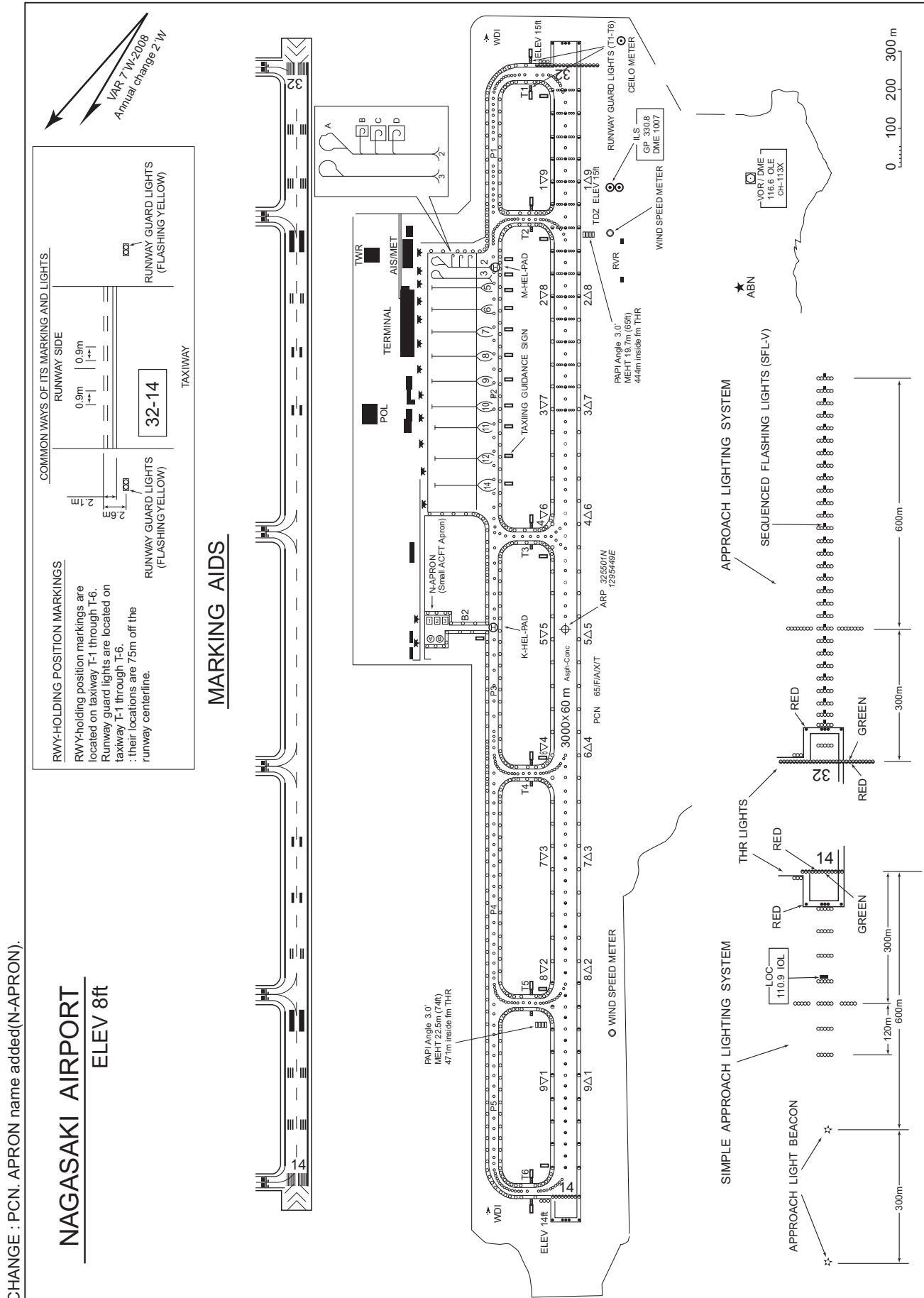


RJFU / NAGASAKI

AD CHART



INTENTIONALLY LEFT BLANK

AERDROME OBSTACLE CHART - ICAO TYPE A (OPERATING LIMITATIONS)

[illegible]

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC
Transverse Mercator Projection



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....

