of the County of Monterey, State of California, described as follows:

Being a portion of Parcel B, as said Parcel B is described in that certain deed recorded February 1, 2007, in instrument number 2007-8907 of official records, in the office of the county recorder of Monterey County, more particularly described as follows:

Beginning at the most westerly corner of said Parcel B, thence, from said **Point of Beginning,** the following three (3) courses along the boundary of said Parcel B:

1) North 40°00'04" East 63.58 feet; thence

2) South 49°59'56" East 535.80 feet; thence

3) South 40°00'04" West 35.44 feet; thence departing the boundary of said Parcel B

4) North 57°53'16 West 205.05 feet, more or less, to the southerly line of said Parcel B; thence along said southerly line

5) North 49°59'56" West 332.68 feet to the **Point of Beginning**.

Together with the following described parcel of land:

Being a portion of Parcel C, as said Parcel C is described in said deed, more particularly described as follows:

Beginning at a point on the westerly line of said Parcel C, said point being distant North 40°00'04" East 35.34 feet from the most westerly corner of said Parcel C, thence, from said **Point of Beginning,** the following five (5) courses along the boundary of said Parcel C:

A. North 40°00'04" East 32.48 feet; thence

B. Westerly along the arc of a tangent 14.00 foot radius curve to the right, from which the center of said curve bears South 49°59'56" East, through a central angle of 89°54'39", an arc distance of 21.97 feet; thence

C. South 50°05'17" East 16.03 feet; thence

D. North 39°55'25" East 6.34 feet; thence

E. South 49°59'56" East 351.37 feet; thence departing the boundary of said Parcel C

F. North 57°53'16 West 385.01 feet, more or less, to the **Point of Beginning**.

Containing a total of 41,053 square feet of land, more or less.

Attached hereto is a plat to accompany legal description, and by this reference made a part hereof.

END OF DESCRIPTION

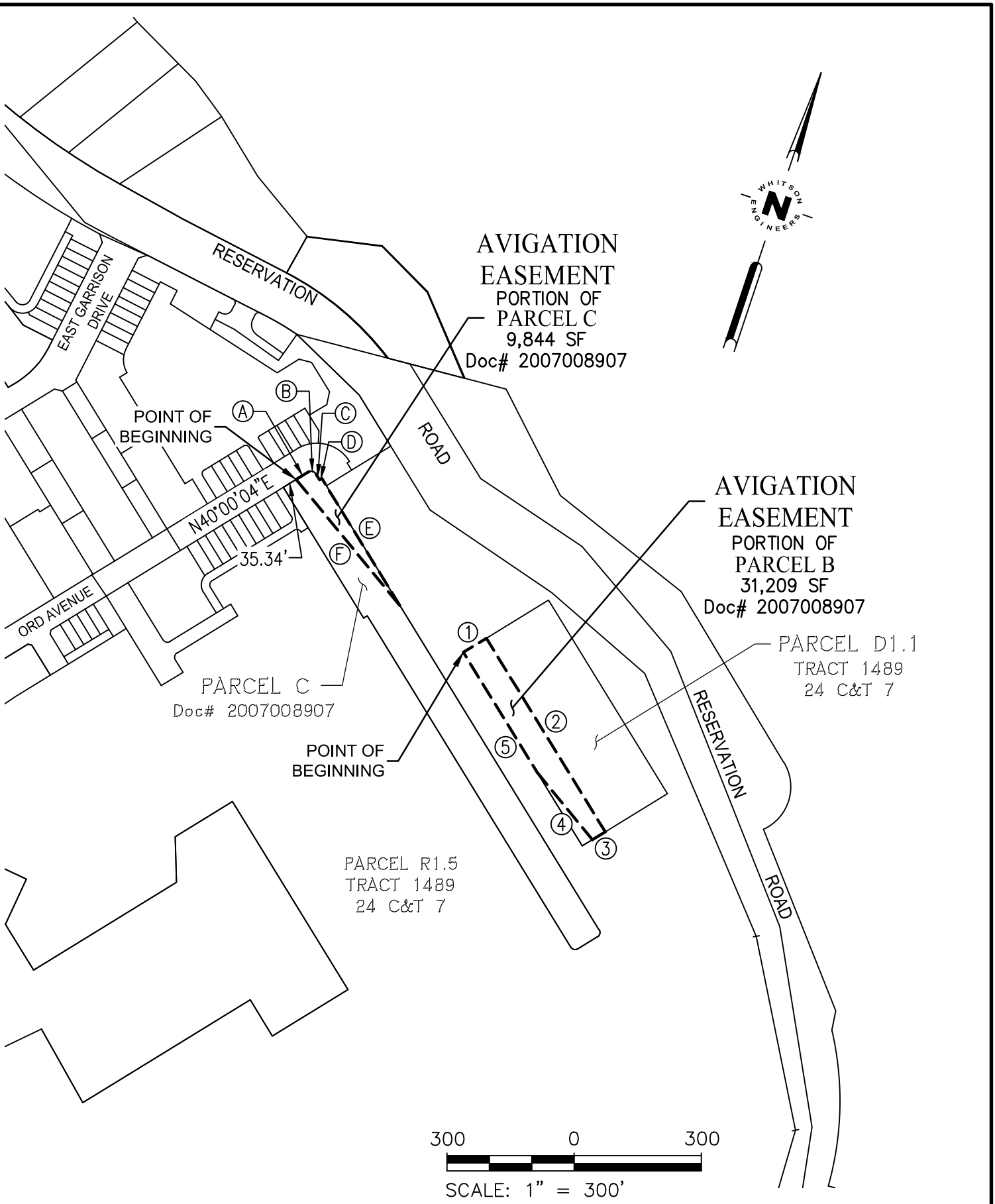
PREPARED BY:

