

AD 2 AERODROMES**RJFU AD 2.1 AERODROME LOCATION INDICATOR AND NAME****RJFU - NAGASAKI****RJFU AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

1	ARP coordinates and site at AD	325501N/1295449E
2	Direction and distance from (city)	18Km (9.7nm) NNE of Nagasaki railway station, 4km (2.2nm) W of Omura railway station.
3	Elevation/ Reference temperature	8ft / 33°C (2004-2008)
4	Geoid undulation at AD ELEV PSN	105.89ft
5	MAG VAR/ Annual change	7° W (2008) / Annual change 2' W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism Nagasaki Airport, 593-2 Mishima-cho, Omura City, Nagasaki Pref. Tel: 0957(53)6901 Fax: 0957(54)4539 AFS: RJFUYFYX
7	Types of traffic permitted (IFR/VFR)	IFR/VFR
8	Remarks	Nil

RJFU AD 2.3 OPERATIONAL HOURS

1	AD Administration	2200 - 1300
2	Customs and immigration	Customs: 2330-0815 Immigration: INTL SKED FLT hours only
3	Health and sanitation	Quarantine(human, plant): INTL SKED FLT hours only Quarantine(animal): 2330-1100
4	AIS Briefing Office	2200 - 1300
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (FUKUOKA)
7	ATS	2200 - 1300
8	Fuelling	2200 - 1300
9	Handling	DOM/JAL:2240-1240, ANA:2200-1230, ORC:2200-0910 INTL/2330-0800
10	Security	2130 - 1200
11	De-icing	Nil
12	Remarks	Nil

RJFU AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	No limitation
2	Fuel/ oil types	Fuel Grades : JET A-1 Oil Grade : W80, W100, AERO80, AERO100
3	Fuelling facilities/ capacity	Fuel Truck Refueling, No limitation
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

RJFU AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in the city
2	Restaurants	Available, Not Continuous
3	Transportation	Buses, Taxis and Ships
4	Medical facilities	Hospitals in the city
5	Bank and Post Office	Bank in the city. Post office in the city.
6	Tourist Office	Tourist Office in the city
7	Remarks	Nil

RJFU AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 9
2	Rescue equipment	Chemical fire fighting truck x 3, Water supply truck x 1, Lighting power supply truck x 1, Emergency medical equipments conveyance truck x 1
3	Capability for removal of disabled aircraft	B744
4	Remarks	Nil

RJFU AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	
2	Clearance priorities	1.RWY 2.TWY 3.APRON
3	Remarks	Seasonal availability:ALL seasons

RJFU AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Surface : Surface Concrete, Asphalt Concrete in part. Strength : PCN 56/R/A/X/T spot NR 2 PCN 52/R/B/X/T spot NR 3 PCN 56/R/B/X/T spot NR 5 PCN 50/R/A/X/T spot NR 6 PCN 62/R/B/X/T spot NR 7, 8, 9, 10 PCN 74/R/B/X/T spot NR 11, 12, 14
2	Taxiway width, surface and strength	Width : B2.....9m P1 - P5.....23m T1, T6.....28.5m T2, T3, T4, T5....34m Surface : Asphalt Concrete Strength : B2.....PCN 5/F/C/X/T P1, P3, P4, T1...PCN 65/F/A/X/T P5, T6.....PCN 97/F/C/X/T T2, T3, T4, T5....PCN 54/F/A/X/T P2.....PCN 62/R/B/X/T
3	ACL and elevation	Not available
4	VOR checkpoints	Not available
5	INS checkpoints	Spot NR 5 : 325447.08N/1295522.18E* 6 : 325448.42N/1295520.75E 7 : 325449.91N/1295519.11E 8 : 325451.60N/1295517.31E 9 : 325453.29N/1295515.51E 10 : 325454.98N/1295513.71E 11 : 325456.73N/1295511.84E 12 : 325458.53N/1295509.91E
6	Remarks	Nil

RJFU 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 of aircraft stands	ACFT stand ID signs: SPOT 2, 5-9
2	RWY and TWY markings and LGT	<p>RWY14/32: (Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe (LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY32), WBAR(RWY32), RWY DIST marker LGT</p> <p>TWY: T1 - T6 (Marking) TWY CL, RWY HLDG PSN, Mandatory Instructions, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT, RWY guard LGT, Taxiing guidance sign</p> <p>TWY: P1, P3, P4, P5 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT</p> <p>TWY: P2 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign</p> <p>TWY: B2 (Marking) TWY CL, TWY side stripe (LGT) TWY edge LGT, Taxiing guidance sign</p>
3	Stop bars	Nil
4	Remarks	(Marking) Overrun area (LGT) Apron flood LGT

RJFU AD 2.10 AERODROME OBSTACLES

■ In Area2 See Obstacle data

■ In Area3 To be developed

RJFU AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	FUKUOKA
2	Hours of service MET Office outside hours	H24 (FUKUOKA)
3	Office responsible for TAF preparation Periods of validity	FUKUOKA 30 Hours
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at FUKUOKA
6	Flight documentation Language(s) used	C En
7	Charts and other information available for briefing or consultation	S ₆ , U ₈₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} , P _{SWM} , P _{SW} (domestic), U ₂ /Tr, E, C, W _E , W _F , W _G , W _I , W, N
8	Supplementary equipment available for providing information	Nil
9	ATS units provided with information	TWR, APP, ATIS
10	Additional information(limitation of service, etc.)	Nil

RJFU AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	TRUE BRG	Dimensions of RWY(M)	Strength(PCN) and surface of RWY	THR coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
14	138.00°	3000x60	PCN 65/F/A/X/T Asphalt Concrete	325537.28N 1295409.77E 105.8ft	THR ELEV: 14ft
32	318.00°	3000x60	PCN 65/F/A/X/T Asphalt Concrete	325424.91N 1295527.04E 106.0ft	THR ELEV: 15ft
Slope of RWY		Strip Dimen- sions(M)	RESA (Overrun) Dimensions (M)		Remarks
7	10		11		14
See below chart	3120x300		40x300	RWY 14 grooving: 3000 x 40m	
See below chart	3120x300		190x(MNM:120 MAX:300)* *For detail, ask airport administrator	RWY 32 grooving: 3000 x 40m	
RWY 14			RWY 32		
<p>Detailed description: The diagram shows two runways. RWY 14 starts at 14ft elevation and slopes down to 11ft at 451.5m. It then has a series of slope segments: 8ft at 1120m, 8ft at 1500m, 9ft at 2060m, and 8ft at 2360m. RWY 32 starts at 15ft elevation and slopes down to 8ft at 2360m. A scale bar at the bottom indicates distances from 0m to 3000m.</p>					

RJFU AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
14	3000	3000	3000	3000	Nil
32	3000	3000	3000	3000	Nil

RJFU AD 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT type LEN INTST	RTHL Color WBAR	PAPI (VASIS) Angle DIST FM THR MEHT	RTZL LEN	RCLL LEN Spacing Color INTST	REDL LEN Spacing Color INTST	RENL Color WBAR	STWL LEN Color
1	2	3	4	5	6	7	8	9
14	SALS (*1) 420m LIH	Green -	PAPI 3.0%/LEFT 471m 74ft	- 900m	3000m 30m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
32	PALS (CAT I) 900m LIH	Green Green	PAPI 3.0%/LEFT 444m 65ft	900m	3000m 30m Coded color (White/Red) LIH	3000m 60m Coded color (White/Yellow) LIH	Red	Nil (*2)
Remarks								
10								
SALS with APCH LGT beacon(600m and 900m FM RWY THR)(*1) Overrun area edge LGT(LEN:60m Color:Red)(*2)								

RJFU AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN:325428N/1295457E, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer : RWY 32 : 438m from RWY 32 THR, LGTD RWY 14 : 430m from RWY 14 THR, LGTD
3	TWY edge and centerline lighting	TWY edge LGT: Blue TWY CL LGT: ALTN Green/Yellow FM RWY leaving Report point, other Green
4	Secondary power supply/ switch-over time	Within 1 sec : REDL, RENL, RTHL, WBAR, RCLL, Overrun area edge LGT Within 15 sec : Other LGT
5	Remarks	WDI LGT

