

Meadow Lake Airport Association, Inc.

13625 Judge Orr Road, Meadow Lake Airport (KFLY), Peyton, CO 80831-6051

November 22, 2017

El Paso County Planning & Community Development
2880 International Circle
Colorado Springs, CO 80910
ATTN: Raimere Fitzpatrick

Subj: **JUDGE ORR PUD (PUD-17-005)**

Ref: (a) Meadow Lake Airport – Airport Layout Plan
(b) FAA Advisory Circular 150/5300-13A, Airport Design
(c) Interim Guidance on Land Uses Within a Runway Protection Zone (FAA Memorandum dated Sep 27, 2012)

The Meadow Lake Airport Association (MLAA) has reviewed the proposed Planned Unit Development (PUD) for the 39 acre plot at 11605 Judge Orr Road, and has no objections with the proposed land subdivision, subject to the following concerns:

1. As the PUD Plan depicts, there is a recorded Avigation Easement over the entire property. More specifically, the proposed Lots 11, 12, & 13 lie in the Runway Protection Zone (RPZ) of Meadow Lake's primary runway 15-33. Aircraft approaching and departing necessarily fly low over this area. **ANY proposed construction in this area MUST have "Statement of No Objection" from the FAA prior to a building permit.** An FAA Form 7460-1 "Notice of Proposed Construction" must be submitted for an Obstruction Evaluation. We request that a copy be provided to the MLAA.
2. In addition, many of the proposed commercial business uses listed in the Letter of Intent would be incompatible for these three lots. Reference (b) defines the RPZ as "An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground". Reference (c) provides additional guidance on land uses within an RPZ. In Meadow Lake's 52 years of operation there have been numerous instances of mishaps terminating in this open field. An occupied "Child Care Center", "Medical Clinic", Religious Facility", etc. would have devastating results. We request that special consideration and restrictions be made to prospective allowable use of these lots, and that notations be made requiring coordination with appropriate FAA staffs.

Respectfully,



David E. Elliott
President, Board of Directors
Meadow Lake Airport Association
cell: (719) 339-0928 email: falcon20flier@msn.com

Encl: (1) FAA AC 150/5300-13A: Definitions, pg 9 ... vvv. Runway Protection Zone (RPZ)
(2) FAA AC 150/5300-13A: Sec 310. Runway Protection Zone (RPZ)
(3) Interim Guidance on Land Uses Within a Runway Protection Zone (FAA Memorandum dated Sep 27, 2012)

www.meadowlakeairport.com

vvv. *Runway Protection Zone (RPZ).* An area at ground level prior to the threshold or beyond the runway end to enhance the safety and protection of people and property on the ground.

www. *Runway Safety Area (RSA).* A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.

xxx. *Shoulder.* An area adjacent to the defined edge of paved runways, taxiways, or aprons providing a transition between the pavement and the adjacent surface; support for aircraft and emergency vehicles deviating from the full-strength pavement; enhanced drainage; and blast protection.

yyy. *Small Aircraft.* An aircraft with a maximum certificated takeoff weight of 12,500 lbs (5670 kg) or less.

zzz. *Stopway (SWY).* An area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff. A blast pad is not a stopway.

aaaa. *Takeoff Distance Available (TODA).* See Declared Distances.

bbbb. *Takeoff Run Available (TORA).* See Declared Distances.

cccc. *Taxilane (TL).* A taxiway designed for low speed and precise taxiing. Taxilanes are usually, but not always, located outside the movement area, providing access from taxiways (usually an apron taxiway) to aircraft parking positions and other terminal areas.

dddd. *Taxiway (TW).* A defined path established for the taxiing of aircraft from one part of an airport to another.

eeee. *Taxiway Design Group (TDG).* A classification of airplanes based on outer to outer Main Gear Width (MGW) and Cockpit to Main Gear distance (CMG).

ffff. *Taxiway Edge Safety Margin (TESM).* The distance between the outer edge of the landing gear of an airplane with its nose gear on the taxiway centerline and the edge of the taxiway pavement.

gggg. *Taxiway/Taxilane Safety Area (TSA).* A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft deviating from the taxiway.

hhhh. *Threshold (TH).* The beginning of that portion of the runway available for landing. In some instances, the threshold may be displaced. "Threshold" always refers to landing, not the start of takeoff.

