## AD 2 AERODROMES

## RJSK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

# RJSK - AKITA

## RJSK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

| | | |
|---|---|---|
| 1 | ARP coordinates and site at AD | *393656N 1401307E*<br>278° / 1.25km from RWY28 THR. |
| 2 | Direction and distance from (city) | 334° / 13.3km(7.2NM) Akita station<br>310° / 16.1km(8.7NM) Omono Rivermouth in Akita City |
| 3 | Elevation/ Reference temperature | 305ft / 30°C(2004 -2008) |
| 4 | Geoid undulation at AD ELEV PSN | 127FT |
| 5 | MAG VAR/ Annual change | 8° W (2009) / 1'E |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Akita Airport Administration Office (Akita prefectural government)<br>49 Yuwa Tsubakigawa-aza Yamagomori, Akita City<br>Tel:018-886-3362 Fax:018-886-3365 |
| 7 | Types of traffic permitted(IFR/ VFR) | IFR/VFR |
| 8 | Remarks | Akita Airport Radio Facility Office(Civil Aviation Bureau)<br>49 Yuwa Tsubakigawa-aza Yamagomori, Akita City<br>Tel:018-886-3161 Fax:018-886-3163 |

## RJSK AD 2.3 OPERATIONAL HOURS

| | | |
|---|---|---|
| 1 | AD Administration | 2200 - 1300 |
| 2 | Customs and immigration | INTL SKED FLT hours only |
| 3 | Health and sanitation | INTL SKED FLT hours only |
| 4 | AIS Briefing Office | Nil |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24(TOKYO) |
| 7 | ATS | 2200 - 1300 |
| 8 | Fuelling | JET A-1 : 2200 - 1300<br>Avgas100 : 0100 - 0600 and On request (Tel : 018-886-3133) |
| 9 | Handling | 2100 - 1300 |
| 10 | Security | 2100 - 1140 |
| 11 | De-icing | Nil |
| 12 | Remarks | Nil |

## RJSK AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|---|
| 1 | Cargo-handling facilities | All the modern institutions that deal with the weight thing to a Boeing 747 type passenger plane. |
| 2 | Fuel/ oil types | JET A-1 , Avgas100 |
| 3 | Fuelling facilities/ capacity | Fuel truck refueling |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Nil |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | Nil |

## RJSK AD 2.5 PASSENGER FACILITIES

| | | |
|---|---|---|
| 1 | Hotels | Nil |
| 2 | Restaurants | At Airport |
| 3 | Transportation | Buses and Taxi |
| 4 | Medical facilities | Nil |
| 5 | Bank and Post Office | Bank: ATM at airport |
| 6 | Tourist Office | Nil |
| 7 | Remarks | Nil |

## RJSK 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,<br>Emergency medical equipments conveyance truck |
| 3 | Capability for removal of disabled aircraft | Nil |
| 4 | Remarks | Nil |

## RJSK AD 2.7 SEASONAL AVAILABILITY-CLEARING

| | | |
|---|---|---|
| 1 | Types of clearing equipment | Snow Removal Equipments :<br>motor graders x 1 , rotary x 5 , dozer x 3 ,snow ploughs x 11 ,<br>snow sweeper x 7 , anti-freezing-agent spreaders x 2 |
| 2 | Clearance priorities | 1.RWY , TWY (T1, T4, T5 ,P1 ,P2 ,P3 and P4)<br>2.TWY (T2, T3), Apron |
| 3 | Remarks | Nil |

## RJSK AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|---|---|
| 1 | Apron surface and strength | APRON<br>Surface : Concrete, Strength : PCN 62/R/B/X/T<br>EAST-APRON<br>Surface: Asphalt and Concrete<br>Strength:<br>Asphalt: PCN 24/F/C/Y/T<br>Concrete: PCN 20/R/B/Y/T |
| 2 | Taxiway width, surface and strength | TWY P1-P4 Width:30m, Surface:asphalt, Strength:PCN 87/F/C/X/T<br>TWY T1,T5 Width:32m, Surface:asphalt, Strength:PCN 87/F/C/X/T<br>TWY T2,T3,T4 Width:34m, Surface:asphalt, Strength:PCN 87/F/C/X/T<br>TWY E Width:18m, Surface:asphalt, Strength:PCN 24/F/C/Y/T |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not available |
| 5 | INS checkpoints | Spot Nr<br>1: *393644.22N 1401316.77E*<br>2: *393644.10N 1401314.33E*<br>3: *393644.35N 1401311.94E*<br>5: *393644.58N 1401309.02E*<br>6: *393644.84N 1401306.10E*<br>11: *393644.44N 1401318.54E*<br>12: *393645.82N 1401318.74E*<br>13: *393647.03N 1401318.78E*<br>14: *393643.87N 1401320.88E*<br>15: *393644.71N 1401321.01E*<br>16: *393645.54N 1401321.13E*<br>17: *393646.33N 1401321.42E* |
| 6 | Remarks | Nil |

## RJSK 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:10/28<br>(Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe<br>(LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY28), WBAR, RWY DIST marker LGT<br><br>TWY:ALL TWY<br>(Marking) TWY CL, RWY HLDG PSN, TWY side stripe<br>(LGT) TWY edge LGT<br>TWY:T1-T5<br>(LGT) TWY CL LGT, RWY guard LGT, Taxiing guidance sign<br>TWY:P1-P4<br>(LGT) TWY CL LGT<br>TWY:P2<br>(LGT) Taxiing guidance sign |
| 3 | Stop bars | Nil |
| 4 | Remarks | (Marking) Overrun area<br>(LGT) Apron flood LGT |

## RJSK AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

Other obstacles

| OBST ID/ designation | Obstacle type | Coordinates | Elevation | Markings/ LGT | Remarks |
|---|---|---|---|---|---|
| RJSK1 | Tower | *393717N/1401350E* | 440ft | Nil | Under horizontal SFC |
| RJSK2 | Antenna | *393727N/1401337E* | 443ft | Nil | Under horizontal SFC |
| RJSK3 | Antenna | *393727N/1401334E* | 442ft | Nil | Under horizontal SFC |

In Area3 To be developed

## RJSK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|---|---|---|
| 1 | Associated MET Office | TOKYO |
| 2 | Hours of service<br>MET Office outside hours | H24(TOKYO) |
| 3 | Office responsible for TAF preparation<br>Periods of validity | TOKYO<br>30 Hours |
| 4 | Trend forecast<br>Interval of issuance | Nil. |
| 5 | Briefing/ consultation provided | Briefing is available upon inquiry at TOKYO |
| 6 | Flight documentation<br>Language(s) used | C<br>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<br>available for providing information | Nil |
| 9 | ATS units provided with information | TWR |
| 10 | Additional information(limitation of service, etc.) | Nil |

## RJSK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | TRUE BRG | Dimensions of RWY(M) | Strength(PCN) and Surface of RWY | THR coordinates<br>THR geoid undulation | THR elevation and highest elevation of TDZ of precision APP RWY |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 10 | 096.61° | 2500×60 | PCN 87/F/C/X/T<br>Asphalt Concrete | *393700.98N1401215.14E*<br>127FT | THR ELEV: 288.5ft |
| 28 | 276.61° | 2500×60 | PCN 87/F/C/X/T<br>Asphalt Concrete | *393651.66N1401359.25E*<br>127.3FT | THR ELEV: 313.6ft<br>TDZ ELEV: 312.2ft |

| Slope of RWY | Strip Dimensions (M) | RESA (Overrun) Dimensions(M) | Remarks |
|---|---|---|---|
| 7 | 10 | 11 | 14 |
| See AD2.24 AD CHART | 2620×300 | 40 × (MNM:280 MAX:300)* | RWY Grooving:2500×60m |
| | 2620×300 | 185 × (MNM:125 MAX:300)*<br>*For detail, ask airport administrator | |

## RJSK AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 10 | 2500 | 2500 | 2500 | 2500 | Nil |
| TWY:T4 | 1985 | 1985 | 1985 | | Nil |
| 28 | 2500 | 2500 | 2500 | 2500 | Nil |
| TWY:T2 | 1800 | 1800 | 1800 | | Nil |

誘導路の TORA, TODA 及び ASDA は、誘導路中心線と滑走路中心線の交点から滑走路末端までの距離を示す。
(TORA, TODA and ASDA for TWY indicate distances BTN the point where TWY CL meets RWY CL and RWY THR.)

## RJSK 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 |
| 10 | SALS<br>(*1)<br>420m<br>LIH | Green<br>Green | PAPI<br>3.0°/Left<br>420m<br>74ft | Nil | 2500m<br>30m<br>Coded color<br>(White/red)<br>LIH | 2500m<br>60m<br>Coded color<br>(White/Yellow)<br>LIH | Red | Nil (*2) |
| 28 | PALS<br>(CAT I)<br>840m<br>LIH | Green<br>Green | PAPI<br>3.0°/Left<br>429m<br>66ft | 900m | 2500m<br>30m<br>Coded color<br>(White/red)<br>LIH | 2500m<br>60m<br>Coded color<br>(White/Yellow)<br>LIH | Red | Nil (*2) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| SALS with APCH LGT beacon (550m and 890m FM RWY THR ) (*1)<br>Overrun area edge LGT(LEN60m color:Red) (*2) | | | | | | | | |

## RJSK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|---|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: *393641N/1401302E*, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT<br>Anemometer location and LGT | LDI:Nil<br>Anemometer:<br>RWY10:117°/350m from RWY10 THR, LGTD<br>RWY28:263°/457m from RWY28 THR, LGTD |
| 3 | TWY edge and center line lighting | TWY edge and center line lights installed, see AD2.9 |
| 4 | Secondary power supply/ switch-over time | Within 1sec: REDL, RCLL, RTHL, RENL, WBAR, Overrun area edge LGT<br>Within 15sec: Other LGT |
| 5 | Remarks | WDI LGT |

