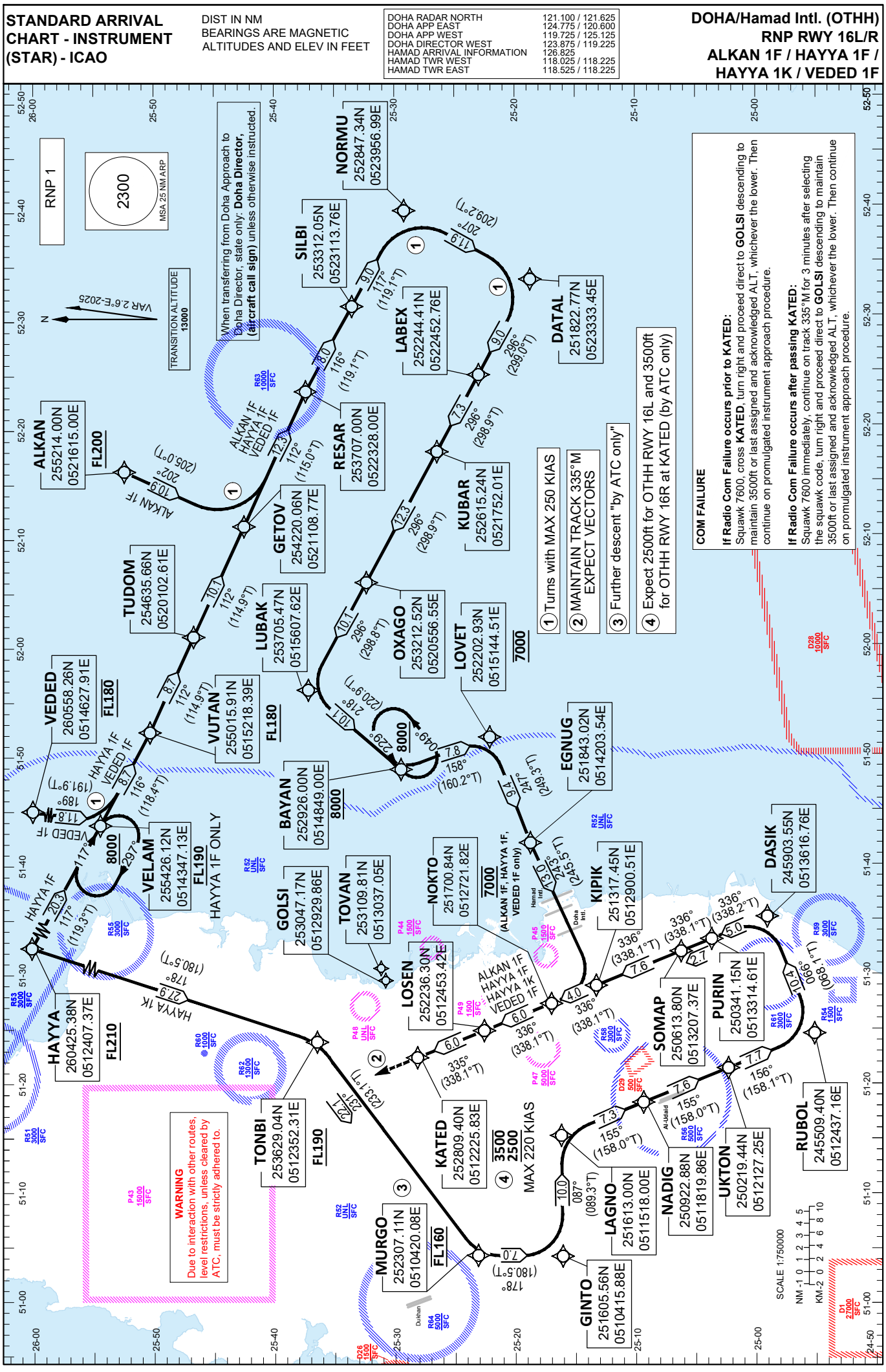
STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO

DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET

DOHA RADAR NORTH	121.100 / 121.625
DOHA APP EAST	124.775 / 120.600
DOHA APP WEST	119.725 / 125.125
DOHA DIRECTOR WEST	123.875 / 119.225
HAMAD ARRIVAL INFORMATION	126.825
HAMAD TWR WEST	118.025 / 118.225
HAMAD TWR EAST	118.525 / 118.225

DOHA/Hamad Intl. (OTHH)
RNP RWY 16L/R
ALKAN 1F / HAYYA 1F / HAYYA 1K / VEDED 1F



STANDARD ARRIVAL
CHART - INSTRUMENT
(STAR) - ICAO

DOHA/Hamad Intl.(OTHH)
RNP RWY 16L/R
ALKAN 1F / HAYYA 1F / HAYYA 1K / VEDED 1F

TABULAR DESCRIPTION

RNP STAR ALKAN 1F

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	ALKAN	-	-	-2.6	-	-	+FL200	-	-	RNP 1
2	TF	GETOV	-	202 (205.0)	-2.6	10.9	-	-	-250	-	RNP 1
3	TF	RESAR	-	112 (115.0)	-2.6	12.3	-	-	-	-	RNP 1
4	TF	SILBI	-	116 (119.1)	-2.6	8.0	-	-	-	-	RNP 1
5	TF	NORMU	-	117 (119.1)	-2.6	9.0	-	-	-250	-	RNP 1
6	TF	DATAL	-	207 (209.2)	-2.6	11.9	-	-	-250	-	RNP 1
7	TF	LABEX	-	296 (299.0)	-2.6	9.0	-	-	-	-	RNP 1
8	TF	KUBAR	-	296 (298.9)	-2.6	7.3	-	-	-	-	RNP 1
9	TF	OXAGO	-	296 (298.9)	-2.6	12.3	-	-	-	-	RNP 1
10	TF	LUBAK	-	296 (298.8)	-2.6	10.1	-	-	-	-	RNP 1
11	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	+8000	-	-	RNP 1
12	TF	LOVET	-	158 (160.2)	-2.6	7.8	-	@7000	-	-	RNP 1
13	TF	EGNUG	-	247 (249.3)	-2.6	9.4	-	-	-	-	RNP 1
14	TF	KIPIK	-	243 (245.5)	-2.6	13.0	-	-	-	-	RNP 1
15	TF	NOKTO	-	336 (338.1)	-2.6	4.0	-	@7000	-	-	RNP 1
16	TF	LOSEN	-	336 (338.1)	-2.6	6.0	-	-	-	-	RNP 1
17	TF	KATED	-	335 (338.1)	-2.6	6.0	-	+2500/-3500	-220	-	RNP 1
18	FM	KATED	-	335 (338.1)	-2.6	-	-	-	-220	-	RNP 1
Remarks	Expect 2500ft for OTHH RWY 16L and 3500ft for OTHH RWY 16R at KATED (by ATC only).										

