

Flight Lesson: Precision Approach

Objectives:

1. exhibit knowledge of the elements related to Precision Approach Procedures
2. understands the different terminology and procedures in a Precision vs Non-Precision approach
3. ability to read, interpret, and fly precision approach plates correctly

Schedule:

Activity	Est. Time
Ground	1
Simulator	2
Debrief	0.25
Total	3.25

Recommended Readings:

IFH	Ch. 7: 7-34 to 7:36: WAAS, LAAS
	Ch. 7: 7-37 to 7-46: ILS, advanced approach systems
	Ch. 7: 7-49 to 7-51: Radar navigation

Elements Ground:

• Precision Approach Basics

• Types

- ILS
 - WAAS/LAAS
- LPV
 - APV - appr w/ Vert Guidance
- MLS

• ILS Components

- Localizer (End of Rwy)
 - course width: 3-6° usually 5°
 - coverage:
 - 35° w/in 10 NM
 - 10° w/in 18 NM
 - radiates signal in both directions
 - Identified with 1 and 3 letter ident
 - Aligned w/in 3° of rwy
- Glideslope (side of rwy)
 - appr 1.4° height
 - sited for 55' TCH
- OM
 - 4-7 miles out, colocated w/FAF
 - blue light (dash dash)

- MM
 - 3-6k ft out, appr DH
 - amber light (dot dash)
- IM
 - between MM and threshold
 - white light (dot dot)

• **DH vs DA**

• Flying the Precision Approach

- Approach Briefing
- Aircraft pre-configuration
- At FAP
 - descent rate rule of thumb:
 - appr speed/2 + add zero
- Pitch & Power Control
- Rate of Changes?
 - half standard rate turn
 - max 5° corrections
- MAP = DH

Elements Sim:

- ILS Approaches
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