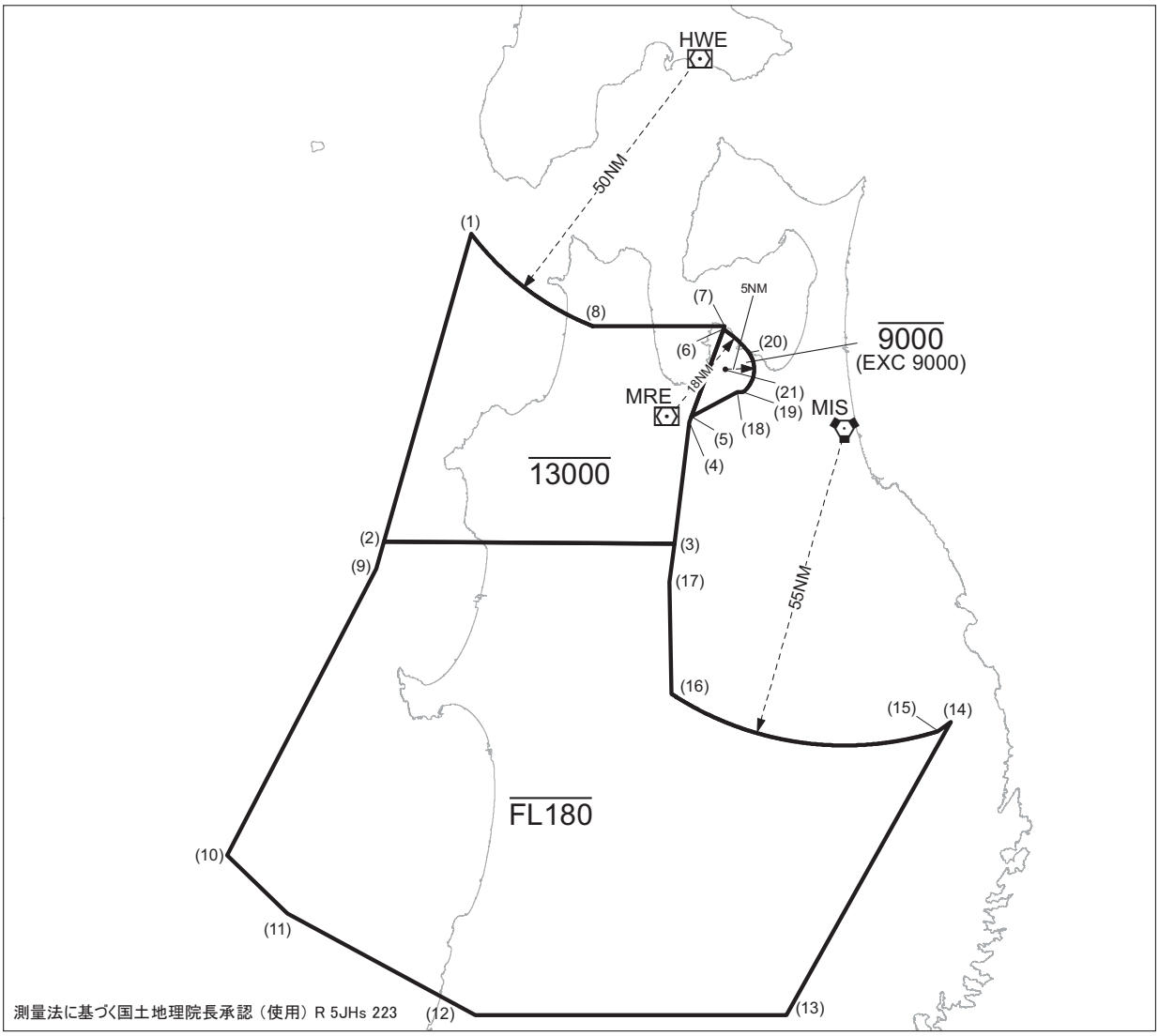
## RJSK AD 2.16 HELICOPTER LANDING AREA

| |
|---|
| Nil |

## RJSK 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 |
| Akita CTR | Area within a radius of 5nm(9km) of Akita ARP (*39°37'N 140°13'E*) | 3,000 or below | D | Akita Tower En | |
| Shirakami ACA | See attached chart | | E | Shirakami APP En | |

## 白神進入管制区
## Shirakami Approach Control Area




Point list

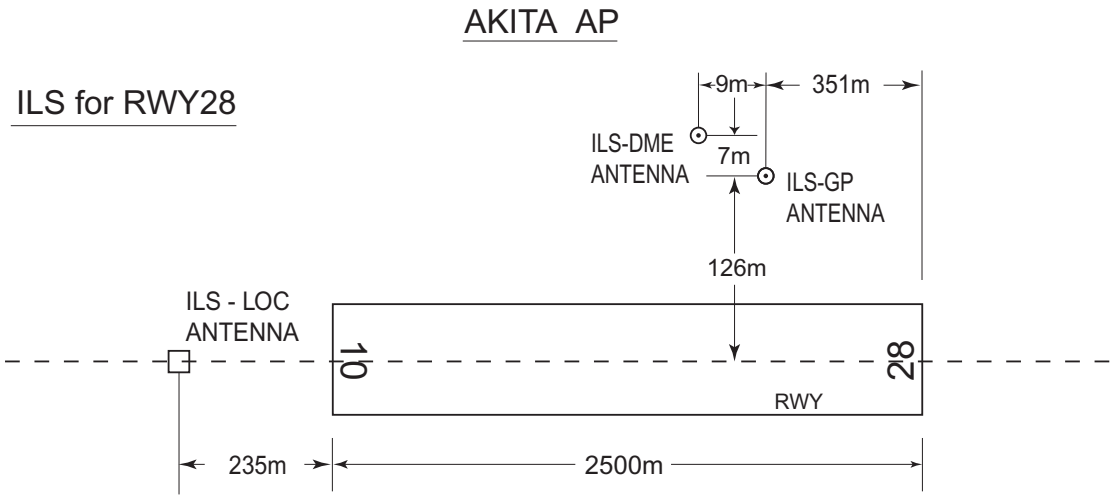
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| （1） | *411552N* | *1395713E* | （11） | *391725N* | *1391738E* | （21） | *405230N* | *1405541E* |
| （2） | *402212N* | *1393805E* | （12） | *390010N* | *1395948E* | | | |
| （3） | *402212N* | *1404403E* | （13） | *390021N* | *1410906E* | | | |
| （4） | *404323N* | *1404728E* | （14） | *395103N* | *1414622E* | | | |
| （5） | *404419N* | *1404755E* | （15） | *394929N* | *1414329E* | | | |
| （6） | *405927N* | *1405513E* | （16） | *395611N* | *1404325E* | | | |
| （7） | *410000N* | *1405529E* | （17） | *401534N* | *1404259E* | | | |
| （8） | *410000N* | *1402510E* | （18） | *404832N* | *1405824E* | | | |
| （9） | *401728N* | *1393625E* | （19） | *404834N* | *1405945E* | | | |
| （10） | *392719N* | *1390356E* | （20） | *405524N* | *1410102E* | | | |

## RJSK AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| APP | Shirakami Approach | 119.25MHz<br>315.3MHz<br>120.65MHz<br>121.5MHz(E)<br>243.0MHz(E) | 2200 - 1300 | |
| TWR | Akita Tower | 118.6MHz(1)<br>126.2MHz<br>243.0MHz(E) | 2200 - 1300 | (1) Primary |

## RJSK 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 (8°W/2013) | UWE | 110.65MHz | H24 | *393701.66N 1401112.97E* | | |
| DME | UWE | 1130MHz (CH-43Y) | H24 | *393701.66N 1401112.97E* | 286ft | |
| ILS-LOC 28 | IUW | 108.9MHZ | 2200-1300 | *393701.85N 1401205.32E* | | LOC: 235m(771ft) away FM RWY 10 THR. BRG (MAG) 285.60° |
| ILS-GP 28 | | 329.3MHZ | 2200-1300 | *393656.99N 1401345.24E* | | GP: 351m(1152ft) inside FM RWY 28 THR, 126m(413ft) N of RCL. GP angle 3.0°<br>HGT of ILS Ref datum16.5m(54ft). |
| ILS-DME 28 | IUW | 987MHZ (CH-26X) | 2200-1300 | *393657.33N 1401344.53E* | 324ft | DME: 360m(1181ft) inside FM RWY 28 THR, 133m(436ft) N of RCL. |
| MSAS | | 1575.42MHz | H24 | | | Transmitting antennas are satellite based. |




REMARKS : 1 LOC beam BRG(MAG) 285.60°
2 HGT of ILS REF datum 16.5m(54ft)
3 GP Angle 3.0°
4 ELEV of ILS-DME 98.8m(324ft)

## RJSK AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

Nil

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

## RJSK AD 2.21 NOISE ABATEMENT PROCEDURES

Nil

## RJSK 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 | 10 | A,B,C,D | - | 400m | - | 400m | - | 500m |
| | 28 | A,B,C,D | 400m | 400m | 400m | 400m | - | 500m |
| OTHER | 10 | A,B,C,D | AVBL LDG MINIMA | | | | | |
| | 28 | A,B,C,D | | | | | | |

**2. Lost communication procedures for arrival aircraft under radar navigational guidance**
If radio communications with Shirakami Approach are lost for 1 minute, squawk Mode A/3 Code 7600 and;
(I) 1. Contact Akita Tower.
2. If unable, proceed in accordance with visual flight rules.
3. If unable, proceed to YUWA 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 requires.

