AD 2 AERODROMES

ROYN AD 2.1 AERODROME LOCATION INDICATOR AND NAME

ROYN - YONAGUNI

ROYN AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1	ARP coordinates and site at AD	*242803N/1225847E* 075°/1.00km from RWY 08 THR
2	Direction and distance from (city)	124km W from ISHIGAKI City
3	Elevation/ Reference temperature	49ft / 32.7°C(2001 - 2005)
4	Geoid undulation at AD ELEV PSN	76ft
5	MAG VAR/ Annual change	3°44'(2006) / Annual Change 0°03'W
6	AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses	OKINAWA PREF. Public AP. 4350, Aza-Yonaguni, Yonaguni-cho, Yaeyama-gun, Okinawa Pref Tel 0980-87-8375, 0980-87-3266 Fax 0980-87-2913, E-mail:aa063002@pref.okinawa.lg.jp Web: http://www.pref.okinawa.jp/
7	Types of traffic permitted (IFR/ VFR)	IFR/VFR
8	Remarks	Nil

ROYN AD 2.3 OPERATIONAL HOURS

1	AD Administration	2300 - 1030
2	Customs and immigration	On request Customs: 0980-87-2804 Immigration: 0980-82-2333
3	Health and sanitation	Quarantine(human): On request(0980-82-4940) Quarantine(animal, plant): Nil
4	AIS Briefing Office	Nil
5	ATS Reporting Office(ARO)	Nil
6	MET Briefing Office	H24 (NAHA)
7	ATS	2300 - 1030 Remarks: AFIS provided by Naha Airport Office.
8	Fuelling	Nil
9	Handling	2300 - 1030
10	Security	2300 - 1030
11	De-icing	Nil
12	Remarks	Nil

ROYN AD 2.4 HANDLING SERVICES AND FACILITIES

1	Cargo-handling facilities	Ask AD Administration
2	Fuel/ oil types	Nil
3	Fuelling facilities/ capacity	Nil
4	De-icing facilities	Nil
5	Hangar space for visiting aircraft	Nil
6	Repair facilities for visiting aircraft	Nil
7	Remarks	Nil

ROYN AD 2.5 PASSENGER FACILITIES

1	Hotels	Hotels in Yonaguni-cho
2	Restaurants	Restaurants in Yonaguni-cho
3	Transportation	Busses and Taxis
4	Medical facilities	Clinic in Yonaguni-cho 4.0km
5	Bank and Post Office	Post Office in Yonaguni-cho
6	Tourist Office	Nil
7	Remarks	Nil

ROYN AD 2.6 RESCUE AND FIRE FIGHTING SERVICES

1	AD category for fire fighting	CAT 7
2	Rescue equipment	Chemical fire fighting truck (6,000-Liter Class) x 2 Chemical fire fighting truck (3,000-Liter Class) x 1
3	Capability for removal of disabled aircraft	Incapable
4	Remarks	Nil

ROYN AD 2.7 SEASONAL AVAILABILITY-CLEARING

1	Types of clearing equipment	Not Applicable
2	Clearance priorities	Not Applicable
3	Remarks	Nil

ROYN AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

1	Apron surface and strength	Surface: Asphalt-concrete Strength: PCN 40/F/A/X/T
2	Taxiway width, surface and strength	Width: 23m Surface: Asphalt-concrete Strength: PCN 52/F/A/X/T
3	ACL and elevation	Not Available
4	VOR checkpoints	Not Available
5	INS checkpoints	Spot NR S-1 : *242756.96N/1225845.44E* S-2 : *242757.51N/1225847.70E*
6	Remarks	Nil

ROYN 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	Nil
2	RWY and TWY markings and LGT	RWY: RWY08/26 (Marking): RWY designation, RWY CL, RWY THR, RWY middle point, TDZ, RWY side stripes, Aiming point (LGT): RCLL, REDL, RENL, RTHL TWY: (Marking): TWY CL, RWY HLDG PSN, TWY side stripe (LGT): TWY edge LGT, TWY CL LGT
3	Stop bars	Nil
4	Remarks	(Marking): Overrun area, Apron TWY CL (LGT): Apron flood LGT

ROYN AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

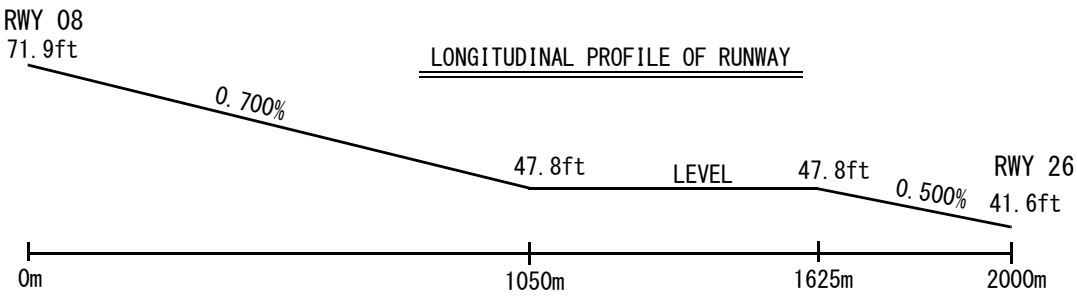
ROYN AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

1	Associated MET Office	NAHA
2	Hours of service MET Office outside hours	H24 (NAHA)
3	Office responsible for TAF preparation Periods of validity	Nil
4	Trend forecast Interval of issuance	Nil
5	Briefing/ consultation provided	Briefing is available upon inquiry at NAHA
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}, U_2/T_r, P_S, P_5, P_3, P_{25}, P_{SWE}, P_{SWF}, P_{SWG}, P_{SWI}, P_{SWM}, P_{SW}(domestic), 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	RADIO
10	Additional information(limitation of service, etc.)	Nil

ROYN 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
08	075.27°	2000×45	PCN 52/F/A/X/T Asphalt-concrete	*242754.37N* *1225812.86E* 76ft	THR ELEV: 71.9FT
26	255.27°	2000×45	PCN 52/F/A/X/T Asphalt-concrete	*242810.89N* *1225921.54E* 76ft	THR ELEV: 41.6FT

