

OTHH — HAMAD INTERNATIONAL

OTHH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

OTHH — HAMAD INTERNATIONAL

OTHH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	251628.43N 0513630.16E Adjacent to control Tower building
2	Direction and distance from (city)	5.5 NM East from Doha City Centre
3	Elevation/Reference temperature	13 FT/42°C
4	Geoid undulation at AD ELEV PSN	-98 FT
5	MAG VAR/Annual change	2.3°E (JUN 2014) / 0.05°E
6	AD Operator, address, telephone, telefax, telex, AFS	Post: Chief Operating Office Hamad International Airport P.O. Box 24730 Doha State of Qatar Tel: (974) 4010 7715 / (974) 4010 3999 Fax: (974) 4010 1010 SITA: DOHAOXH
7	Types of traffic permitted (IFR/VFR)	IFR / VFR
8	Remarks	Airport Operations Control Centre Duty Manager (AOCC DM) 24/7: Tel: (974) 4010 3999

OTHH AD 2.3 OPERATIONAL HOURS

1	AD Operator	H24
2	Customs and immigration	H24
3	Health and sanitation	H24
4	AIS Briefing Office	H24
5	ATS Reporting Office (ARO)	H24
6	MET Briefing Office	H24
7	ATS	H24
8	Fuelling	H24
9	Handling	H24
10	Security	H24
11	De-icing	Not required due to local climate
12	Remarks	a. Scheduled closure of RWY 16L/34R - Mondays 0700 to 1100 and Tuesdays 0000 to 0130. b. Scheduled closure of RWY 16R/34L - Wednesdays 0700 to 1100 and Thursdays 0000 to 0130.

OTHH AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Available
2	Fuel/oil types	Jet A1

3	<i>Fuelling facilities/capacity</i>	Fuel Hydrant System on Concourse A, B, C, D and E, Remote Stands G and H, Emiri Apron, Cargo Apron and Maintenance Apron - stands Q1 ,Q2 ,Q3 and Q4 . Code C alternative Stands and General Aviation, bowsers only.
4	<i>De-icing facilities</i>	Not required due to local climate
5	<i>Hangar space for visiting aircraft</i>	NIL
6	<i>Repair facilities for visiting aircraft</i>	Qatar Airways Technical by arrangement .
7	<i>Remarks</i>	For Handling services. Contact QAS. See Item 9 of GEN 1.1 and 2.5 of GEN 1.2

OTHH AD 2.5 PASSENGER FACILITIES

1	<i>Hotels</i>	Hotel accommodation available in the airport and in Doha City
2	<i>Restaurants</i>	H24 Airport restaurant in the terminal building
3	<i>Transportation</i>	Bus Services ,Taxi and courtesy coaches to hotels
4	<i>Medical facilities</i>	Airport's Medical Centre located at passenger terminal complex. Operated H24. Full medical facilities (Level 3 Hospital) are available in the City of Doha. Ambulance available at airport.
5	<i>Bank and Post Office</i>	Available at Airport Terminal building
6	<i>Tourist Office</i>	Available at Airport Terminal building
7	<i>Remarks</i>	NIL

OTHH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	<i>AD category for fire fighting</i>	CAT 10
2	<i>Rescue equipment</i>	Rescue equipment : As per ICAO Annex 14 and QCAR - ADR - "Aerodrome Design, Operations and Licensing"
3	<i>Capability for removal of disabled aircraft</i>	The recovery equipment available at Hamad International Airport is able to assist in the recovery of aircraft up to and including A380. The disabled Aircraft Recovery Team shall be activated through the Qatar Airways OCC H24. Duty Manager Telephone number(s) (974) 4018 4500 / 4018 4977 to activate the Disabled Aircraft Recovery Team.
4	<i>Remarks</i>	Total number of trained personnel: 100+ Communications with aircraft on ground available on 121.6 MHz

OTHH AD 2.7 SEASONAL AVAILABILITY - CLEARING

1	<i>Types of clearing equipment</i>	NIL
2	<i>Clearance priorities</i>	N / A
3	<i>Remarks</i>	Local climate precludes the requirement. Aerodrome is available in all seasons.

OTHH AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1	<i>Designation, surface and strength of aprons</i>	CONCOURSE A: concrete, PCN 110 / R / B / W / T CONCOURSE B: concrete, PCN 110 / R / B / W / T CONCOURSE C: concrete, PCN 92 / R / B / W / T CONCOURSE D: concrete, PCN 92 / R / B / W / T CONCOURSE E: concrete, PCN 92 / R / B / W / T APRON 4: concrete, PCN 76 / R / B / W / T APRON 5: concrete, PCN 185 / R / B / W / T REMOTE TRANSFER: concrete, PCN 110 / R / B / W / T EMIRI TERMINAL: concrete, PCN 110 / R / B / W / T CARGO AND COURIER: concrete, PCN 110 / R / B / W / T MAINTENANCE: concrete, PCN 110 / R / B / W / T GENERAL AVIATION : asphalt, PCN 110 / F / B / W / T ISOLATION PAD: concrete, PCN 110 / R / B / W / T
2	<i>Designation, width, surface and strength of taxiways</i>	TWY A: 30 M, asphalt, PCN 110 / F / B / W / T TWY A1-A12: 30 M, asphalt, PCN 110 / F / B / W / T TWY B: 25 M, asphalt, PCN 110 / F / B / W / T TWY C: 25 M, asphalt, PCN 110 / F / B / W / T TWY D: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY E: 30 M, asphalt, PCN 110 / F / B / W / T TWY E1: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY E2: 25 M, asphalt, PCN 110 / F / B / W / T TWY E3: 25 M, asphalt, PCN 110 / F / B / W / T TWY E4: 25 M, asphalt, PCN 168 / F / A / X / T TWY G: 30 M, asphalt, PCN 110 / F / B / W / T TWY H: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY J: between TWY L and TWY R: 25 M, asphalt, PCN 110 / F / B / W / T TWY J between TWY L10 and TWY L12: 25 M, concrete, PCN 107 / R / B / W / T TWY K: 25 M, asphalt, PCN 110 / F / B / W / T TWY L: 30 M, asphalt, PCN 110 / F / B / W / T TWY L1-L9: 30 M, asphalt, PCN 110 / F / B / W / T TWY L10-L12 between RWY 16R/34L and TWY K: 30 M, asphalt, PCN 110 / F / B / W / T TWY L10-L12 between TWY K and TWY J: 25 M, concrete, PCN 112 / R / B / X / T TWY N: 25 M, asphalt, PCN 168 / F / A / X / T TWY Q: 25 M, asphalt, PCN 110 / F / B / W / T TWY Q1: 25 M, asphalt, PCN 110 / F / B / W / T TWY Q2: 25 M, asphalt, PCN 110 / F / B / W / T TWY R: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY S: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY T: 40 M, asphalt, PCN 110 / F / B / W / T TWY T1: 25 M, asphalt, PCN 168 / F / A / X / T TWY T2: 25 M, asphalt, PCN 168 / F / A / X / T TWY T3: 25 M, asphalt, PCN 168 / F / A / X / T TWY T4: 25 M, asphalt, PCN 168 / F / A / X / T TWY V: 25 M, asphalt, PCN 110 / F / B / W / T TWY W: 30 M, asphalt, PCN 110 / F / B / W / T TWY W1: 25 M, asphalt, PCN 110 / F / B / W / T & 168 / F / A / X / T TWY W2: 25 M, asphalt, PCN 110 / F / B / W / T TWY W3: 25 M, asphalt, PCN 110 / F / B / W / T TWY W4: 25 M, asphalt, PCN 168 / F / A / X / T TWY Y: 30 M, asphalt, PCN 110 / F / B / W / T
3	<i>Altimeter checkpoint location and elevation</i>	All aircraft stands: 17 FT
4	<i>VOR checkpoints</i>	RWY 34R - Holding Point A; RWY 16L - Holding Point A12; RWY 34L - Holding Point L; RWY 16 R - Holding Point L12.
5	<i>INS checkpoints</i>	See AIRCRAFT PARKING / DOCKING CHARTS
6	<i>Remarks</i>	Code F aircraft operations are permitted on all taxiways except following taxiways: TWY E (BTN TWY D and Stand B2) TWY W (BTN TWY H and Stand A4) TWY N TWY Y

OTHH AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1	Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system at aircraft stands	Mandatory signs at all intersections of TWYs and RWYs at all holding positions. Taxi information and location signs at all TWYs. VDGS installed and operational on all stands except for MARS stands. VDGS not available on APRON 4 Stands. Stands not equipped with VDGS have marked centre lines and will be marshalled. For information on VDGS; Stands 501-515 see OTBD AD 2.23.1 Visual Docking Guidance System For all other stands see OTHH AD 2.23.3 Visual Docking Guidance System .
2	<i>RWY and TWY markings</i>	RWY: Designation, THR, TDZ, CL, Edge, RWY end. See AD 2.14 and AD 2.15 for additional information on lighting. TWY: Edge marking, CL, Holding Positions at all TWY / RWY intersections.
3	<i>Stop bars</i>	Stop bars at all RWY entrances and where appropriate.
4	Remarks	Details of each aircraft stand in relation to common aircraft types for parking possibilities together with limitations are depicted in OTHH AD 2.23.4 Aircraft parking restrictions at Hamad International Airport .

OTHH AD 2.10 AERODROME OBSTACLES

1 OBSTACLES IN AREA 2

1.1 Obstacles in Area 2 are available in electronic format. [Refer to GEN 3.1.6 Electronic terrain and obstacle data](#).

2 OBSTACLES IN AREA 3

2.1 Obstacles in Area 3 are available in electronic format. [Refer to GEN 3.1.6 Electronic terrain and obstacle data](#).

OTHH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	<i>Associated MET Office</i>	Forecast and Analysis Office, Qatar Met Dept, Doha International Airport.
2	<i>Hours of service</i>	H24
	<i>MET Office outside hours</i>	NIL
3	<i>Office responsible for TAF preparation</i>	Forecast and Analysis Office, Qatar Met Dept, Doha International Airport.
	<i>Periods of validity</i>	H30 (prepared 6 hourly).
4	<i>Trend forecast</i>	TREND
	<i>Interval of issuance</i>	½ HR
5	<i>Briefing/consultation provided</i>	Issue of forecast folders, Personal consultations, self briefings, telephone consultation with duty forecaster.
6	<i>Flight documentation</i>	Charts, abbreviated plain language text.
	<i>Language(s) used</i>	English
7	<i>Charts and other information available for briefing or consultation</i>	S, U ₂₅ , P ₂₅ (other levels on request), T, SWH (East & West), SWM, TB (Gulf sector winds).
8	<i>Supplementary equipment available for providing information</i>	Fax, e-mail, IVR (Interactive Voice Response) for general information.
9	<i>ATS units provided with information</i>	HAMAD TOWER, DOHA APPROACH
10	<i>Additional information (limitation of service, etc.)</i>	NIL

OTHH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY (M)	Strength (PCN) and surface of RWY and SWY	THR coordinates, RWY end coordinates, THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
16L	158.17°	4 850 X 60	110 / F / B / W / T asphalt	251745.97N 0513631.96E 251519.65N 0513736.41E -98.32 FT	THR 13.21 FT TDZ 13.39 FT
34R	338.18°	4 850 X 60	110 / F / B / W / T asphalt	251519.65N 0513736.41E 251745.97N 0513631.96E -98.57 FT	THR 13.10 FT TDZ 13.39 FT
16R	158.16°	4 250 X 60	110 / F / B / W / T asphalt	251727.52N 0513523.07E 251519.32N 0513619.56E -98.27 FT	THR 13.13 FT TDZ 13.50 FT
34L	338.17°	4 250 X 60	110 / F / B / W / T asphalt	251519.32N 0513619.56E 251727.52N 0513523.07E -98.49 FT	THR 13.22 FT TDZ 13.47 FT

Designations RWY NR	Slope of RWY- SWY		SWY dimensions (M)	CWY dimensions (M)	Strip dimensions (M)	RESA dimensions (M)	Location and Arresting System	OFZ	Remarks
	RWY	SWY							
1	7		8	9	10	11	12	13	14
16L	0	NIL	NIL	NIL	4 970 X 300	240 x 120	NIL	Yes	Non-load bearing Runway shoulders - 7.5 M each side
34R	0	NIL	NIL	NIL	4 970 X 300	240 x 120	NIL	Yes	Non-load bearing Runway shoulders - 7.5 M each side
16R	0	NIL	NIL	NIL	4 370 X 300	240 x 120	NIL	Yes	Non-load bearing Runway shoulders - 7.5 M each side
34L	0	NIL	NIL	NIL	4 370 X 300	240 x 120	NIL	Yes	Non-load bearing Runway shoulders - 7.5 M each side

OTHH AD 2.13 DECLARED DISTANCES

RWY Designator	Intersection Departures	TORA (M)	TODA (M)	ASDA (M)	LDA (M)	Remarks
1	2	3	4	5	6	7
16L	Not Applicable	4 850	4 850	4 850	4 850	NIL
	TWY A11	4 730	4 730	4 730	NIL	
	TWY A10	4 082	4 082	4 082	NIL	
	TWY A6	2 497	2 497	2 497	NIL	
34R	Not Applicable	4 850	4 850	4 850	4 850	
	TWY A1	4 730	4 730	4 730	NIL	
	TWY A2	4 266	4 266	4 266	NIL	
	TWY A3	3 077	3 077	3 077	NIL	
	TWY A6	2 386	2 386	2 386	NIL	
16R	Not Applicable	4 250	4 250	4 250	4 250	
	TWY L11	4 130	4 130	4 130	NIL	
	TWY L10	3 614	3 614	3 614	NIL	
	TWY L7	2 348	2 348	2 348	NIL	
34L	Not Applicable	4 250	4 250	4 250	4 250	
	TWY L1	4 122	4 122	4 122	NIL	
	TWY L2	3 646	3 646	3 646	NIL	
	TWY L7	1 935	1 935	1 935	NIL	

Note: Intersection departures are allowed subject to the following:

a. Initiated by pilot and approved by ATC, subject to traffic.

b. ATC is able to keep aircraft visual at all times.

OTHH AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type, LEN, INTST	THR LGT, colour, WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST
1	2	3	4	5	6
16L	CAT III 900 M LIH	LIH Green supplemented by WBAR	PAPI 3° (16.2M)	900 M	Length: 4 850 M Spacing : 15 M Colour: fm 0 M to last 900 M White, last 900 M to last 300 M Red / White, last 300 M Red INTST: LIH
34R	CAT III 900 M LIH	LIH Green supplemented by WBAR	PAPI 3° (16.0 M)	900 M	Length: 4 850 M Spacing: 15 M Colour: fm 0 M to last 900 M White, last 900 M to last 300 M Red / White, last 300 M Red INTST: LIH
16R	CAT III 900 M LIH	LIH Green supplemented by WBAR	PAPI 3° (15.8 M)	900 M	Length: 4 250 M Spacing: 15 M Colour: fm 0 M to last 900 M White, last 900 M to last 300 M Red / White , last 300 M Red INTST: LIH

RWY Designator	APCH LGT type, LEN, INTST	THR LGT, colour, WBAR	VASIS (MEHT) PAPI	TDZ LGT LEN	RWY Centre Line LGT Length, spacing, colour, INTST
1	2	3	4	5	6
34L	CAT III 900 M LIH	LIH Green supplemented by WBAR	PAPI 3° (17.4 M)	900 M	Length: 4 250 M Spacing: 15 M Colour: fm 0 M to last 900 M White, last 900 M to last 300 M Red / White, last 300 M Red INTST: LIH

RWY Designator	RWY edge LGT LEN, spacing, colour, INTST	RWY End LGT colour, WBAR	SWY LGT LEN, colour	Remarks
1	7	8	9	10
16L	Length: 4 850 M Spacing: 60 M Colour: fm 0 M to last 600 M White, last 600 M Yellow INTST: LIH	Red NIL	NIL	NIL
34R	Length: 4 850 M Spacing: 60 M Colour: fm 0 M to last 600 M White, last 600 M Yellow INTST: LIH	Red NIL	NIL	NIL
16R	Length: 4 250 M Spacing: 60 M Colour: fm 0 M to last 600 M White, last 600 M Yellow INTST: LIH	Red NIL	NIL	NIL
34L	Length: 4 250 M Spacing: 60 M Colour: fm 0 M to last 600 M White, last 600 M Yellow INTST: LIH	Red NIL	NIL	NIL

OTHH AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN / IBN location, characteristics and hours of operation	ABN: NIL IBN: NIL
2	LDI location and LGT Anemometer location and LGT	LDI: NIL Anemometer: 16L - 251736.4560N 0513640.7313E 34R - 251532.1162N 0513735.5462E 16R - 251715.2675N 0513524.0348E 34L - 251530.2198N 0513609.9122E Automated Weather Observing System (AWOS). WS425 Ultrasonic wind Sensor

3	<i>TWY edge and centre line lighting</i>	Rapid Exit Taxiway Indicator Lights (RETIL) marked and lit when required. RETIL lead-off lights are alternate green/amber indicating within ILS sensitive area. Taxiway centreline lights are green, except when within ILS sensitive area, where taxiway centre line lights are alternate green/amber. Taxiway blue edge lighting provided on bends and curves only. Holding positions at all taxiway to runway intersections are lit by red stop bars except on Cat I holding position of Taxiway A2, A6, A10, L2, L7 and L10. Red stop bars will be switched off when permission is given to enter the runway. Aircraft are at no time to cross a lit red stop bar to enter a runway.
4	<i>Secondary power supply/switch-over time</i>	Available via UPS immediate power. Standby generator also available. Switch-over time of less than 1 second.
5	<i>Remarks</i>	NIL

OTHH AD 2.16 HELICOPTER LANDING AREA

1	<i>Coordinates TLOF or THR of FATO Geoid undulation</i>	NIL NIL
2	<i>TLOF and/or FATO elevation M/FT</i>	NIL
3	<i>TLOF and FATO area dimensions, surface, strength, marking</i>	NIL
4	<i>True BRG of FATO</i>	NIL
5	<i>Declared distance available</i>	NIL
6	<i>APP and FATO lighting</i>	NIL
7	<i>Remarks</i>	NIL

OTHH AD 2.17 ATS AIRSPACE

1	<i>Designation and lateral limits</i>	DOHA CTR: Refer to OTBD-AD-2.17
2	<i>Vertical limits</i>	SFC to 2 500 FT
3	<i>Airspace classification</i>	D
4	<i>ATS unit call sign Language(s)</i>	HAMAD Tower English
5	<i>Transition altitude</i>	13 000 FT
6	<i>Hours of applicability</i>	H24
7	<i>Remarks</i>	NIL

OTHH AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequencies allocation (MHz)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6
APP	Doha Radar	121.100	N/A	H24	Primary
	Doha Approach	119.725	N/A	H24	Primary
		120.600	N/A	H24	Secondary
	Doha Director	119.400	N/A	H24	Primary
		121.125	N/A	H24	Secondary
	-	121.500	N/A	H24	Emergency
	-	243.000	N/A	H24	Emergency

Service designation	Call sign	Frequencies allocation (MHz)	Logon address	Hours of operation	Remarks
1	2	3	4	5	6
TWR	Hamad Tower East	118.525	N/A	H24	
	Hamad Tower West	118.025	N/A	H24	
	Hamad Tower	118.225	N/A	H24	Secondary
	Hamad Clearance Delivery	120.875	N/A	H24	
	-	121.500	N/A	H24	Emergency
	-	243.000	N/A	H24	Emergency
GMC	Hamad Ground East	120.225	N/A	H24	Note1
	Hamad Ground West	118.650	N/A	H24	Note2
	Hamad Ground	121.675	N/A	H24	Secondary
D-ATIS	Hamad Terminal Information	126.850	DOHATYA	H24	Data Link Service available. ATIS broadcast can also be obtained via hotline: (974)44705310-13
DCL	N/A	N/A	DOHDCYA	H24	Data Link Service for departure clearance
CPDLC	N/A	N/A	DOHFAYA	H24	

Note 1 - Aircraft on Cargo Apron, Emiri Terminal and aircraft leaving Aircraft Maintenance area and Emiri Hangar area.

Note 2 - Aircraft parked on the North Node and General Aviation Apron.

Note 3 - All departing aircraft shall immediately contact "Doha Approach" on 119.725 MHz

OTHH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of Aid, MAG VAR, Type of supported OPS (for VOR/ILS/MLS, give declination)	IDENT	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
DVOR / DME (2.3°E / 2014)	DOH	114.400 MHz CH 91X	H24	251459.66N 0513634.80E	39.34 FT	NIL
LOC RWY 16L ILS CAT III	IDE	108.700 MHz	H24	251510.34N 0513740.51E		Distance from threshold 16L 5 158.71 M
GP RWY 16L		330.500 MHz	H24	251738.19N 0513640.39E		3° ILS RDH 55 FT
ILS DME RWY 16L	IDE	CH 24X	H24	251738.20N 0513640.43E	32.00 FT	Co - located with GP, DIST zero TDZ
MM RWY 16L		75 MHz	H24	251814.92N 0513619.21E		ELEV 26.65 FT
LOC RWY 34R ILS CAT III	AZM	110.100 MHz	H24	251755.28N 0513627.86E		Distance from threshold 34R 5 158.63 M
GP RWY 34R		334.400 MHz	H24	251530.57N 0513736.60E		3° ILS RDH 53 FT
ILS DME RWY 34R	AZM	CH 38X	H24	251530.56N 0513736.56E	31.46 FT	Co - located with GP, DIST zero TDZ
MM RWY 34R		75 MHz	H24	251450.69N 0513749.16E		ELEV 30.83 FT
LOC RWY 16R ILS CAT III	QAT	108.100 MHz	H24	251509.98N 0513623.68E		Distance from threshold 16R 4 559.70 M

Type of Aid, MAG VAR, Type of supported OPS (for VOR/ILS/MLS, give declination)	IDENT	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
GP RWY 16R		334.700 MHz	H24	251716.61N 0513522.87E		3° ILS RDH 53 FT
ILS DME RWY 16R	QAT	CH 18X	H24	251716.62N 0513522.92E	32.47 FT	Co - located with GP, DIST zero TDZ
MM RWY 16R		75 MHz	H24	251756.47N 0513510.31E		ELEV 26.71 FT
LOC RWY 34L ILS CAT III	HJJ	111.900 MHz	H24	251736.83N 0513518.96E		Distance from threshold 34L 4 558.67 M
GP RWY 34L		331.100 MHz	H24	251528.74N 0513610.37E		3° ILS RDH 53 FT
ILS DME RWY 34L	HJJ	CH 56X	H24	251528.73N 0513610.33E	31.54 FT	Co - located with GP, DIST zero TDZ
MM RWY 34L		75 MHz	H24	251449.78N 0513632.57E		ELEV 23.39 FT

OTHH AD 2.20 LOCAL AERODROME REGULATIONS

1 AIRPORT REGULATIONS

1.1 Diversion Aircraft: Available as an alternate and can accommodate any type of diversion.

1.2 At Hamad International Airport a number of local regulations apply. The list of regulations listed below are available at the AIS Briefing Office.

- Airport By-Law 2010
- HIA Aerodrome Manual, Second Edition Version 1.0 April 2014
- HIA Safety Management System, Second Edition Version 1.0 April 2014
- Airport Emergency Plan - HIA Edition Version 1.0 July 2014
- Disabled Aircraft Recovery Plan - 1 NOV 2010
- HIA Airside Vehicle Operating Rules – April 2014
- Interim Wildlife Hazard Management Plan v.1 - May 2012

When a local regulation is of importance for the safe operation of aircraft on the apron, the information will be given to each aircraft by the TWR or GMC.

2 TAXIING TO AND FROM STANDS

2.1 Nose-in parking is mandatory. Exemptions only given in special cases with specific authorization from ATC & AD operator.

2.2 Aircraft are restricted to push back from nose in parking stands. Exemptions will be granted to certain aircraft by the AD operator.

2.3 Non-marked parking areas may also be assigned for aircraft parking. Aircraft will be hand-marshalled.

2.4 Parking Restrictions in APRON 4.

2.4.1 Apron 4 is having Power In – Power Out (PIPO) Aircraft stand parking configuration.

2.4.2 Power In – Power Out stands are 425E, 425W, 426E, 426W, 427E, 427W, 428E, 428W, 429E, 429W. There will be 5 parallel lead in/off lines with two nose wheel parking position on each line; Facing West to and from TWY Q; and Facing

East to and from TWY C. Pilots must follow "Follow Me vehicle" and marshaller for parking and shall use of minimum thrust taxiing only.

2.4.3 Power In – Power Out arrangement on Stands mentioned in [2.4.2](#) are for aircraft type up to code C only.

2.4.4 If stands 425W, 426W, 427W, 428W, 429W is/are occupied with Aircraft, stands 425E, 426E, 427E, 428E, 429E will be automatically blocked (vice versa).

2.4.5 180 degrees turn on the Power In – Power Out (PIPO) stands are not allowed.

3 PARKING AREA FOR SMALL AIRCRAFT (GENERAL AVIATION)

General Aviation Apron contains nine(09) code C stands (Y1-Y9). General aviation aircraft shall be guided by marshalls to the parking area for small aircraft.

4 PARKING AREA FOR HELICOPTERS

(To be developed).

5 APRON - TAXING DURING WINTER CONDITIONS

Not Applicable.

6 TAXIING — LIMITATIONS

Insufficient safety distances restrict large aircraft's use of certain taxiways when using their own power. Further information will be given to each aircraft from the TWR or GMC.

7 SCHOOL AND TRAINING FLIGHTS - TECHNICAL TEST FLIGHTS - USE OF RUNWAYS

Training flights not permitted.

8 HELICOPTER TRAFFIC — LIMITATION

(To be developed).

9 REMOVAL OF DISABLED AIRCRAFT FROM RUNWAYS

When an aircraft is wrecked on a runway, it is the duty of the owner or user of such aircraft to have it removed as soon as possible. If a wrecked aircraft is not removed from the runway as quickly as possible by the owner or user, the aircraft will be removed by the aerodrome authority at the owner's or user's expense.

OTHH AD 2.21 NOISE ABATEMENT PROCEDURES

NIL

OTHH AD 2.22 FLIGHT PROCEDURES

1 SPECIAL PROCEDURES APPLICABLE TO ILS CATEGORY II / III OPERATIONS AT HAMAD INTERNATIONAL

1.1 GENERAL

1.1.1 ILS CAT II / III approach facilities are available at HAMAD INTERNATIONAL airport as follows:

- OTHH: RWY 16L, CAT II or CAT III
- OTHH: RWY 34R, CAT II or CAT III
- OTHH: RWY 16R, CAT II or CAT III
- OTHH: RWY 34L, CAT II or CAT III

1.1.2 Current Information concerning surface, wind and RVR is immediately available from ATC and significant changes will be reported in accordance with the provisions of PANS - ATM (DOC 4444).

1.1.3 Any changes in the operational status expected to last more than one hour will be promulgated by NOTAM and pilots will be advised accordingly by ATIS or on initial contact with ATC.

1.2 MINIMA

See section [OTHH 2.22.3](#) Aerodrome Operating Minima

1.3 AUTHORIZATION

Operators will be permitted to execute CAT II / III approaches and landings if they are legally authorized by their own state of registration to do so, and after having conveyed a copy of their relevant certification papers to the:

Post: Chairman
Civil Aviation Authority
P.O. Box 3000
Doha
State of Qatar

And obtaining endorsement of acceptance therefrom.

2 LOW VISIBILITY PROCEDURES (LVP)

2.1 As authorised by QCAA, Low Visibility Procedures (LVP) will be instituted in a phase approach manner at HAMAD INTERNATIONAL airport whenever the official meteorological visibility condition is 2000 M or less, or whenever the cloud base is 1000 FT or less, or whenever conditions are such that all of the manoeuvring area cannot be seen from the control tower.

2.2 The procedures will ensure protection of the ILS localizer and glide path signals to ILS CAT III limits, provide an effective surface movement guidance and control system, and ensure a safe ground environment for aircraft and vehicles.

2.3 LVP will not normally be introduced for aircraft carrying out practice CAT II or CAT III approaches although a request may be made to ATC for ILS signal protection.

3 AERODROME OPERATING MINIMA

3.1 LANDING OPERATING MINIMA

Straight-in RWY	Aircraft Category			
	A	B	C	D
RWY 16L				
CAT 3B ILS	RVR 50 M	RVR 50 M	RVR 50 M	RVR 50 M
CAT 3A ILS	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M
CAT 2 ILS	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 129 FT (116 FT) RA 117 FT
ALS out	RVR 300 M	RVR 300 M	RVR 300 M	RVR 300 M*/350 M
ILS	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 220 FT (207 FT) RVR 550 M
ALS out	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M
LOC	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M
ALS out	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M
RNP (LNAV/VNAV)	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M
ALS out	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M
RNP (LNAV)	MDA (H) 570 FT (557 FT) RVR 1800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M
ALS out	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M
VOR/DME	MDA (H) 1020 FT (1007 FT) RVR 4 100 M	MDA (H) 1020 FT (1007 FT) RVR 4 100 M	MDA (H) 1020 FT (1007 FT) RVR 4 100 M	MDA (H) 1020 FT (1007 FT) RVR 4 100 M
ALS out	RVR 4 900 M	RVR 4 900 M	RVR 4 900 M	RVR 4 900 M
RWY 16R				
CAT 3B ILS	RVR 50 M	RVR 50 M	RVR 50 M	RVR 50 M

Straight-in RWY	Aircraft Category			
	A	B	C	D
CAT 3A ILS	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M
CAT 2 ILS	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 132 FT (119 FT) RA 123 FT
ALS out	RVR 300 M	RVR 300 M	RVR 300 M	RVR 300 M*/350 M
ILS	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 220 FT (207 FT) RVR 550 M
ALS out	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M
LOC	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M	MDA (H) 370 FT (357 FT) RVR 900 M
ALS out	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M
RNP(LNAV/VNAV)	DA (H) 380 FT (367 FT) RVR 1 000 M	DA (H) 380 FT (367 FT) RVR 1 000 M	DA (H) 380 FT (367 FT) RVR 1 000 M	DA (H) 380 FT (367 FT) RVR 1 000 M
ALS out	RVR 1 700 M	RVR 1 700 M	RVR 1 700 M	RVR 1 700 M
RNP (LNAV)	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M
ALS out	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M
VOR/DME	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M
ALS out	RVR 1 800 M	RVR 1 800 M	RVR 1 800 M	RVR 1 800 M
RWY 34L				
CAT 3B ILS	RVR 50 M	RVR 50 M	RVR 50 M	RVR 50 M
CAT 3A ILS	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M
CAT 2 ILS	DA (H) 184 FT (171 FT) RA 174 FT	DA (H) 200 FT (187 FT) RA 191 FT	DA (H) 213 FT (200 FT) RA 204 FT	DA (H) 226 FT (213 FT) RA 213 FT
ALS out	RVR 450 M	RVR 450 M	RVR 450 M	RVR 450 M
CAT 2 ILS 4.0% Missed Approach Climb Gradient	DA (H) 113 FT (100 FT) RA 99 FT	DA (H) 113 FT (100 FT) RA 99 FT	DA (H) 113 FT (100 FT) RA 99 FT	DA (H) 132 FT (119 FT) RA 120 FT
ALS out	RVR 300 M	RVR 300 M	RVR 300 M	RVR 300 M*/350 M
ILS	DA (H) 301 FT (288 FT) RVR 650 M	DA (H) 310 FT (297 FT) RVR 650 M	DA (H) 320 FT (307 FT) RVR 700 M	DA (H) 330 FT (317 FT) RVR 700 M
ALS out	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M
ILS 4.0% Missed Approach Climb Gradient	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 220 FT (207 FT) RVR 550 M
ALS out	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M
LOC	MDA (H) 340 FT (327 FT) RVR 800 M	MDA (H) 340 FT (327 FT) RVR 800 M	MDA (H) 340 FT (327 FT) RVR 800 M	MDA (H) 340 FT (327 FT) RVR 800 M
ALS out	RVR 1 500 M	RVR 1 500 M	RVR 1 500 M	RVR 1 500 M
RNP (LNAV/VNAV)	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M	DA (H) 370 FT (357 FT) RVR 900 M
ALS out	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M	RVR 1 600 M
RNP (LNAV)	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M	MDA (H) 570 FT (557 FT) RVR 1 800 M
ALS out	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M	RVR 2 500 M

Straight-in RWY	Aircraft Category			
	A	B	C	D
VOR/DME	MDA (H) 530 FT (517 FT) RVR 1 600 M	MDA (H) 530 FT (517 FT) RVR 1 600 M	MDA (H) 530 FT (517 FT) RVR 1 600 M	MDA (H) 530 FT (517 FT) RVR 1 600 M
ALS out	RVR 2 400 M	RVR 2 400 M	RVR 2 400 M	RVR 2 400 M
RWY 34R				
CAT 3B ILS	RVR 50 M	RVR 50 M	RVR 50 M	RVR 50 M
CAT 3A ILS	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M	RA 50 FT RVR 200 M
CAT 2 ILS	DA (H) 113 FT (100 FT) RA 100 FT	DA (H) 124 FT (111 FT) RA 113 FT	DA (H) 137 FT (124 FT) RA 132 FT	DA (H) 156 FT (143 FT) RA 151 FT
ALS out	RVR 300 M	RVR 300 M	RVR 400 M	RVR 450 M
ILS	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 213 FT (200 FT) RVR 550 M	DA (H) 222 FT (209 FT) RVR 550 M	DA (H) 235 FT (222 FT) RVR 550 M
ALS out	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M	RVR 1 200 M
LOC	MDA (H) 320 FT (307 FT) RVR 700 M	MDA (H) 320 FT (307 FT) RVR 700 M	MDA (H) 320 FT (307 FT) RVR 700 M	MDA (H) 320 FT (307 FT) RVR 700 M
ALS out	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M
RNP (LNAV/VNAV)	DA (H) 310 FT (297 FT) RVR 650 M	DA (H) 310 FT (297 FT) RVR 650 M	DA (H) 310 FT (297 FT) RVR 650 M	DA (H) 310 FT (297 FT) RVR 650 M
ALS out	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M	RVR 1 400 M
RNP (LNAV)	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M	MDA (H) 410 FT (397 FT) RVR 1 100 M
ALS out	RVR 1 800 M	RVR 1 800 M	RVR 1 800 M	RVR 1 800 M
VOR/DME	MDA (H) 1 360 FT (1 347 FT) RVR 4 600 M	MDA (H) 1 360 FT (1 347 FT) RVR 4 600 M	MDA (H) 1 360 FT (1 347 FT) RVR 4 600 M	MDA (H) 1 360 FT (1 347 FT) RVR 4 600 M
ALS out	RVR 5 000 M	RVR 5 000 M	RVR 5 000 M	RVR 5 000 M
<i>*300 M may be used for Category D aeroplane conducting an auto-land</i>				

Circle to Land	100 KT	135 KT	180 KT	250 KT
After ILS 16L, LOC 16L, RNP 16L, ILS 16R, LOC 16R, RNP 16R, VOR 16R, ILS 34L, LOC 34L, RNP 34L, VOR 34L, ILS 34R, LOC 34R or RNP 34R.	MDA (H) 620 FT (607 FT) VIS 1 500 M	MDA (H) 620 FT (607 FT) VIS 1 600 M	MDA (H) 1 240 FT (1 227 FT) VIS 2 400 M	MDA (H) 1 240 FT (1 227 FT) VIS 3 600 M
After VOR 16L	MDA (H) 1 020 FT (1 007 FT) VIS 1 500 M	MDA (H) 1 020 FT (1 007 FT) VIS 1 600 M	MDA (H) 1 240 FT (1 227 FT) VIS 2 400 M	MDA (H) 1 240 FT (1 227 FT) VIS 3 600 M
After VOR 34R	MDA (H) 1 360 FT (1 347 FT) VIS 1 500 M	MDA (H) 1 360 FT (1 347 FT) VIS 1 600 M	MDA (H) 1 360 FT (1 347 FT) VIS 2 400 M	MDA (H) 1 360 FT (1 347 FT) VIS 3 600 M

3.2 TAKE-OFF OPERATING MINIMA

Take-off RVR / Visibility for Runway 16L, 16R, 34L & 34R					
LVP must be in force				Runway edge lighting and/or centre line marking (DAY only)	NIL (DAY only)
	Runway edge and centre line lighting and multiple RVR information	Runway edge and centre line lighting	Runway edge lighting and/or centre line marking (DAY only)		
A	150 M	200 M	250 M	-	500 M
B					
C					
D	200 M	250 M	300 M		

Note: The operational minima published for HAMAD INTERNATIONAL airport have been established in accordance with Appendix 1 (New) to QCAR - OPS 1.430.

