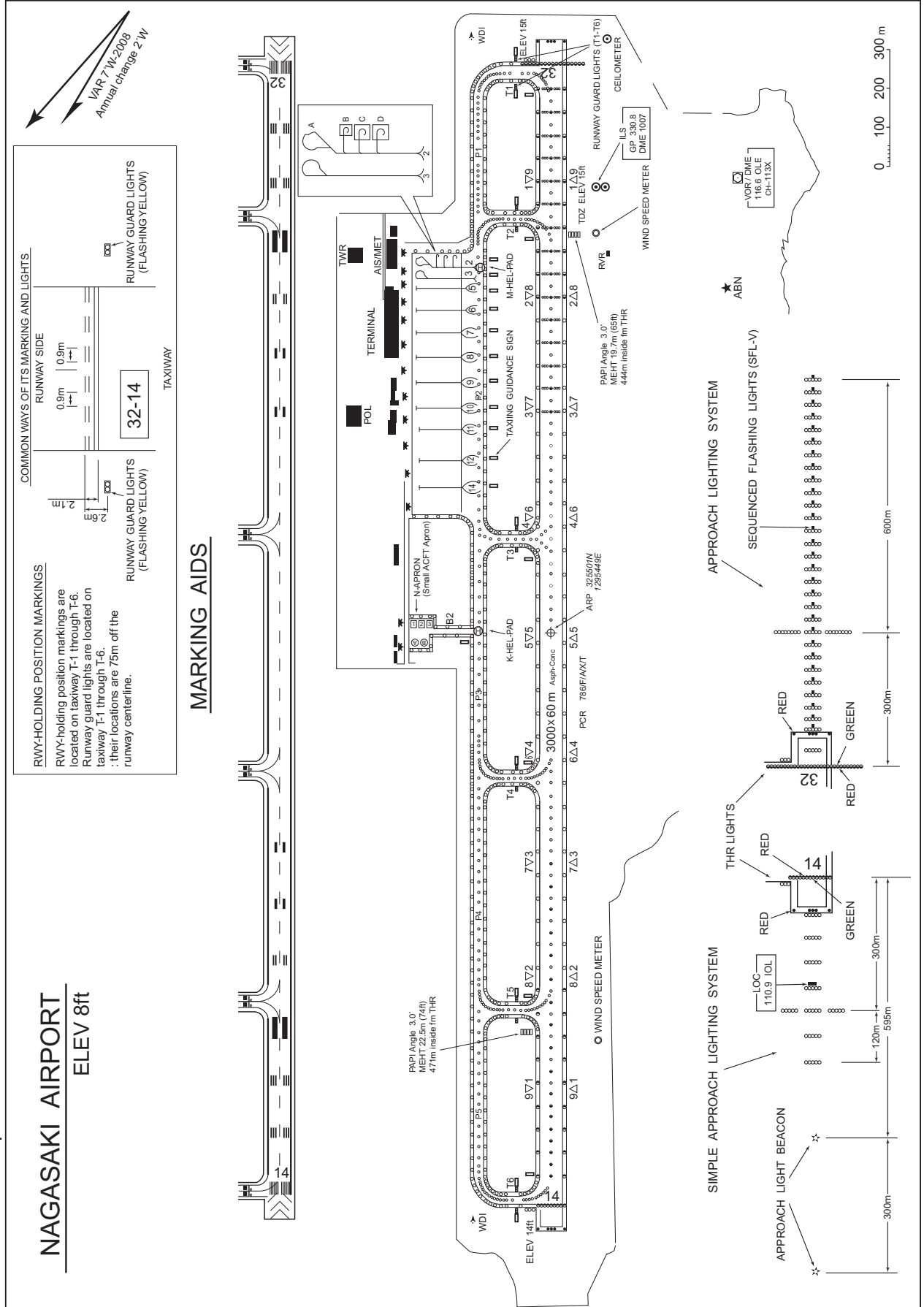


RJFU / NAGASAKI

AD CHART



INTENTIONALLY LEFT BLANK

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC
Transverse Mercator Projection

NAGASAKI AIRPORT
RWY : 14/32

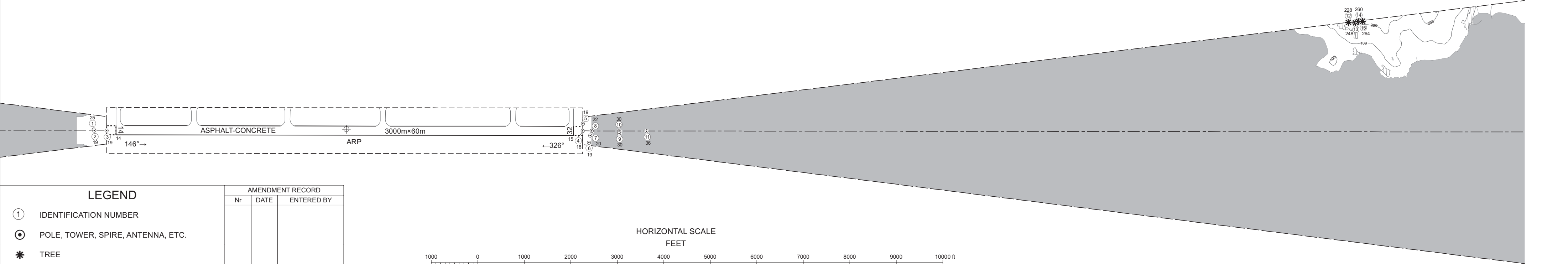
DECLARED DISTANCES		
RWY 14		RWY32
3000m	TAKE OFF RUN AVAILABLE	3000m
3000m	TAKE OFF DISTANCE AVAILABLE	3000m
3000m	ACCELERATE STOP DISTANCE AVAILABLE	3000m
3000m	LANDING DISTANCE AVAILABLE	3000m





SLOPE 1.2%

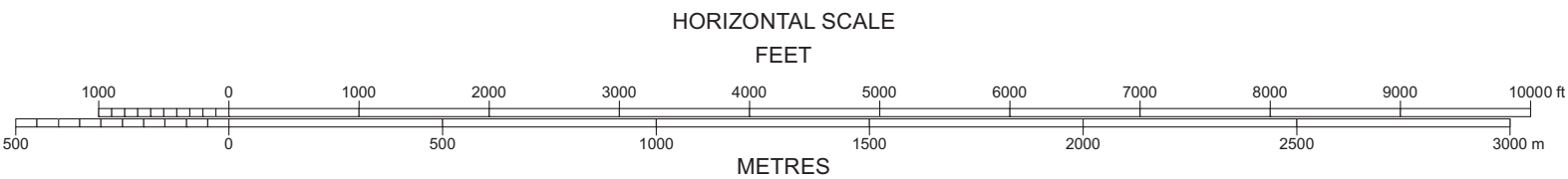
NO SIGNIFICANT OBSTACLES BEYOND THIS POINT

NO SIGNIFICANT OBSTACLES BEYOND THIS POINT

VERTICAL SCALE



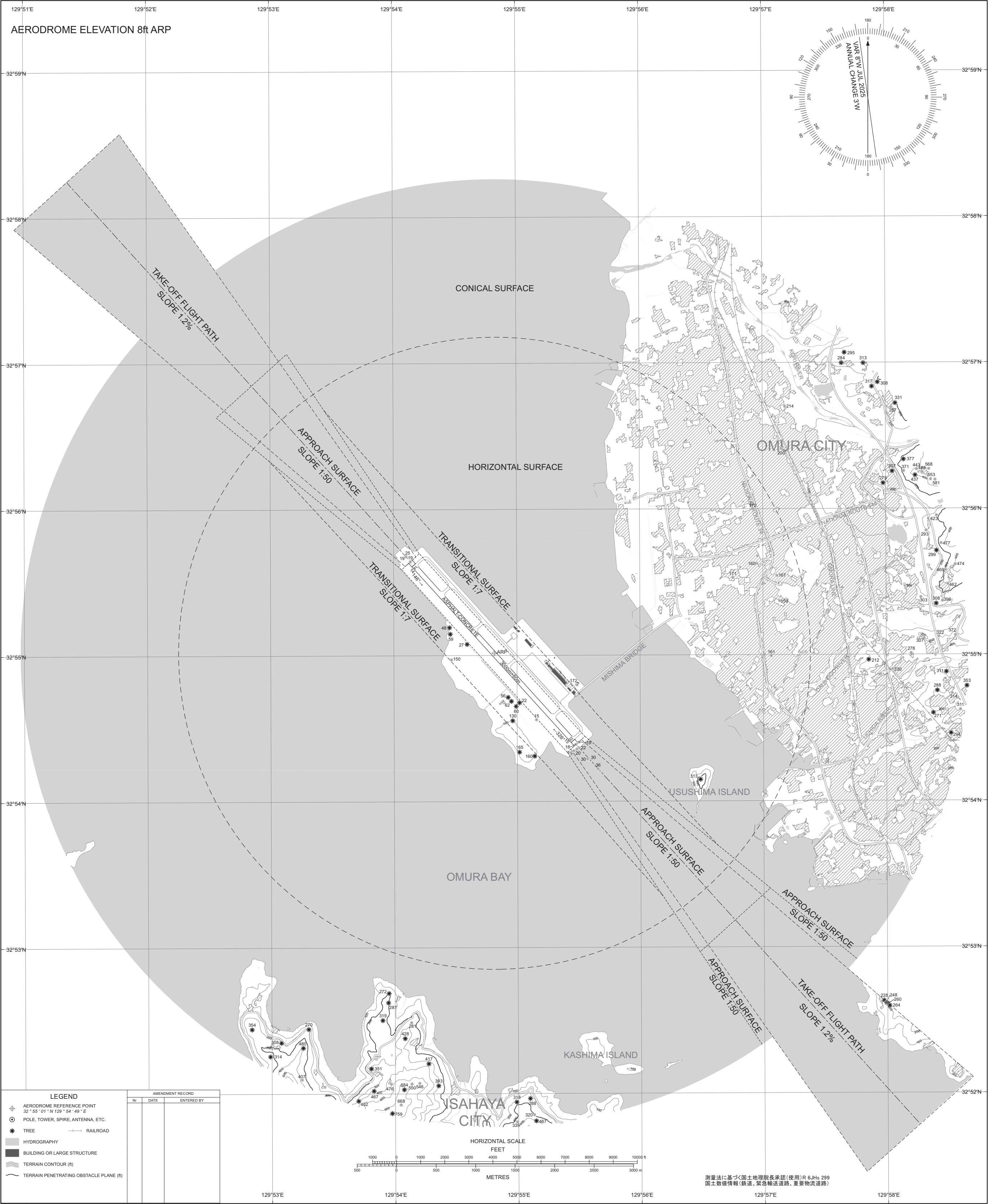
LEGEND		AMENDMENT RECORD		
		Nr	DATE	ENTERED BY
①	IDENTIFICATION NUMBER			
⊙	POLE, TOWER, SPIRE, ANTENNA, ETC.			
*	TREE			
	HYDROGRAPHY			
	BUILDING OR LARGE STRUCTURE			
	TERRAIN CONTOUR (ft)			
	TERRAIN PENETRATING OBSTACLE PLANE (ft)			



測量法に基づく国土地理院長承認(使用) R 6JHs 299

AERODROME OBSTACLE CHART - ICAO
TYPE B

DIMENSIONS AND ELEVATIONS IN FEET, BEARINGS ARE MAGNETIC
Transverse Mercator Projection



CHANGE: Update

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

SID

NORTH ONE DEPARTURE

RWY 14: Climb RWY HDG to 500FT, via OLE R144 to 6.0 DME,
turn right HDG324° until crossing OLE R258, turn right HDG016°
to intercept and proceed via OLE R331 to PEARL....