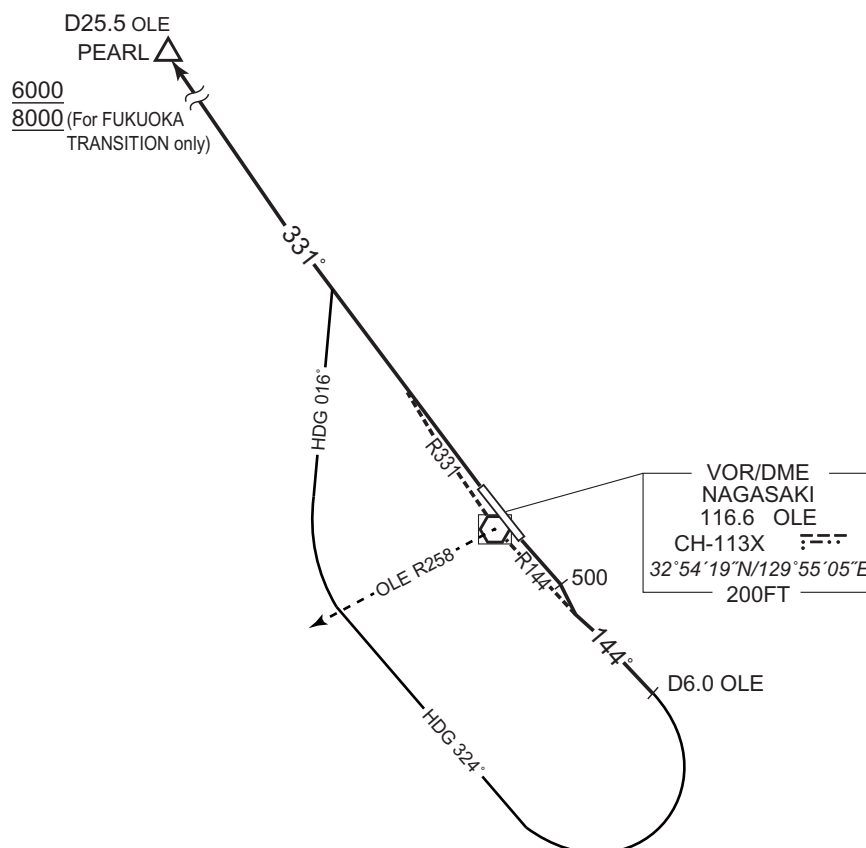
... Cross PEARL at or above 6000FT(*).

* 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

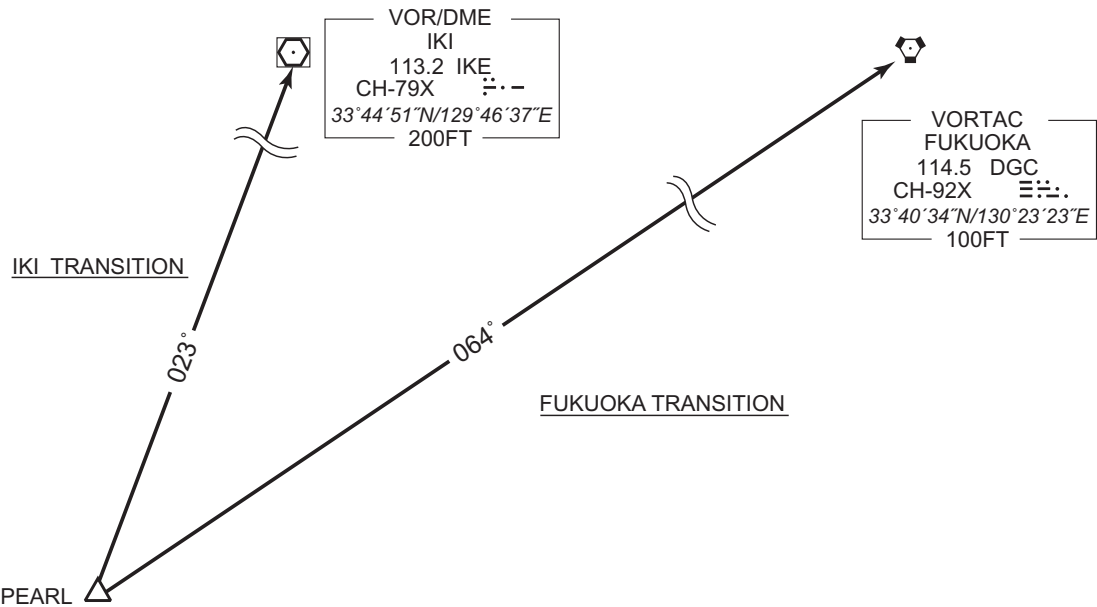
TRANSITION

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.