4 RUNWAY UTILISATION

To ensure the maximum runway utilisation, pilots are expected to comply with the following operational procedures.

4.1 DEPARTURES

- On receipt of line-up clearance pilots should ensure that they are able to taxi and line-up on the runway as soon as the preceding aircraft has commenced either its take-off roll or landing run.
- On receipt of take-off clearance, pilots should ensure that they are able to commence take-off without delay.
- Pilots not able to comply with these requirements should notify ATC as soon as possible, latest when transferred to Hamad Tower frequency.

4.2 ARRIVALS

- Pilots shall plan their landing and roll out to target the rapid exit taxiways that provide for a safe and expeditious exit from the runway to reduce delays and maximize runway utilization at all times. 90° angle taxiways shall only be used if instructed by ATC.
- The aircraft should not be slowed down significantly below normal taxi speed or stopped on any exit taxiway unless approved by ATC.
- Rapid Exit Taxiway Indicator Lights (RETILs) are provided on runway 16R/34L and 16L/34R to assist pilots in judging distances to rapid exit taxiways and enable them to apply braking action for a more efficient roll-out and runway exit speed. RETILs are provided for rapid exit taxiways as follows:
RWY 16R - L8, L5, L3
RWY 34L - L4, L6, L9
RWY 16L - A8, A7, A3
RWY 34R - A4, A5, A9

5 TRANSPONDER OPERATING PROCEDURES ON THE GROUND

Advanced Surface Movement Guidance and Control System (A-SMGCS) using Mode-S Multi-lateration had been commissioned at Hamad International Airport.

Aircraft Transponder Operating Procedures, in the movement area, as listed below;

5.1 DEPARTURES

ACFT at parking stand

- Enter the discrete SSR code received from Clearance Delivery/TWR.
- Enter the three letter ICAO designator followed by the flight number (e.g.QTR123) through the FMS or the Transponder.

During Pushback

- Transponder shall be selected manually in order to display the aircraft identification (Callsign and the SSR code) on the A-SMGCS display.
- ATC will verify the data and use it for identification.

5.2 ARRIVALS

Landing aircraft to maintain their transponder switched - on until they park on the stand.

6 ARRIVAL AIRCRAFT CONTACT PROCEDURE

In the absence of instructions by DOHA APP to transfer frequency, landing aircraft are advised to contact Hamad Tower East - Frequency 118.525 MHz or Hamad Tower West - Frequency 118.025 MHz at 5 NM Final.

7 RNP INSTRUMENT APPROACH PROCEDURE

7.1 WAYPOINT LIST

Designator	Co-ordinates	Approach procedure
ODBIP	253537.40N 0512800.00E	RNP RWY16L, RNP RWY 16R
TANDO*	252853.68N 0512422.68E	RNP RWY16L, RNP RWY 16R
IVANI*	253302.21N 0513544.87E	RNP RWY16L, RNP RWY 16R
TOVAN*	253109.81N 0513037.05E	RNP RWY16L
HH601	252621.31N 0513244.59E	RNP RWY16L
RW16L	251745.97N 0513631.96E	RNP RWY16L
HH602	251449.85N 0513749.52E	RNP RWY16L
GENOT	252018.11N 0515114.66E	RNP RWY16L, RNP RWY 16R, RNP RWY 34L, RNP RWY 34R
GOLSI*	253047.17N 0512929.86E	RNP RWY16R
HH501	252602.84N 0513135.62E	RNP RWY16R
RW16R	251727.52N 0513523.07E	RNP RWY16R
HH502	251439.85N 0513636.94E	RNP RWY16R
VEKIS	250047.55N 0513419.39E	RNP RWY16R
PURVA	250341.28N 0514617.29E	RNP RWY16R
ASLEB	251255.45N 0515211.43E	RNP RWY16R
EMUNA	245712.86N 0514455.31E	RNP RWY34L, RNP RWY 34R
DANIK*	245948.49N 0513712.89E	RNP RWY34L, RNP RWY 34R
MUXED*	250356.10N 0514832.78E	RNP RWY34L, RNP RWY 34R
IMKAT*	250138.57N 0514220.38E	RNP RWY34L
HH801	250643.86N 0514006.34E	RNP RWY34L
RW34L	251519.32N 0513619.56E	RNP RWY34L
HH802	251806.98N 0513505.67E	RNP RWY34L
DARTU	252224.62N 0513133.18E	RNP RWY34L
SIVOT	252655.93N 0512749.08E	RNP RWY34L
BUBOD	252920.40N 0513612.95E	RNP RWY34L
TATSA	252615.54N 0514621.66E	RNP RWY34L
LAGMA*	250204.62N 0514325.78E	RNP RWY34R
HH901	250644.17N 0514123.09E	RNP RWY34R
RW34R	251519.65N 0513736.41E	RNP RWY34R
HH902	251807.32N 0513622.55E	RNP RWY34R
GOMBO	252944.22N 0514450.16E	RNP RWY34R

Note: Waypoints marked with asterisk (*) are listed in [ENR 4.4](#)

8 ADVISORY NOTICE TO ALL DEPARTING TRAFFIC

8.1 Aircraft departing on RWY 16R/34L should be aware of possible TCAS warnings due to VFR (helicopter) operations East of OTBD RWY 15/33. OTBD VFR helicopter traffic are deemed separated from OTHH departing traffic.

8.2 VFR traffic at OTBD, operate as follows (Refer to [AD.OTBD-CHART-55](#) - Helicopter Route Chart):

8.2.1 Rotary wing

- VFR helicopter departures from OTBD: Helicopters departing from RWY 15 will turn left to CRA (251531.20N, 0513503.57E) climbing to 1000 FT to cross CRA at 1000 FT, then helicopter will proceed to MRT (251800.58N, 0513357.07E) and standby for ATC Clearance to cross north of THR RWY 16R/16L en-route to BAY (251910.92N, 0513657.70E). From BAY aircraft will route via BNE (251850.49N, 0514140.25E) en-route to the East. Once cleared by ATC aircraft will climb to 1500 FT until CTR boundary.

2. VFR helicopter departures from OTBD: Helicopters departing from RWY 33 will turn right to CRA (251531.20N 0513503.57E) climbing to 1000 FT to cross CRA at 1000 FT, then helicopter will proceed to SRA (251423.05N 0513528.92E) and standby for ATC clearance to cross south of THR RWY 34L/34R en-route to SEA (251526.40N 0513836.00E). From SEA aircraft will route via BNE (251850.49N, 0514140.25E) en-route to the East. Once cleared by ATC aircraft will climb to 1500 FT until CTR boundary.
3. VFR Helicopter landing at Doha from East: All helicopters from the East will route to BNE at 500 FT and will be route either via BAY or SEA depending on runway in use to cross either north or south of THR RWY 16L/16R or THR RWY 34R/34L en-route to Doha.

8.2.2 Fixed wing

1. VFR departures from OTBD - RWY 15 are independent from OTHH IFR traffic on the proviso that the VFR traffic climbs straight ahead to 700 FT, turns to the west before the upwind end of OTBD RWY 15. The VFR departure will state if it is unable to adhere to this route and will therefore be treated as per OTBD IFR departure.
2. VFR departures from OTBD - RWY 33 are independent from OTHH IFR traffic on the proviso that the VFR traffic climbs straight ahead to 700 FT, turns to the west and remains south of OTP45. The VFR departure will state if it is unable to adhere to this route and will therefore be treated as per OTBD IFR departure.

OTHH AD 2.23 ADDITIONAL INFORMATION

1 AREAS IN THE AD WHERE BIRDS ARE OBSERVED

A study has been conducted by AD Operator (interim Wildlife Hazard Management Plan / version May 2012). Chart is available at [OTHH-AD-2.24](#).

2 SURFACE MOVEMENT GUIDANCE, CONTROL SYSTEM AND MARKINGS

2.1 Stand identification / taxiway guide lines / visual docking / parking guidance system.

2.2 Nose wheel guidelines on taxiways and aprons.

2.3 A follow-me vehicle will be provided for all non-standard parking.

2.4 Parking stands are equipped with Visual Docking Guidance System (VDGS).

3 VISUAL DOCKING GUIDANCE SYSTEM (VDGS)

The VDGS is an aircraft parking aid for airport and aircraft safety and efficiency.

3.1 GENERAL SAFETY MEASURES

3.1.1 The VDGS has a built -in error detection program to inform the aircraft pilot of impending dangers during the docking procedure.

3.1.2 If the pilot is unsure of the information being shown on the VDGS display unit, he / she must immediately stop the aircraft and obtain further information for clearance.

3.1.3 The pilot shall not enter the stand area, unless the docking system first is showing the vertical running arrows. The pilot must not proceed beyond the bridge, unless these arrows have been superseded by the closing rate bar.

3.1.4 The pilot shall not enter the stand area, unless the aircraft type displayed is equal to approaching aircraft.

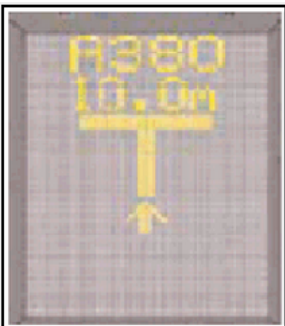
3.1.5 When using the docking system, pilots are advised to taxi into the aircraft stand at minimum speed. The system will display "SLOW" to inform the pilot if the aircraft's taxiing speed is too fast. (See [ITEM 3.2.6](#) of Stand docking procedures).

3.1.6 To avoid overshooting, pilots are advised to approach the stop position slowly and observe the closing rate information displayed. Pilots should stop the aircraft immediately when seeing the "STOP" display or when given the "STOP" sign by the aircraft marshaller.

3.1.7 The SBU MESSAGE - The message STOP SBU means that docking has been interrupted and has to be resumed only by manual guidance. Do not try to resume docking without manual guidance.

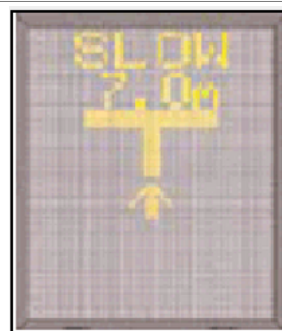
3.2 STAND DOCKING PROCEDURES

No Marshall will be present in bays equipped with VDGS. In the event of malfunction of VDGS, pilots should hold position and inform ATC.

3.2.1 START-OF-DOCKING The system is activated by pressing one of the aircraft type buttons on the operator panel. When the system has been activated, 'WAIT' will be displayed.	
3.2.2 CAPTURE The yellow scrolling arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed. The pilot must not enter the parking stand area unless the yellow scrolling arrows are displayed.	
3.2.3 TRACKING On successful capture of the aircraft, the yellow scrolling arrows are replaced by the yellow centre line indicator (Closing Rate Bar). The flashing red arrow indicates the direction the aircraft should turn. The yellow arrow shows position in relation to the centre line. This indicator gives the correct position and azimuth guidance. In the figure, the yellow arrow indicates an aircraft to the left of the centre line and the red flashing arrow indicates the direction to steer in-order to align the aircraft with the centre line.	
3.2.4 CLOSING RATE Display of digital countdown starts when the aircraft is 20 meters from stop position. When the aircraft is less than 12 meters from the stop-position, the closing rate is indicated by turning off one row of the centre line symbol per half a metre of the distance, covered by the aircraft towards the stop-position of the stand. The picture illustrates the aircraft is 16 meters from the stop-position, slightly left of the centre line. The red arrow indicates the direction to steer.	
3.2.5 ALIGNED TO CENTRE The absence of any direction arrow indicates the aircraft is on the centre line. The picture illustrates that the aircraft is 10 meters from the stop-position and is on the centre line.	

3.2.6 SLOW (DECREASE SPEED)

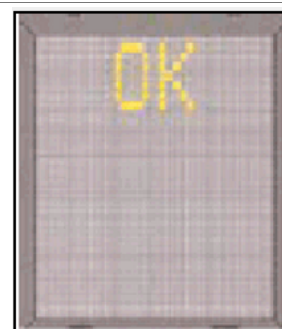
If the aircraft is approaching faster than the accepted speed, the system will show 'SLOW' as a warning to the pilot.

**3.2.7 STOP POSITION REACHED**

When the correct stop-position is reached, the display will show 'STOP'.

**3.2.8 DOCKING COMPLETED**

When the aircraft has parked, 'OK' will be displayed.

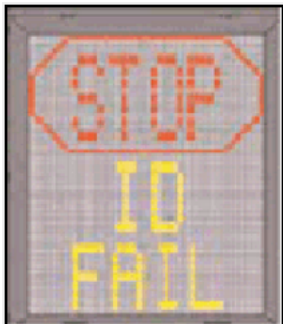
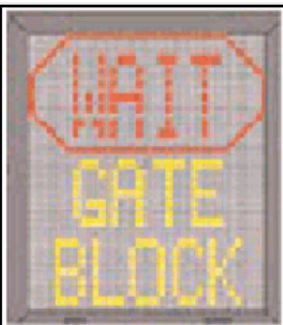
**3.2.9 OVERSHOOT**

If the aircraft overshoot the stop-position, 'TOO FAR' will be displayed.

**3.2.10 STOP SHORT**

If the aircraft is found standing still but has not reached the intended stop-position, the message 'STOP OK' will be shown after a while.

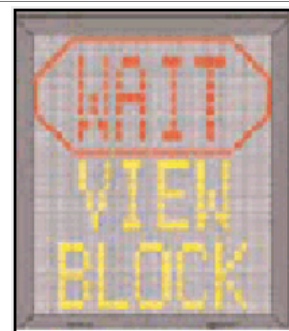


3.2.11 WAIT If some object is blocking the view toward approaching aircraft or the detected aircraft is lost during docking close to STOP, the display will show 'WAIT'. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again. The pilot must not proceed further, unless the 'WAIT' message has been superseded by the closing rate bar.	
3.2.12 AIRCRAFT VERIFICATION FAILURE During entry into the stand, the aircraft geometry is being checked. If, for any reason, aircraft verification is not made 12 M before the stop-position, the display will first show 'WAIT' and make a second verification check. If this fails 'STOP' and 'ID FAIL' will be displayed. The pilot must not proceed further without manual guidance, unless the 'WAIT' message has been superseded by the closing rate bar.	
3.2.13 SLOW (IN ABNORMAL SITUATIONS) This display can be shown for two reasons: a. BAD WEATHER CONDITION During heavy fog, rain or sandstorm, the visibility for the docking system can be reduced. When the system is activated and in capture mode, the display will disable the yellow scrolling arrows and display 'SLOW' and the aircraft type. As soon as the system detects the approaching aircraft, the closing rate bar will appear. If the system has been configured in this mode to make a shortened ID verification (check of engine position excluded), the aircraft symbol will blink to give attention. b. AIRCRAFT LOST DURING DOCKING If the aircraft is lost during docking, the display will show 'SLOW'. As soon as the system detects the approaching aircraft, the closing rate bar will re-appear. The pilot must not proceed further, unless the closing rate bar is shown.	
3.2.14 GATE BLOCKED If an object is found blocking the view from the docking system to the planned stop position for the aircraft, the docking procedure will be halted with a 'WAIT' and 'GATE BLOCK' message. The docking procedure will resume as soon as the blocking object has been removed. The pilot must not proceed further without manual guidance, unless the 'WAIT' message has been superseded by the closing rate bar.	

3.2.15 VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for example internally in the unit on the laser lens or on the laser window by dirt, or another obstacle in the closest view area, the docking system will report a view blocked condition, i.e. 'VIEW BLOCK'. Once the system is able to see the aircraft through the hinder, the message will be replaced by closing rate bar.

The pilot must not proceed further without manual guidance, unless the 'WAIT' message has been superseded by the closing rate bar.

**3.2.16 SBU-STOP**

Any unrecoverable error during the docking procedure will generate a SBU (Safety Back Up) condition. The display will show 'STOP SBU' message.

A manual backup procedure will be used for docking guidance.

**3.2.17 TOO FAST**

If the aircraft approaches with a speed higher than the docking system can handle, the message 'STOP' and 'TOO FAST' will be displayed. The docking system must be re-started or the docking procedure completed by manual guidance.

**3.2.18 EMERGENCY STOP**

Pilots should stop the aircraft immediately when 'STOP' is displayed.

**3.2.19 CHOCKS ON**

'CHOCK ON' will be displayed when the ground staff has put the chocks in front of the nose wheel and pressed the 'chocks on' button on the operator panel.

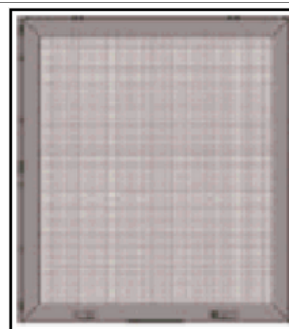


3.2.20 ERROR

If a system error occurs, the message 'ERROR' will be displayed with an error code.

**3.2.21 SYSTEM BREAKDOWN / POWER FAILURE**

In case of a severe system failure or power failure, the display will go black. A manual backup procedure will be used for docking guidance.

**4 AIRCRAFT PARKING RESTRICTIONS AT HAMAD INTERNATIONAL AIRPORT****4.1 Code C and Code D Aircraft**

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
ACFT Code - C												ACFT Code-D
A1	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A3	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A4	E	Y	Y	Y	Y	Y	L	L	L	L	L	L
A5	F	Y	Y	Y	Y	Y	L	L	L	Y	Y	Y
A6	E	Y	Y	Y	Y	Y	Y	Y	L	Y	Y	Y
A7	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A8	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A9	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A10	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
A11	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
B1	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
B2	E	Y	Y	Y	Y	Y	Y	Y	L	L	L	L
B3	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
B4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
B5	E	Y	Y	Y	Y	Y	L	Y	L	Y	Y	Y
B6	E	Y	Y	Y	Y	Y	Y	Y	L	Y	Y	Y
B7	E	Y	Y	Y	Y	Y	Y	Y	L	Y	Y	Y
B8	E	Y	Y	Y	Y	Y	L	Y	L	Y	Y	Y
B9	E	Y	Y	Y	Y	Y	Y	Y	L	Y	Y	Y
B10	E	Y	Y	Y	Y	Y	Y	Y	L	L	Y	Y
C1	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C2	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y

Legend:
Y – Possible
N – Not Possible
L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
		ACFT Code - C									ACFT Code-D	
C3	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C4	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C5	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C6	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C7	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C8	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C9	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C10	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C11	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C12	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
C13	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D1	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D2	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D3	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D3L	C	Y	N	L	N	N	L	L	L	L	N	N
D3R	C	Y	N	L	N	N	L	L	L	L	N	N
D4	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D5	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D5L	C	Y	Y	L	L	L	L	L	L	L	N	N
D5R	C	Y	N	L	N	N	L	L	L	L	N	N
D7	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D7L	C	Y	Y	L	L	L	L	L	L	L	N	N
D7R	C	Y	Y	L	L	L	L	L	L	L	N	N
D9	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D9L	C	Y	Y	L	L	L	L	L	L	L	N	N
D9R	C	Y	Y	L	L	L	L	L	L	L	N	N
D11	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D13	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D13L	C	Y	Y	L	L	L	L	L	L	L	N	N
D13R	C	Y	Y	L	L	L	L	L	L	L	N	N
D15	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
D15L	C	Y	Y	L	L	L	L	L	L	L	N	N
D15R	C	Y	Y	L	L	L	L	L	L	L	N	N
D17	E	N	N	N	N	N	N	N	N	N	N	N
D17R	C	Y	Y	L	L	L	L	L	L	L	N	N
D19	E	N	N	N	N	N	N	N	N	N	N	N
D19L	C	Y	Y	L	L	L	L	L	L	L	N	N
D19R	C	Y	Y	L	L	L	L	L	L	L	N	N
E1	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E2	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E3	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E3L	C	Y	N	L	N	N	L	L	L	L	N	N
E3R	C	Y	Y	L	L	L	L	L	L	L	N	N
E4	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E5	F	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E5L	C	Y	Y	L	L	L	L	L	L	L	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
ACFT Code - C											ACFT Code-D	
E5R	C	Y	Y	L	L	L	L	L	L	L	N	N
E7	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E7L	C	Y	Y	L	L	L	L	L	L	L	N	N
E7R	C	Y	Y	L	L	L	L	L	L	L	N	N
E9	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E11	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E11L	C	Y	N	L	N	N	L	L	L	L	N	N
E11R	C	Y	Y	L	L	L	L	L	L	L	N	N
E13	E	Y	Y	Y	Y	Y	L	L	L	L	Y	Y
E13L	C	Y	N	L	N	N	L	L	L	L	N	N
E13R	C	Y	Y	L	L	L	L	L	L	L	N	N
E15	E	N	N	N	N	N	N	N	N	N	N	N
E15L	C	Y	Y	L	L	L	L	L	L	L	N	N
E17	E	N	N	N	N	N	N	N	N	N	N	N
E17L	C	Y	Y	L	L	L	L	L	L	L	N	N
E17R	C	Y	Y	L	L	L	L	L	L	L	N	N
G1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G1L	C	Y	Y	L	L	L	L	L	L	L	N	N
G1R	C	Y	Y	L	L	L	Y	Y	L	L	N	N
G2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G2L	C	Y	Y	L	L	L	L	L	L	L	N	N
G2R	C	Y	Y	L	L	L	L	L	L	L	N	N
G3C	C	Y	Y	L	L	L	L	L	L	L	N	N
G4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G4L	C	Y	Y	L	L	L	L	L	L	L	N	N
G4R	C	Y	Y	L	L	L	Y	Y	L	L	N	N
G5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G5L	C	Y	Y	L	L	L	L	L	L	L	N	N
G5R	C	Y	Y	L	L	L	L	L	L	L	N	N
G6	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G6L	C	Y	Y	L	L	L	L	L	L	L	N	N
G6R	C	Y	N	Y	N	N	L	L	L	L	N	N
H1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H1L	C	Y	Y	L	L	L	L	L	L	L	N	N
H1R	C	Y	Y	L	L	L	L	L	L	L	N	N
H2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H2L	C	Y	Y	L	L	L	L	L	L	L	N	N
H2R	C	Y	Y	L	L	L	L	L	L	L	N	N
H3C	C	Y	Y	L	L	L	L	L	L	L	N	N
H4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H4L	C	Y	Y	L	L	L	L	L	L	L	N	N
H4R	C	Y	Y	L	L	L	L	L	L	L	N	N
H5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H5L	C	Y	Y	L	L	L	L	L	L	L	N	N
H5R	C	Y	Y	L	L	L	L	L	L	L	N	N
H6	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Legend: Y – Possible N – Not Possible L – Possible with aircraft handling constraints												

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
		ACFT Code - C									ACFT Code-D	
H6L	C	Y	N	L	N	N	L	L	L	L	N	N
H6R	C	Y	Y	L	L	L	Y	Y	L	L	N	N
F1	E	N	N	N	N	N	N	N	N	N	N	N
F2	E	N	N	N	N	N	N	N	N	N	N	N
F3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F6	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F7	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F8	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F9	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F10	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
F11	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	L	L
Q2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	L	L
Q3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	L	L
Q4	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q20	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q21	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q40	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q41	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q50	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q51	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V1	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V2L	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V2R	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Y1	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y2	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y3	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y4	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y5	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y6	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y7	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y8	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y9	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
501	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
501L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
501R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
502	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
502L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
502R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
503	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
503L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
ACFT Code - C											ACFT Code-D	
503R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
504	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
504L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
504R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
505	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
505L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
505R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
506	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
506L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
506R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
507	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
507L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
507R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
508	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
508L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
508R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
509	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
509L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
509R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
510	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
510L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
510R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
511	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
511L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
511R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
512	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
512L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
512R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
513	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
513L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
513R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
514	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
514L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
514R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
515	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
515L	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
515R	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
425E	C	Y	Y	N	N	N	Y	N	Y	Y	N	N
425W	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
426E	C	Y	Y	N	N	N	Y	N	Y	Y	N	N
426W	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
427E	C	Y	Y	N	N	N	Y	N	Y	Y	N	N
427W	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
428E	C	Y	Y	N	N	N	Y	N	Y	Y	N	N
428W	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
429E	C	Y	Y	N	N	N	Y	N	Y	Y	N	N

Legend:
Y – Possible
N – Not Possible
L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A318 A319 A320	A321	B732 B733 B734 B735 B737	B738	B739	E170	E190	F100	MD80 MD81 MD82 MD83 MD88	A300 A306 A310	B752 B753 B762 B763 B764
		ACFT Code - C										ACFT Code-D
429W	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Legend: Y – Possible N – Not Possible L – Possible with aircraft handling constraints												

4.2 Code E and Code F Aircraft

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A332 A333 A342 A343	A345 A346	A359	B742 B743	B744	B747S	B772 B77L	B773 B77W	B788	A388	B748
		ACFT Code - E										ACFT Code-F
A1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
A3	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
A4	E	L	L	L	L	L	L	L	L	L	N	N
A5	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
A6	E	Y	L	Y	Y	Y	Y	Y	L	Y	N	N
A7	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
A8	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
A9	E	Y	L	Y	Y	Y	Y	Y	L	L	N	Y
A10	E	Y	L	Y	Y	Y	Y	Y	L	Y	N	Y
A11	E	Y	N	N	N	N	N	Y	N	Y	N	N
B1	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
B2	E	L	L	L	L	L	L	L	L	L	N	N
B3	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
B4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
B5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
B6	E	Y	Y	Y	Y	Y	Y	Y	Y	L	N	N
B7	E	Y	L	Y	Y	Y	Y	Y	L	Y	N	N
B8	E	Y	L	Y	Y	Y	Y	Y	L	Y	N	Y
B9	E	Y	L	Y	Y	Y	Y	Y	L	Y	N	Y
B10	E	Y	N	N	Y	Y	Y	Y	N	Y	N	N
C1	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
C3	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
C5	E	Y	Y	Y	Y	Y	Y	Y	Y	L	N	N
C6	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C7	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C8	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C9	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C10	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
C11	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	N
C12	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
C13	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
D1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Legend: Y – Possible N – Not Possible L – Possible with aircraft handling constraints												

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A332 A333 A342 A343	A345 A346	A359	B742 B743	B744	B747S	B772 B77L	B773 B77W	B788	A388	B748
ACFT Code - E											ACFT Code-F	
D2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
D3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
D3L	C	N	N	N	N	N	N	N	N	N	N	N
D3R	C	N	N	N	N	N	N	N	N	N	N	N
D4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
D5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
D5L	C	N	N	N	N	N	N	N	N	N	N	N
D5R	C	N	N	N	N	N	N	N	N	N	N	N
D7	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
D7L	C	N	N	N	N	N	N	N	N	N	N	N
D7R	C	N	N	N	N	N	N	N	N	N	N	N
D9	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
D9L	C	N	N	N	N	N	N	N	N	N	N	N
D9R	C	N	N	N	N	N	N	N	N	N	N	N
D11	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
D13	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
D13L	C	N	N	N	N	N	N	N	N	N	N	N
D13R	C	N	N	N	N	N	N	N	N	N	N	N
D15	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
D15L	C	N	N	N	N	N	N	N	N	N	N	N
D15R	C	N	N	N	N	N	N	N	N	N	N	N
D17	E	L	L	L	L	L	L	L	L	L	N	N
D17R	C	N	N	N	N	N	N	N	N	N	N	N
D19	E	L	L	L	L	L	L	L	L	L	N	N
D19L	C	N	N	N	N	N	N	N	N	N	N	N
D19R	C	N	N	N	N	N	N	N	N	N	N	N
E1	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E2	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
E3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E3L	C	N	N	N	N	N	N	N	N	N	N	N
E3R	C	N	N	N	N	N	N	N	N	N	N	N
E4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
E5	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
E5L	C	N	N	N	N	N	N	N	N	N	N	N
E5R	C	N	N	N	N	N	N	N	N	N	N	N
E7	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E7L	C	N	N	N	N	N	N	N	N	N	N	N
E7R	C	N	N	N	N	N	N	N	N	N	N	N
E9	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E11	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E11L	C	N	N	N	N	N	N	N	N	N	N	N
E11R	C	N	N	N	N	N	N	N	N	N	N	N
E13	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
E13L	C	N	N	N	N	N	N	N	N	N	N	N
E13R	C	N	N	N	N	N	N	N	N	N	N	N
E15	E	L	L	L	L	L	L	L	L	L	N	N
E15L	C	N	N	N	N	N	N	N	N	N	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A332 A333 A342 A343	A345 A346	A359	B742 B743	B744	B747S	B772 B77L	B773 B77W	B788	A388	B748
		ACFT Code - E									ACFT Code-F	
E17	E	L	L	L	L	L	L	L	L	L	N	N
E17L	C	N	N	N	N	N	N	N	N	N	N	N
E17R	C	N	N	N	N	N	N	N	N	N	N	N
G1	E	Y	Y	L	Y	Y	Y	Y	Y	Y	L	Y
G1L	C	N	N	N	N	N	N	N	N	N	N	N
G1R	C	N	N	N	N	N	N	N	N	N	N	N
G2	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
G2L	C	N	N	N	N	N	N	N	N	N	N	N
G2R	C	N	N	N	N	N	N	N	N	N	N	N
G3C	C	N	N	N	N	N	N	N	N	N	N	N
G4	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
G4L	C	N	N	N	N	N	N	N	N	N	N	N
G4R	C	N	N	N	N	N	N	N	N	N	N	N
G5	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
G5L	C	N	N	N	N	N	N	N	N	N	N	N
G5R	C	N	N	N	N	N	N	N	N	N	N	N
G6	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
G6L	C	N	N	N	N	N	N	N	N	N	N	N
G6R	C	N	N	N	N	N	N	N	N	N	N	N
H1	E	Y	Y	L	Y	Y	Y	Y	Y	Y	L	Y
H1L	C	N	N	N	N	N	N	N	N	N	N	N
H1R	C	N	N	N	N	N	N	N	N	N	N	N
H2	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
H2L	C	N	N	N	N	N	N	N	N	N	N	N
H2R	C	N	N	N	N	N	N	N	N	N	N	N
H3C	C	N	N	N	N	N	N	N	N	N	N	N
H4	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
H4L	C	N	N	N	N	N	N	N	N	N	N	N
H4R	C	N	N	N	N	N	N	N	N	N	N	N
H5	E	Y	Y	L	Y	Y	Y	Y	Y	Y	N	Y
H5L	C	N	N	N	N	N	N	N	N	N	N	N
H5R	C	N	N	N	N	N	N	N	N	N	N	N
H6	E	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y
H6L	C	N	N	N	N	N	N	N	N	N	N	N
H6R	C	N	N	N	N	N	N	N	N	N	N	N
F1	E	N	N	N	N	N	N	N	N	N	N	N
F2	E	N	N	N	N	N	N	N	N	N	N	N
F3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F6	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F7	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F8	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F9	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F10	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
F11	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Q1	E	Y	Y	Y	L	L	L	L	L	Y	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A332 A333 A342 A343	A345 A346	A359	B742 B743	B744	B747S	B772 B77L	B773 B77W	B788	A388	B748
ACFT Code - E											ACFT Code-F	
Q2	E	Y	Y	Y	L	L	L	L	L	Y	N	N
Q3	E	Y	Y	Y	L	L	L	L	L	Y	N	N
Q4	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q20	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q21	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q40	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q41	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Q50	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Q51	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
V1	F	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
V2L	F	L	L	L	L	L	L	L	L	L	L	L
V2R	F	L	L	L	L	L	L	L	L	L	L	L
V3	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
V4	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
V5	E	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Y1	C	N	N	N	N	N	N	N	N	N	N	N
Y2	C	N	N	N	N	N	N	N	N	N	N	N
Y3	C	N	N	N	N	N	N	N	N	N	N	N
Y4	C	N	N	N	N	N	N	N	N	N	N	N
Y5	C	N	N	N	N	N	N	N	N	N	N	N
Y6	C	N	N	N	N	N	N	N	N	N	N	N
Y7	C	N	N	N	N	N	N	N	N	N	N	N
Y8	C	N	N	N	N	N	N	N	N	N	N	N
Y9	C	N	N	N	N	N	N	N	N	N	N	N
501	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
501L	C	N	N	N	N	N	N	N	N	N	N	N
501R	C	N	N	N	N	N	N	N	N	N	N	N
502	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
502L	C	N	N	N	N	N	N	N	N	N	N	N
502R	C	N	N	N	N	N	N	N	N	N	N	N
503	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
503L	C	N	N	N	N	N	N	N	N	N	N	N
503R	C	N	N	N	N	N	N	N	N	N	N	N
504	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
504L	C	N	N	N	N	N	N	N	N	N	N	N
504R	C	N	N	N	N	N	N	N	N	N	N	N
505	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
505L	C	N	N	N	N	N	N	N	N	N	N	N
505R	C	N	N	N	N	N	N	N	N	N	N	N
506	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
506L	C	N	N	N	N	N	N	N	N	N	N	N
506R	C	N	N	N	N	N	N	N	N	N	N	N
507	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
507L	C	N	N	N	N	N	N	N	N	N	N	N
507R	C	N	N	N	N	N	N	N	N	N	N	N
508	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
508L	C	N	N	N	N	N	N	N	N	N	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

