

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: Airport Remote Mobile Communication Service provided by Naha FSC. |
| 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

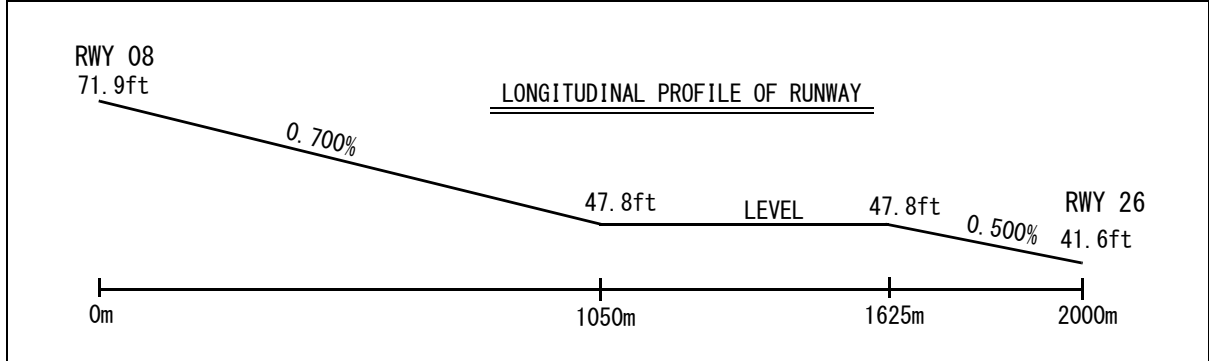
ROYN AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|--|--|
| 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 | REMOTE |
| 10 | Additional information(limitation of ser- vice, 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 Remote En | Nil |

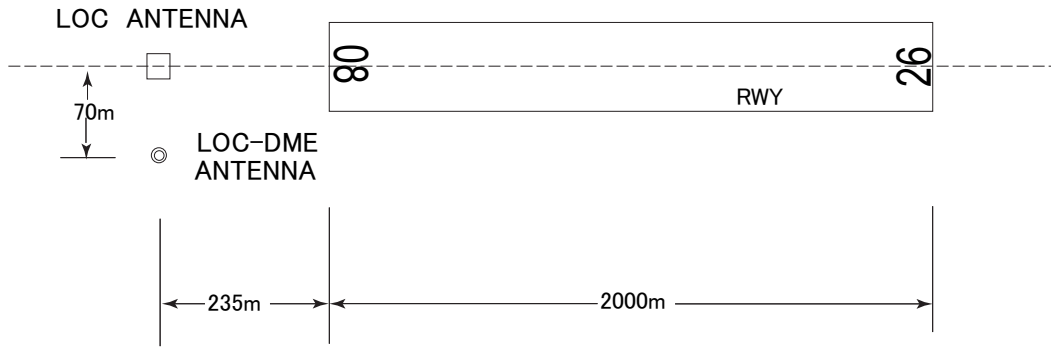
ROYN AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|-----------------|-----------|--------------------|---|
| 1 | 2 | 3 | 4 | 5 |
| A/G | Yonaguni Remote | 118.5MHz | 2300 - 1030 | Remote air-ground facilities controlled by Naha FSC |

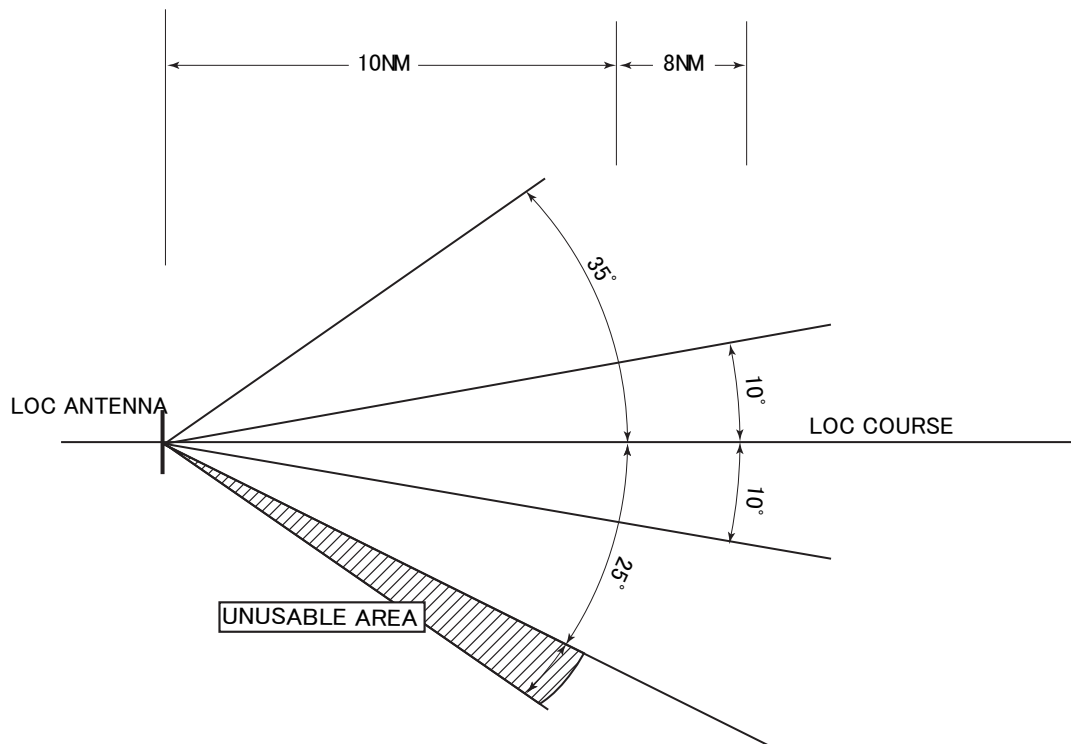
ROYN AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| 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 |
| DME | YNE | 1058MHz (CH-97Y) | H24 | 242753.72N/1225951.86E | 314.6ft | BLW 4000ft. |
| 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