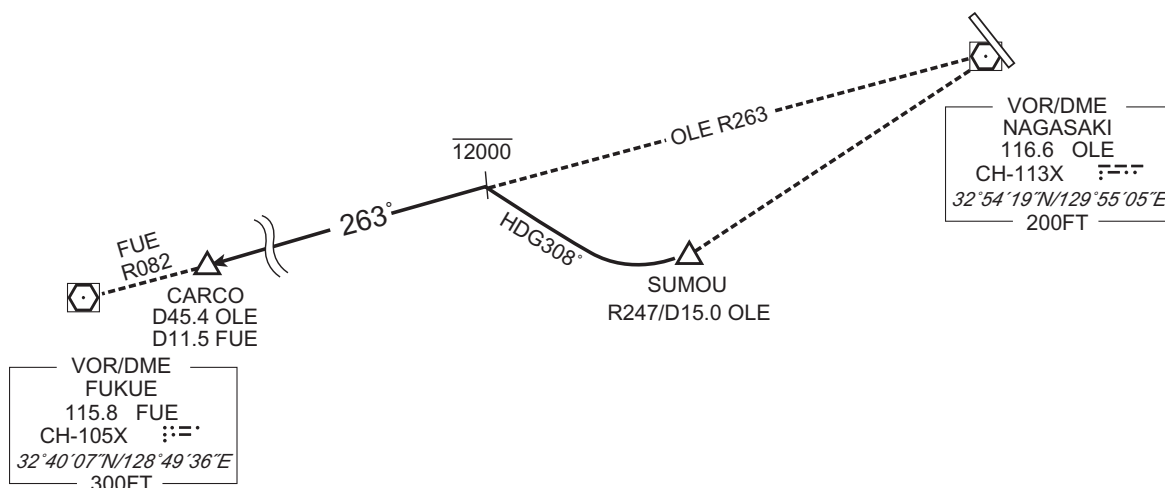
Maintain 12000FT or below until intercepting OLE R279.

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 R082 to CARCO.

Maintain 12000FT or below until intercepting OLE R263.



CHANGE : Description of PROC name.

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.