Slope of RWY	Strip Dimensions(M)	RESA(Overrun) Dimensions(M)	Remarks
7	10	11	14
See below figure	2120×150 2120×150	91×156 200×156	RWY Grooving : 30m×2000m



ROYN AD 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
08	2000	2000	2000	2000	Nil
26	2000	2000	2000	2000	Nil

ROYN 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
08	-	Green -	PAPI 3.0° /LEFT 356.1m 49ft	-	2,000m 30m Coded color LIH	2,000m 60m Coded color LIH	Red	Nil(*2)
26	SALS (*1) 420m LIH	Green -	PAPI 3.0°/LEFT 276.6m 49ft	-	2,000m 30m Coded color LIH	2,000m 60m Coded color LIH	Red	Nil(*2)
Remarks								
10								
SALS with RAI(LEN:360m)(*1) Overrun area edge LGT(LEN:60m Color:Red)(*2) RWY THR ID LGT for RWY 08 THR (Color: White)								

ROYN AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1	ABN/IBN location, characteristics and hours of operation	ABN: *242756N/1225853E*, White/Green EV4.3sec, HO
2	LDI location and LGT Anemometer location and LGT	LDI : Nil Anemometer : AVBL
3	TWY edge and centerline lighting	TWY edge and center line lights installed, see AD2.9
4	Secondary power supply/ switch-over time	Within 15sec: All Lights
5	Remarks	Nil

ROYN AD 2.16 HELICOPTER LANDING AREA

Nil

ROYN 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
Yonaguni Information Zone	Area within a radius of 5nm of Yonaguni ARP	------ 3000	-	Yonaguni Radio En	Nil

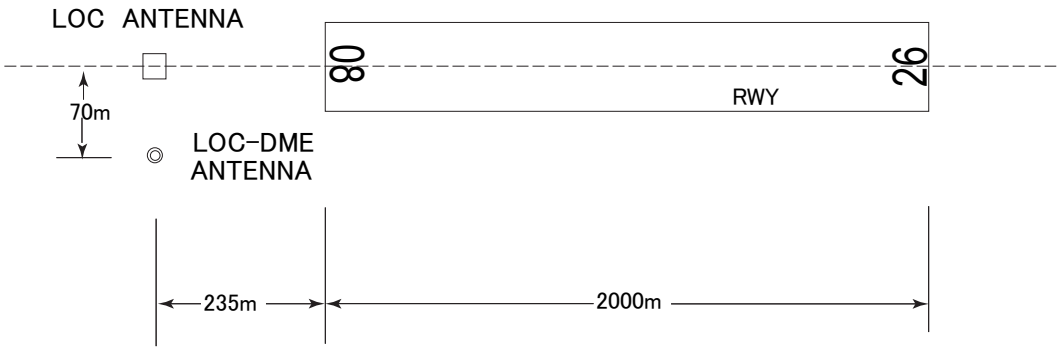
ROYN AD 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Frequency	Hours of operation	Remarks
1	2	3	4	5
AFIS	Yonaguni Radio	118.5MHz	2300 - 1030	Operated by Naha Airport Office.

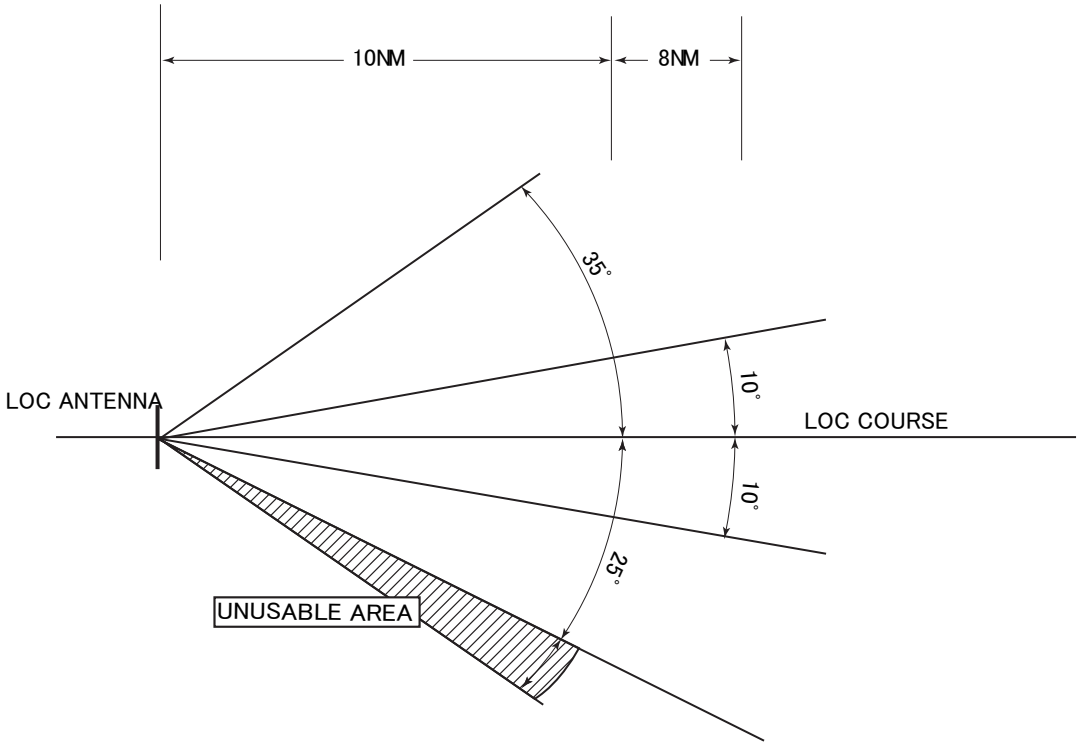
ROYN AD 2.19 RADIO NAVIGATION AND LANDING AIDS

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 (5°W/2019)	YNE	115.05MHz	H24	*242753.72N/1225951.86E*		Unusable: 140° -170° beyond 20nm BLW 4000ft.
DME	YNE	1058MHz (CH-97Y)	H24	*242753.72N/1225951.86E*	314.6ft	
LOC 26	IYN	108.55MHz	2300-1030	*242752.42N/1225804.79E*		LOC 26: 235m (771ft) away FM RWY 08 THR, BRG (MAG) 259°
LOC-DME 26	IYN	1109MHz (CH-22Y)	2300-1030	*242750.22N/1225805.42E*		DME 26: 235m (771ft) inside FM RWY 08 THR, 70m (230ft) S of RCL. ELEV 25.8m (85ft). Unusable: beyond 25° south (90Hz) side of course due to terrain
MSAS		1575.42MHz	H24			Transmitting antennas are satellite based.

