

FAA Performance Improves Accident Statistics

October 2006

Federal Airways & Airspace[®]

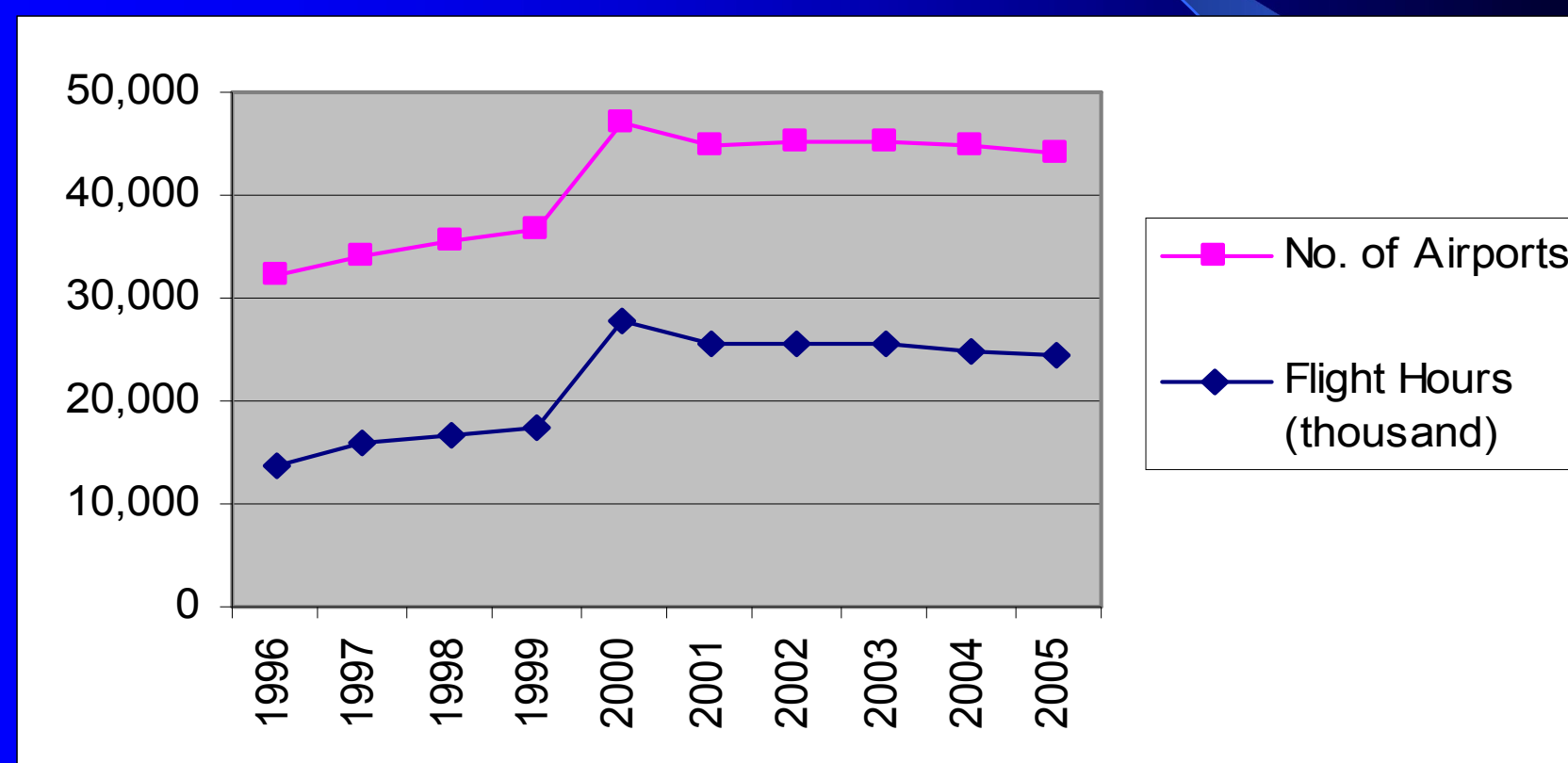
National Airspace System

- 14,494 Instrument Flight Procedures (as of 8/3/2006)
 - Over 1,000 Instrument Landing System (ILS) procedures
 - Over 1,700 Non-Directional Beacon (NDB) procedures
 - Over 2,700 VHF Omni-Directional Range (VOR) procedures
 - Over 3,500 Global Positioning System (GPS)/Area Navigation (RNAV) procedures
- The FAA performs approx. 30,000 OE/AAA studies yearly
 - Over 1,000 feasibility studies per year are performed for pending procedure actions.
- 114,307 known aeronautical obstacles (as of 9/2006)