Stand ID & Code		Aircraft Type & Code										
Stand ID	Stand Code	A332 A333 A342 A343	A345 A346	A359	B742 B743	B744	B747S	B772 B77L	B773 B77W	B788	A388	B748
		ACFT Code - E									ACFT Code-F	
508R	C	N	N	N	N	N	N	N	N	N	N	N
509	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
509L	C	N	N	N	N	N	N	N	N	N	N	N
509R	C	N	N	N	N	N	N	N	N	N	N	N
510	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
510L	C	N	N	N	N	N	N	N	N	N	N	N
510R	C	N	N	N	N	N	N	N	N	N	N	N
511	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
511L	C	N	N	N	N	N	N	N	N	N	N	N
511R	C	N	N	N	N	N	N	N	N	N	N	N
512	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
512L	C	N	N	N	N	N	N	N	N	N	N	N
512R	C	N	N	N	N	N	N	N	N	N	N	N
513	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
513L	C	N	N	N	N	N	N	N	N	N	N	N
513R	C	N	N	N	N	N	N	N	N	N	N	N
514	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
514L	C	N	N	N	N	N	N	N	N	N	N	N
514R	C	N	N	N	N	N	N	N	N	N	N	N
515	E	Y	N	Y	N	N	N	Y	Y	Y	N	N
515L	C	N	N	N	N	N	N	N	N	N	N	N
515R	C	N	N	N	N	N	N	N	N	N	N	N
425E	C	N	N	N	N	N	N	N	N	N	N	N
425W	C	N	N	N	N	N	N	N	N	N	N	N
426E	C	N	N	N	N	N	N	N	N	N	N	N
426W	C	N	N	N	N	N	N	N	N	N	N	N
427E	C	N	N	N	N	N	N	N	N	N	N	N
427W	C	N	N	N	N	N	N	N	N	N	N	N
428E	C	N	N	N	N	N	N	N	N	N	N	N
428W	C	N	N	N	N	N	N	N	N	N	N	N
429E	C	N	N	N	N	N	N	N	N	N	N	N
429W	C	N	N	N	N	N	N	N	N	N	N	N

Legend:

Y – Possible

N – Not Possible

L – Possible with aircraft handling constraints

OTHH AD 2.24 CHARTS RELATED TO AN AERODROME

AERODROME CHART - ICAO	AD2.OTHH-CHART-01/02
AIRCRAFT PARKING / DOCKING CHART - ICAO	AD2.OTHH-CHART-03
AERODROME OBSTACLE CHART - ICAO RWY 16L/34R Type A	AD2.OTHH-CHART-05
AERODROME OBSTACLE CHART - ICAO RWY 16R/34L Type A	AD2.OTHH-CHART-07
PRECISION APPROACH TERRAIN CHART - ICAO RWY 16L	AD2.OTHH-CHART-09
PRECISION APPROACH TERRAIN CHART - ICAO RWY 34R	AD2.OTHH-CHART-11
PRECISION APPROACH TERRAIN CHART - ICAO RWY 16R	AD2.OTHH-CHART-13
PRECISION APPROACH TERRAIN CHART - ICAO RWY 34L	AD2.OTHH-CHART-15
SID - ICAO RWY 16L BATHA 1M RNP	AD2.OTHH-CHART-17/18
SID - ICAO RWY 16L BUNDU 1M RNP	AD2.OTHH-CHART-19/20

SID - ICAO RWY 16L ALSEM 1M / ALVEN 1M / NAMLA 1M RNP	AD2.OTHH-CHART-21/22
SID - ICAO RWY 16L PATOM 1M RNP	AD2.OTHH-CHART-23/24
SID - ICAO RWY 16L SALWA 1M RNP	AD2.OTHH-CHART-25/26
SID - ICAO RWY 16L/R LOXUL 1C/1M	AD2.OTHH-CHART-27
SID - ICAO RWY 16R BATHA 1C RNP	AD2.OTHH-CHART-29/30
SID - ICAO RWY 16R ALSEM 1C / BUNDU 1C / NAMLA 1C RNP	AD2.OTHH-CHART-31/32
SID - ICAO RWY 16R ALVEN 1C / PATOM 1C RNP	AD2.OTHH-CHART-33/34
SID - ICAO RWY 16R SALWA 1C RNP	AD2.OTHH-CHART-35/36
SID - ICAO RWY 34L BATHA 1W RNP	AD2.OTHH-CHART-37/38
SID - ICAO RWY 34L ALSEM 1W / BUNDU 1W / NAMLA 1W RNP	AD2.OTHH-CHART-39/40
SID - ICAO RWY 34L ALVEN 1W / PATOM 1W RNP	AD2.OTHH-CHART-41/42
SID - ICAO RWY 34L PATOM 1Z CCO RNP	AD2.OTHH-CHART-43/44
SID - ICAO RWY 34L SALWA 1W RNP	AD2.OTHH-CHART-45/46
SID - ICAO RWY 34L/R MUXOP 1E/1W	AD2.OTHH-CHART-47
SID - ICAO RWY 34R BATHA 1E / SALWA 1E RNP	AD2.OTHH-CHART-49/50
SID - ICAO RWY 34R ALSEM 1E / BUNDU 1E / NAMLA 1E RNP	AD2.OTHH-CHART-51/52
SID - ICAO RWY 34R ALVEN 1E / PATOM 1E RNP	AD2.OTHH-CHART-53/54
STAR - ICAO RWY 16L AFNAN 1M / BAYAN 1M / GINTO 1M RNP	AD2.OTHH-CHART-55/56
STAR - ICAO RWY 16R AFNAN 1C / BAYAN 1C / GINTO 1C RNP	AD2.OTHH-CHART-57/58
STAR - ICAO RWY 34L AFNAN 1W / BAYAN 1W / GINTO 1W RNP	AD2.OTHH-CHART-59/60
STAR - ICAO RWY 34R AFNAN 1E / BAYAN 1E / GINTO 1E RNP	AD2.OTHH-CHART-61/62
ATC SURVEILLANCE MINIMUM ALTITUDE CHART - ICAO	AD2.OTHH-CHART-63
IAC - ICAO RWY 16L ILS	AD2.OTHH-CHART-65
IAC - ICAO RWY 16L VOR	AD2.OTHH-CHART-67
IAC - ICAO RWY 16L RNP	AD2.OTHH-CHART-69/70
IAC - ICAO RWY 16R ILS	AD2.OTHH-CHART-71
IAC - ICAO RWY 16R VOR	AD2.OTHH-CHART-73
IAC - ICAO RWY 16R RNP	AD2.OTHH-CHART-75/76
IAC - ICAO RWY 34L ILS	AD2.OTHH-CHART-77
IAC - ICAO RWY 34L VOR	AD2.OTHH-CHART-79
IAC - ICAO RWY 34L RNP	AD2.OTHH-CHART-81/82
IAC - ICAO RWY 34R ILS	AD2.OTHH-CHART-83
IAC - ICAO RWY 34R VOR	AD2.OTHH-CHART-85
IAC - ICAO RWY 34R RNP	AD2.OTHH-CHART-87/88
BIRD CONCENTRATIONS	AD2.OTHH-CHART-89

AERODROME
CHART - ICAO

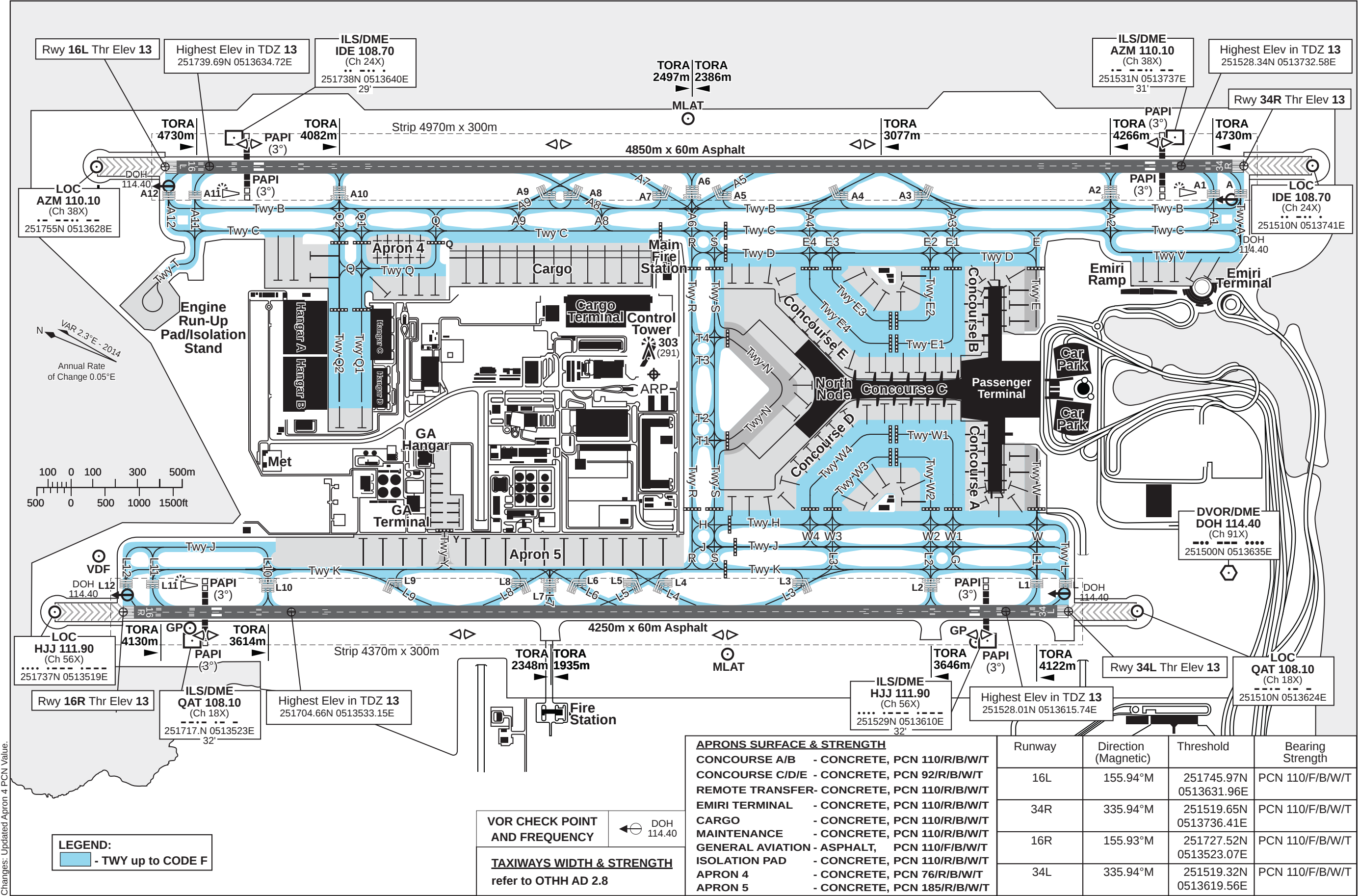
DISTANCES IN METRES.
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET.

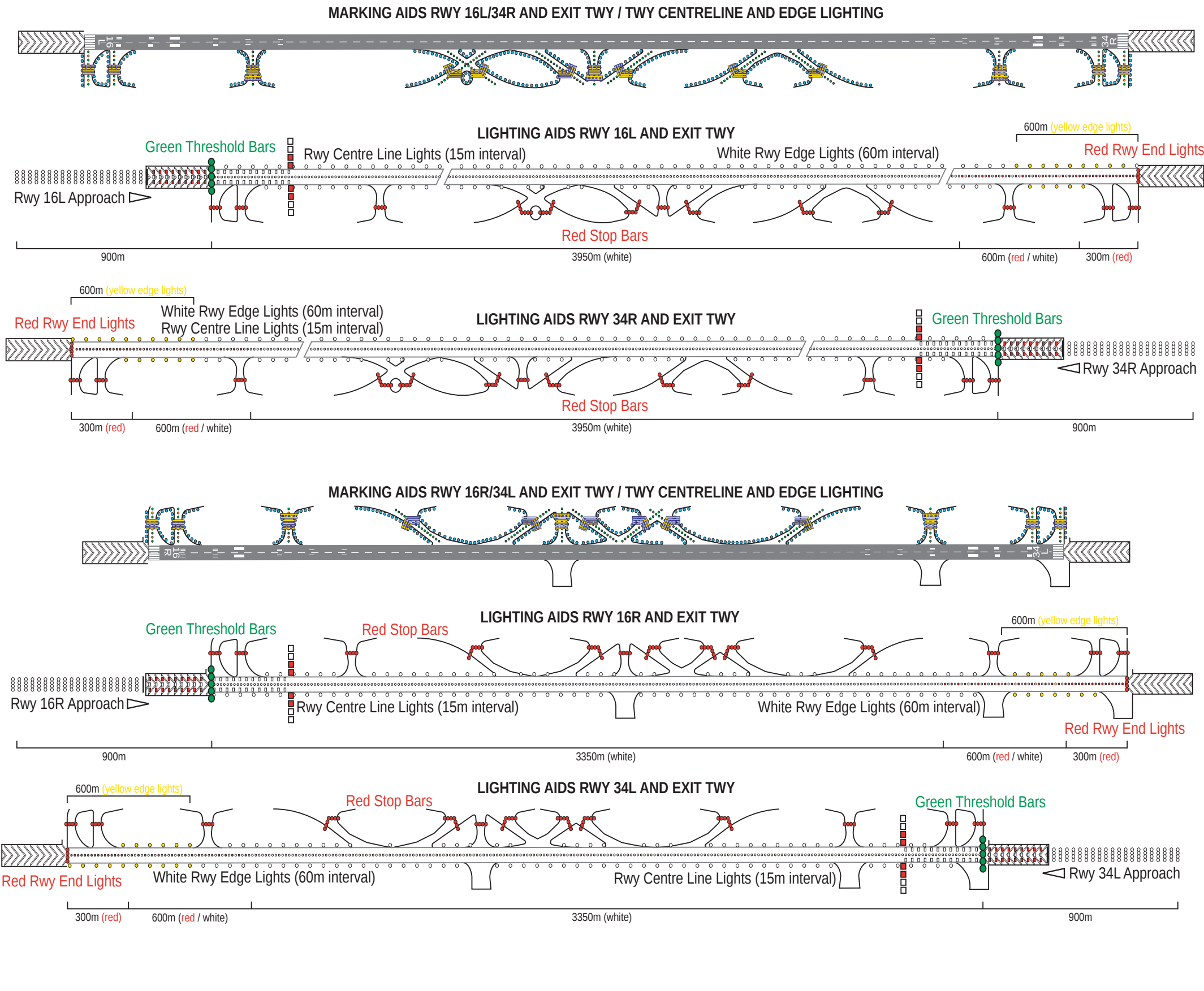
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251628.43N
0513630.16E

AD ELEV 13FT

DOHA APP	119.725 / 120.60	GMC (EAST)	120.225
DIRECTOR	119.40 / 121.125	GMC (WEST)	118.650
TWR (EAST)	118.525 / 118.225	ATIS	126.850
TWR (WEST)	118.025 / 118.225		

HAMAD Intl.
OTHH





Changes: Chart re-issued.

AIRCRAFT PARKING/DOCKING
CHART - ICAO

DISTANCES IN METRES.
ALTITUDES, ELEVATIONS
AND HEIGHTS IN FEET.

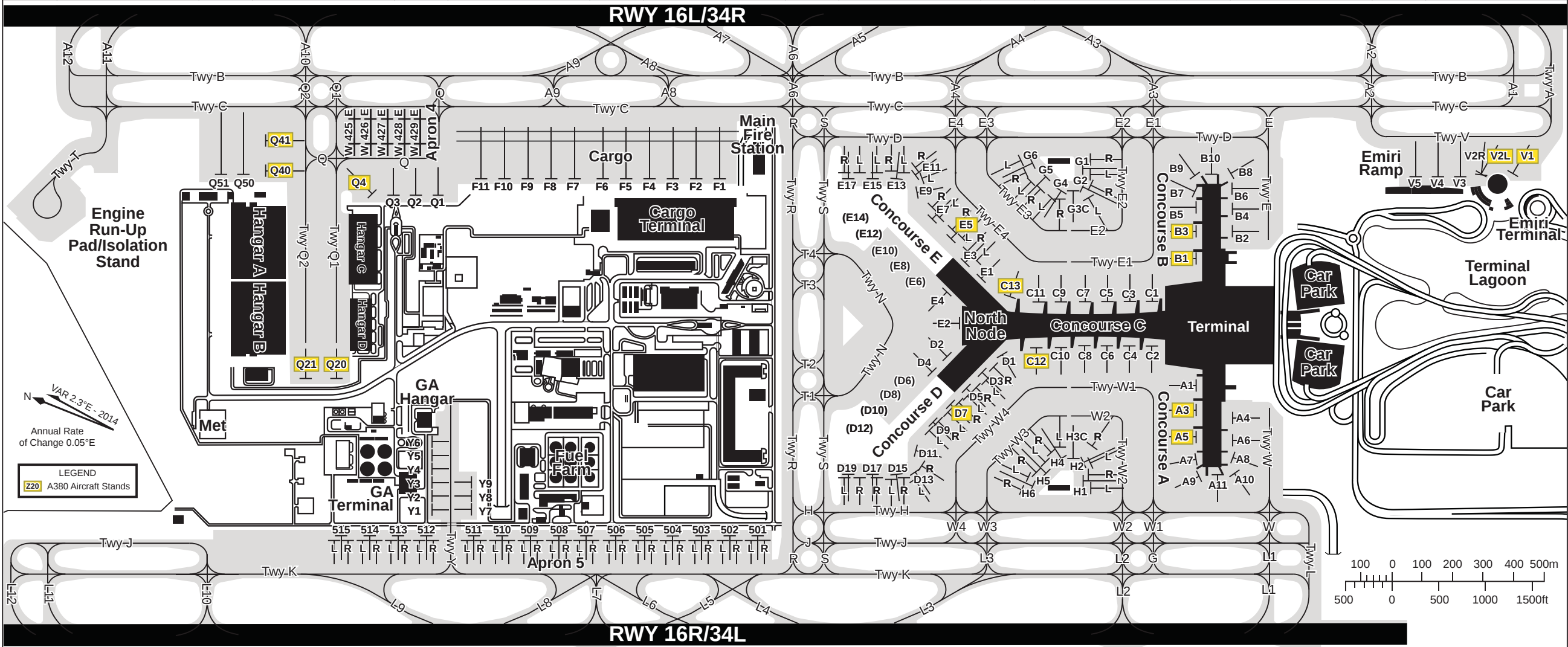
ARP
251628.43N
0513630.16E

APRON ELEV
17FT

DOHA APP	119.725 / 120.60	GMC (EAST)	120.225
DIRECTOR	119.40 / 121.125	GMC (WEST)	118.650
TWR (EAST)	118.525 / 118.225	ATIS	126.850
TWR (WEST)	118.025 / 118.225		

HAMAD Intl.
OTHH

A1	251540.55N 0513641.08E	B1	251545.50N 0513654.74E	C1	251548.15N 0513648.22E	C11	251559.27N 0513643.28E	D5L	251602.10N 0513629.61E	D10	Not available	D17R	251608.27N 0513618.03E	E5	251610.36N 0513646.36E
A3	251539.59N 0513638.43E	B2	251543.04N 0513659.30E	C2	251546.36N 0513643.29E	C12	251557.71N 0513638.27E	D5R	251601.51N 0513630.90E	D11	251605.16N 0513621.80E	D19	251610.47N 0513617.09E	E5L	251609.35N 0513646.87E
A4	251535.70N 0513639.16E	B3	251546.56N 0513657.64E	C3	251550.34N 0513647.25E	C13	251602.32N 0513642.64E	D6	Not available	D12	Not available	D19L	251610.43N 0513616.21E	E5R	251610.64N 0513647.36E
A5	251538.53N 0513635.53E	B4	251543.92N 0513701.71E	C4	251548.54N 0513642.33E	D1	251600.42N 0513635.64E	D7	251603.51N 0513627.87E	D13	251604.40N 0513619.59E	D19R	251609.15N 0513616.77E	E6	Not available
A6	251534.83N 0513636.75E	B5	251547.55N 0513700.29E	C5	251552.52N 0513646.29E	D2	251606.39N 0513633.60E	D7L	251603.07N 0513626.93E	D13L	251604.13N 0513618.81E	E1	251605.62N 0513644.21E	E7	251612.97N 0513647.67E
A7	251537.65N 0513633.14E	B6	251544.74N 0513703.87E	C6	251550.73N 0513641.37E	D3	251601.46N 0513633.06E	D7R	251602.61N 0513628.28E	D13R	251603.78N 0513620.11E	E2	251606.34N 0513637.35E	E7L	251612.32N 0513648.12E
A8	251534.13N 0513634.90E	B7	251548.25N 0513701.97E	C7	251554.71N 0513645.33E	D3L	251600.81N 0513632.40E	D8	Not available	D15	251606.14N 0513618.93E	E3	251607.89N 0513645.28E	E7R	251613.48N 0513648.97E
A9	251536.73N 0513631.40E	B8	251545.46N 0513705.50E	C8	251552.92N 0513640.40E	D3R	251600.23N 0513633.76E	D9	251604.61N 0513624.96E	D15L	251606.43N 0513617.88E	E3L	251606.98N 0513645.67E	E8	Not available
A10	251533.34N 0513633.25E	B9	251548.94N 0513703.71E	C9	251557.08N 0513644.25E	D4	251607.55N 0513631.33E	D9L	251604.46N 0513623.63E	D15R	251605.13N 0513618.40E	E3R	251608.20N 0513646.19E	E9	251615.49N 0513649.89E
A11	251534.92N 0513632.39E	B10	251547.34N 0513704.53E	C10	251555.30N 0513639.36E	D5	251602.44N 0513630.55E	D9R	251603.85N 0513625.13E	D17	251607.76N 0513617.53E	E4	251608.72N 0513640.02E	E10	Not available



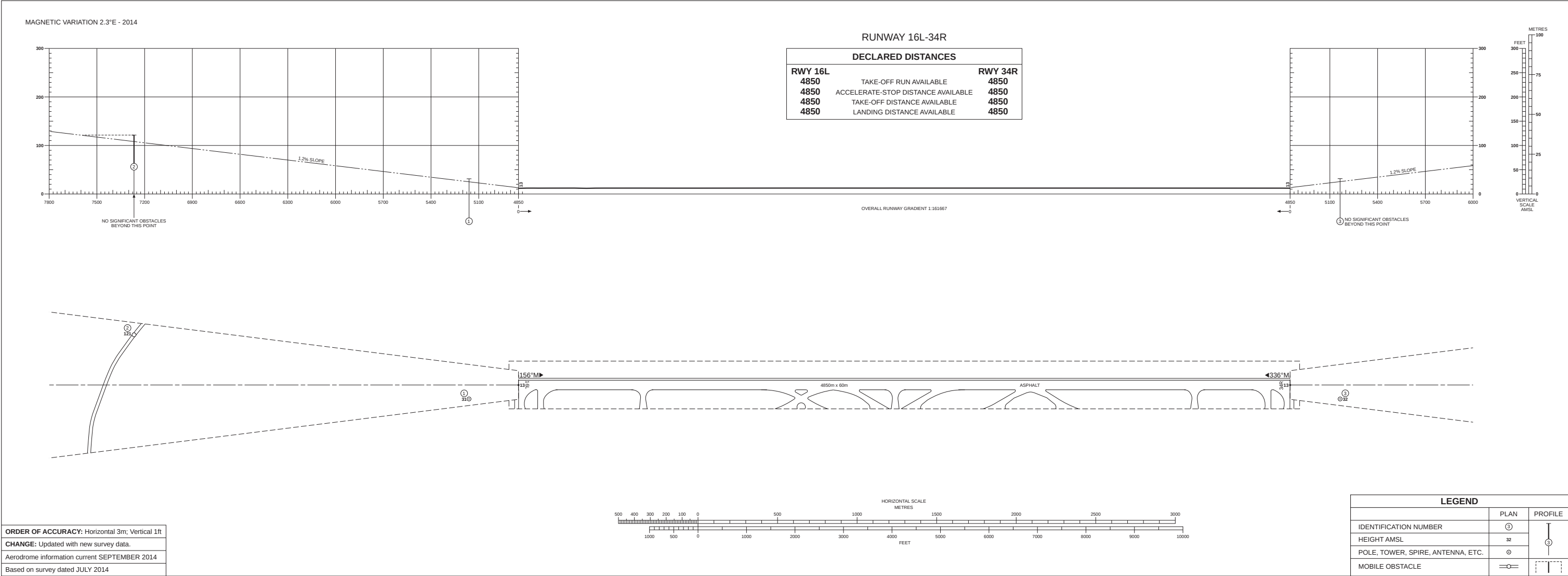
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E11L	251615.36N 0513651.88E	F7	251649.65N 0513636.60E	G6	251605.33N 0513658.05E	H6R	251553.44N 0513622.39E	Y2	251651.20N 0513556.22E	501	251618.49N 0513606.06E	507	251634.57N 0513558.97E	513	251653.63N 0513550.54E*
E11R	251616.28N 0513652.65E	F8	251651.95N 0513635.60E	G6L	251606.40N 0513657.97E	Q1	251702.40N 0513628.93E	Y3	251651.73N 0513557.68E	501L	251618.84N 0513604.95E	507L	251634.93N 0513557.86E	513L	251653.98N 0513549.42E*
E12	Not available	F9	251654.24N 0513634.58E	G6R	251605.41N 0513657.02E	Q2	251704.59N 0513627.97E	Y4	251652.27N 0513559.13E	501R	251617.53N 0513605.53E	507R	251633.62N 0513558.44E	513R	251652.67N 0513550.00E*
E13	251617.89N 0513650.76E	F10	251656.53N 0513633.57E	H1	251547.90N 0513625.92E	Q3	251706.77N 0513627.00E	Y5	251652.80N 0513600.60E	502	251621.11N 0513604.91E	508	251637.54N 0513557.67E	514	251656.25N 0513549.38E*
E13L	251617.28N 0513651.71E	F11	251658.82N 0513632.56E	H1L	251546.83N 0513625.71E	Q4	251708.88N 0513626.22E	Y6	251653.33N 0513602.06E	502L	251621.47N 0513603.79E	508L	251637.89N 0513556.55E	514L	251656.60N 0513548.26E*
E13R	251618.59N 0513651.26E	G1	251600.17N 0513659.62E	H1R	251547.67N 0513626.96E	Q20	251705.13N 0513604.79E	Y7	251646.80N 0513556.46E	502R	251620.15N 0513604.37E	508R	251636.58N 0513557.13E	514R	251655.29N 0513548.84E*
E14	Not available	G1L	251559.34N 0513659.04E	H2	251548.63N 0513627.90E	Q21	251708.14N 0513603.46E	Y8	251647.33N 0513557.92E	503	251623.74N 0513603.75E	509	251640.16N 0513556.51E	515	251658.87N 0513548.22E*
E15	251619.87N 0513649.86E	G1R	251559.80N 0513700.45E	H2L	251547.91N 0513628.16E	Q40	251720.28N 0513624.13E	Y9	251647.86N 0513559.38E	503L	251624.09N 0513602.63E	509L	251640.52N 0513555.40E	515L	251659.23N 0513547.11E*
E15L	251619.85N 0513650.73E	G2	251559.46N 0513657.63E	H2R	251548.34N 0513629.56E	Q41	251721.45N 0513627.36E	425E	251712.33N 0513632.80E*	503R	251622.78N 0513603.21E	509R	251639.21N 0513555.97E	515R	251657.92N 0513547.69E*
E17	251622.05N 0513648.88E	G2L	251558.20N 0513656.65E	H3C	251549.27N 0513628.83E	Q50	251722.33N 0513622.76E	425W	251711.97N 0513631.81E*	504	251626.70N 0513602.44E	510	251642.79N 0513555.35E	Note: * - Calculated values	
E17L	251621.28N 0513650.05E	G2R	251558.78N 0513657.99E	H4	251550.89N 0513627.38E	Q51	251724.52N 0513621.80E	426E	251711.11N 0513633.34E*	504L	251627.06N 0513601.33E	510L	251643.14N 0513554.24E		
E17R	251622.55N 0513649.51E	G3C	251559.34N 0513656.47E	H4L	251551.06N 0513628.21E	V1	251517.78N 0513717.60E	426W	251710.75N 0513632.35E*	504R	251625.74N 0513601.91E	510R	251641.83N 0513554.81E		
F1	251635.43N 0513642.87E	G4	251601.42N 0513656.29E	H4R	251551.71N 0513627.62E	V2L	251520.87N 0513716.27E	427E	251709.89N 0513633.88E*	505	251629.33N 0513601.29E	511	251645.38N 0513554.17E*		
F2	251637.72N 0513641.86E	G4L	251601.87N 0513655.50E	H5	251551.82N 0513625.17E	V2R	251520.76N 0513715.67E	427W	251709.53N 0513632.89E*	505L	251629.68N 0513600.17E	511L	251645.74N 0513553.05E*		
F3	251640.01N 0513640.85E	G4R	251601.02N 0513655.56E	H5L	251552.23N 0513626.24E	V3	251522.82N 0513715.02E	428E	251708.67N 0513634.42E*	505R	251628.37N 0513600.75E	511R	251644.42N 0513553.63E*		
F4	251642.30N 0513639.84E	G5	251603.48N 0513657.18E	H5R	251552.69N 0513624.83E	V4	251525.01N 0513714.05E	428W	251708.30N 0513633.42E*	506	251631.95N 0513600.13E	512	251651.00N 0513551.69E*		
F5	251644.60N 0513638.83E	G5L	251604.33N 0513656.77E	H6	251552.61N 0513623.13E	V5	251527.19N 0513713.09E	429E	251707.44N 0513634.96E*	506L	251632.30N 0513559.01E	512L	251651.36N 0513550.58E*		

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ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

AERODROME OBSTACLE CHART - ICAO
TYPE A OPERATING LIMITATIONS

DOHA/Hamad Intl. (OTHH)
16L/34R - QATAR

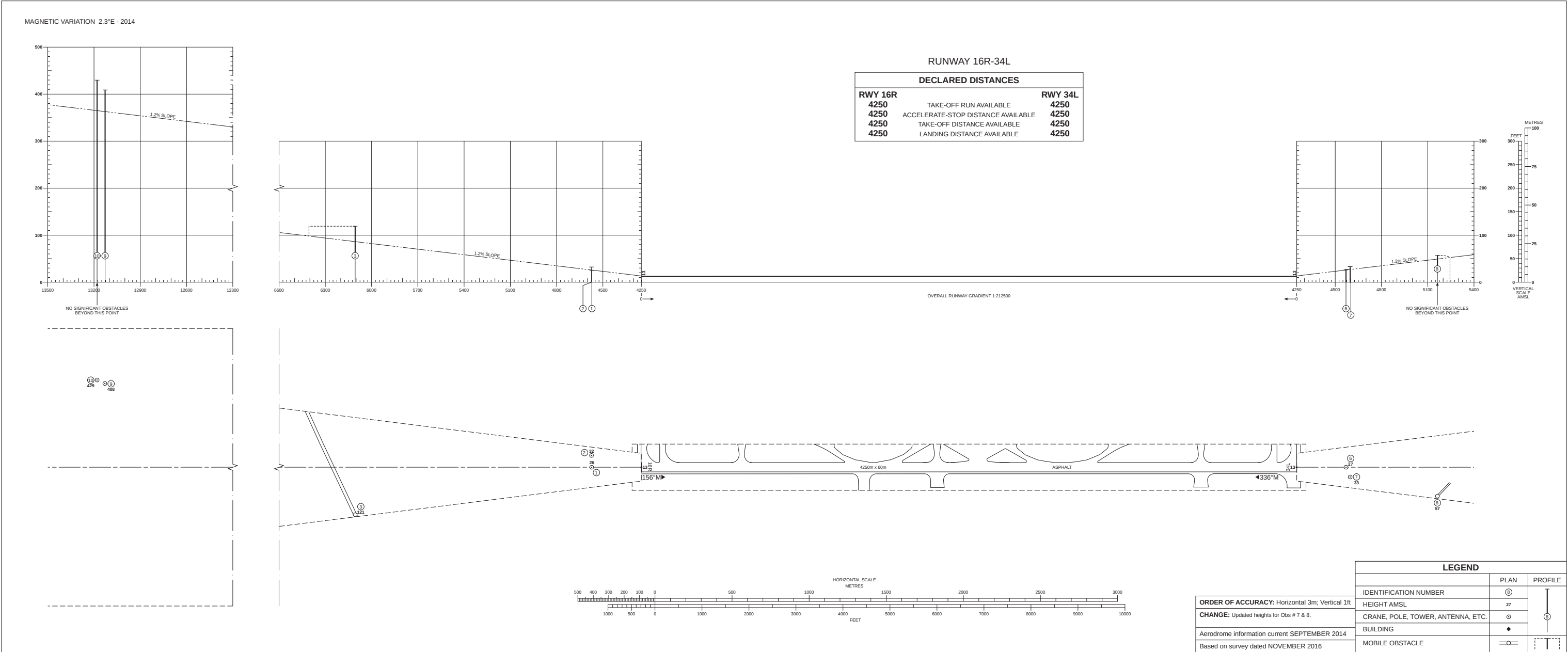


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ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

AERODROME OBSTACLE CHART - ICAO
TYPE A OPERATING LIMITATIONS

DOHA/Hamad Intl. (OTHH)
16R/34L - QATAR

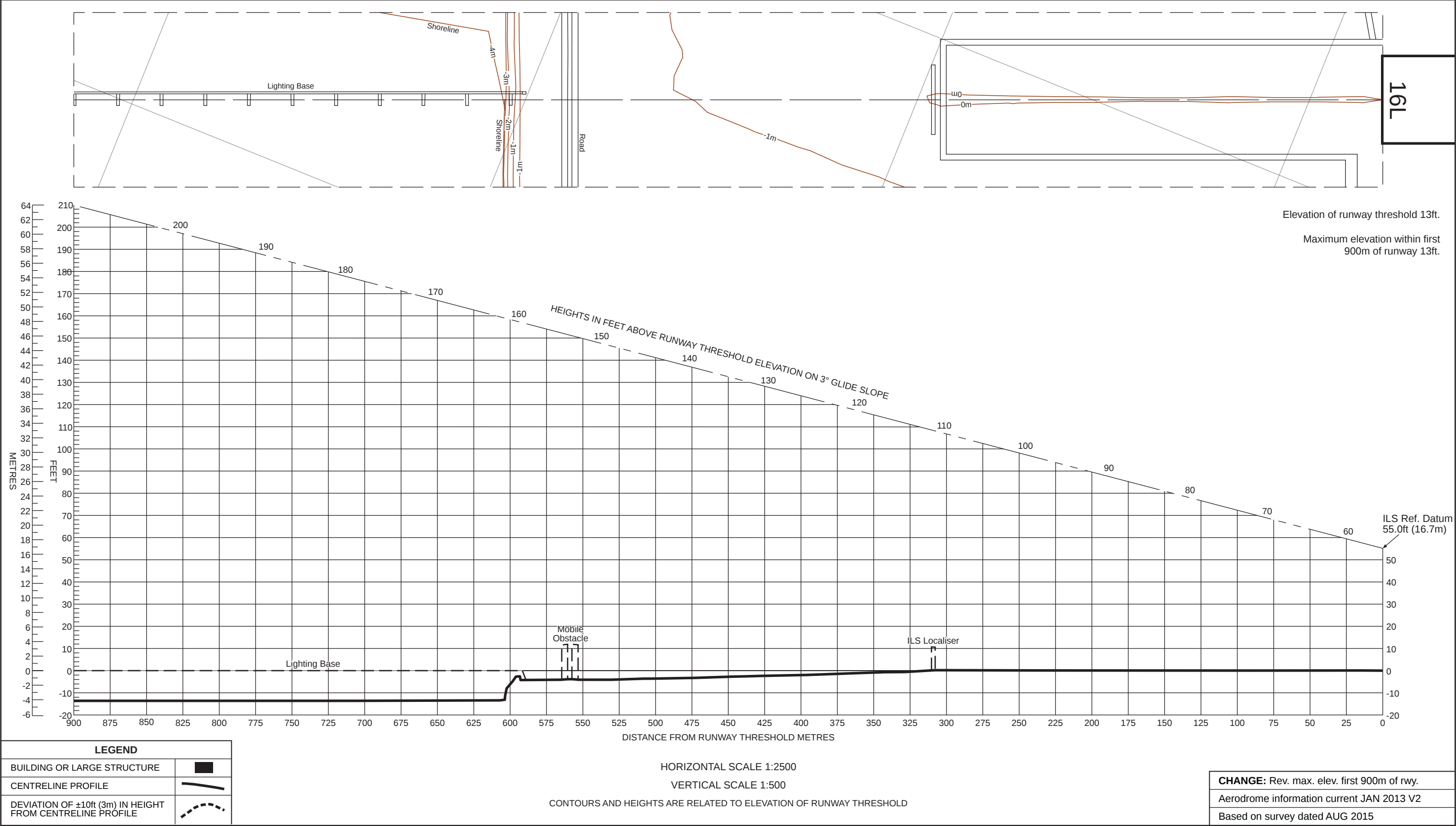


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ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