RWY 32: Climb via OLE R331 to PEARL....

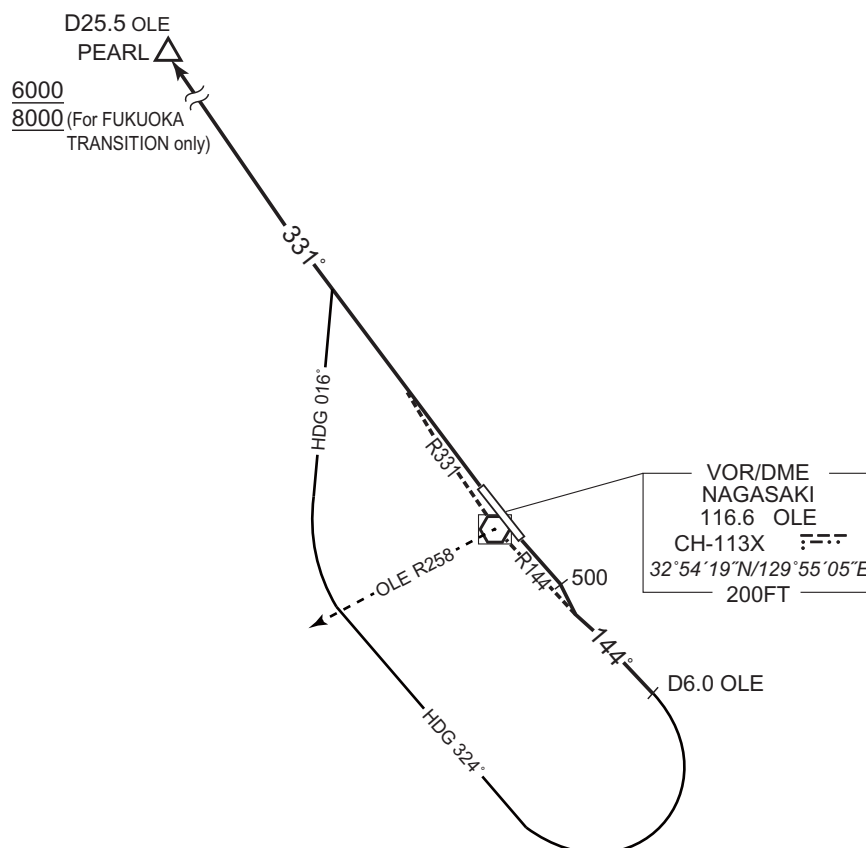
... Cross PEARL at or above 6000FT(*).

* For FUKUOKA TRANSITION : Cross PEARL at or above 8000FT.

Note RWY 14: 5.0% climb gradient required up to 1200FT.

OBST ALT 1411FT located at 6.9NM 158° FM end of RWY14.

OBST ALT 1575FT located at 7.7NM 165° FM end of RWY14.



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

TRANSITION

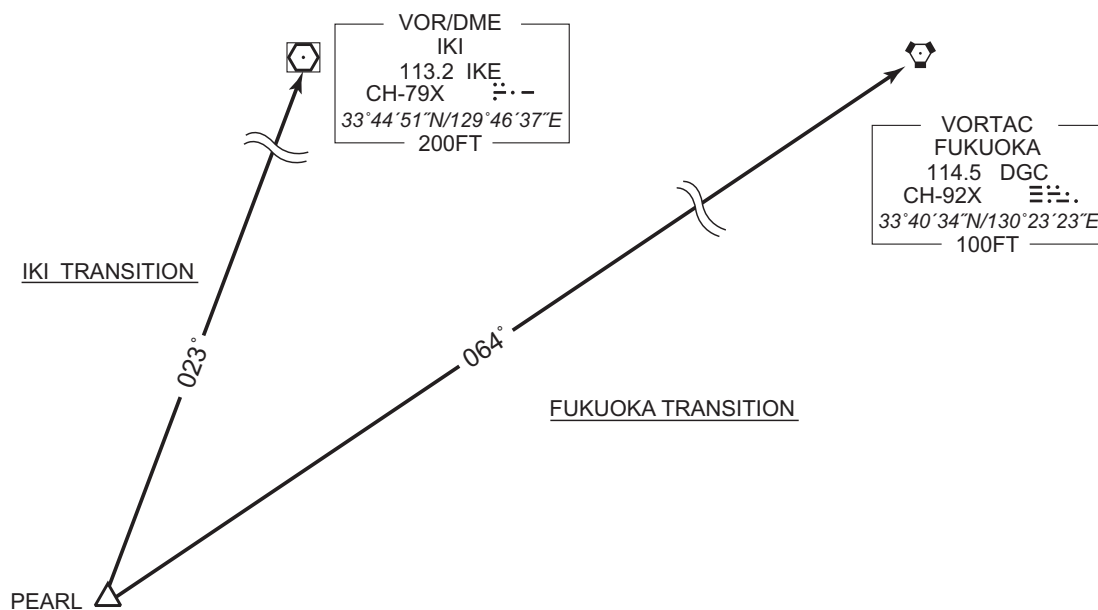
FUKUOKA TRANSITION

From over PEARL, via DGC R244 to DGC VORTAC.

Note : Not applicable for aircraft equipped with TACAN only.

IKI TRANSITION

From over PEARL, via IKE R203 to IKE VOR/DME.



CHANGE : Course FM PEARL to IKE.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

SID

WEST SEVEN DEPARTURE

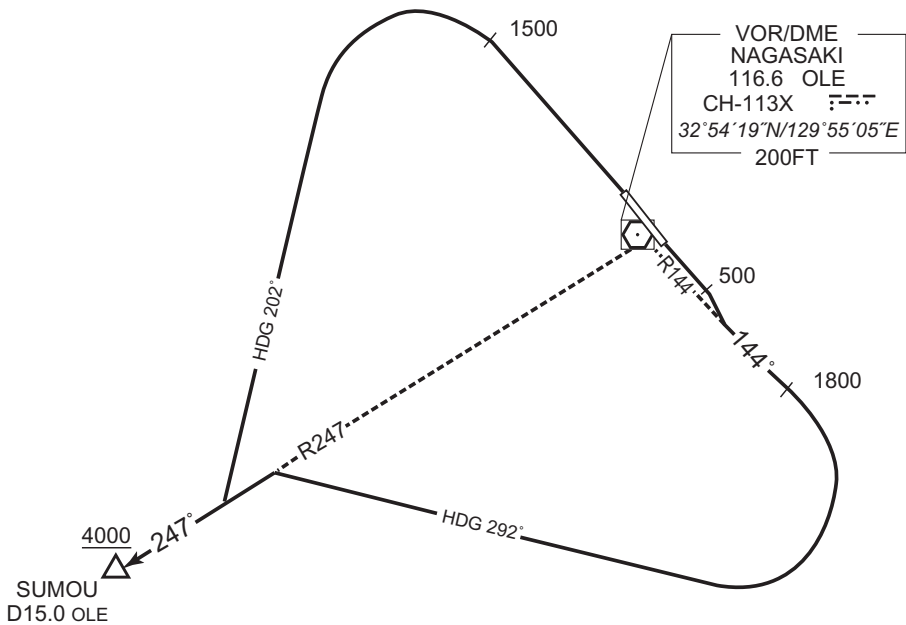
RWY 14: Climb RWY HDG to 500FT, climb via OLE R144 to 1800FT,
turn right HDG292° to intercept and proceed via OLE R247...

RWY 32: Climb RWY HDG 1500FT, turn left HDG202° to intercept
and proceed via OLE R247...

... to SUMOU.

Cross SUMOU at or above 4000FT.

Note RWY 14: 5.0% climb gradient required up to 1800FT.
OBST ALT 854FT located at 3.4NM 170° FM end of RWY14.
RWY 32: 5.0% climb gradient required up to 1500FT.
OBST ALT 1969FT located at 8.0NM 272° FM end of RWY32.



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

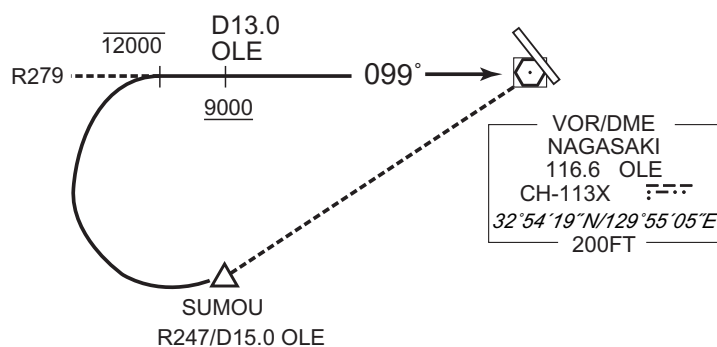
TRANSITION

OMURA TRANSITION

From over SUMOU, turn right to intercept and proceed via OLE R279 to OLE VOR/DME.

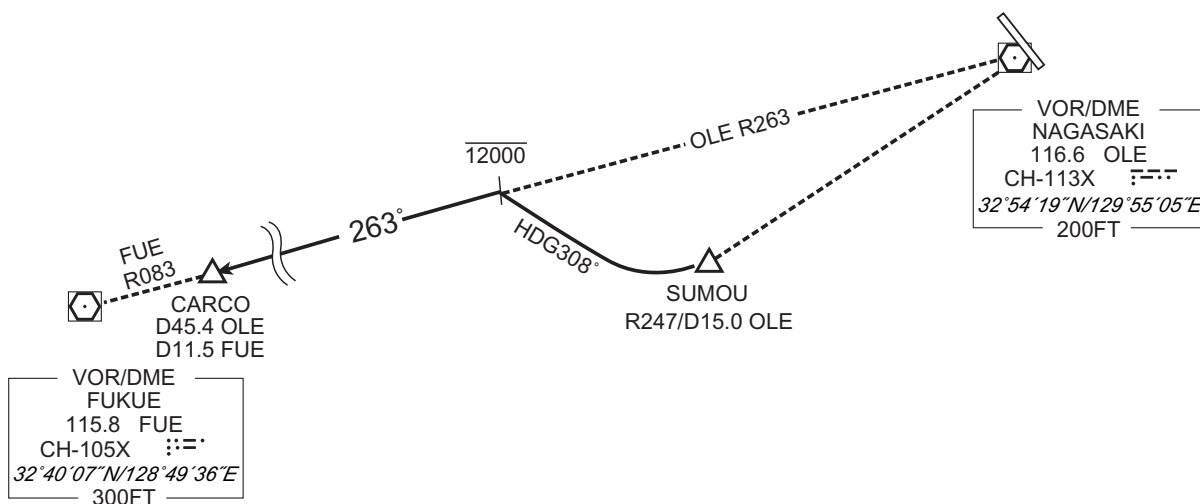
Maintain 12000FT or below until intercepting OLE R279.

Cross OLE R279/13.0DME at or above 9000FT.

