NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

National Policy

N 8260.64

Effective Date:
09/14/2007

Cancellation Date:
09/14/2008

SUBJ: Radar Approaches and Minimum Vectoring Altitudes—Current Guidance and Criteria

1. Purpose of This Notice. This notice applies to approach procedures and other operations based on the use of ground radar systems. It expands and unifies criteria for Precision Approach Radar (PAR) and Airport Surveillance Radar (ASR) approaches, as well as specifies new criteria for radar Minimum Vectoring Altitude Chart (MVAC) development. Appendix A contains the criteria and guidance for radar procedures and must be used in place of the criteria contained in FAA Order 8260.3B, United States Standard for Terminal Instrument Procedures (TERPS), volume 1, chapter 10.

2. Audience. The primary audience for this notice is the National Flight Procedures Office, Air Traffic Facility Managers, and Air Traffic Airspace and Procedures personnel, who have the responsibility to develop and review Radar Approach Procedures and Vectoring Altitude Charts. The secondary audience includes Flight Standards and Air Traffic branches and divisions in the regions and in headquarters.

3. Where You Can Find This Notice. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avr.faa.gov. Operators and the public can find this notice at http://fsims.faa.gov.

4. Cancellation. This notice cancels and supersedes Flight Technology and Procedures Division, AFS-400, policy memorandum on interim criteria and guidance for Radar Procedures.

5. Disposition. We will permanently incorporate the information in this notice in FSIMS before this notice expires. Questions concerning this notice should be directed to the Flight Technologies and Procedures Division, AFS-400 at (405) 954-4164.

ORIGINAL SIGNED by
John M. Allen for

James J. Ballough
Director, Flight Standards Service

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Initiated By: AFS-420

Appendix A. Chapter 10. RADAR Procedures

10.0 GENERAL. This chapter applies to radar approach procedures and associated radar vectoring operations based on the use of ground radar systems. Three types of radar procedures are covered:

10.0.1 Precision Approach Radar (PAR). PAR is a radar system that graphically displays course and glidepath deviation and distance from touchdown information of sufficient accuracy, continuity, and integrity to provide precision approach capability to a runway.

10.0.2 Airport Surveillance Radar (ASR). ASR is a system that displays direction and distance information with enough accuracy, continuity, and integrity to safely provide radar vectoring capability for departures, arrivals, and en route operations, as well as nonprecision approach capability to a runway or airport.

10.0.3 Minimum Vectoring Altitude Chart (MVAC). A MVAC developed according to this standard is the primary tool to support obstruction clearance and radar vectoring by terminal facilities. A minimum IFR altitude chart developed under Order 7210.37, En Route Minimum IFR Altitude (MIA) Sector Charts, is the primary tool to support radar operations by en route facilities (see Order 7210.3, Holding Pattern Criteria, paragraphs 3-9-1 and 6-4-2 and/or the appropriate military directive for additional guidance). A MVAC specifies the lowest mean sea level (MSL) altitude at or above the floor of controlled airspace (see paragraph 10.5.6) that also provides *at least* the minimum required obstacle clearance (ROC) from terrain and obstacles. The MVAC may be used as a substitute for the initial and/or intermediate segment and feeder routes of an instrument approach procedure when minimum vectoring altitudes are compatible with the published procedure.

10.1 LOST COMMUNICATIONS PROCEDURES. Radar approach and departure procedures must include instructions for the pilot to follow in the event of lost communications with the radar controller. Alternate lost communications procedures must be established for use where multiple approaches are authorized.

10.2 RADAR MONITOR. ASR or PAR may be used to monitor aircraft flying a published approach procedure in order to increase safety and expedite air traffic flow. Radar monitoring is not a basis for ROC reduction; however, this does not preclude establishment of radar stepdown fixes in the published procedure for the purpose of permitting descent to a lower altitude. Order 8260.3B, volume 1, paragraphs 286, 287, 288, and 289 apply when using a radar stepdown fix to gain lower minimums.

10.3 PRECISION APPROACH RADAR. A PAR system provides glidepath and course guidance that meets the instrument landing system (ILS) performance standards contained in the International Civil Aviation Organization (ICAO) Annex 10.

10.3.1 Inoperative Components. Failure of direction or distance information renders the entire PAR system inoperative. Failure of the glidepath feature may revert the PAR to a nonprecision approach system and the nonprecision minimums specified in TERPS, volume 1, chapter 3, section 5 apply. In this case, apply the obstacle clearance requirements specified in volume 1, chapter 9, for localizer and localizer type directional aids.

10.3.2 Feeder Routes and Initial Approach Segments. ASR, area navigation (RNAV), or other navigation facilities may provide navigational guidance for feeder routes and initial segments. Apply the criteria provided in paragraph 10.5 to develop an MVAC when ASR is used as the primary means of navigational guidance. When other navigational systems/facilities are the primary means of navigational guidance, apply the criteria provided in the appropriate 8260-series order.