PRECISION APPROACH TERRAIN CHART - ICAO

DOHA/Hamad Intl. (OTHH)
RUNWAY 16L

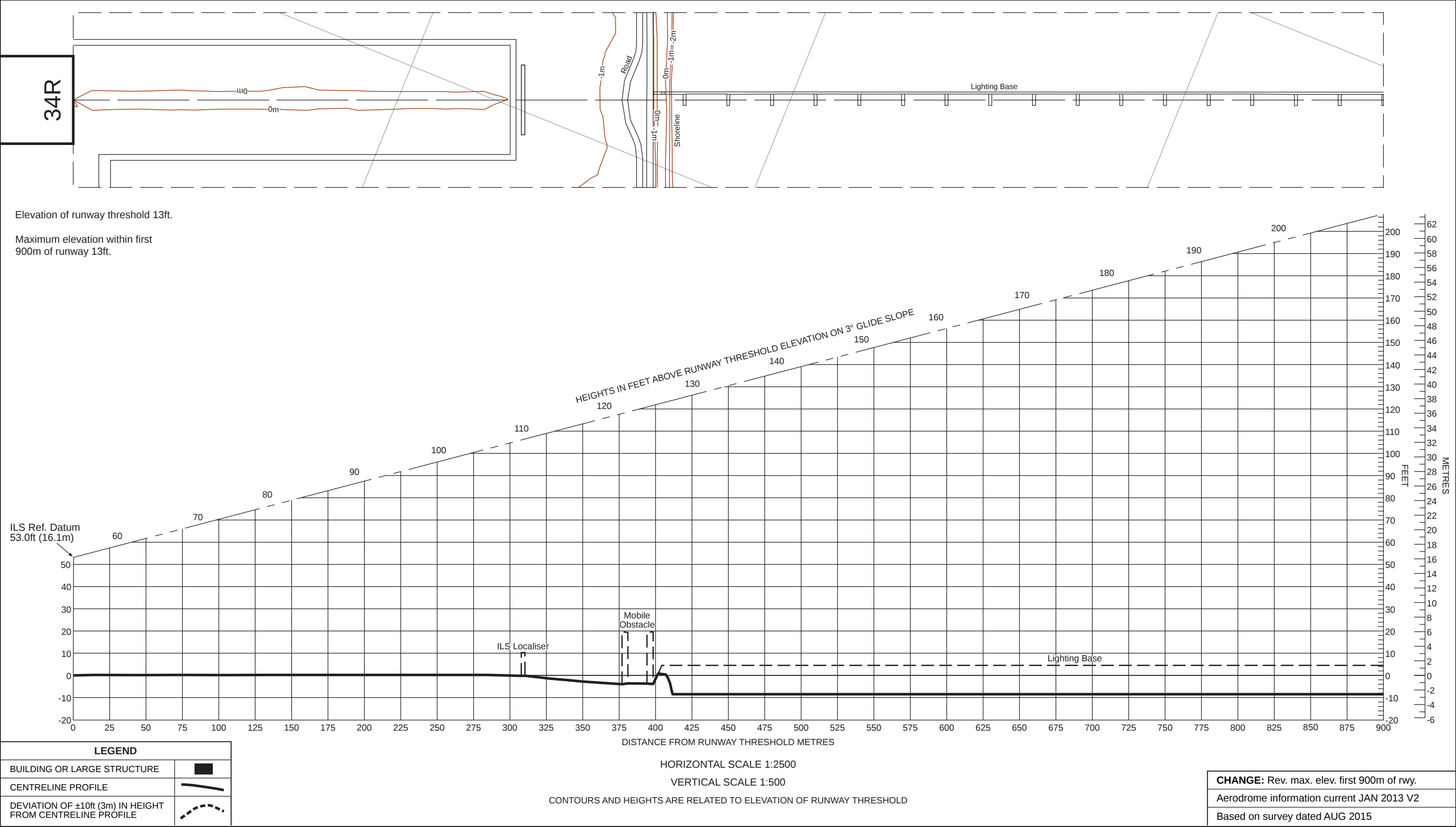


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ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

PRECISION APPROACH TERRAIN CHART - ICAO

DOHA/Hamad Intl. (OTHH)
RUNWAY 34R

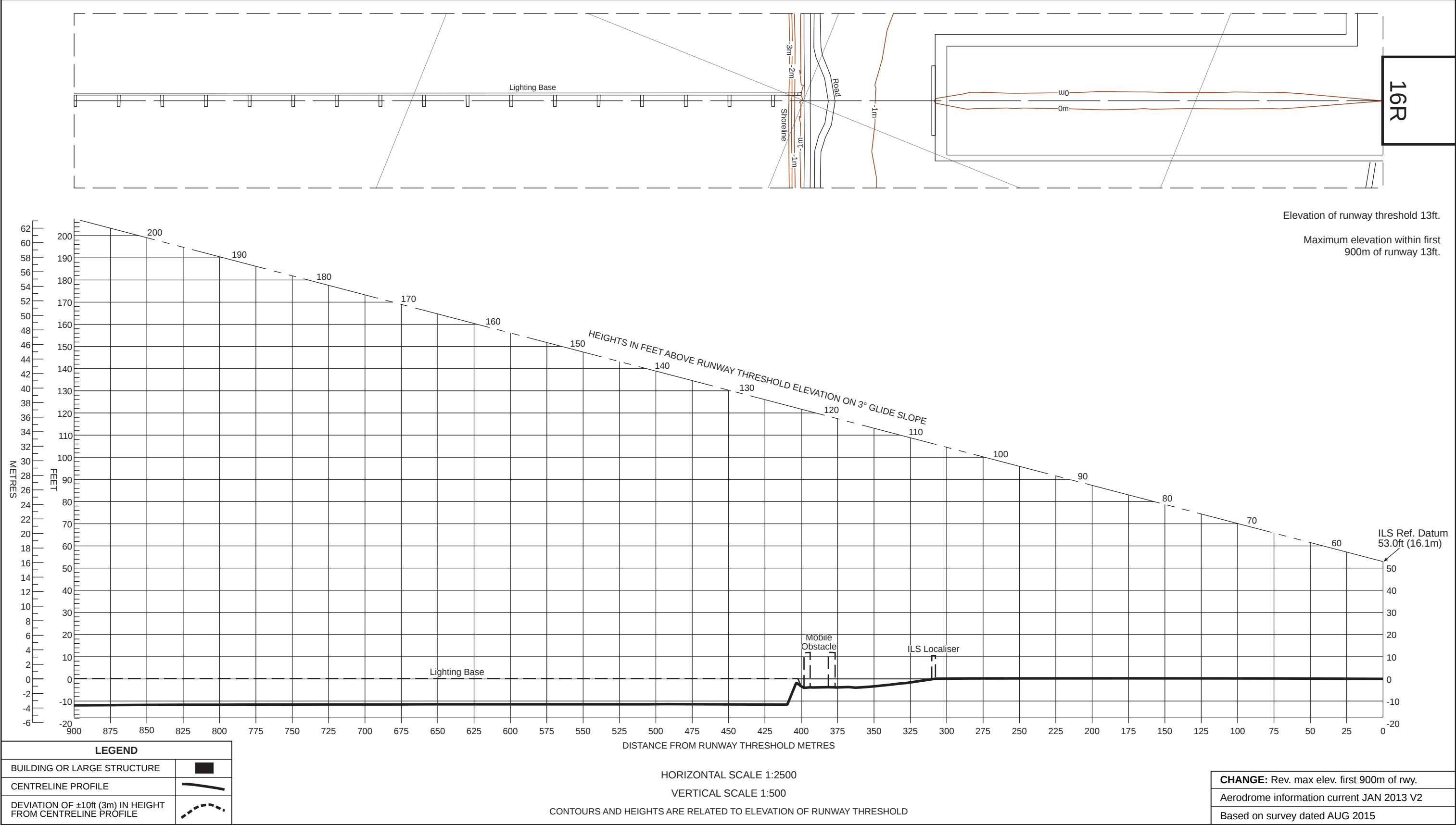


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ELEVATIONS IN FEET
ALL OTHER DIMENSIONS IN METRES

PRECISION APPROACH TERRAIN CHART - ICAO

DOHA/Hamad Intl. (OTHH)
RUNWAY 16R

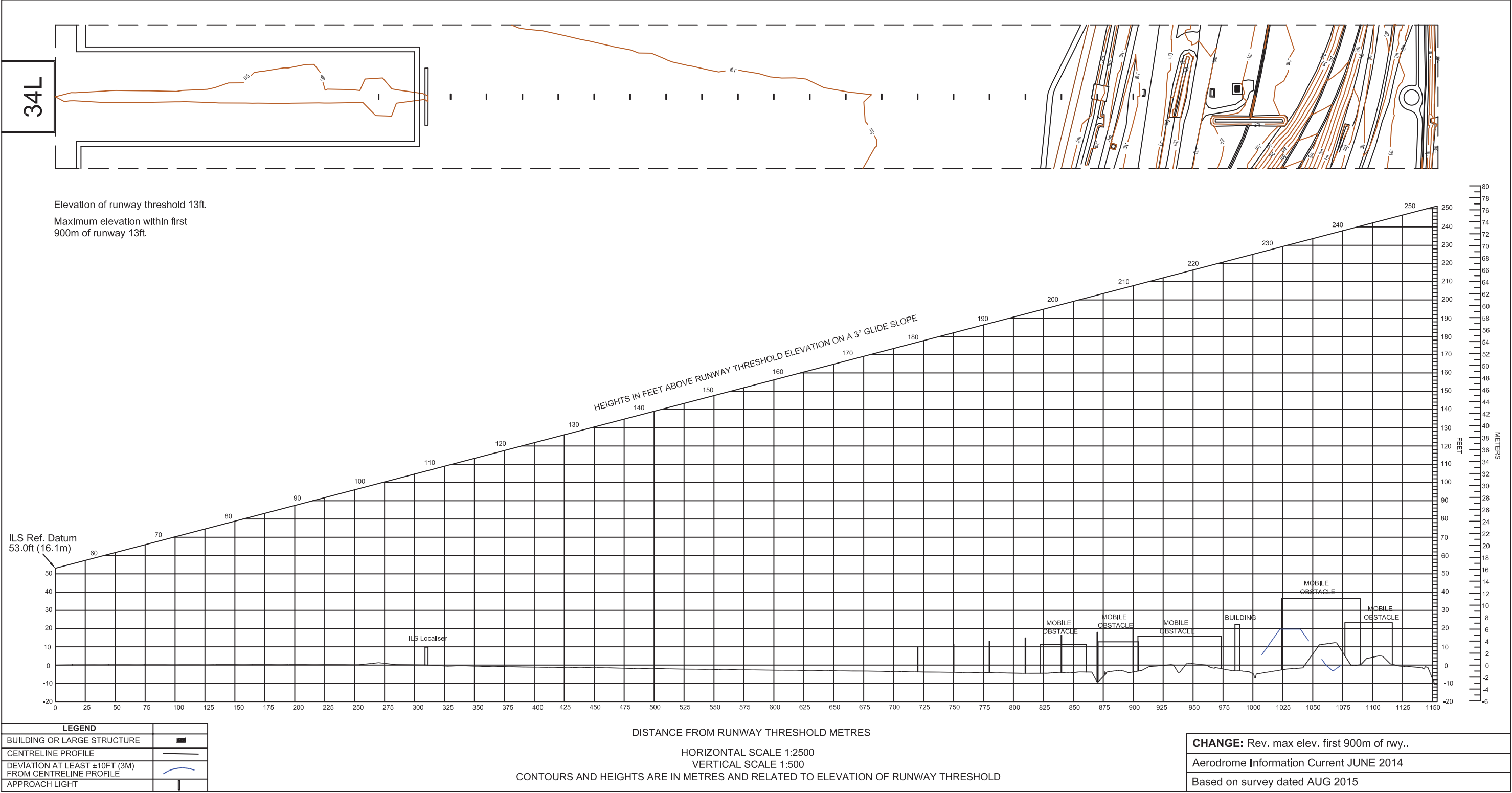


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ELEVATIONS IN METERS
ALL OTHER DIMENSIONS IN METRES

PRECISION APPROACH TERRAIN CHART - ICAO

DOHA/Hamad Intl. (OTHH)
RUNWAY 34L



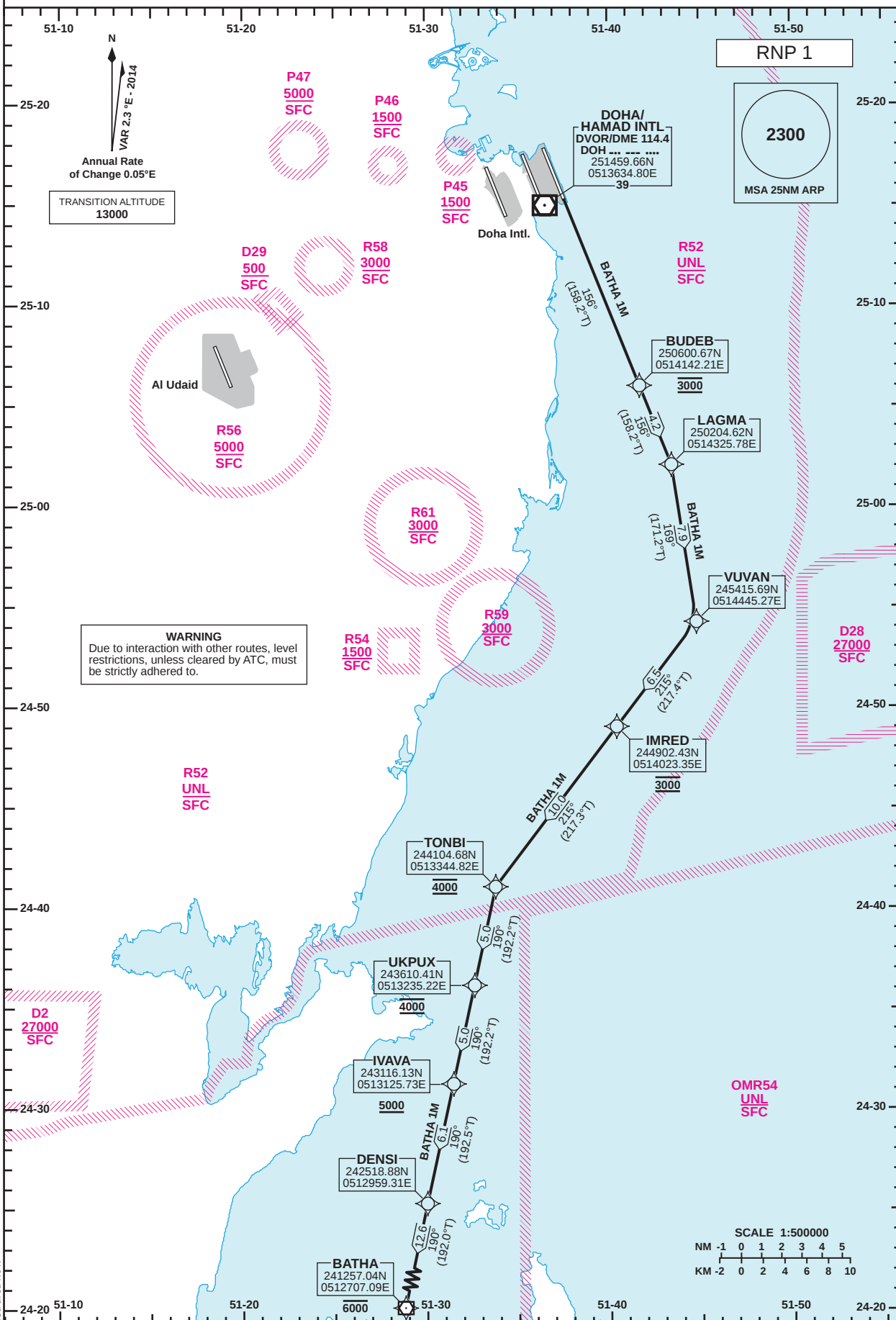
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STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16L
BATHA 1M



Route Designator	Routing
BATHA 1M	BUDEB [T158.2;A3000] - LAGMA - VUVAN - IMRED [A3000] - TONBI [A4000] - UKPUX [A4000] - IVAVA [A5000+] - DENSI - BATHA [A6000-]

Changes: New restricted area R61.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
BATHA 1M

TABULAR DESCRIPTION

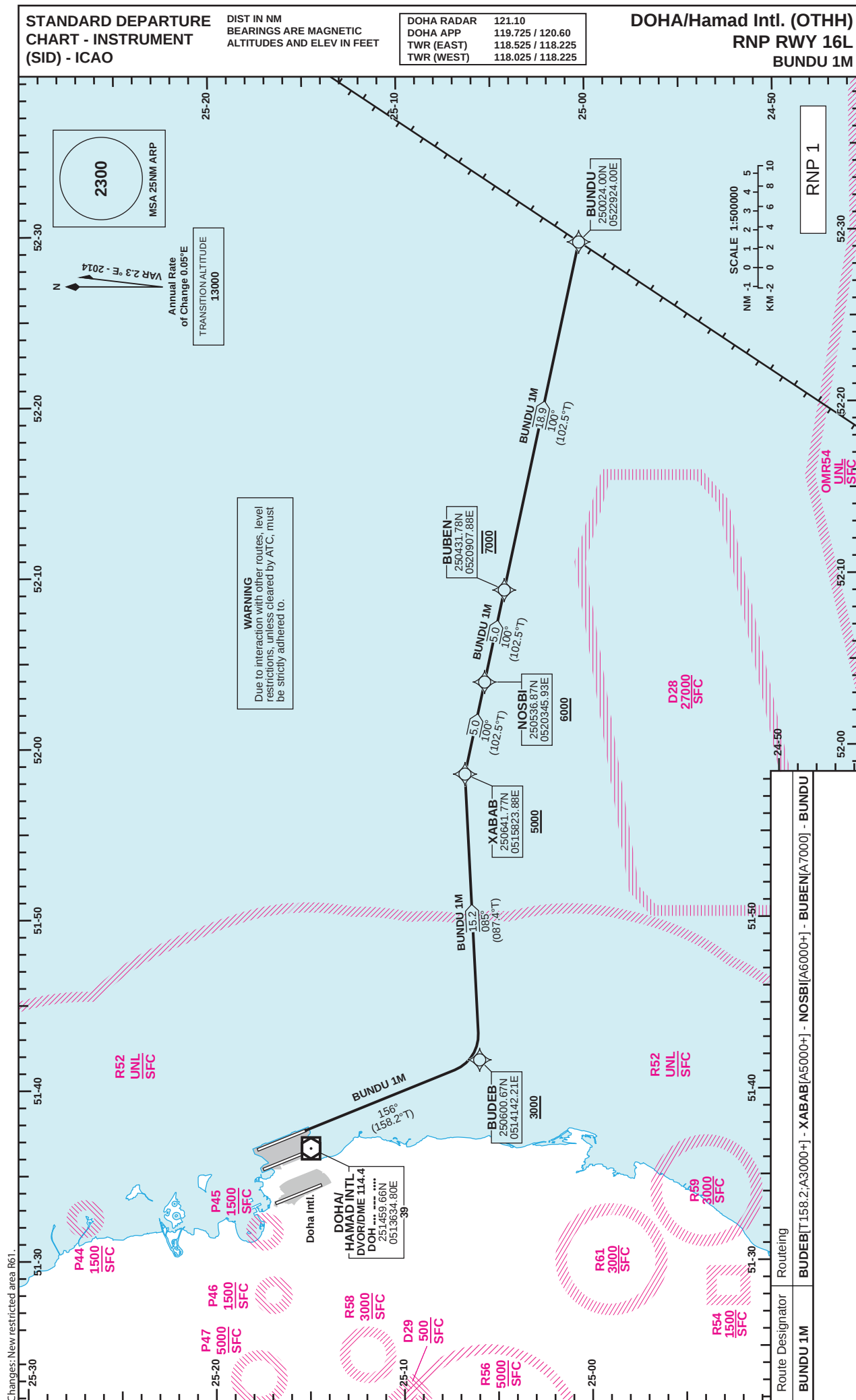
RNP SID BATHA 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	BUDEB	-	156 (158.2)	2.3	-		@3000			RNP 1
2	TF	LAGMA	-	156 (158.2)	2.3	4.2		-			RNP 1
3	TF	VUVAN	-	169 (171.2)	2.3	7.9		-			RNP 1
4	TF	IMRED	-	215 (217.4)	2.3	6.5		@3000			RNP 1
5	TF	TONBI	-	215 (217.3)	2.3	10.0		@4000			RNP 1
6	TF	UKPUX	-	190 (192.2)	2.3	5.0		@4000			RNP 1
7	TF	IVAVA	-	190 (192.2)	2.3	5.0		+5000			RNP 1
8	TF	DENSI	-	190 (192.5)	2.3	6.1		-			RNP 1
9	TF	BATHA	-	190 (192.0)	2.3	12.6		-6000			RNP 1

WAYPOINT LIST

RNP SID BATHA 1M	
Waypoint Identifier	Coordinates
BUDEB	250600.67N 0514142.21E
LAGMA	250204.62N 0514325.78E
VUVAN	245415.69N 0514445.27E
IMRED	244902.43N 0514023.35E
TONBI	244104.68N 0513344.82E
UKPUX	243610.41N 0513235.22E
IVAVA	243116.13N 0513125.73E
DENSI	242518.88N 0512959.31E
BATHA	241257.04N 0512707.09E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16L
BUNDU 1M

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
BUNDU 1M

TABULAR DESCRIPTION

RNP SID BUNDU 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	BUDEB	-	156 (158.2)	2.3	-		+3000			RNP 1
2	TF	XABAB	-	085 (087.4)	2.3	15.2		+5000			RNP 1
3	TF	NOSBI	-	100 (102.5)	2.3	5.0		+6000			RNP 1
4	TF	BUBEN	-	100 (102.5)	2.3	5.0		@7000			RNP 1
5	TF	BUNDU	-	100 (102.5)	2.3	18.9		-			RNP 1

WAYPOINT LIST

RNP SID BUNDU 1M	
Waypoint Identifier	Coordinates
BUDEB	250600.67N 0514142.21E
XABAB	250641.77N 0515823.88E
NOSBI	250536.87N 0520345.93E
BUBEN	250431.78N 0520907.88E
BUNDU	250024.00N 0522924.00E



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
ALSEM 1M /ALVEN 1M /NAMLA 1M

TABULAR DESCRIPTION

RNP SID ALSEM 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	TORKO	-	156 (158.2)	2.3	-		-			RNP 1
3	TF	PASAV	-	068 (070.3)	2.3	15.6		+4000			RNP 1
4	TF	DEBOM	-	068 (070.4)	2.3	5.0		+5000			RNP 1
5	TF	PEGEM	-	068 (070.4)	2.3	5.4		+6000			RNP 1
6	TF	GOBLU	-	068 (070.5)	2.3	5.4		@7000			RNP 1
7	TF	ALSEM	-	076 (078.2)	2.3	28.7		-			RNP 1

RNP SID ALVEN 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	TORKO	-	156 (158.2)	2.3	-		-			RNP 1
3	TF	PASAV	-	068 (070.3)	2.3	15.6		+4000			RNP 1
4	TF	DEBOM	-	068 (070.4)	2.3	5.0		+5000			RNP 1
5	TF	PEGEM	-	068 (070.4)	2.3	5.4		+6000			RNP 1
6	TF	GOBLU	-	068 (070.5)	2.3	5.4		@7000			RNP 1
7	TF	SITAL	-	347 (349.6)	2.3	14.1		-			RNP 1
8	TF	ALVEN	-	320 (322.6)	2.3	24.0		-			RNP 1

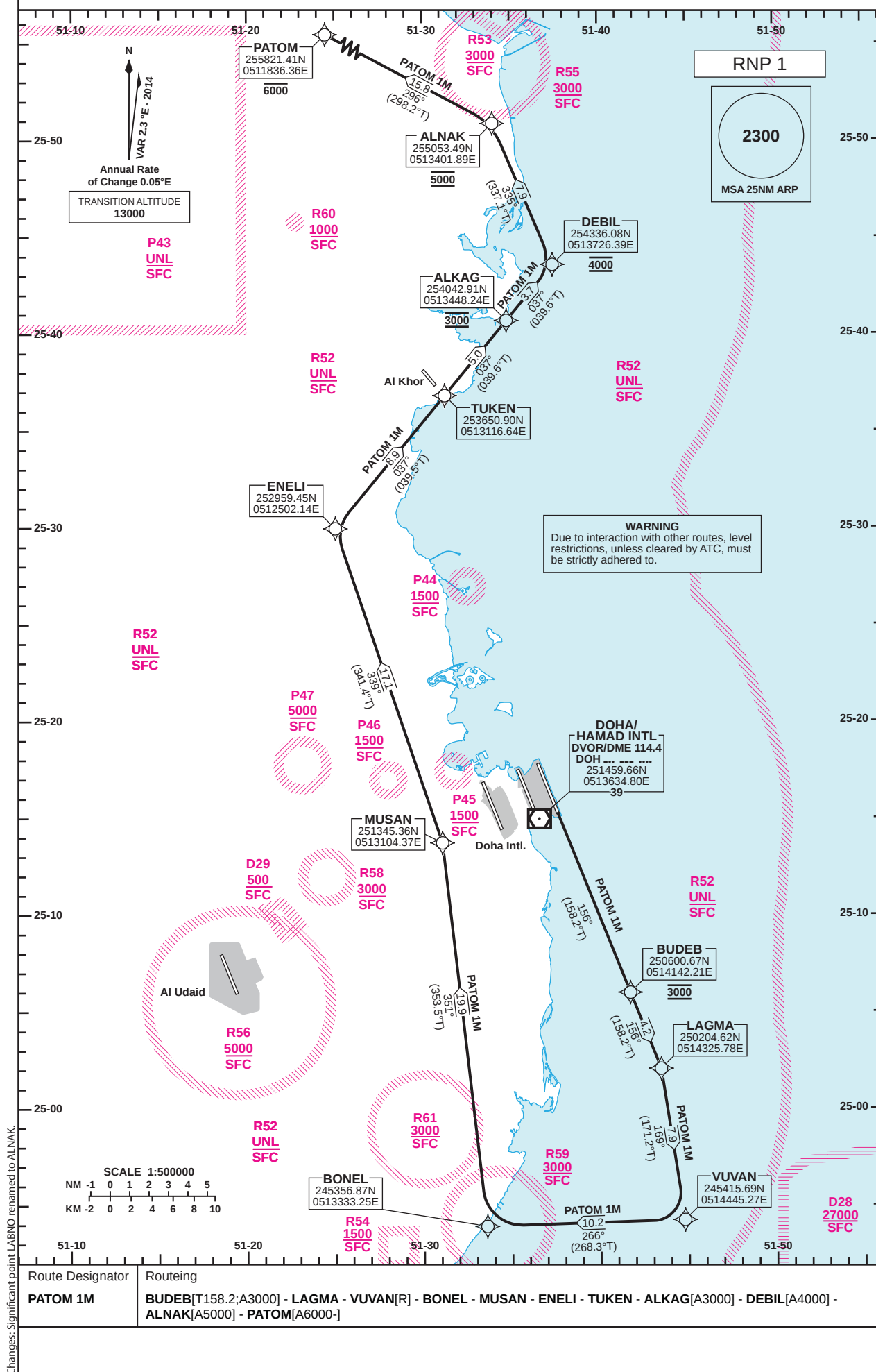
RNP SID NAMLA 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	TORKO	-	156 (158.2)	2.3	-		-			RNP 1
3	TF	PASAV	-	068 (070.3)	2.3	15.6		+4000			RNP 1
4	TF	DEBOM	-	068 (070.4)	2.3	5.0		+5000			RNP 1
5	TF	PEGEM	-	068 (070.4)	2.3	5.4		+6000			RNP 1
6	TF	GOBLU	-	068 (070.5)	2.3	5.4		@7000			RNP 1
7	TF	NAMLA	-	127 (129.3)	2.3	24.7		-			RNP 1

WAYPOINT LIST

RNP SID ALSEM 1M /ALVEN 1M /NAMLA 1M	
Waypoint Identifier	Coordinates
TORKO	251040.17N 0513939.39E
PASAV	251555.53N 0515550.51E
DEBOM	251736.36N 0520102.45E
PEGEM	251925.12N 0520639.78E
GOBLU	252113.67N 0521217.27E
ALSEM	252703.45N 0524322.04E
SITAL	253510.20N 0520927.90E
ALVEN	255418.19N 0515315.30E
NAMLA	250532.00N 0523318.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16L
PATOM 1M

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
PATOM 1M

TABULAR DESCRIPTION

RNP SID PATOM 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	BUDEB	-	156 (158.2)	2.3	-		@3000			RNP 1
2	TF	LAGMA	-	156 (158.2)	2.3	4.2		-			RNP 1
3	TF	VUVAN	-	169 (171.2)	2.3	7.9	R	-			RNP 1
4	TF	BONEL	-	266 (268.3)	2.3	10.2		-			RNP 1
5	TF	MUSAN	-	351 (353.5)	2.3	19.9		-			RNP 1
6	TF	ENELI	-	339 (341.4)	2.3	17.1		-			RNP 1
7	TF	TUKEN	-	037 (039.5)	2.3	8.9		-			RNP 1
8	TF	ALKAG	-	037 (039.6)	2.3	5.0		@3000			RNP 1
9	TF	DEBIL	-	037 (039.6)	2.3	3.7		@4000			RNP 1
10	TF	ALNAK	-	335 (337.1)	2.3	7.9		@5000			RNP 1
11	TF	PATOM	-	296 (298.2)	2.3	15.8		-6000			RNP 1

WAYPOINT LIST

RNP SID PATOM 1M	
Waypoint Identifier	Coordinates
BUDEB	250600.67N 0514142.21E
LAGMA	250204.62N 0514325.78E
VUVAN	245415.69N 0514445.27E
BONEL	245356.87N 0513333.25E
MUSAN	251345.36N 0513104.37E
ENELI	252959.45N 0512502.14E
TUKEN	253650.90N 0513116.64E
ALKAG	254042.91N 0513448.24E
DEBIL	254336.08N 0513726.39E
ALNAK	255053.49N 0513401.89E
PATOM	255821.41N 0511836.36E



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
SALWA 1M

TABULAR DESCRIPTION

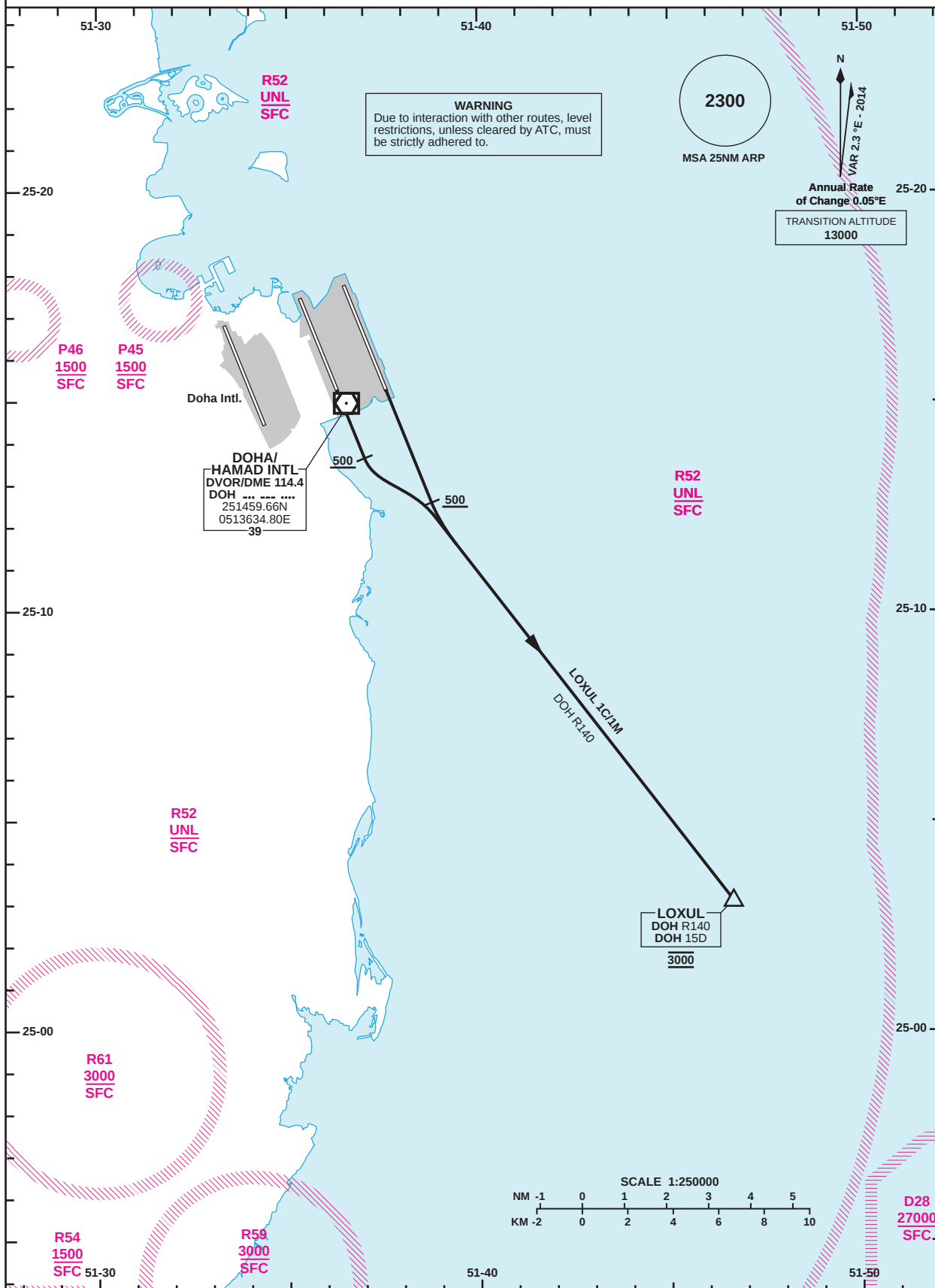
RNP SID SALWA 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	BUDEB	-	156 (158.2)	2.3	-		@3000			RNP 1
2	TF	LAGMA	-	156 (158.2)	2.3	4.2					RNP 1
3	TF	VUVAN	-	169 (171.2)	2.3	7.9	R				RNP 1
4	TF	BONEL	-	266 (268.3)	2.3	10.2					RNP 1
5	TF	MUSAN	-	351 (353.5)	2.3	19.9					RNP 1
6	TF	EGSUN	-	339 (341.4)	2.3	4.7					RNP 1
7	TF	BUDAS	-	289 (291.3)	2.3	6.9		@3000			RNP 1
8	TF	DASIB	-	289 (291.2)	2.3	6.9		+4000			RNP 1
9	TF	EGSAL	-	267 (269.3)	2.3	5.0		+5000			RNP 1
10	TF	ASNOS	-	267 (269.3)	2.3	15.2					RNP 1
11	TF	SALWA	-	248 (250.0)	2.3	21.4		-6000			RNP 1