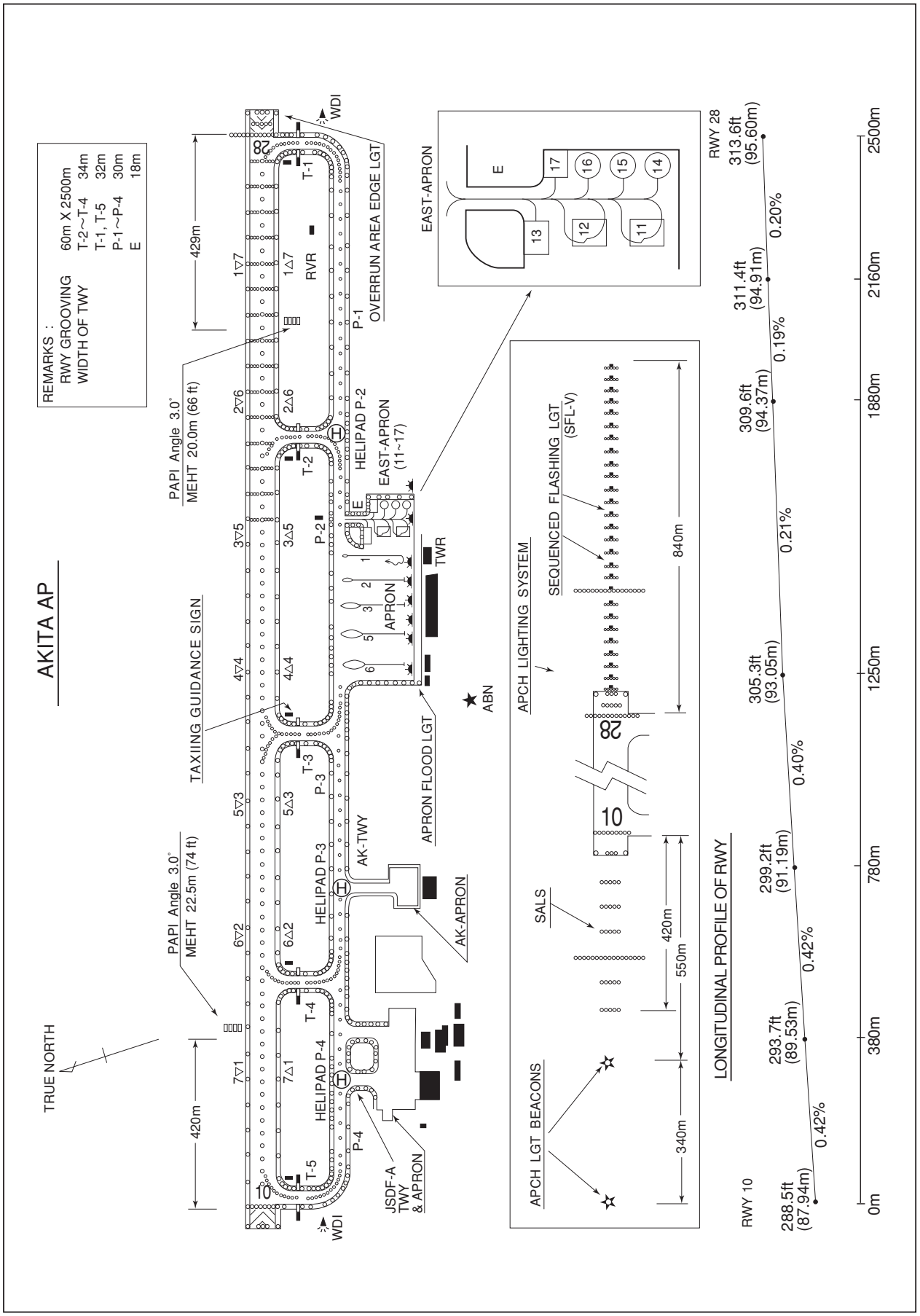
## RJSK AD 2.23 ADDITIONAL INFORMATION

**HELIPAD Location**: On PARL TWY
HELIPAD P2 at the intersection with TWY T2
HELIPAD P3 on TWY P3 at the intersection with AK TWY
HELIPAD P4 on TWY P4 at the point of intersection with JSDF-A TWY

## RJSK AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome/Heliport Chart
Standard Departure Chart - Instrument (YUWA REVERSAL)
Standard Departure Chart - Instrument (MUTSU-RNAV)
Standard Departure Chart - Instrument (USYU-RNAV)
Standard Departure Chart - Instrument (NIIGATA-RNAV)
Standard Arrival Chart - Instrument (MAGGY,YAYOI,CHOKA WEST-RNAV)
Standard Arrival Chart - Instrument (MAGGY,YAYOI,CHOKA EAST-RNAV)
Instrument Approach Chart (ILS Z or LOC Z RWY28)
Instrument Approach Chart (ILS Y or LOC Y RWY28)
Instrument Approach Chart (VOR RWY28)
Instrument Approach Chart (VOR Z RWY10)
Instrument Approach Chart (RNP Z RWY10)
Instrument Approach Chart (RNP Y RWY10 (AR))
Instrument Approach Chart (RNP Z RWY28)
Instrument Approach Chart (RNP Y RWY28 (AR))
Other Chart (Visual REP)
Other Chart (MVA CHART)

RJSK / AKITA AD CHART



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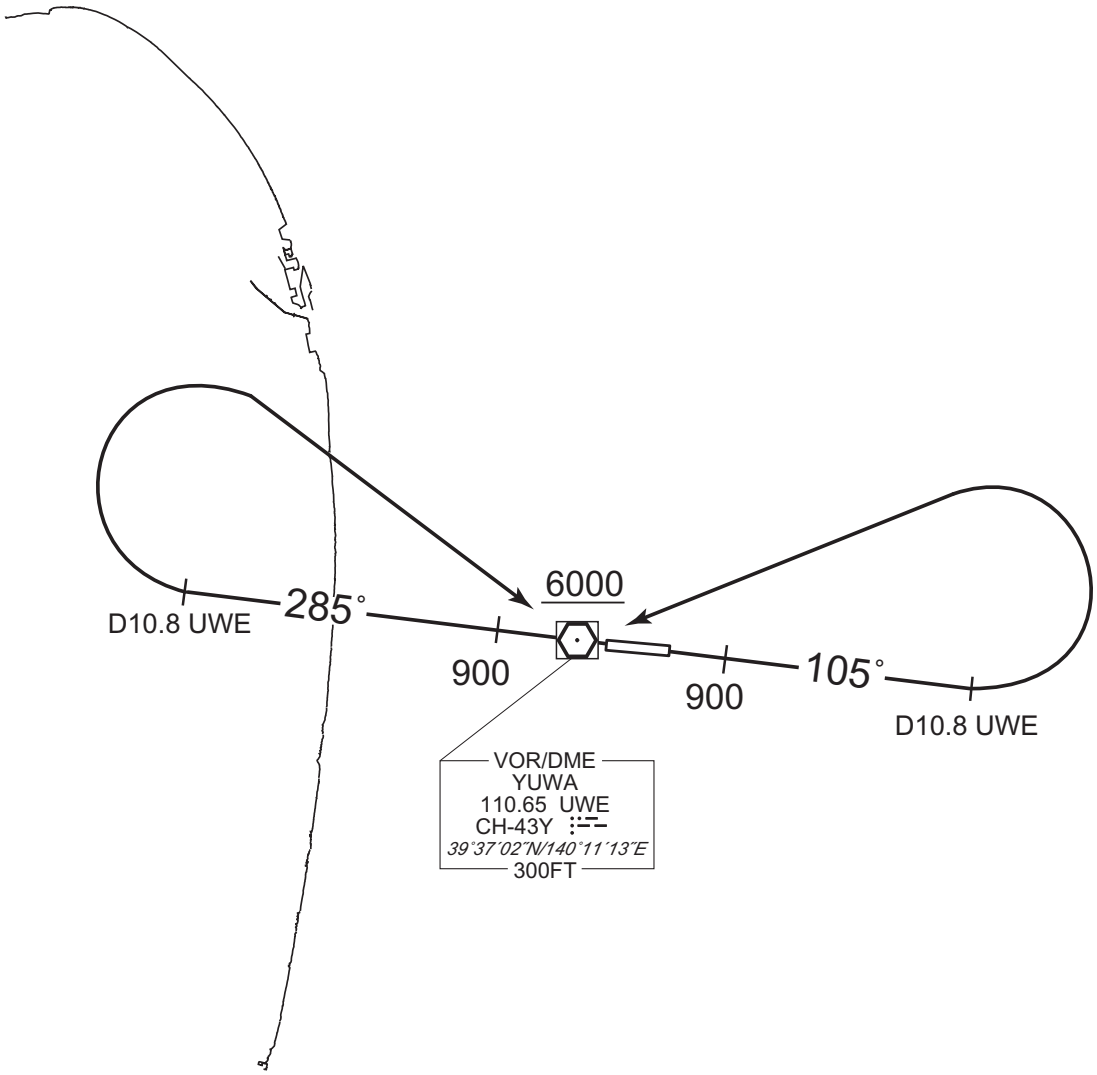
**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA SID

## YUWA REVERSAL SEVEN DEPARTURE

RWY 10 : Climb RWY HDG to 900FT, via UWE R105 to 10.8DME, turn left,...
RWY 28 : Climb RWY HDG to 900FT, via UWE R285 to 10.8DME turn right,...
...direct to UWE VOR/DME.
Cross UWE VOR/DME at or above 6000FT.

Note RWY10 : 5.0% climb gradient required up to 3300FT.
OBST ALT 3543FT located at 13.8NM 071˚ FM end of RWY10.




CHANGE : PROC course. PROC renamed. Note added.

STANDARD DEPARTURE CHART -INSTRUMENT

RJSK / AKITA

RNAV SID

# MUTSU THREE DEPARTURE

RNP1

Note GNSS required.


RWY10 : Climb on HDG106° at or above 900FT, turn left direct to SUGUT, to IRNOG, to MRE.
RWY28 : Climb on HDG286° at or above 900FT, turn right direct to NUPLI, to MRE.

Note RWY10 : 5.0% climb gradient required up to 3800FT.
OBST ALT 3937FT located at 15.3NM 039° FM end of RWY10.