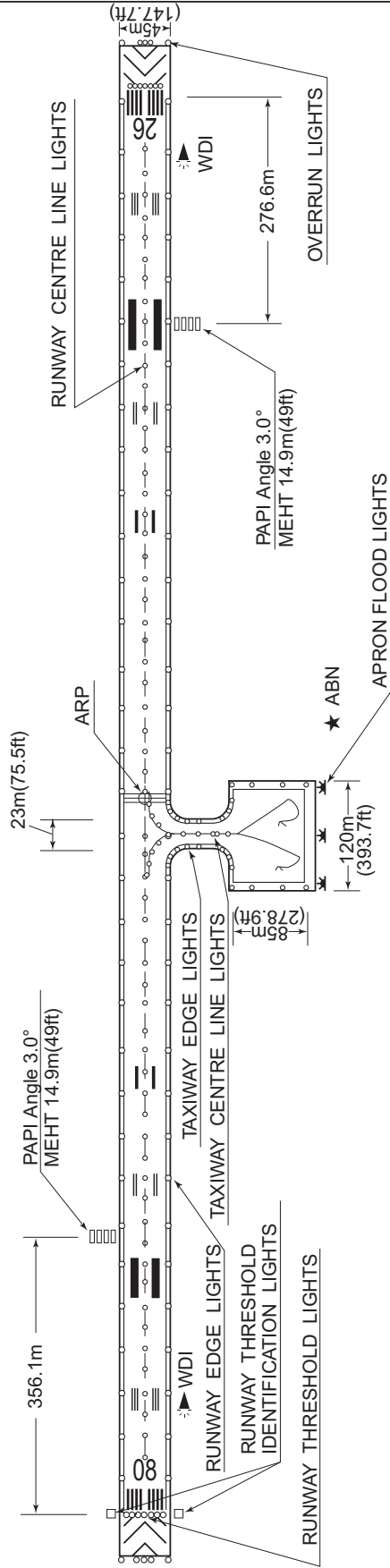
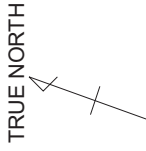
Aerodrome/Heliport Chart
 Standard Departure Chart - Instrument (TAKZO, ABASA)
 Standard Departure Chart - Instrument (AYAKA-RNAV)
 Standard Arrival Chart - Instrument (ABASA-RNAV)
 Instrument Approach Chart (LOC RWY26)
 Instrument Approach Chart (VOR RWY26)
 Instrument Approach Chart (RNAV(GNSS) RWY26)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

ROYN / YONAGUNI

AD CHART

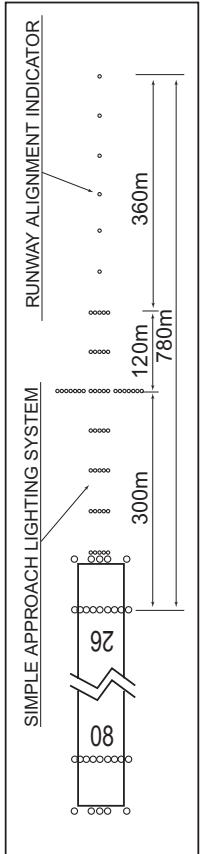
CHANGE : PCN.

YONAGUNI AIRPORT

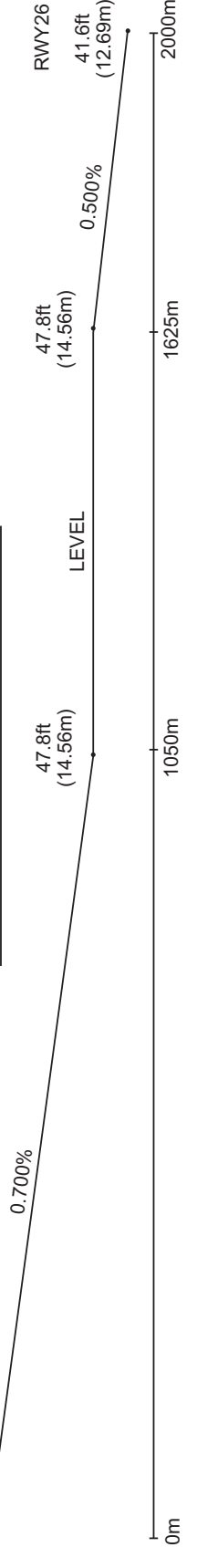


REMARKS :