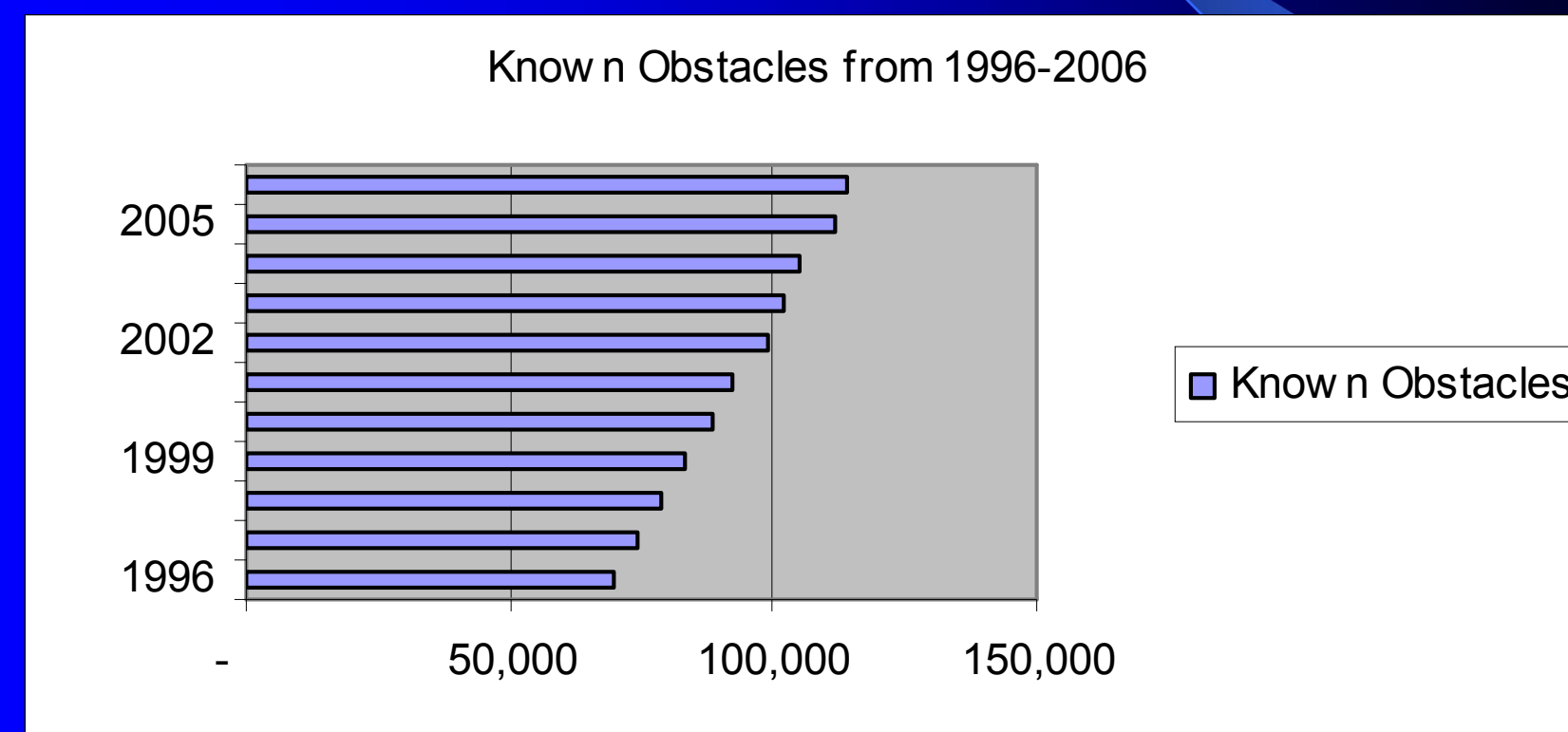
What is Happening?