WHITSON ENGINEERS

RICHARD P. WEBER P.L.S.
L.S. NO. 8002

LICENSED LAND SURVEYOR
RICHARD P. WEBER
No. 8002
STATE OF CALIFORNIA

Job No.: 2615.72



EAST GARRISON

MONTEREY COUNTY CALIFORNIA

PLAT TO ACCOMPANY LEGAL DESCRIPTION

DRAWING PATH: T:\Monterey Projects\2615\Survey\Plat & Legals\Plats\Avigation_Pcl-B_C-Plat.dwg

DATE:	NOV 28, 2017
SCALE:	1" = 300'
DRAWN:	SDT
CHECKED:	RPW
PROJECT No.:	2615.72

SHEET 1 OF 1

EXHIBIT 'B'

Part 77 of the Federal Aviation Regulations (14 CFR 77.25)

(12 pages including this cover sheet)

Title 14: Aeronautics and Space

PART 77—SAFE, EFFICIENT USE, AND PRESERVATION OF THE NAVIGABLE AIRSPACE

Contents

AUTHORITY: 49 U.S.C. 106 (g), 40103, 40113-40114, 44502, 44701, 44718, 46101-46102, 46104.

SOURCE: Docket No. FAA-2006-25002, 75 FR 42303, July 21, 2010, unless otherwise noted.

Back to Top

Subpart A—General

Back to Top

§77.1 Purpose.

This part establishes:

(a) The requirements to provide notice to the FAA of certain proposed construction, or the alteration of existing structures;

(b) The standards used to determine obstructions to air navigation, and navigational and communication facilities;

(c) The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities or equipment; and

(d) The process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

Back to Top

§77.3 Definitions.

For the purpose of this part:

Non-precision instrument runway means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

Planned or proposed airport is an airport that is the subject of at least one of the following documents received by the FAA:

(1) Airport proposals submitted under 14 CFR part 157.

(2) Airport Improvement Program requests for aid.

(3) Notices of existing airports where prior notice of the airport construction or alteration was not provided as required by 14 CFR part 157.

(4) Airport layout plans.

(5) DOD proposals for airports used only by the U.S. Armed Forces.

(6) DOD proposals on joint-use (civil-military) airports.