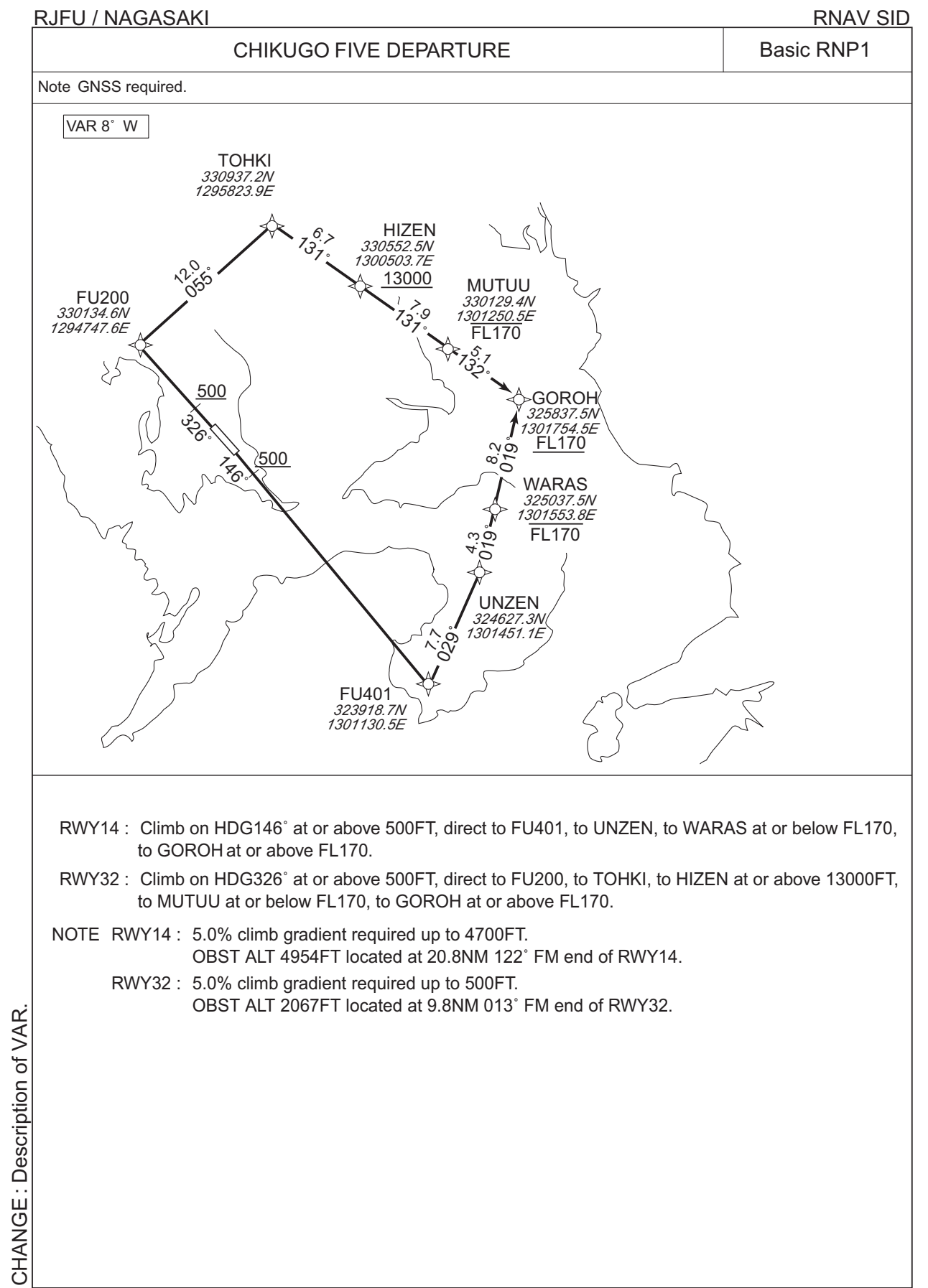
RWY 32: Climb via OLE R331 to 6.3DME, turn left, direct to OLE VOR/DME.
Cross OLE VOR/DME at or above 5000FT.

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



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	—	—	Basic RNP1
002	DF	FU401	—	—	-7.6	—	—	—	—	—	Basic RNP1
003	TF	UNZEN	—	029 (021.5)	-7.6	7.7	—	—	—	—	Basic RNP1
004	TF	WARAS	—	019 (011.9)	-7.6	4.3	—	-FL170	—	—	Basic RNP1
005	TF	GOROH	—	019 (011.9)	-7.6	8.2	—	+FL170	—	—	Basic 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	—	—	Basic RNP1
002	DF	FU200	—	—	-7.6	—	—	—	—	—	Basic RNP1
003	TF	TOHKI	—	055 (047.8)	-7.6	12.0	—	—	—	—	Basic RNP1
004	TF	HIZEN	—	131 (123.8)	-7.6	6.7	—	+13000	—	—	Basic RNP1
005	TF	MUTUU	—	131 (123.9)	-7.6	7.9	—	-FL170	—	—	Basic RNP1
006	TF	GOROH	—	132 (124.0)	-7.6	5.1	—	+FL170	—	—	Basic RNP1

CHANGE : VAR. PROC renamed. Course FM MUTUU to GOROH.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