Number of US Airports continues to increase while the number of flight hours is leveling off



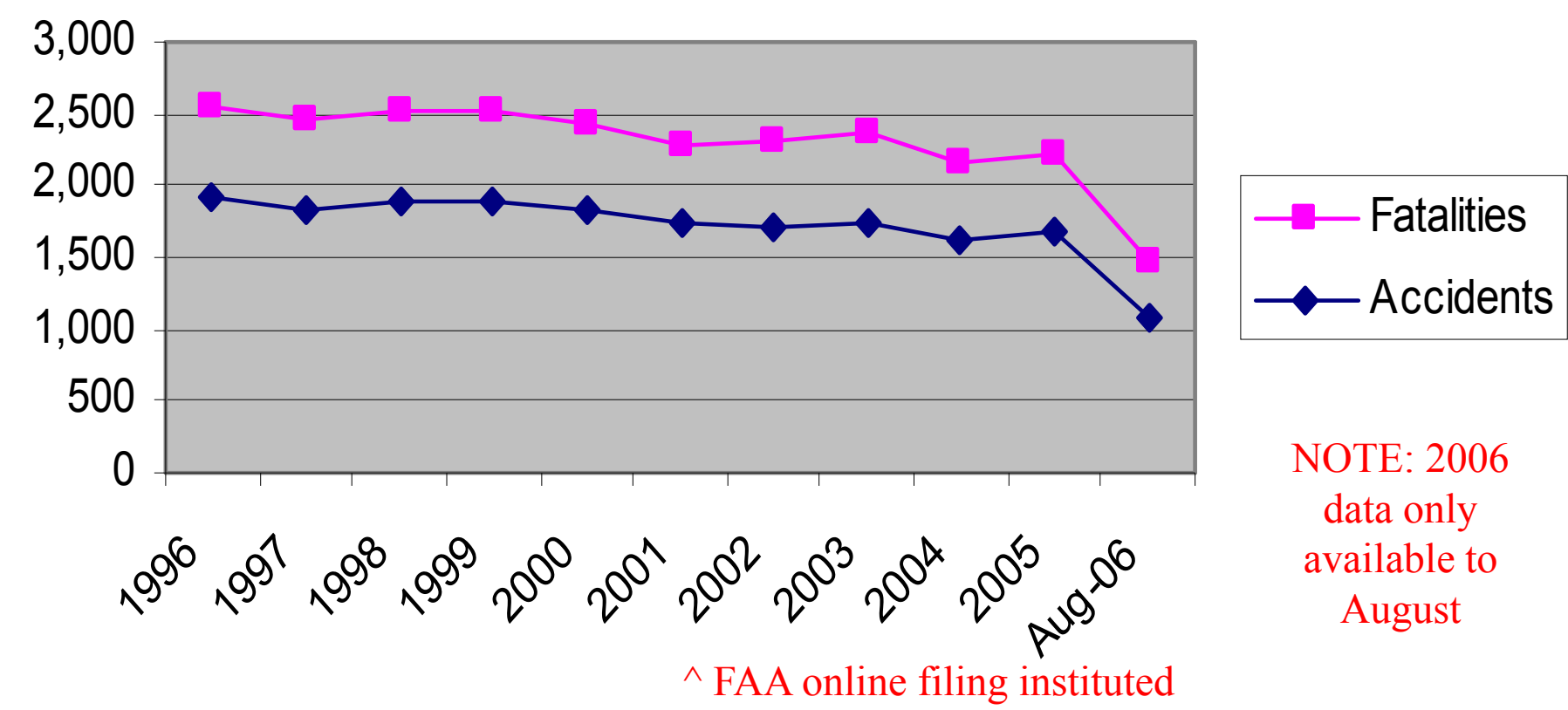
<http://www.ntsb.gov/Aviation/Table10.htm>

Number of **known obstacles** increased by approximately 6% for the first 5 years of the last decade and continues to increase approx. 3 to 4% per year