LOC and LOC-DME for RWY26



REMARKS : 1. LOC beam BRG(MAG) 259°
2. ELEV of LOC-DME 25.8m(85ft)



UNUSABLE : BEYOND 25DEG SOUTH (90Hz) SIDE OF COURSE DUE TO TERRAIN.

ROYN AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

On use of YONAGUNI airport, aircraft operator is required to notify Okinawa Pref. in advance.

2. Taxiing to and from stands

Nil

3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

Nil

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

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

ROYN AD 2.21 NOISE ABATEMENT PROCEDURES

Ask AD administration

ROYN AD 2.22 FLIGHT PROCEDURES

TAKE OFF MINIMA

	RWY	ACFT CAT	REDL & RCLL	REDL or RCLL or RCL Marking	NIL (DAYTIME ONLY)
			CEIL-VIS	CEIL-VIS	CEIL-VIS
Multi-Engine ACFT-with TKOF ALTN AP Filed	08	A,B,C,D	0-400m	0-400m	0-500m
	26		900-2400m* 300-2400m** 0-400m***	900-2400m* 300-2400m** 0-400m***	900-2400m* 300-2400m** 0-400m***
OTHER	08	A,B,C,D	AVBL LDG MINIMA		
	26				

* Applicable to Conventional Departure in case of not climbing with 9.0%.
**Applicable to RNAV Departure in case of not climbing with 7.2%.
***Applicable to Conventional Departure in case of climbing with 9.0% gradient up to 900FT.
***Applicable to RNAV Departure in case of climbing with 7.2% gradient up to 600FT.

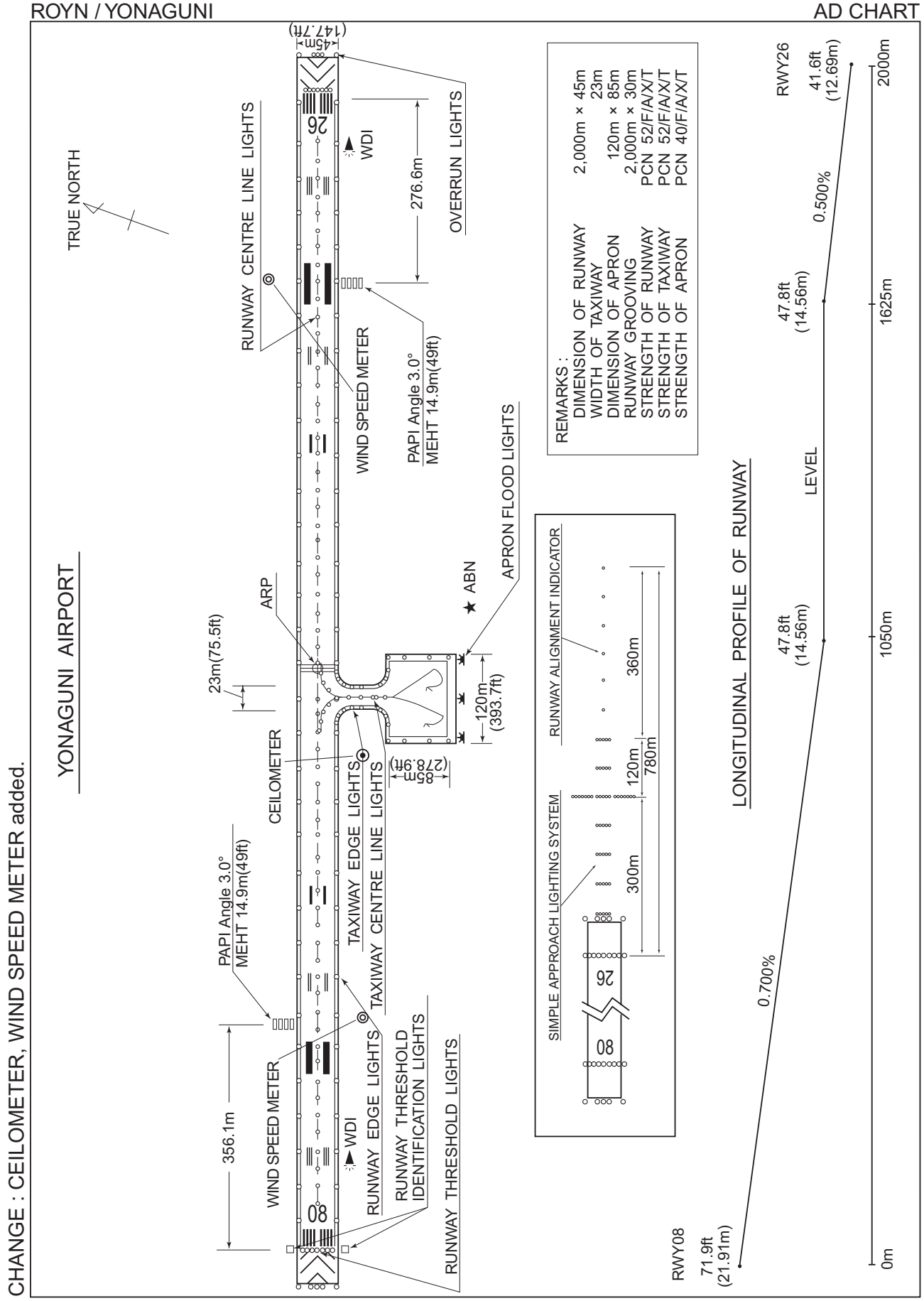
ROYN AD 2.23 ADDITIONAL INFORMATION

Ask AD administration

ROYN AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart - Instrument (TAKZO, ABASA)
Standard Departure Chart - Instrument (AYAKA-RNAV)
Standard Arrival Chart - Instrument (ABASA-RNAV)
Instrument Approach Chart (LOC RWY26)
Instrument Approach Chart (VOR RWY26)
Instrument Approach Chart (RNAV(GNSS) RWY26)
Other Chart (Visual REP)
Other Chart (MVA CHART)

ROYN / YONAGUNI AD CHART



STANDARD DEPARTURE CHART -INSTRUMENT

ROYN / YONAGUNI SID

CHANGE : PROC renamed. Radial FM YNE. Note RWY08 added. OBST chart added.