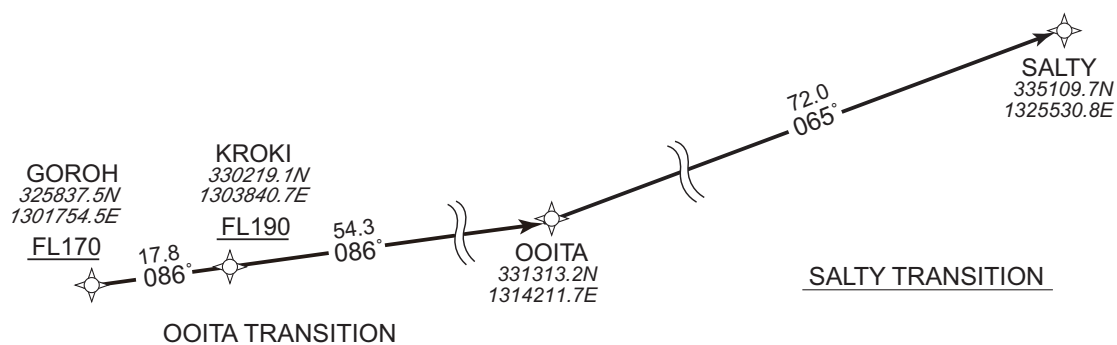
RNAV TRANSITION

SALTY TRANSITION / OOITA TRANSITION

Basic RNP1

Note GNSS required.

VAR 8° W

SALTY TRANSITION

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

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	—	—	Basic RNP1
002	TF	KROKI	—	086 (077.9)	-7.6	17.8	—	+FL190	—	—	Basic RNP1
003	TF	OOITA	—	086 (078.1)	-7.6	54.3	—	—	—	—	Basic RNP1
004	TF	SALTY	—	065 (057.8)	-7.6	72.0	—	—	—	—	Basic RNP1

OOITA 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	—	—	Basic RNP1
002	TF	KROKI	—	086 (077.9)	-7.6	17.8	—	+FL190	—	—	Basic RNP1
003	TF	OOITA	—	086 (078.1)	-7.6	54.3	—	—	—	—	Basic RNP1

CHANGE : Description of VAR.

RJFU / NAGASAKI

RNAV SID

Note GNSS required.



Note RWY14 : 5.0% climb gradient required up to 1200FT.
OBST ALT 892FT located at 4.1NM 130° FM end of RWY14.
OBST ALT 1050FT located at 4.6NM 165° FM end of RWY14.
RWY32 : 5.0% climb gradient required up to 1900FT.
OBST ALT 1936FT located at 8.0NM 272° FM end of RWY32.

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	—	—	Basic RNP1
002	DF	KAZSA	—	—	-7.6	—	—	—	—	—	Basic 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	—	—	Basic RNP1
002	DF	FU201	Y	—	-7.6	—	—	—	—	—	Basic RNP1
003	DF	FU202	—	—	-7.6	—	L	—	—	—	Basic RNP1
004	TF	KAZSA	—	137 (129.3)	-7.6	25.5	—	—	—	—	Basic RNP1

CHANGE : New PROC.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKIRNAV SID

AKNAG ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 8°W

AKNAG
332017.0N
1295044.8E
7000

008°/26.4

500

MIGAP
325352.4N
1295034.2E

326°

500

FU400
325105.7N
1295859.6E

RWY14 : Climb on HDG146° at or above 500FT, direct to FU400, turn right direct to MIGAP, to AKNAG at or above 7000FT.

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

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 1200FT.
OBST ALT 1739FT located at 8.7NM 010° 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	-	-	Basic RNP1
002	DF	FU400	Y	-	-7.7	-	-	-	-	-	Basic RNP1
003	DF	MIGAP	-	-	-7.7	-	R	-	-	-	Basic RNP1
004	TF	AKNAG	-	008 (000.3)	-7.7	26.4	-	+7000	-	-	Basic 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	-	-	+500	-	-	Basic RNP1
002	DF	AKNAG	-	-	-7.7	-	R	+7000	-	-	Basic RNP1