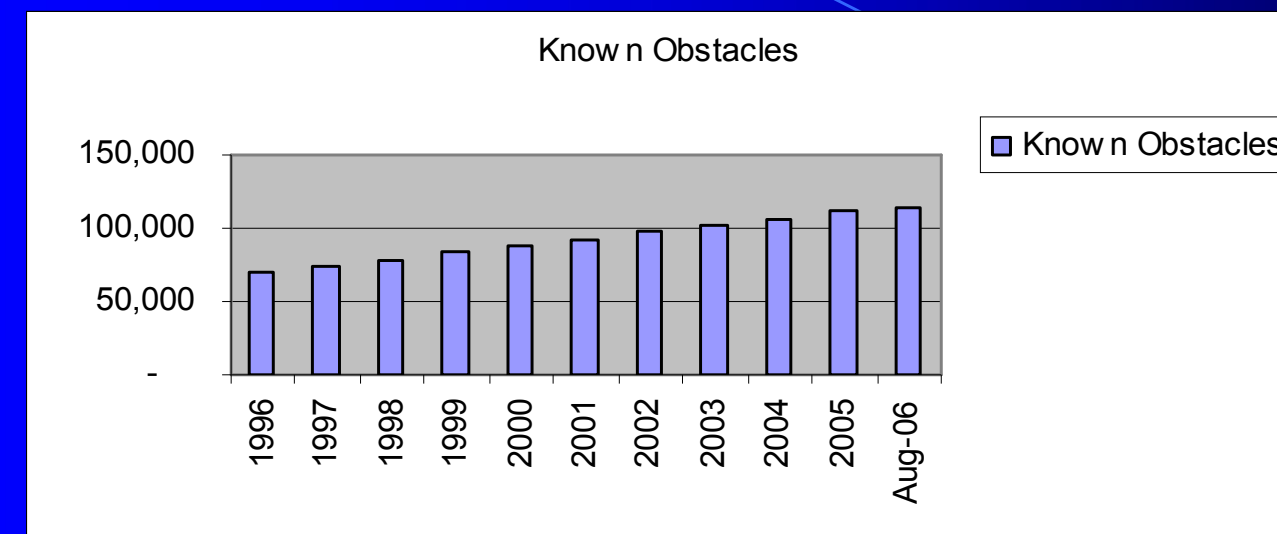


<http://www.ntsb.gov/Aviation/Table10.htm>

Accidents remained relatively the same from 1996-2000, fluctuated slightly from 2001-2003 and decreased steadily from 2003-2006

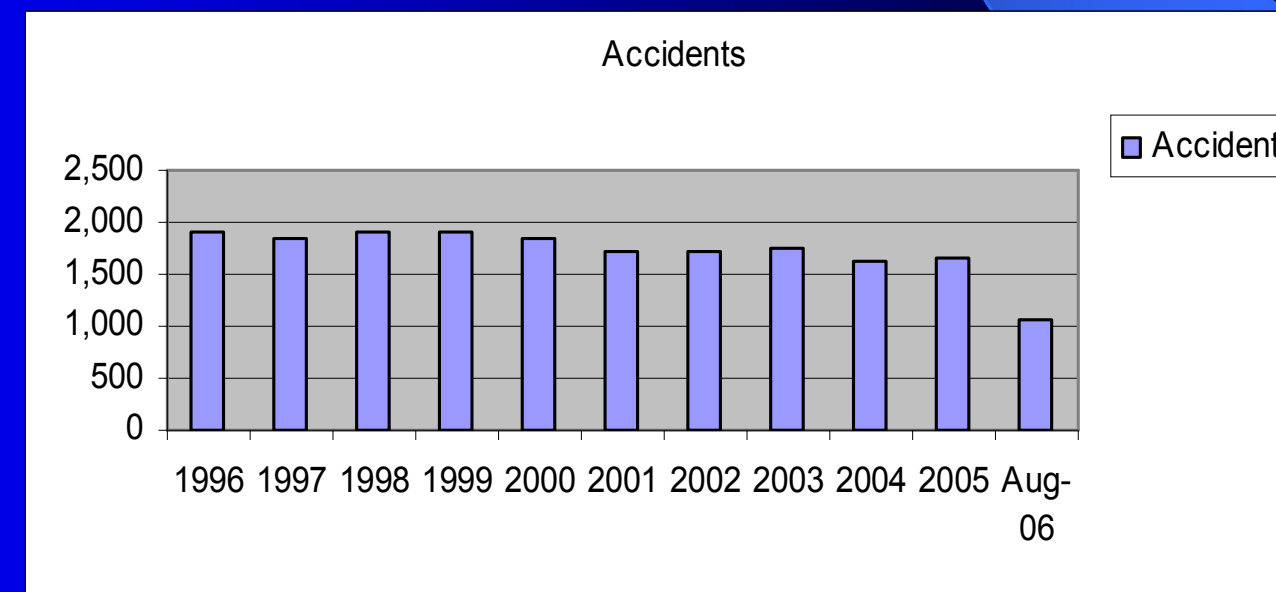


Accidents VS Known Obstacles



**Know
obstacles
have
increased**

**Accidents
have
decreased**



What changes have occurred to make this decrease in accidents happen?