WAYPOINT LIST

RNP SID SALWA 1M	
Waypoint Identifier	Coordinates
BUDEB	250600.67N 0514142.21E
LAGMA	250204.62N 0514325.78E
VUVAN	245415.69N 0514445.27E
BONEL	245356.87N 0513333.25E
MUSAN	251345.36N 0513104.37E
EGSUN	251813.64N 0512924.77E
BUDAS	252044.21N 0512218.83E
DASIB	252314.43N 0511512.60E
EGSAL	252310.82N 0510941.22E
ASNOS	252258.60N 0505256.25E
SALWA	251538.00N 0503048.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RWY 16L/R
LOXUL 1C/1M

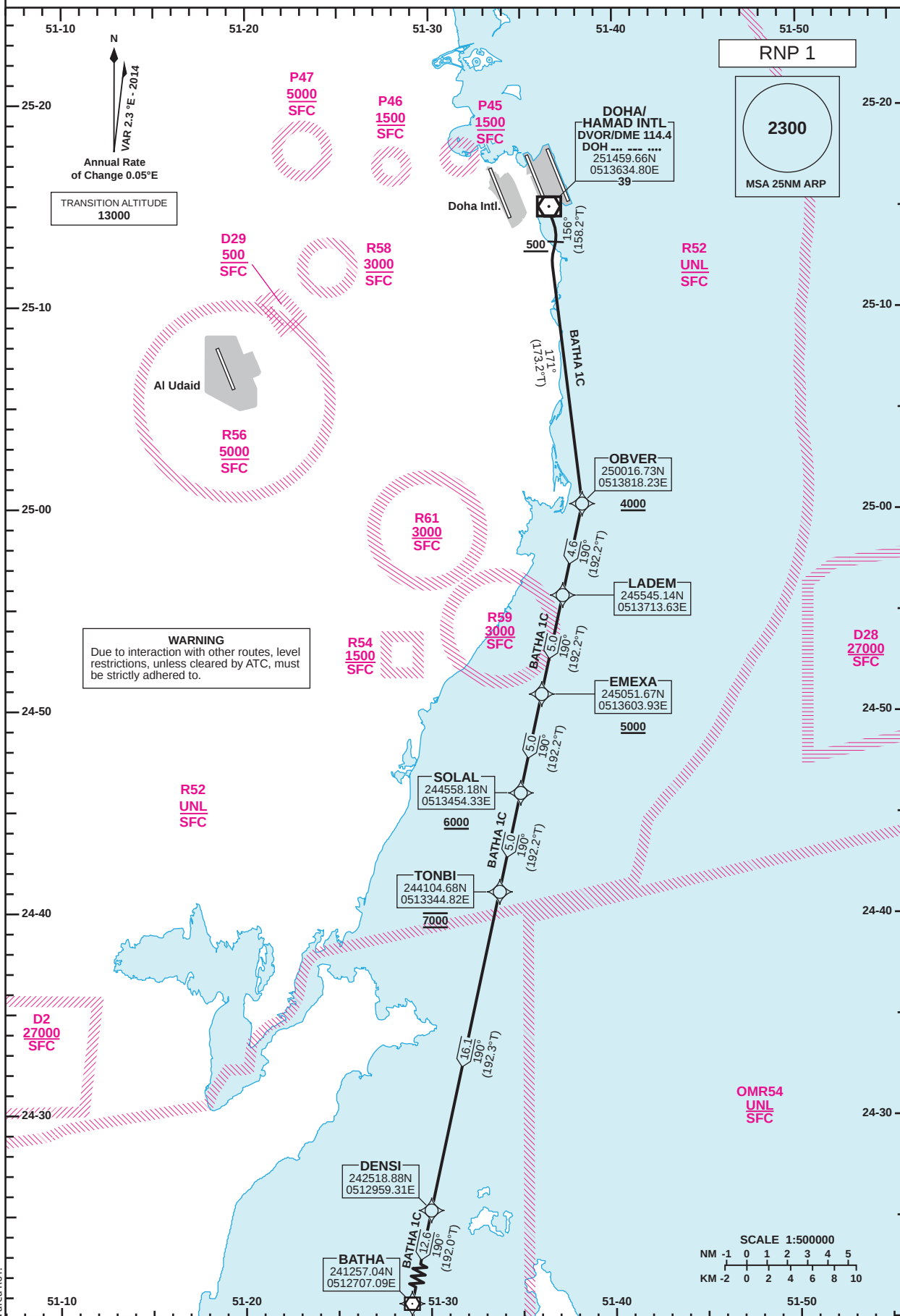
Rwy	Route Designator	Routing		
16L	LOXUL 1M	Climb straight ahead to 500 . Turn left to intercept DOH R140 to LOXUL (DOH 15D) at 3000 . Continue as directed.		
16R	LOXUL 1C	Climb straight ahead to 500 . Turn left to intercept DOH R140 to LOXUL (DOH 15D) at 3000 . Continue as directed.		
GENERAL INFORMATION : 1. Rwy16R - 4% CG required until passing 700 .				
Rwy	Primary SIDs	Initial Contact	Initial Altitude	Radio Fail Procedures
16L	LOXUL 1M	DEPs	Cross DOH D10 at 3000	Execute three left-hand orbits at LOXUL at 3000. Continue left-hand orbit climbing to 5000. Proceed direct to first enroute waypoint then continue as flight planned or proceed direct to DOH DVOR and follow the ILS 16L approach procedure to land at OTHH
16R	LOXUL 1C	DEPs	3000	

Changes: New restricted area R61.

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STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16R
BATHA 1C

Route Designator Routing

BATHA 1C [T158.2;A500+] - OBVER[T173.2;A4000+] - LADEM - EMEXA[A5000+] - SOLAL[A6000+] - TONBI[A7000] - DENSI - BATHA

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 16R departures.
2. 3.5% CG required to 600.

Changes: New restricted area R61.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
BATHA 1C

TABULAR DESCRIPTION

RNP SID BATHA 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA		-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-		+4000			RNP 1
3	TF	LADEM	-	190 (192.2)	2.3	4.6		-			RNP 1
4	TF	EMEXA	-	190 (192.2)	2.3	5.0		+5000			RNP 1
5	TF	SOLAL	-	190 (192.2)	2.3	5.0		+6000			RNP 1
6	TF	TONBI	-	190 (192.2)	2.3	5.0		@7000			RNP 1
7	TF	DENSI	-	190 (192.3)	2.3	16.1		-			RNP 1
8	TF	BATHA	-	190 (192.0)	2.3	12.6		-			RNP 1

WAYPOINT LIST

RNP SID BATHA 1C	
Waypoint Identifier	Coordinates
OBVER	250016.73N 0513818.23E
LADEM	245545.14N 0513713.63E
EMEXA	245051.67N 0513603.93E
SOLAL	244558.18N 0513454.33E
TONBI	244104.68N 0513344.82E
DENSI	242518.88N 0512959.31E
BATHA	241257.04N 0512707.09E



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
ALSEM 1C /BUNDU 1C /NAMLA 1C

TABULAR DESCRIPTION

RNP SID ALSEM 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-		@4000			RNP 1
3	TF	NAKAB	-	100 (102.4)	2.3	7.3		-			RNP 1
4	TF	LUDOS	-	085 (087.4)	2.3	12.9		-			RNP 1
5	TF	NOSBI	-	024 (026.3)	2.3	7.0		-			RNP 1
6	TF	NOVLA	-	024 (026.4)	2.3	12.0		@4000			RNP 1
7	TF	GOBLU	-	024 (026.4)	2.3	5.4		@5000			RNP 1
8	TF	ALSEM	-	076 (078.2)	2.3	28.7		-6000			RNP 1

RNP SID BUNDU 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-		@4000			RNP 1
3	TF	NAKAB	-	100 (102.4)	2.3	7.3		-			RNP 1
4	TF	XALTO	-	085 (087.4)	2.3	15.8		@4000			RNP 1
5	TF	ASTOP	-	085 (087.5)	2.3	5.0		@5000			RNP 1
6	TF	BUNDU	-	085 (087.6)	2.3	18.5		-6000			RNP 1

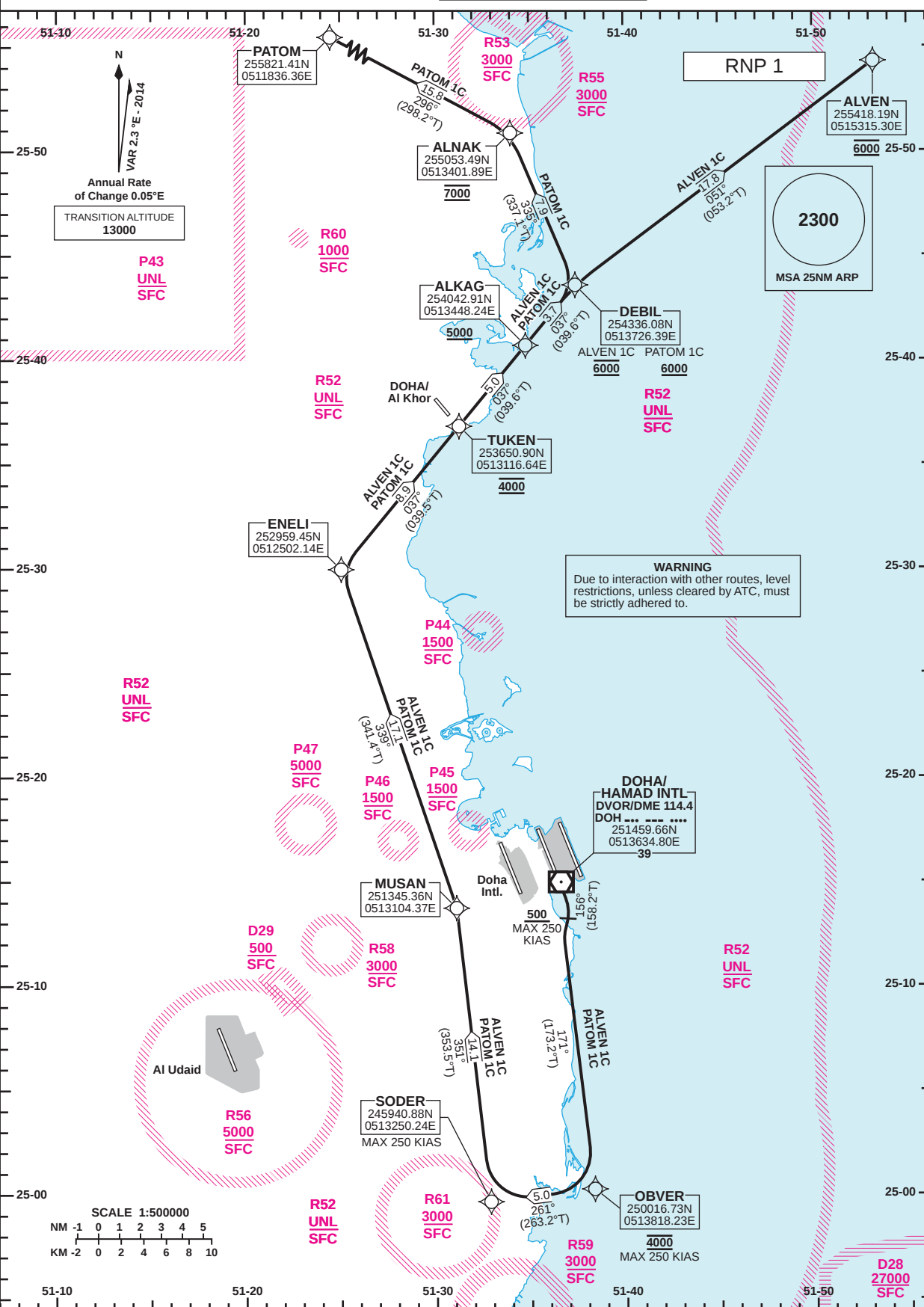
RNP SID NAMLA 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	156 (158.2)	2.3	-		+500			RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-		@4000			RNP 1
3	TF	NAKAB	-	100 (102.4)	2.3	7.3		-			RNP 1
4	TF	XALTO	-	085 (087.4)	2.3	15.8		@4000			RNP 1
5	TF	ASTOP	-	085 (087.5)	2.3	5.0		@5000			RNP 1
6	TF	NAMLA	-	073 (075.0)	2.3	22.8		-6000			RNP 1

WAYPOINT LIST

RNP SID ALSEM 1C /BUNDU 1C /NAMLA 1C	
Waypoint Identifier	Coordinates
OBVER	250016.73N 0513818.23E
NAKAB	245842.53N 0514609.09E
LUDOS	245917.17N 0520019.41E
NOSBI	250536.87N 0520345.93E
NOVLA	251621.97N 0520937.77E
GOBLU	252113.67N 0521217.27E
ALSEM	252703.45N 0524322.04E
XALTO	245924.78N 0520330.62E
ASTOP	245937.74N 0520900.59E
BUNDU	250024.00N 0522924.00E
NAMLA	250532.00N 0523318.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16R
ALVEN 1C /PATOM 1C

Route Designator	Routing
ALVEN 1C	[T158.2;A500+;K250-] - OBVER[R;T173.2;A4000;K250-] - SODER[R;K250-] - MUSAN - ENELI - TUEN[A4000] - ALKAG[A5000+] - DEBIL[A6000] - ALVEN[A6000]
PATOM 1C	[T158.2;A500+;K250-] - OBVER[R;T173.2;A4000;K250-] - SODER[R;K250-] - MUSAN - ENELI - TUEN[A4000] - ALKAG[A5000+] - DEBIL[A6000+] - ALNAK[A7000] - PATOM

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 16R departures.
2. 3.5% CG required to 600.

Changes: Significant point LABNO renamed to ALNAK.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
ALVEN 1C /PATOM 1C

TABULAR DESCRIPTION

RNP SID ALVEN 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA		-	156 (158.2)	2.3	-		+500	-250		RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-	R	@4000	-250		RNP 1
3	TF	SODER	-	261 (263.2)	2.3	5.0	R	-	-250		RNP 1
4	TF	MUSAN	-	351 (353.5)	2.3	14.1		-			RNP 1
5	TF	ENELI	-	339 (341.4)	2.3	17.1		-			RNP 1
6	TF	TUKEN	-	037 (039.5)	2.3	8.9		@4000			RNP 1
7	TF	ALKAG	-	037 (039.6)	2.3	5.0		+5000			RNP 1
8	TF	DEBIL	-	037 (039.6)	2.3	3.7		@6000			RNP 1
9	TF	ALVEN	-	051 (053.2)	2.3	17.8		@6000			RNP 1

RNP SID PATOM 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA		-	156 (158.2)	2.3	-		+500	-250		RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-	R	@4000	-250		RNP 1
3	TF	SODER	-	261 (263.2)	2.3	5.0	R	-	-250		RNP 1
4	TF	MUSAN	-	351 (353.5)	2.3	14.1		-			RNP 1
5	TF	ENELI	-	339 (341.4)	2.3	17.1		-			RNP 1
6	TF	TUKEN	-	037 (039.5)	2.3	8.9		@4000			RNP 1
7	TF	ALKAG	-	037 (039.6)	2.3	5.0		+5000			RNP 1
8	TF	DEBIL	-	037 (039.6)	2.3	3.7		+6000			RNP 1
9	TF	ALNAK	-	335 (337.1)	2.3	7.9		@7000			RNP 1
10	TF	PATOM	-	296 (298.2)	2.3	15.8		-			RNP 1

WAYPOINT LIST

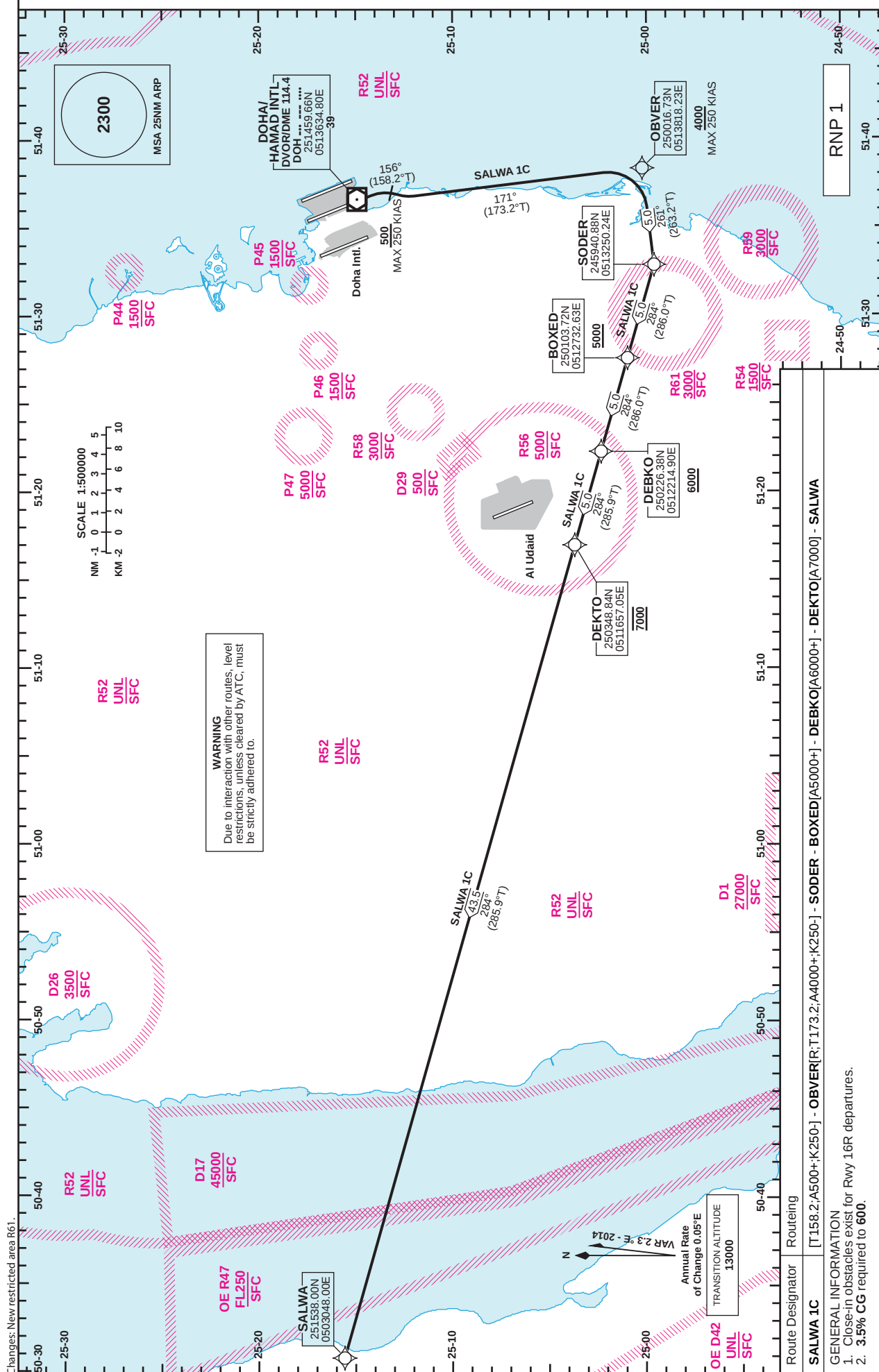
RNP SID ALVEN 1C /PATOM 1C	
Waypoint Identifier	Coordinates
OBVER	250016.73N 0513818.23E
SODER	245940.88N 0513250.24E
MUSAN	251345.36N 0513104.37E
ENELI	252959.45N 0512502.14E
TUKEN	253650.90N 0513116.64E
ALKAG	254042.91N 0513448.24E
DEBIL	254336.08N 0513726.39E
ALVEN	255418.19N 0515315.30E
ALNAK	255053.49N 0513401.89E
PATOM	255821.41N 0511836.36E

STANDARD DEPARTURE CHART - INSTRUMENT (SID) - ICAO

DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16R
SALWA 1C



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
SALWA 1C

TABULAR DESCRIPTION

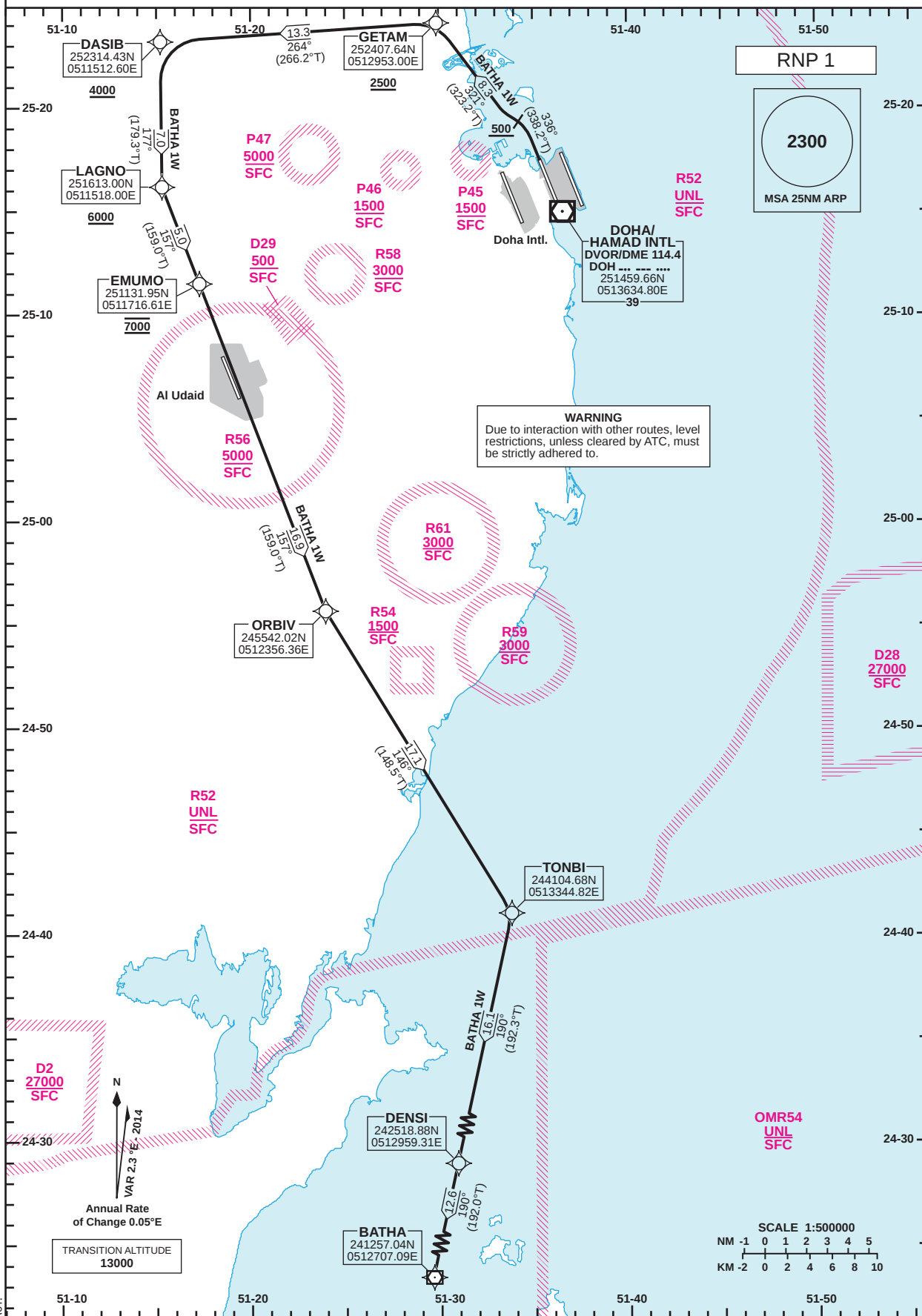
RNP SID SALWA 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA		-	156 (158.2)	2.3	-		+500	-250		RNP 1
2	CF	OBVER	-	171 (173.2)	2.3	-	R	+4000	-250		RNP 1
3	TF	SODER	-	261 (263.2)	2.3	5.0					RNP 1
4	TF	BOXED	-	284 (286.0)	2.3	5.0		+5000			RNP 1
5	TF	DEBKO	-	284 (286.0)	2.3	5.0		+6000			RNP 1
6	TF	DEKTO	-	284 (285.9)	2.3	5.0		@7000			RNP 1
7	TF	SALWA	-	284 (285.9)	2.3	43.5					RNP 1

WAYPOINT LIST

RNP SID SALWA 1C	
Waypoint Identifier	Coordinates
OBVER	250016.73N 0513818.23E
SODER	245940.88N 0513250.24E
BOXED	250103.72N 0512732.63E
DEBKO	250226.38N 0512214.90E
DEKTO	250348.84N 0511657.05E
SALWA	251538.00N 0503048.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
BATHA 1W

Route Designator

Routing

BATHA 1W

[T338.2; A500+] - GETAM[T323.2; A2500+] - DASIB[A4000+] - LAGNO[A6000+] - EMUMO[A7000] - ORBIV - TONBI - DENS - BATHA

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 34L departures.
2. 4.8% CG required to 1200.

Changes: New restricted area R61.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
BATHA 1W

TABULAR DESCRIPTION

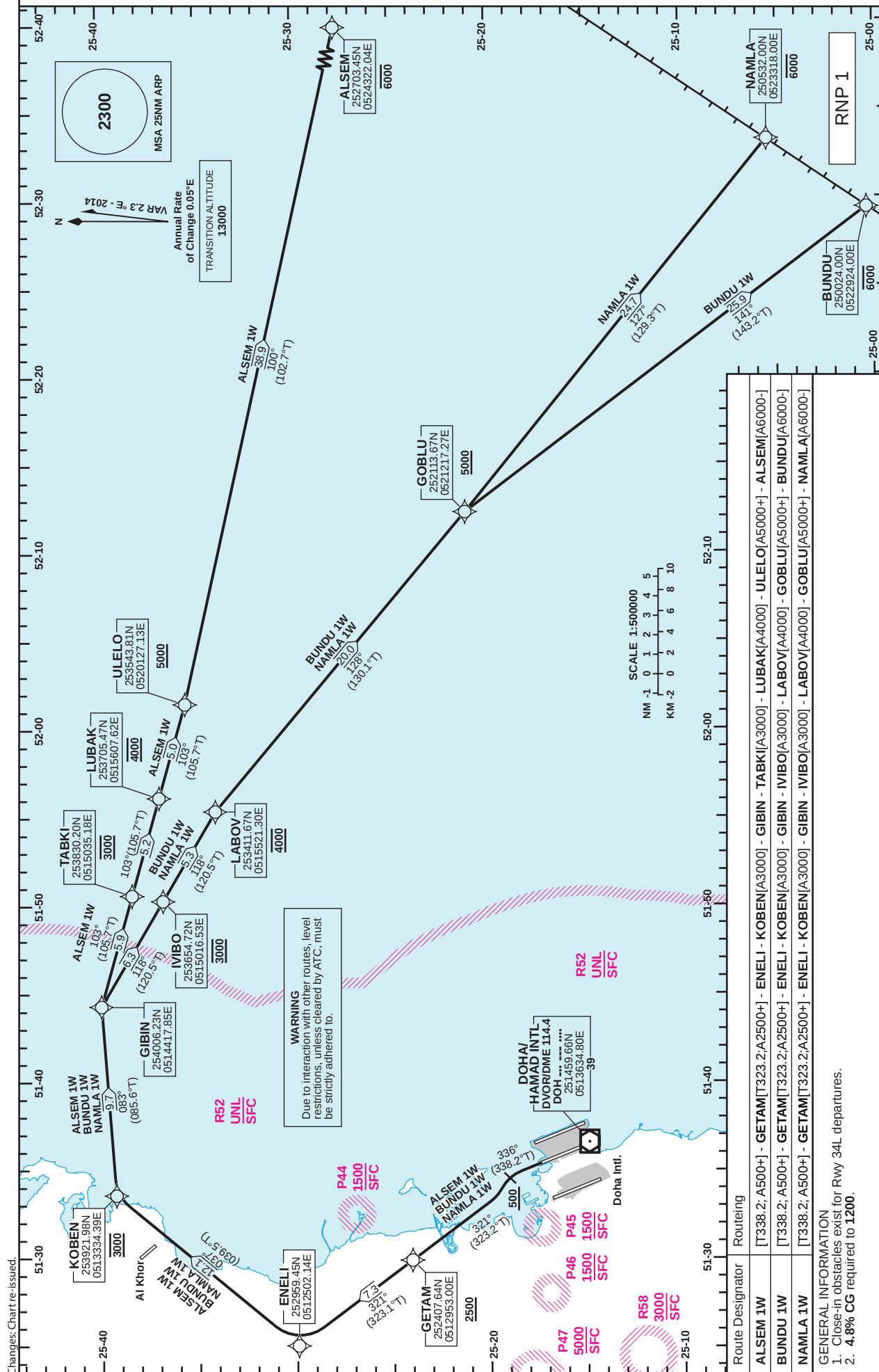
RNP SID BATHA 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA		-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	DASIB	-	264 (266.2)	2.3	13.3		+4000			RNP 1
4	TF	LAGNO	-	177 (179.3)	2.3	7.0		+6000			RNP 1
5	TF	EMUMO	-	157 (159.0)	2.3	5.0		@7000			RNP 1
6	TF	ORBIV	-	157 (159.0)	2.3	16.9		-			RNP 1
7	TF	TONBI	-	146 (148.5)	2.3	17.1		-			RNP 1
8	TF	DENSI	-	190 (192.3)	2.3	16.1		-			RNP 1
9	TF	BATHA	-	190 (192.0)	2.3	12.6		-			RNP 1

WAYPOINT LIST

RNP SID BATHA 1W	
Waypoint Identifier	Coordinates
GETAM	252407.64N 0512953.00E
DASIB	252314.43N 0511512.60E
LAGNO	251613.00N 0511518.00E
EMUMO	251131.95N 0511716.61E
ORBIV	245542.02N 0512356.36E
TONBI	244104.68N 0513344.82E
DENSI	242518.88N 0512959.31E
BATHA	241257.04N 0512707.09E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
ALSEM 1W /BUNDU 1W /NAMLA 1W

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
ALSEM 1W /BUNDU 1W /NAMLA 1W

TABULAR DESCRIPTION

RNP SID ALSEM 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	KOBEN	-	037 (039.5)	2.3	12.1		@3000			RNP 1
5	TF	GIBIN	-	083 (085.6)	2.3	9.7		-			RNP 1
6	TF	TABKI	-	103 (105.7)	2.3	5.9		@3000			RNP 1
7	TF	LUBAK	-	103 (105.7)	2.3	5.2		@4000			RNP 1
8	TF	ULELO	-	103 (105.7)	2.3	5.0		+5000			RNP 1
9	TF	ALSEM	-	100 (102.7)	2.3	38.9		-6000			RNP 1

RNP SID BUNDU 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	KOBEN	-	037 (039.5)	2.3	12.1		@3000			RNP 1
5	TF	GIBIN	-	083 (085.6)	2.3	9.7		-			RNP 1
6	TF	IVIBO	-	118 (120.5)	2.3	6.3		@3000			RNP 1
7	TF	LABOV	-	118 (120.5)	2.3	5.3		@4000			RNP 1
8	TF	GOBLU	-	128 (130.1)	2.3	20.0		+5000			RNP 1
9	TF	BUNDU	-	141 (143.2)	2.3	25.9		-6000			RNP 1

RNP SID NAMLA 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	KOBEN	-	037 (039.5)	2.3	12.1		@3000			RNP 1
5	TF	GIBIN	-	083 (085.6)	2.3	9.7		-			RNP 1
6	TF	IVIBO	-	118 (120.5)	2.3	6.3		@3000			RNP 1
7	TF	LABOV	-	118 (120.5)	2.3	5.3		@4000			RNP 1
8	TF	GOBLU	-	128 (130.1)	2.3	20.0		+5000			RNP 1
9	TF	NAMLA	-	127 (129.3)	2.3	24.7		-6000			RNP 1

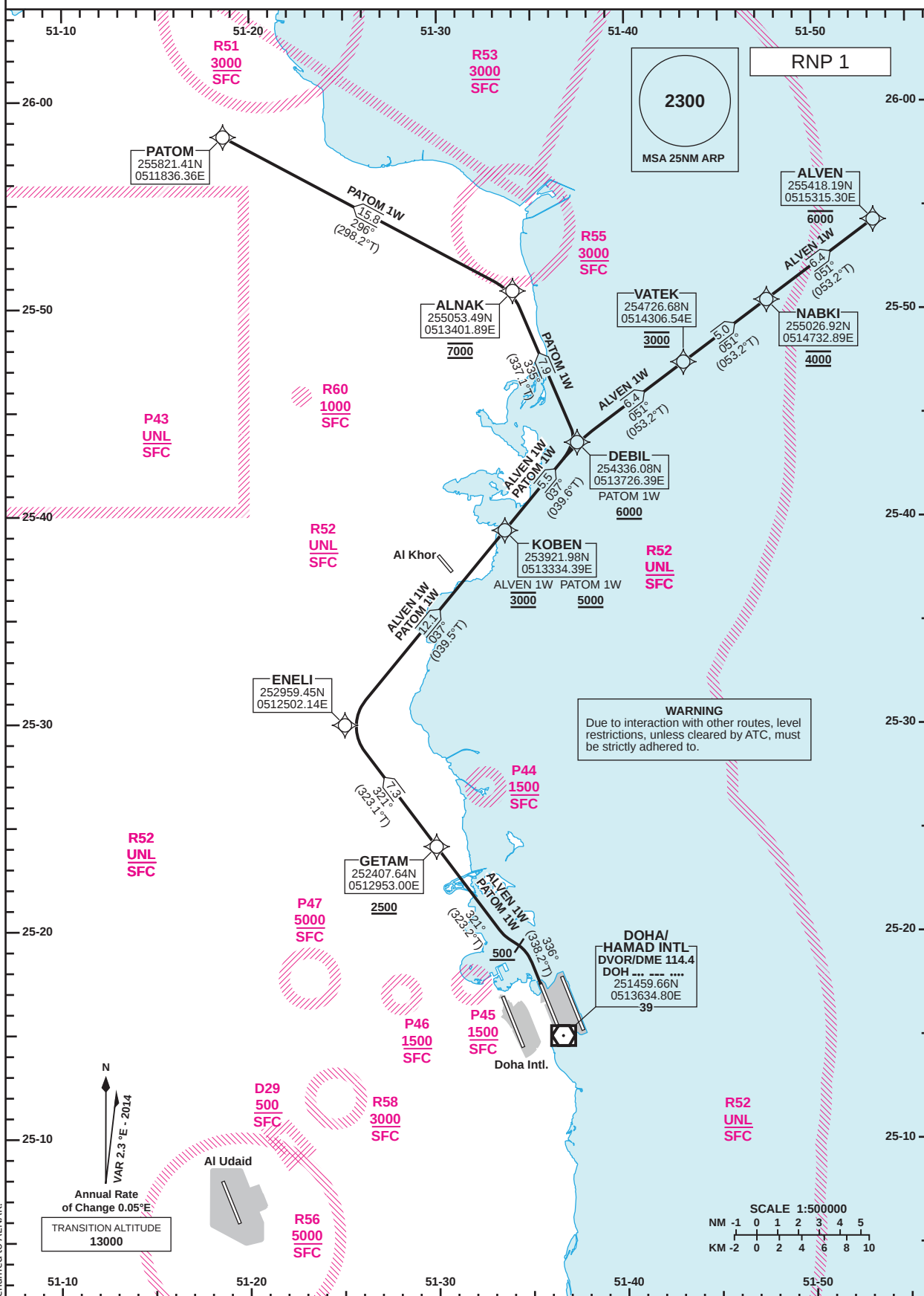
WAYPOINT LIST

RNP SID ALSEM 1W /BUNDU 1W /NAMLA 1W	
Waypoint Identifier	Coordinates
GETAM	252407.64N 0512953.00E
ENELI	252959.45N 0512502.14E
KOBEN	253921.98N 0513334.39E
GIBIN	254006.23N 0514417.85E
TABKI	253830.20N 0515035.18E
LUBAK	253705.47N 0515607.62E
ULELO	253543.81N 0520127.13E

RNP SID ALSEM 1W /BUNDU 1W /NAMLA 1W	
Waypoint Identifier	Coordinates
ALSEM	252703.45N 0524322.04E
IVIBO	253654.72N 0515016.53E
LABOV	253411.67N 0515521.30E
GOBLU	252113.67N 0521217.27E
BUNDU	250024.00N 0522924.00E
NAMLA	250532.00N 0523318.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
ALVEN 1W /PATOM 1W

Route Designator	Routeing
ALVEN 1W	[T338.2; A500+] - GETAM[T323.2; A2500+] - ENELI - KOBEN[A3000] - DEBIL - VATEK[A3000] - NABKI[A4000] - ALVEN[A6000-]
PATOM 1W	[T338.2; A500+] - GETAM[T323.2; A2500+] - ENELI - KOBEN[A5000+] - DEBIL[A6000+] - ALNAK[A7000] - PATOM

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 34L departures.
2. 4.8% CG required to 1200.