CHANGE : Description of VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

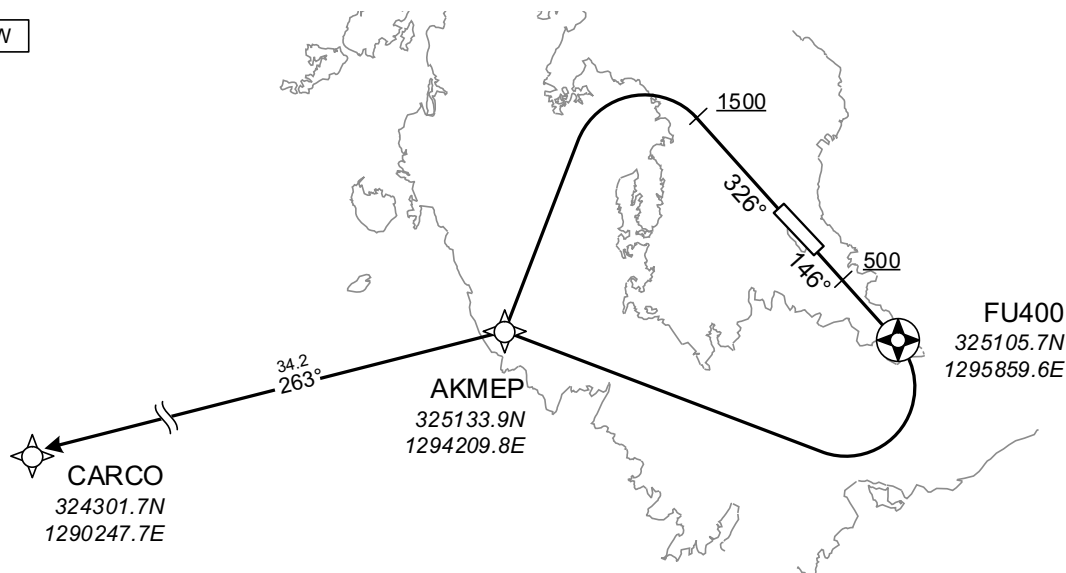
RNAV SID

CARCO ONE DEPARTURE

Basic RNP1

Note GNSS required.

VAR 8°W



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

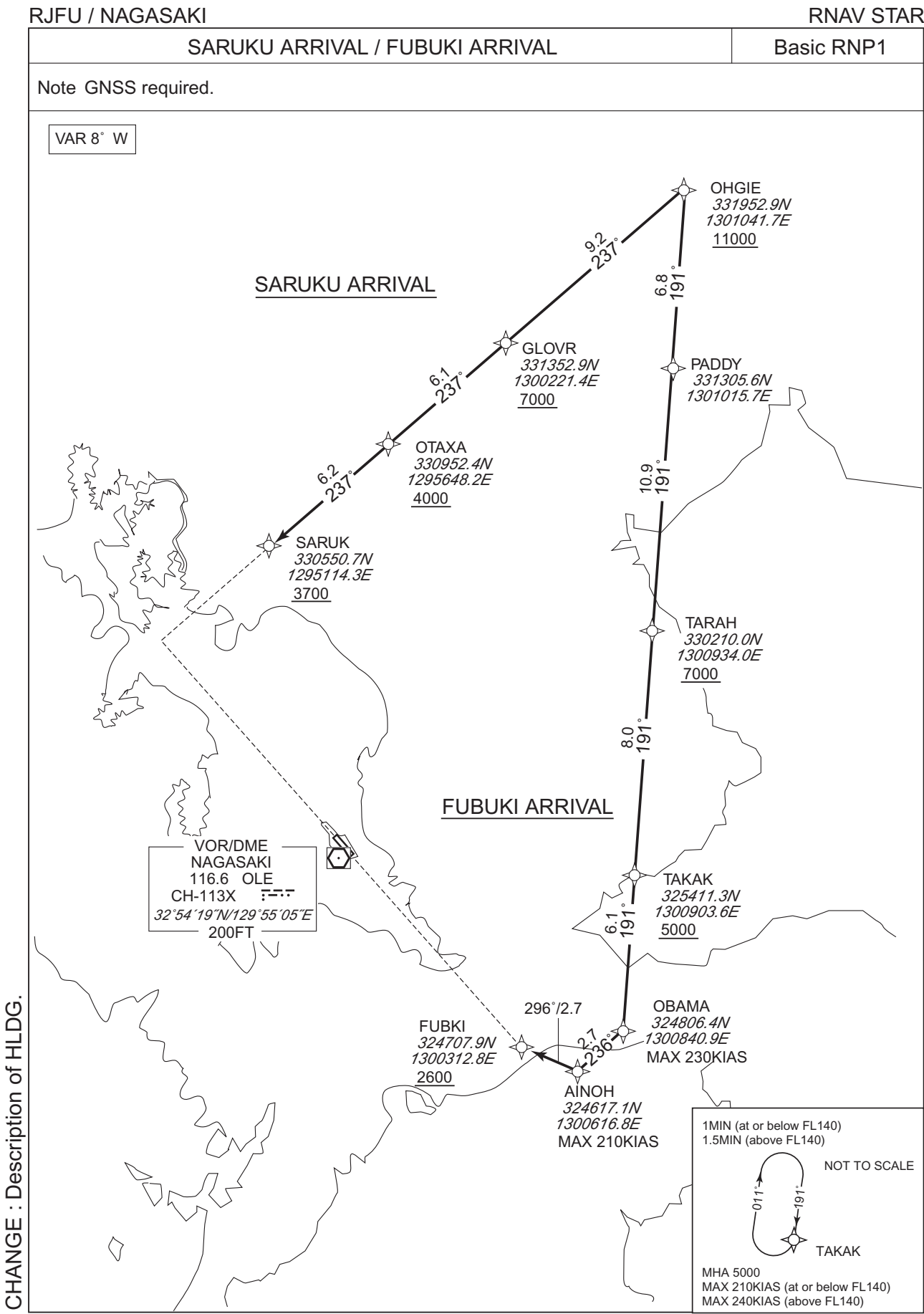
Serial Number	Path Descriptor	Waypoint Identifier	Fly Over	Course °M(°T)	Magnetic Variation	Distance (NM)	Turn Direction	Altitude (FT)	Speed (KIAS)	Vertical Angle	Navigation Specification
001	VA	-	-	146 (138.1)	-7.7	-	-	+500	-	-	Basic RNP1
002	DF	FU400	Y	-	-7.7	-	-	-	-	-	Basic RNP1
003	DF	AKMEP	-	-	-7.7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