- The FAA has:
 - Increased flight restrictions after 9/11/2001
 - Instituted online filing
 - Better record and data keeping
 - Robust tools for internal cases analysis
 - Faster turn-around time for determinations
 - Increased the number of flight procedures

Federal Airways & Airspace[®]
has provided Airspace[®]
training for the general public

Federal Airways & Airspace[®] Airspace Training

- Classes began 1998
- Approximately 400 students have received training in Airspace[®], TERPS[®] and basic EMI
- Classes are 1 week
- Estimated 95% success rate

Airspace[®] Training

- Airspace[®] Theory
 - Airspace Tools
 - Accuracy Standards
 - Latitude/Longitude and Direction
 - FAA ACT of 1958
 - FAA Publications (AIM, OC Charts, FD & IAP)
 - Marking and Lighting
 - FAR Part 77
 - Notice Standards
 - Obstacle Standards
 - FAR Part 77 Analysis
- Aeronautical Study Process
 - FAA Organization (AT/AF/FS/AP)
 - iOE/AAA Software

Airspace[®] Training --Continued

- Airports
 - Runway Types
 - Imaginary Surfaces
 - FAR 77.23 (Obstruction/TERPS/MOCA)
 - FAR 77.25
 - VFR Traffic Pattern Airspace
 - EMI (sighting criteria)
 - Analysis Reports
 - Airports & Part 77
 - VFR
 - Airway
 - Obstacle
 - ASR
 - Navigation/Communication
 - Private Airport Analysis

Airspace[®] Survey

- Airspace[®] Survey
 - Topographic Maps
 - Aerial Photographic & Topographic Overlay
 - Display
 - Airports & Runways
 - Obstacles & Navigation Facilities
 - Obstacle Surfaces
 - TERPS Surfaces
 - Elevation
 - Drawing Tools

TERPS[®] Training

- TERPS[®] Theory and Tools
- FAR 77.23(a)(3)
- Aeronautical CAD Graphical Environment
- Display
 - Airports (Public & Private)
 - Navaids
 - Obstacles (NACO & ASR)
 - Waypoints
- Boundary
 - Roads
 - State & County
 - Airport Property
 - Floor plan of building
 - Property development area

TERPS[®] Training

- Draw
 - Standard Drawing Tools
 - Elevation tool
 - Runway tool
 - FAR Part 77 tools
- TERPS[®] Tools
 - IAP – Drag & Drop
 - Initial Climb Area
 - VFR Traffic Pattern
 - Fix Error
 - Remote Altimeter
 - IAP Manager

