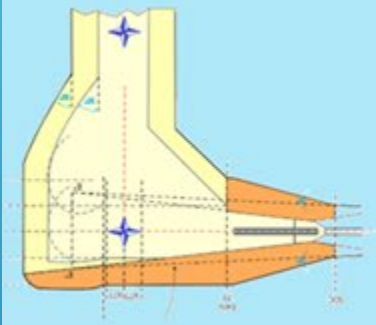
ICAO MID



MID Region Flight Procedure Programme (MID FPP)

FLIGHT PROCEDURE REGULATORY REVIEW PROCESS

Herman Groenewald

- DOC 9906 - Quality Assurance Manual for Flight Procedure Design — Volume I .

The IFP must be approved by the State or by an authority designated by the State, prior to publication. This approval process must ensure that all the appropriate steps within the IFP process have been completed, documented and signed off by the competent authority

- STEPS
  - Receive Request
  - Collect all design and ground validation data
  - Review the design process
  - Review procedure design (Checklists)
  - Validate critical segments (Where applicable)
  - Review Charting (Checklists)
  - Review Documentation / Reports
  - Approval recommendation

Documentation Submission

•The designer provides:

Procedure Design Report (including calculations, charts, and obstacle clearance analysis).

Safety Assessment (hazard identification and mitigation).

Validation Results (flight simulator or ground validation).

Metadata (coordinates, altitudes, fix names, etc.).

Review (ICAO MID FPP)

Compliance Check: verify adherence to ICAO and national standards.

Safety Assessment Review: Ensure risk mitigation measures are adequate.

Airspace Integration: Confirm the procedure fits within controlled airspace and does not conflict with other routes.

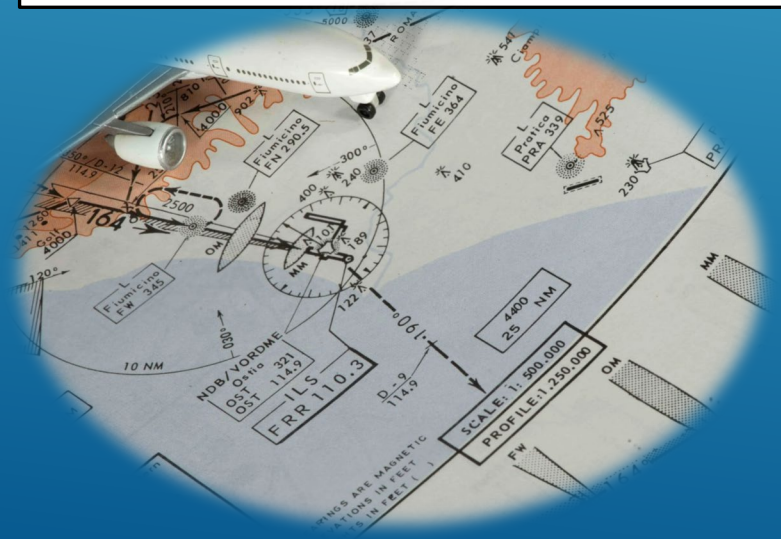
Environmental & Operational Considerations: Noise abatement, terrain, and operational feasibility.

Validation

Ground Validation: Confirm charting accuracy and coding for databases.

Flight Validation: Conducted in an aircraft or simulator to ensure flyability and safety.

Results Submission: Validation reports are reviewed.



Approval

If all checks are satisfactory:

- MID FPP issues **formal recommendation for approval** for the procedure.
- Local Authority / ANSP assigns an **effective date** for publication.

PROCEDURE VALIDATION CHECKLIST
IAP

ORKK - KIRKUK ILS AND LOC RWY 13

The Validator shall ensure that the design, including all the relevant processess, documentation, data, etc complies with the Regulatory Requirements specified by the CAA. Please note that this checklist is not conclusive and should be used as a guide due to the diversity of procedures and unique operational requirements.
The CAA reserves the right, if deemed necessary, to request any additional information or impose additional requirements in order to facilitate the approval and publication of the procedure.

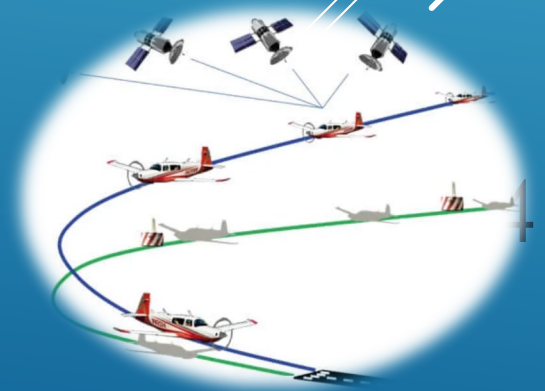
OK - Compliant, OB - Observations, NC - Non Compliance, SC - Safety Concern