10.3.3 Intermediate Approach Segment. ASR, PAR, RNAV, or other navigation facilities may provide navigational guidance in the intermediate segment. The intermediate segment begins at the point where the initial approach course intercepts an extension of the final approach course (FAC) and continues along the inbound course to the precision final approach fix (PFAF). See TERPS, volume 3, paragraph 2.3.1 to determine initial/intermediate segment intercept limits.

a. Where ASR is the primary navigation source, the area is ± 3 nautical mile (NM) wide at the intermediate fix (IF) and connects to the total half-width of the final segment area at the precision final approach fix (PFAF). There is no secondary area.

b. Where RNAV or another non-radar navigation facility is the means of navigation, apply the intermediate criteria provided in the appropriate 8260-series order. The primary area connects to the precision ‘X’ surface area at the PFAF. The secondary area connects to the precision ‘Y’ surface at the PFAF.

10.3.4 Final Approach Segment. Criteria for the final approach segment are contained in TERPS, volume 3, chapter 3. The *minimum* PAR height above touchdown/threshold (HAT/HATh) is 200 ft for civil approaches, and 100 ft for military approaches.

10.3.5 Missed Approach Segment. Criteria for the missed approach segment are contained in TERPS, volume 3, chapter 3. Apply Category (CAT) II missed approach areas and obstacle clearance surfaces to military CAT I PAR approaches with HAT values less than 200 ft.

10.3.6 Simultaneous PAR Procedures. Where facilities and equipment are available to support the requirement, PAR approach procedures to parallel runways may be established. The criteria specified in TERPS, volume 3, appendix 2 must be used as a guideline in developing such procedures.

10.4 AIRPORT SURVEILLANCE RADAR. ASR may be used to provide primary navigation guidance within the operational coverage of the radar. ASR approaches may be established where the coverage and alignment tolerances specified in Order 8200.1, U. S. Standard Flight Inspection Manual, can be met and the runway threshold is *not more than 20 NM* from the radar antenna for straight-in approaches, or, the airport reference point is *not more than 20 NM* from the radar antenna for circling approaches.

10.4.1 Off-Route Vectors. Off-route vectors provide course guidance through feeder and initial route segments. Off-route vectors do not follow a specified ground track; therefore, they are based on a minimum vectoring altitude chart developed for the radar system used. Air route surveillance radar (ARSR) may be used to provide course guidance up to and including the intermediate fix. Vertical and lateral protections are provided by adherence to the *minimum* altitudes of the MVAC. Therefore, the entire area required for the MVAC is considered for obstacle clearance. The minimum vectoring altitude (MVA) of the sector in which the IF is located determines the minimum IF altitude.

10.4.2 Radar Patterns. Radar patterns are developed to provide course guidance through feeder and initial route segments when a specified ground track must be continuously followed to avoid obstacles or to accommodate local traffic flow requirements. The pattern must begin at an established fix or point that permits positive radar identification. The exact design of the pattern may vary, but must intersect the final approach course no later than the intermediate fix. Vertical and lateral protections vary by segment. Secondary areas are not applicable.

10.4.3 Initial Approach Segment. The initial approach segment begins at the position the aircraft is in when radar contact is established and the aircraft is advised that they are receiving vectors for a radar approach, and ends at the intermediate fix. Radar guidance is provided via pre-established patterns or off-route vectors.

a. Alignment. The initial approach course, or courses, whether established patterns or random vectors, must be selected to coincide with aircraft maneuvering capability and to satisfy air traffic flow requirements. The *maximum* intercept angle of the initial and intermediate segments is 90 degrees.

b. Area. Evaluate ± 3 NM (5 miles at distances ≥ 40 miles from the radar antenna) of the designated pattern course. The segment length must accommodate the altitude loss required by the **procedure** at the authorized descent gradient. Whenever it is necessary to deviate from established radar patterns, obstacle clearance must be based on an approved MVAC (see paragraph 10.5).

c. Obstacle Clearance. The ***minimum*** ROC is 1,000 ft. Paragraph 10.5.5 applies.

d. Descent Gradients. The ***optimum*** descent gradient is 250 ft/NM. The *maximum* is 500 ft/NM.

e. Altitude Selection. Establish altitudes in 100-ft increments. Altitudes may be rounded to the nearest 100-ft increment provided the rounded value provides at least the *minimum* required ROC. For example, 1,149 ft may round to 1,100 ft; and 1,150 ft must round to 1,200 ft.