CARCO TRANSITION

From over SUMOU, turn right HDG308° to intercept and proceed via OLE R263 /FUE R083 to CARCO.

Maintain 12000FT or below until intercepting OLE R263.



CHANGE : Bearing FM FUE.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

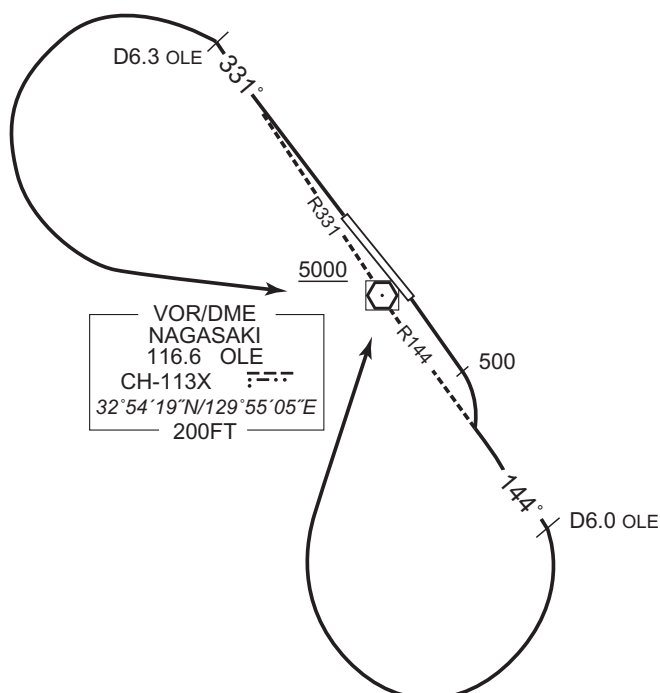
SID

NAGASAKI REVERSAL FIVE DEPARTURE

RWY 14: Climb RWY HDG to 500FT, climb via OLE R144 to 6.0DME, turn right, direct to OLE VOR/DME.
Cross OLE VOR/DME at or above 5000FT.

RWY 32: Climb via OLE R331 to 6.3DME, turn left, direct to OLE VOR/DME.
Cross OLE VOR/DME at or above 5000FT.

Note RWY 14: 5.0% climb gradient required up to 1800FT.
OBST ALT 1575FT located at 7.7NM 165° FM end of RWY14.
RWY 32: 5.0% climb gradient required up to 1600FT.
OBST ALT 1969FT located at 8.0NM 272° FM end of RWY32.



CHANGE : Description of PROC name.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

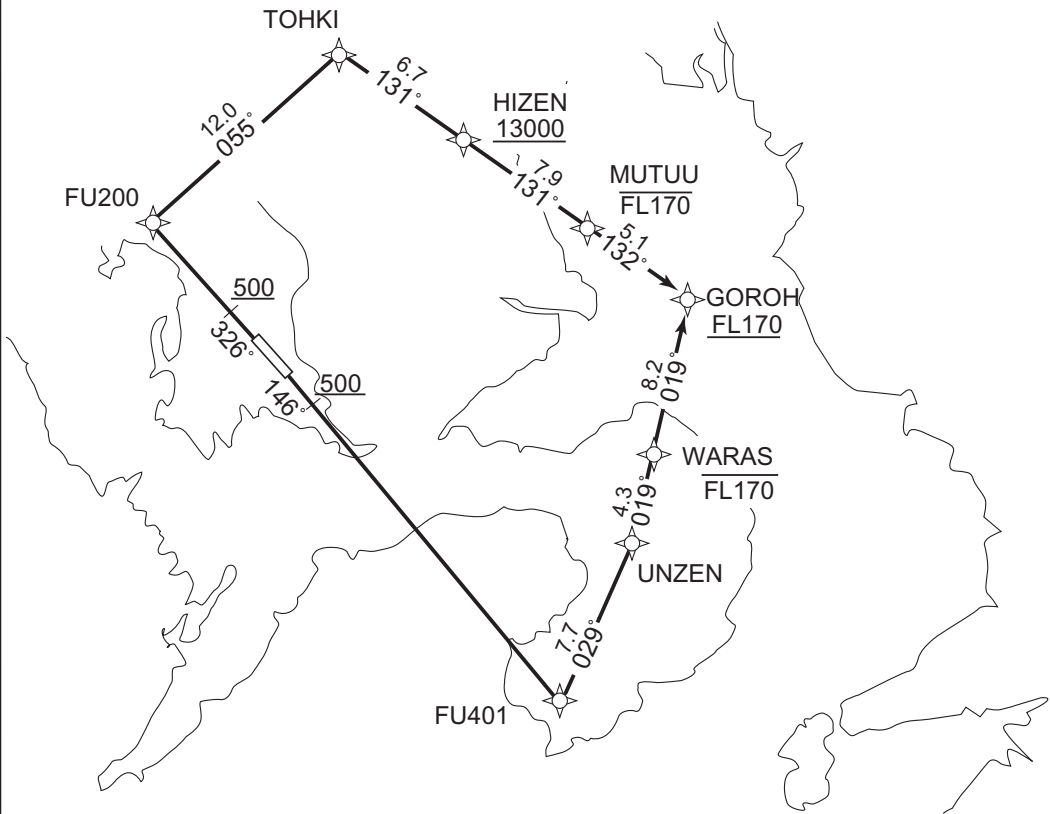
RNAV SID

CHIKUGO FIVE DEPARTURE

RNP1

Note GNSS required.

VAR 8° W



RWY14 : Climb on HDG146° at or above 500FT, direct to FU401, to UNZEN, to WARAS at or below FL170, to GOROH at or above FL170.

RWY32 : Climb on HDG326° at or above 500FT, direct to FU200, to TOHKI, to HIZEN at or above 13000FT, to MUTUU at or below FL170, to GOROH at or above FL170.

NOTE RWY14 : 5.0% climb gradient required up to 4700FT.
OBST ALT 4954FT located at 20.8NM 122° FM end of RWY14.
RWY32 : 5.0% climb gradient required up to 500FT.
OBST ALT 2067FT located at 9.8NM 013° FM end of RWY32.

CHANGE : Latitude and longitude deleted.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV SID

CHIKUGO FIVE DEPARTURE

RWY14

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	146 (138.1)	-7.6	-	-	+500	-	-	RNP1
002	DF	FU401	-	-	-7.6	-	-	-	-	-	RNP1
003	TF	UNZEN	-	029 (021.5)	-7.6	7.7	-	-	-	-	RNP1
004	TF	WARAS	-	019 (011.9)	-7.6	4.3	-	-FL170	-	-	RNP1
005	TF	GOROH	-	019 (011.9)	-7.6	8.2	-	+FL170	-	-	RNP1

RWY32

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	326 (318.1)	-7.6	-	-	+500	-	-	RNP1
002	DF	FU200	-	-	-7.6	-	-	-	-	-	RNP1
003	TF	TOHKI	-	055 (047.8)	-7.6	12.0	-	-	-	-	RNP1
004	TF	HIZEN	-	131 (123.8)	-7.6	6.7	-	+13000	-	-	RNP1
005	TF	MUTUU	-	131 (123.9)	-7.6	7.9	-	-FL170	-	-	RNP1
006	TF	GOROH	-	132 (124.0)	-7.6	5.1	-	+FL170	-	-	RNP1

Waypoint Coordinates

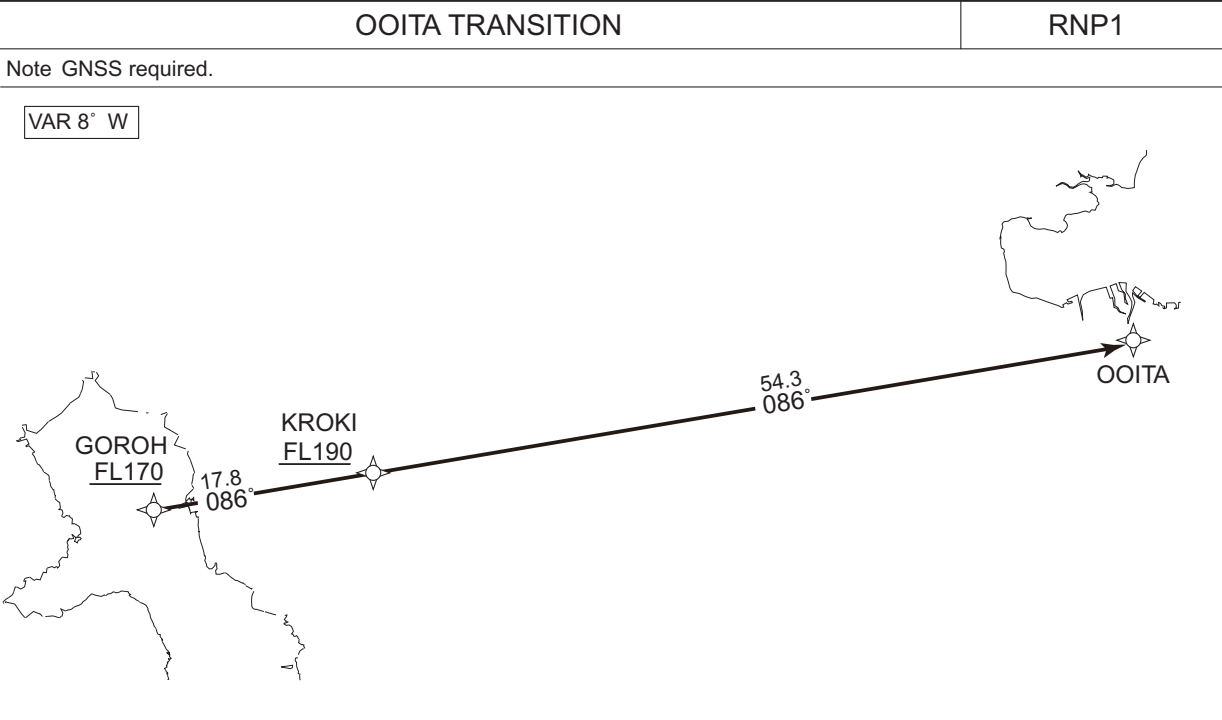
Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
FU401	323918.7N / 1301130.5E	TOHKI	330937.2N / 1295823.9E
UNZEN	324627.3N / 1301451.1E	HIZEN	330552.5N / 1300503.7E
WARAS	325037.5N / 1301553.8E	MUTUU	330129.4N / 1301250.5E
FU200	330134.6N / 1294747.6E	GOROH	325837.5N / 1301754.5E

CHANGE : Waypoint Coordinates added.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV TRANSITION



From GOROH at or above FL170, to KROKI at or above FL190, to OOITA.

