

STANDARD ARRIVAL  
CHART - INSTRUMENT  
(STAR) - ICAODOHA/Hamad Intl.(OTHH)  
RNP RWY 34L/R  
ALKAN 1V / HAYYA 1V / TOSNA 1R / TOVOX 1R / VEDED 1V

## TABULAR DESCRIPTION

## RNP STAR ALKAN 1V

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	SENKI	-	225 (227.6)	-2.6	8.3	-	-	-	-	RNP 1
3	TF	LUBAK	-	229 (231.8)	-2.6	15.3	-	-	-	-	RNP 1
4	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	-	-	-	RNP 1
5	TF	EGNUG	-	207 (209.8)	-2.6	12.3	-	+8000/-9000	-	-	RNP 1
6	TF	MISOX	-	156 (158.2)	-2.6	5.0	-	+6000	-	-	RNP 1
7	TF	SIDMU	-	156 (158.2)	-2.6	2.7	-	-	-	-	RNP 1
8	TF	LOVAN	-	156 (158.2)	-2.6	3.2	-	+4000	-	-	RNP 1
9	TF	MUXED	-	156 (158.2)	-2.6	4.9	-	+2500/-3500	-220	-	RNP 1
10	FM	MUXED	-	156 (158.2)	-2.6	-	-	-	-220	-	RNP 1
Remarks		Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at MUXED (by ATC only).									

## RNP STAR HAYYA 1V

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	LUBAK	-	163 (165.3)	-2.6	13.6	-	-	-	-	RNP 1
5	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	-	-	-	RNP 1
6	TF	EGNUG	-	207 (209.8)	-2.6	12.3	-	+8000/-9000	-	-	RNP 1
7	TF	MISOX	-	156 (158.2)	-2.6	5.0	-	+6000	-	-	RNP 1
8	TF	SIDMU	-	156 (158.2)	-2.6	2.7	-	-	-	-	RNP 1
9	TF	LOVAN	-	156 (158.2)	-2.6	3.2	-	+4000	-	-	RNP 1
10	TF	MUXED	-	156 (158.2)	-2.6	4.9	-	+2500/-3500	-220	-	RNP 1
11	FM	MUXED	-	156 (158.2)	-2.6	-	-	-	-220	-	RNP 1
Remarks		Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at MUXED (by ATC only).									

## RNP STAR TOSNA 1R

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	TOSNA	-	-	-2.6	-	-	+FL200	-	-	RNP 1
2	TF	KUVLA	-	233 (236.0)	-2.6	16.1	-	-	-	-	RNP 1
3	TF	DINEX	-	214 (216.4)	-2.6	16.5	-	-	-250	-	RNP 1
4	TF	KIVAM	-	263 (265.5)	-2.6	10.5	-	-	-	-	RNP 1
5	TF	AFNAN	-	336 (338.4)	-2.6	10.7	-	+11000	-	-	RNP 1
6	TF	EMALO	-	336 (338.3)	-2.6	4.7	-	-	-	-	RNP 1
7	TF	MUTLI	-	336 (338.3)	-2.6	8.1	-	-	-	-	RNP 1
8	TF	LOVET	-	336 (338.8)	-2.6	7.6	-	@7000	-	-	RNP 1
9	TF	EGNUG	-	247 (249.3)	-2.6	9.4	-	@7000	-	-	RNP 1
10	TF	MISOX	-	156 (158.2)	-2.6	5.0	-	+6000	-	-	RNP 1
11	TF	SIDMU	-	156 (158.2)	-2.6	2.7	-	-	-	-	RNP 1
12	TF	LOVAN	-	156 (158.2)	-2.6	3.2	-	+4000	-	-	RNP 1
13	TF	MUXED	-	156 (158.2)	-2.6	4.9	-	+2500/-3500	-220	-	RNP 1
14	FM	MUXED	-	156 (158.2)	-2.6	-	-	-	-220	-	RNP 1
Remarks		Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at MUXED (by ATC only).									