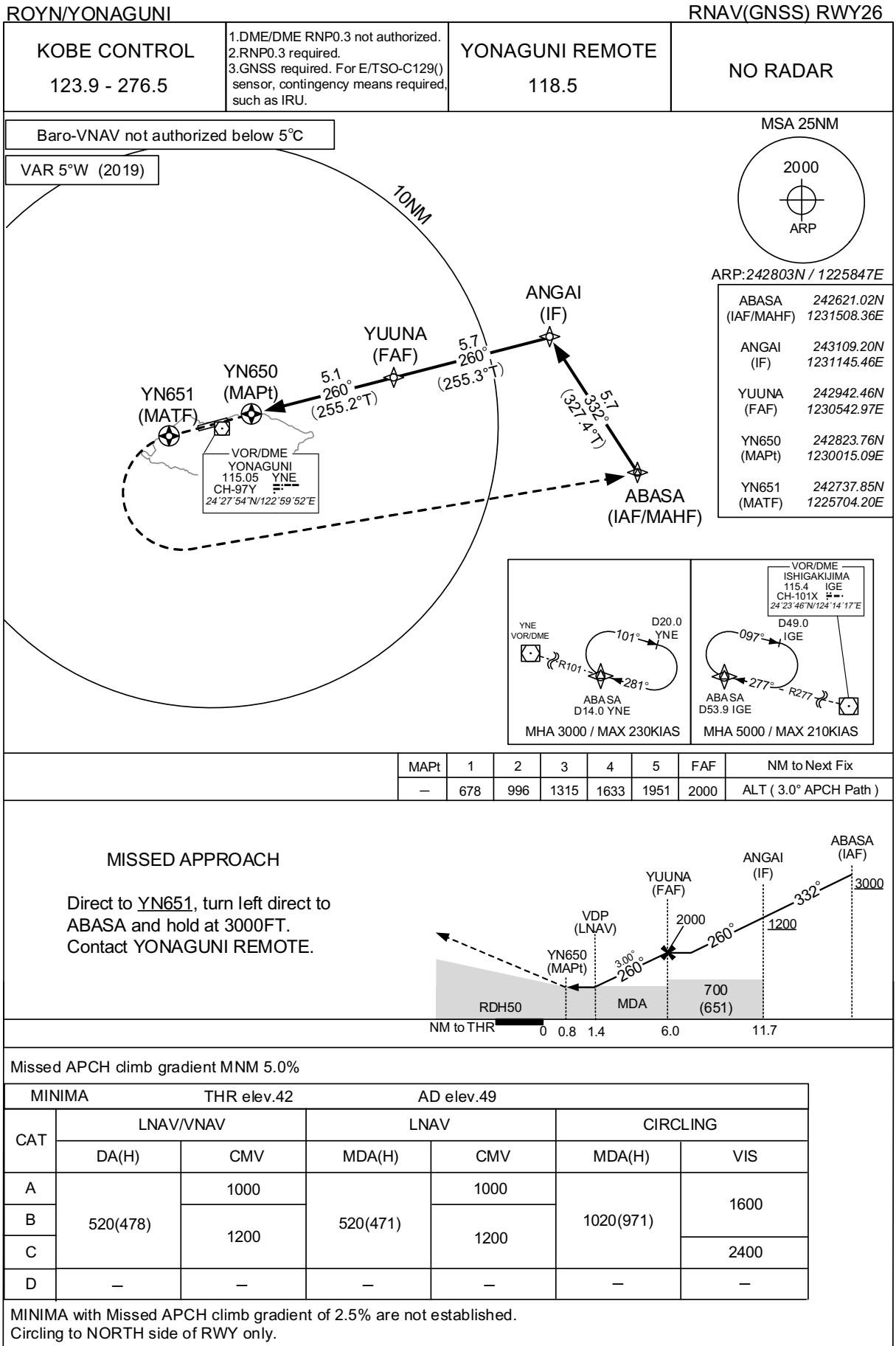
| | |
|---------------------|----------------|
| DIMENSION OF RUNWAY | 2,000m x 45m |
| WIDTH OF TAXIWAY | 23m |
| DIMENSION OF APRON | 120m x 85m |
| RUNWAY GROOVING | 2,000m x 30m |
| STRENGTH OF RUNWAY | PCN 52/F/A/X/T |
| STRENGTH OF TAXIWAY | PCN 52/F/A/X/T |
| STRENGTH OF APRON | PCN 40/F/A/X/T |



LONGITUDINAL PROFILE OF RUNWAY



INSTRUMENT APPROACH CHART



CHANGE : New PROC

INTENTIONALLY LEFT BLANK

STANDARD DEPARTURE CHART -INSTRUMENT

ROYN / YONAGUNI

SID

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.