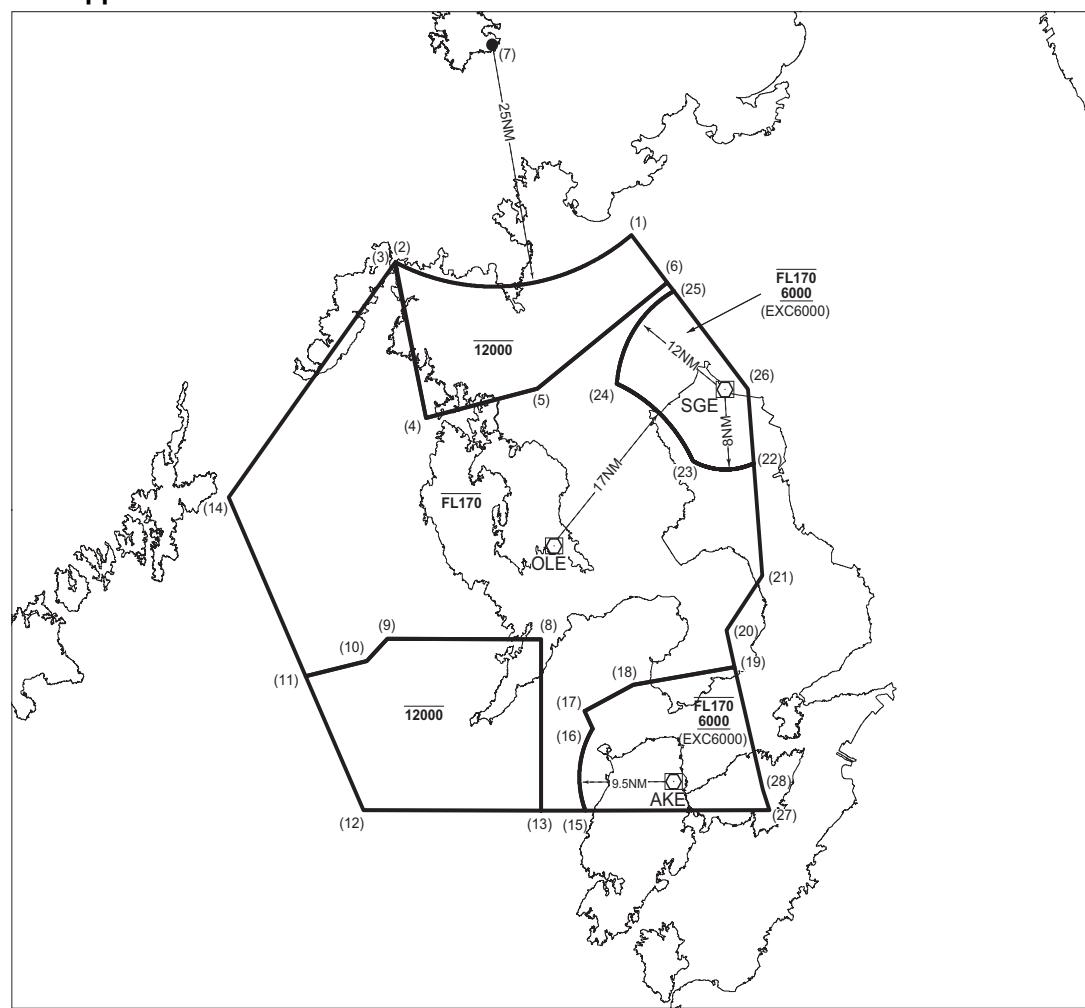
RJFU AD 2.16 HELICOPTER LANDING AREA

Nil

RJFU AD 2.17 ATS AIRSPACE

Designation and lateral limits		Vertical limits (ft)	Airspace classification	ATS unit call sign Language	Remarks
1		2	3	4	6
NAGASAKI CTR	Area within a radius of 5 nm of NAGASAKI ARP (325501N1295449E)	3,000 or below	D	NAGASAKI TWR En	
NAGASAKI ACA	See attached chart		E	NAGASAKI APP NAGASAKI RADAR NAGASAKI DEP En	
NAGASAKI TCA	See attached chart		E	NAGASAKI TCA En	

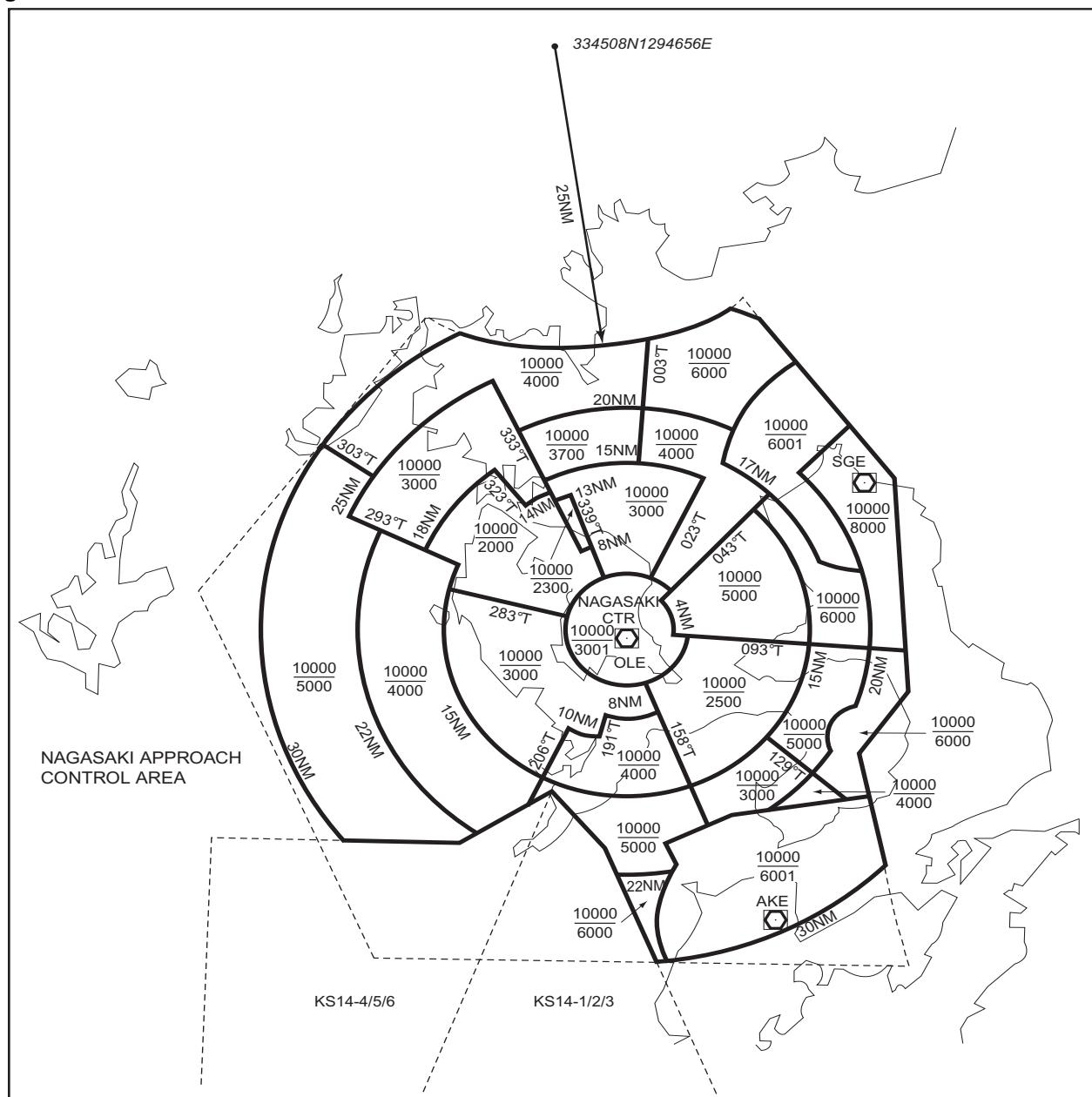
長崎進入管制区 Nagasaki Approach Control Area



Point list

- | | | | | | |
|------|-----------------|------|-----------------|------|-----------------|
| (1) | 332519N1300516E | (11) | 323917N1292246E | (21) | 324950N1302218E |
| (2) | 332227N1293413E | (12) | 322522N1293021E | (22) | 330132N1302113E |
| (3) | 332219N1293406E | (13) | 322522N1295325E | (23) | 330147N1301316E |
| (4) | 330615N1293818E | (14) | 325752N1291235E | (24) | 330951N1300318E |
| (5) | 330921N1295252E | (15) | 322522N1295913E | (25) | 331929N1301048E |
| (6) | 332024N1300955E | (16) | 323353N1300008E | (26) | 330915N1302028E |
| (7) | 334508N1294656E | (17) | 323544N1295905E | (27) | 322522N1302306E |
| (8) | 324312N1295325E | (18) | 323828N1300526E | (28) | 322734N1302215E |
| (9) | 324312N1293323E | (19) | 324018N1301840E | | |
| (10) | 324053N1293041E | (20) | 324407N1301735E | | |

長崎ターミナルコントロールエリア
Nagasaki Terminal Control Area

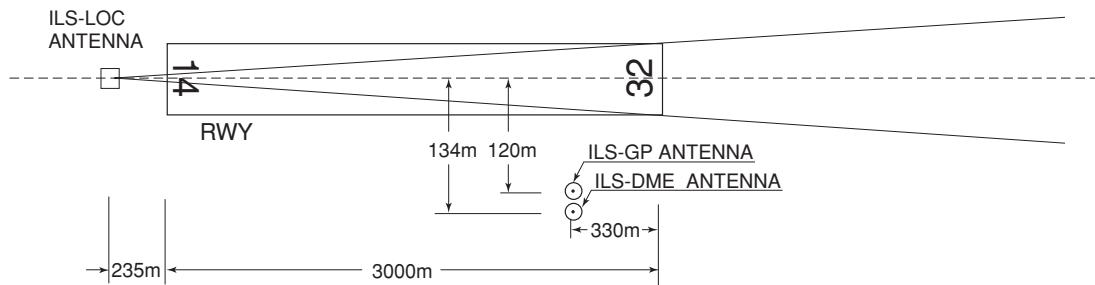


RJFU AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
APP	Nagasaki Approach	119.175MHz(1) 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	(1)Primary
ASR	Nagasaki Radar	119.175MHz 121.025MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
DEP	Nagasaki Departure	121.0MHz 261.2MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
TCA	Nagasaki TCA	121.175MHz 245.3MHz	2300 - 1030	
TWR	Nagasaki Tower	118.5MHz 126.2MHz 122.7MHz 236.8MHz 121.5MHz(E) 243.0MHz(E)	2200 - 1300	
GND	Nagasaki Ground	121.6MHz	2200 - 1300	
ATIS	NAGASAKI Airport	126.85MHz	2200 - 1300	

RJFU AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid (VOR declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
VOR (7°W/2006)	OLE	116.6MHz	H24	325418.89N/ 1295504.73E		Unusable : 030°-045° beyond 25nm BLW 6,000ft 046°-085° beyond 20nm BLW 6,000ft 115°-125° beyond 30nm BLW 7,000ft 160°-170° beyond 30nm BLW 5,000ft 171°-230° beyond 20nm BLW 4,000ft 260°-300° beyond 25nm BLW 4,000ft
DME	OLE	1200 MHz (CH-113X)	H24	325418.89N/ 1295504.73E	154ft	
ILS-LOC 32	IOL	110.9MHz	2200 - 1300	325542.95N/ 1295403.71E		LOC : 235m(771ft) away FM RWY 14THR, BRG(MAG)325°.
ILS-GP 32	-	330.8MHz	2200 - 1300	325430.22N/ 1295515.11E		GP : 330m(1084ft) inside FM RWY 32 THR. 120m SW of RCL. HGT of ILS Ref datum 16.2m(53ft). GP Angle 3.0°.
ILS-DME 32	IOL	1007MHz (CH-46X)	2200 - 1300	325429.87N/ 1295514.76E	25ft	DME : 330m(1084ft) inside FM RWY 32 THR, 134m(439ft) SW of RCL.
MSAS		1575.42M Hz	H24			Transmitting antennas are satellite based.

ILS

REMARKS : 1. LOC beam BRG(MAG) 325°
2. HGT of ILS REF datum 16.2m (53ft)
3. GP Angle 3.0°
4. ELEV of ILS-DME 7.6m (25ft)

RJFU AD 2.20 LOCAL TRAFFIC REGULATIONS**1. Airport regulations**

Without prior permission of the airport administrator, the transient aircraft shall not use on this airport.

