

Instrument Approach Procedures

Types of Approaches

- Non-P _____ – IAP that provides lateral navigation guidance (VOR, NDB, RNAV, GPS, Localizer, SDF, LDA, ASR)
- P _____ – IAP that gives both vertical and lateral navigation guidance (ILS, PAR, MLS) (sometimes LDA and RNAV)
- V _____ – ATC gives vectors and provides a method for intercepting the published final approach course
- F _____ -Procedure – The pilot is responsible for following published procedures to align the aircraft with the final approach course, usually performed in a non-radar environment and includes a course reversal
- Terminal Approach – Primary nav aid located on field defines missed approach point
- Timed Approaches – Timing from a specified fix defines missed approach point
- S _____ – When an IAP is aligned within 30° of the runway centerline
- _____ Procedure – Instrument approach to a runway with a published sidestep procedure to a different, parallel runway
- C _____ – An approach not aligned within 30° of a runway that requires circling to land
- M _____ – Procedure used when landing is not possible
- V _____ – An approach where the pilot follows normal VFR rules
- C _____ – Accomplished by visual contact with the ground, must be requested by the pilot, requires at least one mile of visibility and clear of clouds
- P _____ – Precision approach procedures published for parallel runways

Approach Segments

- F _____ Route – A link from the enroute phase to the approach phase
- I _____ Segment – Provides a method of aligning with the approach course
- I _____ Segment – Starts when aligned within 30° of the approach course
- F _____ Segment – Provides safe navigation to a point where visual references are required to continue the approach to a landing
- M _____ Segment – Provides safe navigation from the missed approach point to where you can shoot the approach again or continue to another airport

Fixes

- _____ – (IAF) where an instrument approach begins
- _____ – (IF) turn to align the aircraft within 30 degrees of the approach course
- _____ – (FAF) where the descent to the airport begins
- _____ – Fix inside of the FAF that allows for lower MDA if identified

Procedural Points

- _____ – (MAP) where a decision is required for further descent or executing a missed approach procedure (DA (or DH) on a precision approach) (time, DME, radar, station passage, or a fix on a non-precision approach)
- _____ – (VDP/VAP) the point on some non-precision approaches after which a pilot can make a normal 3° descent if visual contact is made

Altitudes

- Airport _____ – The highest point of an airport's usable runways
- _____ – (TDZE) the highest elevation in the first _____ feet of the landing surface
- _____ – (HAT) measured from the TDZE or the threshold elevation
- _____ – (HAA) measured from the official airport elevation
- _____ – (MVA) ATC must assign altitudes at or above this altitude
- _____ – (MSA) for emergency purposes only, provides obstacle clearance, provides _____ feet obstacle clearance within _____ NM of an indicated facility.
- _____ – (TAA) for GPS: an aircraft can descend here to begin approach
- _____ – (TCH) the altitude over the threshold when established on the glide slope centerline
- _____ – (MDA) the lowest altitude (MSL) permitted on a _____ approach until the runway environment is in sight.
- _____ – (MDH) similar to the MDA, but measured in height AGL
- _____ – (DA) the altitude in a _____ approach at which an immediate decision must be made to continue the approach or to execute a missed approach
- _____ – (DH) similar to the DA, but measured in height AGL

Landing Minimums

- Landing Minimums _____ – _____ and _____ restrictions for an IAP
- _____ – (RVR) What a pilot from a moving aircraft sees when looking down a runway end, based on the measurement of a _____ and reported in hundreds of feet.

Aircraft Approach Categories (V_{REF} or $1.3 V_{SO}$)

- Category A: _____ Knots
- Category B: _____ Knots
- Category C: _____ Knots
- Category D: _____ Knots
- Category E: _____ Knots

Descent below MDA(H) or DA(H) and landing requirements:

- Final confirmation of gear down and locked
- Visibility as published
- Normal rate of descent using normal maneuvers

If the approach lighting system is in sight:

You may descend within _____ feet of the touchdown elevation

Further descent (below that) requires the "runway environment" in sight:

R _____ side row bars or red terminating bar on approach lights (ALFS-I & II)

T _____

T _____ marking

T _____ lights

T _____ z _____ or t _____ z _____ markings

T _____ z _____ lights

R _____ or _____ markings

R _____ lights

R _____

V _____

IFR Alternate

Does the destination have an approach? (if not, an alternate is required)

Does the destination meet the 1-2-3 rule?

1 _____ to 1 _____ ETA

2 _____ ceilings

3 _____ of visibility

Minimums for an Alternate

Standard alternate minimums

Precision approach: _____ foot ceilings & _____ miles visibility

Non-precision app (non-GPS): _____ foot ceilings & _____ miles vis.