10.4.4 Intermediate Approach Segment. An intermediate segment is not required provided the MVA at least 6 NM prior to the FAF is equal to or less than the FAF altitude. When an intermediate segment is required, establish the IF where the initial approach course intersects an extension of the final approach course (FAC). The intermediate segment extends along the intermediate course inbound to the FAF. The IF must be within 40 NM of the ASR antenna.

a. Alignment. The intermediate course is an extension of the final approach course.

b. Area. The width of the intermediate segment at the IF is ± 3 NM. It tapers to the width of the final approach area at the FAF. The segment length must accommodate the altitude loss required by the procedure. The *minimum* length of the intermediate segment is 1 NM. The *maximum* length is 15 NM. The *minimum* length depends on aircraft category and the intercept angle with the initial segment (see table 10-1 and figures 10-1 and 10-2). The *maximum* intercept angle is 90 degrees. The radar fix displacement tolerance specified in TERPS, volume 1, paragraph 286a applies for obstacle clearance assessment.

Table 10-1. Interception Angle VS Length of Intermediate Segment.

Maximum Angle of Interception (Degrees)	Minimum Length of Segment (Miles)
15	1
30	2
45	3
60	4
75	5
90	6

Note: This table may be interpolated; however, the absolute minimum length is 1 NM (see figure 10-1).

Figure 10-1. Minimum Segment Length.

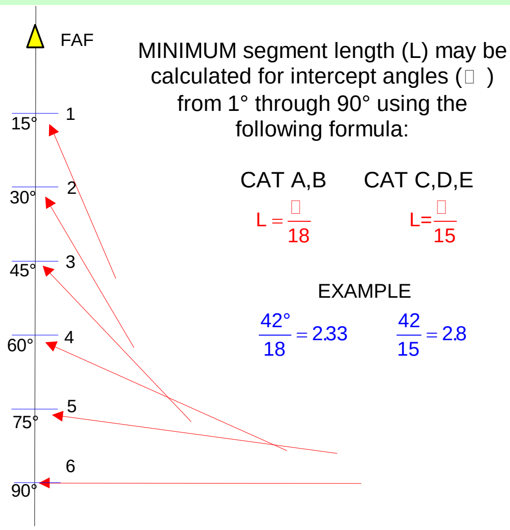
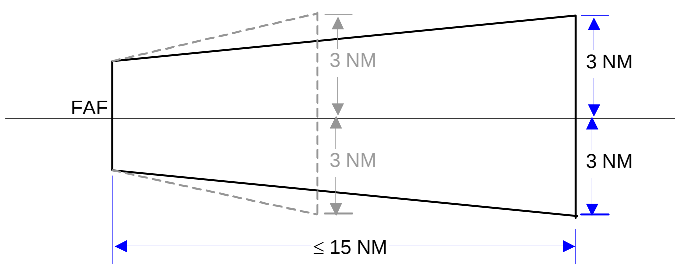


Figure 10-2. Intermediate Segment Area.



c. Obstacle Clearance. The *minimum* ROC is 500 ft. Evaluate and identify terrain as precipitous or non-precipitous using software that implements FAA-approved algorithms. Where precipitous terrain is identified, increase ROC values by the amount specified. Apply appropriate military directives in determining precipitous terrain additives for military ASR approaches.

d. Descent Gradient. The *optimum* descent gradient is 150 ft/NM. The *maximum* descent gradient is 318 ft/NM.

e. Altitude Selection. Establish altitudes in 100-ft increments. Altitudes may be rounded to the nearest 100-ft increment provided the rounded value provides at least the *minimum* required ROC. For example, 849 may round to 800 ft; and 850 ft must round to 900 ft.

10.4.5 Final Approach Segment (FAS). The final approach begins at the FAF and ends at the runway or missed approach point (MAP), whichever is encountered last. Apply the radar fix displacement factor specified in TERPS, volume 1, paragraph 286a for obstruction clearance.

a. Alignment. Align the FAC with the extended runway centerline for a straight-in approach, or to the center of the airport for a circling approach. When an operational advantage can be achieved, the FAC for circling approaches may be aligned to any portion of the usable landing surface.

b. Area. The final approach area is determined by joining the half-width of the primary area (½W_p) at the FAF and the runway landing threshold point (LTP) or missed approach point (MAP) using straight lines. Half-width values are determined by the following formula:

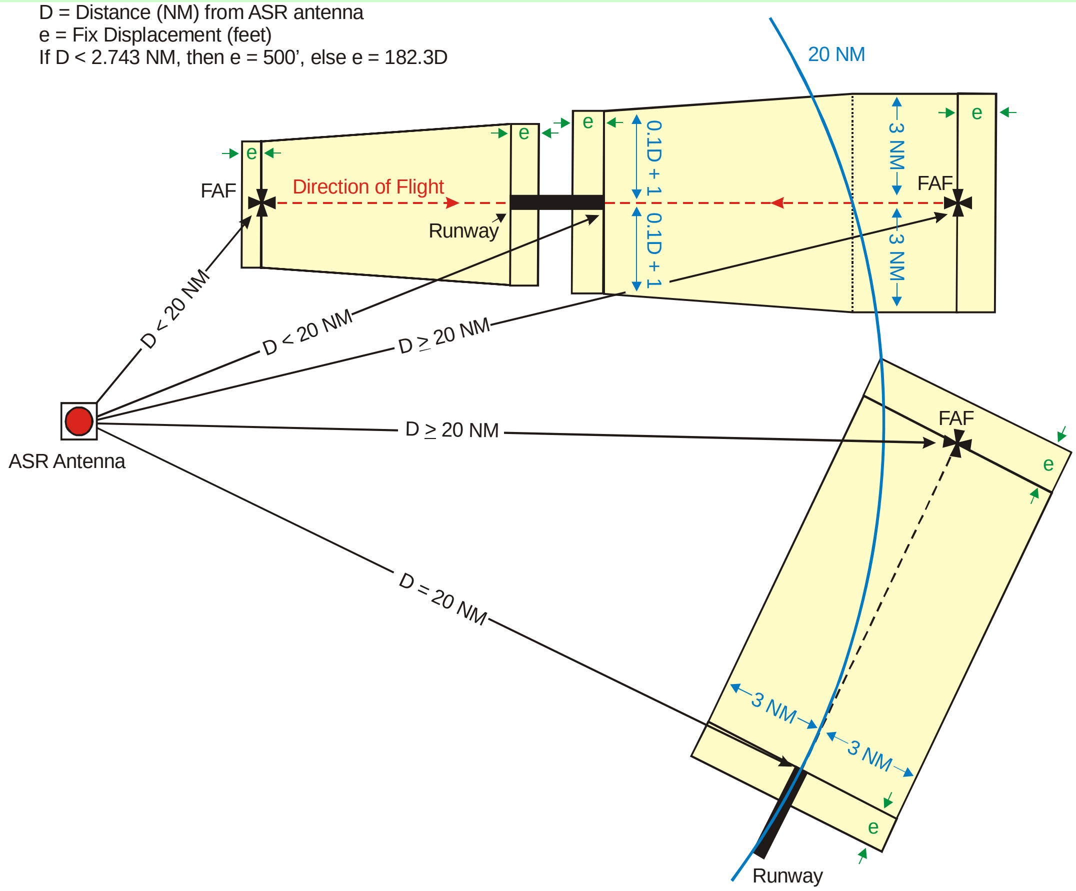
For D ≤ 20 NM	$\frac{1}{2}W_P = 01D + 1$
For D>20 NM	$\frac{1}{2}W_P = 3$

Where D = distance from radar antenna on FAC centerline.

The *minimum* length of the final approach areas is 3 NM. The *optimum* length is that required to provide a 318 ft/NM (3.0 degrees) descent gradient. The *maximum* length is 10 NM (see figure 10-3).

Note: Distances > 20 NM have a constant half-width of 3 NM - see figure 10-3.

Figure 10-3. ASR Final Approach Segment.



c. Obstacle Clearance. Apply at least 250 ft of ROC in the final approach area. For circling procedures, apply the ROC prescribed in TERPS, chapter 2, section 6 in the circling area. Evaluate and identify terrain as precipitous or non-precipitous using software that implements FAA-approved algorithms. Where precipitous terrain is identified, increase ROC values by the amount specified. Apply appropriate military directives in determining precipitous terrain additives for military ASR approaches.

d. Descent Gradient. The *optimum* descent gradient is 318 ft/NM, which approximates a 3.00° angle. The *maximum* is 400 ft/NM, which approximates a 3.77° angle. When the maximum descent gradient is exceeded, straight-in minimums are not authorized. The descent gradient is computed using the following formula:

$$DG = \frac{A}{L}$$

$$\theta = tan^{-1}\left(\frac{DG}{6076115}\right)$$

where:

A = FAF alt - (RWT elev + TCH) for straight-in
A = FAF alt - Lowest circling MDA for circling
L = FAF to RWT distance (NM) for straight-in
L = FAF to MAP distance (NM) for circling.

Use the precision TCH value if the runway is served by a precision approach. If not, use the value of the visual glide slope indicator (VGSI) serving the runway. If there is no VGSI, assume a 50-ft TCH for descent gradient calculations.

e. Stepdown Fix. Order 8260.3, volume 1, paragraphs 288 and 289 apply. When a stepdown fix is required in the final segment to gain lower minimums, make every effort to provide a stabilized descent gradient throughout the approach. Relocating the MAP (circling procedure) or FAF, or increasing the minimum altitude at the FAF or the stepdown fix are possible options; however, it is realized that airspace constraints, traffic flows, etc. may sometimes not allow a stabilized descent. Descent gradient criteria specified in paragraph 10.4.5d applies between the stepdown fix and TCH at the landing threshold for straight-in approaches or between the stepdown fix and the lowest circling minimum descent altitude (CMDA) for circling approaches.

f. Recommended Altitudes (RecAlt). Determine recommended altitudes at each mile on final approach. Determine RecAlt values using the following formula:

$$RecAlt = \mathbf{A} - \mathbf{DG}$$

where:

A = FAF altitude or last RecAlt

DG = Value from paragraph 10.4.5d above

Values less than MDA are not applicable. Round recommended altitudes to the nearest 20-ft increment. See the example below.