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Unable to stay at spot NR 2B, C, D from sunset to sunrise. Ask AD administration for detail.

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Wing tip clearance at the TWY intersection (REF AD1.1.6.8)

Wing tip clearance at the TWY intersection between the aircraft holding at the stop marking on the TWY and the other aircraft taxiing behind it are as follows.

When B74D holding at the stop marking on TWY T2 or T5

Wing span (WS) of aircraft taxiing on TWY P1-P2 or P4-P5	WS <= 19.4m	19.4m < WS <= 36.4m	WS > 36.4m
wing tip clearance	*A	*B	*C

Legend

*A : wing tip clearance >= 15m

*B : 6.5m <= wing tip clearance < 15m

*C : wing tip clearance < 6.5m

7. School and training flights - technical test flights - use of runways

On use of this airport by training operation, the operator is required to arrange and obtain the prior permission of the airport administrator.

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

RJFU AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

RJFU AD 2.22 FLIGHT PROCEDURES**1. TAKE OFF MINIMA**

	RWY	ACFT CAT	REDL & RCLL		REDL or RCLL or RCL Marking		NIL (DAYTIME ONLY)	
			RVR	VIS	RVR	VIS	RVR	VIS
Multi-Engine ACFT with TKOF ALTN AP FILED	14	A,B,C,D	-	400m	-	400m	-	500m
	32		400m	400m	400m	400m	-	500m
OTHER	14	A,B,C,D	AVBL LDG MINIMA					
	32		AVBL LDG MINIMA					

2. Lost communication procedures for Arrival Aircraft under radar navigational guidance.

If radio communications with NAGASAKI Approach/Radar are lost for 30 seconds, squawk Mode A/3 Code 7600 and :

- (I) 1. Contact NAGASAKI Tower.
 2. If unable, proceed in accordance with Visual Flight Rules.
 3. If unable, proceed to NAGASAKI VOR/DME at last assigned altitude or 4,000 feet whichever is higher, and execute instrument approach.
- (II) Procedures other than above will be issued when situation required.

3. Trajectorized Airport Traffic Data Processing System (TAPS)

Aircraft flying under control of Nagasaki approach control in the approach control area will be instructed to reply with discrete code on Mode A/3 and Mode C.

If an aircraft with non-discrete capability be instructed to reply with the discrete code, it shall report a controller accordingly.

長崎アプローチの指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該コードによる応答を指示された場合は、管制官に対しその旨通報すること。

RJFU AD 2.23 ADDITIONAL INFORMATION

Nil

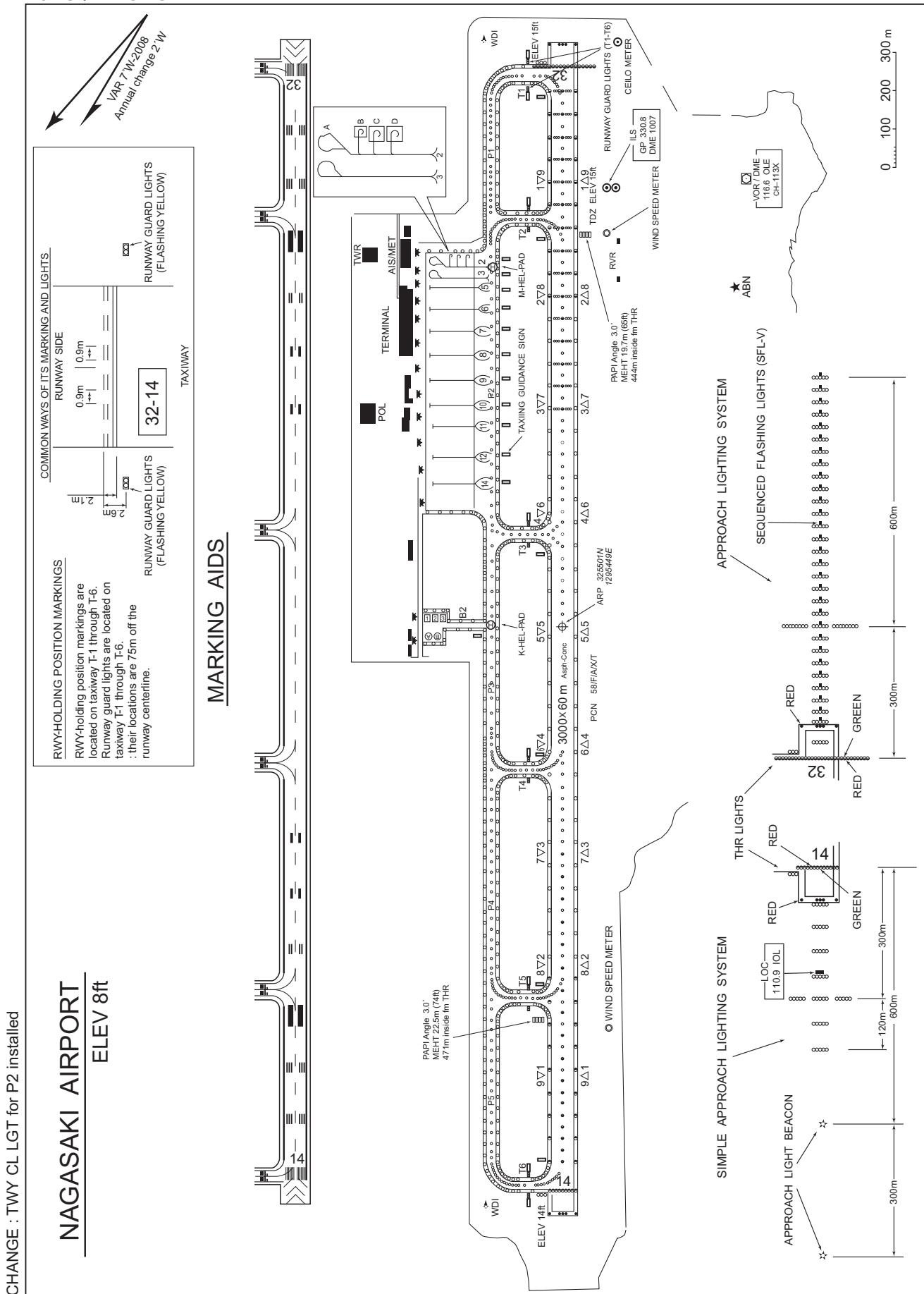
RJFU AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Aerodrome Obstacle Chart -ICAO type A (RWY 14/32)
Aerodrome Obstacle Chart -ICAO type B
Standard Departure Chart - Instrument (NORTH)
Standard Departure Chart - Instrument (WEST)
Standard Departure Chart - Instrument (SOUTH)
Standard Departure Chart - Instrument (NAGASAKI REVERSAL)

Standard Departure Chart - Instrument (CHIKUGO-RNAV)
Standard Arrival Chart - Instrument (RNAV)
Instrument Approach Chart (ILS Z or LOC Z RWY 32)
Instrument Approach Chart (ILS Y or LOC Y RWY 32)
Instrument Approach Chart (RNAV(GNSS) RWY 14)
Instrument Approach Chart (VOR RWY 32)
Instrument Approach Chart (VOR RWY 14)
Other Chart (Visual REP)
Other Chart (LDG CHART)
Other Chart (HOLDING PATTERN)
Other Chart (MVA CHART)

RJFU / NAGASAKI

AD CHART



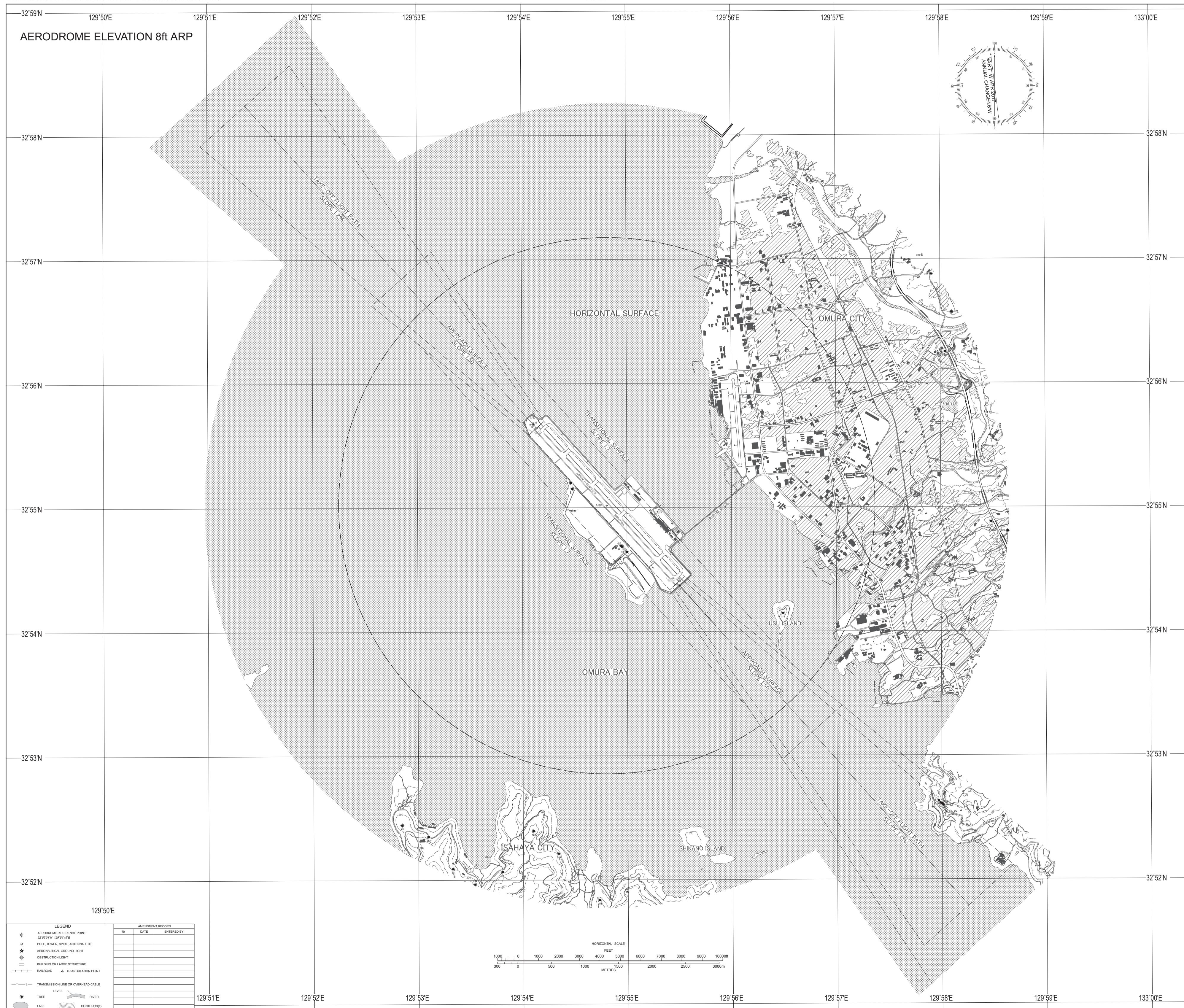
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DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



AERODROME OBSTACLE CHART-ICAO TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

SID

NORTH NINE DEPARTURE

RWY 14: Climb RWY HDG to 500FT, climb via OLE R143 to 1800FT,
turn right HDG001° to intercept and proceed via OLE R331 to PEARL,...

