



U. S. Department
of Transportation
**Federal Aviation
Administration**

Great Lakes Region
Illinois, Indiana, Michigan,
Minnesota, North Dakota,
Ohio, South Dakota,
Wisconsin

2300 East Devon Avenue
Des Plaines, Illinois 60018

POLICY AND PROCEDURES MEMORANDUM - AIRPORTS DIVISION

NUMBER: 5300.1B

DATE: FEB 05 1999

SUBJECT: Runway Protection Zone and Airport Object Clearing Policy

CANCELLATION: PPM 5300.1A dated October 5, 1993

REFERENCES: FAR Part 77 Objects Affecting Navigable Airspace
FAR Part 139 Certification and Operations:
Land Airports Serving Certain Air Carriers
FAR Part 152 Airport Aid Program
Order 5100.37 Land Acquisition and Relocation
Assistance for Airport Development Projects
Order 5100.38A Airport Improvement Program (AIP) Handbook
Order 5200.5A Waste Disposal Sites on New Airports
Order 8260.3B United States Standard for Terminal
Instrument Procedures
AC 150/5100-17 Land Acquisition and Relocation Assistance
for Airport Improvement Program Assisted
Projects.
AC 150/5200-33 Hazardous Wildlife Attractants on or Near
Airports
AC 150/5300-13 Airport Design
PPM 5210.2 Bird Hazard Reduction - Waste Disposal
Facilities
Federal Register FAA Runway Protection Zone Policy
(Friday 8/4/89)

APPENDICES: 1. Exhibit 1, Runway Object Free Area and Runway Safety Area
Exhibit 2, Runway Protection Zone and Obstacle Free Zone
- Visual Runways and Runways with Approach Visibilities
Minimums not Lower than $\frac{1}{4}$ of a statute mile.
Exhibit 3, Runway Protection Zone and Obstacle Free
Zone - Runways Serving Small Airplanes with Approach
Visibilities Lower than $\frac{1}{4}$ of a Statute Mile.
Exhibit 4, Runway Protection Zone (RPZ) and Obstacle Free
Zone (OFZ) for Runways Serving Large Airplanes with
Approach Visibilities Lower than $\frac{1}{4}$ of a Statue Mile.
Exhibit 5, Clearway and Stopway
2. Summary Sheet
3. Changes from Prior PPM
4. Federal Register, Friday 8/4/89, FAA Runway Protection
Zone Policy

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1. Background. Approach Protection Zones were originally established to define land areas underneath aircraft approach paths in which control by the airport operator was highly desirable to prevent the creation of airport hazards. Subsequently, clear zones beyond runway ends were established to preclude obstructions potentially hazardous to aircraft and to control building construction as a protection for people on the ground.

FAA Runway Protection Zone Policy, Federal Register, Friday, August 4, 1989 states that the FAA will resist or oppose objects or activities in the vicinity of an airport that conflict with an airport's planning or design, or recommendation to protect the public's investment in the national airport system.

Advisory Circular (AC) 150/5300-13 (dated 9/29/89), Airport Design, introduced the Runway Protection Zone (RPZ) criteria. This replaced the prior AC 150/5300-4B, and redefined the area as a RPZ in lieu of a "clear zone". The RPZ function is to enhance the protection of people and property on the ground. This AC also introduced the recommendation for the RPZ to be accessible to rescue and fire fighting vehicles.

Advisory Circular 150/5300-13, changes 1 & 2, paragraphs 211 and 212 set forth required and recommended Airport Object Clearing Criteria to ensure safe and efficient aircraft operations at an airport.

Advisory Circular 150/5300-13, paragraph 213 a. (2)(a) states that "automobile parking facilities, although discouraged, may be permitted provided the parking facilities and any associated appurtenances, in addition to meeting all of the preceding conditions, are located outside of the object free area extension" .

FAA Order 5100.38A, paragraph 602 b. (1) states that "the sponsor should be strongly encouraged to acquire fee title to all land within the runway protection zone, with first priority given to land within the object free area. Structures or activities located on this land must be removed unless excepted by the regional Airports Division manager or needed for air navigational aids."

FAA Order 5100.38A, Appendix 9 - Special Condition 12.a. "Acquisition of Fee Title to Runway protection Zone. The sponsor agrees to prevent the erection or creation of any structure or place of public assembly in the runway protection zone, as depicted on the Exhibit "A" Any existing structures or uses within the runway protection zone will be cleared or discontinued unless approved by the FAA."

Sponsor requirements regarding the clearance of approaches of obstructions identified under Part 77 is generally based on obligations (Assurance No. 23) incurred via grant agreements issued prior to October 1, 1980. Change 9 to FAR Part 152, which revised the clearing of obstructions to the clearing of airport hazards, was provided May 22, 1980. Assurances based on Change 9 were provided in August of 1981, and were included in the FY-81 grants. As such, grant agreements executed after October 1, 1980 do not require the sponsors to seek the removal of obstructions, but rather the removal of airport hazards. Currently, Airport Sponsor agreements with FAA

require sponsors to protect terminal airspace by mitigating existing airport hazards and "preventing" future airport hazards.

FAA Order 8260.3B, Chapter 12, specifies the Obstacle Clearing requirements to be applied to diverse departures, departure routes and Standard Instrument Departures (SID's).

FAA Order 5200.5A, "Waste Disposal Sites on or Near Airports" presents FAA's determination that a waste disposal site within 5,000 feet of a runway end used by piston powered aircraft only or within 10,000 feet of a runway end used or planned to be used by turbine powered aircraft is an incompatible land use incompatible airport operation and therefore unacceptable within the RPZ's.

FAR Part 139, Section 139.337, Wildlife Hazard Management, requires airport owners to take immediate measures to alleviate wildlife hazards whenever they are detected.

Consistent interpretation and application of the above guidance is essential to the safe, orderly development of airports consistent with available financial resources and the increased land-use requirement from all segments of society. This document establishes a uniform policy for the application of the above guidance and other related documents.

2. Definition.

a. Airport Hazard - Any structure or object of natural growth located on or in the vicinity of a public-use airport, or any use of land near such an airport, which obstructs the airspace required for the flight in landing or take off at such airport, or is otherwise hazardous to such landing or taking off of aircraft is an airport hazard (see FAA Order 5190.6A, Appendix 5). In the Great Lakes Region, an item will only be considered an airport hazard based on an unfavorable airspace determination.

b. Building Restriction Line - A line which identifies suitable building area locations on airports. The Building Restriction Line should encompass the Runway Protection Zone, Runway Visibility Zone, areas required for airport traffic control tower clear line of sight, and when feasible all areas with less than 35-foot clearance under the FAR Part 77 surfaces.

c. Clearway - A defined rectangular area beyond the end of a runway cleared or suitable for use in lieu of runway to satisfy takeoff distance requirements.

d. Declared Distances (See PPM 5300.2) - The distances the airport owner declares available for satisfying the airplane's takeoff run, takeoff distance, accelerated-stop distance, and landing distance requirements.

Takeoff Run Available (TORA) - The length of runway declared available and suitable for the ground run of an airplane taking off.

Takeoff Distance Available (TODA) - The TORA plus the length of any remaining runway and/or clearway beyond the far end of TORA.

Accelerate-Stop Distance Available (ASDA) - The runway plus stopway length declared available and suitable for the acceleration and deceleration of an airplane aborting a takeoff.