310. Runway Protection Zone (RPZ).

The RPZ's function is to enhance the protection of people and property on the ground. This is best achieved through airport owner control over RPZs. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities.

a. RPZ background.

(1) 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 air navigation hazards. Subsequently, a 1952 report by the President's Airport Commission (chaired by James Doolittle), entitled *The Airport and Its Neighbors*, recommended the establishment of clear areas beyond runway ends. Provision of these clear areas was not only to preclude obstructions potentially hazardous to aircraft, but also to control building construction as a protection from nuisance and hazard to people on the ground. The Department of Commerce concurred with the recommendation on the basis that this area was "primarily for the purpose of safety and convenience to people on the ground." The FAA adopted "Clear Zones" with dimensional standards to implement the Doolittle Commission's recommendation. Guidelines were developed recommending that clear zones be kept free of structures and any development that would create a place of public assembly.

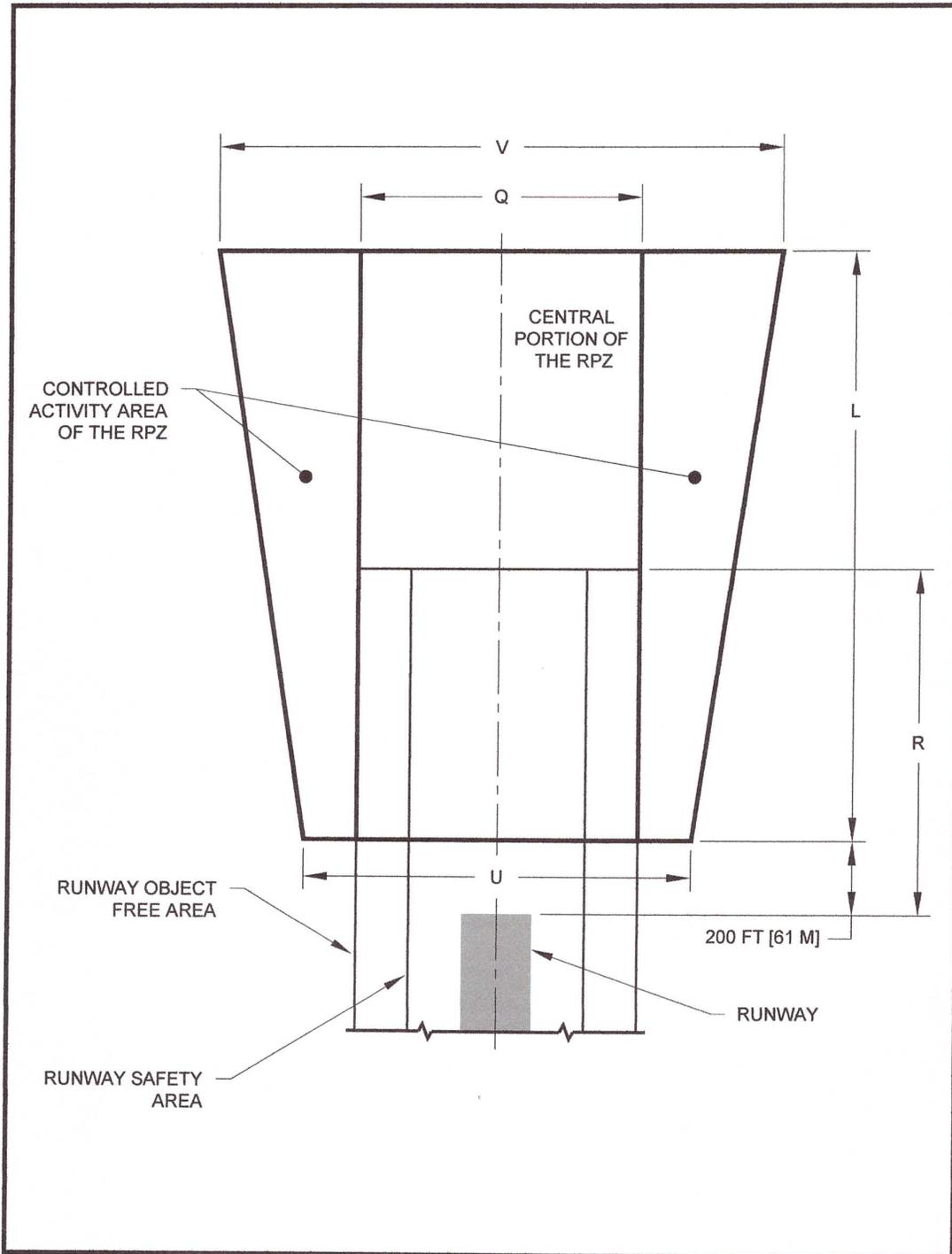
(2) In conjunction with the introduction of the RPZ as a replacement term for Clear Zone, the RPZ was divided into "extended object free" and "controlled activity" areas. The extended object free area has subsequently been renamed as the "central portion of the RPZ." The RPZ function is to enhance the protection of people and property on the ground. Where practical, airport owners should own the property under the runway approach and departure areas to at least the limits of the RPZ. It is desirable to clear the entire RPZ of all above-ground objects. Where this is impractical, airport owners, as a minimum, should maintain the RPZ clear of all facilities supporting incompatible activities. See FAA Memorandum, *Interim Guidance on Land Uses Within a Runway Protection Zone*, dated 9/27/2012, for guidance on incompatible activities.