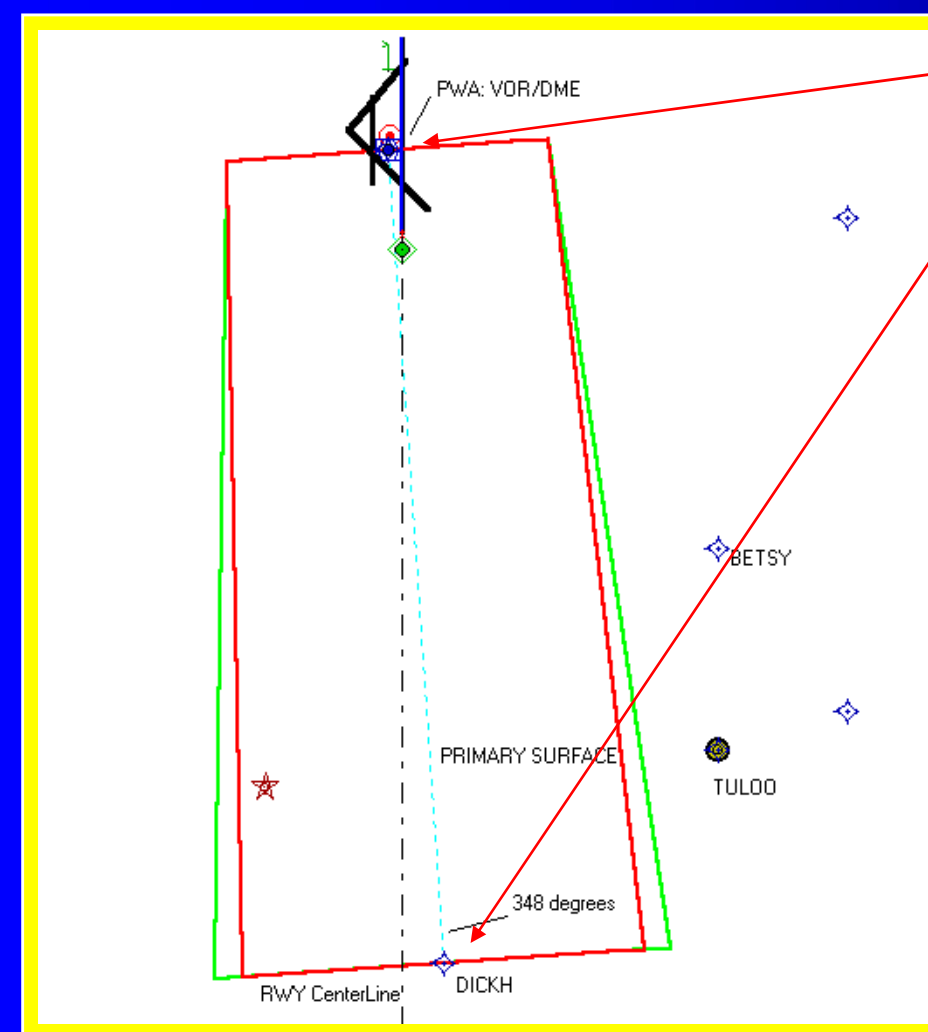
TERPS® Training

- TERPS® Manager Version
 - Unlimited alternate airport configurations
 - Add runway
 - Runway extension
 - What if capability
 - Object management
- How to read Instrument Approach Procedure charts
- Work problems
- Find Alternate Location
- Be Good Neighbor
- Airspace Library (Hyperlink)
- Work Problems