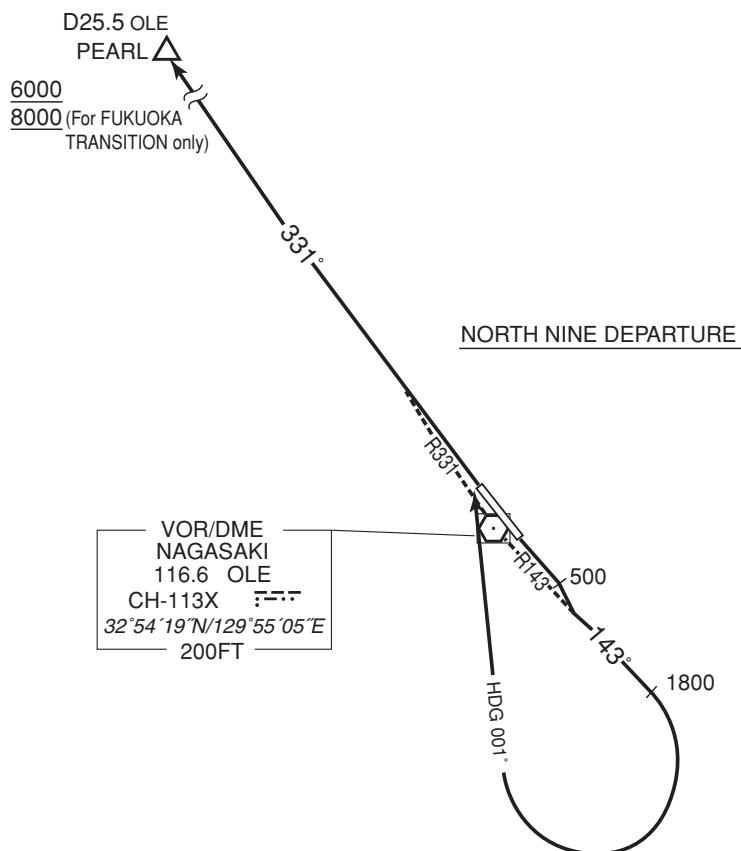
RWY 32: Climb via OLE R331 to PEARL,...

... 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 1800FT.
OBST ALT 854FT located at 3.40NM 170° FM end of RWY14.

CHANGE : SID renamed



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 R202 to IKE VOR/DME.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

SID

WEST SIX DEPARTURE

RWY 14: Climb RWY HDG to 500FT, climb via OLE R143 to 1800FT, turn right HDG291° to intercept and proceed via OLE R246...

RWY 32: Climb RWY HDG 1500FT, turn left HDG201° to intercept and proceed via OLE R246...

... to SUMOU.

Cross SUMOU at or above 4000FT.

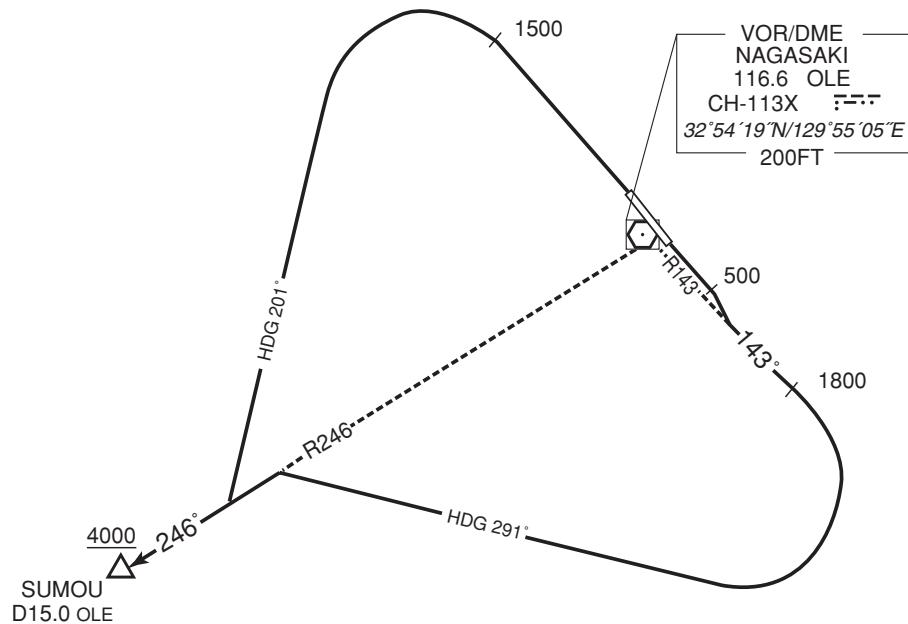
Note RWY 14: 5.0% climb gradient required up to 1800FT.

OBST ALT 854FT located at 3.40NM 170° FM end of RWY14.

RWY 32: 5.0% climb gradient required up to 1500FT.

OBST ALT 1969FT located at 8.01NM 271° FM end of RWY32.

WEST SIX DEPARTURE



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

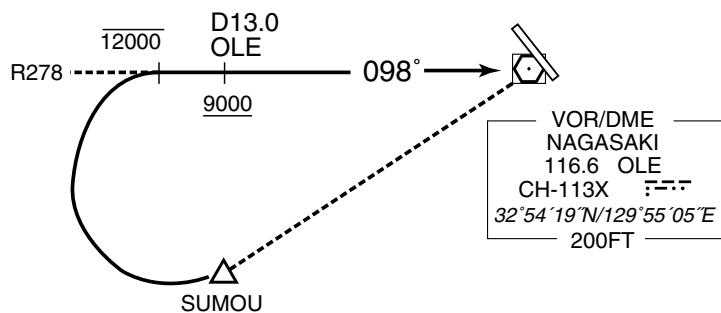
TRANSITION

OMURA TRANSITION

From over SUMOU, turn right to intercept and proceed via OLE R278 to OLE VOR/DME.

Maintain 12000FT or below until intercepting OLE R278.

Cross OLE R278/13.0DME at or above 9000FT.

OMURA TRANSITIONCARCO TRANSITION

From over SUMOU, turn right HDG 307° to intercept and proceed via OLE R262 /FUE R082 to CARCO.

Maintain 12000FT or below until intercepting OLE R262.

CARCO TRANSITION

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

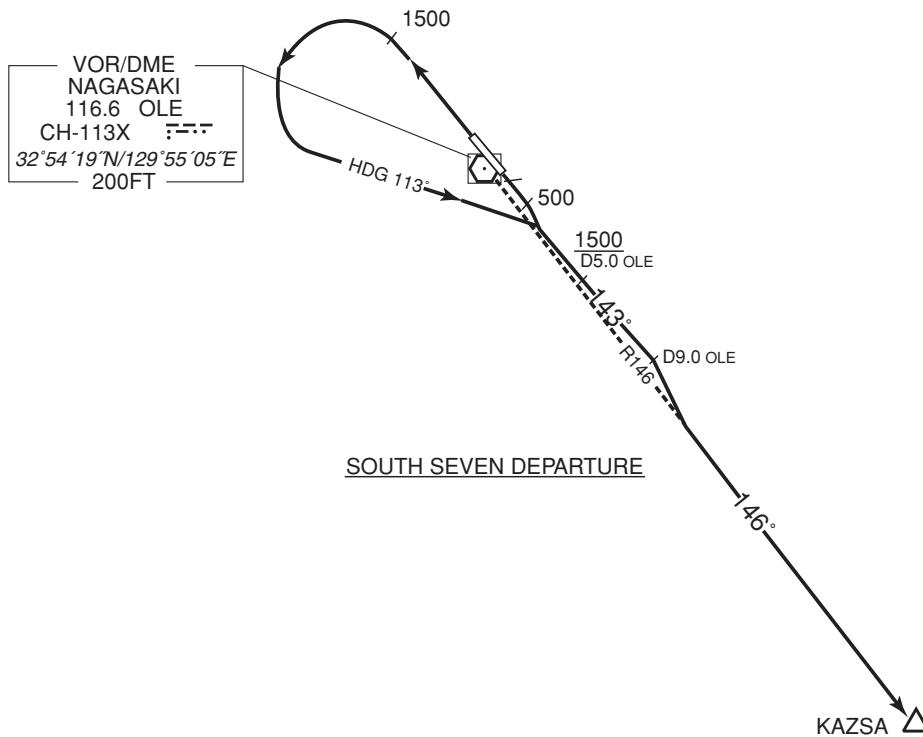
SID

SOUTH SEVEN DEPARTURE

RWY 14: Climb RWY HDG to 500FT, climb via OLE R143 to 9.0DME, turn right to intercept and proceed via OLE R146 to KAZSA. Cross OLE R143/5.0DME at or above 1500FT.

RWY 32: Climb RWY HDG to 1500FT, turn left HDG113° to intercept and proceed via OLE R143 to 9.0DME, turn right to intercept and proceed via OLE R146 to KAZSA.

