

Approaches



Presentation to: North and South Dakota Aviation Users

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Date: October 27-28, 2009



Federal Aviation
Administration



Approaches

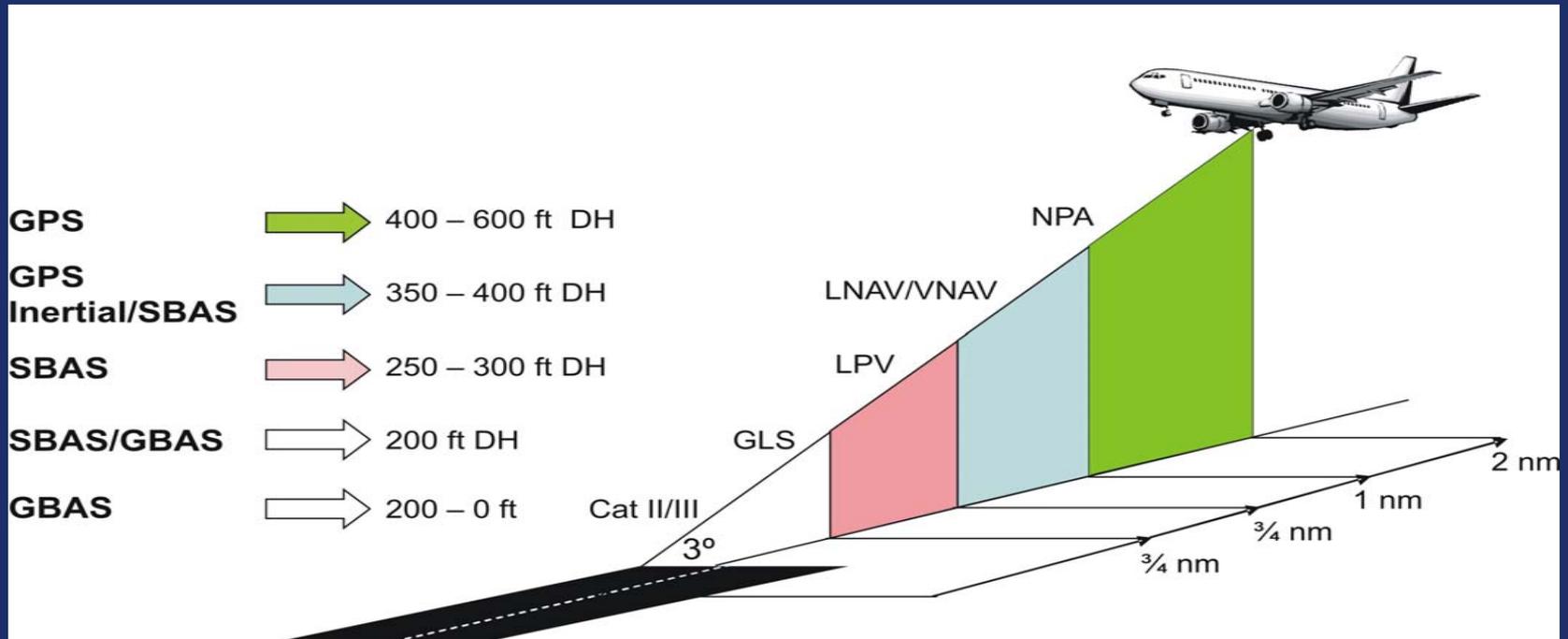
Why are LPV approaches so common?

LPV approaches provide:

- LPV procedures have no requirement for ground-based transmitters at the airport.
- No consideration needs to be given to the placement of navigation facilities, maintenance of clear zones around the facility, or access to the facility for maintenance.
- LPV approaches eliminate the need for critical area limitations associated with an ILS.
- From a pilots viewpoint, an LPV approach looks and flies like an ILS, but the WAAS approach is more stable than that of an ILS.
- WAAS equipped users can fly area navigation (RNAV) and required navigation performance (RNP) procedures as well as LPV procedures and the avionics costs are relatively cheap considering the total navigation solution provided.



Approaches



Approaches

Requesting Approaches

Who can get an LPV approach?

- **All public use airports**
 - NPIAS
 - Non-NPIAS
- **Private use airports**
 - Must have a reimbursable agreement with the FAA for the development and maintenance of the approach



Approaches

Requesting Approaches Step 1 - ALP

Step 1 – ALP

- Must have an approved ALP identifying approaches that are to be requested.
- ALP will identify airport infrastructure necessary to be developed to be in accordance with Advisory Circular 150/5300-13.
 - Requirements identified in Appendix 16
- Have development that supports the approach (clear approaches, adequate land control of the RPZ, and other design standards).
- ALP will identify obstructions necessary to determine the Height Above Touchdown (HAT), required to determine minimum.