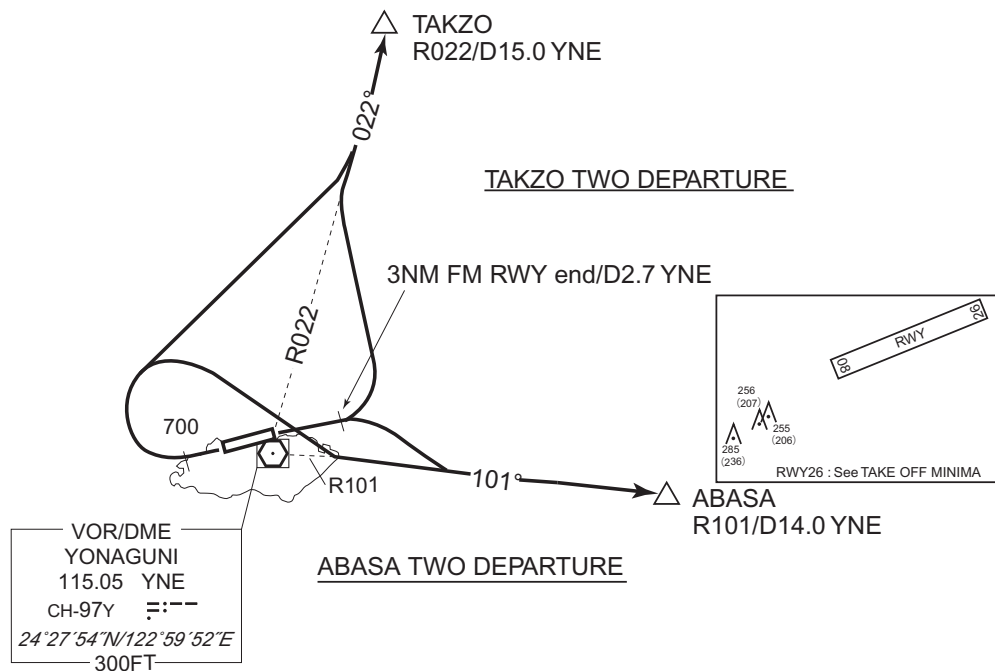
RWY26 : No turn before DER.

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,

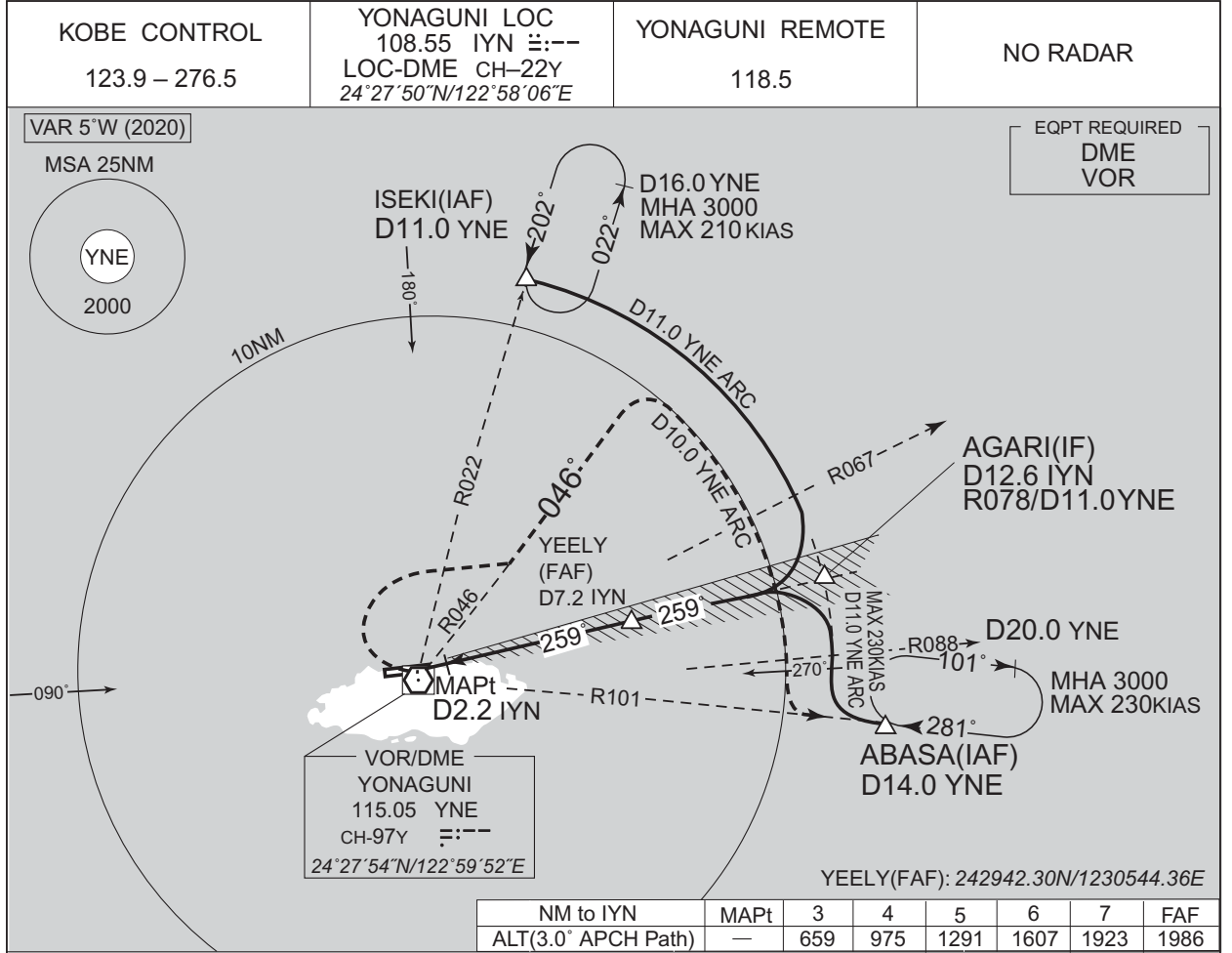
OBST ALT 912FT located at 2.1NM 115° FM end of RWY26.