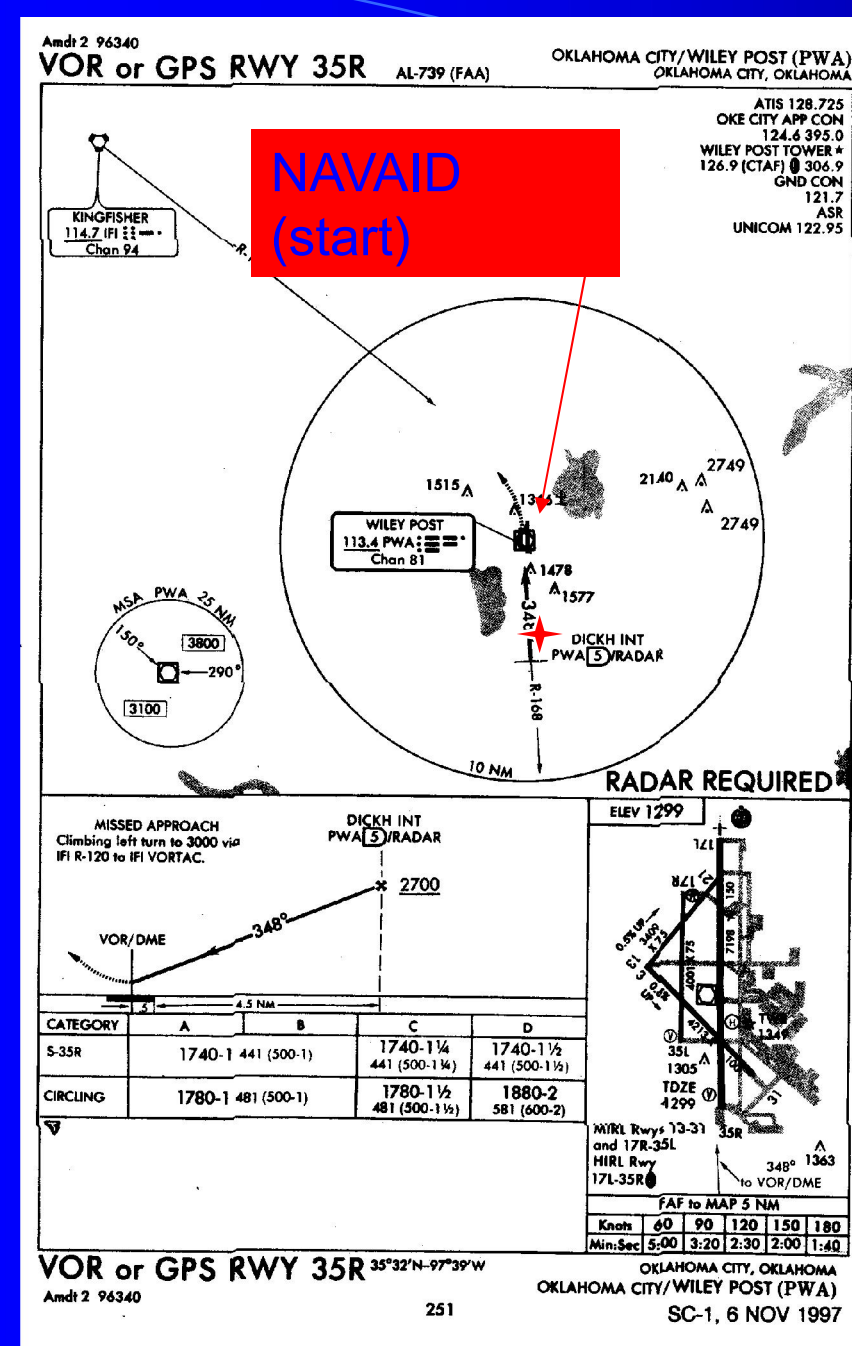
Non-precision Instrument Approach

- Tower Location
 - Latitude: 35-28-04
 - Longitude: 97-39-46
- Ground Elevation: 1224' AMSL
- Tower Height: 307' AGL
- Tower Overall Height: 1531' AMSL

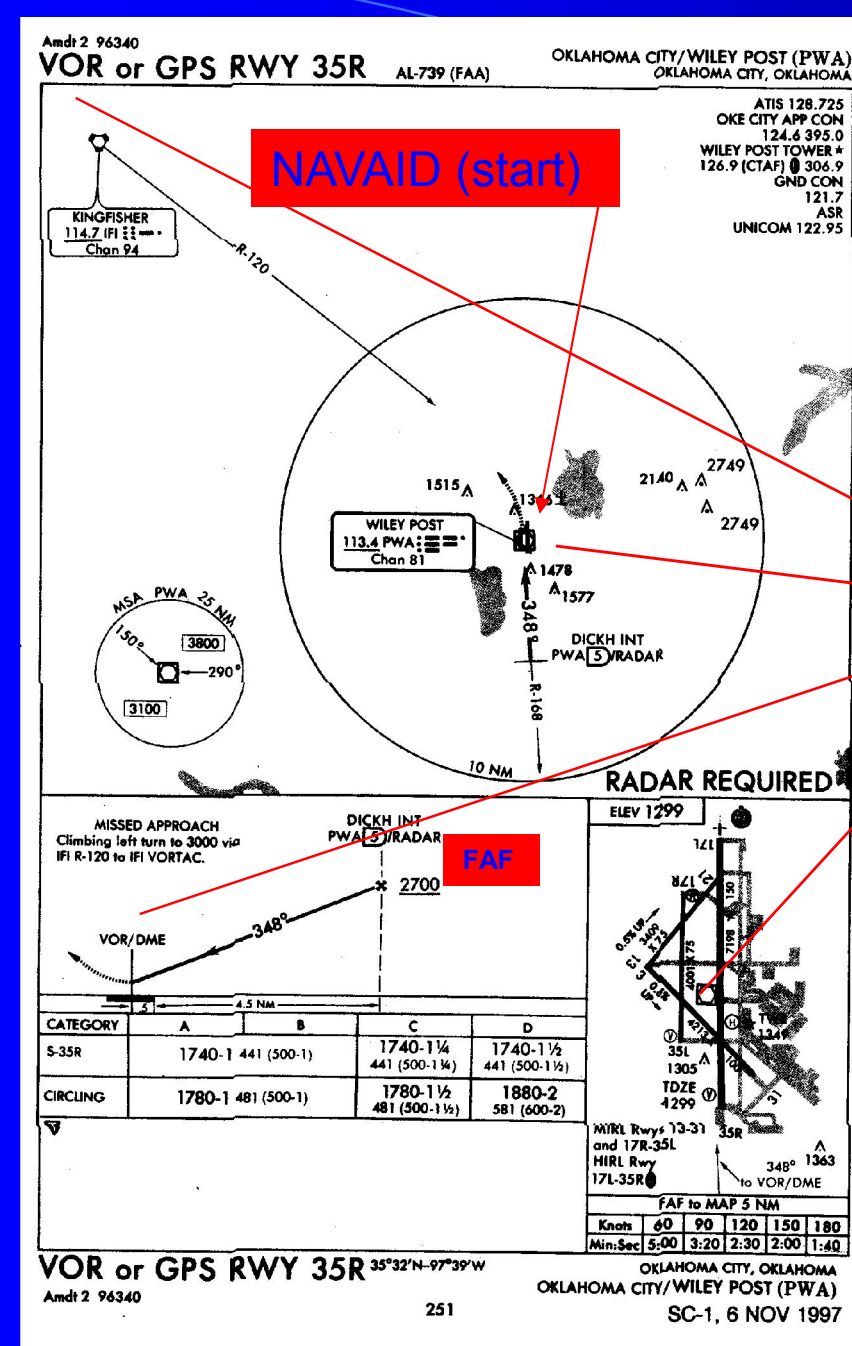
IAP Draw - VOR w/ FAF (On Airport)