Note RWY 14: 5.0% climb gradient required up to 1500FT.
OBST ALT 854FT located at 3.40NM 170° FM end of RWY14.
RWY 32: 5.0% climb gradient required up to 1500FT.
OBST ALT 1969FT located at 8.01NM 271° FM end of RWY32.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

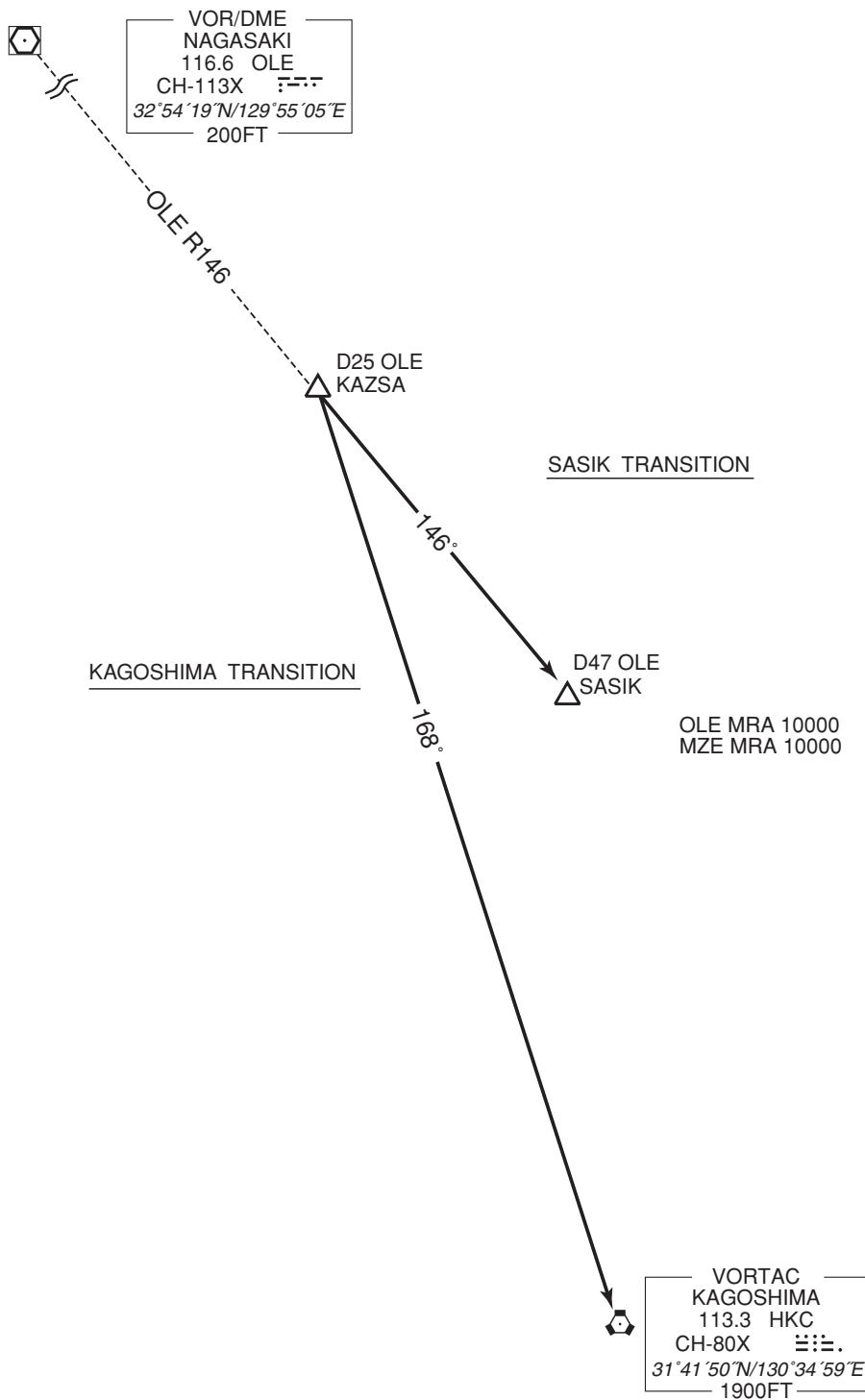
TRANSITION

SASIK TRANSITION

From over KAZSA, via OLE R146 to SASIK.

KAGOSHIMA TRANSITION

From over KAZSA, via HKC R348 to HKC VORTAC.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

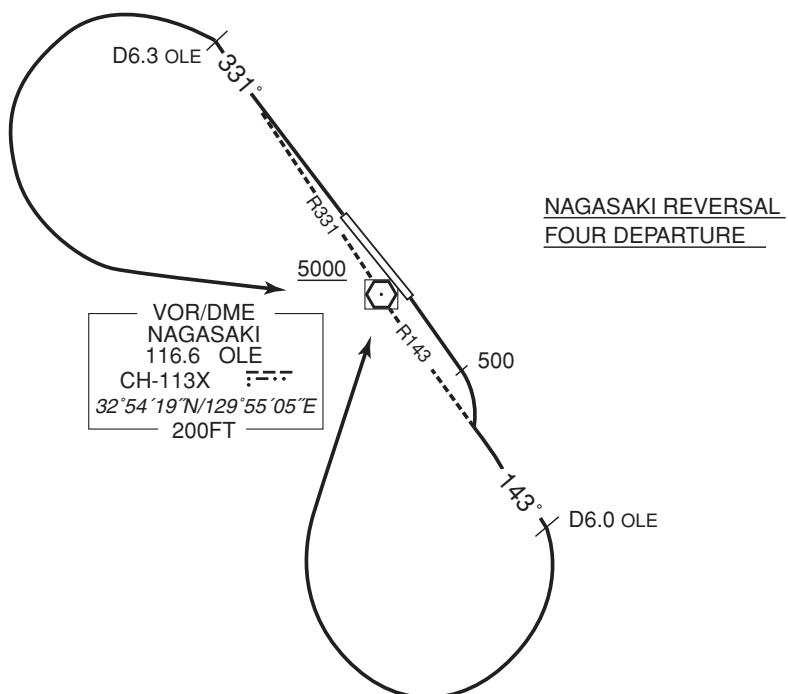
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NAGASAKI REVERSAL FOUR DEPARTURE

RWY 14: Climb RWY HDG to 500FT, climb via OLE R143 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 7.69NM 164° FM end of RWY14.
RWY 32: 5.0% climb gradient required up to 1600FT.
OBST ALT 1969FT located at 8.01NM 271° FM end of RWY32.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV SID

CHIKUGO FOUR DEPARTURE

RNAV1

Note 1) DME/DME/IRU or GNSS required.

※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off roll.

2) RADAR service required.

Critical DME

RWY14
SGE: 13.0NM to FU401 - FU401

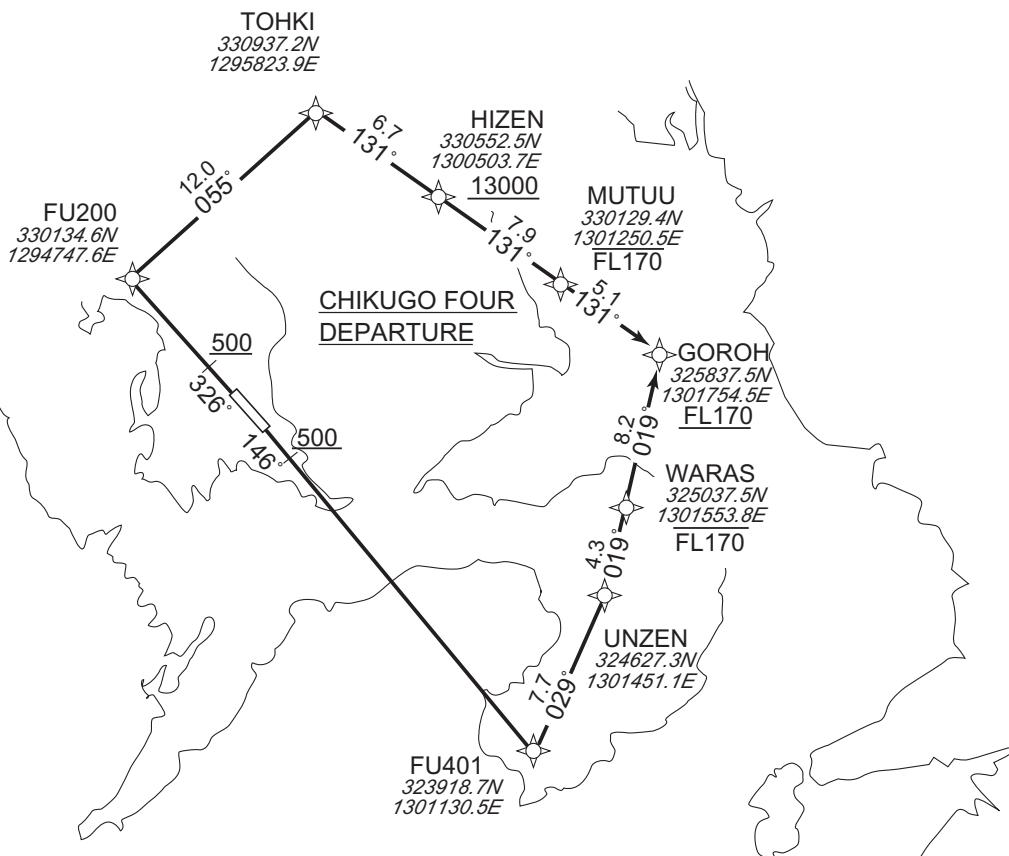
DME GAP

RWY14
RWY14 DER - 13.0NM to FU401
RWY32
RWY32 DER - 4.0NM to FU200

Inappropriate Navaids

See AD1.1.6.10.3. Inappropriate NAV/AIDs for RNAV1

VAR 7° W(2020)

CHIKUGO FOUR DEPARTURE

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 : PROC.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

RNAV SID

CHIKUGO FOUR 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)	-7.5	—	—	+500	—	—	RNAV1
002	DF	FU401	—	—	-7.5	—	—	—	—	—	RNAV1
003	TF	UNZEN	—	029 (021.5)	-7.5	7.7	—	—	—	—	RNAV1
004	TF	WARAS	—	019 (011.9)	-7.5	4.3	—	-FL170	—	—	RNAV1
005	TF	GOROH	—	019 (011.9)	-7.5	8.2	—	+FL170	—	—	RNAV1

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)	-7.5	—	—	+500	—	—	RNAV1
002	DF	FU200	—	—	-7.5	—	—	—	—	—	RNAV1
003	TF	TOHKI	—	055 (047.8)	-7.5	12.0	—	—	—	—	RNAV1
004	TF	HIZEN	—	131 (123.8)	-7.5	6.7	—	+13000	—	—	RNAV1
005	TF	MUTUU	—	131 (123.9)	-7.5	7.9	—	-FL170	—	—	RNAV1
006	TF	GOROH	—	131 (124.0)	-7.5	5.1	—	+FL170	—	—	RNAV1

CHANGE : PROC.