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



INSTRUMENT APPROACH CHART

ROYN / YONAGUNI LOC RWY26

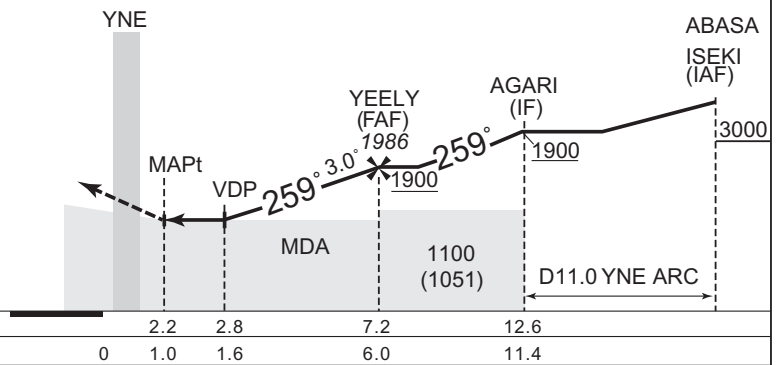


CHANGE : VAR. Radial FM YNE. AGARI, YEELY established. OCA added.

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 REMOTE.

Timing not authorized for defining the MAPt.



Missed APCH climb gradient MNM 5.0%

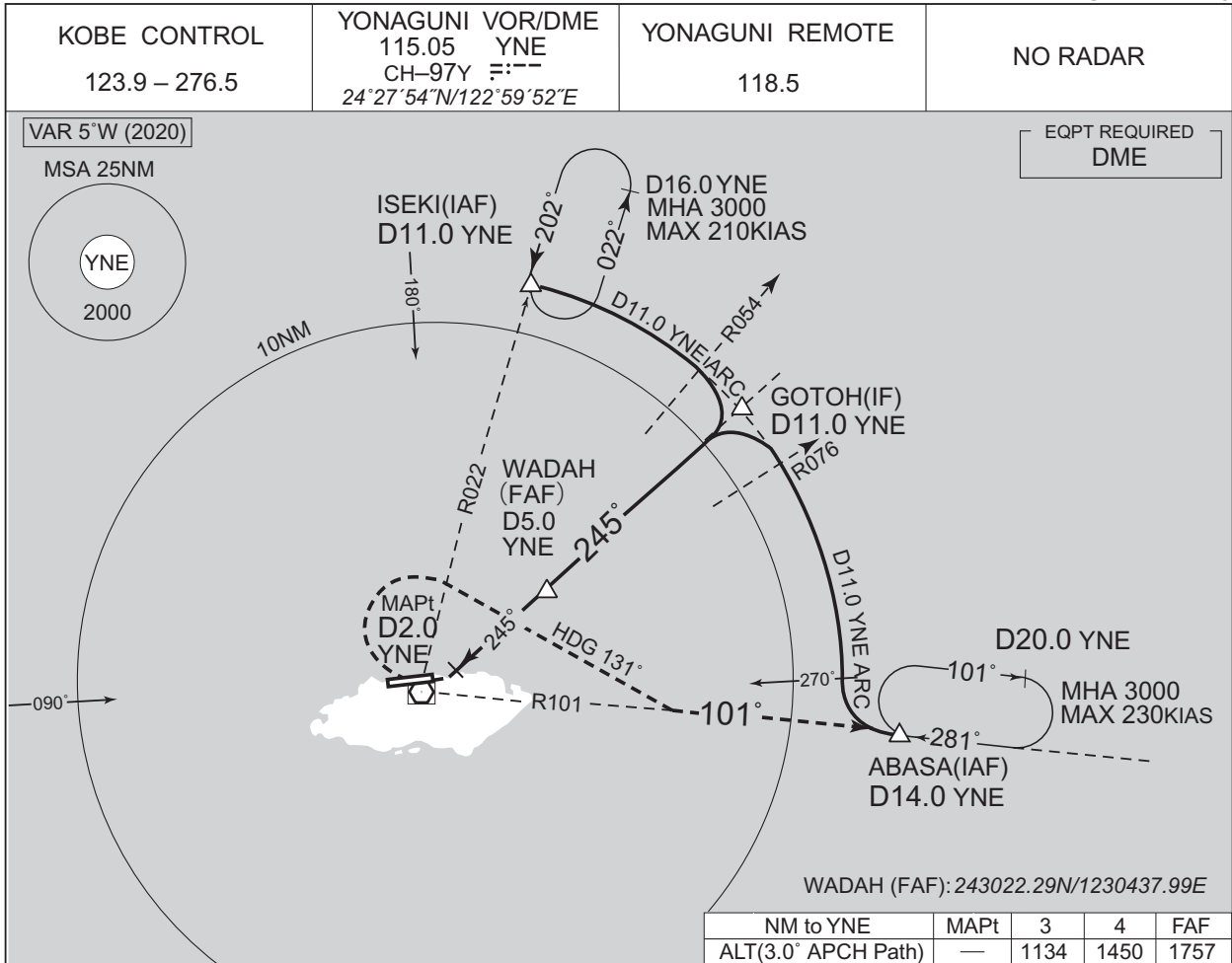
| | | | | |
|--------|----------|--------------|-------------|------|
| MINIMA | | THR elev. 42 | AD elev. 49 | |
| CAT | CIRCLING | | | |
| | MDA(H) | CMV | MDA(H) VIS | |
| | A | 1000 | 1020 (971) | 1600 |
| | | 570 (521) | | |
| B | 1200 | 2400 | | |
| D | 1600 | 3200 | | |