CHANGE : Description of VAR.

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	—	—	Basic RNP1
002	TF	GLOVR	—	237 (229.3)	-7.6	9.2	—	+7000	—	—	Basic RNP1
003	TF	OTAXA	—	237 (229.2)	-7.6	6.1	—	+4000	—	—	Basic RNP1
004	TF	SARUK	—	237 (229.2)	-7.6	6.2	—	+3700	—	—	Basic RNP1

FUBUKI ARRIVAL

From OHGIE at or above 11000FT, to PADDY, to TARAH 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	—	—	Basic RNP1
002	TF	PADDY	—	191 (183.1)	-7.6	6.8	—	—	—	—	Basic RNP1
003	TF	TARAH	—	191 (183.1)	-7.6	10.9	—	+7000	—	—	Basic RNP1
004	TF	TAKAK	—	191 (183.0)	-7.6	8.0	—	+5000	—	—	Basic RNP1
005	TF	OBAMA	—	191 (183.0)	-7.6	6.1	—	—	-230	—	Basic RNP1
006	TF	AINOH	—	236 (228.0)	-7.6	2.7	—	—	-210	—	Basic RNP1
007	TF	FUBKI	—	296 (288.2)	-7.6	2.7	—	+2600	—	—	Basic 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)	Basic RNP1

CHANGE : VAR. Navigation specification: PROC course(FUBUKI ARRIVAL). HLDG course.

INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

ILS Z or LOC Z RWY32



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

ILS Y or LOC Y RWY32



RJFU / NAGASAKI

RNP RWY32

Baro-VNAV not authorized below -5°C

VAR 8°W



NM to Next Fix	MAPt	2	3	4	5	FAF
ALT (3.0° APCH Path)	-	705	1023	1342	1660	1900

Direct to FU251, turn left direct to OLE
and hold at 4000FT.
Contact NAGASAKI APP.



Missed APCH climb gradient MNM 5.0%

MINIMA								
THR elev. 15			AD elev. 8					
CAT	LPV		LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	RVR/ CMV	DA(H)	RVR/ CMV	MDA(H)	RVR/ CMV	MDA(H)	VIS
A	288(273)	800	580(565)	1000	580(572)	1000	620(612)	1600
B	297(282)			1200		1200		
C	307(292)			1600		1600		
D	317(302)	1400					890(882)	3200

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

CHANGE : Description of VAR.