CHANGE : PROC course. PROC renamed. Navigation Specification(Basic RNP1→RNP1). SUGUT, NUPLI, IRNOG established. SK002 abolished.

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA RNAV SID

CHANGE : PROC course. PROC renamed. Navigation Specification(Basic RNP1 → RNP1). SUGUT, NUPLI, IRNOG established. SK002 abolished.

## MUTSU THREE DEPARTURE

### RWY10

| 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 | - | - | 106 (096.6) | -9.1 | - | - | +900 | - | - | RNP1 |
| 002 | DF | SUGUT | - | - | -9.1 | - | L | - | - | - | RNP1 |
| 003 | TF | IRNOG | - | 016 (006.4) | -9.1 | 40.3 | - | - | - | - | RNP1 |
| 004 | TF | MRE | - | 032 (023.2) | -9.1 | 22.5 | - | - | - | - | RNP1 |

### RWY28

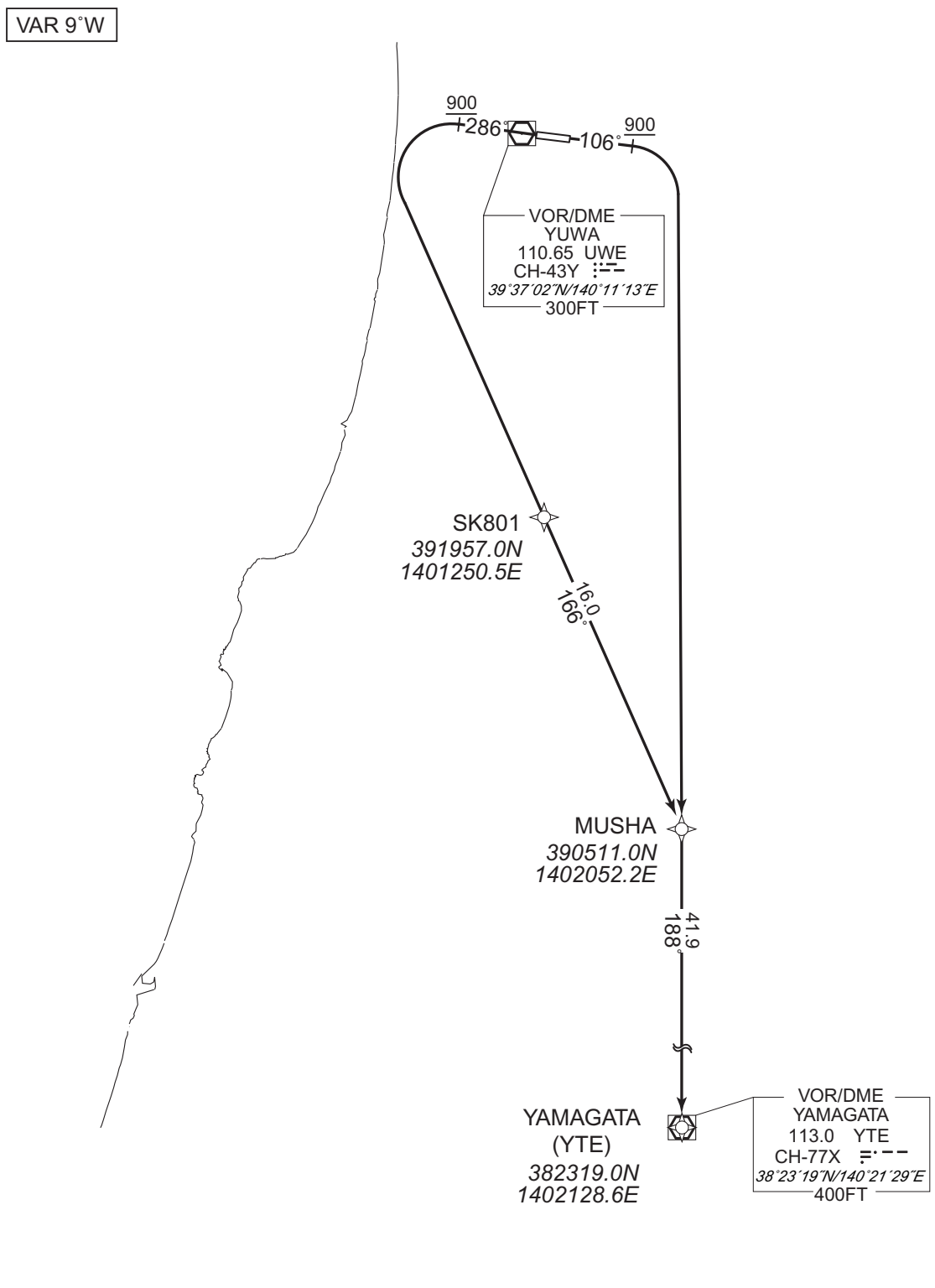
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | VA | - | - | 286 (276.6) | -9.1 | - | - | +900 | - | - | RNP1 |
| 002 | DF | NUPLI | - | - | -9.1 | - | R | - | - | - | RNP1 |
| 003 | TF | MRE | - | 032 (023.0) | -9.1 | 60.9 | - | - | - | - | RNP1 |

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA

RNAV SID

| USYU TWO DEPARTURE | RNP1 |
|---|---|
| Note GNSS required. | |




CHANGE : Navigation Specification(Basic RNP1 → RNP1).

RWY10 : Climb on HDG 106˚ at or above 900FT, turn right direct to MUSHA, to YTE.
RWY28 : Climb on HDG 286˚ at or above 900FT, turn left direct to SK801, to MUSHA, to YTE.

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA RNAV SID

## USYU TWO DEPARTURE

### RWY10

| 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 | - | - | 106 (096.6) | -8.9 | - | - | +900 | - | - | RNP1 |
| 002 | DF | MUSHA | - | - | -8.9 | - | R | - | - | - | RNP1 |
| 003 | TF | YTE | - | 188 (179.3) | -8.9 | 41.9 | - | - | - | - | RNP1 |

### RWY28

| 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 | - | - | 286 (276.6) | -8.9 | - | - | +900 | - | - | RNP1 |
| 002 | DF | SK801 | - | - | -8.9 | - | L | - | - | - | RNP1 |
| 003 | TF | MUSHA | - | 166 (157.1) | -8.9 | 16.0 | - | - | - | - | RNP1 |
| 004 | TF | YTE | - | 188 (179.3) | -8.9 | 41.9 | - | - | - | - | RNP1 |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

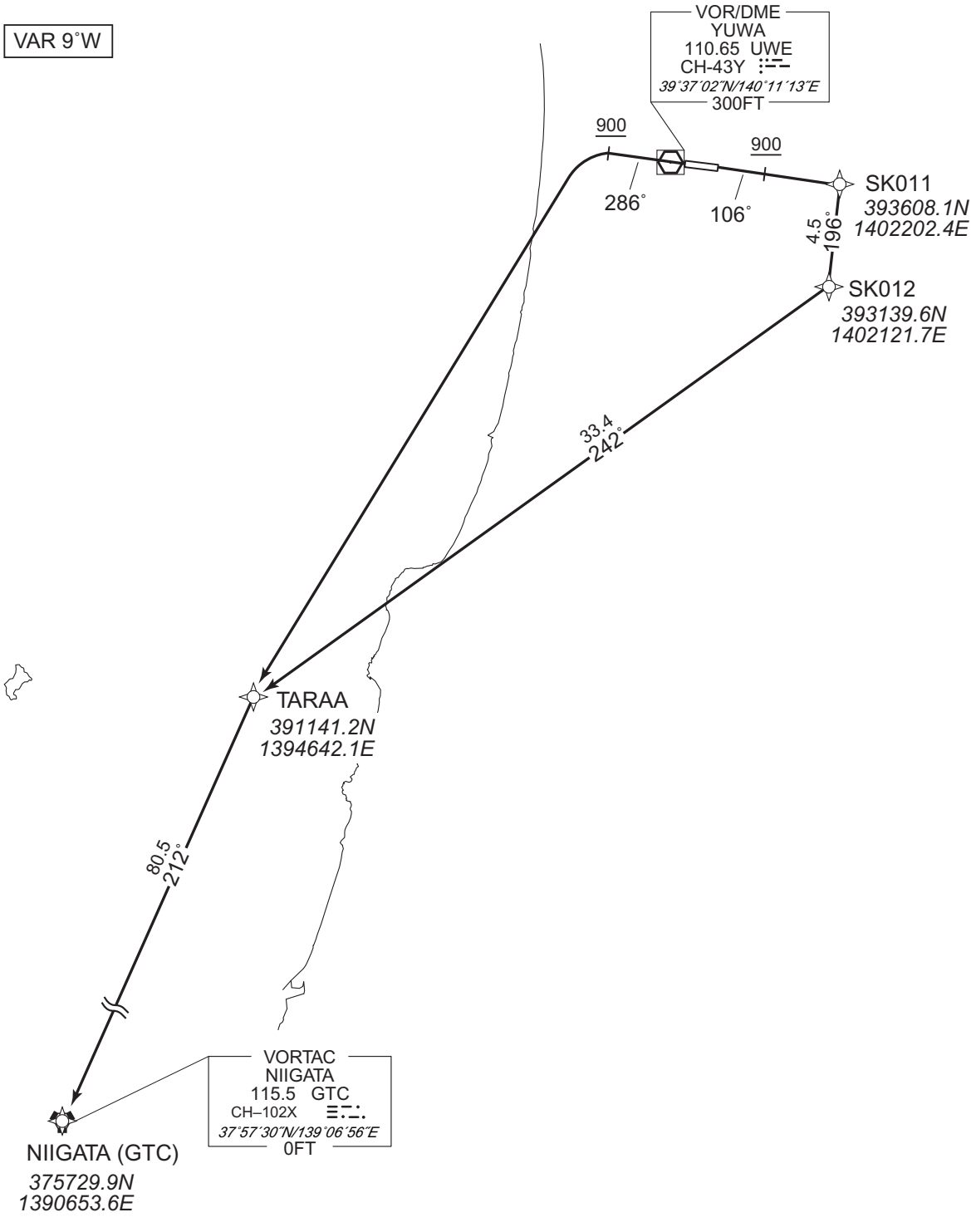
**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA

RNAV SID

| NIIGATA TWO DEPARTURE | RNP1 |
|---|---|

Note GNSS required.