STANDARD DEPARTURE CHART -INSTRUMENT

RJFU / NAGASAKI

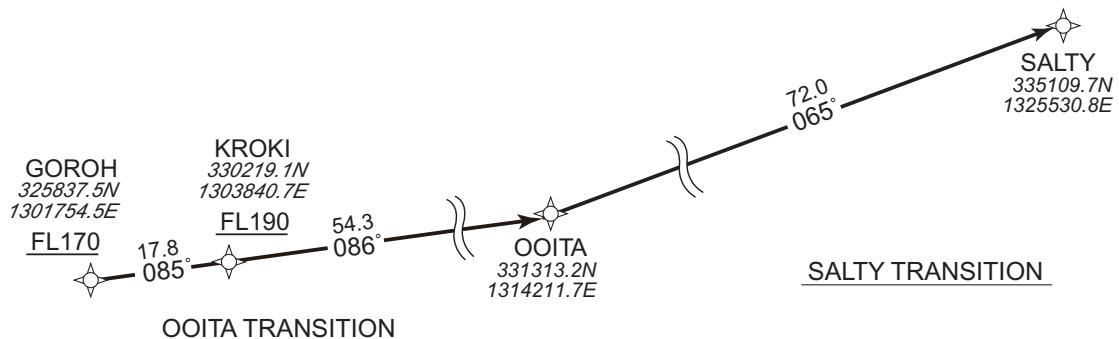
RNAV TRANSITION

SALTY TRANSITION / OOITA TRANSITION

RNAV1

Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required.	Critical DME	—
	DME GAP	—
	Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 7° W(2020)

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	—	—	-7.5	—	—	+FL170	—	—	RNAV1
002	TF	KROKI	—	085 (077.9)	-7.5	17.8	—	+FL190	—	—	RNAV1
003	TF	OOITA	—	086 (078.1)	-7.5	54.3	—	—	—	—	RNAV1
004	TF	SALTY	—	065 (057.8)	-7.5	72.0	—	—	—	—	RNAV1

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	—	—	-7.5	—	—	+FL170	—	—	RNAV1
002	TF	KROKI	—	085 (077.9)	-7.5	17.8	—	+FL190	—	—	RNAV1
003	TF	OOITA	—	086 (078.1)	-7.5	54.3	—	—	—	—	RNAV1

CHANGE : PROC.

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.

Critical DME	-		
DME GAP	-		
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1		

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	-	-	-7.4	-	-	+11000	-	-	RNAV1
002	TF	GLOVR	-	237 (229.3)	-7.4	9.2	-	+7000	-	-	RNAV1
003	TF	OTAXA	-	237 (229.2)	-7.4	6.1	-	+4000	-	-	RNAV1
004	TF	SARUK	-	237 (229.2)	-7.4	6.2	-	+3700	-	-	RNAV1

FUBUKI ARRIVAL

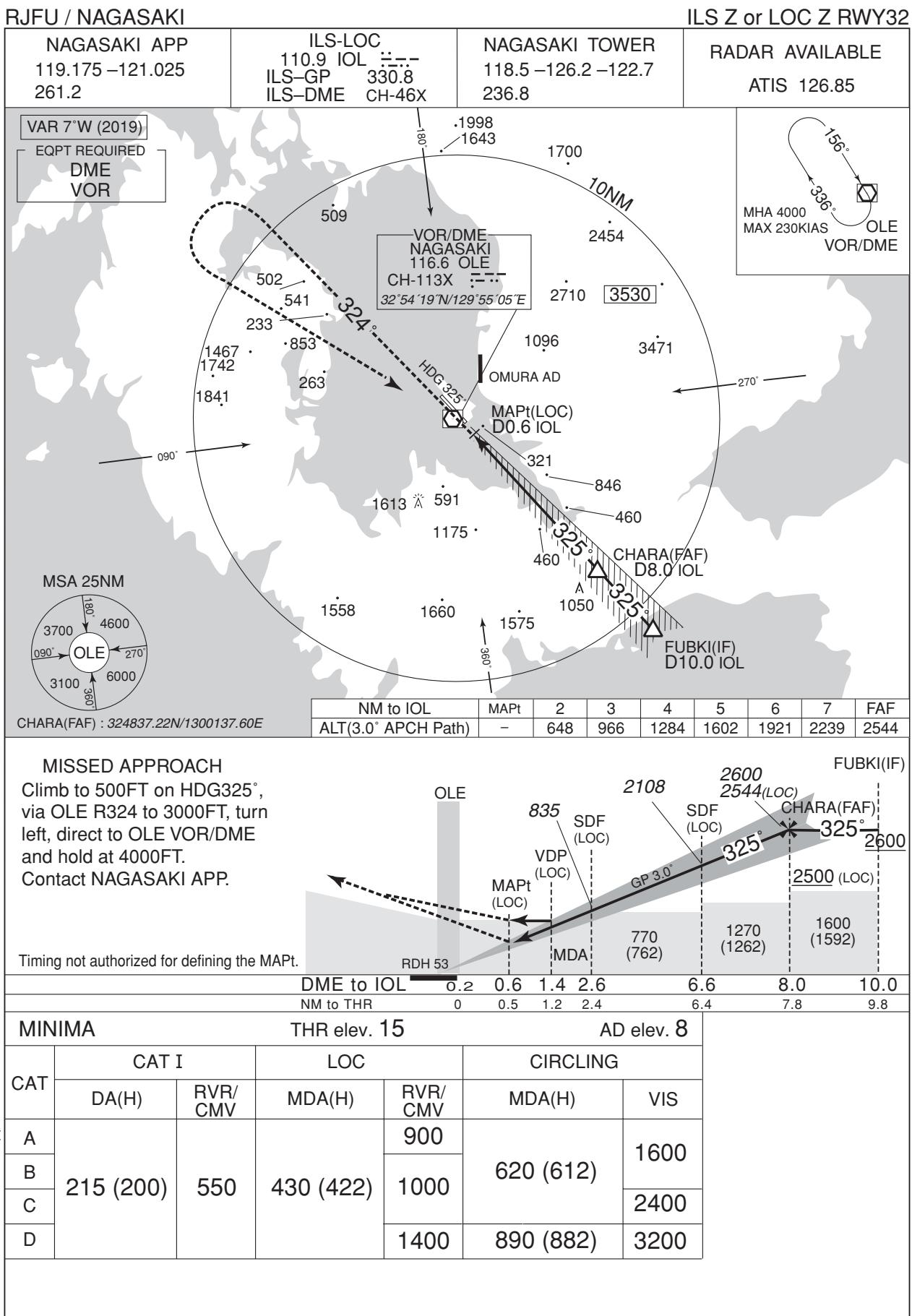
From OHGIE at or above 11000FT, to PADDY, to TARAH at or above 7000FT, to TAKAK at or above 5000FT, to OBAMA, to AINOH, to FUBKI at or above 2600FT.

Critical DME	OLE	OBAMA - FUBKI
	SGE	OBAMA - FUBKI
DME GAP	-	
Inappropriate Navaids	See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1	

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	-	-	-7.4	-	-	+11000	-	-	RNAV1
002	TF	PADDY	-	190 (183.1)	-7.4	6.8	-	-	-	-	RNAV1
003	TF	TARAH	-	190 (183.1)	-7.4	10.9	-	+7000	-	-	RNAV1
004	TF	TAKAK	-	190 (183.0)	-7.4	8.0	-	+5000	-	-	RNAV1
005	TF	OBAMA	-	190 (183.0)	-7.4	6.1	-	-	-230	-	RNAV1
006	TF	AINOH	-	235 (228.0)	-7.4	2.7	-	-	-210	-	RNAV1
007	TF	FUBKI	-	296 (288.2)	-7.4	2.7	-	+2600	-	-	RNAV1

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	190 (183.0)	-7.4	1.0(-14000) 1.5(+14001)	R	5000	-	-210(-14000) -240(+14001)	RNAV1