TAKZO TWO DEPARTURE

RWY 08 : Climb RWY HDG until 3NM from RWY end/YNE 2.7DME, turn left,...
RWY 26 : Climb RWY HDG until 700FT, turn right,...
...climb via YNE R022 to TAKZO.

Note RWY08 : 6.7% climb gradient required up to 700FT.
OBST ALT 89FT located at 0.1NM 126° FM end of RWY08.

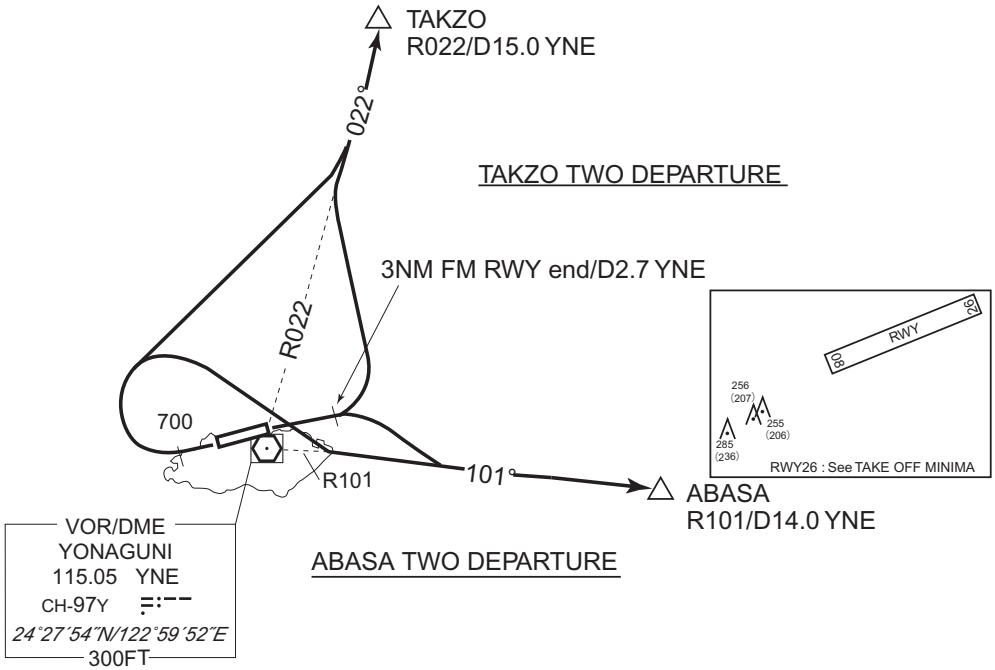
RWY26 : No turn before DER.
In case of climbing with 9.0 % gradient up to 900FT, another TKOF WX MINIMA is applicable.
OBST ALT 358FT located at 0.6NM 236˚ FM end of RWY26,
OBST ALT 912FT located at 2.1NM 115˚ FM end of RWY26.

ABASA TWO DEPARTURE

RWY 08 : Climb RWY HDG until 3NM from RWY end/YNE 2.7DME, turn right,...
RWY 26 : Climb RWY HDG until 700FT, turn right,...
...climb via YNE R101 to ABASA.

Note RWY08 : 6.7% climb gradient required up to 700FT.
OBST ALT 89FT located at 0.1NM 126° FM end of RWY08.

RWY26 : No turn before DER.
In case of climbing with 9.0 % gradient up to 900FT, another TKOF WX MINIMA is applicable.
OBST ALT 358FT located at 0.6NM 236˚ FM end of RWY26,
OBST ALT 912FT located at 2.1NM 115˚ FM end of RWY26.