RNP STAR HAYYA 1F

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	HAYYA	-	-	-2.6	-	-	+FL210	-	-	RNP 1
2	TF	VELAM	-	117 (119.3)	-2.6	20.3	-	+FL190	-	-	RNP 1
3	TF	VUTAN	-	116 (118.4)	-2.6	8.7	-	+ FL180	-	-	RNP 1
4	TF	TUDOM	-	112 (114.9)	-2.6	8.7	-	-	-	-	RNP 1
5	TF	GETOV	-	112 (114.9)	-2.6	10.1	-	-	-	-	RNP 1
6	TF	RESAR	-	112 (115.0)	-2.6	12.3	-	-	-	-	RNP 1
7	TF	SILBI	-	116 (119.1)	-2.6	8.0	-	-	-	-	RNP 1
8	TF	NORMU	-	117 (119.1)	-2.6	9.0	-	-	-250	-	RNP 1
9	TF	DATAL	-	207 (209.2)	-2.6	11.9	-	-	-250	-	RNP 1
10	TF	LABEX	-	296 (299.0)	-2.6	9.0	-	-	-	-	RNP 1
11	TF	KUBAR	-	296 (298.9)	-2.6	7.3	-	-	-	-	RNP 1
12	TF	OXAGO	-	296 (298.9)	-2.6	12.3	-	-	-	-	RNP 1
13	TF	LUBAK	-	296 (298.8)	-2.6	10.1	-	-	-	-	RNP 1
14	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	+8000	-	-	RNP 1
15	TF	LOVET	-	158 (160.2)	-2.6	7.8	-	@7000	-	-	RNP 1
16	TF	EGNUG	-	247 (249.3)	-2.6	9.4	-	-	-	-	RNP 1
17	TF	KIPIK	-	243 (245.5)	-2.6	13.0	-	-	-	-	RNP 1
18	TF	NOKTO	-	336 (338.1)	-2.6	4.0	-	@7000	-	-	RNP 1
19	TF	LOSEN	-	336 (338.1)	-2.6	6.0	-	-	-	-	RNP 1
20	TF	KATED	-	335 (338.1)	-2.6	6.0	-	+2500/-3500	-220	-	RNP 1
21	FM	KATED	-	335 (338.1)	-2.6	-	-	-	-220	-	RNP 1
Remarks	Expect 2500ft for OTHH RWY 16L and 3500ft for OTHH RWY 16R at KATED (by ATC only).										

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RNP STAR HAYYA 1K

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	HAYYA	-	-	-2.6	-	-	+FL210	-	-	RNP 1
2	TF	TONBI	-	178 (180.5)	-2.6	27.9	-	+FL190	-	-	RNP 1
3	TF	MURGO	-	213 (233.1)	-2.6	22.1	-	@FL160	-	-	RNP 1
4	TF	GINTO	-	178 (180.5)	-2.6	7.0	-	-	-	-	RNP 1
5	TF	LAGNO	-	087 (089.3)	-2.6	10.0	-	-	-	-	RNP 1
6	TF	NADIG	-	155 (158.0)	-2.6	7.3	-	-	-	-	RNP 1
7	TF	UKTON	-	155 (158.0)	-2.6	7.6	-	-	-	-	RNP 1
8	TF	RUBOL	-	156 (158.1)	-2.6	7.7	-	-	-	-	RNP 1
9	TF	DASIK	-	066 (068.1)	-2.6	10.4	-	-	-	-	RNP 1
10	TF	PURIN	-	336 (338.2)	-2.6	5.0	-	-	-	-	RNP 1
11	TF	SOMAP	-	336 (338.1)	-2.6	2.7	-	-	-	-	RNP 1
12	TF	KIPIK	-	336 (338.1)	-2.6	7.6	-	-	-	-	RNP 1
13	TF	NOKTO	-	336 (338.1)	-2.6	4.0	-	-	-	-	RNP 1
14	TF	LOSEN	-	336 (338.1)	-2.6	6.0	-	-	-	-	RNP 1
15	TF	KATED	-	335 (338.1)	-2.6	6.0	-	+2500/-3500	-220	-	RNP 1
16	FM	KATED	-	335 (338.1)	-2.6	-	-	-	-220	-	RNP 1

Remarks	Further descent after MURGO by ATC only. Expect 2500ft for OTHH RWY 16L and 3500ft for OTHH RWY 16R at KATED (by ATC only).