Changes: Significant point LABNO renamed to ALNAK.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
ALVEN 1W /PATOM 1W

TABULAR DESCRIPTION

RNP SID ALVEN 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	KOBEN	-	037 (039.5)	2.3	12.1		@3000			RNP 1
5	TF	DEBIL	-	037 (039.6)	2.3	5.5		-			RNP 1
6	TF	VATEK	-	051 (053.2)	2.3	6.4		@3000			RNP 1
7	TF	NABKI	-	051 (053.2)	2.3	5.0		@4000			RNP 1
8	TF	ALVEN	-	051 (053.2)	2.3	6.4		-6000			RNP 1

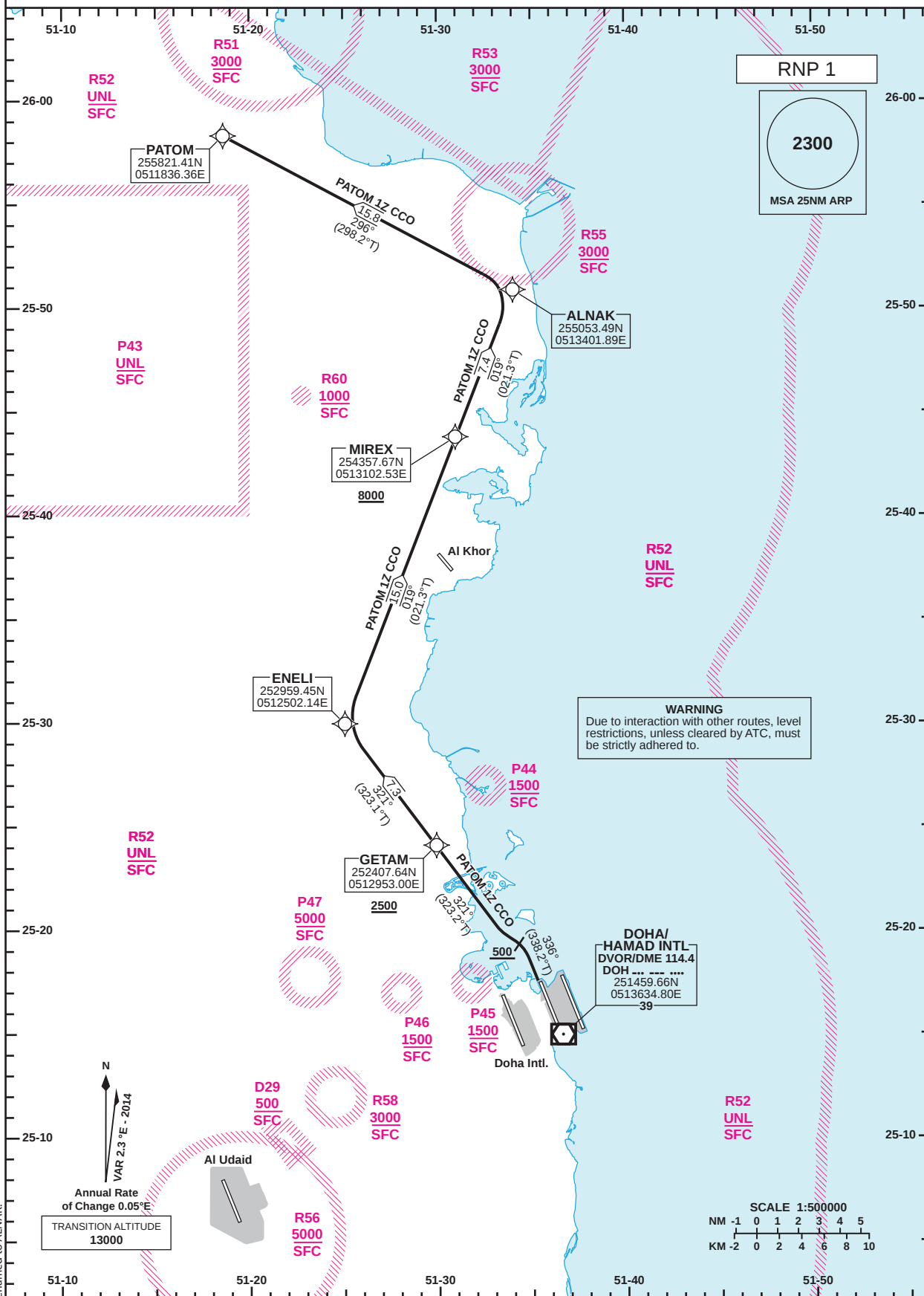
RNP SID PATOM 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	KOBEN	-	037 (039.5)	2.3	12.1		+5000			RNP 1
5	TF	DEBIL	-	037 (039.6)	2.3	5.5		+6000			RNP 1
6	TF	ALNAK	-	335 (337.1)	2.3	7.9		@7000			RNP 1
7	TF	PATOM	-	296 (298.2)	2.3	15.8		-			RNP 1

WAYPOINT LIST

RNP SID ALVEN 1W/PATOM 1W	
Waypoint Identifier	Coordinates
GETAM	252407.64N 0512953.00E
ENELI	252959.45N 0512502.14E
KOBEN	253921.98N 0513334.39E
DEBIL	254336.08N 0513726.39E
VATEK	254726.68N 0514306.54E
NABKI	255026.92N 0514732.89E
ALVEN	255418.19N 0515315.30E
ALNAK	255053.49N 0513401.89E
PATOM	255821.41N 0511836.36E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
PATOM 1Z CCO

Route Designator

Routing

PATOM 1Z CCO [T338.2; A500+] - GETAM[T323.2; A2500+] - ENELI[R] - MIREX[A8000+] - ALNAK[L] - PATOM

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 34L departures.
2. 4.8% CG required to 1200.

Changes: Significant point LABNO renamed to ALNAK

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
PATOM 1Z CCO

TABULAR DESCRIPTION

RNP SID PATOM 1Z CCO											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	ENELI	-	321 (323.1)	2.3	7.3		-			RNP 1
4	TF	MIREX	-	019(021.3)	2.3	15.0		+8000			RNP 1
5	TF	ALNAK	-	019(021.3)	2.3	7.4		-			RNP 1
6	TF	PATOM	-	296 (298.2)	2.3	15.8		-			RNP 1

WAYPOINT LIST

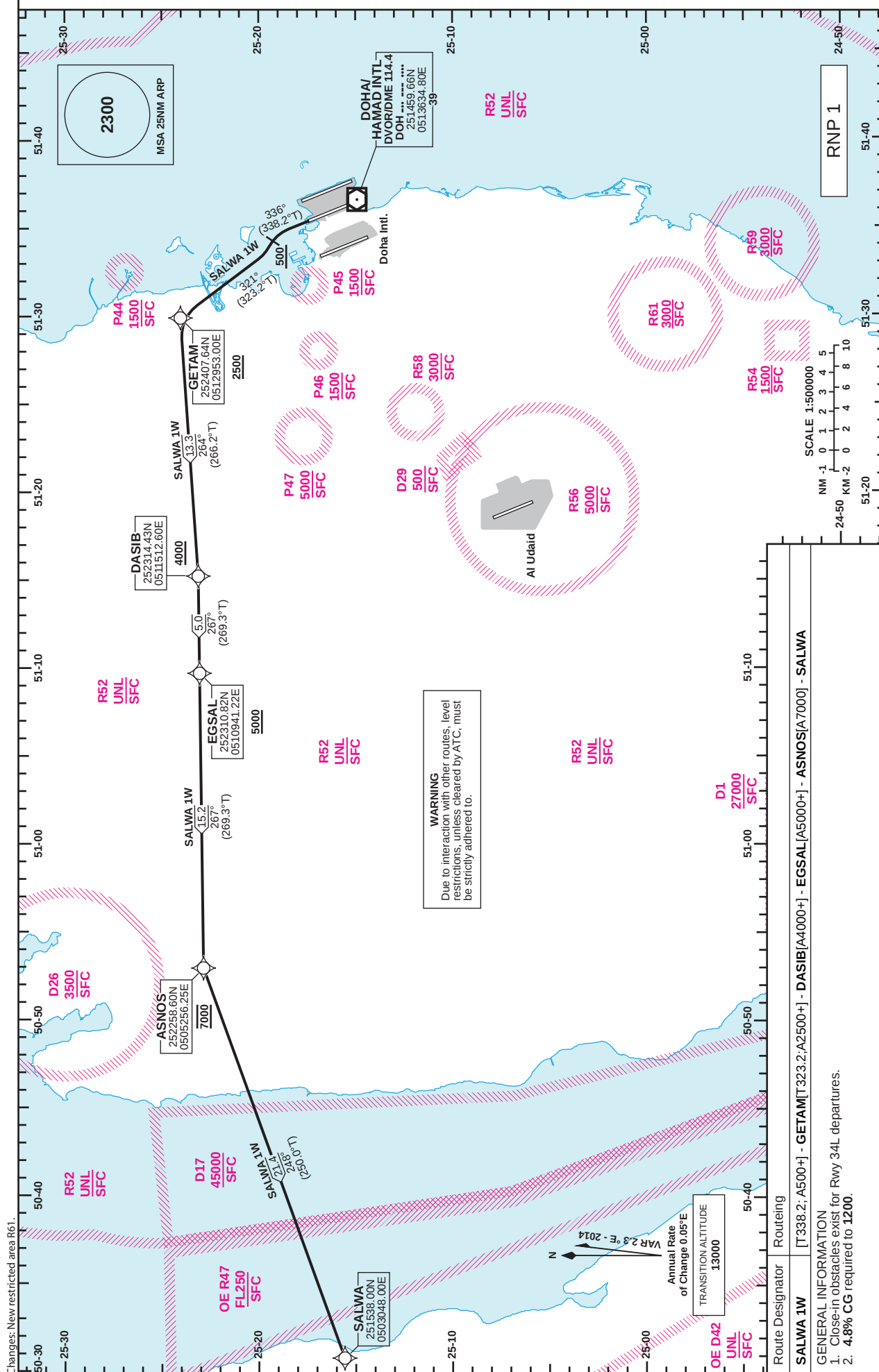
RNP SID PATOM 1Z CCO	
Waypoint Identifier	Coordinates
GETAM	252407.64N 0512953.00E
ENELI	252959.45N 0512502.14E
MIREX	254357.67N 0513102.53E
ALNAK	255053.49N 0513401.89E
PATOM	255821.41N 0511836.36E

**STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO**

DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

**DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
SALWA 1W**



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

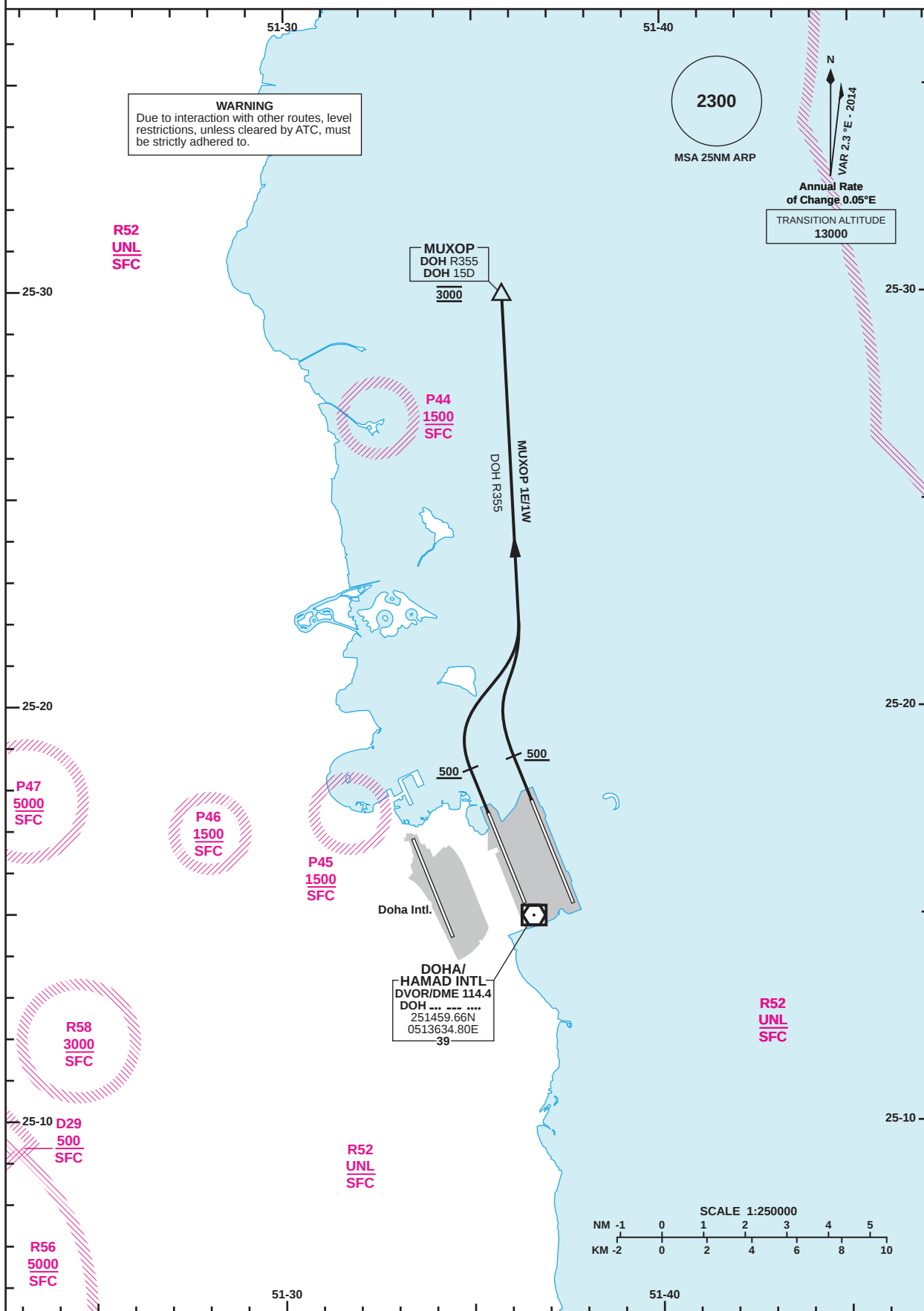
DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
SALWA 1W

TABULAR DESCRIPTION

RNP SID SALWA 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500			RNP 1
2	CF	GETAM	-	321 (323.2)	2.3	-		+2500			RNP 1
3	TF	DASIB	-	264 (266.2)	2.3	13.3		+4000			RNP 1
4	TF	EGSAL	-	267 (269.3)	2.3	5.0		+5000			RNP 1
5	TF	ASNOS	-	267 (269.3)	2.3	15.2		@7000			RNP 1
6	TF	SALWA	-	248 (250.0)	2.3	21.4		-			RNP 1

WAYPOINT LIST

RNP SID SALWA 1W	
Waypoint Identifier	Coordinates
GETAM	252407.64N 0512953.00E
DASIB	252314.43N 0511512.60E
EGSAL	252310.82N 0510941.22E
ASNOS	252258.60N 0505256.25E
SALWA	251538.00N 0503048.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEETDOHA RADAR 121.10
DOHA APP 119.725 / 120.60
TWR (EAST) 118.525 / 118.225
TWR (WEST) 118.025 / 118.225DOHA/Hamad Intl. (OTHH)
RWY 34L/R
MUXOP 1E/1W

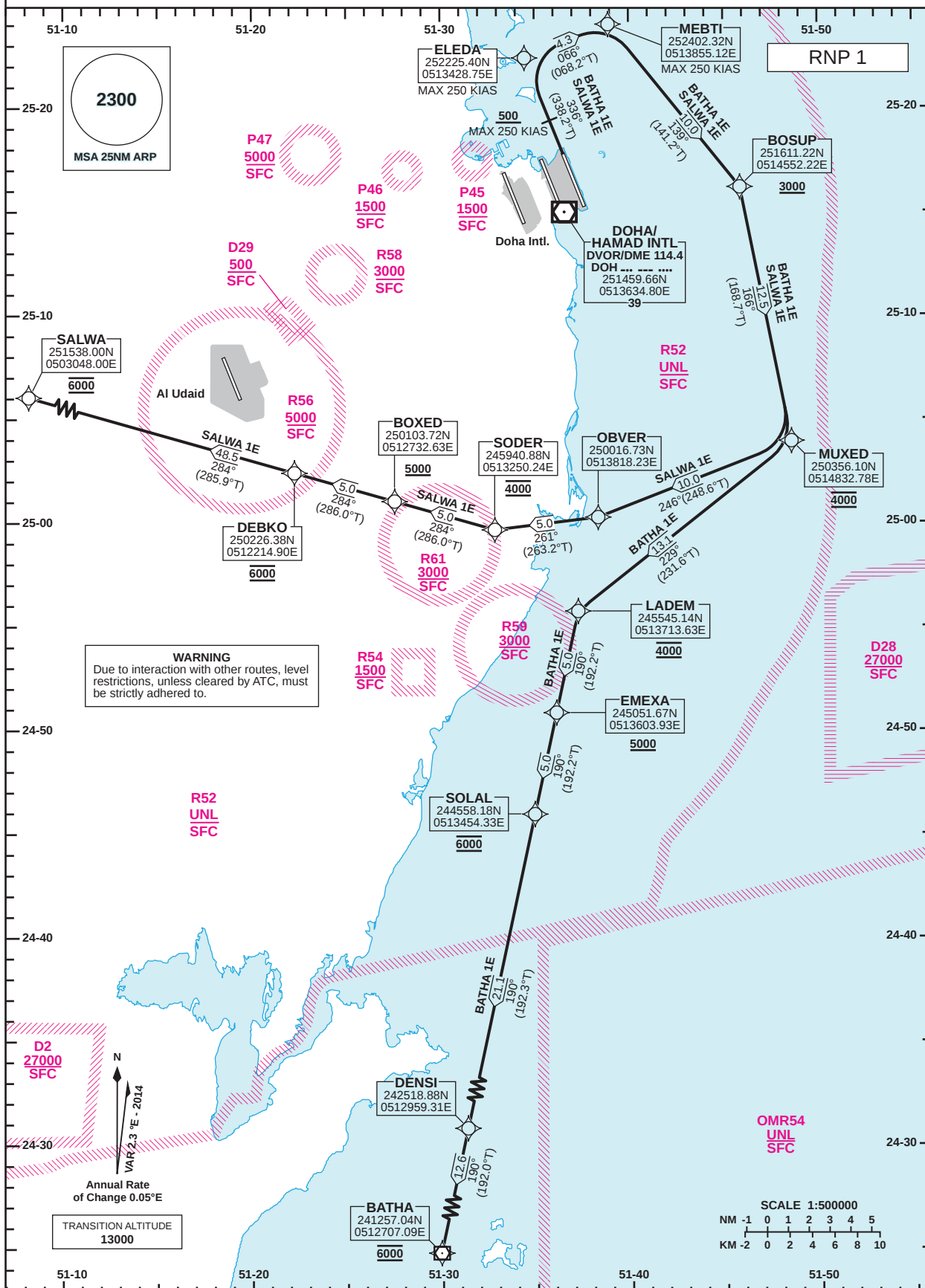
Rwy	Route Designator	Routing		
34L	MUXOP 1W	Climb straight ahead to 500 . Turn right to intercept DOH R355 to MUXOP (DOH15D) at 3000 . Continue as directed.		
34R	MUXOP 1E	Climb straight ahead to 500 . Turn right to intercept DOH R355 to MUXOP (DOH15D) at 3000 . Continue as directed.		
Rwy	Primary SIDs	Initial Contact	Initial Altitude	Radio Fail Procedures
34L	MUXOP 1W	DEPs	3000	Execute three right-hand orbits at MUXOP at 3000. Continue right-hand orbit climbing to 5000. Proceed direct to first enroute waypoint then continue as flight planned or proceed direct to DOH DVOR and follow the ILS 34R approach procedure to land at OTHH.
34R	MUXOP 1E	DEPs	3000	

Changes: Update MSA

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STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34R
BATHA 1E /SALWA 1E

Route Designator	Routeing
BATHA 1E	[T338.2; A500+; K250-] - ELEDA[R; T338.2; K250-] - MEBTI[K250-] - BOSUP[A3000+] - MUXED[A4000] - LADEM[A4000] - EMEXA[A5000+] - SOLAL[A6000] - Densi - BATHA[A6000]
SALWA 1E	[T338.2; A500+; K250-] - ELEDA[R; T338.2; K250-] - MEBTI[K250-] - BOSUP[A3000+] - MUXED[A4000] - OBVER - SODER[A4000] - BOXED[A5000+] - DEBKO[A6000] - SALWA[A6000]

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 34R departures.

Changes: New restricted area R61.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34R
BATHA 1E /SALWA 1E

TABULAR DESCRIPTION

RNP SID BATHA 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500	-250		RNP 1
2	CF	ELEDA	-	336 (338.2)	2.3	-	R	-	-250		RNP 1
3	TF	MEBTI	-	066 (068.2)	2.3	4.3		-	-250		RNP 1
4	TF	BOSUP	-	139 (141.2)	2.3	10.0		+3000	-		RNP 1
5	TF	MUXED	-	166 (168.7)	2.3	12.5		@4000	-		RNP 1
6	TF	LADEM	-	229 (231.6)	2.3	13.1		@4000	-		RNP 1
7	TF	EMEXA	-	190 (192.2)	2.3	5.0		+5000	-		RNP 1
8	TF	SOLAL	-	190 (192.2)	2.3	5.0		@6000	-		RNP 1
9	TF	DENSI	-	190 (192.3)	2.3	21.1		-	-		RNP 1
10	TF	BATHA	-	190 (192.0)	2.3	12.6		@6000	-		RNP 1

RNP SID SALWA 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA	-	-	336 (338.2)	2.3	-		+500	-250		RNP 1
2	CF	ELEDA	-	336 (338.2)	2.3	-	R	-	-250		RNP 1
3	TF	MEBTI	-	066 (068.2)	2.3	4.3		-	-250		RNP 1
4	TF	BOSUP	-	139 (141.2)	2.3	10.0		+3000	-		RNP 1
5	TF	MUXED	-	166 (168.7)	2.3	12.5		@4000	-		RNP 1
6	TF	OBVER	-	246 (248.6)	2.3	10.0		-	-		RNP 1
7	TF	SODER	-	261 (263.2)	2.3	5.0		@4000	-		RNP 1
8	TF	BOXED	-	284 (286.0)	2.3	5.0		+5000	-		RNP 1
9	TF	DEBKO	-	284 (286.0)	2.3	5.0		@6000	-		RNP 1
10	TF	SALWA	-	284 (285.9)	2.3	48.5		@6000	-		RNP 1

WAYPOINT LIST

RNP SID BATHA 1E /SALWA 1E	
Waypoint Identifier	Coordinates
ELEDA	252225.40N 0513428.75E
MEBTI	252402.32N 0513855.12E
BOSUP	251611.22N 0514552.22E
MUXED	250356.10N 0514832.78E
LADEM	245545.14N 0513713.63E
EMEXA	245051.67N 0513603.93E
SOLAL	244558.18N 0513454.33E
DENSI	242518.88N 0512959.31E
BATHA	241257.04N 0512707.09E
OBVER	250016.73N 0513818.23E
SODER	245940.88N 0513250.24E
BOXED	250103.72N 0512732.63E
DEBKO	250226.38N 0512214.90E
SALWA	251538.00N 0503048.00E



STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34R
ALSEM 1E /BUNDU 1E /NAMLA 1E

TABULAR DESCRIPTION

RNP SID ALSEM 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	SOKEN	-	336 (338.2)	2.3	-		+2500			RNP 1
2	TF	DEMBO	-	037 (039.6)	2.3	10.1		@4000			RNP 1
3	TF	UKILA	-	090 (092.7)	2.3	9.3		+6000			RNP 1
4	TF	LABOV	-	090 (092.8)	2.3	5.0		@7000			RNP 1
5	TF	ALSEM	-	097 (099.1)	2.3	44.0		-			RNP 1

RNP SID BUNDU 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA		-	336 (338.2)	2.3	-		+500	-250		RNP 1
2	CF	ELEDA	-	336 (338.2)	2.3	-	R	-	-250		RNP 1
3	TF	MEBTI	-	066 (068.2)	2.3	4.3		-	-250		RNP 1
4	TF	BOSUP	-	139 (141.2)	2.3	10.0		+3000			RNP 1
5	TF	PUSNO	-	076 (078.1)	2.3	8.6		@4000			RNP 1
6	TF	NABIS	-	076 (078.1)	2.3	8.3		@7000			RNP 1
7	TF	GOBLU	-	076 (078.2)	2.3	7.5		-			RNP 1
8	TF	BUNDU	-	141 (143.2)	2.3	25.9		-			RNP 1

RNP SID NAMLA 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CA		-	336 (338.2)	2.3	-		+500	-250		RNP 1
2	CF	ELEDA	-	336 (338.2)	2.3	-	R	-	-250		RNP 1
3	TF	MEBTI	-	066 (068.2)	2.3	4.3		-	-250		RNP 1
4	TF	BOSUP	-	139 (141.2)	2.3	10.0		+3000			RNP 1
5	TF	PUSNO	-	076 (078.1)	2.3	8.6		@4000			RNP 1
6	TF	NABIS	-	076 (078.1)	2.3	8.3		@7000			RNP 1
7	TF	GOBLU	-	076 (078.2)	2.3	7.5		-			RNP 1
8	TF	NAMLA	-	127 (129.3)	2.3	24.7		-			RNP 1

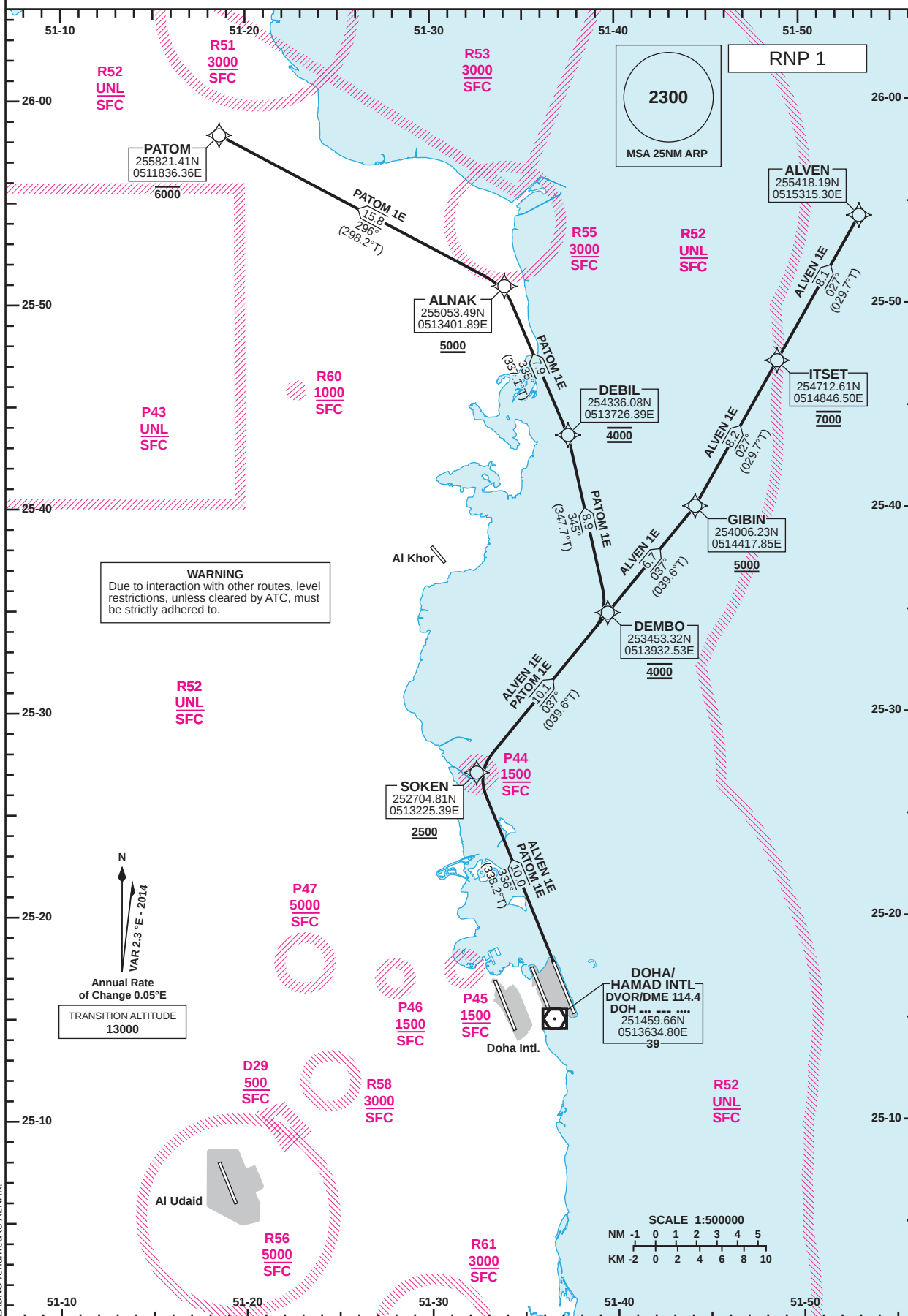
WAYPOINT LIST

RNP SID ALSEM 1E/BUNDU 1E/NAMLA 1E	
Waypoint Identifier	Coordinates
SOKEN	252704.81N 0513225.39E
DEMBO	253453.32N 0513932.53E
UKILA	253426.51N 0514947.60E
LABOV	253411.67N 0515521.30E
ALSEM	252703.45N 0524322.04E
ELEDA	252225.40N 0513428.75E
MEBTI	252402.32N 0513855.12E

RNP SID ALSEM 1E/BUNDU 1E/NAMLA 1E	
Waypoint Identifier	Coordinates
BOSUP	251611.22N 0514552.22E
PUSNO	251758.69N 0515512.34E
NABIS	251940.97N 0520408.54E
GOBLU	252113.67N 0521217.27E
BUNDU	250024.00N 0522924.00E
NAMLA	250532.00N 0523318.00E

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34R
ALVEN 1E /PATOM 1E

Route Designator	Routing
ALVEN 1E	SOKEN[T338.2; A2500+] - DEMBO[A4000] - GIBIN[A5000+] - ITSET[A7000] - ALVEN
PATOM 1E	SOKEN[T338.2; A2500+] - DEMBO[A4000] - DEBIL[A4000] - ALNAK[A5000+] - PATOM[A6000-]

GENERAL INFORMATION

1. Close-in obstacles exist for Rwy 34R departures.

Changes: Significant point LABNO renamed to ALNAK.