STANDARD DEPARTURE CHART -INSTRUMENT

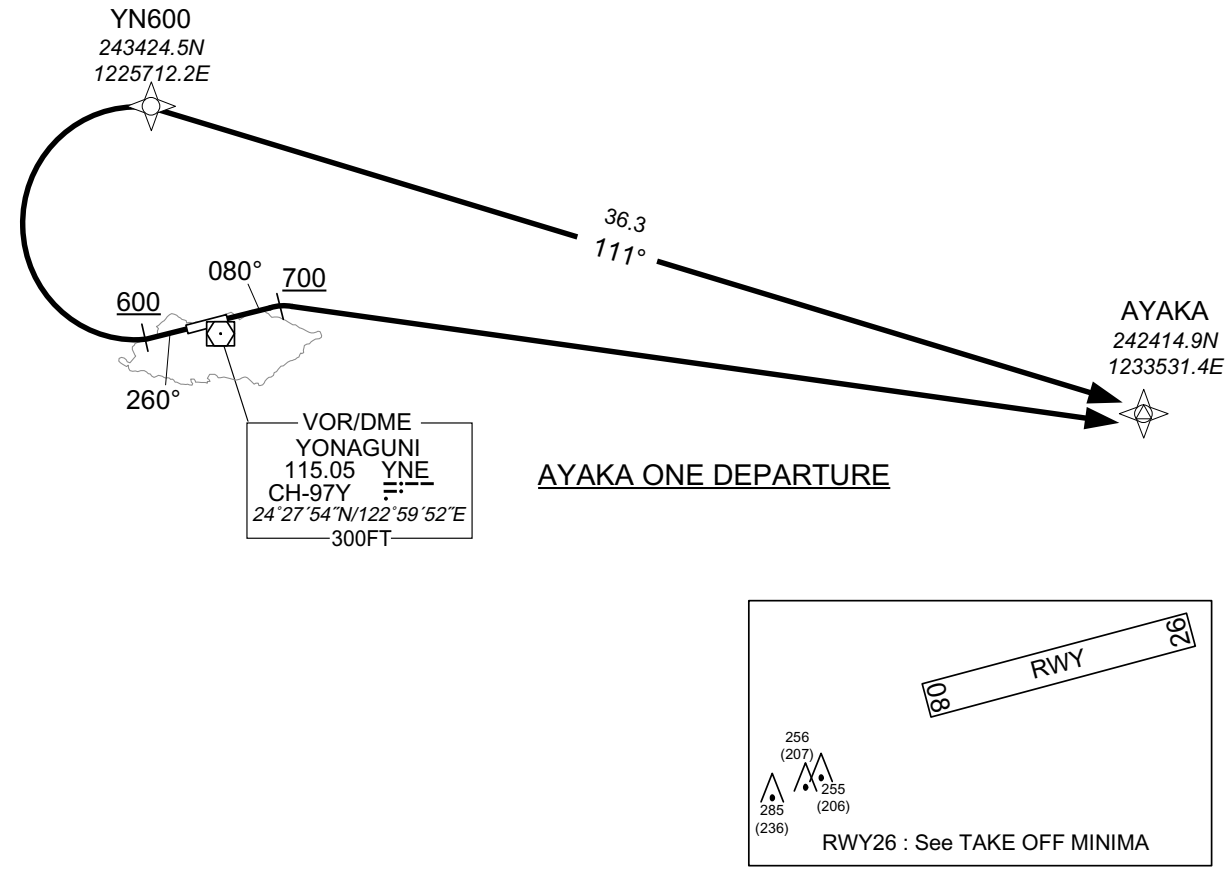
ROYN / YONAGUNI

RNAV SID

AYAKA ONE DEPARTURE	Basic RNP1

Note GNSS required.

VAR 5°W (2019)



AYAKA ONE DEPARTURE

RWY08 : Climb on HDG080° at or above 700FT, turn right direct to AYAKA.
RWY26 : Climb on HDG260° at or above 600FT, turn right direct to YN600,to AYAKA.

Note RWY08 : 6.7% climb gradient required up to 700FT.
OBST ALT 89FT located at 0.1NM 126° FM end of RWY08.

RWY26 : In case of climbing with 7.2% gradient up to 600FT, another TKOF WX MINIMA is applicable.
OBST ALT 271FT located at 0.5NM 237° FM end of RWY26.

CHANGE : New PROC

STANDARD DEPARTURE CHART -INSTRUMENT

ROYN / YONAGUNI RNAV SID

AYAKA ONE DEPARTURE

RWY08

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	—	—	080 (075.2)	-4.6	—	—	+700	—	—	Basic RNP1
002	DF	AYAKA	—	—	-4.6	—	R	—	—	—	Basic RNP1

RWY26

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	—	—	260 (255.2)	-4.6	—	—	+600	—	—	Basic RNP1
002	DF	YN600	—	—	-4.6	—	R	—	—	—	Basic RNP1
003	TF	AYAKA	—	111 (106.1)	-4.6	36.3	—	—	—	—	Basic RNP1

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

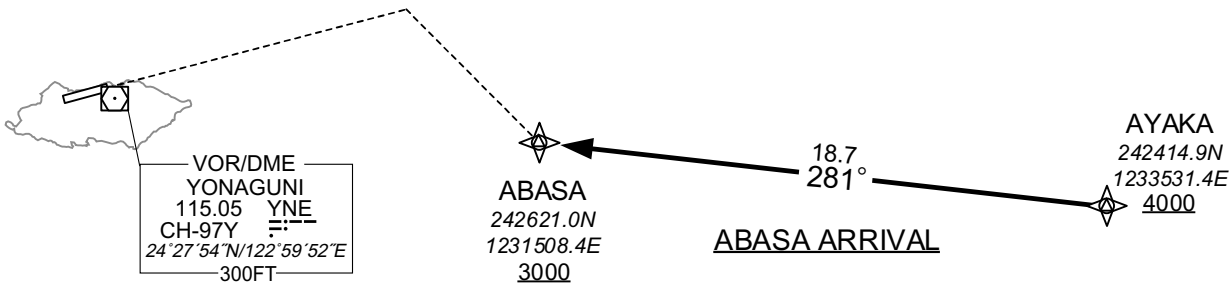
ROYN / YONAGUNI

RNAV STAR RWY26

ABASA ARRIVAL	Basic RNP1

Note GNSS required.

VAR 5°W (2019)



ABASA ARRIVAL

From AYAKA at or above 4000FT, to ABASA at or above 3000FT.

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	AYAKA	—	—	-4.6	—	—	+4000	—	—	Basic RNP1
002	TF	ABASA	—	281 (276.5)	-4.6	18.7	—	+3000	—	—	Basic RNP1