Landing Distance Available (LDA) - The runway length declared available and suitable for a landing airplane.

e. Hazard to Air Navigation - An object which, as a result of an aeronautical study, the FAA determines will have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft, operation of air navigation facilities, or existing or potential airport capacity.

f. Object - Includes, but is not limited to above ground structures, NAVAIDS, people, equipment, vehicles, natural growth, terrain, and parked aircraft.

g. Object Free Area - A two-dimensional ground area centered on a runway, taxiway, or taxilane centerline which is clear of objects, except for objects that need to be located in the Object Free Area for air navigation or aircraft ground-maneuvering purposes.

When the Runway Object Free Area is applied with respect to declared distance ends, the Runway Object Free Area is located as described in paragraph 4, Appendix 14, of AC 150/5300-13.

Tables 3-1, 3-2, 3-3, and 4-1 of AC 150/5300-13 specify runway and taxiway Object Free Area standard dimensions.

h. Obstacle Free Zone (OFZ). The airspace defined by the runway Obstacle Free Zone and as appropriate, the inner-approach Obstacle Free Zone and the inner-transitional Obstacle Free Zone, which is clear of object penetrations other than frangible NAVAIDS.

Runway Obstacle Free Zone - A defined volume of airspace centered above the runway centerline. This airspace is above a surface whose elevation at any point is the same as the elevation of the nearest point on the runway centerline. The runway OFZ extends 200 feet beyond each end of the runway. Its width is defined in paragraph 306 of AC 150/5300-13. When the declared distance concept is applied to a runway, the OFZ extends 200 feet beyond the end of the runway declared usable for aircraft operations.

Inner-approach Obstacle Free Zone - The airspace above a surface centered on the extended runway centerline. It applies to runways with an approach lighting system.

Inner-transitional Obstacle Free Zone - The airspace above the surfaces located on the outer edges of the runway Obstacle Free Zone and the inner-approach Obstacle Free Zone. It applies to precision instrument runways.

i. Obstruction to Air Navigation - An object of greater height than any of the heights or surfaces presented in Subpart C of FAR Part 77. (Obstructions to air navigation are presumed to be hazards to air navigation until an FAA study has determined otherwise.)

j. Runway Protection Zone - An area off the runway end (formerly the clear zone) used to enhance the protection of people and property on the ground.

k. Runway Safety Area - A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway and provides greater accessibility for fire fighting and rescue equipment during such incidents.

When the Runway Safety Area is applied to the declared distance ends, the Runway Safety Area is located as described in paragraph 4, Appendix 14, of AC 150/5300-13.

l. Runway Visibility Zone - An area formed by imaginary line connecting the runways visibility points as described in paragraph 503, of AC 150/5300-13.

m. Stopway - A defined rectangular surface beyond the end of a runway prepared or suitable for use in lieu of runway to support an airplane, without causing structural damage to the airplane, during an aborted takeoff.

n. Taxilane - The portion of the aircraft parking area used for access between taxiways and aircraft parking positions.

o. Taxiway - A defined path established for the taxiing of aircraft from one part of an airport to another.

p. Taxiway Safety Area - A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway.

q. Threshold - The beginning of that portion of the runway available for landing. When the threshold is located at a point other than at the beginning of the pavement and the portion of pavement behind the threshold may be used for takeoffs in either direction and landings from the opposite direction, it is referred to as a displaced threshold. When the threshold is located at a point other than at the beginning of the pavement and the portion of pavement behind the threshold is not available for takeoff or landing in either direction, this area behind the threshold may be made available for taxiing aircraft.

3. Policy/Procedures.

a. This PPM represents a new policy dealing with the removal of obstructions. This is based on the premise that an analytical and informed judgment can be made on which obstructions are hazards (some obstructions may indeed - based on a study - not be hazards). An obstruction to air navigation is assumed to be a hazard unless a FAA airspace study determines otherwise. Insofar as it is within a sponsor's power and reasonable; airport hazards are to be removed in accordance with the sponsor's assurances. If it is not within the sponsor's power, or no feasible alternative exists for removal of the obstruction that constitutes the hazard, an adjustment of aeronautical procedures should be requested so the obstruction can be accommodated without

removal. Obstructions resulting from airport conditions, including temporary conditions, must be marked and lighted in accordance with FAA standards (Advisory Circular 70/7460-1, Obstruction Marking and Lighting) unless an aeronautical study has determined such marking and/or lighting is not necessary.

b. Airport owner control over Runway Protection Zones will enhance the protection of people and property on the ground. Such control includes clearing Runway Protection Zone areas (and maintaining them clear) of incompatible objects and activities. (See AC 150/5300-13, paragraph 212).

The Runway Protection Zone is trapezoidal in shape and centered about the runway centerline. It begins 200 feet beyond the end of the area usable for takeoff or landing. On turf runways, the Runway Protection Zone begins at the end of the area usable for takeoff or landing or at the threshold when declared distances are implemented.

When declared distances are implemented, the Runway Protection Zone may begin at a location other than 200 feet beyond the end of runway. When a Runway Protection Zone begins at a location other than 200 feet beyond the end of runway, two Runway Protection Zones are required, i.e. a departure Runway Protection Zone and an approach Runway Protection Zone. These two Runway Protection Zones normally overlap and are described in paragraph 5, of Appendix 14, of AC 150/5300-13.

Advisory Circular 150/5300-13 recommends that airport owners discourage automobile parking and FAA Order 5100.38A requires RPZ's that are acquired in fee to be clear of all structures unless excepted by the FAA (ADO manager). This PPM (5300.1B) precludes automobile parking and related facilities from RPZ's that are to be acquired in fee. This regional guidance is appropriate and consistent with the preceding national guidance. The FAA (ADO manager) is not prevented from authorizing automobile parking on land acquired in fee for an RPZ in unique situations, if there is no feasible or practicable alternative for meeting the airport's current parking needs. Airport owners should be strongly encouraged to relocate automobile parking from existing RPZ's owned in fee, to the extent such relocation is feasible and practical to accomplish.

Airport owners should control the property within all Runway Protection Zones. The sponsor must have property interest satisfactory to the FAA in the required Runway Protection Zones for the primary runway and any secondary runway if that runway is involved in a grant project. Those Runway Protection Zone areas without proper control should be included in a project for acquisition of the necessary property interests. In the event acquisition of the Runway Protection Zones is not feasible, FAA must approve a satisfactory plan for Runway Protection Zone control. This plan should be based on an analysis of alternative airport configurations (which may include site evaluations), environmental considerations, cost of fee acquisition and legal constraints. The analysis should identify current Runway Protection Zone activities and contain a financial comparison of continued present use to potential reuse of the land.

The Airport Layout Plan (ALP) is the required vehicle for documenting the sponsor's property acquisition plan for implementing the FAA

Runway Protection Zone policy. The sponsor's intentions, including acquisition timing and the ability to acquire, control, and clear each Runway Protection Zone must be clearly reflected in the ALP report/Master Plan report or on the ALP.

(1) New Airports - The required Runway Protection Zones must be acquired by the Sponsor in fee and cleared, unless a plan for less than fee acquisition is approved by FAA.

Clearing includes grubbing, removing all objects, and avoiding the introduction of sudden grade changes. The sponsor must maintain RPZ's clear of incompatible land uses and above ground objects which do not need to be located in the Runway Protection Zone for air navigation or aircraft maneuvering purposes (NAVAIDs would be an exception).