CHANGE : Navigation Specification(Basic RNP1 → RNP1).

RWY10 : Climb on HDG 106˚ at or above 900FT, direct to SK011, to SK012, to TARAA, to GTC.
RWY28 : Climb on HDG 286˚ at or above 900FT, turn left direct to TARAA, to GTC.

**STANDARD DEPARTURE CHART -INSTRUMENT**

RJSK / AKITA RNAV SID

## NIIGATA TWO DEPARTURE

RWY10

| 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 | - | - | 106 (096.6) | -8.9 | - | - | +900 | - | - | RNP1 |
| 002 | DF | SK011 | - | - | -8.9 | - | - | - | - | - | RNP1 |
| 003 | TF | SK012 | - | 196 (186.7) | -8.9 | 4.5 | - | - | - | - | RNP1 |
| 004 | TF | TARAA | - | 242 (233.5) | -8.9 | 33.4 | - | - | - | - | RNP1 |
| 005 | TF | GTC | - | 212 (203.0) | -8.9 | 80.5 | - | - | - | - | RNP1 |

RWY28

| 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 | - | - | 286 (276.6) | -8.9 | - | - | +900 | - | - | RNP1 |
| 002 | DF | TARAA | - | - | -8.9 | - | - | - | - | - | RNP1 |
| 003 | TF | GTC | - | 212 (203.0) | -8.9 | 80.5 | - | - | - | - | RNP1 |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

**STANDARD ARRIVAL CHART-INSTRUMENT**

RJSK / AKITA

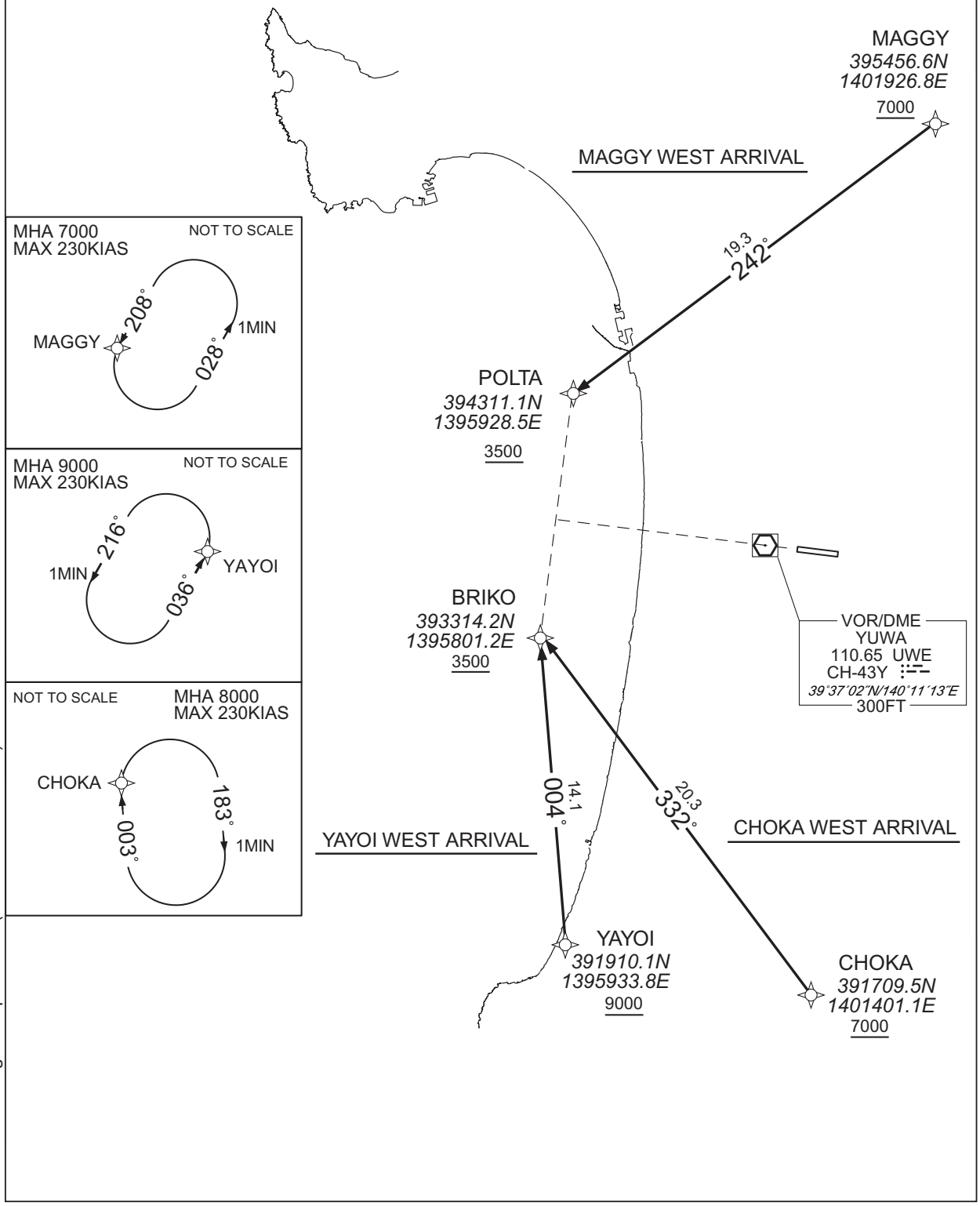
RNAV STAR RWY10

MAGGY WEST ARRIVAL
YAYOI WEST ARRIVAL
CHOKA WEST ARRIVAL

RNP1

Note GNSS required.

VAR 9˚W




CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA

RNAV STAR RWY10

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## MAGGY WEST ARRIVAL

From MAGGY at or above 7000FT, to POLTA at or above 3500FT.

| 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 | MAGGY | - | - | -9.0 | - | - | +7000 | - | - | RNP1 |
| 002 | TF | POLTA | - | 242 (232.6) | -9.0 | 19.3 | - | +3500 | - | - | 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 | MAGGY | 208 (199.5) | -9.0 | 1.0(-14000) | L | 7000 | FL140 | -230(-14000) | RNP1 |

## YAYOI WEST ARRIVAL

From YAYOI at or above 9000FT, to BRIKO at or above 3500FT.

| 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 | YAYOI | - | - | -9.0 | - | - | +9000 | - | - | RNP1 |
| 002 | TF | BRIKO | - | 004 (355.2) | -9.0 | 14.1 | - | +3500 | - | - | 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 | YAYOI | 036 (026.6) | -9.0 | 1.0(-14000) | L | 9000 | FL140 | -230(-14000) | RNP1 |

## CHOKA WEST ARRIVAL

From CHOKA at or above 7000FT, to BRIKO at or above 3500FT.

| 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 | CHOKA | - | - | -9.0 | - | - | +7000 | - | - | RNP1 |
| 002 | TF | BRIKO | - | 332 (322.5) | -9.0 | 20.3 | - | +3500 | - | - | 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 | CHOKA | 003 (353.8) | -9.0 | 1.0(-14000) | R | 8000 | FL140 | -230(-14000) | RNP1 |