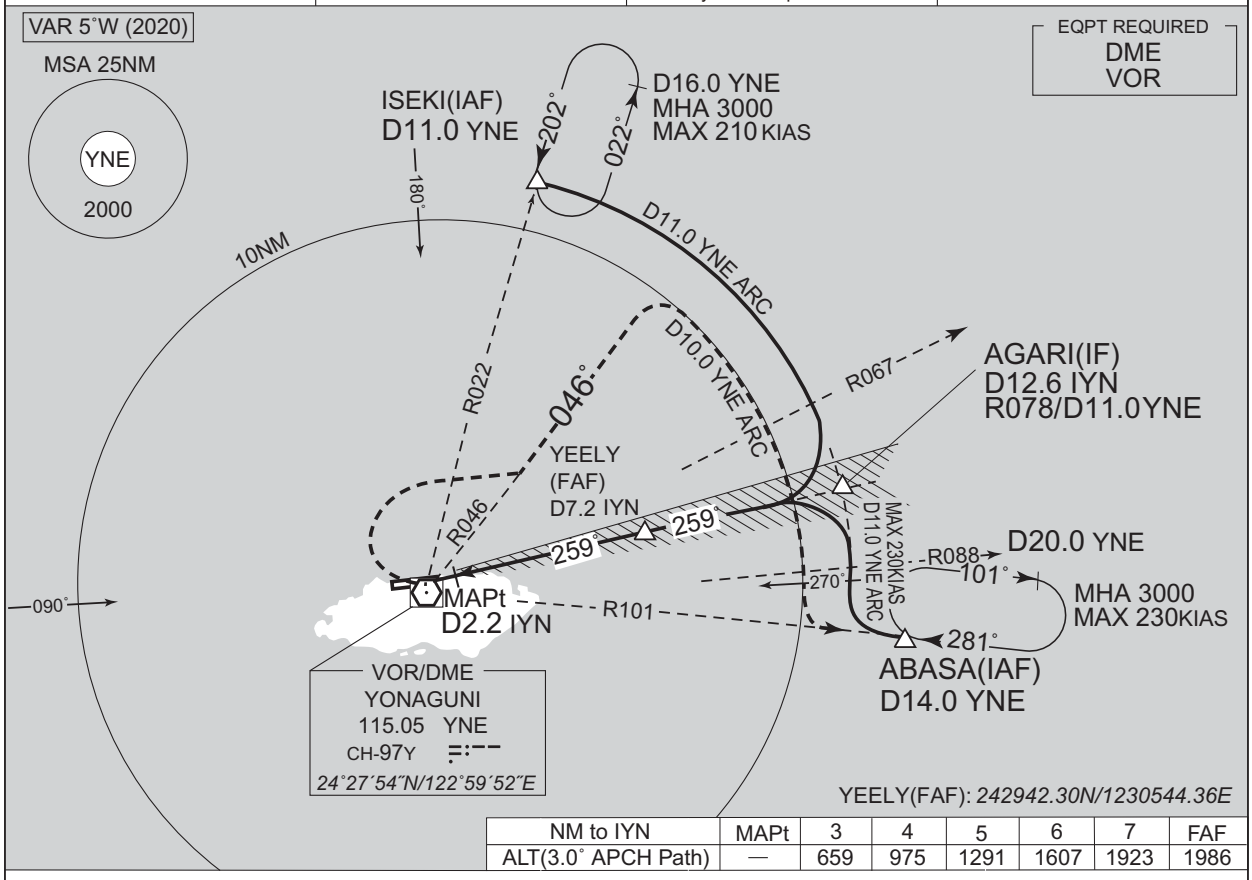
CHANGE : New PROC

INTENTIONALLY LEFT BLANK

INSTRUMENT APPROACH CHART

ROYN / YONAGUNI — LOC RWY26

FUKUOKA CONTROL	YONAGUNI LOC 108.55 IYN ≡:−− LOC-DME CH−22Y *24˚27′50″N/122˚58′06″E*	YONAGUNI RADIO 118.5 AFIS provided by Naha Airport Office	NO RADAR
123.9 – 276.5			

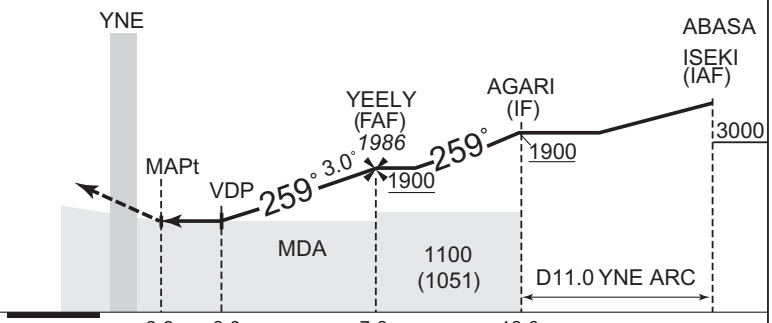


NM to IYN	MAPt	3	4	5	6	7	FAF
ALT(3.0˚ APCH Path)	—	659	975	1291	1607	1923	1986

MISSED APPROACH

Turn right, climb to 3000FT via YNE R046, via YNE 10.0DME clockwise ARC to intercept and proceed via YNE R101 to ABASA and hold.
Contact YONAGUNI RADIO.

Timing not authorized for defining the MAPt.



DME to IYN		2.2	2.8	7.2	12.6
NM to THR	0	1.0	1.6	6.0	11.4

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 42		AD elev. 49	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	570 (521)	1000	1020 (971)	1600
B		1200		
C				2400
D		1600		3200

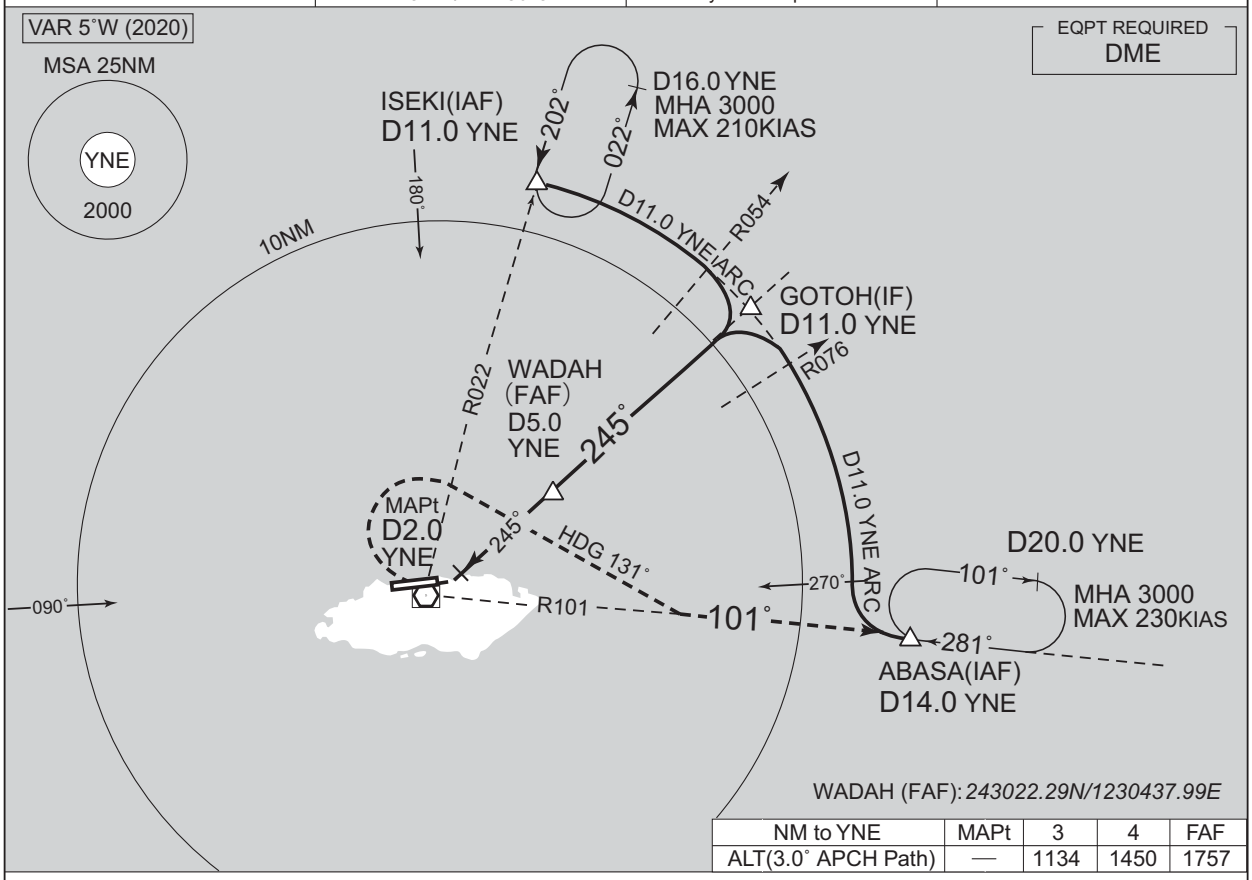
MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