No approach: descent and land from _____ in basic _____

Non-standard alternate minimums

Published with approach charts

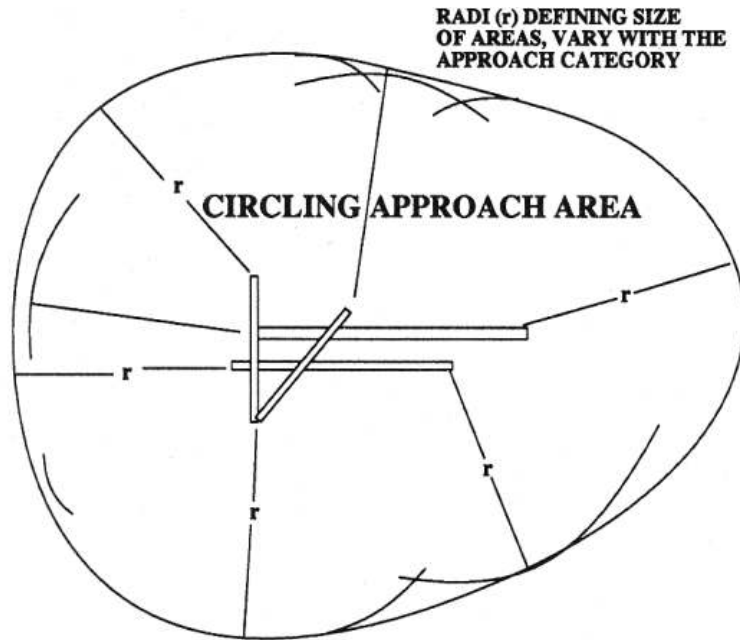
Alternate not authorized

Circling Approaches

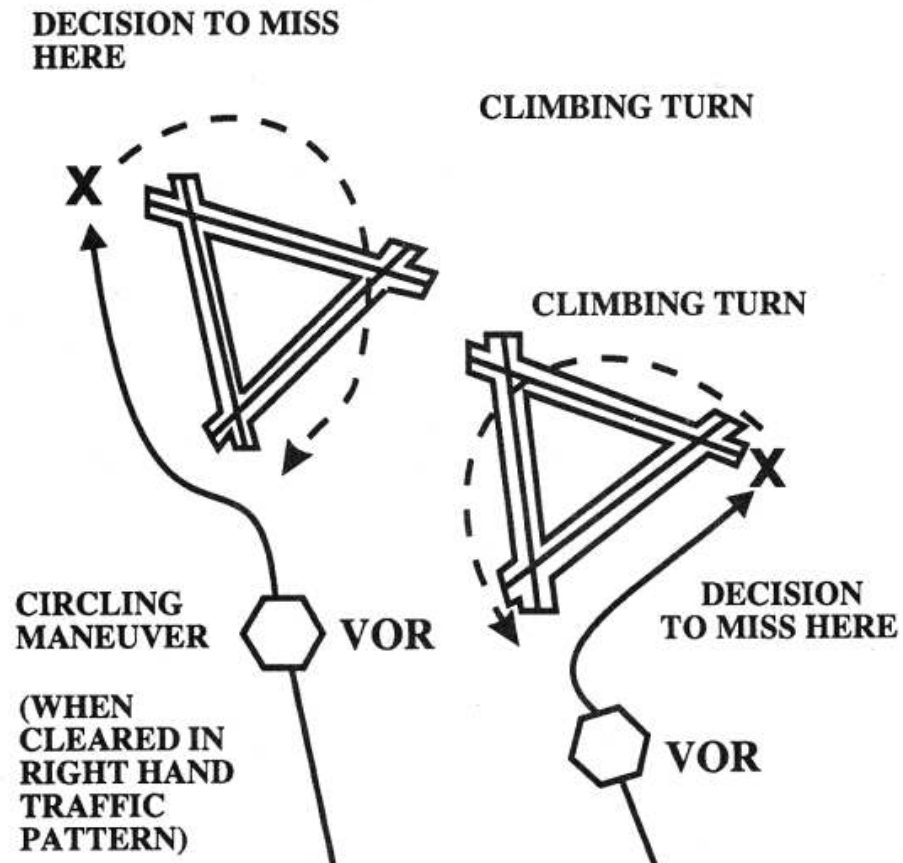
CIRCLING APPROACH AREA RADII

Approach Category	Radius (Miles)
A	1.3
B	1.5
C	1.7
D	2.3
E	4.5

Circling Approaches, continued



Missed Approaches from Circling



Timed Approaches from a Holding Fix