STANDARD DEPARTURE
CHART - INSTRUMENT
(SID) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34R
ALVEN 1E /PATOM 1E

TABULAR DESCRIPTION

RNP SID ALVEN 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	SOKEN	-	336 (338.2)	2.3	-		+2500			RNP 1
2	TF	DEMBO	-	037 (039.6)	2.3	10.1		@4000			RNP 1
3	TF	GIBIN	-	037 (039.6)	2.3	6.7		+5000			RNP 1
4	TF	ITSET	-	027 (029.7)	2.3	8.2		@7000			RNP 1
5	TF	ALVEN	-	027 (029.7)	2.3	8.1		-			RNP 1

RNP SID PATOM 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	CF	SOKEN	-	336 (338.2)	2.3	-		+2500			RNP 1
2	TF	DEMBO	-	037 (039.6)	2.3	10.1		@4000			RNP 1
3	TF	DEBIL	-	345 (347.7)	2.3	8.9		@4000			RNP 1
4	TF	ALNAK	-	335 (337.1)	2.3	7.9		+5000			RNP 1
5	TF	PATOM	-	296 (298.2)	2.3	15.8		-6000			RNP 1

WAYPOINT LIST

RNP SID ALVEN 1E /PATOM 1E	
Waypoint Identifier	Coordinates
SOKEN	252704.81N 0513225.39E
DEMBO	253453.32N 0513932.53E
GIBIN	254006.23N 0514417.85E
ITSET	254712.61N 0514846.50E
ALVEN	255418.19N 0515315.30E
DEBIL	254336.08N 0513726.39E
ALNAK	255053.49N 0513401.89E
PATOM	255821.41N 0511836.36E



STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
AFNAN 1M /BAYAN 1M /GINTO 1M

TABULAR DESCRIPTION

RNP STAR AFNAN 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	AFNAN	-		2.3			-12000			RNP 1
2	TF	SIDMU	-	300 (302.4)	2.3	15.9					RNP 1
3	TF	EGNUG	-	336 (338.2)	2.3	7.7		+8000			RNP 1
4	TF	IVANI	-	336 (338.2)	2.3	15.4	L	+5000	-220		RNP 1
5	TF	TOVAN	-	246 (248.1)	2.3	5.0			-180		RNP 1

RNP STAR BAYAN 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	BAYAN	-		2.3			-12000			RNP 1
2	TF	ASTIM	-	162 (164.7)	2.3	7.7					RNP 1
3	TF	EGNUG	-	246 (248.3)	2.3	8.8	R	+8000			RNP 1
4	TF	IVANI	-	336 (338.2)	2.3	15.4	L	+5000	-220		RNP 1
5	TF	TOVAN	-	246 (248.1)	2.3	5.0			-180		RNP 1

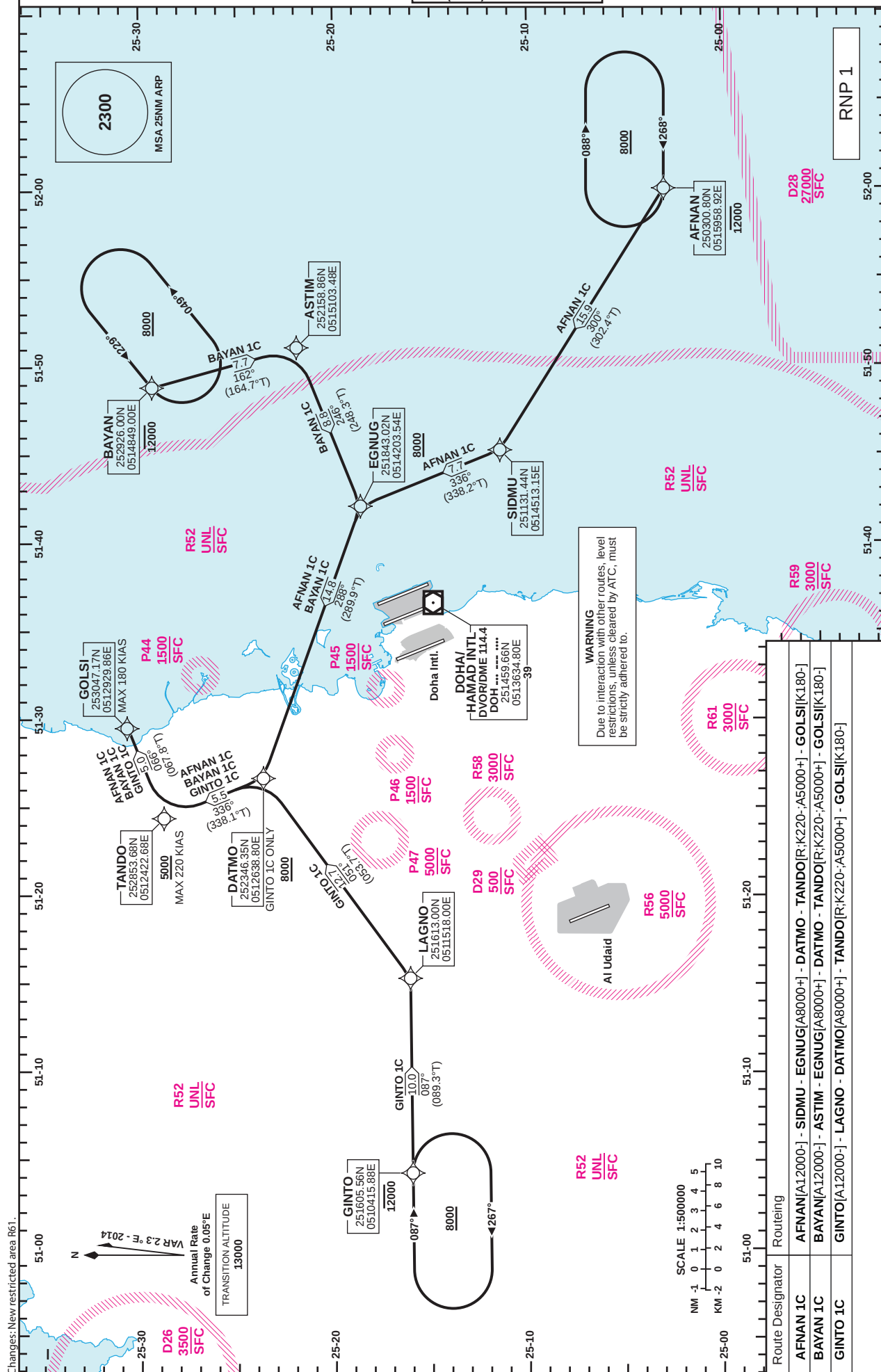
RNP STAR GINTO 1M											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	GINTO	-		2.3			-12000			RNP 1
2	TF	LAGNO	-	087 (089.3)	2.3	10.0					RNP 1
3	TF	DATMO	-	051 (053.7)	2.3	12.7		+8000			RNP 1
4	TF	PUTAN	-	066 (068.1)	2.3	11.1	L				RNP 1
5	TF	IVANI	-	336 (338.2)	2.3	5.5	L	+5000	-220		RNP 1
6	TF	TOVAN	-	246 (248.1)	2.3	5.0			-180		RNP 1

WAYPOINT LIST

RNP STAR AFNAN 1M /BAYAN 1M /GINTO 1M	
Waypoint Identifier	Coordinates
AFNAN	250300.80N 0515958.92E
SIDMU	251131.44N 0514513.15E
BAYAN	252926.00N 0514849.00E
ASTIM	252158.86N 0515103.48E
EGNUG	251843.02N 0514203.54E
GINTO	251605.56N 0510415.88E
LAGNO	251613.00N 0511518.00E
DATMO	252346.35N 0512638.80E
PUTAN	252754.71N 0513800.57E
IVANI	253302.21N 0513544.87E
TOVAN	253109.81N 0513037.05E

STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
DIRECTOR	119.40 / 121.125
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16R
AFNAN 1C /BAYAN 1C /GINTO 1C

STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
AFNAN 1C /BAYAN 1C /GINTO 1C

TABULAR DESCRIPTION

RNP STAR AFNAN 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	AFNAN	-		2.3			-12000			RNP 1
2	TF	SIDMU	-	300 (302.4)	2.3	15.9		-			RNP 1
3	TF	EGNUG	-	336 (338.2)	2.3	7.7		+8000			RNP 1
4	TF	DATMO	-	288 (289.9)	2.3	14.8		-			RNP 1
5	TF	TANDO	-	336 (338.1)	2.3	5.5	R	+5000	-220		RNP 1
6	TF	GOLSI		066 (067.8)	2.3	5.0		-	-180		RNP 1

RNP STAR BAYAN 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	BAYAN	-		2.3			-12000			RNP 1
2	TF	ASTIM	-	162 (164.7)	2.3	7.7		-			RNP 1
3	TF	EGNUG	-	246 (248.3)	2.3	8.8		+8000			RNP 1
4	TF	DATMO	-	288 (289.9)	2.3	14.8		-			RNP 1
5	TF	TANDO	-	336 (338.1)	2.3	5.5	R	+5000	-220		RNP 1
6	TF	GOLSI		066 (067.8)	2.3	5.0		-	-180		RNP 1

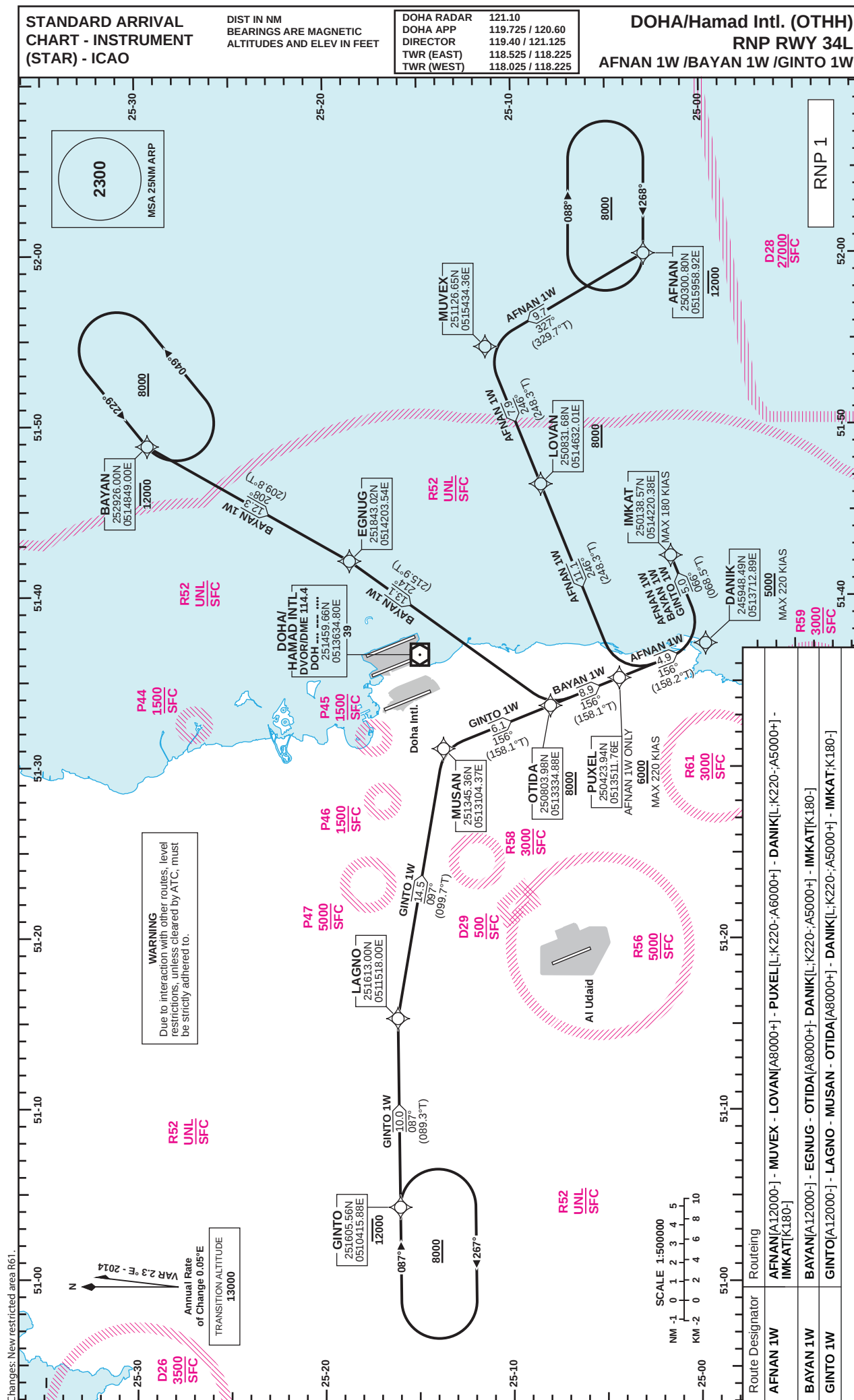
RNP STAR GINTO 1C											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	GINTO	-		2.3			-12000			RNP 1
2	TF	LAGNO	-	087 (089.3)	2.3	10.0		-			RNP 1
3	TF	DATMO	-	051 (053.7)	2.3	12.7		+8000			RNP 1
4	TF	TANDO	-	336 (338.1)	2.3	5.5	R	+5000	-220		RNP 1
5	TF	GOLSI	-	066 (067.8)	2.3	5.0		-	-180		RNP 1

WAYPOINT LIST

RNP STAR AFNAN 1C /BAYAN 1C /GINTO 1C	
Waypoint Identifier	Coordinates
AFNAN	250300.80N 0515958.92E
SIDMU	251131.44N 0514513.15E
BAYAN	252926.00N 0514849.00E
ASTIM	252158.86N 0515103.48E
EGNUG	251843.02N 0514203.54E
GINTO	251605.56N 0510415.88E
LAGNO	251613.00N 0511518.00E
DATMO	252346.35N 0512638.80E
TANDO	252853.68N 0512422.68E
GOLSI	253047.17N 0512929.86E

STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAODIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
DIRECTOR	119.40 / 121.125
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 34L
AFNAN 1W /BAYAN 1W /GINTO 1W

STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
AFNAN 1W /BAYAN 1W /GINTO 1W

TABULAR DESCRIPTION

RNP STAR AFNAN 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	AFNAN	-		2.3			-12000			RNP 1
2	TF	MUVEX	-	327 (329.7)	2.3	9.7					RNP 1
3	TF	LOVAN	-	246 (248.3)	2.3	7.9		+8000			RNP 1
4	TF	PUXEL	-	246 (248.2)	2.3	11.1	L	+6000	-220		RNP 1
5	TF	DANIK	-	156 (158.2)	2.3	4.9	L	+5000	-220		RNP 1
6	TF	IMKAT	-	066 (068.5)	2.3	5.0			-180		RNP 1

RNP STAR BAYAN 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	BAYAN	-		2.3			-12000			RNP 1
2	TF	EGNUG	-	208 (209.8)	2.3	12.3					RNP 1
3	TF	OTIDA	-	214 (215.9)	2.3	13.1		+8000			RNP 1
4	TF	DANIK	-	156 (158.1)	2.3	8.9	L	+5000	-220		RNP 1
5	TF	IMKAT	-	066 (068.5)	2.3	5.0			-180		RNP 1

RNP STAR GINTO 1W											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	GINTO	-		2.3			-12000			RNP 1
2	TF	LAGNO	-	087 (089.3)	2.3	10.0					RNP 1
3	TF	MUSAN	-	097 (099.7)	2.3	14.5					RNP 1
4	TF	OTIDA	-	156 (158.1)	2.3	6.1		+8000			RNP 1
5	TF	DANIK	-	156 (158.1)	2.3	8.9	L	+5000	-220		RNP 1
6	TF	IMKAT	-	066 (068.5)	2.3	5.0			-180		RNP 1

WAYPOINT LIST

RNP STAR AFNAN 1W /BAYAN 1W /GINTO 1W	
Waypoint Identifier	Coordinates
AFNAN	250300.80N 0515958.92E
MUVEX	251126.65N 0515434.36E
LOVAN	250831.68N 0514632.01E
PUXEL	250423.94N 0513511.76E
BAYAN	252926.00N 0514849.00E
EGNUG	251843.02N 0514203.54E
GINTO	251605.56N 0510415.88E
LAGNO	251613.00N 0511518.00E
MUSAN	251345.36N 0513104.37E
OTIDA	250803.98N 0513334.88E
DANIK	245948.49N 0513712.89E
IMKAT	250138.57N 0514220.38E



STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 34R
AFNAN 1E /BAYAN 1E /GINTO 1E

TABULAR DESCRIPTION

RNP STAR AFNAN 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	AFNAN	-		2.3			-12000			RNP 1
2	TF	MUVEX	-	327 (329.7)	2.3	9.7		+8000			RNP 1
3	TF	LOVAN	-	246 (248.3)	2.3	7.9	L	-8000	-220		RNP 1
4	TF	MUXED	-	156 (158.2)	2.3	4.9	R	+5000	-220		RNP 1
5	TF	LAGMA	-	246 (248.3)	2.3	5.0			-180		RNP 1

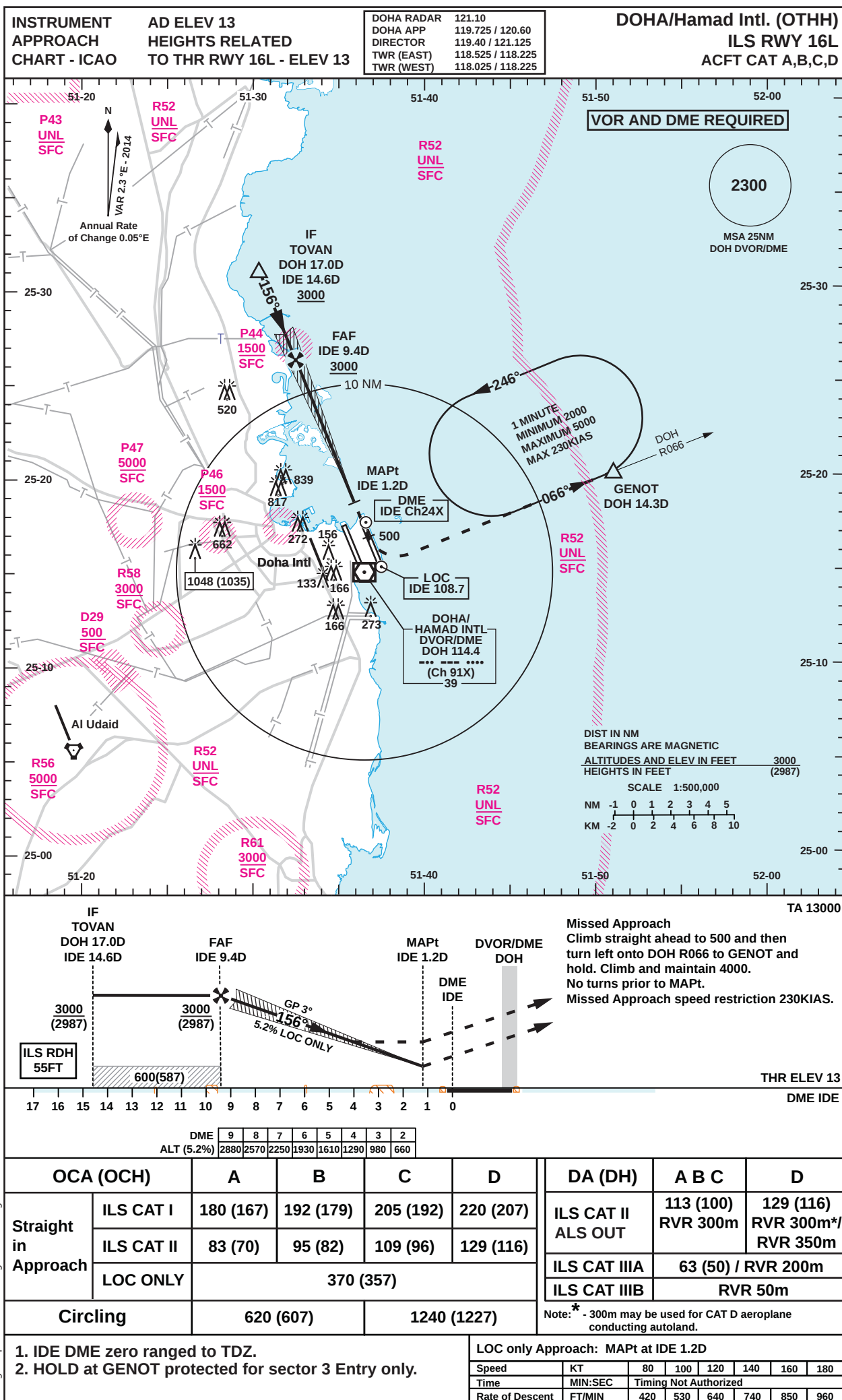
RNP STAR BAYAN 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	BAYAN	-		2.3			-12000			RNP 1
2	TF	EGNUG	-	208 (209.8)	2.3	12.3					RNP 1
3	TF	SIDMU	-	156 (158.2)	2.3	7.7		+8000			RNP 1
4	TF	MUXED	-	156 (158.2)	2.3	8.1	R	+5000	-220		RNP 1
5	TF	LAGMA	-	246 (248.3)	2.3	5.0			-180		RNP 1

RNP STAR GINTO 1E											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	GINTO	-		2.3			-12000			RNP 1
2	TF	LAGNO	-	087 (089.3)	2.3	10.0					RNP 1
3	TF	SIDMU	-	097 (099.7)	2.3	27.5		+8000			RNP 1
4	TF	MUXED	-	156 (158.2)	2.3	8.1	R	+5000	-220		RNP 1
5	TF	LAGMA	-	246 (248.3)	2.3	5.0			-180		RNP 1

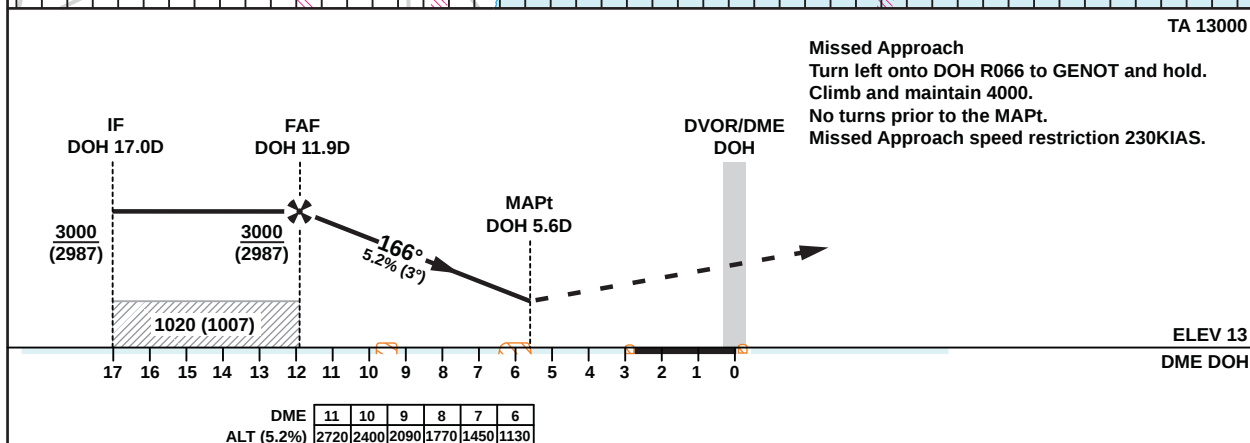
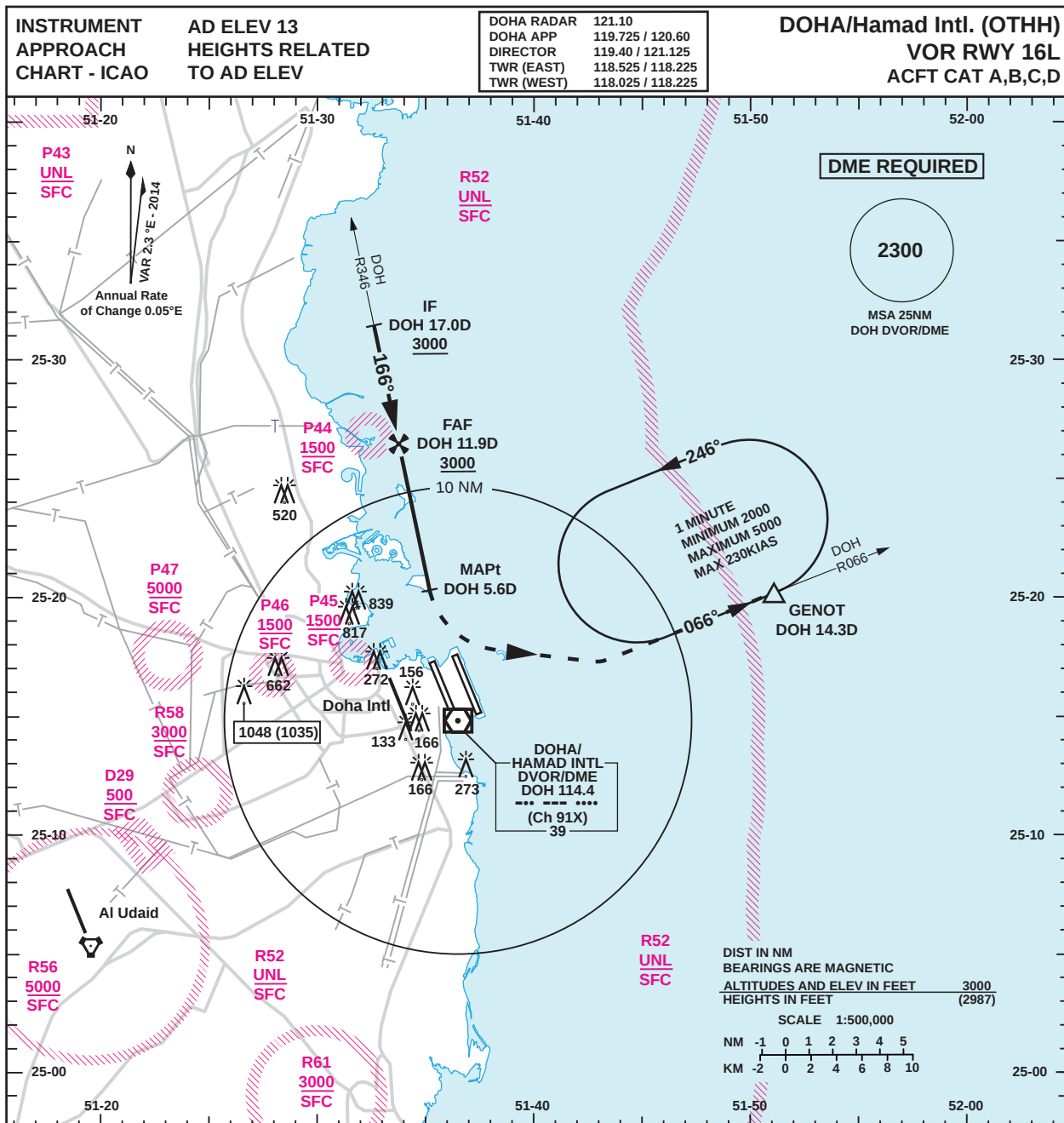
WAYPOINT LIST

RNP STAR AFNAN 1E /BAYAN 1E /GINTO 1E	
Waypoint Identifier	Coordinates
AFNAN	250300.80N 0515958.92E
MUVEX	251126.65N 0515434.36E
LOVAN	250831.68N 0514632.01E
BAYAN	252926.00N 0514849.00E
EGNUG	251843.02N 0514203.54E
GINTO	251605.56N 0510415.88E
LAGNO	251613.00N 0511518.00E
SIDMU	251131.44N 0514513.15E
MUXED	250356.10N 0514832.78E
LAGMA	250204.62N 0514325.78E

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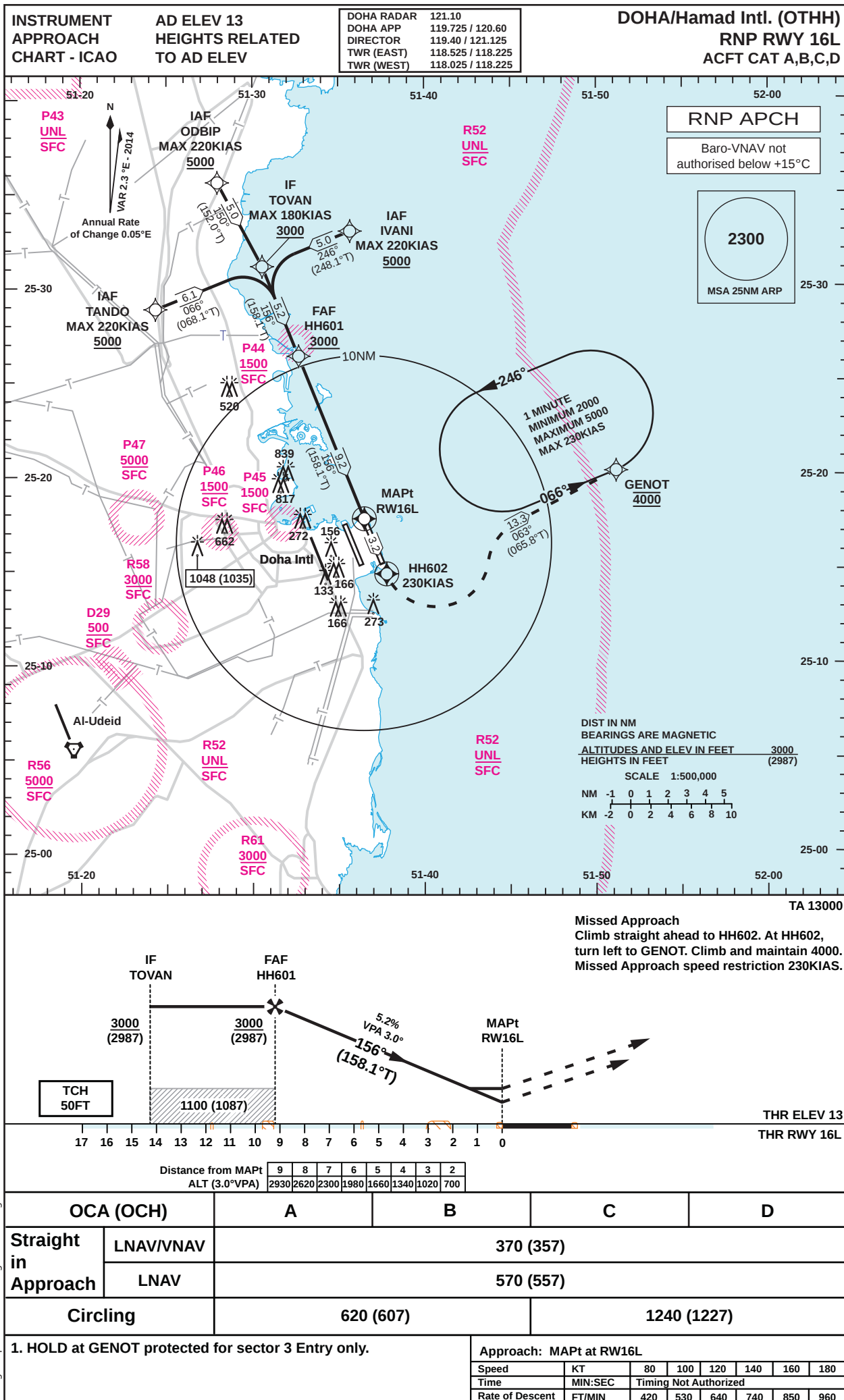
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OCA (OCH)		A	B	C	D							
Straight in Approach	VOR	1020 (1007)										
		Circling		1020 (1007)			1240 (1227)					
1. CAUTION - Final Approach Track offset from runway centre line by 10°. 2. HOLD at GENOT protected for sector 3 Entry only.			VOR Approach: MAPt at DOH 5.6D									
			Speed		KT		80	100	120	140	160	180
			Time		MIN:SEC		Timing Not Authorized					
			Rate of Descent		FT/MIN		420	530	640	740	850	960

Changes: Updated dominating obstacle height

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Changes: Updated dominating obstacle height.

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 13
HEIGHTS RELATED TO AD ELEV

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L
ACFT CAT A,B,C,D

TABULAR DESCRIPTION

RNP RWY 16L TANDO

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	TANDO	-		2.3			+5000	-220		RNP APCH
2	TF	TOVAN	-	066 (068.1)	2.3	6.1	R	+3000	-180		RNP APCH

RNP RWY 16L ODBIP

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	ODBIP	-		2.3			+5000	-220		RNP APCH
2	TF	TOVAN	-	150 (152.0)	2.3	5.0		+3000	-180		RNP APCH

RNP RWY 16L IVANI

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	IVANI	-		2.3			+5000	-220		RNP APCH
2	TF	TOVAN	-	246 (248.1)	2.3	5.0	L	+3000	-180		RNP APCH

RNP RWY 16L FINAL

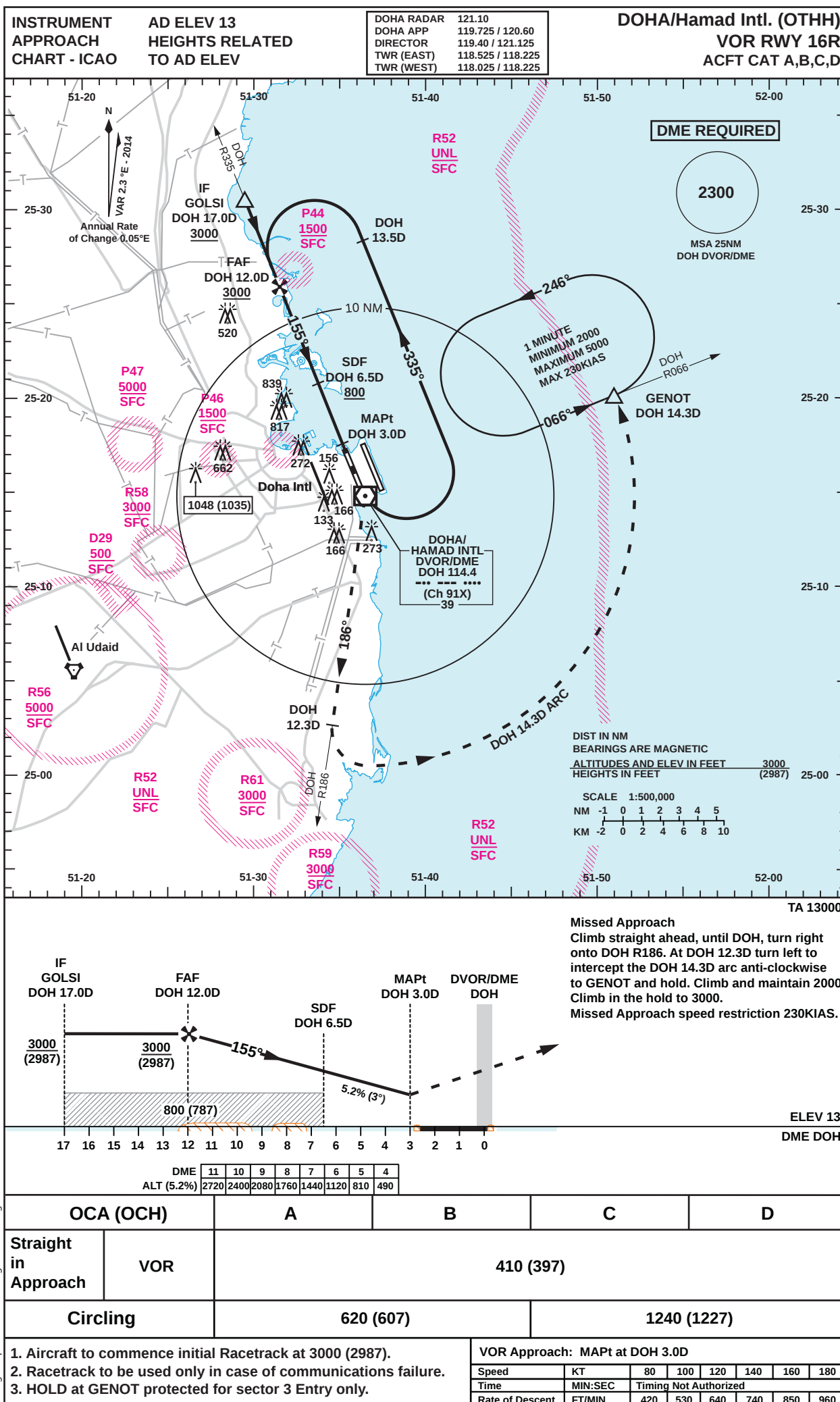
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	TOVAN	-		2.3	-		+3000	-180		RNP APCH
2	TF	HH601	-	156 (158.1)	2.3	5.2		+3000	-180		RNP APCH
3	TF	RW16L	Y	156 (158.1)	2.3	9.2			-180	-3.0/50	RNP APCH
4	CF	HH602	Y	156 (158.2)	2.3	-	L		-230		RNP APCH
5	TF	GENOT	-	063 (065.8)	2.3	13.3		@4000	-230		RNP APCH
6	HM	GENOT	Y	066 (068.3)	2.3	4.3	L	@4000	-230		RNP APCH

WAYPOINT LIST

RNP RWY 16L	
Waypoint Identifier	Coordinates
TANDO	252853.68N 0512422.68E
ODBIP	253537.40N 0512800.00E
IVANI	253302.21N 0513544.87E
TOVAN	253109.81N 0513037.05E
HH601	252621.31N 0513244.59E
RW16L	251745.97N 0513631.96E
HH602	251449.85N 0513749.52E
GENOT	252018.11N 0515114.66E

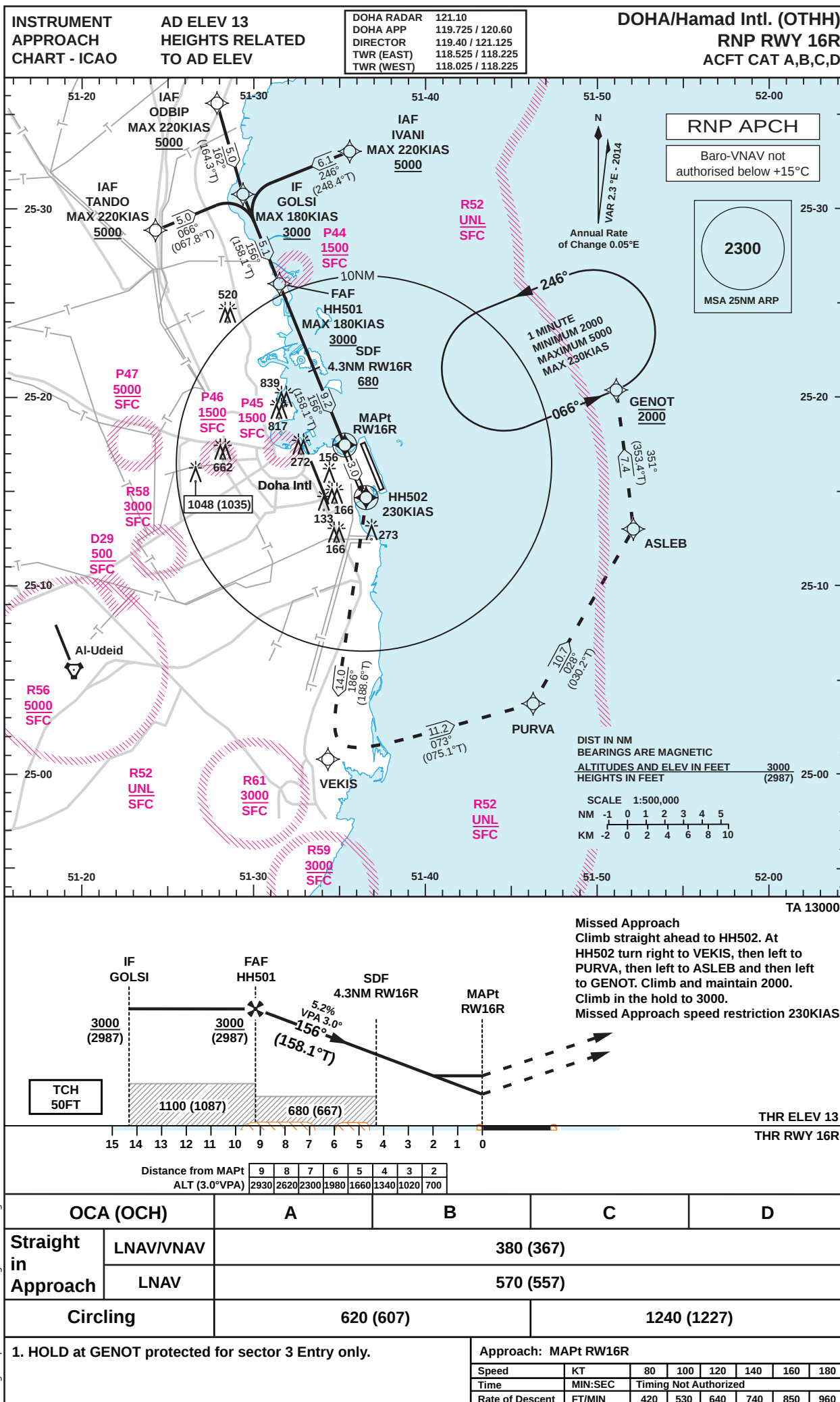


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Changes: Updated dominating obstacle height.