Incompatible land uses include, but are not limited to uses which might create glare and misleading lights, residences, fuel handling and storage facilities, smoke generating activities, places of public assembly (i.e.: churches, schools, hospitals, office buildings, shopping centers, stadiums, recreational facilities etc.), waste disposal sites (i.e.: open dumps, landfills, composting, sludge disposal, effluent spraying, waste water treatment lagoons, etc.), storm water retention or detention basins, creation of wetlands, uses which might impede visual and electronic NAVAIDs and uses that attract wildlife.

NOTE: The prohibition of "recreational facilities" is intended to encompass incompatible places of public assembly, such as swimming pools, water parks, gymnasiums, baseball fields, soccer fields, tennis courts, etc. and their associated structures. Golf courses (except for clubhouses and other related facilities) are not prohibited by the PPM, however the clearing, grubbing and object removal requirements of paragraph 3.b. (1) may make the golf course less interesting. FAR Part 77, TERPS, threshold siting criteria and NAVAID clearance planes and object free areas may also restrict golf courses in RPZ's.

The clearing, grubbing and the removal of objects from the Runway Protection Zone shall provide a surface which would be accessible to airport rescue and fire fighting vehicles and permit passage of aircraft that land short or overshoot the runway without severe damage. These requirements would preclude the following:

(a) Continual flow open waterways (drainage ditches and swales with side slopes of 4:1 or less would be acceptable).

(b) Surface gradients greater than 4:1 (traverseways such as roadways and railroads with side slopes meeting the 4:1 grading criteria would be acceptable).

(c) Parked vehicles and railroad cars.

(d) Stored crops and farm equipment.

(e) Power lines and facilities.

(f) Fencing (fencing with breakable mountings would be acceptable).

Fee acquisition of land beyond the Runway Protection Zones needed to achieve compatible land use, is strongly encouraged.

(2) Airport Improvement Program Investments Involving New Runways or Runway Extensions at Existing Airports. The required Runway Protection Zone should be acquired in fee and cleared subject to the clearing requirements and land use restrictions listed in paragraph 3.b.(1). If fee acquisition is determined to be infeasible, for any part of the Runway Protection Zone, that portion of the Runway Protection Zone must be protected by an aviation easement, (see FAA Order 5100.37) against incompatible land use restrictions listed in paragraph 3.b.(1). In all cases, the Runway Safety Area portion of the Runway Protection Zone must be acquired in fee and cleared, subject to all conditions listed per paragraph 3.b.(1).

The aviation easement must provide protection for FAR Part 77, Subpart C, Surfaces, Obstacle Free Zone, Runway Object Free Area, Clearways, NAVAID Critical Areas, Approach Light Clearing Planes, Runway Visibility Zones, Obstacle Clearing Planes (PAPI, VASI, PLASI), Airport Traffic Control Tower lines of sight, and departure obstacle identification surface clearances (refer to Chapter 12 of Order 8260.3B). This easement must prohibit incompatible land uses as listed in paragraph 3.b.(1). If the present land use on the proposed easement property is incompatible, it must be properly mitigated and approved by the FAA.

In lieu of an aviation easement, Runway Protection Zone protection may be provided by written agreements with a public agency (i.e. State Highway Division) to control use of the land. These agreements must include the incompatible land use restrictions listed in paragraph 3.b.(1) and be approved by FAA.

In the case of runway extensions into the Runway Protection Zone at existing constrained airports, a minimum Runway Protection Zone area, beginning 200 feet beyond the far end of the Takeoff Distance Available (TODA) for departures, is required. See paragraph 5.b., of Appendix 14, of AC 150/5300-13 for the standard dimensions of this departure Runway Protection Zone. The Runway Protection Zone configuration associated with the approaches shall begin 200 feet before the threshold. Table 2-5, of AC 150/5300-13 contains the standards dimensions for the approach Runway Protection Zones.

Fee and/or easement acquisition of land beyond the Runway Protection Zones, needed to achieve compatible land use, is strongly encouraged.

(3) Airport Improvement Program Investments Involving Work on an Existing Runway or a Parallel Taxiway, but not a Runway Extension. Fee property interest in the required Runway Protection Zone is encouraged. Any Runway Protection Zone areas associated with the runway involved with the project, but without satisfactory property interests, must be included in the project for acquisition of the necessary property interests. Any other eligible Runway Protection Zone areas without satisfactory property interest should also be included in the project.

FEB 05 1999

If fee acquisition is determined to be infeasible, for any part of the Runway Protection Zone, that portion of the Runway Protection Zone must be protected by an avigation easement, (see FAA Order 5100.37) with incompatible land use restrictions listed per paragraph 3.b.(1).

In all cases, the required Runway Safety Area portion of the Runway Protection Zone must be IN FEE and cleared subject to all conditions listed per paragraph 3.b.(1).

A written agreement as defined in paragraph 3.b.(2) in lieu of an avigation easement would be acceptable.

Fee and/or easement acquisition of land beyond the Runway Protection Zones needed to achieve compatible land use, is strongly encouraged.

(4) Airport Improvement Program Investments Involving Other Than Runway or Parallel Taxiway Work. The airport owner should, to the extent feasible, acquire fee or other property interests, satisfactory to the FAA, and clear all required Runway Protection Zones. This acquisition and clearing should be subject to the clearing requirements and the land use restrictions of paragraph 3.b.(1).

(5) Existing Runway Protection Zone's Acquired with Airport Improvement Program Investments. Future incompatible development and land uses will not be permitted in these areas and, where feasible, all existing incompatible objects and land uses shall be removed. Where the existing property interests are less than recommended, satisfactory property acquisition should be strongly encouraged.

(6) Existing RPZ's Acquired without Airport Improvement Program Investments. Future incompatible development and land uses should not be permitted in these areas and, where feasible, the airport owner should be strongly encouraged to remove all existing incompatible objects and land uses. Vehicle parking should be discouraged in the RPZ's. If parking is permitted, it shall be located outside the Runway Object Free Area, including the Runway Object Free Area Extension, and meet the conditions of paragraph 212, of AC 150/5300-13.

(7) Uncontrolled Runway Protection Zone's. Airport owners should make efforts to preclude degradation of off-airport portions of the Runway Protection Zone's. In reviewing notices of proposed off-airport construction and applying criteria specified in paragraphs 211 and 212 of AC 150/5300-13 and paragraph 3.b.(1) of this PPM, FAA shall recommend against the proposed incompatible land uses and unacceptable facilities in accordance with the guidance of paragraph 3.b.(1) of this report. The FAA's policy in regards to off-airport development, as stated on page 32152 of Volume 54, No. 149 of the Federal Register, dated Friday, August 4, 1989, is to resist or oppose objects or activities in the vicinity of an airport which conflict with airport planning or design standards or recommendations. Such opposition shall be presented as FAA recommendations.

c. Runway Object Free Areas must be acquired in fee and clear of objects, except for objects that need to be located in the Runway Object Free

FEB 05 1999

Area for air navigation or aircraft ground maneuvering purposes. The clearing of this area should be consistent with the object clearing requirements of paragraph 3.b.(1). Incompatible land uses in paragraph 3.b.(1) should be precluded from the Runway Object Free Area's. If fee acquisition is not feasible in the foreseeable future, for any part outside the Runway Safety Area, that portion of the Runway Object Free Area must be controlled by an avigation easement subject to the land use restrictions of paragraph 3.b.(1) and protect the critical areas listed in paragraph 3.b.(2). The extension of the Runway Object Free Area to the end of the Runway Protection Zone, subject to the required clearing criteria, is recommended where feasible. The OFA, with related clearing, should be extended to the maximum length feasible if it can not be extended to the end of the RPZ. Automobile parking is prohibited from being located in the Runway Object Free Area and the extended Runway Object Free Area.

d. Runway and Taxiway Safety Areas must be acquired in fee and be free of objects, except for objects that need to be located in the runway/taxiway safety area for air navigation or aircraft ground maneuvering purposes. These objects shall be constructed on low impact resistant supports (frangibly mounted structures) to the lowest practical height with the frangible point no higher than 3 inches (7.6 cm) above grade.