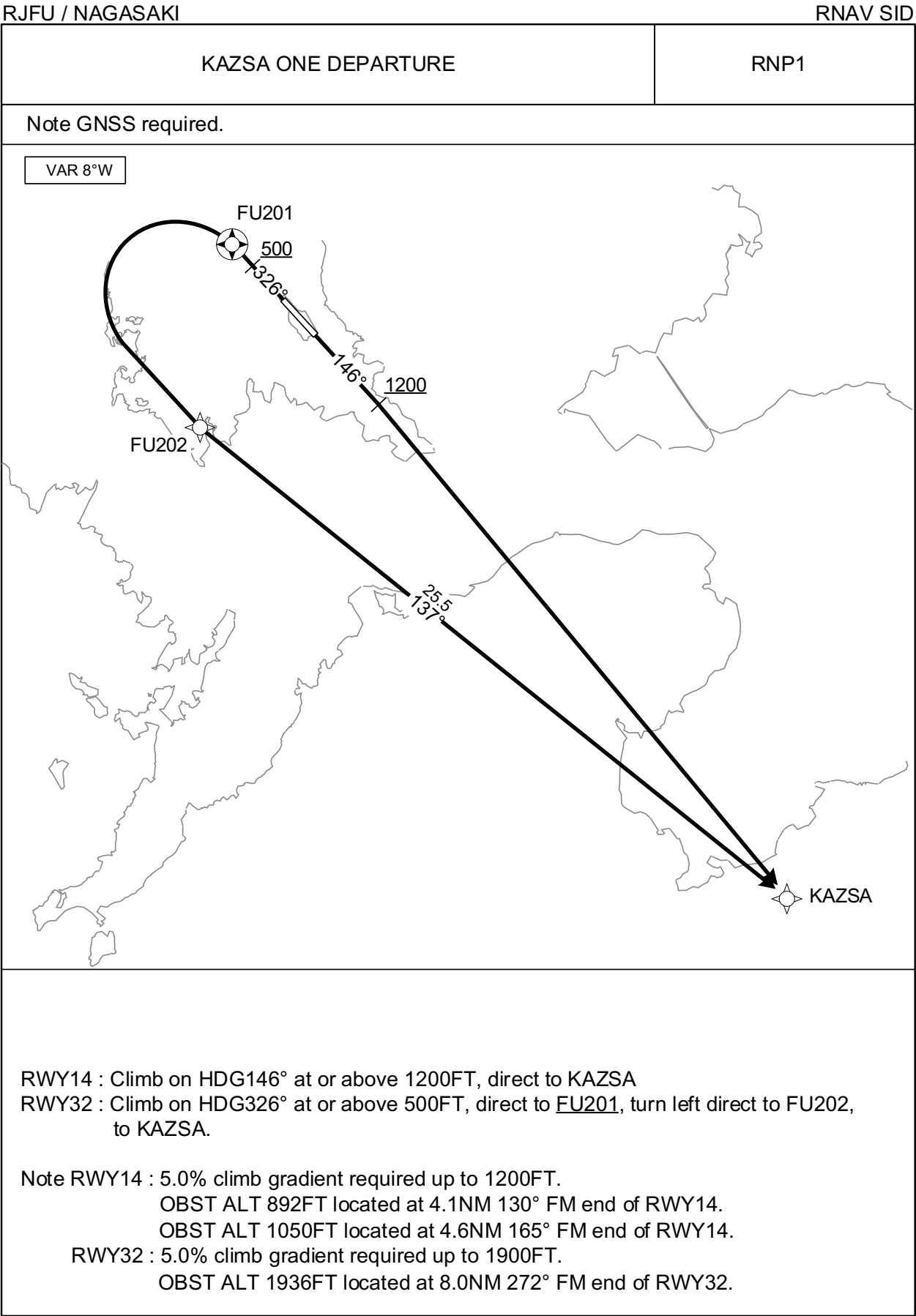
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	GOROH	—	—	-7.6	—	—	+FL170	—	—	RNP1
002	TF	KROKI	—	086 (077.9)	-7.6	17.8	—	+FL190	—	—	RNP1
003	TF	OOITA	—	086 (078.1)	-7.6	54.3	—	—	—	—	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates
GOROH	325837.5N / 1301754.5E
KROKI	330219.1N / 1303840.7E
OOITA	331313.2N / 1314211.7E

CHANGE : SALTY TRANSITION abolished. Waypoint Coordinates added.

STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV SID

KAZSA ONE DEPARTURE

RWY14

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	146 (138.1)	-7.6	-	-	+1200	-	-	RNP1
002	DF	KAZSA	-	-	-7.6	-	-	-	-	-	RNP1

RWY32

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	326 (318.1)	-7.6	-	-	+500	-	-	RNP1
002	DF	FU201	Y	-	-7.6	-	-	-	-	-	RNP1
003	DF	FU202	-	-	-7.6	-	L	-	-	-	RNP1
004	TF	KAZSA	-	137 (129.3)	-7.6	25.5	-	-	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates
FU201	325731.0N / 1295208.2E
FU202	325118.6N / 1295047.5E
KAZSA	323510.2N / 1301410.8E

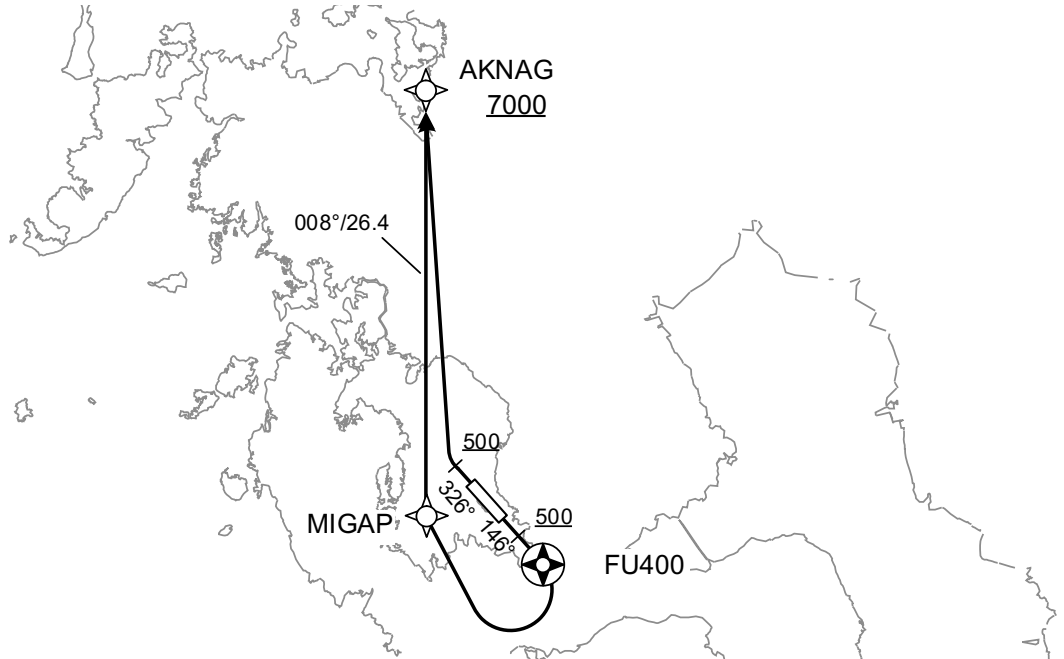
CHANGE : Waypoint Coordinates added.

RJFU / NAGASAKI

AKNAG ONE DEPARTURE

RNP1

VAR 8°W



RWY32 : Climb on HDG326° at or above 500FT, turn right direct to AKNAG at or above 7000FT.

OBST ALT 1739FT located at 8.7NM 010° FM end of RWY32.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	146 (138.1)	-7.7	-	-	+500	-	-	RNP1
002	DF	FU400	Y	-	-7.7	-	-	-	-	-	RNP1
003	DF	MIGAP	-	-	-7.7	-	R	-	-	-	RNP1
004	TF	AKNAG	-	008 (000.3)	-7.7	26.4	-	+7000	-	-	RNP1

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	326 (318.1)	-7.7	-	-	+500	-	-	RNP1
002	DF	AKNAG	-	-	-7.7	-	R	+7000	-	-	RNP1

Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
FU400	325105.7N / 1295859.6E	AKNAG	332017.0N / 1295044.8E
MIGAP	325352.4N / 1295034.2E		

CHANGE : Waypoint Coordinates added.

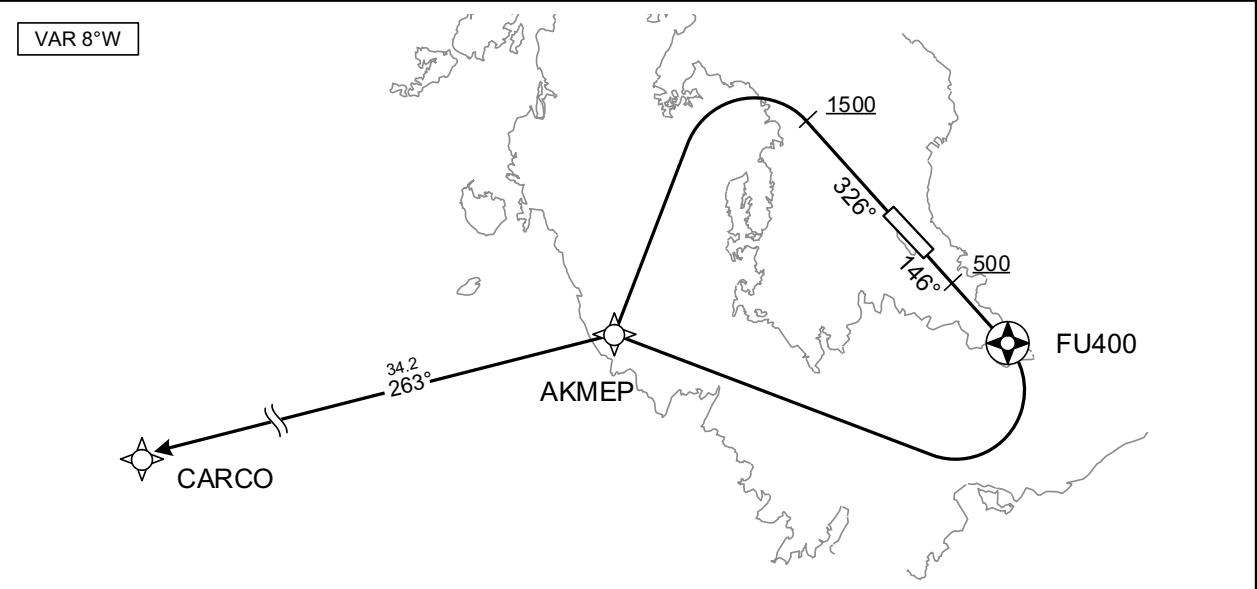
STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV SID

CARCO ONE DEPARTURE	RNP1
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Note GNSS required.



RWY14 : Climb on HDG146° at or above 500FT, direct to FU400, turn right direct to AKMEP, to CARCO.

RWY32 : Climb on HDG326° at or above 1500FT, turn left direct to AKMEP, to CARCO.

Note RWY14 : 5.0% climb gradient required up to 1800FT.
OBST ALT 1247FT located at 4.2NM 177° FM end of RWY14.
OBST ALT 1634FT located at 3.6NM 211° FM end of RWY14.
RWY32 : 5.0% climb gradient required up to 1500FT.
OBST ALT 1969FT located at 8.0NM 272° FM end of RWY32.