1	GENERAL					
	1.1	PROCEDURE INFORMATION				
		Airport Na[redacted]				
		ICAO Location Indicator				
		Procedure Name				
		Runway Designator				
		Aircraft Categories				
		Navigation Specification				
		Comment: All procedure information provided				
	1.2	DESIGN ORGANISATION				
		Organisation				
		Flight Procedure Designer				
		Procedure Verifier				
		Principal Flight Procedure Designer				
		Comment: NIL				
	1.3	VALIDATION ORGANISATION				
		Organisation				
		Flight Procedure Designer				
		Procedure Validator				
		Principal Flight Procedure Designer				
		Comment: Validation internal to the design organization. Fully compliant with requirements.				
	1.4	DESIGN CONSIDERATIONS, ASSUMPTIONS & SUPPORTING INFORMATION				
		User Consultation/User Requirement Specification (URS)				
		Proof of Consultation				
		Safety Assessment				
		Environmental Considerations & Limitations				
		Noise Considerations & Limitations				
		Airspace Considerations & Constraints				
		CNS Considerations & Limitations				
		CDO Considerations adhered to				
		Other Considerations & Limitations				
		Design Deviations				
		Design Software & Version				
		Comment: GEOTITAN V 6.02.01.00.				
2	DESIGN DATA & PARAMETERS					
	2.1	AERODROME DATA	OK	OB	NC	SSC
		Aerodrome Reference Point	☑			
		Aerodrome Elevation & GUND	☑			
		Threshold Coordinates	☑			
		Threshold Elevation & GUND	☑			
		RDH at Threshold	☑			

KIRKUK

	2.7	FINAL APPROACH SEGMENT	OK	OB	NC	SSC
		Reference Fix Name/ID	☑			
		Reference Fix Coordinates	☑			
		Reference Fix Type	☑			
		Reference Fix Altitude (FT)	☑			
		Track (°T)	☑			
		Magnetic VAR	☑			
		Track (°M)	☑			
		Indicated Airspeed (IAS)	☑			
		ISA (°C)	☑			
		True Airspeed (TAS)	☑			
		Turn Angle at Fix	☑			
		Turn Anticipation Distacne (DTA)	☑			
		Fix Tolerance (ATT/XTT)	☑			
		Design Segment Length	☑			
		Total Minimum Stabilisation Distance (MSD)	☑			
		Track Distance (TRD)	☑			
		Controlling Obstacle	☑			
		Obstacle Elevation	☑			
		Horizontal Tolerance	☑			
		Vertical Tolerance	☑			
		Vegitation Tolerance	☑			
		Total Obstacle Elevation	☑			
		Primary/Secondary Area Location	☑			
		MOC	☑			
		MOCA	☑			
		OCA (m)	☑			
		OCA (FT)	☑			
		Published OCA (FT)	☑			
		Published OCH (FT)	☑			
		Calculated Descend Gradient (%)	☑			
		Calculated Descend Angle (°)	☑			
		Comment: Fully compliant				
	2.8	VSS PARAMETERS	OK	OB	NC	SSC
		Vertical Path Angle (VPA)	☑			
		Angle of VSS (αVSS)	☑			
		Runway Code	☑			
		Inner APCH Surface Width	☑			
		Splay (%)	☑			
		Splay (°)	☑			
		OCA (NPA)	☑			
		Threshold Elevation	☑			

	2.11	MISSED APPROACH SEGMENT:				
	2.11.1	Initial Missed Approach Segment (MAPT - SOC)	OK	OB	NC	SSC
		Reference Fix Name/ID	☑			
		Reference Fix Coordinates	☑			
		Reference Fix Type	☑			
		Reference Fix Altitude (FT)	☑			
		Indicated Airspeed (IAS)	☑			
		ISA (°C)	☑			
		True Airspeed (TAS)	☑			
		Tailwind Component	☑			
		True Airspeed (Total)	☑			
		Segment Track (°T)	☑			
		Magnetic VAR	☑			
		Segment Track (°M)	☑			
		MAPT ATT	☑			
		MAPT - SOC Distance	☑			
		Area Construction	☑			
		Controlling Obstacle	☑			
		Obstacle Elevation	☑			
		Horizontal Tolerance	☑			
		Vertical Tolerance	☑			
		Vegitation Tolerance	☑			
		Total Obstacle Elevation	☑			
		Primary/Secondary Area Location	☑			
		MOC	☑			
		MOCA	☑			
		OCA (m)	☑			
		OCA (FT)	☑			
		Published OCA (FT)	☑			
		Published OCH (FT)	☑			



4	SUPPLEMENTARY ITEMS					
	4.1	ADDITIONAL ITEMS NOT SPECIFIED ABOVE	OK	OB		
		Comment: NIL				
5	REGULATORY COMPLIANCE					
	5.1	PDP COMPLETE AND COMPLIES WITH SPECIFIED REQUIREMENTS	OK	OB	NC	SC
		MOPs	☐			
		CARs & CATs	☐			
		Comment: Evaluated against ICAO SARPS and not Regulatory requirements as there are NIL published.				
6	INDEPENDENT VALIDATOR REMARKS (ICAO MID)					
	6.1	RECOMMENDATIONS				
		ILS complies with the design requirements of ICAO DOC 8168 VOL II and the quality requirements of ICAO DOC 9906 VOL I				
	6.2	VALIDATOR SIGNATURE (Electronic submissions will be regarded as official signature)				
		Name: Herman Groenewald				
		Date: 1 May 2025				
7	INDEPENDENT VALIDATOR (ICAO MID)					
	7.1	RECOMMENDATIONS				
		Recommended for Publication				
	7.2	CAA VALIDATOR SIGNATURE				
		Name: Herman Groenewald				
		Date: 1 May 2025				

Any Question ?