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
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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

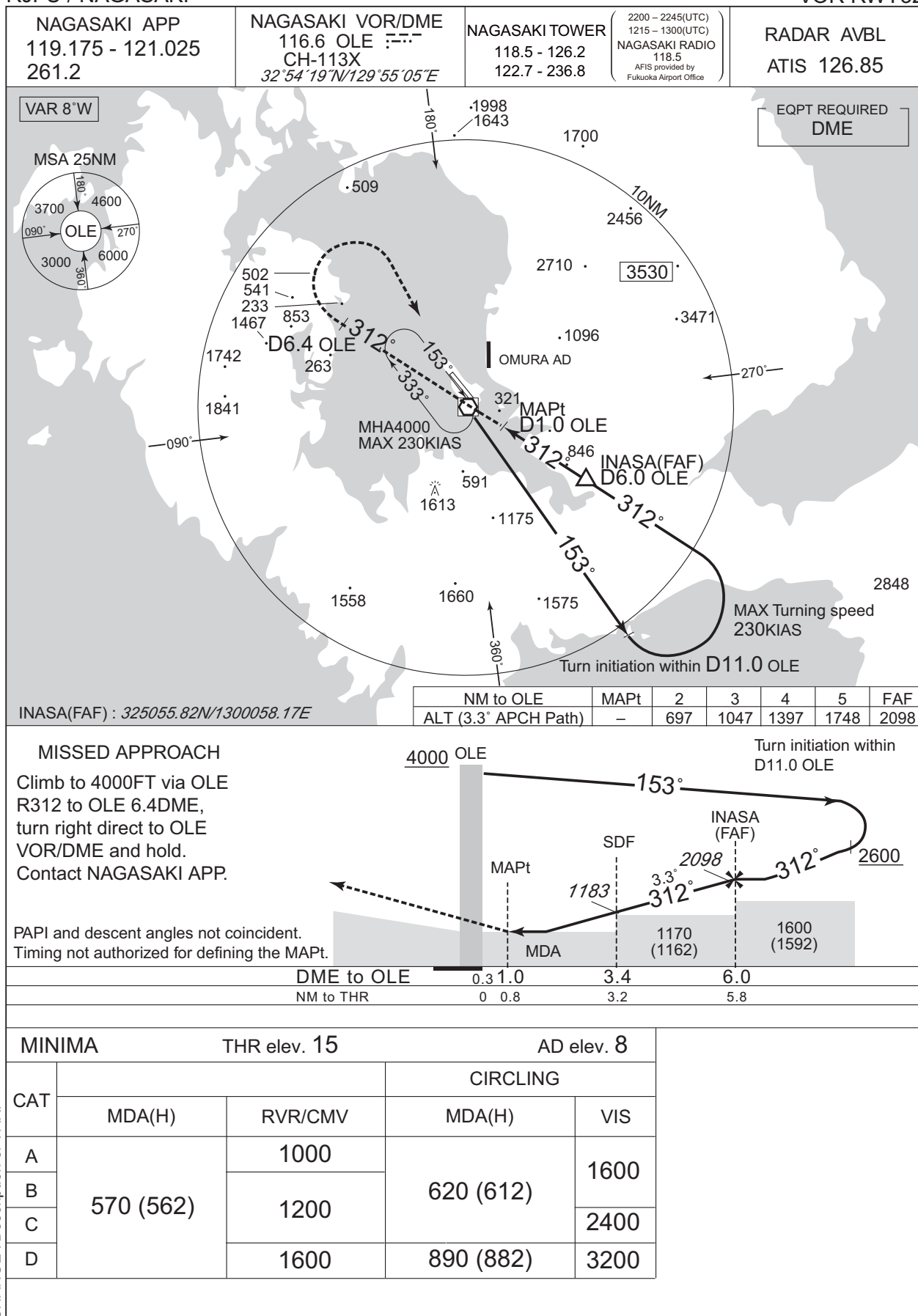
LTP/FTP orthometric height	4.5
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CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

VOR RWY32



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

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.



RJFU / NAGASAKI

HOLDING PATTERN

CHANGE : HLDG course.



RJFU / NAGASAKI

Minimum Vectoring Altitude CHART

VAR 7°W (2011)



① 2300

CENTER : 325458N/1295428E (RADAR SITE)

* : 324540N/1301756E RADIUS : 3NM