**STANDARD ARRIVAL CHART-INSTRUMENT**

RJSK / AKITA

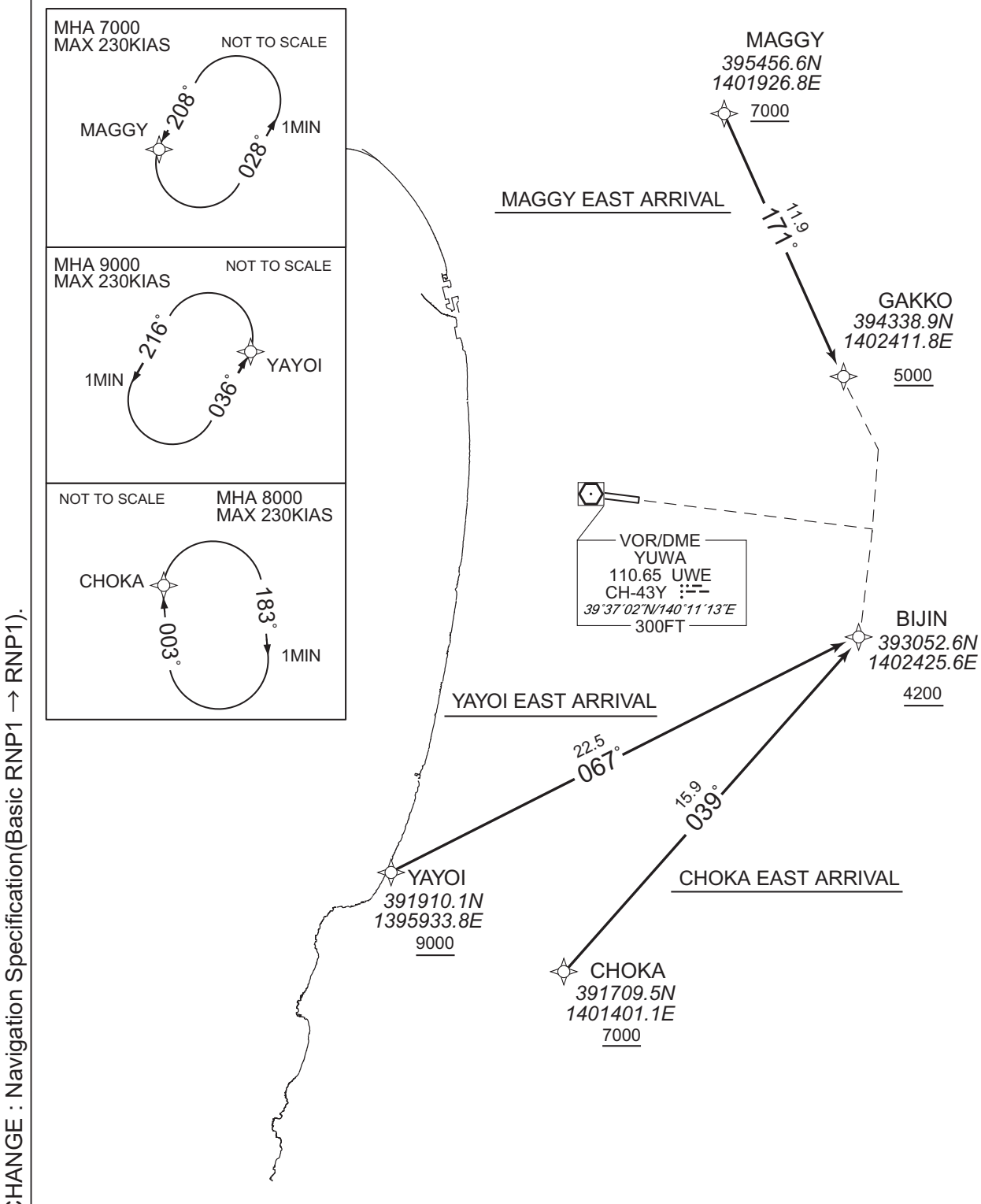
RNAV STAR RWY28

MAGGY EAST ARRIVAL
YAYOI EAST ARRIVAL
CHOKA EAST ARRIVAL

RNP1

Note GNSS required.

VAR 9˚W




CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART-INSTRUMENT

RJSK / AKITA RNAV STAR RWY28

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

## MAGGY EAST ARRIVAL

From MAGGY at or above 7000FT, to GAKKO at or above 5000FT.

| 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 | MAGGY | - | - | -9.0 | - | - | +7000 | - | - | RNP1 |
| 002 | TF | GAKKO | - | 171 (162.1) | -9.0 | 11.9 | - | +5000 | - | - | 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 | MAGGY | 208 (199.5) | -9.0 | 1.0(-14000) | L | 7000 | FL140 | -230(-14000) | RNP1 |

## YAYOI EAST ARRIVAL

From YAYOI at or above 9000FT, to BIJIN at or above 4200FT.

| 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 | YAYOI | - | - | -9.0 | - | - | +9000 | - | - | RNP1 |
| 002 | TF | BIJIN | - | 067 (058.5) | -9.0 | 22.5 | - | +4200 | - | - | 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 | YAYOI | 036 (026.6) | -9.0 | 1.0(-14000) | L | 9000 | FL140 | -230(-14000) | RNP1 |

## CHOKA EAST ARRIVAL

From CHOKA at or above 7000FT, to BIJIN at or above 4200FT.

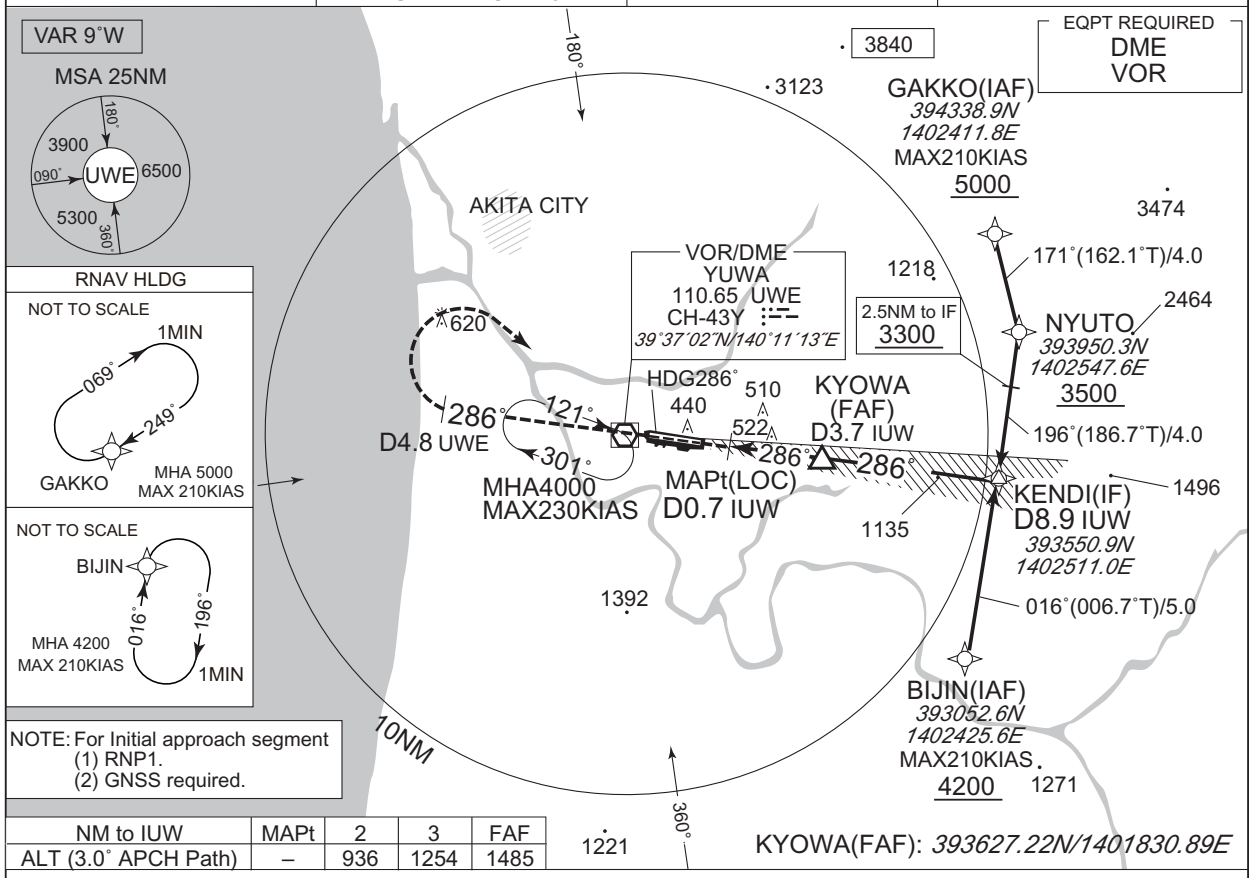
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | CHOKA | - | - | -9.0 | - | - | +7000 | - | - | RNP1 |
| 002 | TF | BIJIN | - | 039 (030.3) | -9.0 | 15.9 | - | +4200 | - | - | 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 | CHOKA | 003 (353.8) | -9.0 | 1.0(-14000) | R | 8000 | FL140 | -230(-14000) | RNP1 |

**INSTRUMENT APPROACH CHART**

RJSK / AKITA — ILS Z or LOC Z RWY28

| SHIRAKAMI APP | ILS-LOC<br>108.9 IUW<br>ILS-GP 329.3<br>ILS-DME CH-26X | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | | 118.6 - 126.2 | |

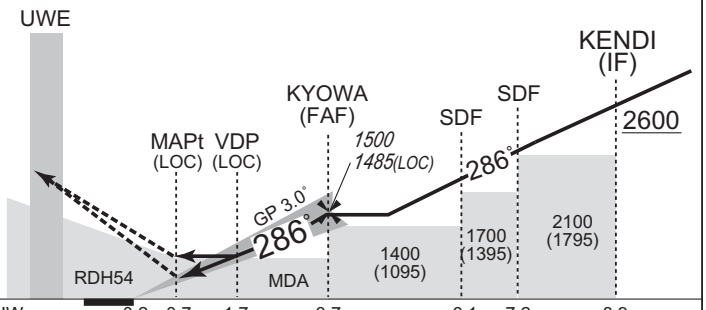



| NM to IUW | MAPt | 2 | 3 | FAF |
|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 936 | 1254 | 1485 |

MISSED APPROACH

Climb to 800FT on HDG286˚,
via UWE R286 to UWE 4.8DME,
turn right, direct to UWE
VOR/DME and hold at 4000FT.
Contact SHIRAKAMI APP.

Timing not authorized for defining the MAPt.




| DME to IUW | 0.2 | 0.7 | 1.7 | 3.7 | 6.1 | 7.2 | 8.9 |
|---|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.5 | 3.5 | 5.9 | 7.0 | 8.7 |

MINIMA THR elev. 314 AD elev. 305

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 514 (200) | 550 | 810 (505) | 1000 | 830 (525) | 1600 |
| B | | | | 1200 | | |
| C | | | | | 900 (595) | 2400 |
| D | | | | 1600 | | 3200 |