RWY14

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	146 (138.1)	-7.7	-	-	+500	-	-	RNP1
002	DF	FU400	Y	-	-7.7	-	-	-	-	-	RNP1
003	DF	AKMEP	-	-	-7.7	-	R	-	-	-	RNP1
004	TF	CARCO	-	263 (255.7)	-7.7	34.2	-	-	-	-	RNP1

RWY32

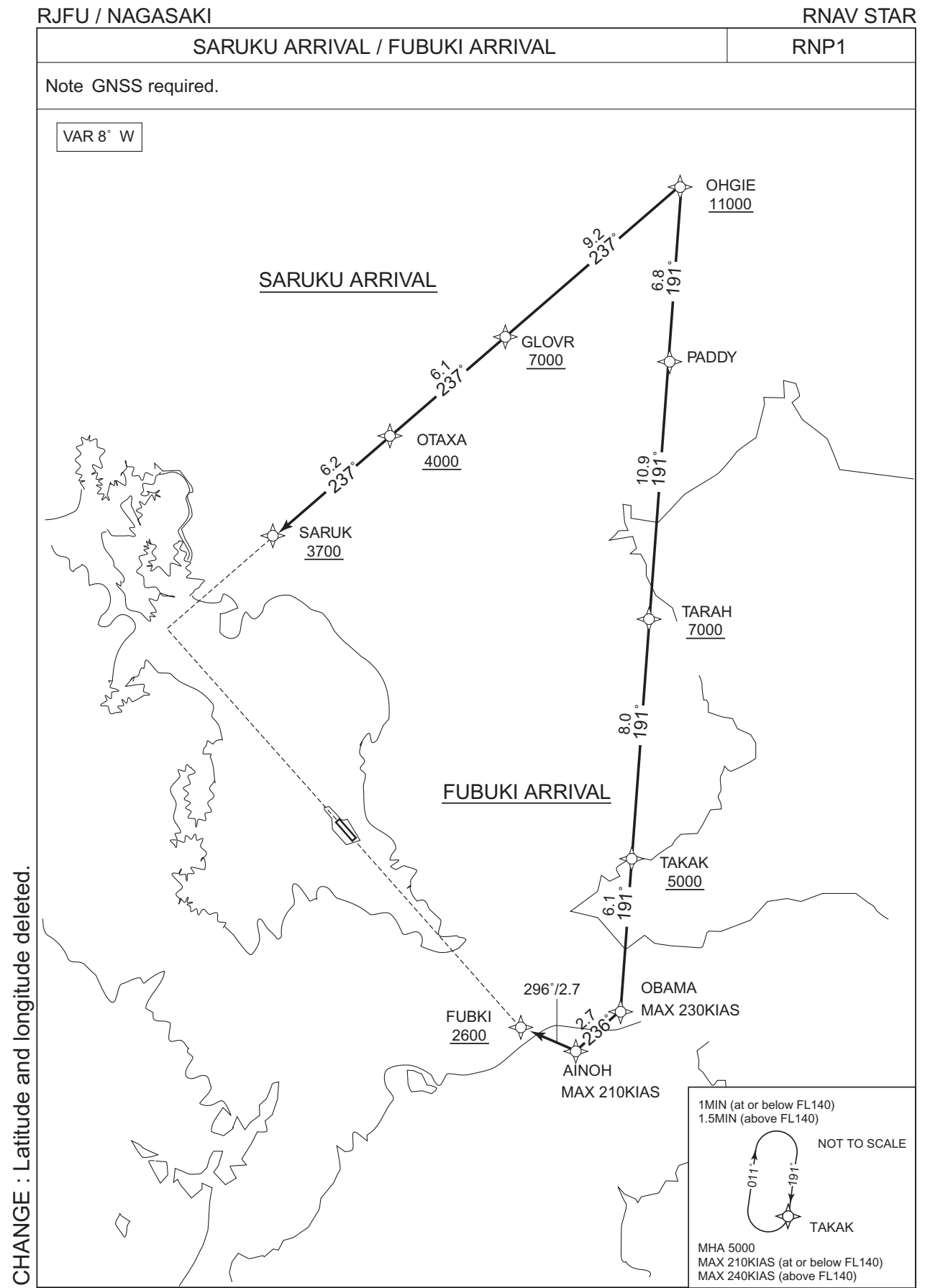
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	326 (318.1)	-7.7	-	-	+1500	-	-	RNP1
002	DF	AKMEP	-	-	-7.7	-	L	-	-	-	RNP1
003	TF	CARCO	-	263 (255.7)	-7.7	34.2	-	-	-	-	RNP1

Waypoint Coordinates

Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
FU400	325105.7N / 1295859.6E	CARCO	324301.7N / 1290247.7E
AKMEP	325133.9N / 1294209.8E		

CHANGE : Waypoint Coordinates added.

STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJFU / NAGASAKI

RNAV STAR

SARUKU ARRIVAL

From OHGIE at or above 11000FT, to GLOVR at or above 7000FT, to OTAXA at or above 4000FT, to SARUK at or above 3700FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	OHGIE	-	-	-7.6	-	-	+11000	-	-	RNP1
002	TF	GLOVR	-	237 (229.3)	-7.6	9.2	-	+7000	-	-	RNP1
003	TF	OTAXA	-	237 (229.2)	-7.6	6.1	-	+4000	-	-	RNP1
004	TF	SARUK	-	237 (229.2)	-7.6	6.2	-	+3700	-	-	RNP1

FUBUKI ARRIVAL

From OHGIE at or above 11000FT, to PADDY, to TARAHA at or above 7000FT, to TAKAK at or above 5000FT, to OBAMA, to AINOH, to FUBKI at or above 2600FT.

Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	IF	OHGIE	-	-	-7.6	-	-	+11000	-	-	RNP1
002	TF	PADDY	-	191 (183.1)	-7.6	6.8	-	-	-	-	RNP1
003	TF	TARAHA	-	191 (183.1)	-7.6	10.9	-	+7000	-	-	RNP1
004	TF	TAKAK	-	191 (183.0)	-7.6	8.0	-	+5000	-	-	RNP1
005	TF	OBAMA	-	191 (183.0)	-7.6	6.1	-	-	-230	-	RNP1
006	TF	AINOH	-	236 (228.0)	-7.6	2.7	-	-	-210	-	RNP1
007	TF	FUBKI	-	296 (288.2)	-7.6	2.7	-	+2600	-	-	RNP1

Path	Waypoint Identifier	Inbound Course °M(°T)	Magnetic Variation	Outbound Time (MIN)	Turn Direction	Minimum Altitude (FT)	Maximum Altitude (FT)	Speed (KIAS)	Navigation Specification
Hold	TAKAK	191 (183.0)	-7.6	1.0(-14000) 1.5(+14001)	R	5000	-	-210(-14000) -240(+14001)	RNP1

Waypoint Coordinates

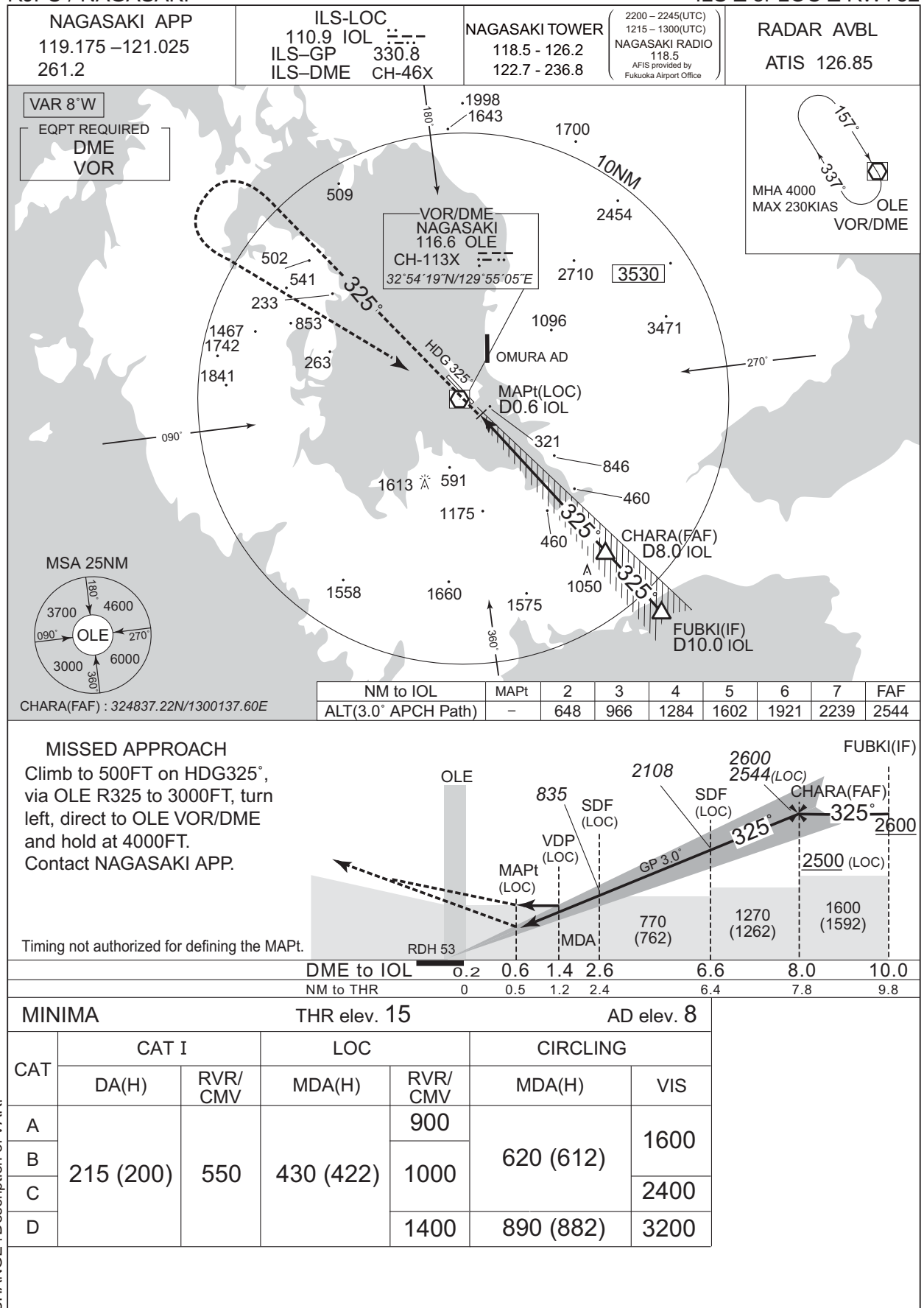
Waypoint Identifier	Coordinates	Waypoint Identifier	Coordinates
OHGIE	331952.9N / 1301041.7E	TARAHA	330210.0N / 1300934.0E
GLOVR	331352.9N / 1300221.4E	TAKAK	325411.3N / 1300903.6E
OTAXA	330952.4N / 1295648.2E	OBAMA	324806.4N / 1300840.9E
SARUK	330550.7N / 1295114.3E	AINOH	324617.1N / 1300616.8E
PADDY	331305.6N / 1301015.7E	FUBKI	324707.9N / 1300312.8E

CHANGE : Waypoint Coordinates added.

INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

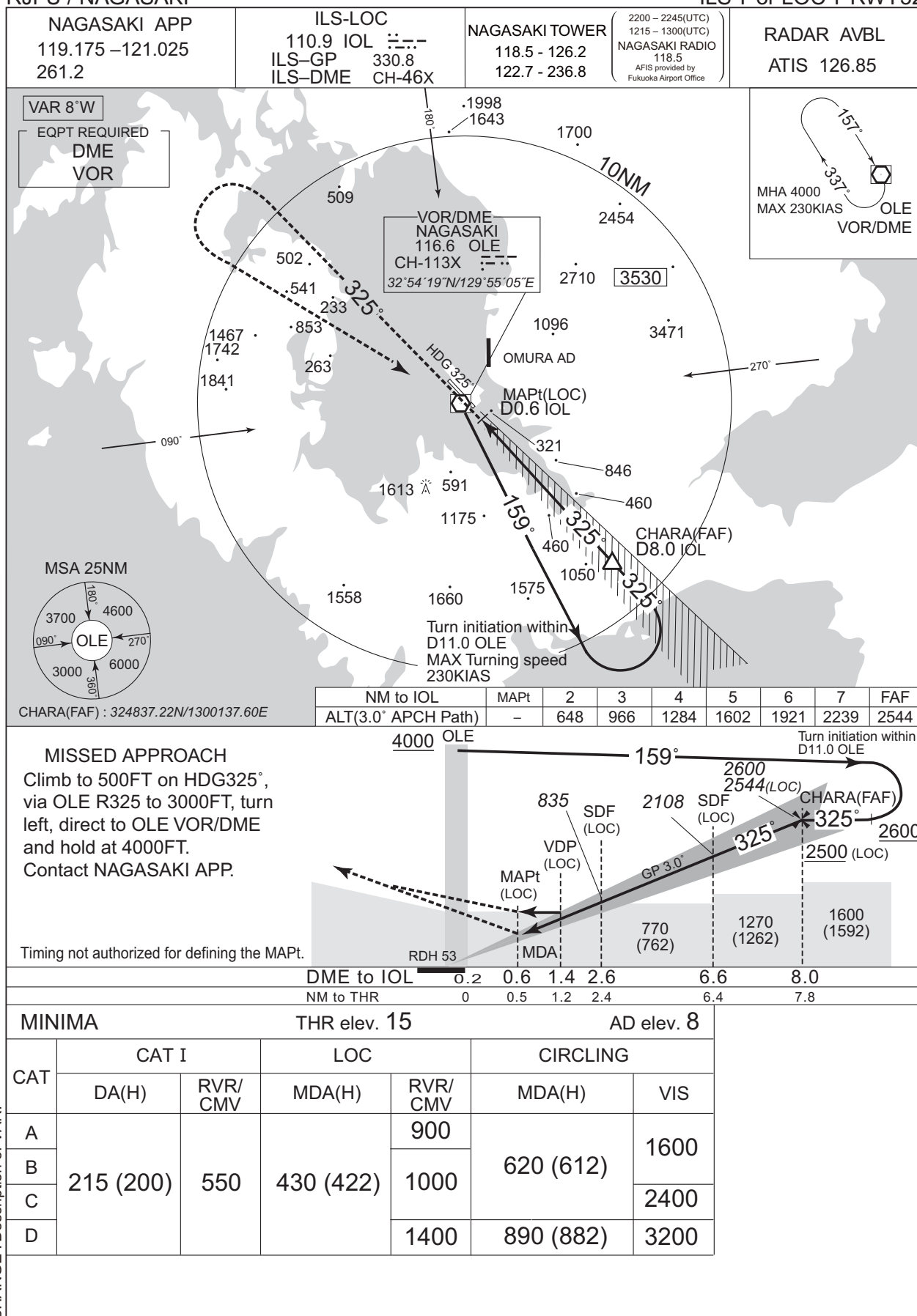
ILS Z or LOC Z RWY32



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

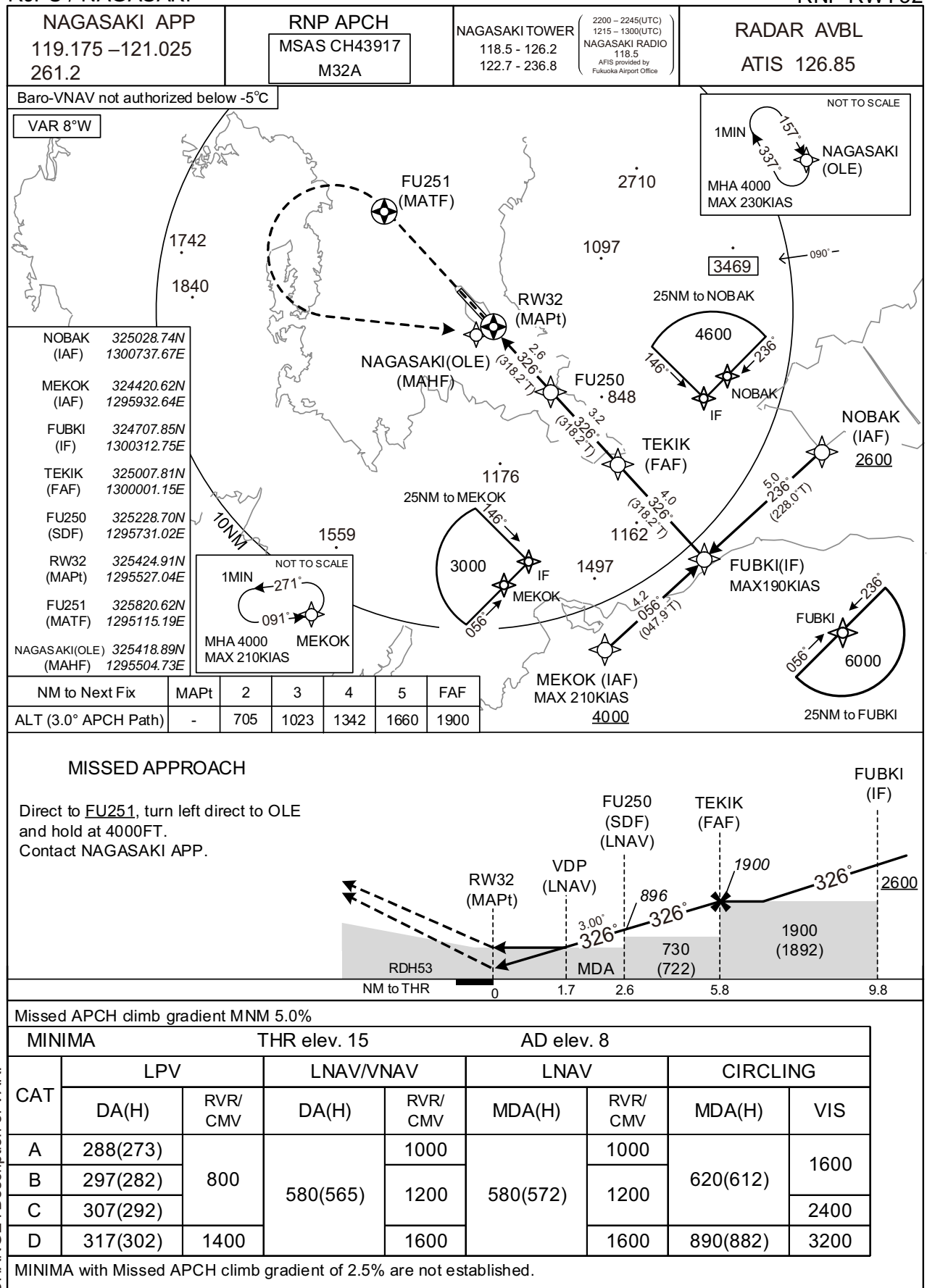
ILS Y or LOC Y RWY32



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

RNP RWY32



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

RNP RWY32

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+00370
SBAS service provider identifier	2	FPAP latitude	325537.2480N
Airport identifier	RJFU	FPAP longitude	1295409.7775E
Runway	32	Threshold crossing height	00016.2
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M32A	∠ length offset	0000
LTP/FTP latitude	325424.8850N	HAL	40.0
LTP/FTP longitude	1295527.0410E	VAL	50.0
CRC remainder	10898D02		

Required additional data

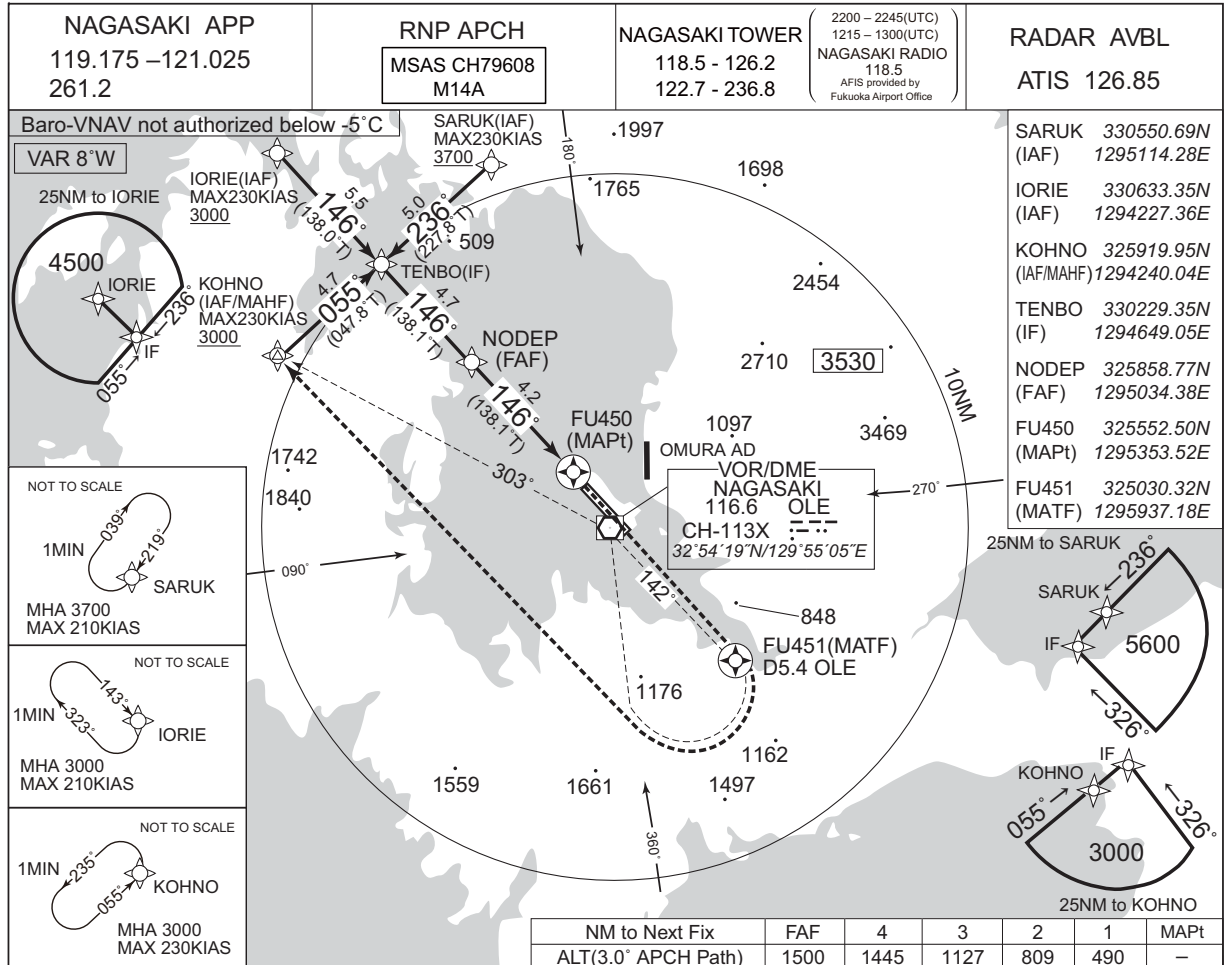
LTP/FTP orthometric height	4.8
----------------------------	-----

CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

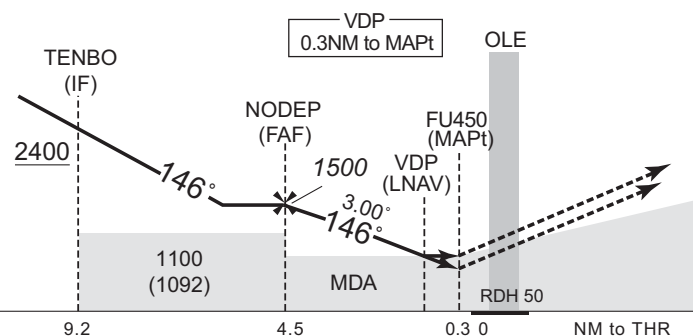
RNP RWY14



MISSED APPROACH

Direct to FU451, turn right direct to KOHNO and hold at 3000FT.
Contact NAGASAKI APP.