CHANGE : ATC call sign.

INSTRUMENT APPROACH CHART

ROYN / YONAGUNI — VOR RWY26

FUKUOKA CONTROL	YONAGUNI VOR/DME	YONAGUNI RADIO	NO RADAR
123.9 – 276.5	115.05 YNE CH–97Y *24˚27´54˝N/122˚59´52˝E*	118.5 AFIS provided by Naha Airport Office	

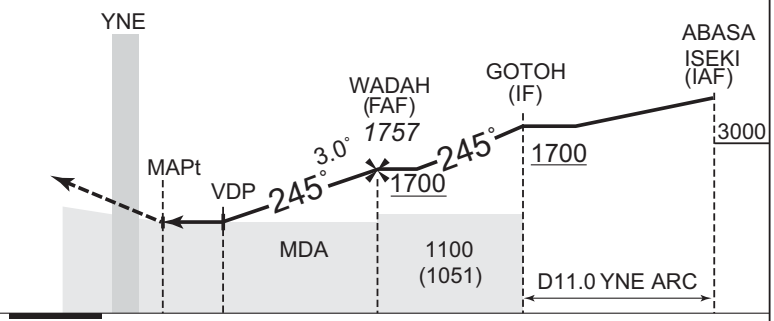


NM to YNE	MAPt	3	4	FAF
ALT(3.0˚ APCH Path)	—	1134	1450	1757

MISSED APPROACH

Turn right, climb to 3000FT
via HDG 131˚ to intercept
and proceed via YNE R101 to
ABASA and hold.
Contact YONAGUNI RADIO.

Timing not authorized for defining the MAPt.



DME to YNE	0	2.0	2.3	5.0	11.0
NM to THR	0	2.3	2.6	5.3	11.3

Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev. 42		AD elev. 49	
CAT			CIRCLING	
	MDA(H)	CMV	MDA(H)	VIS
A	880 (831)	1200	1020 (971)	1600
B		1400		
C				2400
D		1800		3200

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

CHANGE : ATC call sign.

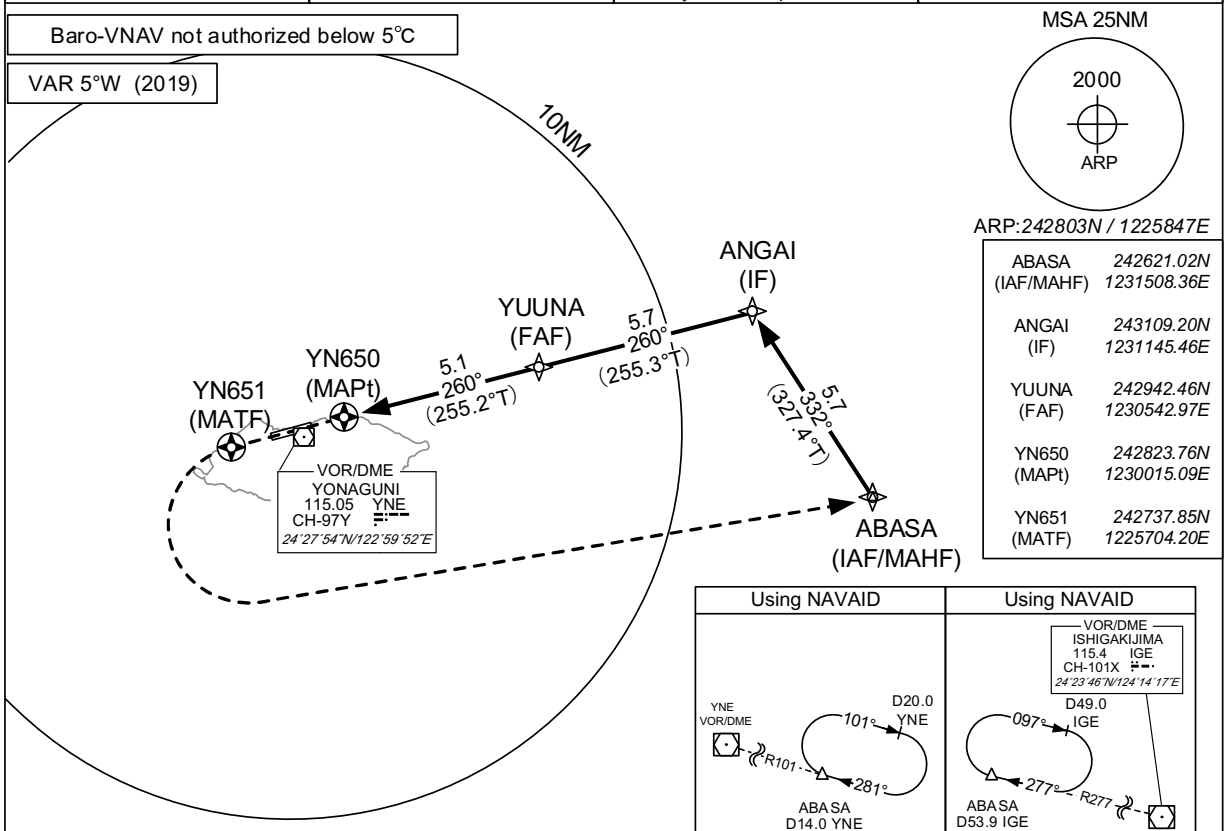
INSTRUMENT APPROACH CHART

ROYN/YONAGUNI — RNAV(GNSS) RWY26

FUKUOKA CONTROL 123.9 - 276.5	1.DME/DME RNP0.3 not authorized. 2.RNP0.3 required. 3.GNSS required.	YONAGUNI RADIO 118.5 AFIS provided by Naha Airport Office	NO RADAR