The surface gradient must conform to the grading requirements of Chapter 5, of AC 150/5300-13, as well as the following criteria:

(1) have no potentially hazardous ruts, humps, depressions, or other surface variations;

(2) be drained by grading or storm sewers to prevent water accumulation;

(3) be capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and firefighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

Compaction of the safety areas shall meet FAA specification P-152 of AC 150/5370-10. The safety areas must be clear of all land uses, including agricultural uses, so that its functional role can be attained. Non-intersecting runways should be designed so that the runway safety areas do not overlap.

e. Obstacle Free Zone is a three-dimensional volume of airspace which supports the transition of ground to airborne aircraft operations (and vice versa). The Obstacle Free Zone is the airspace within which landing and departing airplanes operate most of the time. This zone precludes taxiing and parked airplanes and object penetrations, except for frangible NAVAIDs whose location is fixed by function. Paragraph 306 of AC 150/5300-13 specifies Obstacle Free Zone standard dimensions.

The Obstacle Free Zone clearing should include the object clearing requirements and preclude the incompatible land uses set forth in paragraph 3.b.(1). Acquisition of the Obstacle Free Zone should be in fee. If fee acquisition is not feasible, for any part outside of the Safety Area, that portion of the Obstacle Free Zone must be controlled by an avigation easement

subject to the land use restrictions of paragraph 3.b.(1) and protect the critical areas listed in paragraph 3.b.(2).

f. Building Restriction Line - Buildings, structures, trees, and other fixed objects (except for objects that need to be located within the Building Restriction lines for air navigation or aircraft ground maneuvering purposes) should not be permitted within the Building Restriction Lines. Acquisition of the area within the Building Restriction Lines should be in fee. If fee acquisition is not feasible, for any part outside of the Safety Areas, that portion of the Building Restriction Line should be controlled by an appropriate aviation easement.

g. Runway Visibility Zone - Terrain needs to be graded and permanent objects need to be designed or sited so that there will be an unobstructed line-of-sight from any point five feet above one runway centerline to any point five feet above an intersecting runway centerline within the Runway Visibility Zone. Acquisition of the Runway Visibility Zone should be in fee. If fee acquisition is not feasible, for any part outside of the Safety Areas, that portion of the Runway Visibility Zone should be controlled by an appropriate aviation easement.

When the OFZ of a non-intersection runway violates the OFZ of another runway the Runway Visibility Zone described in paragraph 503, of AC 150/5300-13 shall be applied using a theoretical intersection point. This point shall be determined by extending the runway centerlines to a point of intersection.

h. Approach Surface For siting thresholds - The approach surface used to locate runway approach thresholds should be kept free of all penetrating objects (Appendix 2, of AC 150/5300-13). To control this surface, the acquisition of land underneath is recommended as follows:

(1) The Runway Protection Zone, Object Free Area, and Obstacle Free Zone should be in fee, except for the Runway Safety Area, which must be acquired in fee. If fee acquisition is not feasible, for any part outside of the Runway Safety Area, that portion is recommended to be controlled by an appropriate aviation easement.

(2) Portion beyond Runway Protection Zone and out to 5,000 feet (from the primary surface) is recommended to be in fee or easement.

(3) Portion beyond 5,000 feet (from the primary surface) is recommended to be controlled by zoning.

i. Clearway - The clearway plane, that slopes upward with a slope not greater than 1.25 percent, must be clear of all objects and terrain, including frangible NAVAIDS that need to be located there because of their function. To preclude fixed or movable objects from penetrating the clearway plane during takeoff operation, control of this plane shall be the same as that recommended for the approach threshold surface (see sub-paragraph h.). If the clearway can not be maintained clear of all objects, it can not be declared a clearway.

j. Departure Obstacle Identification Surface is explained in Chapter 12 of FAA Order 8260.3B. This surface must be kept clear of all objects to ensure that the required departure minimums are maintained. Property interest,

FEB 05 1999

adequate to permit the removal of the objects that penetrate the surface, is recommended.

k. Terminal Navigational Facilities - Desired operational clearances for terminal navigational facilities should be provided and maintained. Chapter 6 of AC 150/5300-13 describes the land area, grading requirements, and operational clearance for facilities. Consideration should be given to approach light planes, primary planes, secondary planes, localizer critical areas, glide slope critical areas and object clearing requirements. Except for outer and possibly middle markers, and ASR's and VORTAC's to be located off airport, terminal navigational facilities and associated critical areas and clearance planes should be on airport property owned in fee. If fee property interest is not feasible, an appropriate avigation easement should be obtained to provide the proper control. The critical areas for ASR's and VORTAC's, that are to be located on the airport, should also be owned in fee by the airport or controlled by an appropriate easement.

l. Terminal Instrument Procedures - Serious consideration should be given to removal of the controlling obstacles relative to existing and planned terminal instrument procedures.

m. Clearance Over Highways and Railroads - The recommended minimum clearances contained in FAR Part 77 must be provided for highway, railroad or traverse ways. A clearance surface should be maintained, or the runway threshold displaced, in accordance with criteria contained in Appendix 2 of AC 150/5300-13.

