

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

1 General

- 1.1 The holding, approach and departure procedures in use are based on those contained in the latest edition of ICAO Doc 8168 - *Procedures for Air Navigation Service - Aircraft Operations* (PANS-OPS).
- 1.2 The holding and approach procedures in use have been based on the values and factors contained in Parts III and IV of Vol. I of the PANS-OPS. The holding patterns shall be entered and flown as indicated below.
- 1.3 For RNAV (GNSS) SIDs and STARs operations, aircraft shall be GNSS equipped and the navigation system shall meet ICAO RNAV 1 standard of accuracy or equivalent.
- 1.4 For RNAV (GNSS) Approaches, aircraft shall be GNSS equipped and the navigation system shall meet ICAO RNP 0.3 standard of accuracy or equivalent .
- 1.5 Operators/Pilots who are not approved to fly the RNAV(GNSS) SIDs and STARs shall fly the existing VOR/DME SIDs and STARs or expect radar vectors.
- 1.6 Operators/Pilots who are not approved to fly the RNAV (GNSS) approach procedures shall fly the existing VOR/DME, ILS/DME approaches.
- 1.7 Pilots shall inform ATC when on-board equipment does not meet the requirements of R NAV.
- 1.8 Aircrafts may be radar vectored off a R NAV SID/STAR. Such aircraft will subsequently be given instrument to intercept the appropriate R NAV SID/STAR.
- 1.9 Depending on traffic conditions ATC may, sometimes, deny request to fly these arrival and departure routes.
- 1.10 Vertical restrictions on the charts are designed to contain aircraft in controlled airspace and to separate from local VFR traffic.

Flight level (FL)	Category A and B aircraft	Jet aircraft	
		Normal conditions	Turbulence conditions
Up to FL 140 (4250 M) inclusive	170 KT	230 KT 425 KM/H	280 KT (520 KM/H) or Mach 0.8, whichever is less
Above FL 140 (4250 M) to FL 200 (6100 M) inclusive	240 KT 445 KM/H		
Above FL 200 (6100 M) to FL 340 (1035 M) inclusive	265 KT 490 KM/H		
Above FL 340 (10350 M)	Mach 0.83		Mach 0.83

2 Arriving flights

- 2.1 IFR flights entering and landing within a terminal control area will be cleared to a specified holding point. The terms of this clearance shall be adhered to until further instructions are received from area control. If the clearance limit is reached before further instructions have been received, holding procedures shall be carried out at the level last authorized.
- 2.2 Due to the limited airspace available, it is important that the approaches to the patterns and the holding procedures be carried out as precisely as possible. Pilots are strongly requested to inform ATC if for any reason the approach and/or holding cannot be performed as required.
- 2.3 Pilots are to request from ATC if they intend to fly RNAV SIDs, STARs or the Approach procedures.
- 2.4 R NAV 1 equipped arrivals to male' will be cleared on the appropriate R NAV STARs by ATC.
- 2.5 Arriving aircrafts are required to follow R NAV STARs as follows:

ATS Routes	R NAV STAR	Routing	Run Way
L 894 (Eastbound to Male')	LELEM 3A Arrival	LELEM; MM002 (A5500+);TEKAL (A4000+)	RWY 36
	LELEM 3B Arrival	LELEM;URDIV (A4000+)	RWY 18
L 894 (Westbound to Male')	AQAXA 3A Arrival	AQAXA;TKAL (A4000+)	RWY 36
	AQAXA 3B Arrival	AQAXA;MM003;URDIV (A4000+)	RWY 18
R 329 (Southbound to Male')	KAGUM 3A Arrival	KAGUM;MM003;MM004;TEKAL (A4000+)	RWY 36
	KAGUM 3B Arrival	KAGUM; URDIV (A4000+)	RWY 18
R 329 (Northbound to Male')	ATISA 3A Arrival	ATISA;TKAL (A4000+)	RWY 36
	ATISA 3B Arrival	ATISA;MM004;MM003;URDIV (A4000+)	RWY 18
R 457	MUGBA 3A Arrival	MUGBA; MM004;TKAL(A4000+)	RWY 36
	MUGBA 3B Arrival	MUGBA URDIV (A4000+)	RWY 18
G 465 (Westbound to Male') M 512	DOPDO 3A Arrival	DOPDO;MM004;TEKAL (A4000+)	RWY 36
	DOPDO 3B Arrival	DOPDO;MM003;URDIV (A4000+)	RWY 18
G 465 (Eastbound to Male') M 512	ESKOL 3A Arrival	ESKOL;MM002(A500+);TEKAL (A4000+)	RWY 36
	ESKOL 3B Arrival	ESKOL;MM001(A5500+);URDIV (A4000+)	RWY 18
P 756	GOKAM 3A Arrival	GOKAM;MM004;TEKAL (A4000+)	RWY 36
	GOKAM 3B Arrival	GOKAM;MM003;URDIV (A4000+)	RWY 18

3 Departing flights

- 3.1 IFR flights departing from controlled aerodromes will receive initial ATC clearance from the local aerodrome control tower. The clearance limit will normally be the aerodrome of destination. Detailed instruction with regard to routes, turns, etc. will be issued before take-off.
- 3.2 Pilots shall specify if he wants to fly RNAV STAR and the associated approach procedure or only the RNAV STAR and then a radar vector to intercept the final approach track.
- 3.3 R NAV 1 equipped aircraft will be cleared by ATC on the appropriate R NAV (GNSS) SIDs before pushback or startup.

ATS Routes	R NAV STAR	Routing	Run Way
L 894 (Westbound to Male')	LELEM 4C Departure	MM020;LELEM	RWY 36
	LELEM 4D Departure	MM010;MM011;MM012 (A5500+); LELEM	RWY 18
L 894 (Eastbound to Male')	AQAXA 4D Departure	MM020;MM021;AQAXA	RWY 36
	AQAXA 3D Departure	MM010;AQAXA	RWY 18
R 329 (Northbound to Male')	KAGUM 4C Departure	MM020;KAGUM	RWY 36
	KAGUM 4D Departure	MM010;MM011;MM012 (A5500+); MM013;KAGUM	RWY 18
R 329 (Southbound to Male')	ATISA 4C Departure	MM020;MM021;MM023;ATISA	RWY 36
	ATISA 4D Departure	MM010;ATISA	RWY 18
R 457	MUGBA 4C Departure	MM020;MUGBA	RWY 36
	MUGBA 4D Departure	MM010;MM014;MUGBA	RWY 18
G 465 (Eastbound to Male') M 512	DOPDO 4C Departure	MM020; DOPDO	RWY 36
	DOPDO 4D Departure	MM010;MM014;DOPDO	RWY 18
G 465 (Westbound to Male') M 512	ESKOL 4C Departure	MM020; MM022 (A5500+) ; ESKOL	RWY 36
	ESKOL 4D Departure	MM010; MM011; MM012 (A5500+); ESKOL	RWY 18
P 756	GOKAM 4C Departure	MM020;MM021;GOKAM	RWY 36
	GOKAM 4D Departure	MM010;MM014;GOKAM	RWY 18

4 R NAV Holding Procedures

4.1 For the purpose of holding arriving aircraft during periods of congestion the following holding waypoints and their associated holding procedures are described below;

Fix Indent	Last- Long	Inbound Course	Leg Dist (Minutes)	Turn direction	Min Altitude	Max Altitude
TEKAL	035631.8N 0733159.7E	003°	1 Minute	Right	4000 feet	FL 140
URDIV	042646.3N	183°	1 Minute	Right	4000 feet	FL 140