b. Standards.

(1) **RPZ Configuration/Location.** The RPZ is trapezoidal in shape and centered about the extended runway centerline. The central portion and controlled activity area are the two components of the RPZ (see [Figure 3-16](#)).

(a) **Central Portion of the RPZ.** The central portion of the RPZ extends from the beginning to the end of the RPZ, centered on the runway centerline. Its width is equal to the width of the runway OFA (see [Figure 3-16](#)). Interactive [Table 3-5](#) contains the dimensional standards for the OFA and RPZ.

(b) **Controlled Activity Area.** The controlled activity area is the remaining area of the RPZ on either side of the central portion of the RPZ.



Note: See interactive [Table 3-5](#) for dimensions U, V, L, R, and Q.

Figure 3-16. Runway Protection Zone (RPZ), Runway Object Free Area (ROFA) and Runway Safety Area (RSA)

(2) Approach/Departure RPZ. The approach RPZ dimensions for a runway end is a function of the aircraft approach category and approach visibility minimum associated with the approach runway end. The departure RPZ is a function of the aircraft approach category and departure procedures associated with the runway. For a particular runway end, the more stringent RPZ requirements, usually the approach RPZ requirements, will govern the property interests and clearing requirements the airport owner should pursue.

c. **Location and size.** The RPZ may begin at a location other than 200 feet (61 m) beyond the end of the runway. When an RPZ begins at a location other than 200 feet (61 m) beyond the end of runway, two RPZs are required, i.e., a departure RPZ and an approach RPZ. The two RPZs normally overlap (refer to [Figure 3-17](#) and [Figure 3-18](#)).

(1) Approach RPZ. The approach RPZ extends from a point 200 feet (61 m) from the runway threshold, for a distance as shown in interactive [Table 3-5](#).