RNP STAR VEDED 1F

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	VEDED	-	-	-2.6	-	-	@FL180	-	-	RNP 1
2	TF	VELAM	-	189 (191.9)	-2.6	11.8	-	-	-250	-	RNP 1
3	TF	VUTAN	-	116 (118.4)	-2.6	8.7	-	+FL180	-	-	RNP 1
4	TF	TUDOM	-	112 (114.9)	-2.6	8.7	-	-	-	-	RNP 1
5	TF	GETOV	-	112 (114.9)	-2.6	10.1	-	-	-	-	RNP 1
6	TF	RESAR	-	112 (115.0)	-2.6	12.3	-	-	-	-	RNP 1
7	TF	SILBI	-	116 (119.1)	-2.6	8.0	-	-	-	-	RNP 1
8	TF	NORMU	-	117 (119.1)	-2.6	9.0	-	-	-250	-	RNP 1
9	TF	DATAL	-	207 (209.2)	-2.6	11.9	-	-	-250	-	RNP 1
10	TF	LABEX	-	296 (299.0)	-2.6	9.0	-	-	-	-	RNP 1
11	TF	KUBAR	-	296 (298.9)	-2.6	7.3	-	-	-	-	RNP 1
12	TF	OXAGO	-	296 (298.9)	-2.6	12.3	-	-	-	-	RNP 1
13	TF	LUBAK	-	296 (298.8)	-2.6	10.1	-	-	-	-	RNP 1
14	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	+8000	-	-	RNP 1
15	TF	LOVET	-	158 (160.2)	-2.6	7.8	-	@7000	-	-	RNP 1
16	TF	EGNUG	-	247 (249.3)	-2.6	9.4	-	-	-	-	RNP 1
17	TF	KIPIK	-	243 (245.5)	-2.6	13.0	-	-	-	-	RNP 1
18	TF	NOKTO	-	336 (338.1)	-2.6	4.0	-	@7000	-	-	RNP 1
19	TF	LOSEN	-	336 (338.1)	-2.6	6.0	-	-	-	-	RNP 1
20	TF	KATED	-	335 (338.1)	-2.6	6.0	-	+2500/-3500	-220	-	RNP 1
21	FM	KATED	-	335 (338.1)	-2.6	-	-	-	-220	-	RNP 1

Remarks	Expect 2500ft for OTHH RWY 16L and 3500ft for OTHH RWY 16R at KATED (by ATC only).

WAYPOINT LIST

RNP STAR ALKAN 1F / HAYYA 1F / HAYYA 1K / VEDED 1F	
Waypoint Identifier	**Coordinates**
ALKAN	255214.00N 0521615.00E
GETOV	254220.06N 0521108.77E
RESAR	253707.00N 0522328.00E
SILBI	253312.05N 0523113.76E
NORMU	252847.34N 0523956.99E
DATAL	251822.77N 0523333.45E
LABEX	252244.41N 0522452.76E
KUBAR	252615.24N 0521752.01E
OXAGO	253212.52N 0520556.55E
LUBAK	253705.47N 0515607.62E
BAYAN	252926.00N 0514849.00E
LOVET	252202.93N 0515144.51E
EGNUG	251843.02N 0514203.54E
KIPIK	251317.45N 0512900.51E
NOKTO	251700.84N 0512721.82E
LOSEN	252236.30N 0512453.42E

RNP STAR ALKAN 1F / HAYYA 1F / HAYYA 1K / VEDED 1F	
Waypoint Identifier	**Coordinates**
KATED	252809.40N 0512225.83E
HAYYA	260425.38N 0512407.37E
VELAM	255426.12N 0514347.13E
VUTAN	255015.91N 0515218.39E
TUDOM	254635.66N 0520102.61E
VEDED	260558.26N 0514627.91E
TONBI	253629.04N 0512352.31E
MURGO	252307.11N 0510420.08E
GINTO	251605.56N 0510415.88E
LAGNO	251613.00N 0511518.00E
NADIG	250922.88N 0511819.86E
UKTON	250219.44N 0512127.25E
RUBOL	245509.40N 0512437.16E
DASIK	245903.55N 0513516.76E
PURIN	250341.15N 0513314.61E
SOMAP	250613.80N 0513207.37E

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