Approaches

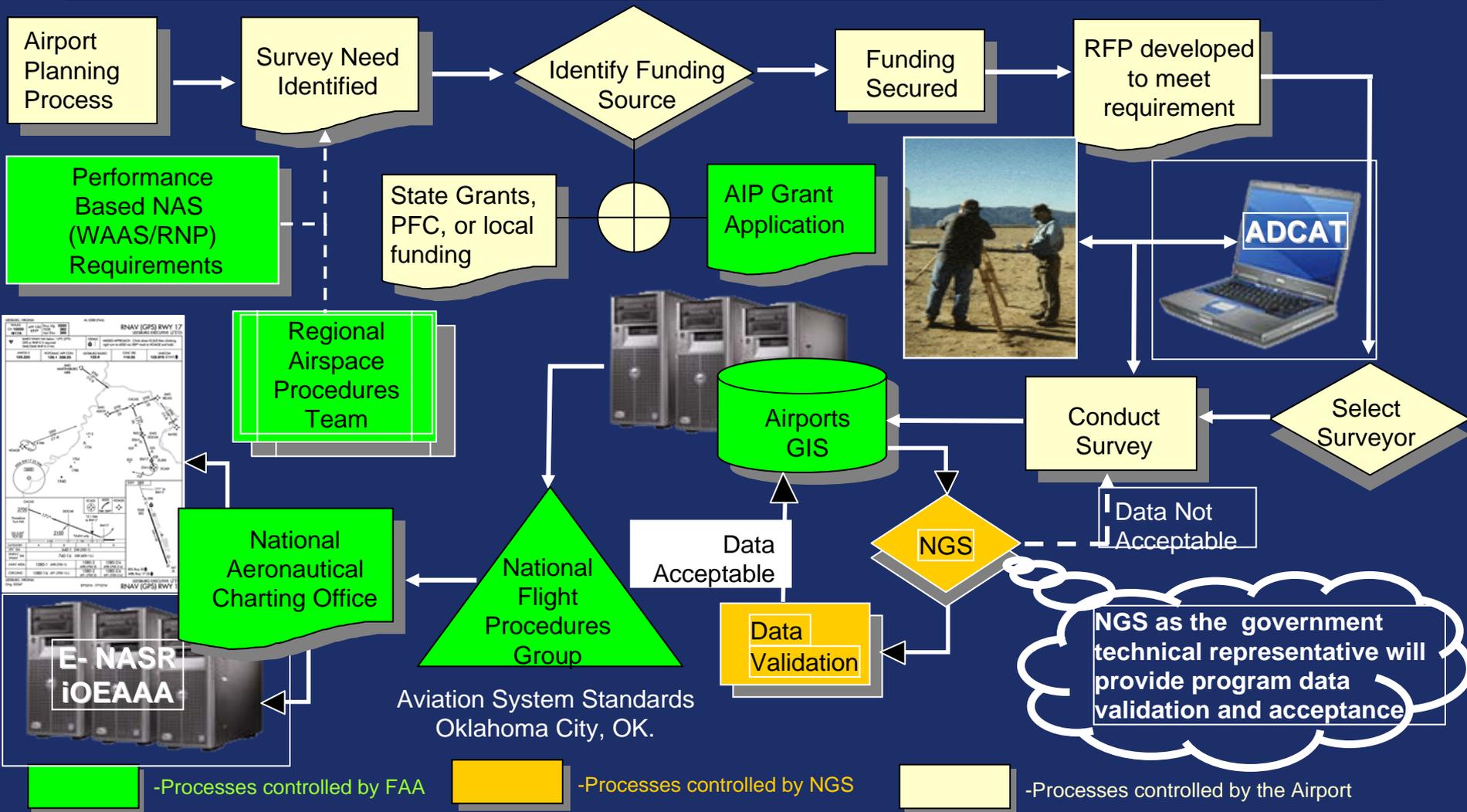
Requesting Approaches – Step 2 Survey

Step 2 – Survey

- Survey must be done in accordance with Advisory Circular 150/5300-16, 17, and 18.
- Previously called “405 Survey”, now called “Approach Survey.”
- A “statement of work” is available at <http://airports-gis.faa.gov>.



Airport Surveying Process



Approaches

Requesting Approaches – Step 2 Survey

Funding for approach surveys can be obtained from:

- WAAS office
- AIP funds
- State Funds
- Local funds
- Other sources



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Step 2 – surveys

Approach surveys planned for Survey

The current list of planned approaches can be found at:

<http://avn.faa.gov>

Select the Flight Procedures Tab

Select “IFP Production Plan” on the drop down menu



Approaches

Requesting Approaches – Step 2 Survey

- Surveyor enters data at <https://tpss.faa.gov/etpss>
- The data is validated



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Requesting Approaches – Step 3 Application

- An application can be submitted at <http://avn.faa.gov/index.asp?xml=ifp/requests>
- Requests can be submitted through the state
- Regional Airspace and Procedure Team (RAPT) will prioritize schedule
- It takes 18 to 24 months to publish an approach



Approaches

Requesting an Approach

Current activity by the FAA on Approaches:

1. Goal to provide 300 new LPV approaches a year.
2. Most new approaches have been implemented in areas of high populated areas.
3. Goal is to have minimums less than 1 mile.
4. Approaches with 1 mile minimums have been developed.



Approaches

Approaches impacted by Development - Permanent

- **Projects that impact approaches to runways such as runway extensions, displacements, and relocations must have the approach amendment requested in time for publishing.**
- **Changes to the airport such as changing the airport name, runway renumbering, identifier changes, etc., require changes to the procedures, and will cancel approaches until new ones are develop.**
- **Preliminary data such as runway location and elevation should be sent in preferably two years in advance.**
- **Finalized data should be submitted no later than a year before implementation of the procedure.**



Approaches

Approaches impacted by Development - Permanent

- **Approaches that will not have the data submitted in time to have the procedures developed:**
 - May have the runway displaced to the original location and the existing approach used until the new approach is developed.
 - Will require removal of markings when new approach is published.
 - May cause the approach procedure to be terminated.



Approaches

Approaches impacted by Development - Temporary

- **Flight Procedures must receive notification of when the construction will start and finish.**



Approaches

Approaches impacted by Development - Temporary

- **Notification must be made at least 5 days prior to any temporary displacement and/or relocation of a threshold.**
- **Proponent must provide the latitude/longitude and elevation of the displaced/new threshold location as well as new Touch Down Zone Elevation information.**
- **Displacements of less than 600' may be able to use the existing procedure.**



Approaches

Questions?