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJFU / NAGASAKI

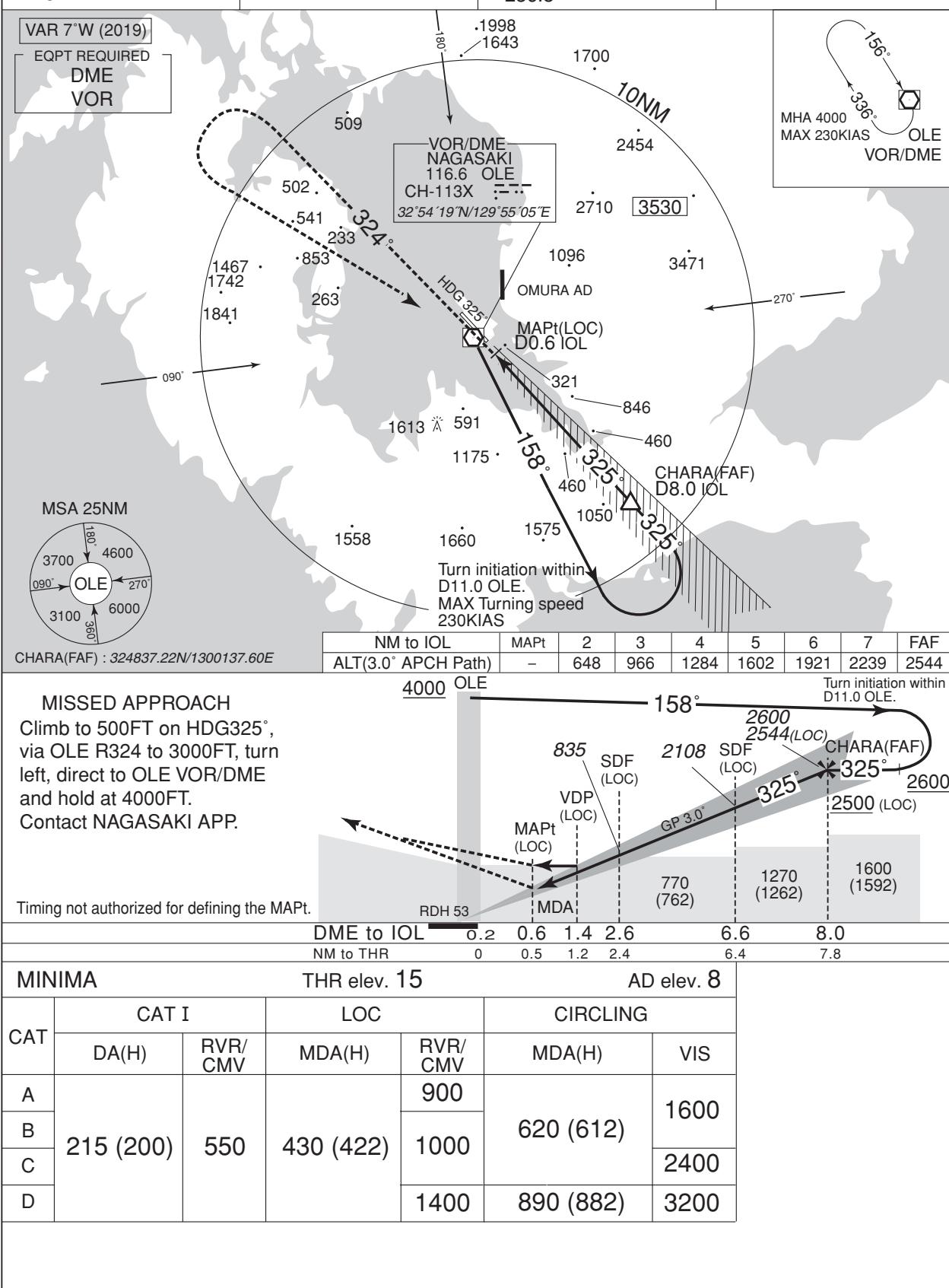
ILS-LOC
110.9 IOL 2--
S-DME CH 46Y

NAGASAKI TOWER
118.5 -126.2 -122.7
236.8

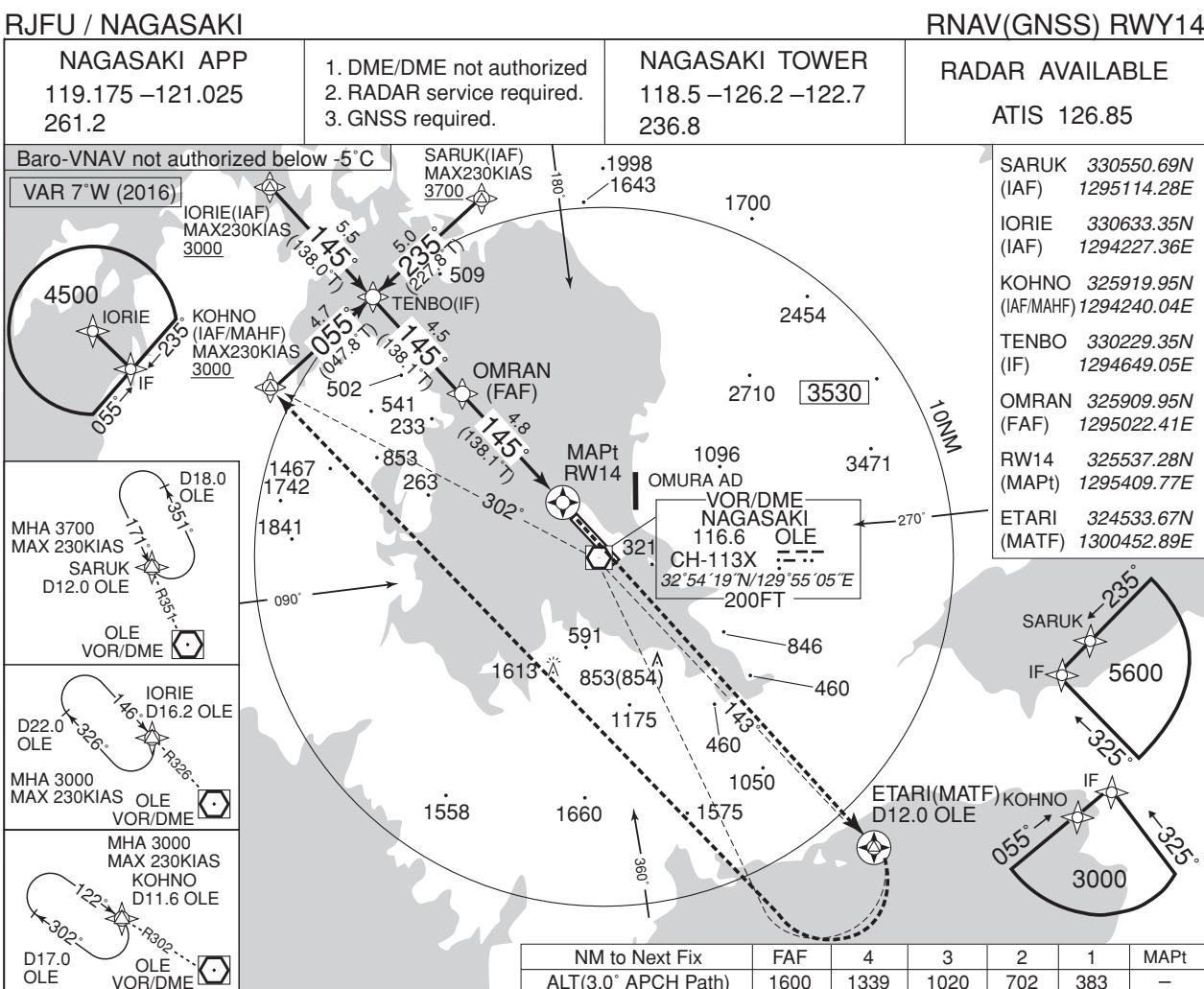
ILS Y or LOC Y RWY32

ATIS 126 85

VAR 7°W (2019)



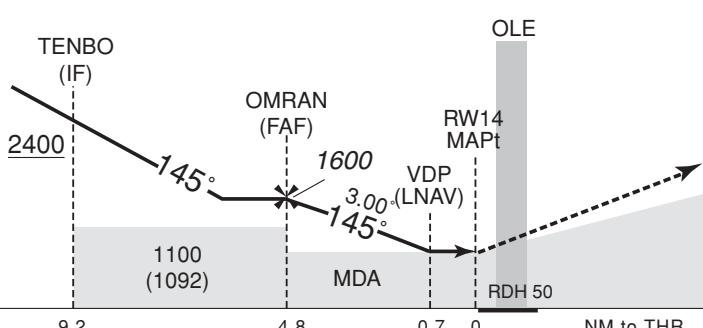
INSTRUMENT APPROACH CHART



MISSED APPROACH

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

(For using VOR/DME)
Climb via OLE R143 to ETARI, turn right, direct to OLE VOR/DNE, via OLE R302 to KOHNO and hold at 3000FT.
Contact NAGASAKI APP.



Missed APCH climb gradient MNM 3.0%

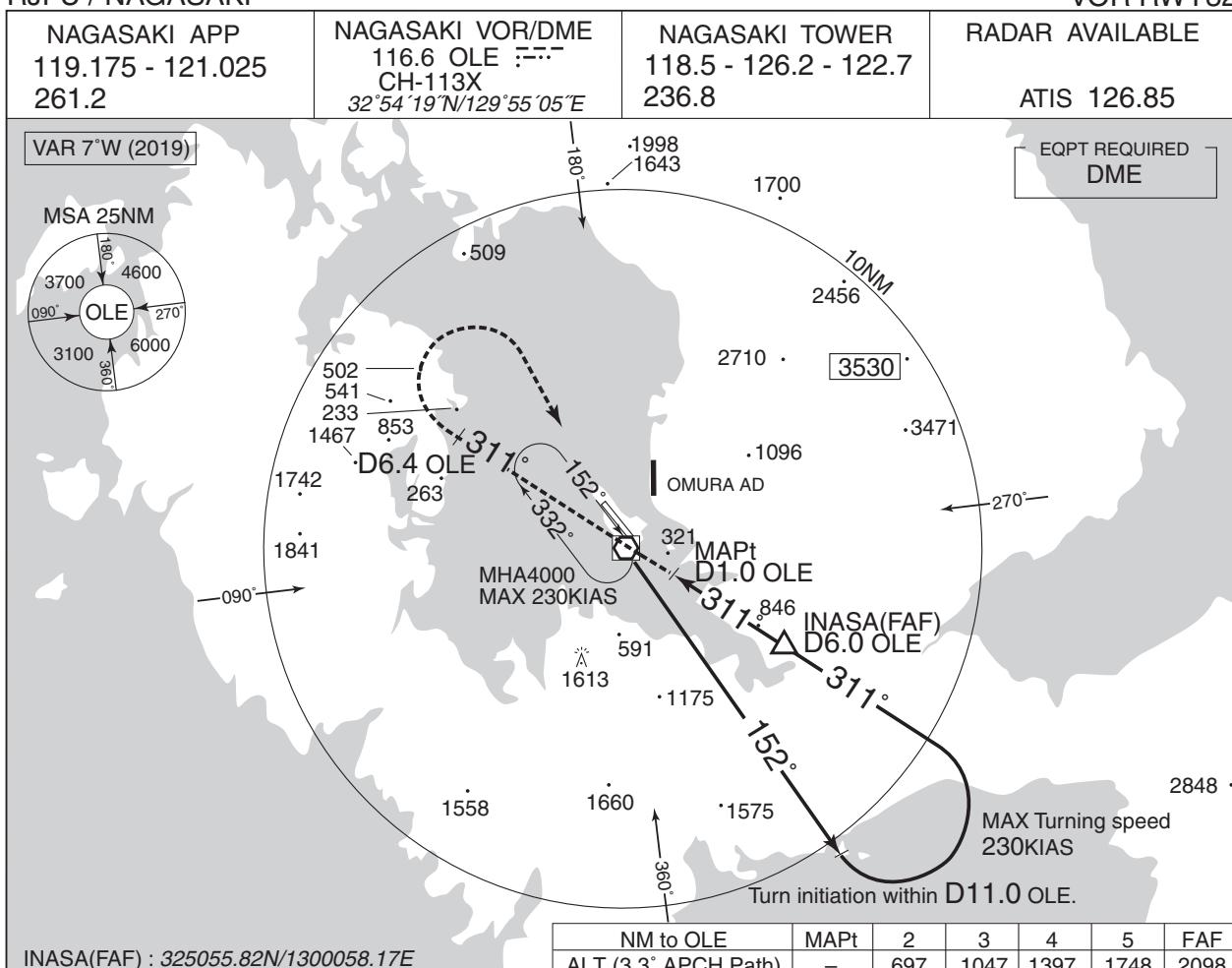
MINIMA		THR elev. 14		AD elev. 8		
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	290 (276)	1000	290 (282)	1000	620 (612)	1600
B		1100		1100		2400
C		1200		1200		3200
D		1400		1400	890(882)	

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

INSTRUMENT APPROACH CHART

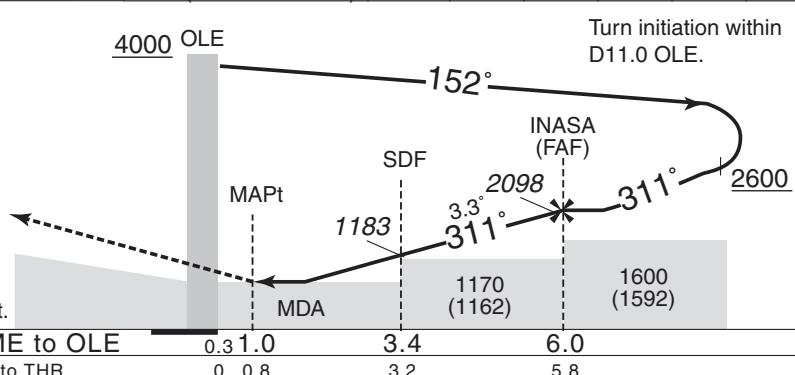
RJFU / NAGASAKI

VOR RWY32



MISSSED APPROACH

Climb to 4000FT via OLE
R311 to OLE 6.4DME,
turn right direct to OLE
VOR/DME and hold.
Contact NAGASAKI APP.