Baro-VNAV not authorized below 5℃

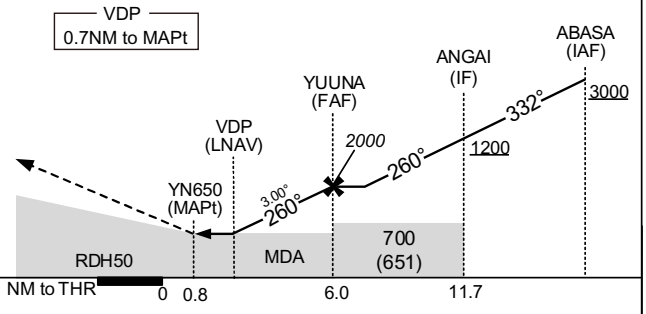
VAR 5°W (2019)



MAPt	1	2	3	4	5	FAF	NM to Next Fix
–	678	996	1315	1633	1951	2000	ALT (3.0° APCH Path)

MISSED APPROACH

Direct to YN651, turn left direct to ABASA and hold at 3000FT.
Contact YONAGUNI RADIO.



Missed APCH climb gradient MNM 5.0%

MINIMA	THR elev.42		AD elev.49			
CAT	LNAV/VNAV		LNAV		CIRCLING	
	DA(H)	CMV	MDA(H)	CMV	MDA(H)	VIS
A	530(488)	1000	530(481)	1000	1020(971)	1600
B		1200		1200		
C						2400
D	–	–	–	–	–	–

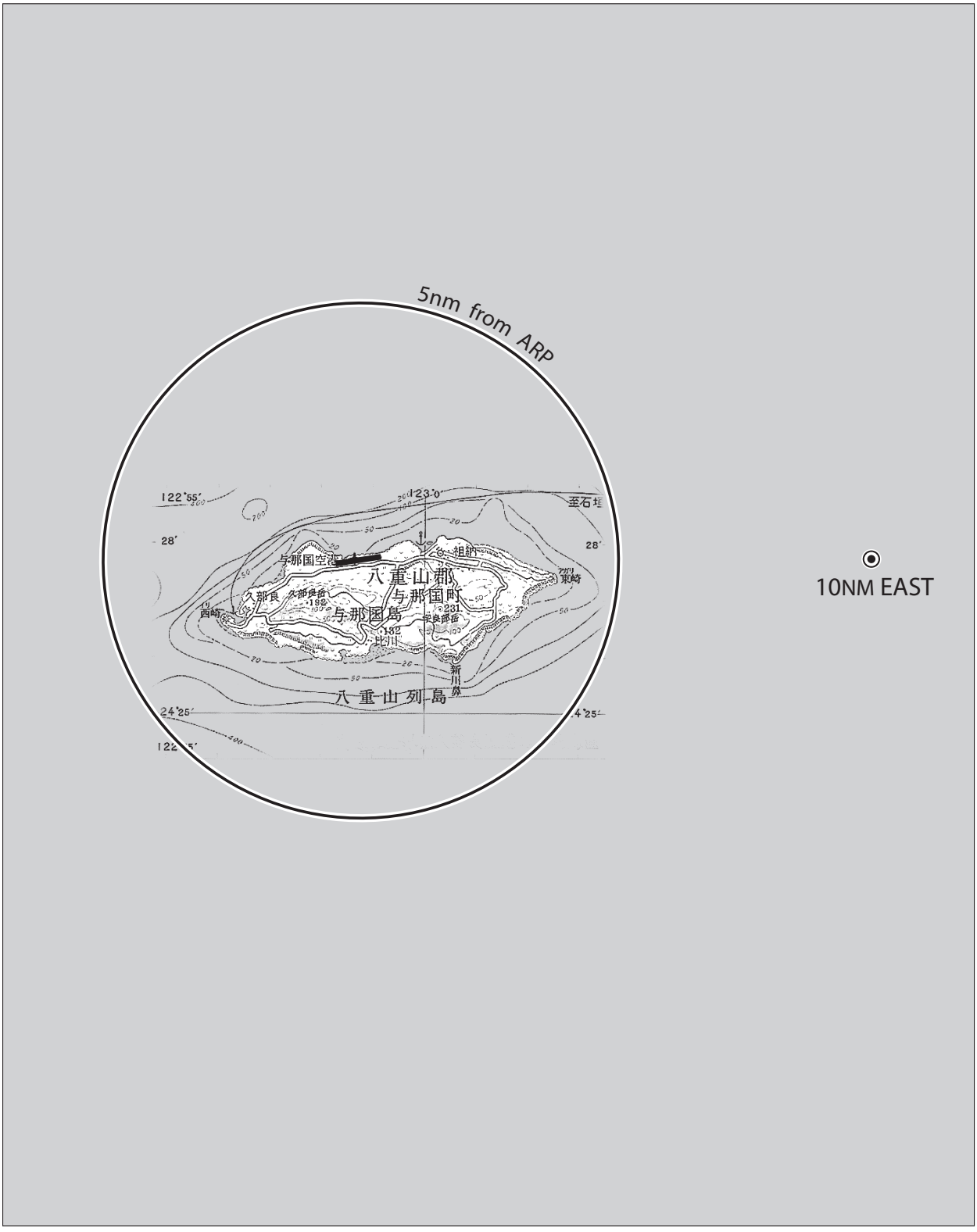
MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling to NORTH side of RWY only.

CHANGE : VDP. MINIMA(DA(H), MDA(H) for LNAV). ATC call sign. Sensor for RNAV.

INTENTIONALLY LEFT BLANK

ROYN / YONAGUNI

Visual REP



Call sign	BRG / DIST from ARP	Remarks
10NM EAST	090°/10NM	海上 Over the sea

ROYN / YONAGUNI Minimum Vectoring Altitude CHART