

FAA Airport Division – Runway Protection Zones

550 - Runway Protection Zones

Overview

Runway protection zones are a trapezoidal area “off the end of the runway end that serves to enhance the protection of people and property on the ground” in the event an aircraft lands or crashes beyond the runway end. Runway Protection Zones underlie a portion of the approach closest to the airport.

Many people have confused the RPZ with the need for Object Free Areas (OFA), Obstacle Free Zones (OFZ), Object clearing criteria, and Part 77 requirements. Each of these serves distinct purposes and are not all coincident.

While the RPZ also has limitations on obstructions (because it lies below the approach surface and because it includes safety areas and obstacle free areas), the primary purpose of the RPZ is the protection of people and property on the ground.

Airport Property and the RPZ

Under FAA design criteria (which applies to all obligated airports), the airport must own the landing area.

Secondly the airport owner must have sufficient interest in the Runway Protection Zones to protect the Runway Protection Zones from **both** obstructions and incompatible land use.

Finally the airport owner must strive to attain compatible zoning around the airport in order to prevent incompatible land uses that:

- Could cause sufficient conflict that endangers the airport
- Cause it to be closed or
- Require substantial remedial investment to purchase conflicting developed property.

Sponsor may attain sufficient interest in the Runway Protection Zones in three primary ways.

- (1) The first and the preferred method is for the airport to purchase the approach areas in fee. Ownership in fee is preferred because it provides maximum control for the airport.
- (2) The second is through purchase of an easement (or a combination of easement and zoning).
- (3) The third alternative is to rely upon adequate zoning which should be enacted even if fee or easement ownership is in place.

FAA Advisory Circular 150/5300-13 states this ownership policy as follows:

“All ... existing and planned airport elements including the following should be on airport property. (A) Object Free areas, (B) **Runway Protection Zones** (C) Areas under ...Part 77 ... imaginary surfaces out where the surfaces obtain a height of at least 35 feet above the primary surface; and (d) Areas, other than those which can be adequately controlled by zoning, easements, or other means to mitigate potential incompatible uses...Such control includes clearing RPZ areas (and maintaining them clear) of incompatible uses and activities.”

Through experience we have learned that it is usually less expensive in the long run to acquire the RPZ in fee rather than acquiring an easement. This is because an easement must be very restrictive in order to provide adequate control unless zoning is also very restrictive.

Compatible Land Use

Compatible land use within the RPZ is generally restricted to such land uses as agricultural, golf course, and similar uses that do not involve congregations of people or construction of buildings or other improvements that may be obstructions.

“The following land use criteria apply within the RPZ: (a) While it is desirable to clear all objects from the RPZ, some uses are permitted, provided they do not attract wildlife, are outside the Runway OFA, and do not interfere with navigational aids. 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. **(B) Land uses prohibited from the RPZ are: residences and places of public assembly. (Churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons typify places of public assembly.)**”

In cases where the land is already developed and it would be too expensive to acquire the existing development, this policy is a recommendation to the landowner i.e. it is a notice to the landowner that the FAA considers such uses incompatible.

“Where it is determined to be impractical for the airport owner to acquire and plan the land uses within the entire RPZ, the RPZ land use standards have recommendation status for that portion of the RPZ not controlled by the airport owner.”

Where such land is vacant, it is rarely impractical to acquire the land in the RPZ. Even if the cost of the land seems to be prohibitive the airport owner is expected to exercise sufficient control through zoning or easements to prevent prohibited land uses.

It is FAA policy to object to incompatible land uses that are proposed for property within the RPZ whether or not the airport owns the land and such objection should be anticipated. In particular when we receive a proposal for an airspace study under Part 157 for the RPZ **we will object when that proposal conflicts with an airport planning or design standard or recommendation.**

FAA Recommendation

We recommend that Airport owners and managers review the Airport Layout Plan for conformity with the above statement. Airports that do not own the entire RPZ should consider the need to acquire such land if there is any possibility that incompatible land uses could occur within the RPZ. In particular easements should be reviewed to ensure that land uses are restricted not just obstructions. Where necessary, requests should be made to the appropriate zoning authority to rezone such land to prevent future incompatible use. Where neither zoning nor easements are adequate the RPZ should be acquired in fee. Airport layout plans should be revised if necessary to show such future land acquisition so that it is eligible under the Airport Improvement Program. An airport can acquire such land and be reimbursed at a later date from a future AIP grant, if funds become available, such land acquisition is shown on an approved ALP, and the FAA determines that such land is eligible.

RESOURCES Advisory Circulars

- **AC 150/5300-13 Airport Design**