EXAMPLE

FAF = 2000', MDA=660, DG=311

6 NM altitude = 2000
5 NM recommmended altitude = 2000-311 = 1689 (1680)
4 NM recommmended altitude = 1689-311 = 1378 (1380)
3 NM recommmended altitude = 1378-311 = 1067 (1060)
2 NM recommmended altitude = 1067-311 = 756 (760)
1 NM recommmended altitude = 756-311 = 445 (not issued, < MDA)

g. RecAlt with Stepdown Fix. When a stabilized approach cannot be designed and two descent gradients are necessary, calculate RecAlt as above except use a second descent gradient beginning at the stepdown fix.

EXAMPLE

FAF=2000', MDA=640,

at FAF: DG=311, at 3 NM: 364

6 NM altitude = 2000
5 NM recommended altitude = 2000-311 = 1689 (1680)
4 NM recommended altitude = 1689-311 = 1378 (1380)
3 NM recommended altitude = 1378-364 = 1014 (1020)
2 NM recommended altitude = 1014-364 = 650 (660)
1 NM recommended altitude = 650-364 = 386 (not issued, < MDA)

10.4.6 Missed Approach Segment. See TERPS, volume 1, chapter 2, section 7. The missed approach point is on the final approach course not farther from the final approach fix than the runway threshold (first usable portion of the landing area for circling approach). The missed approach surface must commence over the MAP at the required height (see TERPS, volume 1, paragraph 274).

10.5 MINIMUM VECTORING ALTITUDE CHART. The MVAC is a tool developed for all terminal radar facilities that provide radar service and as deemed necessary for en route facilities. The MVAC, while designed to meet operational needs, must meet controlled airspace (see paragraph 10.5.6) and terrain/obstruction clearance requirements. The MVA is established regardless of radar system flight inspection results; it is the controller's responsibility to determine that a target return is adequate for radar control purposes.

10.5.1 Alignment. Develop the MVAC aligned to True North.

10.5.2 Areas. When a MVAC is required, develop the chart to cover the maximum displayable range of the radar system. If the area of air traffic control (ATC) responsibility is beyond the limits of the radar system, and if operationally required, apply the criteria in Order 7210.37 for the non-radar area. (USA, USN, and USAF: The MVAC maximum range may be modified.)

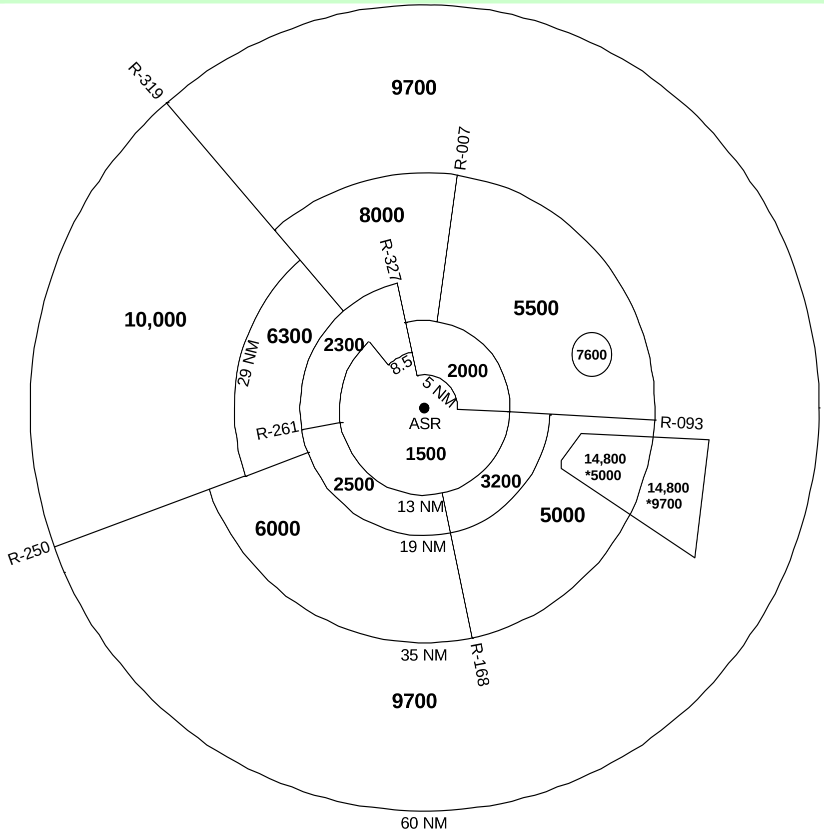
a. Sector Design. The MVAC may be sub-divided into sectors to conform to terrain and gain relief from obstructions in order to allow radar operations at lower altitudes if required. Except as noted below, there is no prescribed limit on the size, shape, or orientation of MVAC sectors as long as they are designed with consideration to aircraft maneuvering ability, air traffic flow requirements, and are large enough to permit vectoring. Design the sectors as simply as possible to ensure safety and simplicity in radar separation and sequencing applications. Where small contiguous MVA areas with different altitudes do not serve an operational need, consider combining them using the highest applicable MVA.