(7) Completed airport site selection feasibility study.

Precision instrument runway means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

Public use airport is an airport available for use by the general public without a requirement for prior approval of the airport owner or operator.

Seaplane base is considered to be an airport only if its sea lanes are outlined by visual markers.

Utility runway means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

Visual runway means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA-approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

Back to Top

Subpart B—Notice Requirements

Back to Top

§77.5 Applicability.

(a) If you propose any construction or alteration described in §77.9, you must provide adequate notice to the FAA of that construction or alteration.

(b) If requested by the FAA, you must also file supplemental notice before the start date and upon completion of certain construction or alterations that are described in §77.9.

(c) Notice received by the FAA under this subpart is used to:

(1) Evaluate the effect of the proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace and of airport traffic capacity at public use airports;

(2) Determine whether the effect of proposed construction or alteration is a hazard to air navigation;

(3) Determine appropriate marking and lighting recommendations, using FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting;

(4) Determine other appropriate measures to be applied for continued safety of air navigation; and

(5) Notify the aviation community of the construction or alteration of objects that affect the navigable airspace, including the revision of charts, when necessary.

Back to Top

§77.7 Form and time of notice.

(a) If you are required to file notice under §77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

(b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.

(c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.

(d) If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

(e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

Back to Top

§77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

(a) Any construction or alteration that is more than 200 ft. AGL at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Back to Top

§77.11 Supplemental notice requirements.

(a) You must file supplemental notice with the FAA when:

(1) The construction or alteration is more than 200 feet in height AGL at its site; or

(2) Requested by the FAA.

(b) You must file supplemental notice on a prescribed FAA form to be received within the time limits specified in the FAA determination. If no time limit has been specified, you must submit supplemental notice of construction to the FAA within 5 days after the structure reaches its greatest height.

(c) If you abandon a construction or alteration proposal that requires supplemental notice, you must submit notice to the FAA within 5 days after the project is abandoned.

(d) If the construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Back to Top

Subpart C—Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities

Back to Top

§77.13 Applicability.

This subpart describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. These standards apply to the following:

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus.

(b) The alteration of any permanent or temporary existing structure by a change in its height, including appurtenances, or lateral dimensions, including equipment or material used therein.

Back to Top

§77.15 Scope.

(a) This subpart describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Such facilities include air navigation aids, communication equipment, airports, Federal airways, instrument approach or departure procedures, and approved off-airway routes.

(b) Objects that are considered obstructions under the standards described in this subpart are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard. Once further aeronautical study has been initiated, the FAA will use the standards in this subpart, along with FAA policy and guidance material, to determine if the object is a hazard to air navigation.

(c) The FAA will apply these standards with reference to an existing airport facility, and airport proposals received by the FAA, or the appropriate military service, before it issues a final determination.

(d) For airports having defined runways with specially prepared hard surfaces, the primary surface for each runway extends 200 feet beyond each end of the runway. For airports having defined strips or pathways used regularly for aircraft takeoffs and landings, and designated runways, without specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for aircraft takeoffs and landings, a determination must be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those determined pathways must be considered runways, and an appropriate primary surface as defined in §77.19 will be considered as longitudinally centered on each such runway. Each end of that primary surface must coincide with the corresponding end of that runway.

(e) The standards in this subpart apply to construction or alteration proposals on an airport (including heliports and seaplane bases with marked lanes) if that airport is one of the following before the issuance of the final determination:

(1) Available for public use and is listed in the Airport/Facility Directory, Supplement Alaska, or Supplement Pacific of the U.S. Government Flight Information Publications; or

(2) A planned or proposed airport or an airport under construction of which the FAA has received actual notice, except DOD airports, where there is a clear indication the airport will be available for public use; or,

(3) An airport operated by a Federal agency or the DOD; or,

(4) An airport that has at least one FAA-approved instrument approach.

Back to Top

§77.17 Obstruction standards.

(a) An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 499 feet AGL at the site of the object.

(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under §77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative ground traffic control service furnished by an airport traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) 15 feet for any other public roadway.