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

INSTRUMENT APPROACH CHART

ROYN / YONAGUNI

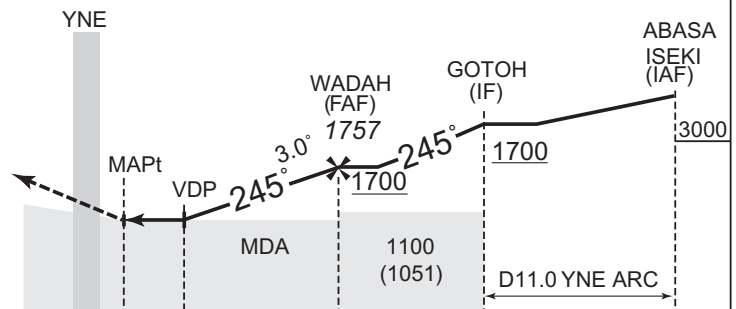
VOR RWY26



MISSED APPROACH

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

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%

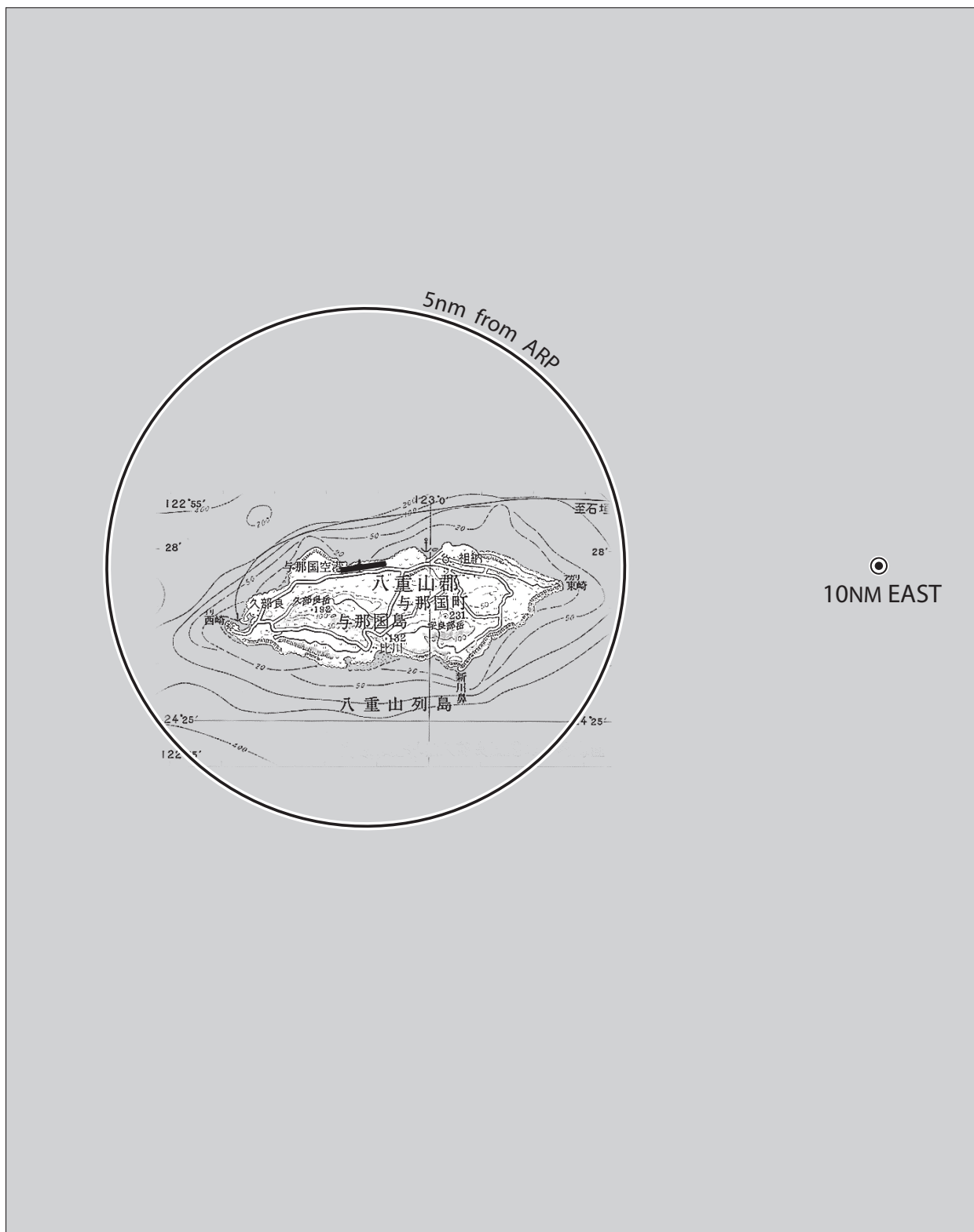
| | | | | |
|--------|-----------|--------------|-------------|------|
| MINIMA | | THR elev. 42 | AD elev. 49 | |
| CAT | MDA(H) | | CIRCLING | |
| | MDA(H) | CMV | MDA(H) | VIS |
| A | 880 (831) | 1200 | 1020 (971) | 1600 |
| B | | 1400 | | |
| C | | 2400 | | |
| D | | 1800 | | |

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

CHANGE : VAR. Radial FM YNE. GOTOH, WADAH established. OCA added.

