

Flight Validation and Pilot Training

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Validation Activities

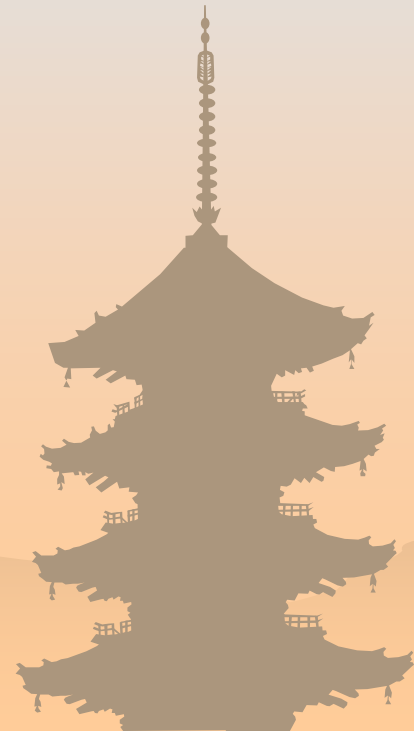
❁ Ground Validation (Simulation)

- Obstacle clearance
- Coding
- Charting
- Fly-ability

❁ Flight Validation

- Obstacle verification (Optional)
- Fly-ability (workload, charting, maneuvering)
- Infrastructure

❁ Database Validation



Flight Inspection and flight validation

- ✿ Flight inspection and flight validation are separate activities but may be accomplished by the same entity.
- ✿ The states is responsible for the quality of the procedure for publication.
- ✿ For the reason, flight inspection and flight validation shall be included in the State's procedure design process flow.



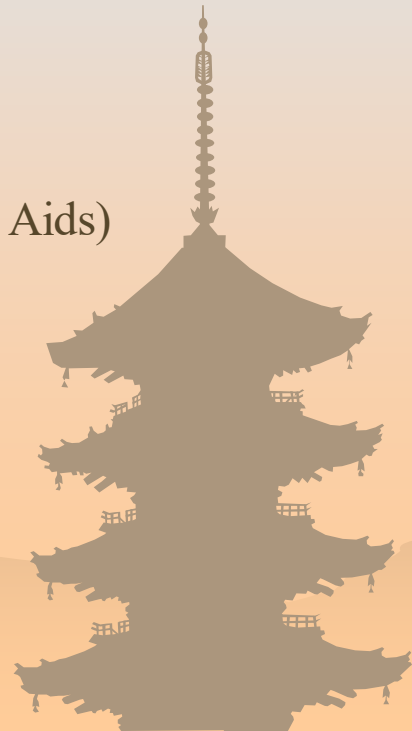
Flight Inspection

✿ Flight Inspection addresses

- Navaid performance for DME/DME RNAV
- Unintentional interference for GNSS

in accordance with Annex 10, ICAO Doc.8071

(Aeronautical Telecommunications and guidance in the Manual
on the Testing of Radio Navigation Aids)



Flight Validation

❁ **Obstacle verification**

Necessary where full obstacle survey cannot be assured

❁ **Fly-ability**

Detailed workload and charting assessments, but...

High level qualitative assessment of maneuvering only

❁ **Infrastructure assessment**

Runway marking, lighting, communications etc.



Database Validation

- ❁ **Test database** may be provided for flight validation.
- ❁ Flight does not validate integrity of procedure subsequently coded in operational database.
- ❁ State must find other means of validating the operational database.



Flight validation pilot training and evaluation (1)

- ❁ State must establish standards for the required competency level.
- ❁ The state must ensure the competency level through the training.
- ❁ Training should include initial and recurrent training at periodic intervals.
- ❁ Competency must be evaluated by the State at regular intervals.
- ❁ The States, flight inspection pilots perform the flight validation, must ensure to conduct flight validation also meet these requirements.



Flight validation pilot training and evaluation (2)

Initial training

- ❁ **must ensure that the pilot is able to demonstrate a basic level of competency.**
 - PANS-OPS VOL.1&2, other ICAO provisions
- ❁ **Knowledge and skills in ground and flight validation of procedures**
 - Ground training
 - Flight training
 - Supervised on-the-job training
 - Initial ground and flight evaluation



Flight validation pilot training and evaluation (3)

Recurrent training

- ❁ must ensure that the pilot is able to demonstrate a basic level of competency.
 - updated PANS-OPS and other ICAO provisions
 - maintenance and enhancement of knowledge and skills
- ❁ Recurrent training program should be accomplished at least every two years, or major changes occur.
- ❁ The competency must be evaluated by the State at regular intervals.



Thank you for your attention !