b. Isolating Prominent Obstructions. When the terrain/obstruction environment would permit a lower MVA except for significantly higher obstructions/terrain in a limited portion of one or more large sectors (i.e., very tall towers/antennas/buildings, isolated mountains, etc.), the sector(s) may be further sub-divided to gain relief. This is accomplished by creating an "isolation area," enclosing the volume of airspace over the obstacle(s) within the applicable 3 or 5 NM buffer. The isolation area is usually "buffer only" (has no defined volume of airspace within which aircraft may be vectored), and is provided to facilitate vectoring around or over the obstruction. The MVA established over the isolation area must provide the appropriate vertical clearance per paragraph 10.5.3, and must be higher than the MVA of the surrounding sector(s). Also, evaluate all other terrain/obstructions (except the feature being isolated) within 3 or 5 NM inward of the edge of the isolation area when determining the MVA(s) of the surrounding sectors.

c. Single Sensor Terminal Operations.

(1) Center MVACs for terminal operations based on a single ASR or ARSR system on the radar antenna. Bearings and arcs from the antenna or point-to-point lines using latitude/longitude coordinates may be used to define sectors (see figure 10-4).

Figure 10-4. Minimum Vectoring Altitude Chart (MVAC) for Terminal, Single-Sensor Operations.

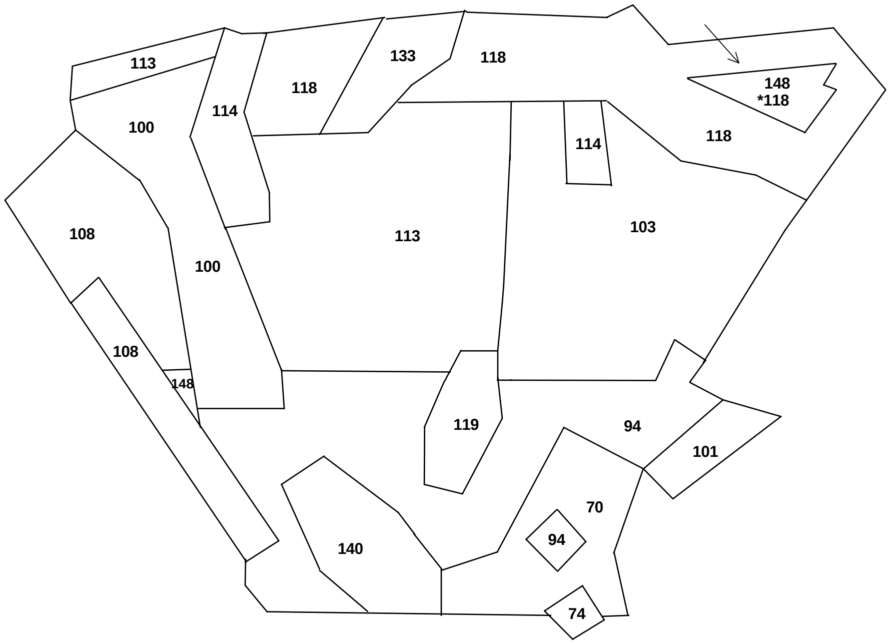


(2) MVACs may be developed from a specified point for full digital systems that allow display of different single sensor origins from a common point. The origin point must be documented in appropriate facility directives.

Note: Application of obstruction separation standards must be based on the actual antenna location-to-obstacle distance.

d. Multi-Sensor Terminal/En Route Operations. Point-to-point lines using latitude and longitude coordinates or arcs/circles center on a specific latitude and longitude may define sectors for MVACs based on a mosaic or fusion of multiple ASR/ARSR systems (see figure 10-5).

Figure 10-5. Minimum Vectoring Altitude Chart (MVAC) for Mosaic/Fusion Multi Sensor Radar Systems.