ROYN / YONAGUNI

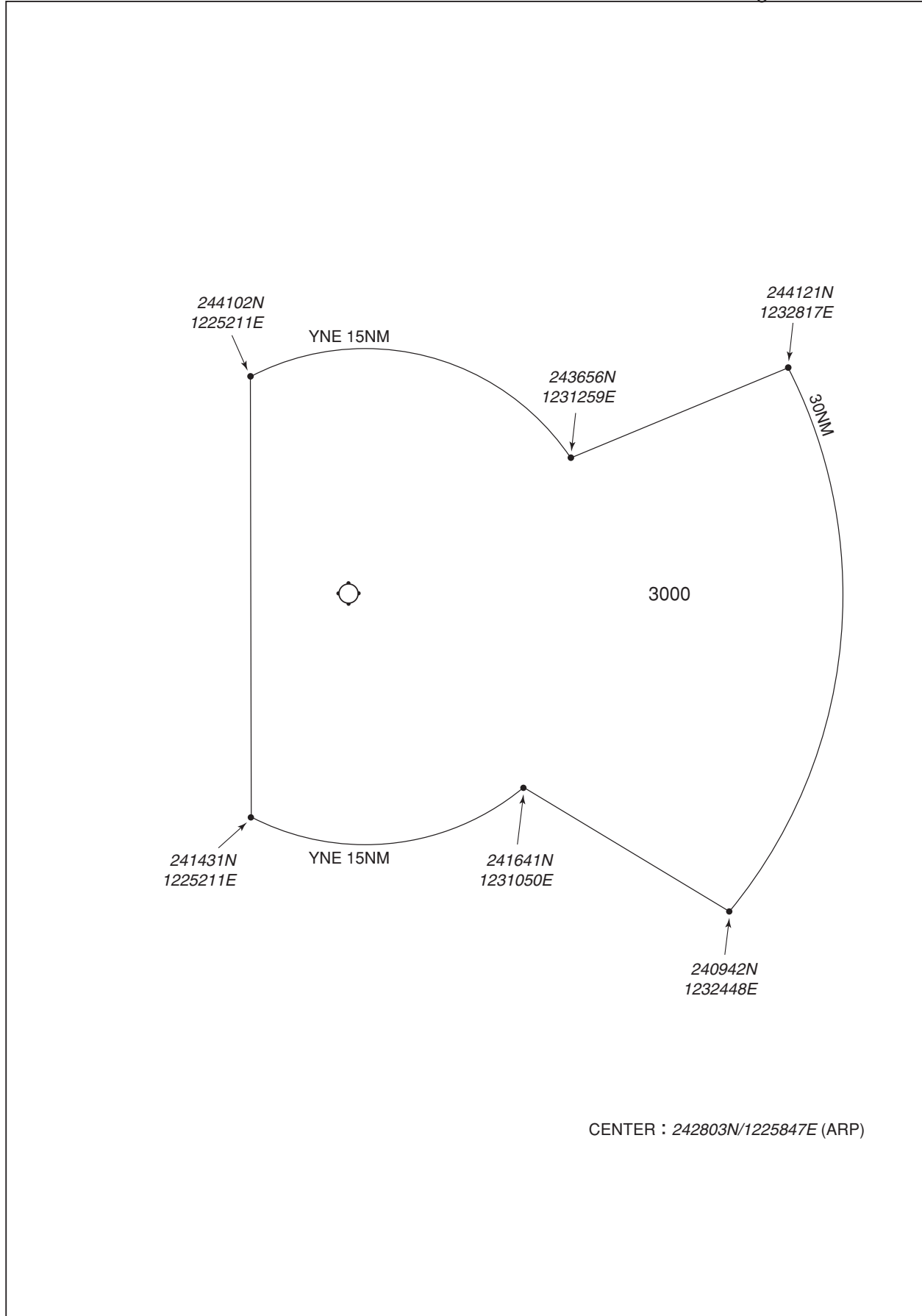
Visual REP



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

ROYN / YONAGUNI

Minimum Vectoring Altitude CHART



STANDARD DEPARTURE CHART -INSTRUMENT

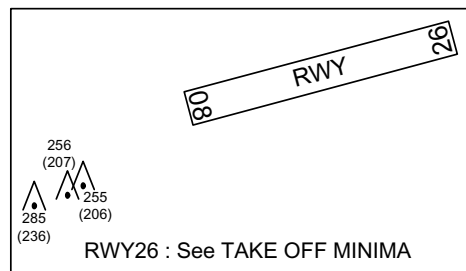
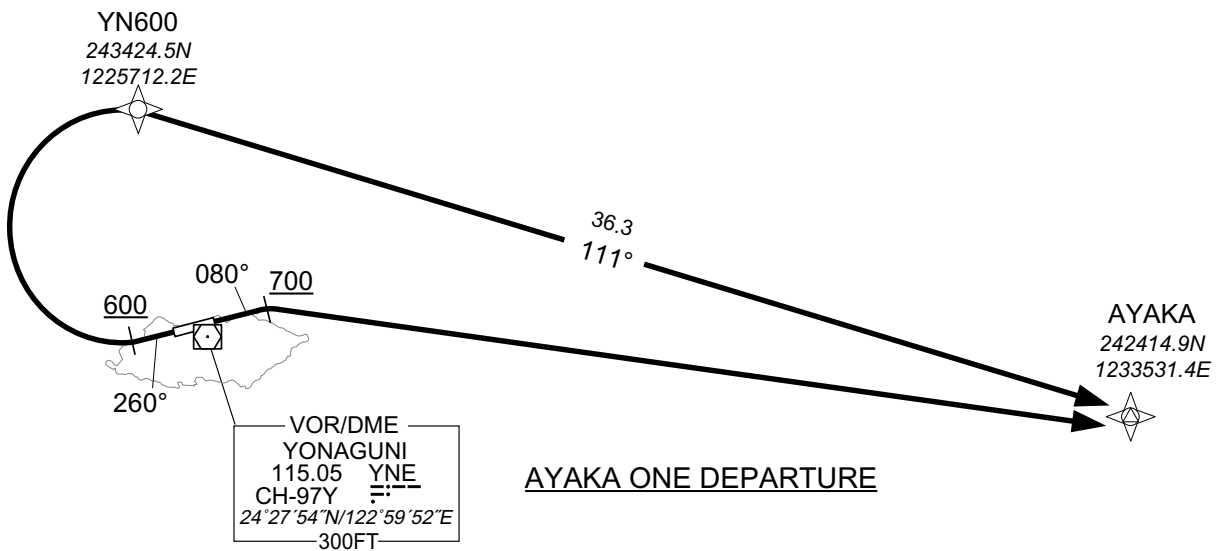
ROYN / YONAGUNI

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

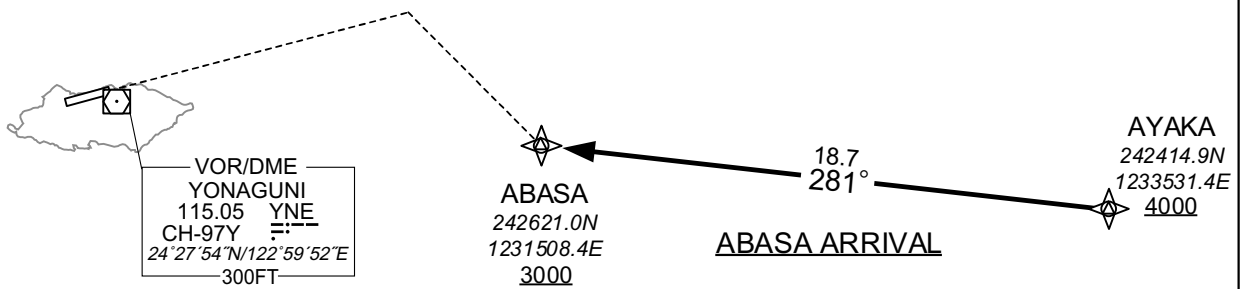
ROYN / YONAGUNI

RNAV STAR RWY26

| | |
|---------------|------------|
| ABASA ARRIVAL | Basic RNP1 |