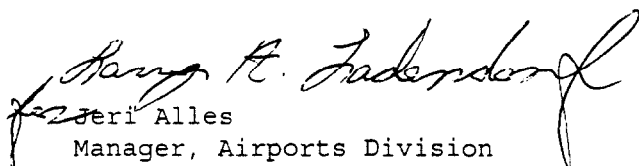
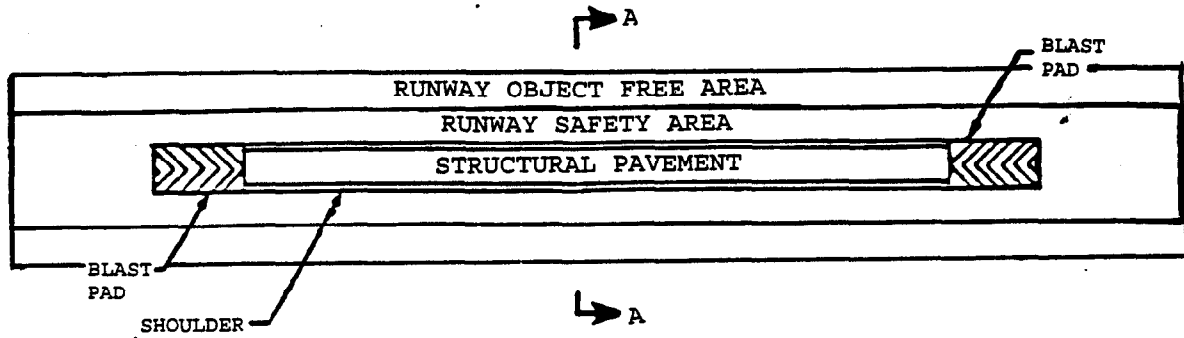
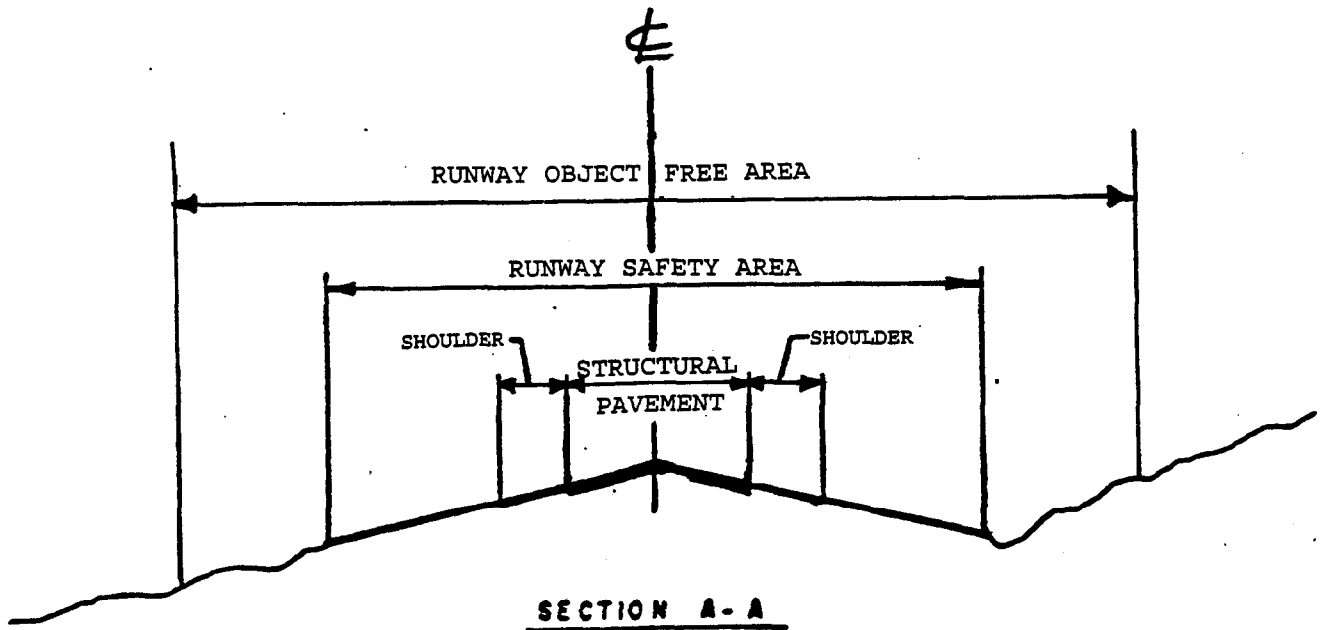

Jerry Alles
Manager, Airports Division

EXHIBIT 1

Runway Object Free Area (ROFA) and Runway Safety Area (RSA)



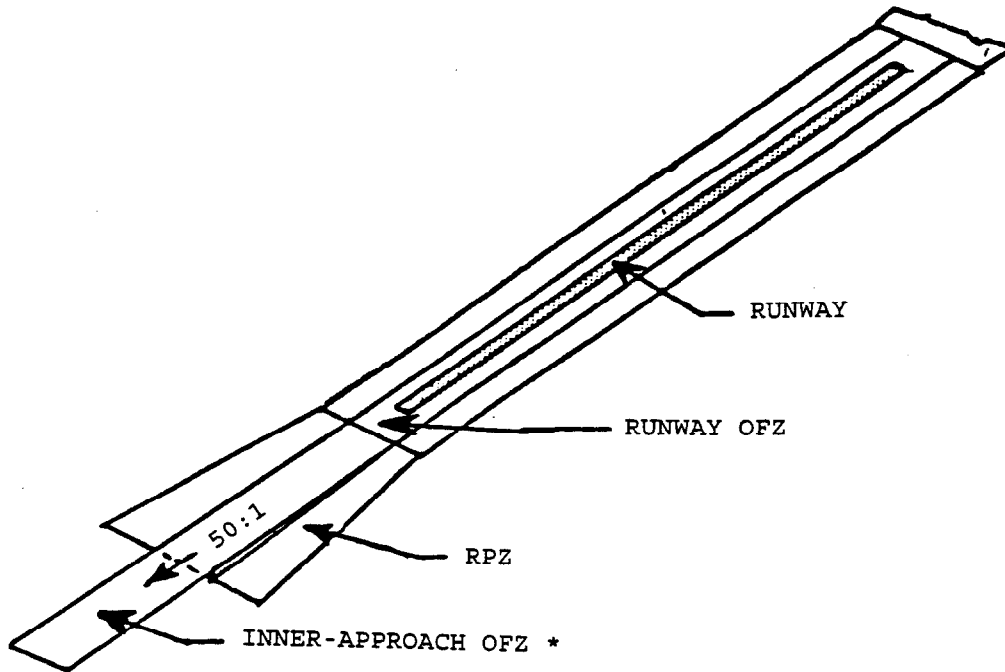
PLAN



SECTION A-A

EXHIBIT 2

Runway Protection Zone (RPZ) and Obstacle Free Zone (OFZ)
for
Visual Runways and Runways with Approach Visibilities
Minimums not Lower than $\frac{1}{4}$ of a Statue Mile



* ONLY WITH AN
APPROACH LIGHT
SYSTEM

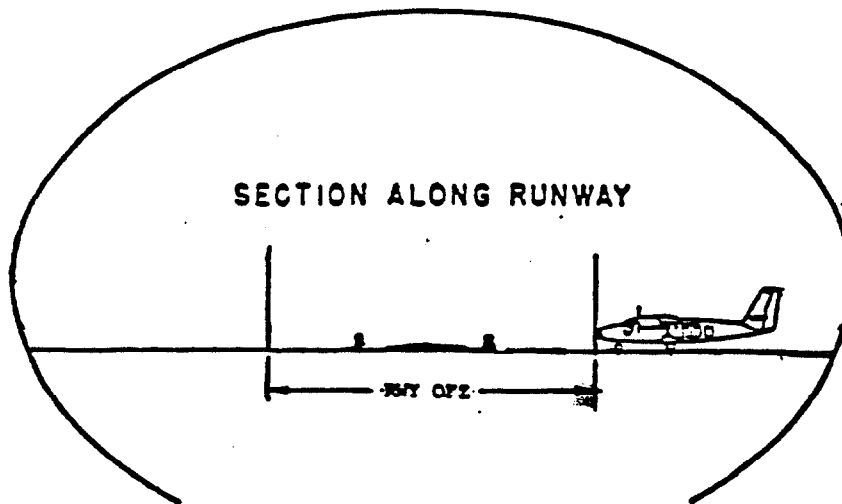


EXHIBIT 3

Runway Protection Zone (RPZ) and Obstacle Free Zone (OFZ)
for
Runways Serving Small Airplanes with Approach Visibilities
Lower than $\frac{1}{4}$ of a Statue Mile.