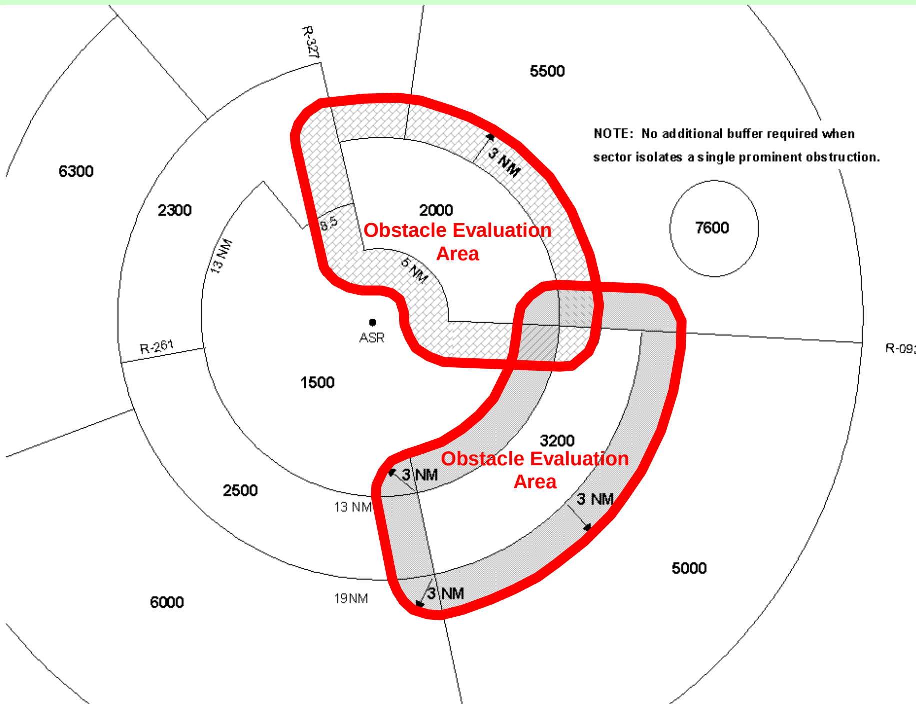
10.5.3 Obstacle Clearance. MVACs require the application of both lateral and vertical obstacle clearances. When developed in areas designated as mountainous under 14 CFR part 95, application of ROC may include adjustments for precipitous terrain. Evaluate and identify terrain as precipitous or non-precipitous using software that implements FAA-approved algorithms. Where precipitous terrain is identified, increase ROC values by the amount specified. The obstacle evaluation area (OEA) for any given sector includes a buffer corresponding to the system used and/or distance from the radar antenna.

a. Lateral Obstacle Clearance. The dimensions of the OEA for each sector depend on whether the radar system is single or multi-sensor. The entire obstacle evaluation area includes the basic area and associated buffer area.

Note: Do not apply radar fix-displacement tolerance to the OEA.

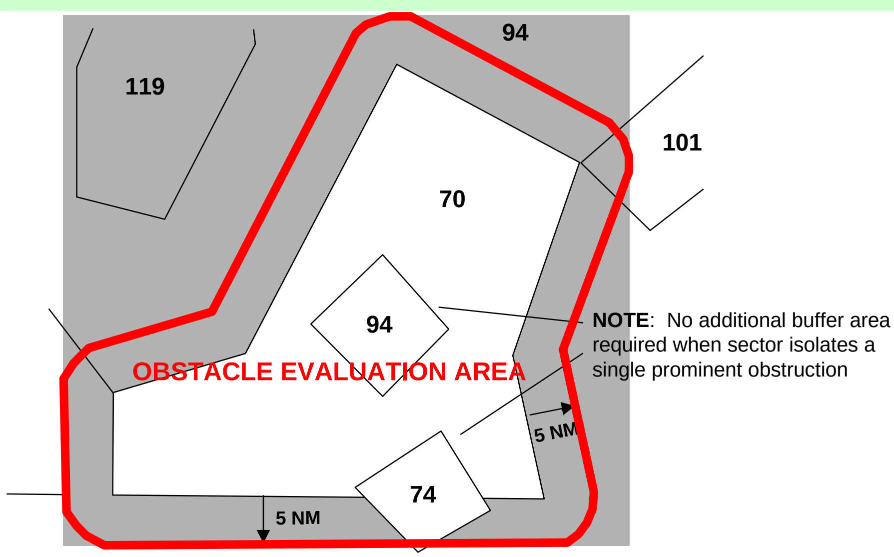
(1) Single Sensor Systems. Establish sector boundaries at least 3 NM (5 NM at distances ≥ 40 NM from the radar antenna) from all obstructions that would impact the sensor MVA. Therefore, the OEA for a given sector includes the appropriate buffer (see figure 10-6).

Figure 10-6. MVAC Sector Buffer Areas.



(2) Mosaic/Fusion and Multi-Sensor Systems. Establish sector boundaries at least 5 NM from all obstructions that would impact the sector MVA. Therefore, the OEA for a given sector includes a 5 NM buffer outside the sector boundary (see figure 10-7).

Figure 10-7. Mosaic/Fusion and Multi Sensor Buffer Areas.



b. Vertical Obstacle Clearance. Apply at least 1,000 ft of ROC over obstructions within a sector and the associated lateral buffer area (see paragraph 10.5.3a). Apply at least 2,000 ft of ROC over obstructions within areas designated as mountainous in 14 CFR part 95, subpart B. Allowance for precipitous terrain is not mandatory; however, ROC must not be reduced in areas where precipitous terrain is a known hazard.

c. Altitude Selection. Round sector altitudes to the nearest 100-ft increment unless rounding up is necessary to provide the required obstacle clearance within the sector and associated buffer area. Existing obstructions where less than minimum ROC has been applied due to the practice of rounding altitudes to the nearest 100-ft increment, to achieve a cardinal or 500-ft MVA sector altitude, may be retained. New obstructions must adhere to obstacle clearance standards.