(2) Departure RPZ. The departure RPZ begins 200 feet (61 m) beyond the runway end or, if the Takeoff Run Available (TORA) and the runway end are not the same, 200 feet (61 m) beyond the far end of the TORA. The departure RPZ dimensional standards are equal to or less than the approach RPZ dimensional standards (refer to interactive [Table 3-5](#)).

(a) For runways designed for small aircraft in Aircraft Approach Categories A and B: Starting 200 feet (61 m) beyond the far end of TORA, 1,000 feet (305 m) long, 250 feet (76 m) wide, and RPZ 450 feet (137 m) wide at the far end.

(b) For runways designed for large aircraft in Aircraft Approach Categories A and B: starting 200 feet (61 m) beyond the far end of TORA, 1,000 feet (305 m) long, 500 feet (152 m) wide, and at the far end of RPZ 700 feet (213 m) wide.

(c) For runways designed for Aircraft Approach Categories C, D, and E: Starting 200 feet (61 m) beyond the far end of TORA, 1,700 feet (518 m) long, 500 feet (152 m) wide, and at the far end of RPZ 1,010 feet (308 m) wide.

d. For RPZ land, the following land uses are permissible without further evaluation:

(1) Farming that meets airport design standards.

(2) Irrigation channels that meet the requirements of [AC 150/5200-33](#) and FAA/USDA manual, [Wildlife Hazard Management at Airports](#).

(3) Airport service roads, as long as they are not public roads and are directly controlled by the airport operator.

(4) Underground facilities, as long as they meet other design criteria, such as RSA requirements, as applicable.

(5) Unstaffed NAVAIDs and facilities, such as equipment for airport facilities that are considered fixed-by-function in regard to the RPZ.