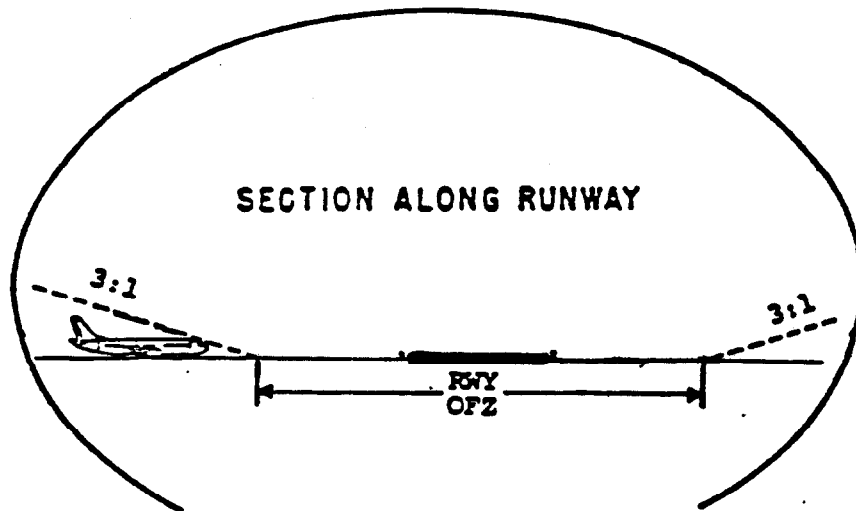
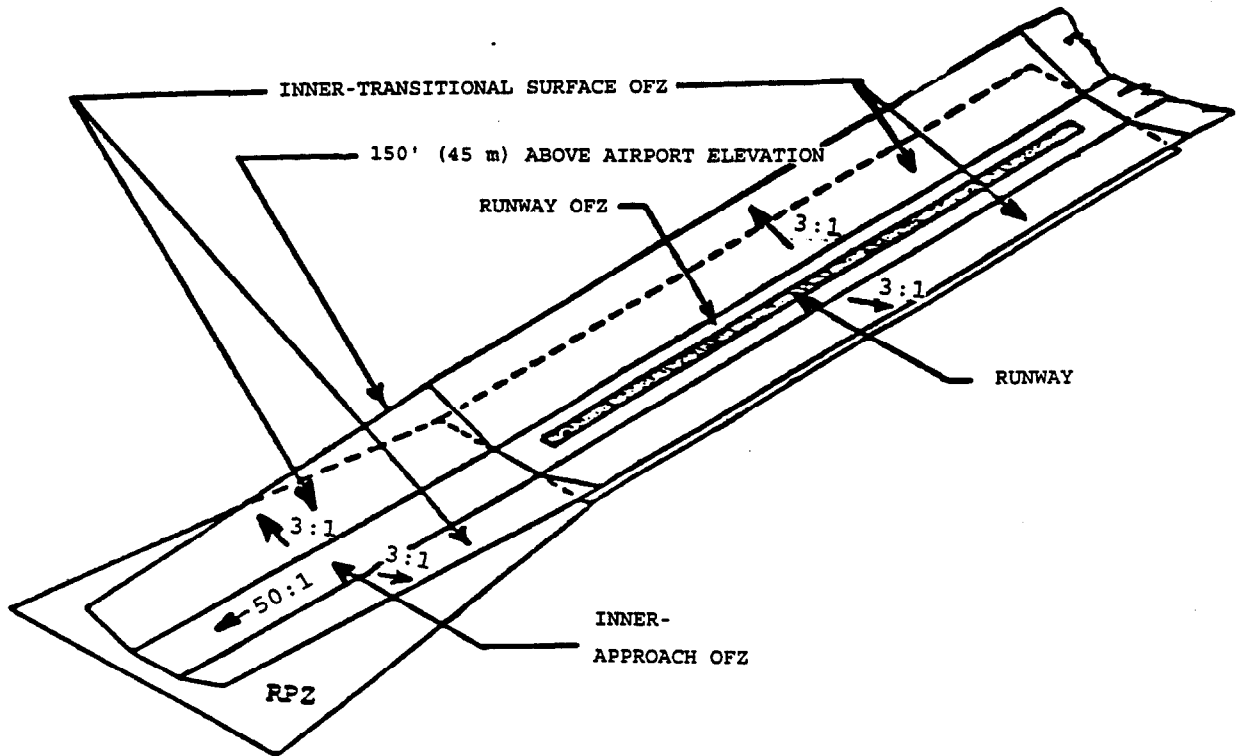


EXHIBIT 4

Runway Protection Zone (RPZ) and Obstacle Free Zone (OFZ)
for
Runways Serving Large Airplanes with Approach Visibilities
Lower than $\frac{1}{4}$ of a Statue Mile.