(For using VOR/DME)
Climb via OLE R142 to OLE 5.4DME, turn right, direct to OLE VOR/DME, via OLE R303 to KOHNO and hold at 3000FT.
Contact NAGASAKI APP.



Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 14 AD elev. 8

CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	264 (250)	1000	290 (276)	1000	290 (282)	1000	620(612)	1600
B		1100		1100		1100		
C	270 (256)	1200		1200		1200		2400
D	280 (266)	1400		1400		1400	890(882)	3200

MINIMA with Missed APCH climb gradient 2.5% are not established.

CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

RNP RWY14

FAS DATA BLOCK

Operation type	0	LTP/FTP ellipsoidal height	+00367
SBAS service provider identifier	2	FPAP latitude	325424.8850N
Airport identifier	RJFU	FPAP longitude	1295527.0410E
Runway	14	Threshold crossing height	00015.0
Approach performance designator	0	TCH units selector	1
Route indicator		Glide path angle	03.00
Reference path data selector	0	Course width at threshold	105.00
Reference path ID	M14A	∠ length offset	0000
LTP/FTP latitude	325537.2480N	HAL	40.0
LTP/FTP longitude	1295409.7775E	VAL	50.0
CRC remainder	B756639A		

Required additional data

LTP/FTP orthometric height	4.5
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CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

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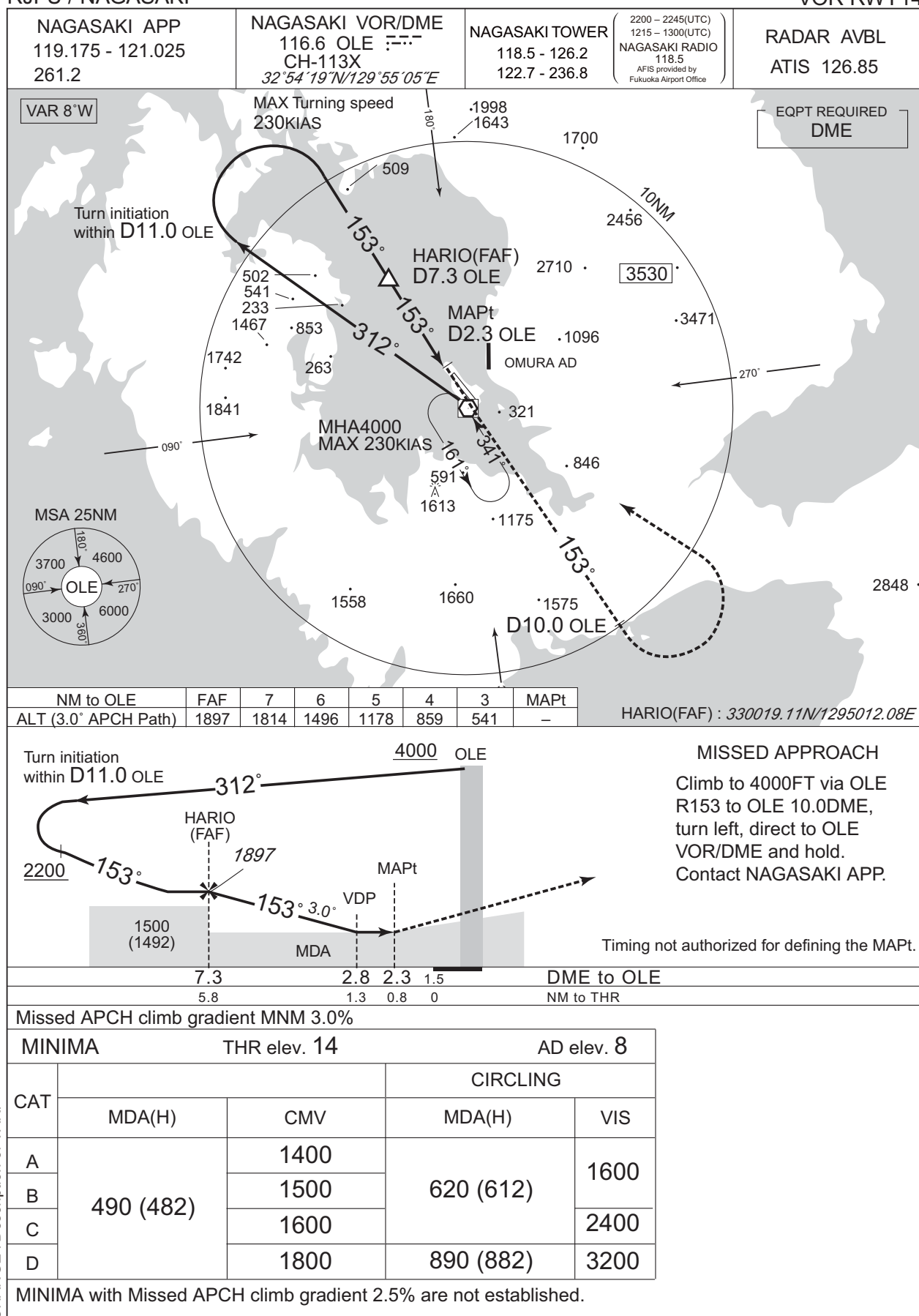
VOR RWY32