RNP STAR TOVOX 1R											
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	TOVOX	-	-	-2.6	-	-	@FL180	-	-	RNP 1
2	TF	DINEX	-	268 (271.0)	-2.6	7.9	-	-	-	-	RNP 1
3	TF	KIVAM	-	263 (265.5)	-2.6	10.5	-	-	-250	-	RNP 1
4	TF	AFNAN	-	336 (338.4)	-2.6	10.7	-	+11000	-	-	RNP 1
5	TF	EMALO	-	336 (338.3)	-2.6	4.7	-	-	-	-	RNP 1
6	TF	MUTLI	-	336 (338.3)	-2.6	8.1	-	-	-	-	RNP 1
7	TF	LOVET	-	336 (338.8)	-2.6	7.6	-	@7000	-	-	RNP 1
8	TF	EGNUG	-	247 (249.3)	-2.6	9.4	-	@7000	-	-	RNP 1
9	TF	MISOX	-	156 (158.2)	-2.6	5.0	-	+6000	-	-	RNP 1
10	TF	SIDMU	-	156 (158.2)	-2.6	2.7	-	-	-	-	RNP 1
11	TF	LOVAN	-	156 (158.2)	-2.6	3.2	-	+4000	-	-	RNP 1
12	TF	MUXED	-	156 (158.2)	-2.6	4.9	-	+2500/-3500	-220	-	RNP 1
13	FM	MUXED	-	156 (158.2)	-2.6	-	-	-	-220	-	RNP 1
Remarks		Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at MUXED (by ATC only).									

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RNP STAR VEDED 1V											
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	LUBAK	-	163 (165.3)	-2.6	13.6	-	-	-	-	RNP 1
5	TF	BAYAN	-	218 (220.9)	-2.6	10.1	-	-	-	-	RNP 1
6	TF	EGNUG	-	207 (209.8)	-2.6	12.3	-	+8000/-9000	-	-	RNP 1
7	TF	MISOX	-	156 (158.2)	-2.6	5.0	-	+6000	-	-	RNP 1
8	TF	SIDMU	-	156 (158.2)	-2.6	2.7	-	-	-	-	RNP 1
9	TF	LOVAN	-	156 (158.2)	-2.6	3.2	-	+4000	-	-	RNP 1
10	TF	MUXED	-	156 (158.2)	-2.6	4.9	-	+2500/-3500	-220	-	RNP 1
11	FM	MUXED	-	156 (158.2)	-2.6	-	-	-	-220	-	RNP 1
Remarks		Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at MUXED (by ATC only).									

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**WAYPOINT LIST**

RNP STAR ALKAN 1V / HAYYA 1V / TOSNA 1R / TOVOX 1R / VEDED 1V	
Waypoint Identifier	Coordinates
ALKAN	255214.00N 0521615.00E
SENKI	254637.00N 0520928.00E
LUBAK	253705.47N 0515607.62E
BAYAN	252926.00N 0514849.00E
EGNUG	251843.02N 0514203.54E
MISOX	251403.48N 0514406.40E
SIDMU	251131.44N 0514513.15E
LOVAN	250831.68N 0514632.01E
MUXED	250356.10N 0514832.78E
HAYYA	260425.38N 0512407.37E
VELAM	255426.12N 0514347.13E

RNP STAR ALKAN 1V / HAYYA 1V / TOSNA 1R / TOVOX 1R / VEDED 1V	
Waypoint Identifier	Coordinates
VUTAN	255015.91N 0515218.39E
TOSNA	251612.00N 0524116.00E
KUVLA	250710.18N 0522633.99E
DINEX	245349.88N 0521548.36E
KIVAM	245259.53N 0520420.77E
AFNAN	250300.80N 0515958.92E
EMALO	250723.36N 0515804.35E
MUTLI	251458.89N 0515445.23E
LOVET	252202.93N 0515144.51E
TOVOX	245341.54N 0522428.70E
VEDED	260558.26N 0514627.91E