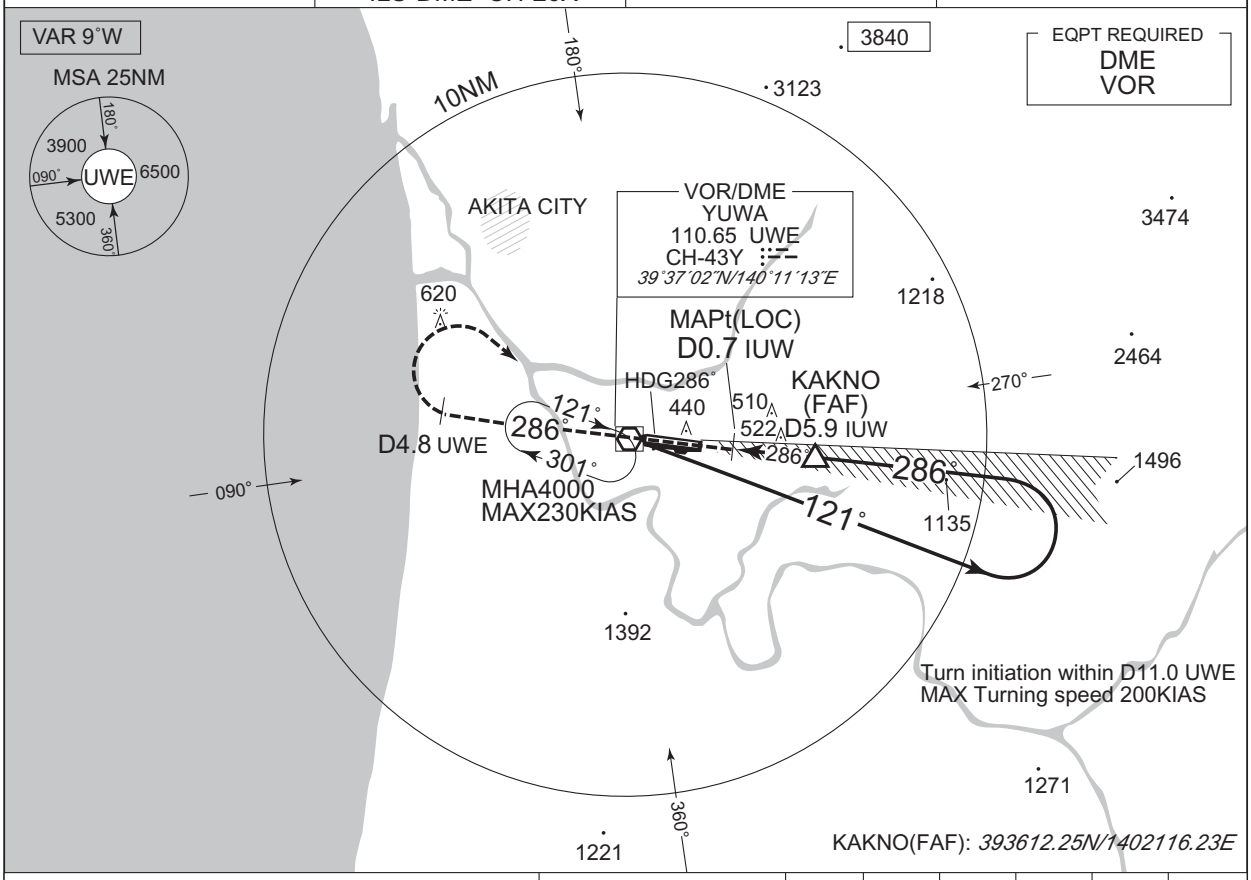
CHANGE : HLDG pattern for using NAVAID abolished. RNAV HLDG pattern established.

**INSTRUMENT APPROACH CHART**

RJSK / AKITA

ILS Y or LOC Y RWY28

| SHIRAKAMI APP | ILS-LOC | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | 108.9 IUW<br>ILS-GP 329.3<br>ILS-DME CH-26X | 118.6 - 126.2 | |

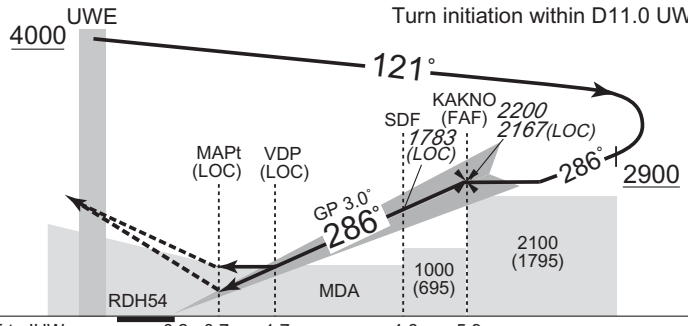



| NM to IUW | MAPt | 2 | 3 | 4 | 5 | FAF |
|---|---|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 936 | 1254 | 1573 | 1891 | 2167 |

MISSED APPROACH

Climb to 800FT on HDG286˚,
via UWE R286 to UWE 4.8DME,
turn right, direct to UWE
VOR/DME and hold at 4000FT.
Contact SHIRAKAMI APP.

Timing not authorized for defining the MAPt.




| DME to IUW | 0.2 | 0.7 | 1.7 | 4.6 | 5.9 |
|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.5 | 4.4 | 5.7 |

MINIMA THR elev. 314 AD elev. 305

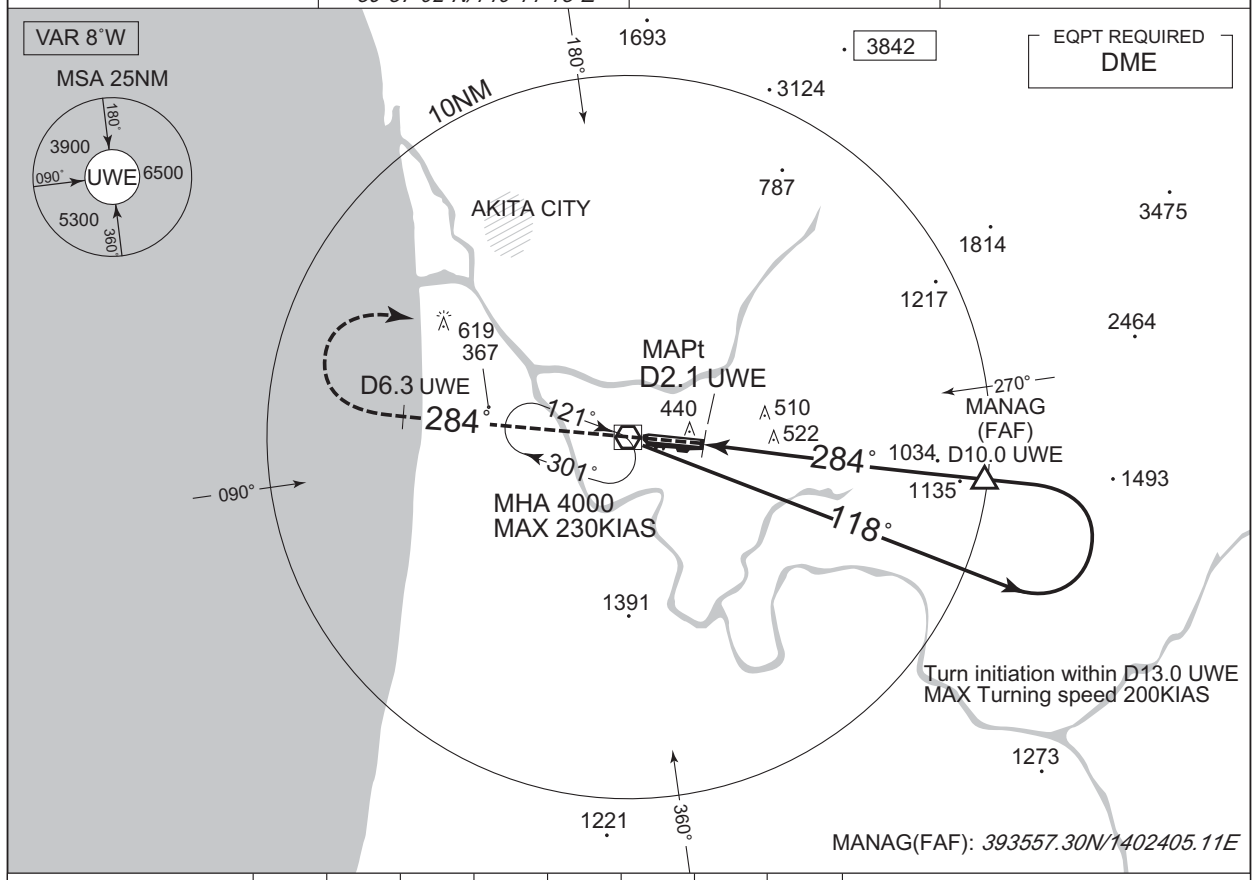
| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 514 (200) | 550 | 810 (505) | 1000 | 830 (525) | 1600 |
| B | | | | 1200 | | |
| C | | | | | 900 (595) | 2400 |
| D | | | | 1600 | | 3200 |

CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

**INSTRUMENT APPROACH CHART**

RJSK / AKITA — VOR RWY28

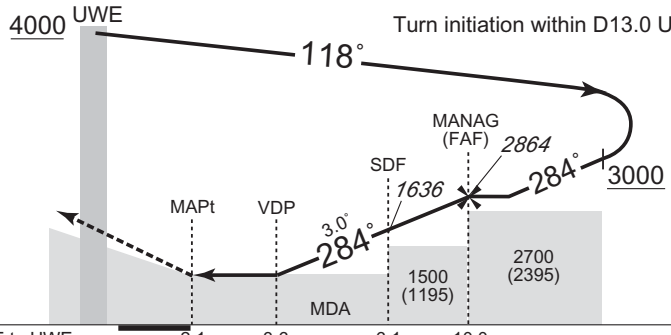
| SHIRAKAMI APP | YUWA VOR/DME | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | 110.65 UWE CH-43Y<br>*39°37′02″N/140°11′13″E* | 118.6 - 126.2 | |




| NM to UWE | MAPt | 4 | 5 | 6 | 7 | 8 | 9 | FAF |
|---|---|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 953 | 1272 | 1590 | 1908 | 2226 | 2545 | 2864 |

MISSED APPROACH
Proceed to UWE VOR/DME,
climb via UWE R284 to
UWE 6.3DME, turn right,
direct to UWE VOR/DME
and hold at 4000FT.
Contact SHIRAKAMI APP.