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Changes: Updated dominating obstacle height.

INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 13
HEIGHTS RELATED TO AD ELEV

DOHA/Hamad Intl.(OTHH)
RNP RWY 16R
ACFT CAT A,B,C,D

TABULAR DESCRIPTION

RNP RWY 16R TANDO											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	TANDO	-		2.3			+5000	-220		RNP APCH
2	TF	GOLSI	-	066 (067.8)	2.3	5.0	R	+3000	-180		RNP APCH

RNP RWY 16R ODBIP											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	ODBIP	-		2.3			+5000	-220		RNP APCH
2	TF	GOLSI	-	162 (164.3)	2.3	5.0		+3000	-180		RNP APCH

RNP RWY 16R IVANI											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	IVANI	-		2.3			+5000	-220		RNP APCH
2	TF	GOLSI	-	246 (248.4)	2.3	6.1	L	+3000	-180		RNP APCH

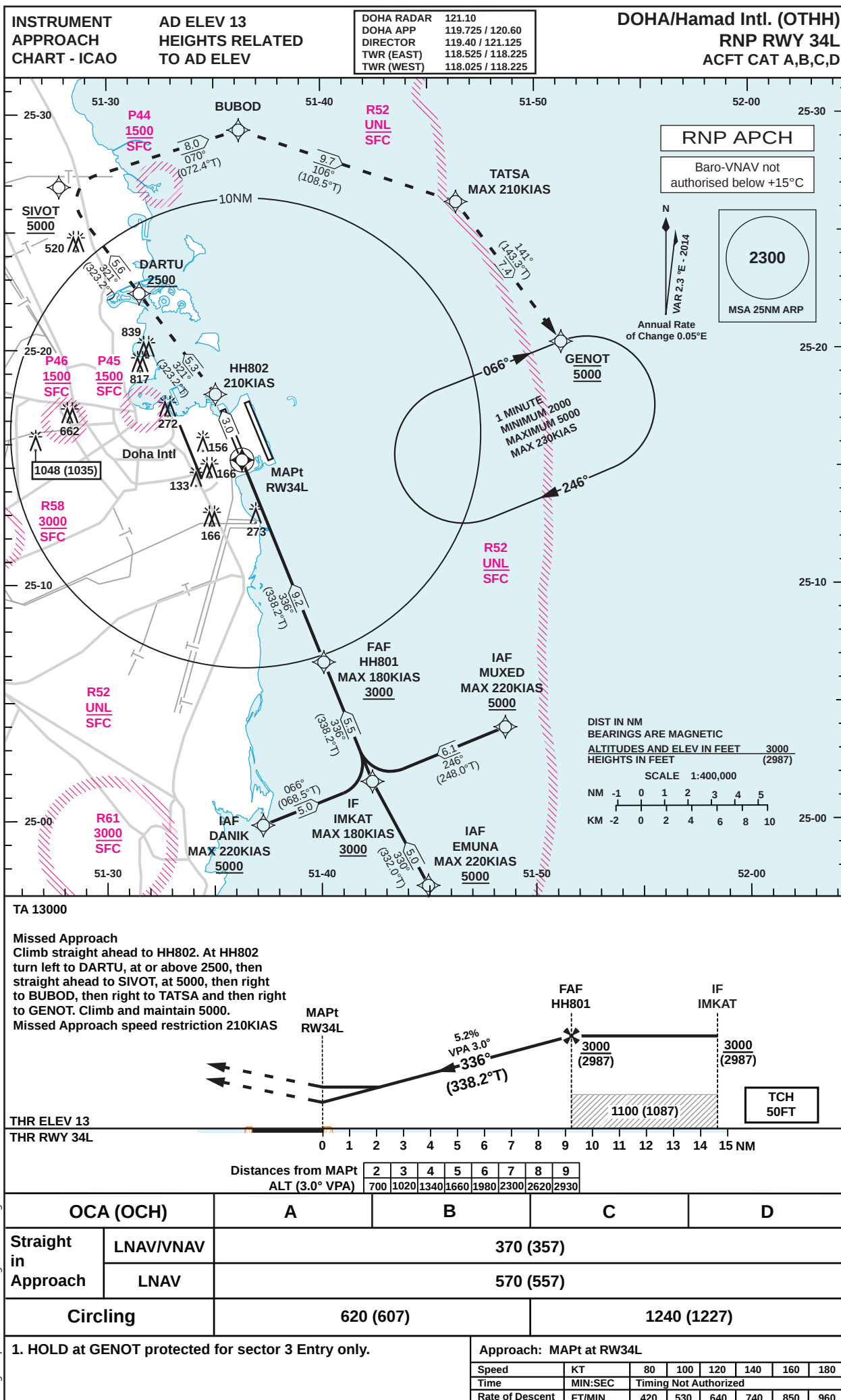
RNP RWY 16R FINAL											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/ TCH(ft)	Navigation Specification
1	IF	GOLSI	-		2.3	-		+3000	-180		RNP APCH
2	TF	HH501	-	156 (158.1)	2.3	5.1		+3000	-180		RNP APCH
3	TF	RW16R	Y	156 (158.1)	2.3	9.2			-180	-3.0/50	RNP APCH
4	CF	HH502	Y	156 (158.2)	2.3	-			-230		RNP APCH
5	TF	VEKIS	-	186 (188.6)	2.3	14.0	L		-230		RNP APCH
6	TF	PURVA	-	073 (075.1)	2.3	11.2			-230		RNP APCH
7	TF	ASLEB	-	028 (030.2)	2.3	10.7			-230		RNP APCH
8	TF	GENOT	-	351 (353.4)	2.3	7.4		@2000	-230		RNP APCH
9	HM	GENOT	Y	066 (068.3)	2.3	4.3	L	@3000	-230		RNP APCH

WAYPOINT LIST

RNP RWY 16R	
Waypoint Identifier	Coordinates
TANDO	252853.68N 0512422.68E
ODBIP	253537.40N 0512800.00E
IVANI	253302.21N 0513544.87E
GOLSI	253047.17N 0512929.86E
HH501	252602.84N 0513135.62E
RW16R	251727.52N 0513523.07E
HH502	251439.85N 0513636.94E
VEKIS	250047.55N 0513419.39E
PURVA	250341.28N 0514617.29E
ASLEB	251255.45N 0515211.43E
GENOT	252018.11N 0515114.66E

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INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 13
HEIGHTS RELATED TO AD ELEV

DOHA/Hamad Intl.(OTHH)
RNP RWY 34L
ACFT A,B,C,D

TABULAR DESCRIPTION

RNP RWY 34L DANIK

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	DANIK	-		2.3			+5000	-220		RNP APCH
2	TF	IMKAT	-	066 (068.5)	2.3	5.0	L	+3000	-180		RNP APCH

RNP RWY 34L EMUNA

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	EMUNA	-		2.3			+5000	-220		RNP APCH
2	TF	IMKAT	-	330 (332.0)	2.3	5.0		+3000	-180		RNP APCH

RNP RWY 34L MUXED

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	MUXED	-		2.3			+5000	-220		RNP APCH
2	TF	IMKAT	-	246 (248.0)	2.3	6.1	R	+3000	-180		RNP APCH

RNP RWY 34L FINAL

Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH(ft)	Navigation Specification
1	IF	IMKAT	-		2.3	-		+3000	-180		RNP APCH
2	TF	HH801	-	336 (338.2)	2.3	5.5		+3000	-180		RNP APCH
3	TF	RW34L	Y	336 (338.2)	2.3	9.2			-180	-3.0/50	RNP APCH
4	CF	HH802	-	336 (338.2)	2.3	-			-210		RNP APCH
5	TF	DARTU	-	321 (323.2)	2.3	5.3			-210		RNP APCH
6	TF	SIVOT	-	321 (323.1)	2.3	5.6	R	@5000	-210		RNP APCH
7	TF	BUBOD	-	070 (072.4)	2.3	8.0			-210		RNP APCH
8	TF	TATSA	-	106 (108.5)	2.3	9.7			-210		RNP APCH
9	TF	GENOT	-	141 (143.3)	2.3	7.4		@5000	-230		RNP APCH
10	HM	GENOT	Y	066 (068.3)	2.3	4.3	R	@5000	-230		RNP APCH

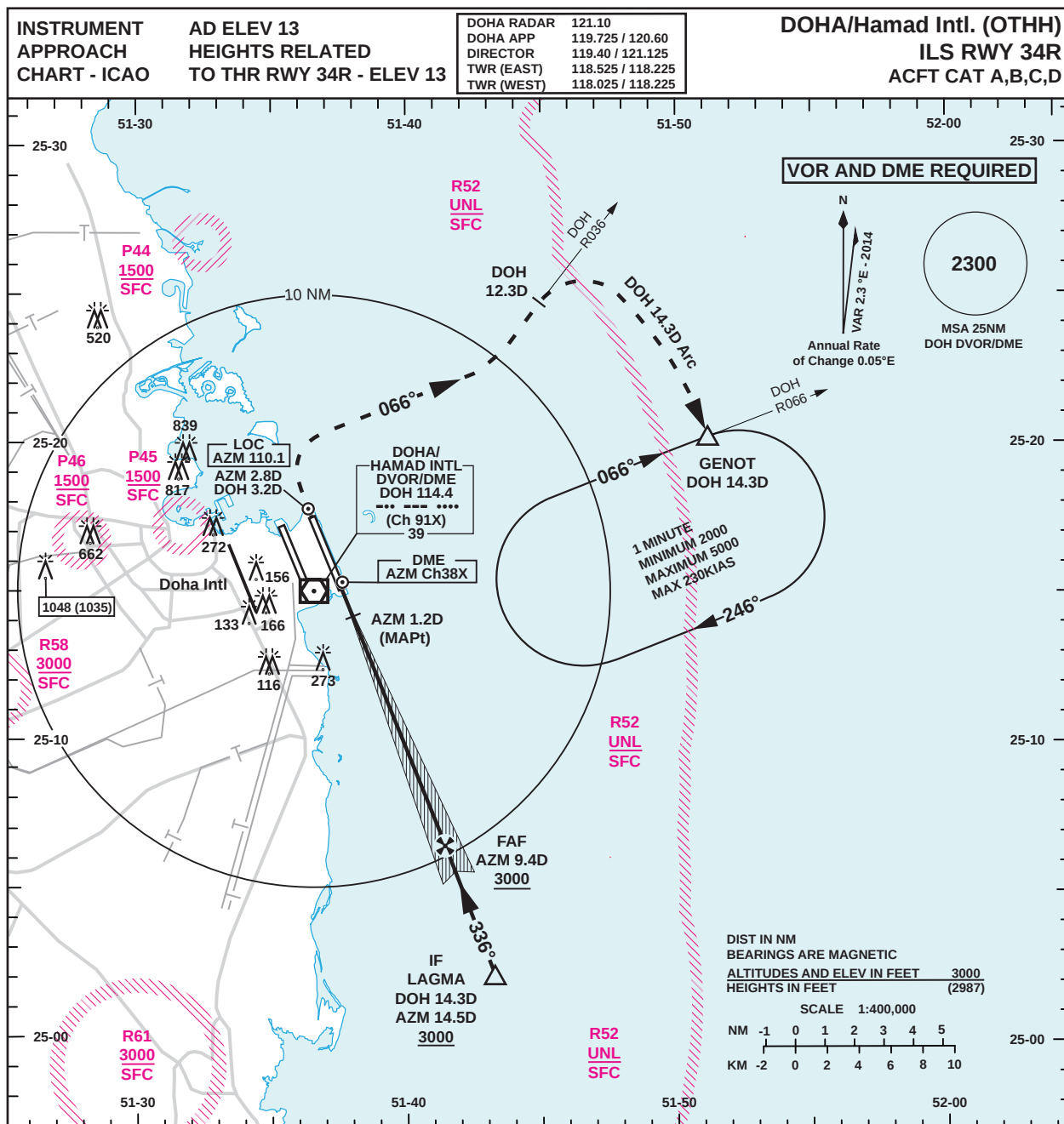
WAYPOINT LIST

RNP RWY 34L

Waypoint Identifier	Coordinates
DANIK	245948.49N 0513712.89E
EMUNA	245712.86N 0514455.31E
MUXED	250356.10N 0514832.78E
IMKAT	250138.57N 0514220.38E
HH801	250643.86N 0514006.34E
RW34L	251519.32N 0513619.56E

RNP RWY 34L

Waypoint Identifier	Coordinates
HH802	251806.98N 0513505.67E
DARTU	252224.62N 0513133.18E
SIVOT	252655.93N 0512749.08E
BUBOD	252920.40N 0513612.95E
TATSA	252615.54N 0514621.66E
GENOT	252018.11N 0515114.66E



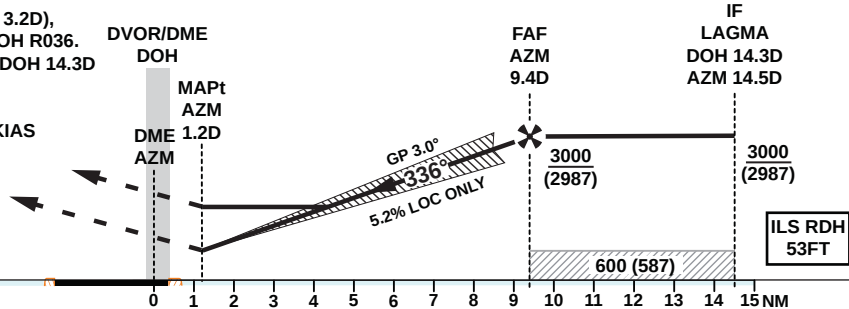
TA 13000

Missed Approach

Climb straight ahead, at AZM 2.8D (DOH 3.2D), turn right onto Track 066° to intercept DOH R036. At DOH 12.3D turn right to intercept the DOH 14.3D arc clockwise to GENOT and hold. Climb and maintain 4000. Missed Approach speed restriction 230KIAS

THR ELEV 13

DME AZM



DME	1	2	3	4	5	6	7	8	9
ALT (5.2%)	340	660	980	1290	1610	1930	2250	2570	2880

OCA (OCH)		A	B	C	D	DA (DH)	A	B	C	D
Straight in Approach	ILS CAT I	199 (186)	210 (197)	222 (209)	235 (222)	ILS CAT II ALS OUT	113 (100) RVR 300m	124 (111) RVR 300m	137 (124) RVR 400m	156 (143) RVR 450m
	ILS CAT II	111 (98)	124 (111)	137(124)	156 (143)	ILS CAT IIIA	63 (50) / RVR 200m			
	LOC ONLY	320 (307)				ILS CAT IIIB	RVR 50m			
Circling		620 (607)		1240 (1227)						

1. AZM DME zero ranged to TDZ.
2. HOLD at GENOT protected for sector 3 Entry only.

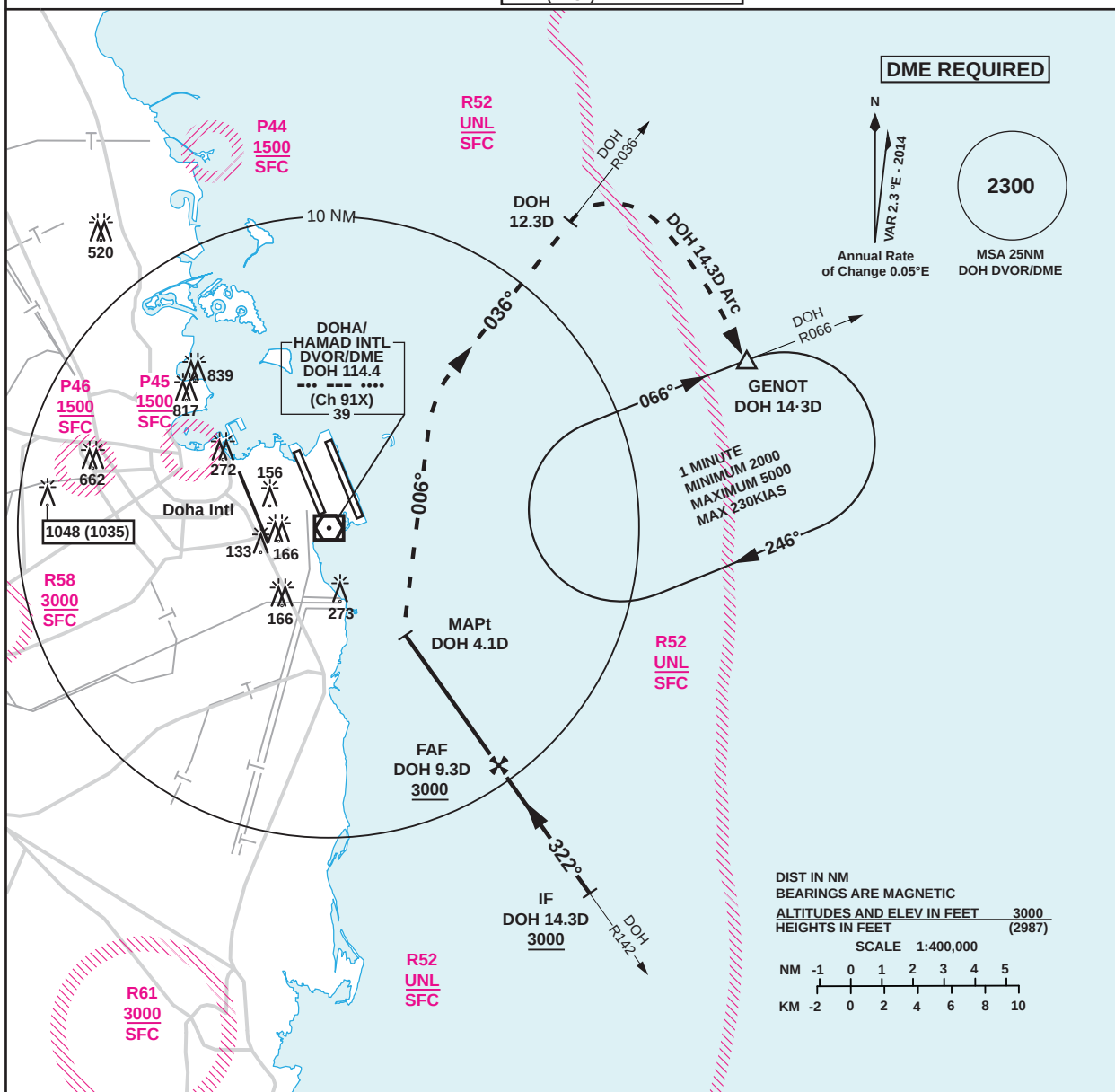
LOC only Approach: MAPt at AZM 1.2D

Speed	KT	80	100	120	140	160	180
Time	MIN:SEC						
Rate of Descent	FT/MIN						
	420	530	640	740	850	960	

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INSTRUMENT
APPROACH
CHART - ICAOAD ELEV 13
HEIGHTS RELATED
TO AD ELEV

DOHA RADAR	121.10
DOHA APP	119.725 / 120.60
DIRECTOR	119.40 / 121.125
TWR (EAST)	118.525 / 118.225
TWR (WEST)	118.025 / 118.225

DOHA/Hamad Intl. (OTHH)
VOR RWY 34R
ACFT CAT A,B,C,D

TA 13000

Missed Approach

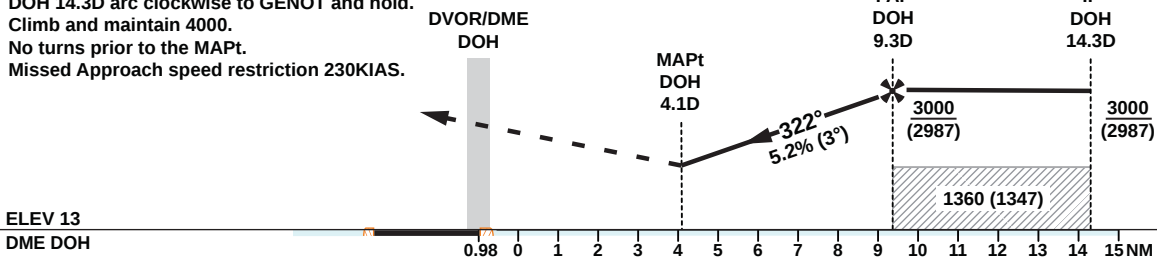
Turn right heading 006° to intercept DOH R036.

At DOH 12.3D turn right to intercept the DOH 14.3D arc clockwise to GENOT and hold.

Climb and maintain 4000.

No turns prior to the MAPt.

Missed Approach speed restriction 230KIAS.



ELEV 13

DME DOH

0.98

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15 NM

DME

ALT (5.2%)

5

6

7

8

9

1610

1930

2250

2560

2880

OCA (OCH)

A

B

C

D

Straight
in
Approach

VOR

1360 (1347)

Circling

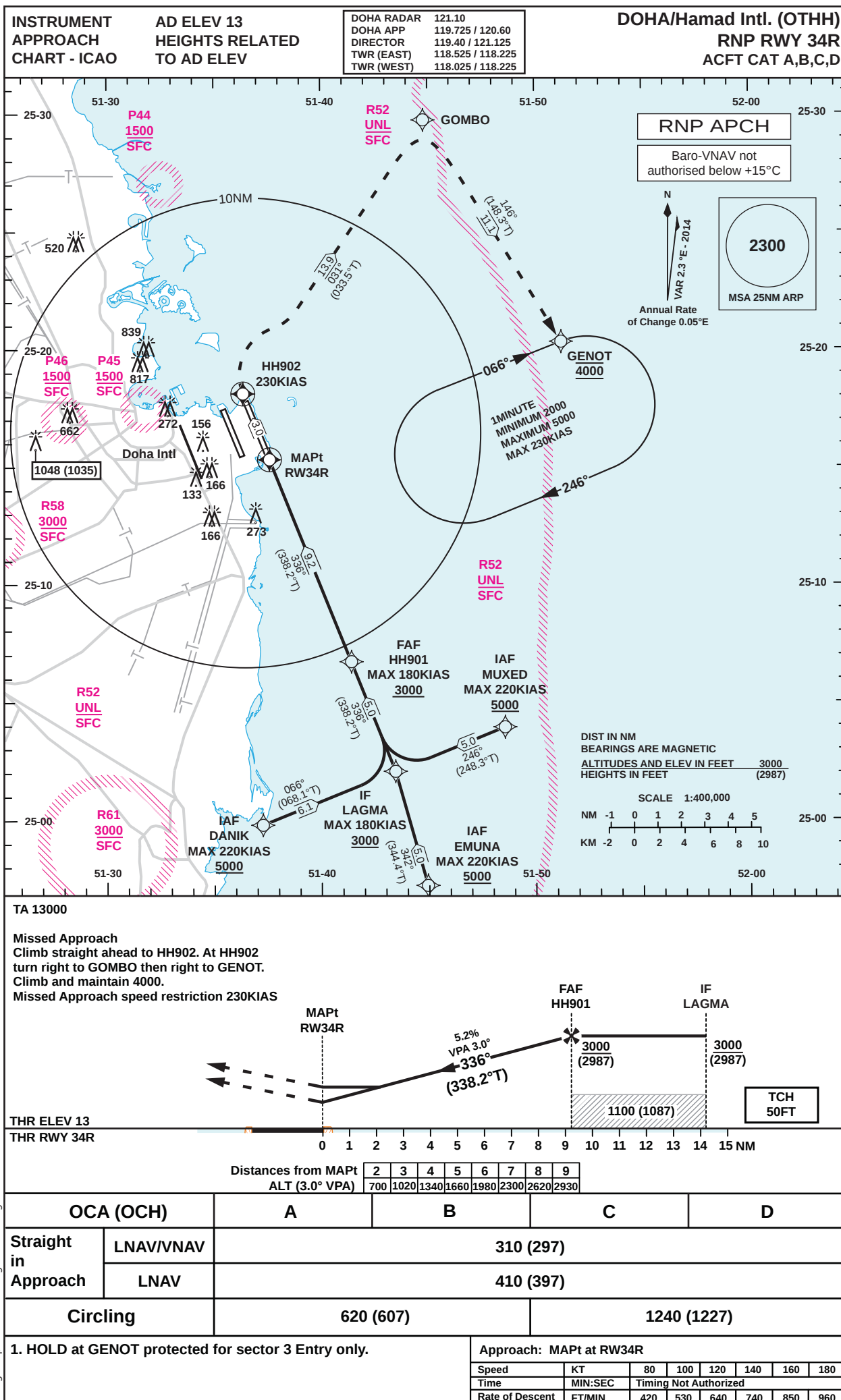
1360 (1347)

- CAUTION - Final Approach Track offset from runway centre line by 014°.
- HOLD at GENOT protected for sector 3 Entry only.

DVOR/DME Approach: MAPt at DOH 4.1D

Speed	KT	80	100	120	140	160	180
Time	MIN:SEC	Timing Not Authorized					
Rate of descent	FT/MIN	420	530	640	740	850	960

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INSTRUMENT
APPROACH
CHART-ICAO

AD ELEV 13
HEIGHTS RELATED TO AD ELEV

DOHA/Hamad Intl.(OTHH)
RNP RWY 34R
ACFT A,B,C,D

TABULAR DESCRIPTION

RNP RWY 34R DANIK											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH (ft)	Navigation Specification
1	IF	DANIK	-		2.3	-		+5000	-220		RNP APCH
2	TF	LAGMA	-	066 (068.1)	2.3	6.1	L	+3000	-180		RNP APCH

RNP RWY 34R EMUNA											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH (ft)	Navigation Specification
1	IF	EMUNA	-		2.3	-		+5000	-220		RNP APCH
2	TF	LAGMA	-	342 (344.4)	2.3	5.0		+3000	-180		RNP APCH

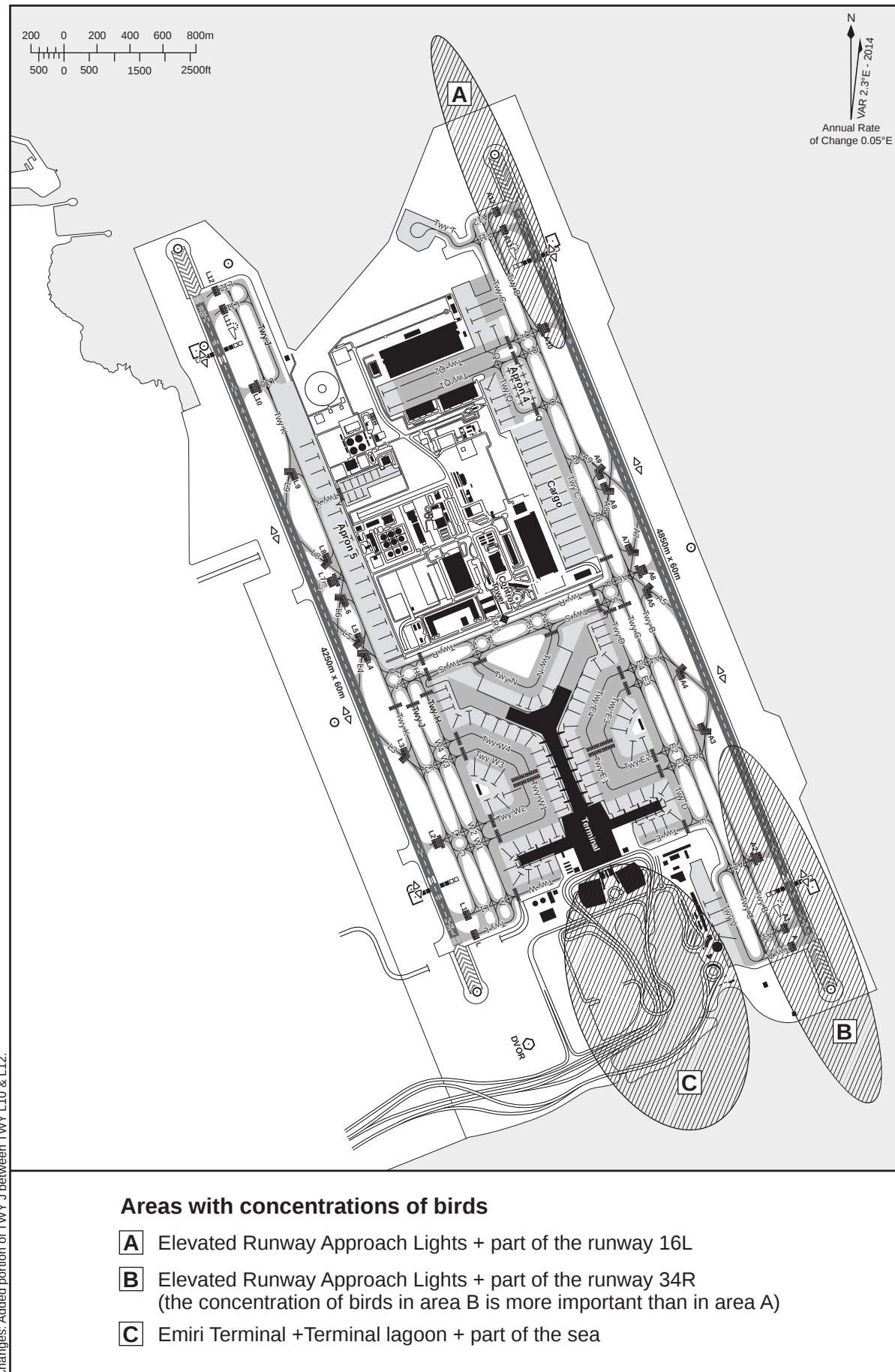
RNP RWY 34R MUXED											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH (ft)	Navigation Specification
1	IF	MUXED	-		2.3			+5000	-220		RNP APCH
2	TF	LAGMA	-	246 (248.3)	2.3	5.0	R	+3000	-180		RNP APCH

RNP RWY 34R FINAL											
Serial Num	Path Descriptor	Waypoint Identifier	Fly-over	Course °M(°T)	Magnetic Variation(°)	Distance (NM)	Turn Direction	Altitude (ft)	Speed (kt)	VPA(°)/TCH (ft)	Navigation Specification
1	IF	LAGMA	-		2.3	-		+3000	-180		RNP APCH
2	TF	HH901	-	336 (338.2)	2.3	5.0		+3000	-180		RNP APCH
3	TF	RW34R	Y	336 (338.2)	2.3	9.2		-	-180	-3.0/50	RNP APCH
4	CF	HH902	Y	336 (338.2)	2.3	-		-	-230		RNP APCH
5	TF	GOMBO	-	031 (033.5)	2.3	13.9	R	-	-230		RNP APCH
6	TF	GENOT	-	146 (148.3)	2.3	11.1		@4000	-230		RNP APCH
7	HM	GENOT	Y	066 (068.3)	2.3	4.3	R	@4000	-230		RNP APCH

WAYPOINT LIST

RNP RWY 34R	
Waypoint Identifier	Coordinates
DANIK	245948.49N 0513712.89E
EMUNA	245712.86N 0514455.31E
MUXED	250356.10N 0514832.78E
LAGMA	250204.62N 0514325.78E
HH901	250644.17N 0514123.09E
RW34R	251519.65N 0513736.41E
HH902	251807.32N 0513622.55E
GOMBO	252944.22N 0514450.16E
GENOT	252018.11N 0515114.66E

BIRD CONCENTRATIONS

HAMAD Intl.
OTHH

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