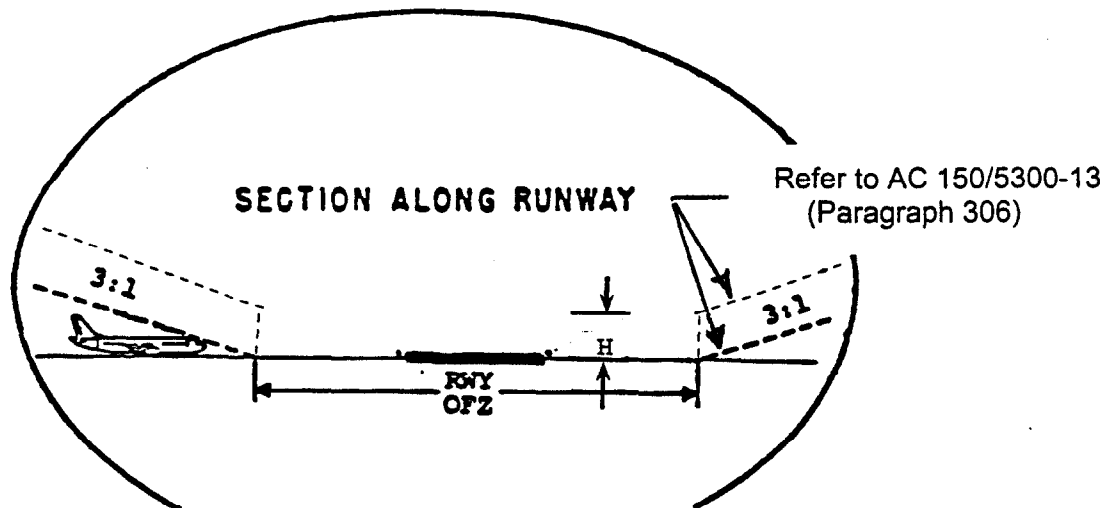
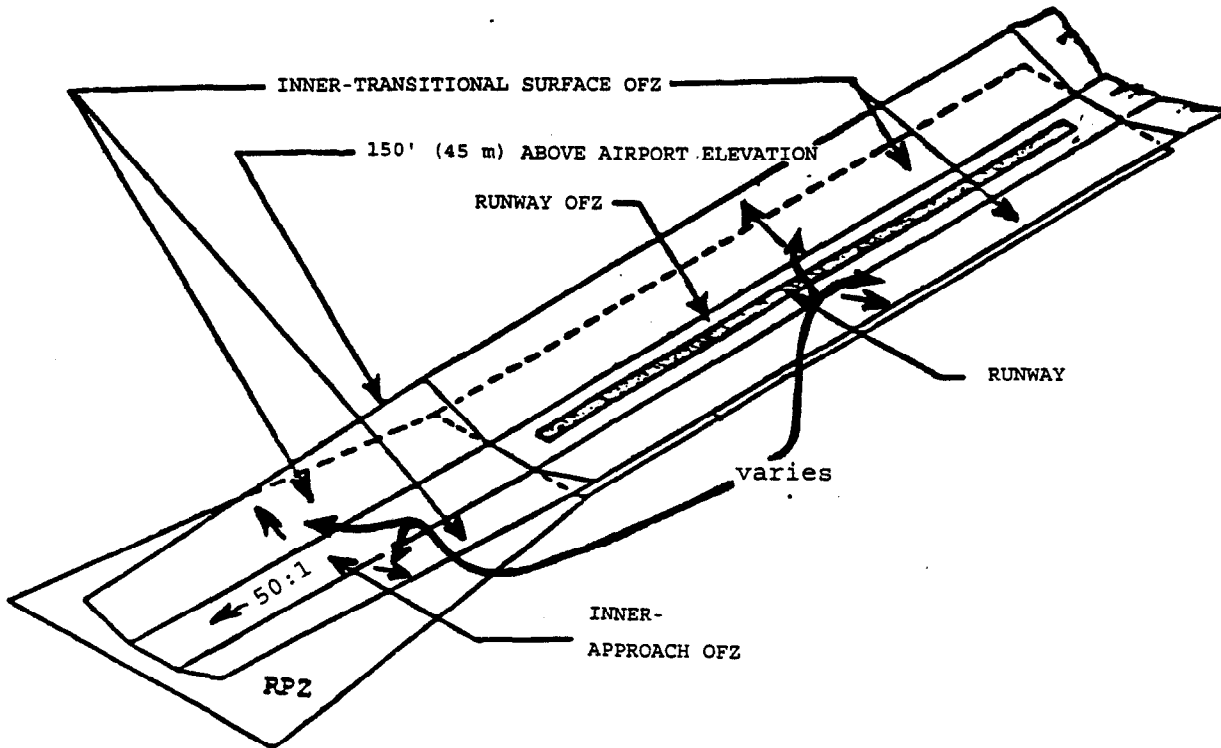
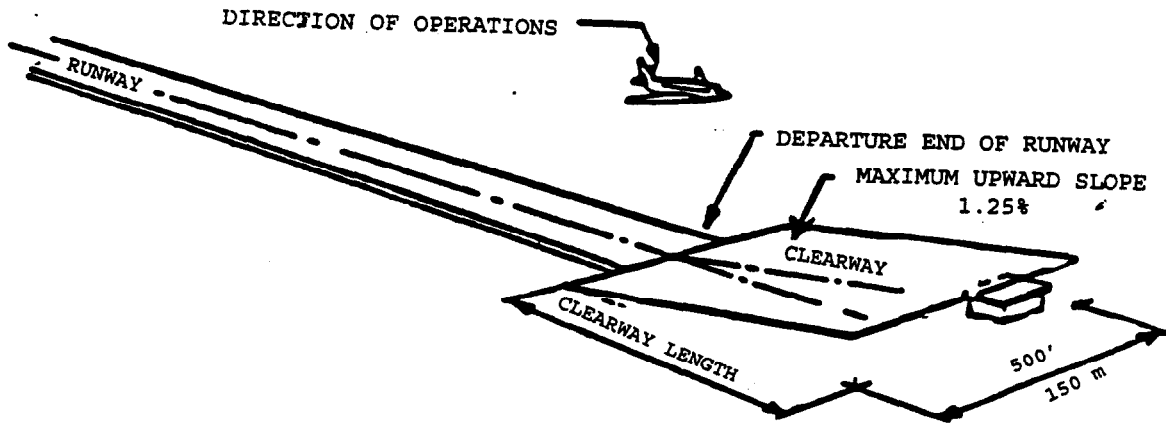
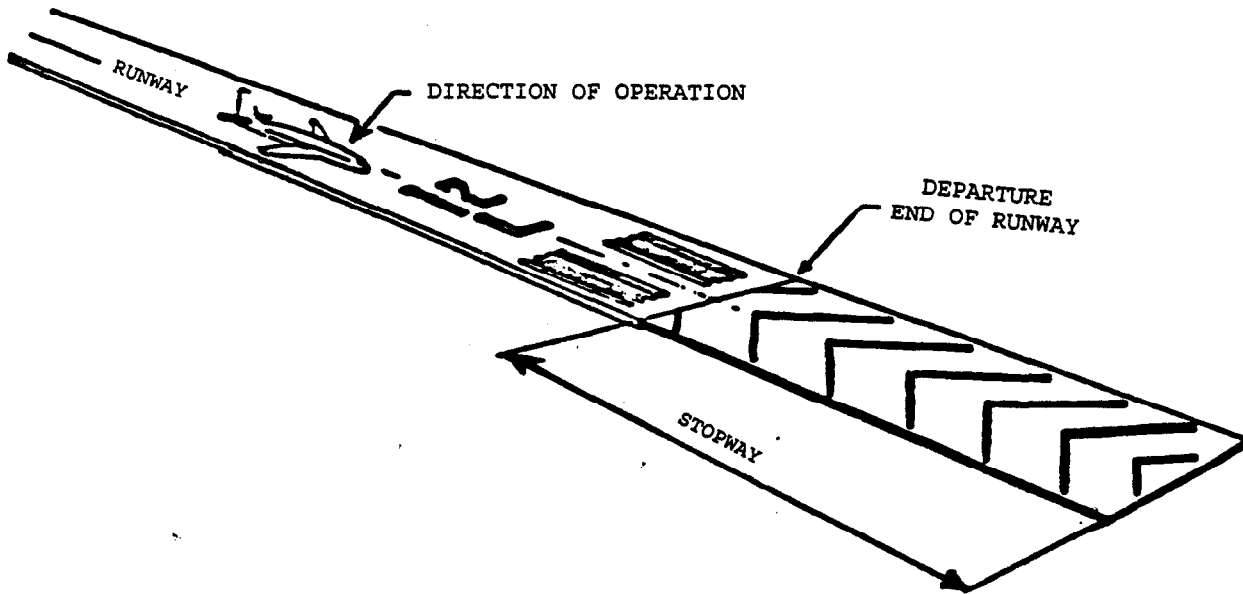


EXHIBIT 5

Clearway and Stopway



Clearway



Stopway

Appendix 2 - Summary

Runway Protection Zone and Airport Object Clearing Policy

Area	Property Interest	Clearing/Land Use
A. Runway Protection Zone		
(1) New Airports	Fee Required	Clear, grub & grade to Runway Protection Zone standards. Farming permitted outside Object Free Area. No automobile parking permitted.
(2) New runways and extension at existing airports	Fee recommended. If fee is not feasible, easement is required.	Clear, grub & grade fee areas. Non-compatible land uses must be restricted by easement. Mitigate existing non-compatible land uses. *
(3) Runway and parallel taxiways	Runway Protection Zone in fee is encouraged. Fee required for Object Free Area; if fee is not feasible, easement is required. Encourage easement for remainder of Runway protection Zone, if fee is not feasible.	Clear, grub and grade fee areas. Non-compatible land uses must be restricted by easements. Mitigate existing non-compatible land uses if feasible. *
(4) Work other than runway or parallel taxiway	Runway Protection Zone in fee is encouraged	Encourage to clear, grub and grade to Runway Protection Zone standard in fee areas, restrict non-compatible land uses and mitigate existing non-compatible land uses.
* No automobile parking permitted on land to be acquired in fee. Encourage existing automobile parking to be relocated out of the RPZ.		