(3) 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) 23 feet for a railroad.

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

Back to Top

§77.19 Civil airport imaginary surfaces.

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach procedure existing or planned for that runway end.

(a) *Horizontal surface.* A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by SW.inging arcs of a specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) *Conical surface.* A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

(c) *Primary surface.* A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having non-precision instrument approaches.

(3) For other than utility runways, the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

(iv) The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) *Approach surface.* A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a non-precision instrument approach;

(iv) 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater that three-fourths of a statute mile;

(v) 4,000 feet for that end of a non-precision instrument runway, other than utility, having a non-precision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) *Transitional surface.* These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

Back to Top

§77.21 Department of Defense (DOD) airport imaginary surfaces.

(a) *Related to airport reference points.* These surfaces apply to all military airports. For the purposes of this section, a military airport is any airport operated by the DOD.

(1) *Inner horizontal surface.* A plane that is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) *Conical surface.* A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) *Outer horizontal surface.* A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) *Related to runways.* These surfaces apply to all military airports.

(1) *Primary surface.* A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) *Clear zone surface.* A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) *Approach clearance surface.* An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) *Transitional surfaces.* These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

Back to Top

§77.23 Heliport imaginary surfaces.

(a) *Primary surface.* The area of the primary surface coincides in size and shape with the designated take-off and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.

(b) *Approach surface.* The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

(c) *Transitional surfaces.* These surfaces extend outward and upward from the lateral boundaries of the primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

Back to Top

Subpart D—Aeronautical Studies and Determinations

Back to Top

§77.25 Applicability.

(a) This subpart applies to any aeronautical study of a proposed construction or alteration for which notice to the FAA is required under §77.9.

(b) The purpose of an aeronautical study is to determine whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of other existing or proposed structures, would constitute a hazard to air navigation.

(c) The obstruction standards in subpart C of this part are supplemented by other manuals and directives used in determining the effect on the navigable airspace of a proposed construction or alteration. When the FAA needs additional information, it may circulate a study to interested parties for comment.

Back to Top

§77.27 Initiation of studies.

The FAA will conduct an aeronautical study when:

(a) Requested by the sponsor of any proposed construction or alteration for which a notice is submitted; or

(b) The FAA determines a study is necessary.

Back to Top

§77.29 Evaluating aeronautical effect.

(a) The FAA conducts an aeronautical study to determine the impact of a proposed structure, an existing structure that has not yet been studied by the FAA, or an alteration of an existing structure on aeronautical operations, procedures, and the safety of flight. These studies include evaluating:

(1) The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;

(2) The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;

(3) The impact on existing and planned public use airports;

(4) Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final determination;

(5) Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;

(6) The potential effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;

(7) The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.

(b) If you withdraw the proposed construction or alteration or revise it so that it is no longer identified as an obstruction, or if no further aeronautical study is necessary, the FAA may terminate the study.

Back to Top

§77.31 Determinations.

(a) The FAA will issue a determination stating whether the proposed construction or alteration would be a hazard to air navigation, and will advise all known interested persons.

(b) The FAA will make determinations based on the aeronautical study findings and will identify the following:

(1) The effects on VFR/IFR aeronautical departure/arrival operations, air traffic procedures, minimum flight altitudes, and existing, planned, or proposed airports listed in §77.15(e) of which the FAA has received actual notice prior to issuance of a final determination.

(2) The extent of the physical and/or electromagnetic effect on the operation of existing or proposed air navigation facilities, communication aids, or surveillance systems.

(c) The FAA will issue a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.

(d) A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation. A Determination of No Hazard to Air Navigation may include the following:

(1) Conditional provisions of a determination.

(2) Limitations necessary to minimize potential problems, such as the use of temporary construction equipment.

(3) Supplemental notice requirements, when required.

(4) Marking and lighting recommendations, as appropriate.

(e) The FAA will issue a Determination of No Hazard to Air Navigation when a proposed structure does not exceed any of the obstruction standards and would not be a hazard to air navigation.