|---------------|------------|

Note GNSS required.

VAR 5°W (2019)



ABASA ARRIVAL

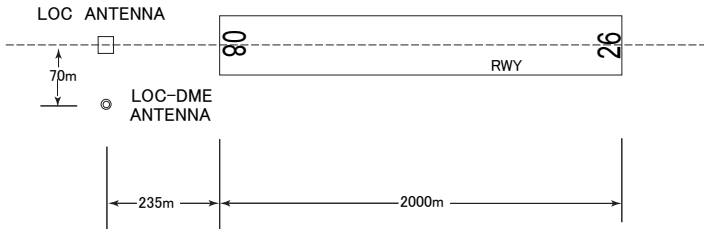
From AYAKA at or above 4000FT, to ABASA at or above 3000FT.

CHANGE : New PROC

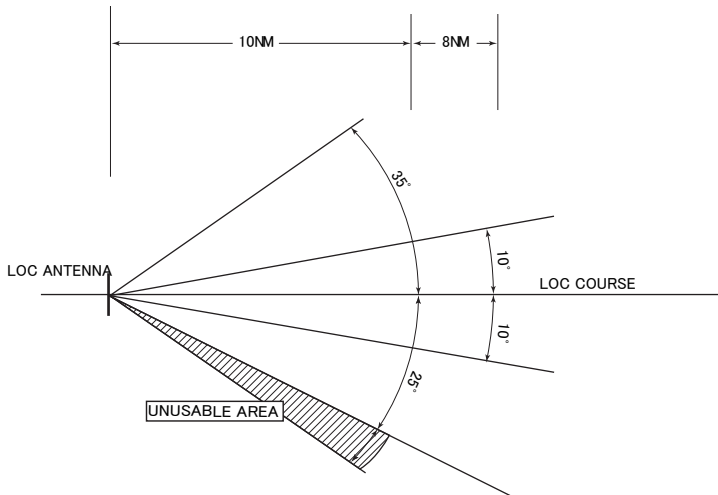
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001 | IF | AYAKA | — | — | -4.6 | — | — | +4000 | — | — | Basic RNP1 |
| 002 | TF | ABASA | — | 281 (276.5) | -4.6 | 18.7 | — | +3000 | — | — | Basic RNP1 |

INTENTIONALLY LEFT BLANK

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.