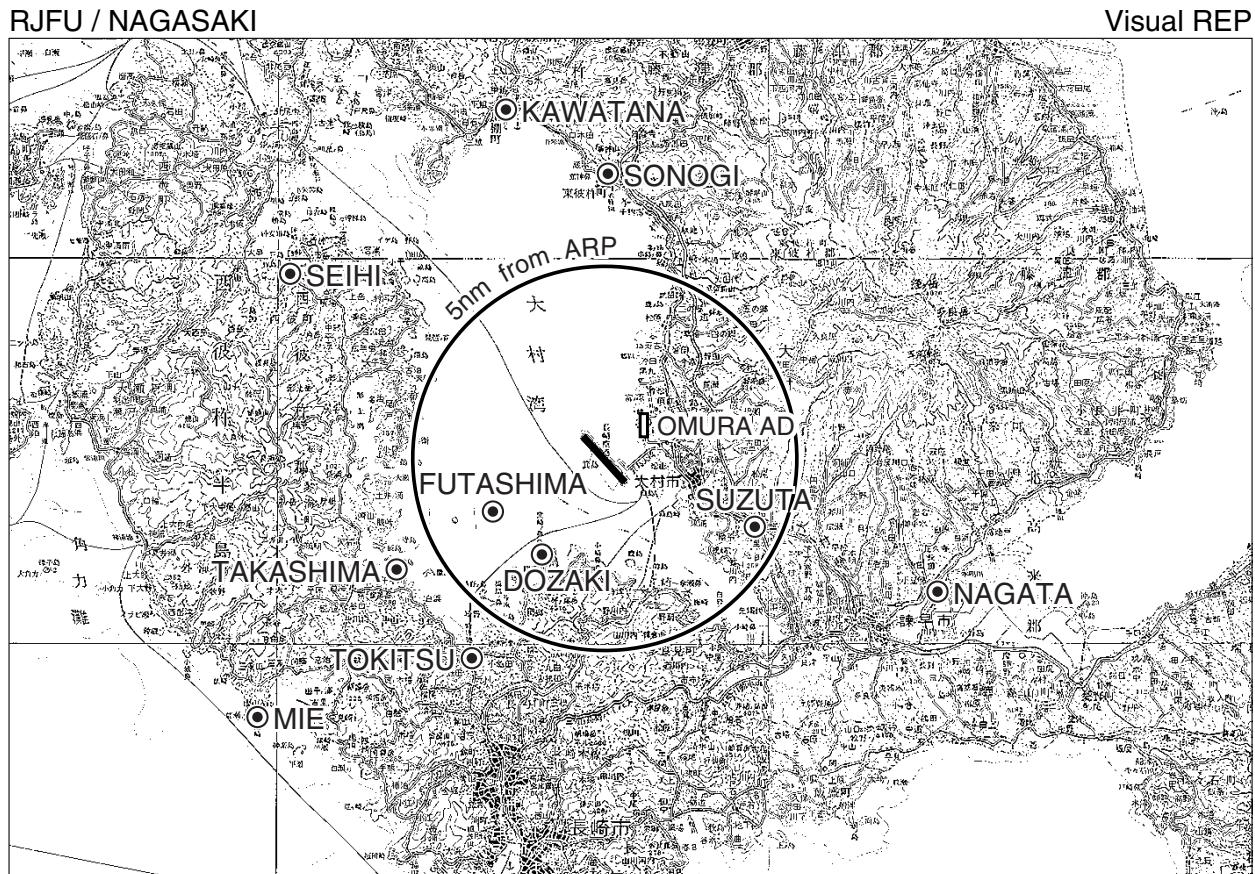
CHANGE : VAR, INASA(FAF) established, Editorial

MINIMA		THR elev. 15	AD elev. 8	
CAT			CIRCLING	
	MDA(H)	RVR/CMV	MDA(H)	VIS
A		1000		1600
B	570 (562)	1200	620 (612)	2400
C		1600	890 (882)	3200

INSTRUMENT APPROACH CHART



INTENTIONALLY LEFT BLANK



Call sign	BRG / DIST from ARP	Remarks
彼杵 Sonogi	005°/ 7.5NM	JR駅 JR Station
長田 Nagata	118°/ 9.4NM	不知火橋 Bridge
鈴田 Suzuta	120°/ 4.3NM	九州自動車道と国道34号線の交点 Intersection
時津 Tokitsu	219°/ 6.0NM	時津港 Harbor
堂崎 Dozaki	227°/ 2.7NM	堂崎鼻 A point of land
三重 Mie	240°/11.0NM	三重崎 A point of land
鷹島 Takashima	251°/ 5.4NM	鷹島 Island
二島 Futashima	252°/ 3.2NM	二島 Island
西彼 Seihi	307°/ 9.2NM	オランダ村 Windmill
川棚 Kawatana	350°/ 9.3NM	JR駅 JR Station

RJFU / NAGASAKI

LDG CHART



RJFU / NAGASAKI

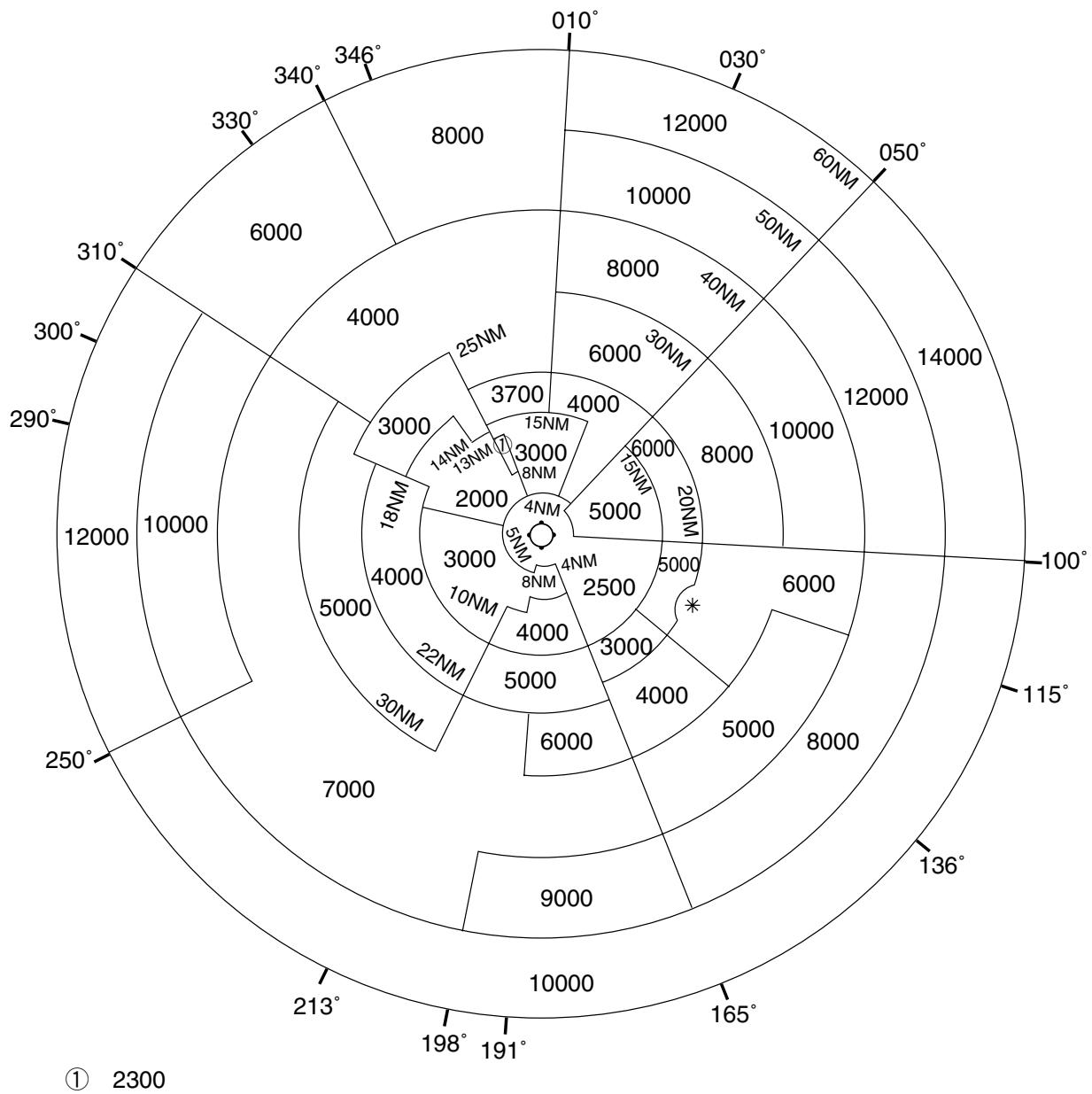
HOLDING PATTERN



RJFU / NAGASAKI

Minimum Vectoring Altitude CHART

VAR 7°W (2011)



CENTER : 325458N/1295428E (RADAR SITE)

* : 324540N/1301756E RADIUS : 3NM