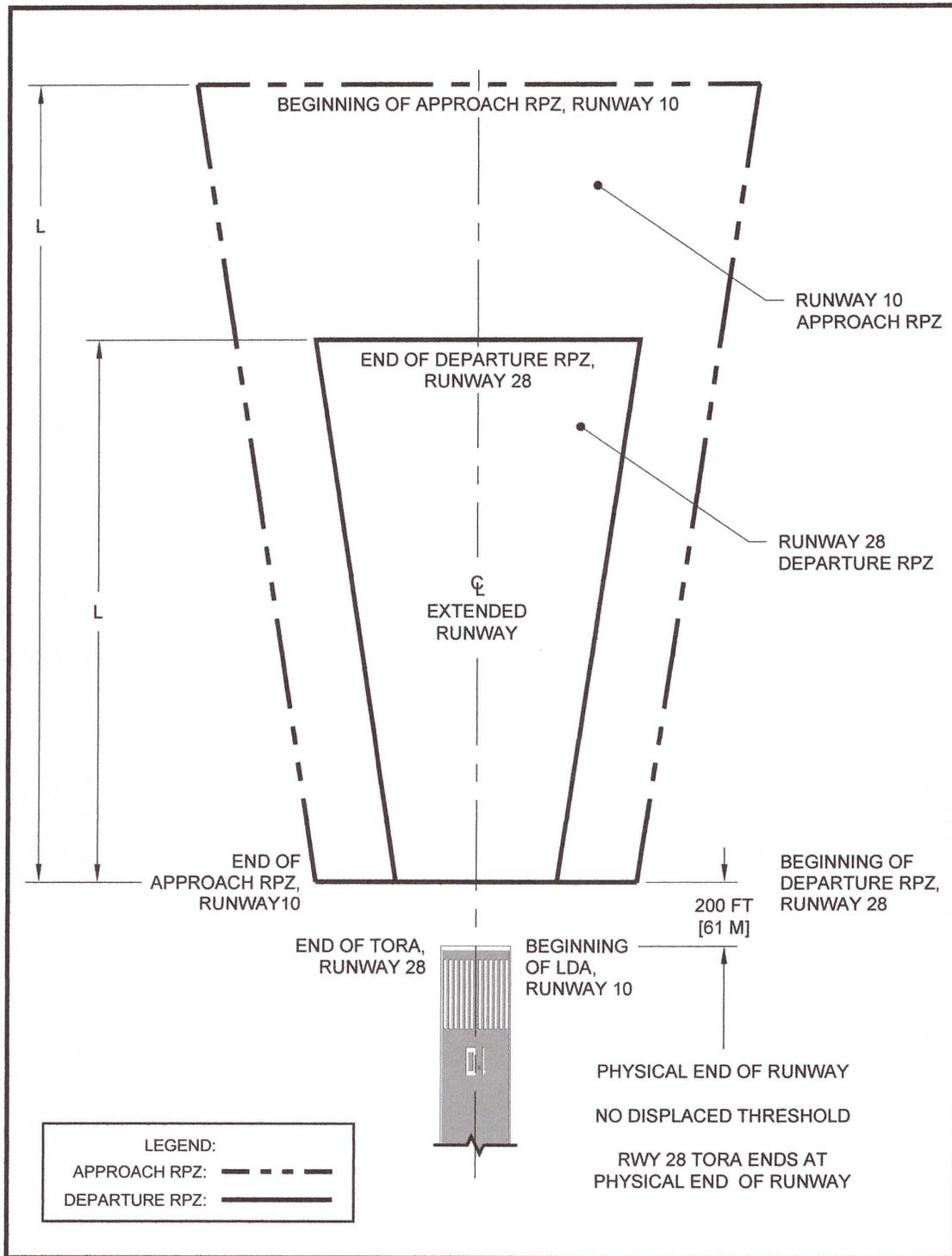


Figure 3-17. Runway with all declared distances equal to the runway length

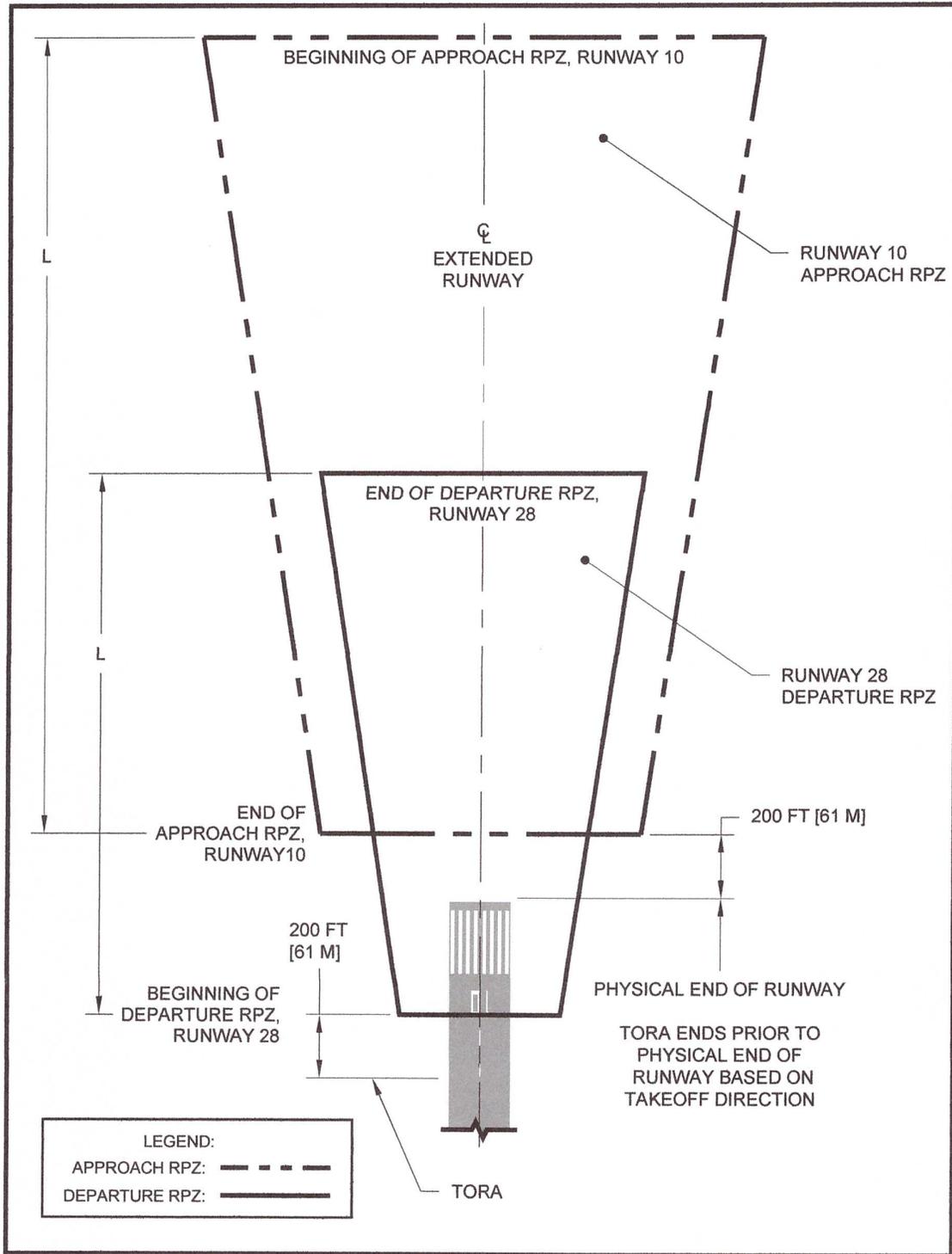


Figure 3-18. Approach and departure RPZs where the Takeoff Run Available (TORA) is less than the Takeoff Distance Available (TODA)



Federal Aviation Administration

Memorandum

Date: SEP 27 2012

To: Regional Airports Division Managers
610 Branch Managers
620 Branch Managers
ADO Managers

From: *Benito De Leon*
Benito De Leon, Director
Office of Airport Planning and Programming (APP-1)

Michael J. O'Donnell
Michael J. O'Donnell, Director
Office of Airport Safety and Standards (AAS-1)

Subject: Interim Guidance on Land Uses Within a Runway Protection Zone

Background

The FAA Office of Airports (ARP) has identified the need to clarify our policy on land uses within the Runway Protection Zone (RPZ). This memorandum presents interim policy guidance on compatible land uses within Runway Protection Zones (RPZ) to address recurrent questions about what constitutes a compatible land use and how to evaluate proposed land uses that would reside in an RPZ. While Advisory Circular 150/5300-Change 17 (Airport Design) notes that "it is desirable to clear all objects from the RPZ," it also acknowledges that "some uses are permitted" with conditions and other "land uses are prohibited."

RPZ land use compatibility also is often complicated by ownership considerations. Airport owner control over the RPZ land is emphasized to achieve the desired protection of people and property on the ground. Although the FAA recognizes that in certain situations the airport sponsor may not fully control land within the RPZ, the FAA expects airport sponsors to take all possible measures to protect against and remove or mitigate incompatible land uses.

ARP is developing a new guidance document for the Regional Office (RO) and Airport District Office (ADO) staff that clarifies our policy regarding land uses in the RPZ. This new guidance document will outline a comprehensive review process for existing and proposed land uses within an RPZ and is slated for publication in 2013. We also intend to incorporate RPZ land use considerations into the ongoing update to the Land Use Compatibility Advisory Circular (AC) which is slated for publication in 2014.

This memorandum outlines interim guidance for ARP RO and ADO staff to follow until the comprehensive RPZ land use guidance is published.