Back to Top

§77.33 Effective period of determinations.

(a) The effective date of a determination not subject to discretionary review under 77.37(b) is the date of issuance. The effective date of all other determinations for a proposed or existing structure is 40 days from the date of issuance, provided a valid petition for review has not been received by the FAA. If a valid petition for review is filed, the determination will not become final, pending disposition of the petition.

(b) Unless extended, revised, or terminated, each Determination of No Hazard to Air Navigation issued under this subpart expires 18 months after the effective date of the determination, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

(c) A Determination of Hazard to Air Navigation has no expiration date.

[Doc. No. FAA-2006-25002, 75 FR 42303, July 21, 2010, as amended by Amdt. 77-13-A, 76 FR 2802, Jan. 18, 2011]

Back to Top

§77.35 Extensions, terminations, revisions and corrections.

(a) You may petition the FAA official that issued the Determination of No Hazard to Air Navigation to revise or reconsider the determination based on new facts or to extend the effective period of the determination, provided that:

(1) Actual structural work of the proposed construction or alteration, such as the laying of a foundation, but not including excavation, has not been started; and

(2) The petition is submitted at least 15 days before the expiration date of the Determination of No Hazard to Air Navigation.

(b) A Determination of No Hazard to Air Navigation issued for those construction or alteration proposals not requiring an FCC construction permit may be extended by the FAA one time for a period not to exceed 18 months.

(c) A Determination of No Hazard to Air Navigation issued for a proposal requiring an FCC construction permit may be granted extensions for up to 18 months, provided that:

(1) You submit evidence that an application for a construction permit/license was filed with the FCC for the associated site within 6 months of issuance of the determination; and

(2) You submit evidence that additional time is warranted because of FCC requirements; and

(3) Where the FCC issues a construction permit, a final Determination of No Hazard to Air Navigation is effective until the date prescribed by the FCC for completion of the construction. If an extension of the original FCC completion date is needed, an extension of the FAA determination must be requested from the Obstruction Evaluation Service (OES).

(4) If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

Back to Top

Subpart E—Petitions for Discretionary Review

Back to Top

§77.37 General.

(a) If you are the sponsor, provided a substantive aeronautical comment on a proposal in an aeronautical study, or have a substantive aeronautical comment on the proposal but were not given an opportunity to state it, you may petition the FAA for a discretionary review of a determination, revision, or extension of a determination issued by the FAA.

(b) You may not file a petition for discretionary review for a Determination of No Hazard that is issued for a temporary structure, marking and lighting recommendation, or when a proposed structure or alteration does not exceed obstruction standards contained in subpart C of this part.

Back to Top

§77.39 Contents of a petition.

(a) You must file a petition for discretionary review in writing and it must be received by the FAA within 30 days after the issuance of a determination under §77.31, or a revision or extension of the determination under §77.35.

(b) The petition must contain a full statement of the aeronautical basis on which the petition is made, and must include new information or facts not previously considered or presented during the aeronautical study, including valid aeronautical reasons why the determination, revisions, or extension made by the FAA should be reviewed.

(c) In the event that the last day of the 30-day filing period falls on a weekend or a day the Federal government is closed, the last day of the filing period is the next day that the government is open.

(d) The FAA will inform the petitioner or sponsor (if other than the petitioner) and the FCC (whenever an FCC-related proposal is involved) of the filing of the petition and that the determination is not final pending disposition of the petition.

Back to Top

§77.41 Discretionary review results.

(a) If discretionary review is granted, the FAA will inform the petitioner and the sponsor (if other than the petitioner) of the issues to be studied and reviewed. The review may include a request for comments and a review of all records from the initial aeronautical study.

(b) If discretionary review is denied, the FAA will notify the petitioner and the sponsor (if other than the petitioner), and the FCC, whenever a FCC-related proposal is involved, of the basis for the denial along with a statement that the determination is final.

(c) After concluding the discretionary review process, the FAA will revise, affirm, or reverse the determination.

Back to Top

Need assistance?

This page intentionally left blank.