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Area	Property Interest	Clearing/Land Use
(5) Existing Runway Protection Zone's acquired with Federal assistance	Encourage fee for areas with less than satisfactory property interest.	Restrict future non-compatible land uses. Actively pursue removal of existing non-compatible land uses.
(6) Existing Runway Protection Zone's acquired without federal assistance	Encourage fee for areas with less than satisfactory property interests.	Encourage restricting future non-compatible land uses and removal of existing non-compatible land uses.
(7) Uncontrolled Runway Protection Zone's	Encourage fee for Runway Protection Zone's.	Take action to preclude future degradation of Runway Protection Zone's. Actively pursue restrictions against future non-compatible land uses.
B. Runway and Taxiway Safety Areas.	Fee required.	Clear, grub and grade to Runway Safety Area standards. Clear of all land uses including farming. Fixed by function Nav aids permitted.
C. Runway Object Free Area	Fee recommended. Easement required.	Clear of objects, including farming, restrict non-compatible land uses. Fixed by function Nav aids permitted.
D. Obstacle Free Zone	Fee recommended. Easement required.	Clear of buildings, structures, trees, and other fixed objects.
E. Building Restriction Line	Fee recommended. Easement required.	Clear of building, structures, trees, and other fixed objects.

FEB 05 1999

Area	Property Interest	Clearing/Land Use
F. Runway Visibility	Fee recommended. Easement required.	Grade and clear objects for clear line of site.
G. Thresholds - approach surface	Fee recommended to end of Runway Protection Zone. Fee or Easement recommended to 5000' from primary surface. Zoning recommended beyond 5000'.	Clear approach surface of all objects.
H. Clearway	See Item G	Clear clearway plane of all objects and terrain.
I. Departure Obstacle Identification Surface	See Item G	Clear obstacle identification surface of all objects.
J. Terminal Navigation Facilities	Fee recommended. Easement if fee is not feasible.	Clear, grub and grade per Chapter 6 of 150/5300-13.

FEB 05 1999

PPM 5300.1B
Appendix 3

APPENDIX 3. CHANGES FROM PRIOR PPM

- (1) Updates PPM to clarify automobile parking restrictions.
- (2) Adds an explanation of how the OFZ is applied to runways that have declared distances.
- (3) Adds an explanation of how the Runway Visibility Zone is applied to non-intersecting runways.
- (4) Includes a recommendation that non-intersecting runways should be designed to keep the RSA's from overlapping.
- (5) A definition of recreational facilities referenced in the PPM has been added.

DEPARTMENT OF TRANSPORTATION

Applications for Certificates of Public Convenience and Necessity and Foreign Air Carrier Permits Filed Under Subpart Q during the Week ended July 28, 1989

The following applications for certificates of public convenience and necessity and foreign air carrier permits were filed under Subpart Q of the Department of Transportation's Procedural Regulations (See 14 CFR 302.1701 *et seq.*). The due date for answers, conforming application, or motion to modify scope are set forth below for each application. Following the answer period DOT may process the application by expedited procedures. Such procedures may consist of the adoption of a show-cause order, a tentative order, or in appropriate cases a final order without further proceedings.

Docket No. 46418.

Date Filed: July 24, 1989.

Due Date for Answers, Conforming Applications, or Motion to Modify Scope: August 21, 1989.

Description: Application of Transcarga, S.A., pursuant to section 402 of the Act and Subpart Q of the Regulations, request a foreign air carrier permit to provide (1) scheduled and non-scheduled foreign air transportation of property and mail between San Jose, Costa Rica and Miami, Florida with intermediate points Belize City, Belize and San Salvador, El Salvador, and (2) charter foreign air transportation of property and mail between points in Costa Rica and points in the United States.

Phyllis T. Kaylor,

Chief, Documentary Services Division.

[FR Doc. 89-18171 Filed 6-3-89; 8:45 am.]

BILLING CODE 4910-02-M

[Order 89-7-51]

Intra-Alaska Bush Service Mail Rates

AGENCY: Department of Transportation.
ACTION: Notice of order tentatively setting bush mail rates.

SUMMARY: The Department of Transportation is directing all parties to show cause why the Intra-Alaska bush mail rates set in Order 89-7-51 should not become final, effective April 13, 1988. The order also establishes temporary rates for application on the issue date of the order.

DATES: Notice of Objection: 15 days after service of this order. Written Objection: 40 days after service of this order.

FOR FURTHER INFORMATION CONTACT: William A. Bingham, Jr., Office of Aviation Analysis, U.S. Department of Transportation, 400 Seventh Street SW., Washington, DC 20590, 202-366-1040.

Dated: July 31, 1989.

Jeffrey N. Shane,

Assistant Secretary for Policy and International Affairs.

[FR Doc. 89-18172 Filed 6-3-89; 8:45 am.]

BILLING CODE 4910-02-M

Federal Aviation Administration

Extension of Comment Period on Noise Exposure Maps and Noise Compatibility Program for Colorado Springs, CO

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice.

SUMMARY: The Federal Aviation Administration (FAA) announces an extension of the comment period on the Colorado Springs Municipal Airport noise exposure maps and associated noise compatibility program to August 14, 1989.

FOR FURTHER INFORMATION CONTACT: Dennis Ossenkop, FAA, Airports Division, ANM-611, 17900 Pacific Hwy S., C-68666, Seattle, WA 98168.

Comments on the noise exposure maps and proposed noise compatibility program should be submitted to the above office.

SUPPLEMENTARY INFORMATION: The noise exposure maps and proposed noise compatibility program are available for examination at the following locations:

Federal Aviation Administration,
Independence Avenue SW., Room 615,
Washington, DC

Federal Aviation Administration,
Airports Division, ANM-602, 17900
Pacific Hwy S., C-68966, Seattle,
Washington 98168

Colorado Springs Municipal Airport,
Colorado Springs.

Issued in Seattle, Washington, July 27, 1989.

Cecil C. Wagner,

Acting Manager, Airports Division.

[FR Doc. 89-18206 Filed 6-3-89; 8:45 am.]

BILLING CODE 4910-12-M

Runway Protection Zone Policy Statement

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of agency policy statement.

SUMMARY: The FAA conducts several airport safety and construction programs under which the agency studies existing and proposed objects and activities, both on and off airports. This notice confirms the policy of the FAA that to protect the public's investment in the national airport system, the FAA will resist or oppose objects or activities in the vicinity of an airport that conflict with an airport planning or design standard or recommendation.

FOR FURTHER INFORMATION CONTACT: Luigi Iori, Manager, Design Standards Group, Office of Airport Safety and Standards (AAS-110), Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; Telephone (202) 267-3654.

SUPPLEMENTARY INFORMATION: Air travel is the major mode of interstate transportation in the United States. As air travel has increased, the frequency of airplane operations and the size of airplanes have likewise increased. At the same time, the public has not seen a corresponding expansion of the airport system. Therefore, handling the increases has challenged the government as well as the aviation industry to maintain a safe and efficient airports-airspace environment.

In meeting this challenge, the FAA conducts several airport safety and construction programs. Under these programs, the FAA studies existing and proposed objects and activities, both on and off airports. These objects and activities are not limited to obstructions to air navigation, as defined in 14 CFR part 77, Objects Affecting Navigable Airspace. The studies also focus on the efficient use of airports and the safety of persons and property on the ground. As the result of a study, the FAA may recommend against the presence of any off-airport object or activity. To protect the public's investment in the national airport system, the FAA will resist or oppose objects or activities in the vicinity of an airport that conflicts with an airports planning or design or recommendation.

Issued in Washington, DC on July 31, 1989.

Leonard E. Mudd,

Director, Office of Airport Safety and Standards.

[FR Doc. 89-15209 Filed 6-3-89; 8:45 am.]

BILLING CODE 4910-12-M