- Begin IAP at the PWA VOR
- Click and Drag to FAF
 - Waypoint (DICKH)
 - Distance (5nm from VOR)
- Red Trapezoid is Primary Area
- Green Trapezoid is Secondary Area



- Located inside Primary Area of Runway 35R VOR Approach
- MDA = 1740'
- FAF 5 NM from VOR/DME
- FAF Waypoint "DICKH"
- Inbound Course Bearing 348°
- MDA - ROC = Maximum AMSL
- 1740 - 250 = 1490' AMSL



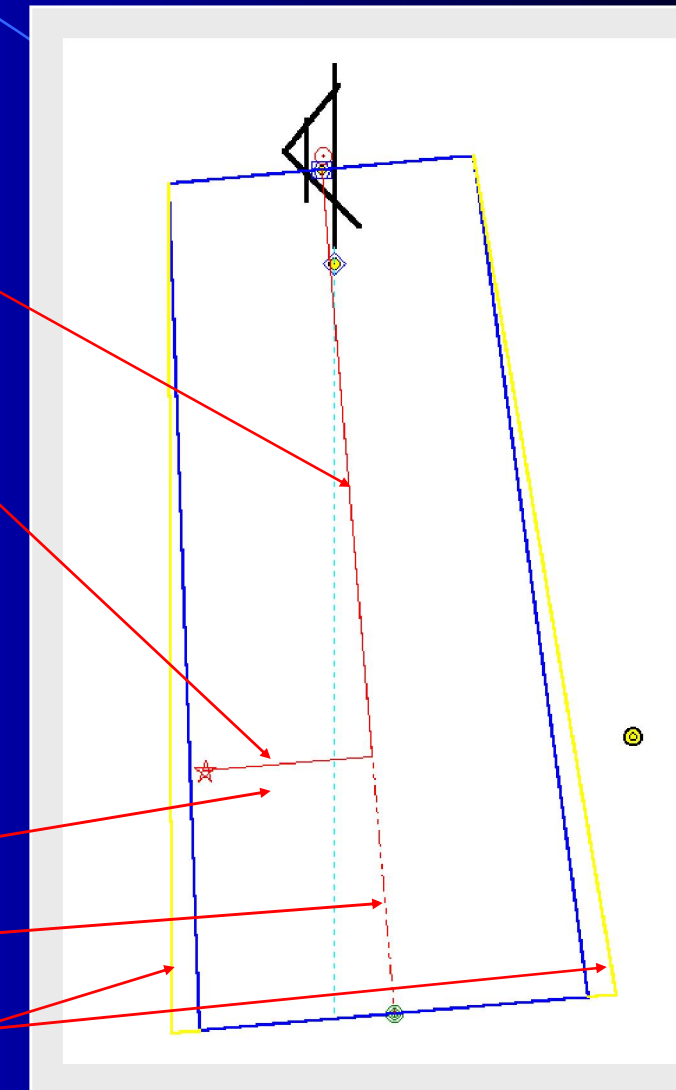
VOR w/ FAF (on airport)

- Draw Menu
- IAP
- VOR with FAF
- VOR, VORTAC, VOR/DME, TACAN. NDB always start at NAVAID. Click and Drag to FAF or beginning of course.

Results

VOR Straight-In Approach Runway 35R

Study Position	Off Set
Latitude: 35-28-4	Distance from start of approach surface: 23226
Longitude: 97-39-46	Distance over from course center line: 6690
<input type="button" value="Switch"/>	
Elevation (feet)	
Ground: 1224 AMSL	
Height: 307 AGL	
Over All: 1531 AMSL	
	Straight-In Approach Area
	Primary Maximum AMSL (ft): 1490
<input type="button" value="Print"/>	
<input type="button" value="Cancel"/>	



Primary Area

Course

Secondary Area

Company Summary

- 22 years in business
- First Windows version of software 1998
- Located in Satellite Beach, FL
- Provide software solutions, consulting services & expert witness testimony to various:
 - Telecommunications companies
 - Building & construction firms & developers
 - Local Governments

www.airspaceusa.com

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