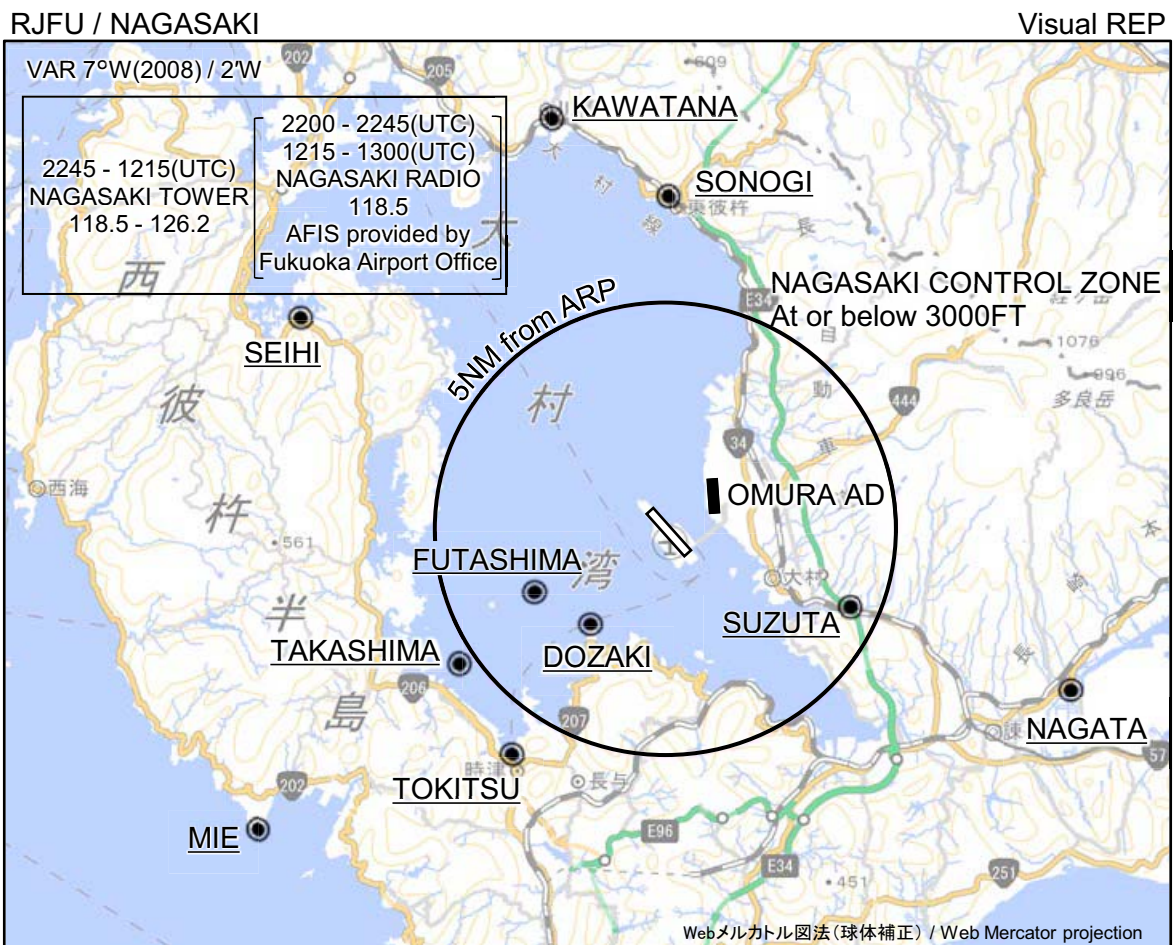
INSTRUMENT APPROACH CHART

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VOR RWY14



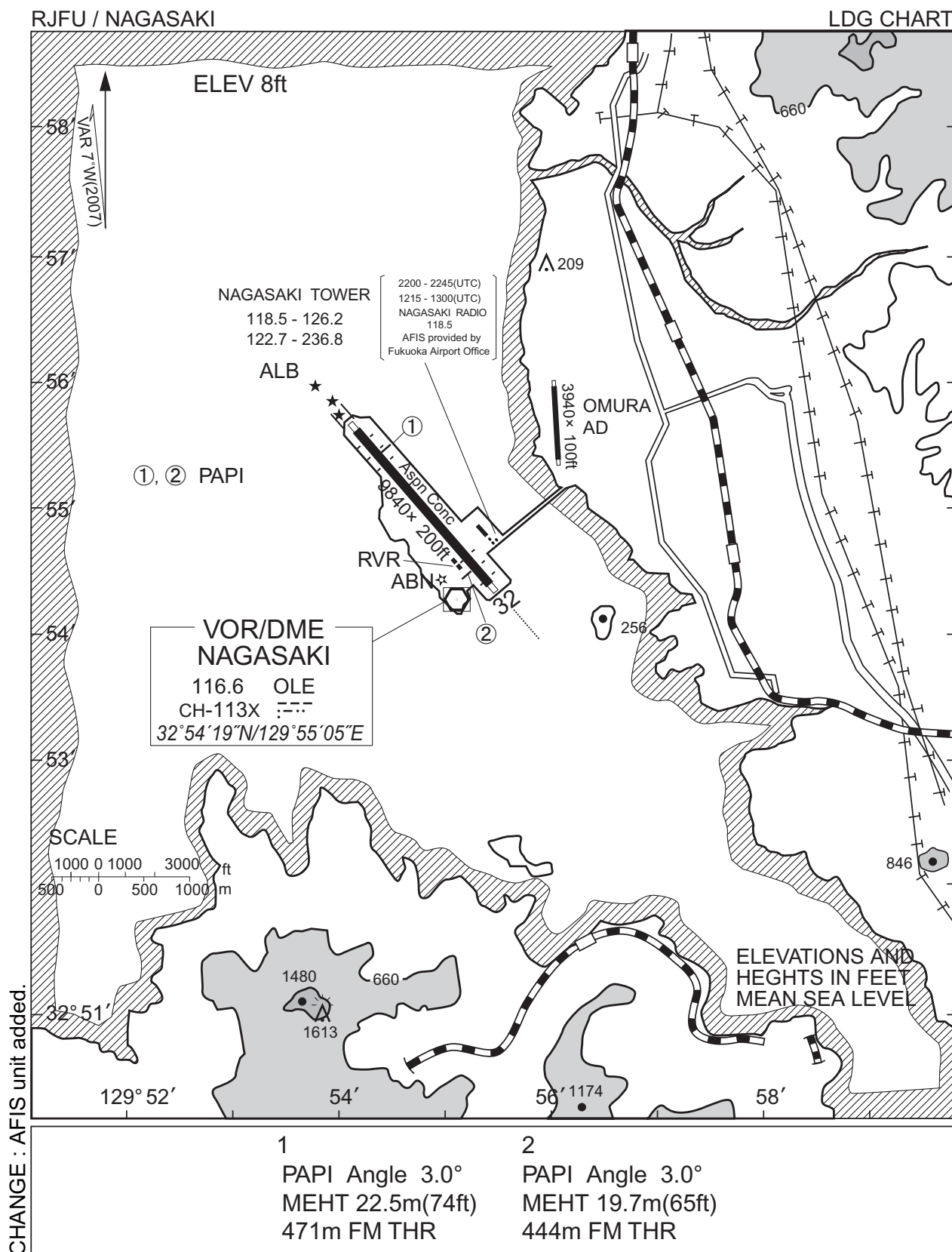
CHANGE : Description of VAR.



※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

Call sign	BRG / DIST from ARP	Remarks
川棚 Kawatana	345°T / 9.4NM	JR駅 JR Station
彼杵 Sonogi	360°T / 7.4NM	JR駅 JR Station
鈴田 Suzuta	113°T / 4.3NM	長崎自動車道と国道34号線の交点 Intersection
長田 Nagata	112°T / 9.4NM	不知火橋 Bridge
西彼 Seihi	301°T / 9.2NM	オランダ村 Windmill
二島 Futashima	244°T / 3.1NM	二島 Island
堂崎 Dozaki	217°T / 2.7NM	堂崎鼻 A point of land
鷹島 Takashima	237°T / 5.4NM	鷹島 Island
時津 Tokitsu	213°T / 6.0NM	時津港 Harbor
三重 Mie	233°T / 11.1NM	三重崎 A point of land

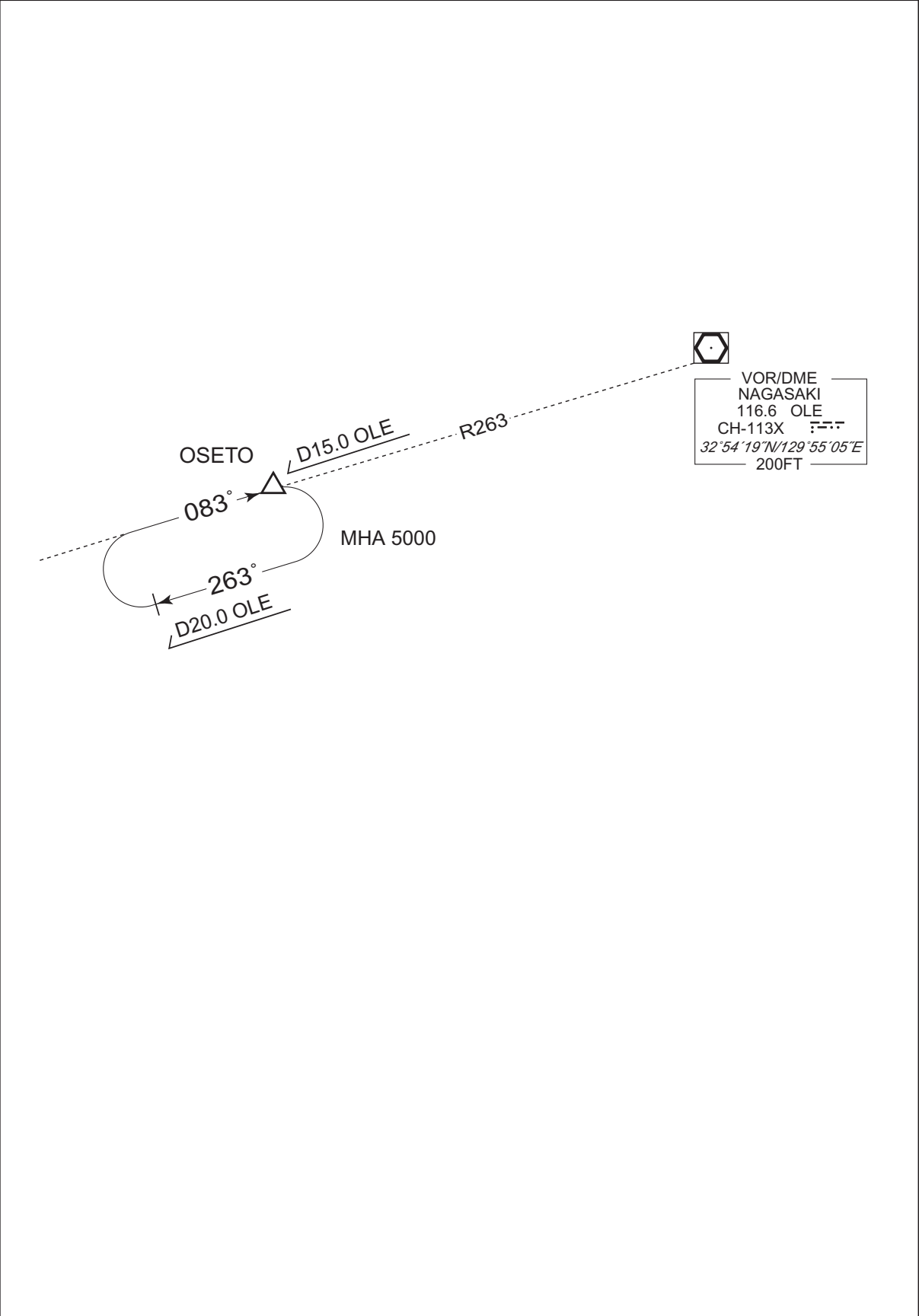
CHANGE : Map updated. BRG/DIST from ARP.



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HOLDING PATTERN

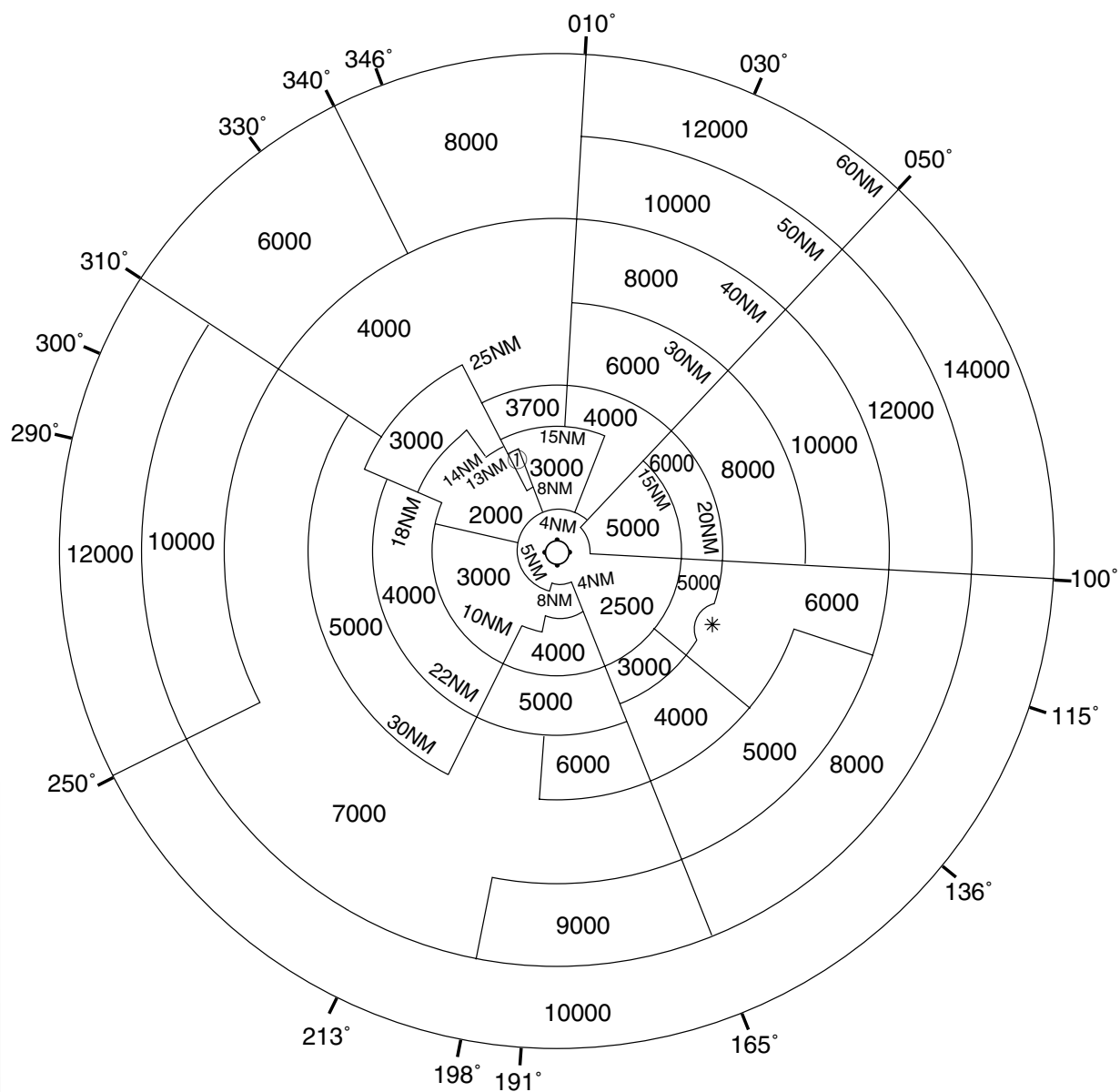
CHANGE : HLDG course.



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Minimum Vectoring Altitude CHART

VAR 7°W (2011)



① 2300

CENTER : 325458N/1295428E (RADAR SITE)

* : 324540N/1301756E RADIUS : 3NM