10.5.4 Obstacle Considerations.

a. Adverse Terrain Assumption. Apply an adverse terrain assumption where topographic contour lines or spot elevations marked "+/-" are identified as controlling obstacles. The minimum adverse terrain assumption is one-half the contour interval; e.g., if the contour interval is 500 ft, the adverse terrain assumption will be 250 ft. Adverse terrain assumptions are not required when terrain is depicted as a spot elevation or benchmark without the "+/-" annotation. Example: The highest terrain within a sector is a 700-ft contour line and contours are depicted at 250-ft intervals. The considered terrain elevation is 825 ft. (NOTE: USAF—see appropriate USAF directive.)

Note: Referencing larger scaled maps for specific areas may reduce the impact of excessive adverse terrain assumptions.

b. Digitized Terrain. When digital terrain data sources that use elevation postings in lieu of contour lines; e.g., digitized elevation models (DEMs) are used to support automated MVAC development, an adverse terrain assumption is not required. Use the DEM value.

c. Adverse Assumed Obstacle (AAO). Add 200 ft to all terrain values to account for natural vegetation growth, uncharted cell phone towers, buildings, and other manmade obstructions not accounted for under part 77. The AAO is added to adverse terrain assumptions or the DEM value to ensure proper obstruction clearance. (NOTE: USAF – see appropriate USAF directives).

Example 1:

The controlling obstruction for a sector is a 900-ft contour and the contour interval is 100 ft. The considered AAO elevation is 1,150 ft (900+50+200).

Example 2:

The controlling obstruction for a sector is a 3,014 ft spot elevation. The considered AAO elevation is 3,214 ft (3,014+200).

10.5.5 ROC Reductions. ROC may be reduced where lower altitudes are required in designated mountainous areas (DMAs) *only* to achieve compatibility with terminal routes, or to permit vectoring to an instrument approach procedure, and precipitous terrain is not a factor. Evaluate and identify terrain as precipitous or non-precipitous using software that implements FAA-approved algorithms. To determine the point at which the MVA ROC reduction is authorized, apply a 250 ft/NM gradient outward from the IF, and upward from the IF altitude until reaching the point where 2,000 ft of ROC is operationally acceptable. Apply reduced ROC as follows:

a. ASR. No less than one thousand feet (1,000 ft) of ROC may be applied.

b. ARSR. No less than one thousand five hundred feet (1,500 ft) or one thousand seven hundred feet (1,700 ft) of reduced ROC may be applied over terrain under TERPS, volume 1, paragraph 1720b(1). One thousand feet (1,000 ft) of reduced ROC may be applied over manmade structures under TERPS, volume 1, paragraph 1720b(2). Both paragraphs are applied and the higher value determines the MVA.

10.5.6 Controlled Airspace. Minimum vectoring altitudes must not be below the floor of controlled airspace and should provide a 300-ft buffer above the floor of controlled airspace. In some cases, this application will result in an exceptionally high MVA; e.g., in areas where the floor of controlled airspace is 14,500 MSL. When operationally required to vector aircraft in underlying Class G (uncontrolled) airspace, two MVAs may be established. The primary MVA must be based on obstruction clearance and the floor of controlled airspace. A second, lower MVA, that provides obstruction clearance, may be established only for those instances when air traffic control is allowed to vector in uncontrolled airspace. The obstruction clearance MVA must be uniquely identified; e.g., by an asterisk (*). The 14,800 ft MVA sector in figure 10-4 provides an example of this application. Do not consider buffer areas for controlled airspace evaluations.

Appendix B. Administrative Information

1. Distribution. We will distribute this notice to the Division level in the Flight Standards Service in Washington headquarters, including the Regulatory Support Division at the Mike Monroney Aeronautical Center; to the branch level in the Regional Flight Standards divisions; and to all Flight Standards District Offices.

2. Background. This document is a safety initiative to resolve recent issues surrounding the fidelity of FAA MVACs and to standardize methodologies to determine obstruction clearance. Current pieces of criteria are located in several different directives; e.g., latest editions of Orders 8260.3; 8260.19, Flight Procedures and Airspace; and 7210.3, Facility Operation and Administration. Consolidating these criteria into one document will provide single-source guidance to both air traffic control and instrument procedure specialists alike. It will also provide the opportunity to resolve criteria/policy contradictions and varying applications. In today's air traffic control system, radar vectors are the most used method to control traffic, yet the criteria supporting the underlying infrastructure, the MVAC, is the least developed criteria in Order 8260.3. Immediate action is necessary to correct this deficiency.