Interim Guidance

New or Modified Land Uses in the RPZ

Regional and ADO staff must consult with the National Airport Planning and Environmental Division, APP-400 (who will coordinate with the Airport Engineering Division, AAS-100), when any of the land uses described in **Table 1** would enter the limits of the RPZ as the result of:

1. An airfield project (e.g., runway extension, runway shift)
2. A change in the critical design aircraft that increases the RPZ dimensions
3. A new or revised instrument approach procedure that increases the RPZ dimensions
4. A local development proposal in the RPZ (either new or reconfigured)

Table 1: Land Uses Requiring Coordination with APP-400

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| <ul style="list-style-type: none"> • Buildings and structures (Examples include, but are not limited to: residences, schools, churches, hospitals or other medical care facilities, commercial/industrial buildings, etc.) • Recreational land use (Examples include, but are not limited to: golf courses, sports fields, amusement parks, other places of public assembly, etc.) • Transportation facilities. Examples include, but are not limited to: <ul style="list-style-type: none"> ○ Rail facilities – light or heavy, passenger or freight ○ Public roads/highways ○ Vehicular parking facilities • Fuel storage facilities (above and below ground) • Hazardous material storage (above and below ground) • Wastewater treatment facilities • Above-ground utility infrastructure (i.e. electrical substations), including any type of solar panel installations. |
|--|

Land uses that may create a safety hazard to air transportation resulting from wildlife hazard attractants such as retention ponds or municipal landfills are not subject to RPZ standards since these types of land uses do not create a hazard to people and property on the ground. Rather, these land uses are controlled by other FAA policies and standards. In accordance with the relevant Advisory Circulars, the Region/ADO must coordinate land use proposals that create wildlife hazards with AAS-300, regardless of whether the proposed land use occurs within the limits of an RPZ.

Alternatives Analysis

Prior to contacting APP-400, the RO and ADO staff must work with the airport sponsor to identify and document the full range of alternatives that could:

1. Avoid introducing the land use issue within the RPZ
2. Minimize the impact of the land use in the RPZ (i.e., routing a new roadway through the controlled activity area, move farther away from the runway end, etc.)

3. Mitigate risk to people and property on the ground (i.e., tunneling, depressing and/or protecting a roadway through the RPZ, implement operational measures to mitigate any risks, etc.)

Documentation of the alternatives should include:

- A description of each alternative including a narrative discussion and exhibits or figures depicting the alternative
- Full cost estimates associated with each alternative regardless of potential funding sources.
- A practicability assessment based on the feasibility of the alternative in terms of cost, constructability and other factors.
- Identification of the preferred alternative that would meet the project purpose and need while minimizing risk associated with the location within the RPZ.
- Identification of all Federal, State and local transportation agencies involved or interested in the issue.
- Analysis of the specific portion(s) and percentages of the RPZ affected, drawing a clear distinction between the Central Portion of the RPZ versus the Controlled Activity Area, and clearly delineating the distance from the runway end and runway landing threshold.
- Analysis of (and issues affecting) sponsor control of the land within the RPZ.
- Any other relevant factors for HQ consideration.

APP-400 will consult with AAS-100 when reviewing the project documents provided by the RO/ADO. APP-400 and AAS-100 will work with the Region/ADO to make a joint determination regarding Airport Layout Plan (ALP) approval after considering the proposed land use, location within the RPZ and documentation of the alternatives analysis.

In addition, APP-400 and AAS-100 will work with the Region/ADO to craft language for inclusion in the airspace determination letter regarding any violations to ensure that all stakeholders (including tenants, operators, and insurers) are fully apprised of the issues and potential risks and liabilities associated with permitting such facilities within the RPZ.

Existing Land Uses in the RPZ

This interim policy only addresses the introduction of new or modified land uses to an RPZ and proposed changes to the RPZ size or location. Therefore, at this time, the RO and ADO staff shall continue to work with sponsors to remove or mitigate the risk of any existing incompatible land uses in the RPZ as practical.

For additional information or questions regarding this interim guidance, please contact either Ralph Thompson, APP-400, at ralph.thompson@faa.gov or (202) 267-8772 or Danielle Rinsler, APP-401, at danielle.rinsler@faa.gov or (202) 267-8784.