Timing not authorized for defining the MAPt.




| DME to UWE | 2.1 | 3.6 | 6.1 | 10.0 |
|---|---|---|---|---|
| NM to THR | 0 | 1.5 | 4.0 | 7.8 |

MINIMA THR elev. 314 AD elev. 305

| CAT | | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 810 (505) | 1000 | 830 (525) | 1600 |
| B | | 1200 | | |
| C | | | 900 (595) | 2400 |
| D | | 1600 | | 3200 |

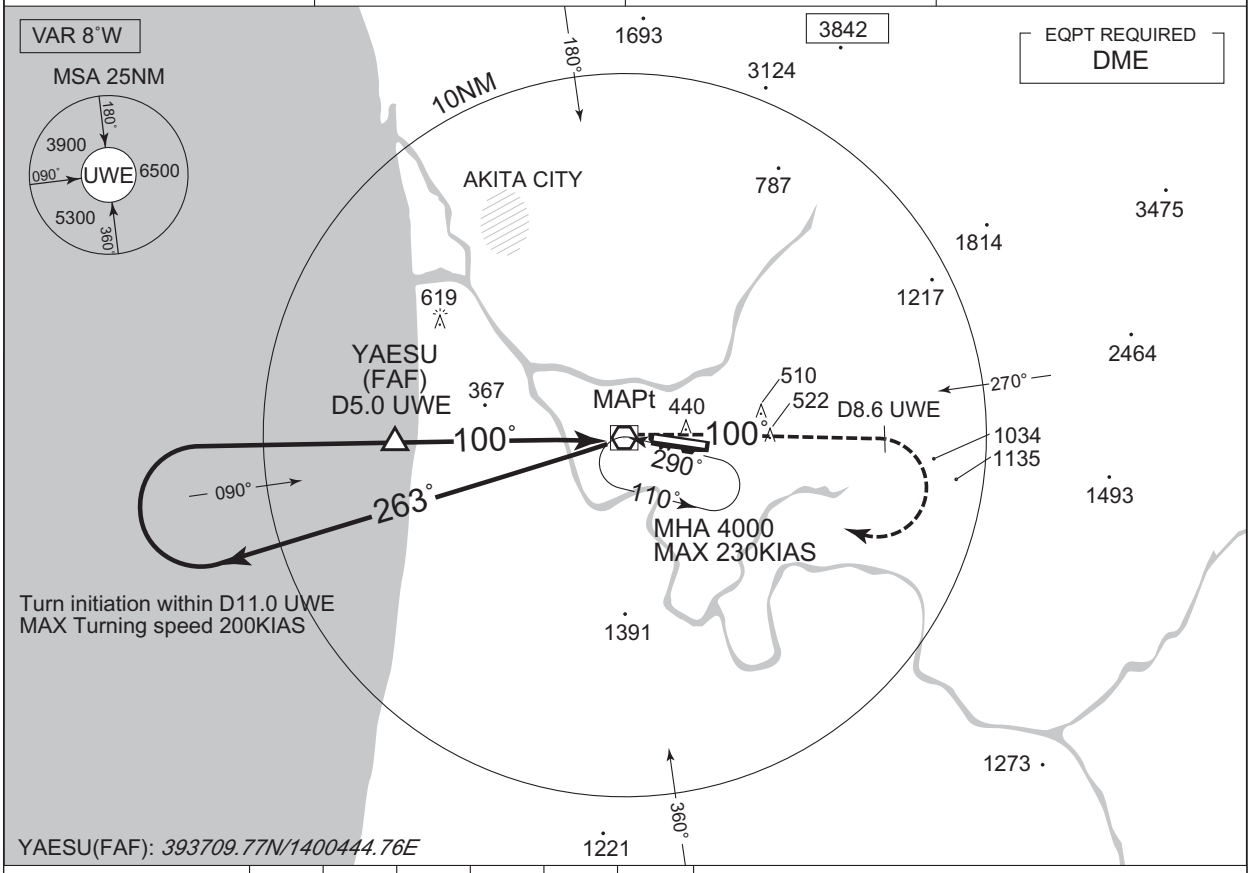
CHANGE : ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

**INSTRUMENT APPROACH CHART**

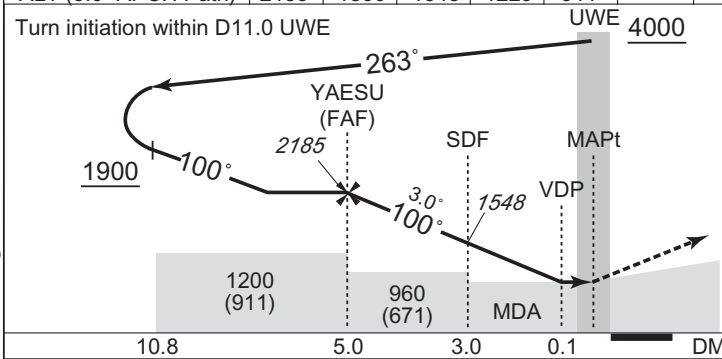
RJSK / AKITA

VOR Z RWY10

| SHIRAKAMI APP<br>119.25 - 315.3 - 120.65 | YUWA VOR/DME<br>110.65 UWE<br>CH-43Y<br>*39°37′02″N/140°11′13″E* | AKITA TOWER<br>118.6 - 126.2 | RADAR AVBL |
|---|---|---|---|




| NM to UWE | FAF | 4 | 3 | 2 | 1 | MAPt |
|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | 2185 | 1866 | 1548 | 1229 | 911 | – |




MISSED APPROACH

Climb via UWE R100 to UWE 8.6DME, turn right, direct to UWE VOR/DME and hold at 4000FT.
Contact SHIRAKAMI APP.

Timing not authorized for defining the MAPt.

| | | | | | |
|---|---|---|---|---|---|
| 10.8 | 5.0 | 3.0 | 0.1 | | DME to UWE |
| 11.6 | 5.8 | 3.8 | 0.9 | 0 | NM to THR |

MINIMA THR elev. 289 AD elev. 305

| CAT | | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | CMV | MDA(H) | VIS |
| A | 680 (391) | 1200 | 830 (525) | 1600 |
| B | | 1300 | | |
| C | | 1400 | 900 (595) | 2400 |
| D | | 1600 | | 3200 |

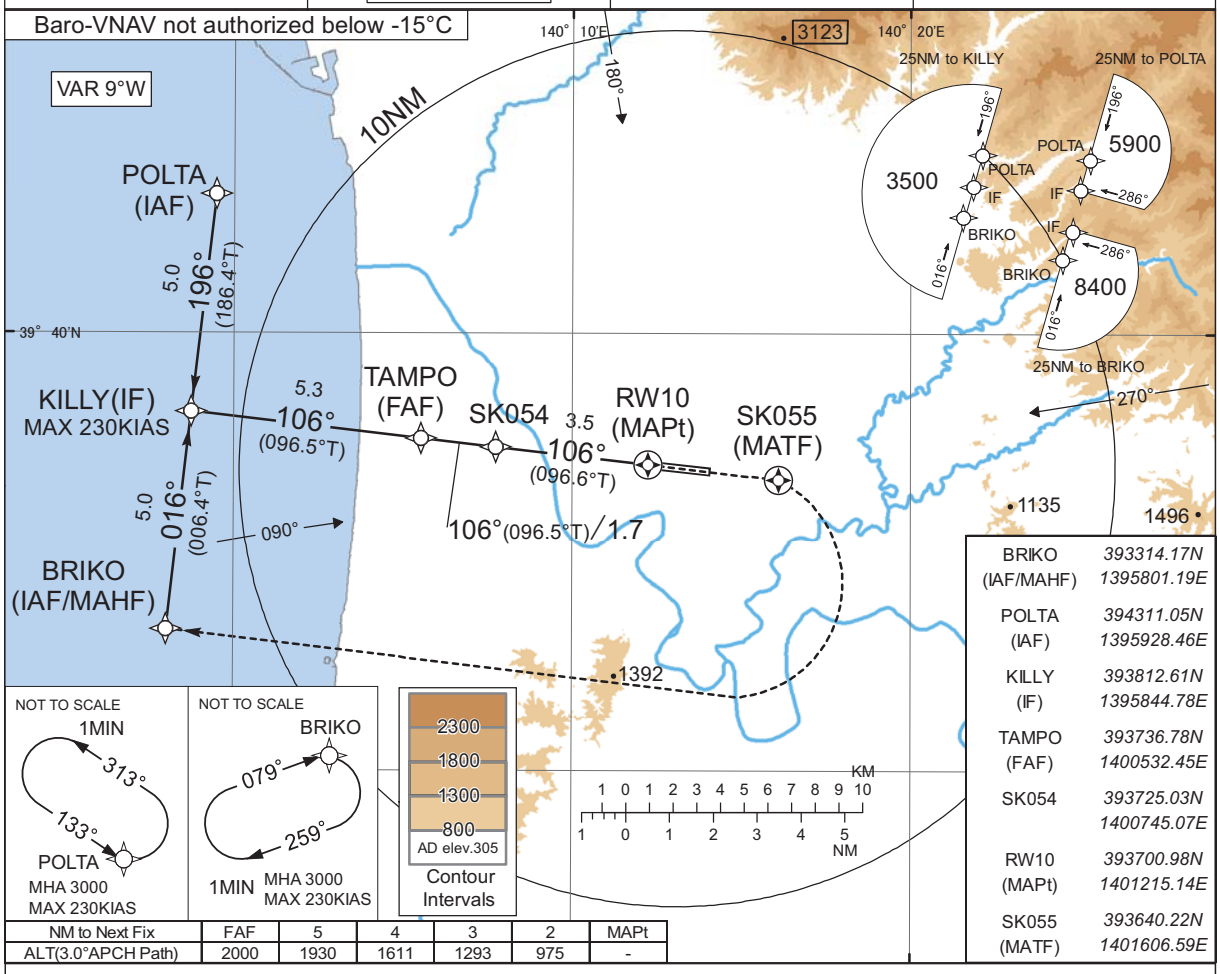
CHANGE : PROC renamed. ATC call sign and FREQ. Description of RADAR Service. Missed APCH PROC.

**INSTRUMENT APPROACH CHART**

CHANGE : PROC course. MAX speed at KILLY added. Missed APCH for using VOR/DME abolished. MSAS CH added. HLDG pattern for using NAVAID abolished. RNAV HLDG at BRIKO. Missed APCH climb gradient MNM. MINIMA.

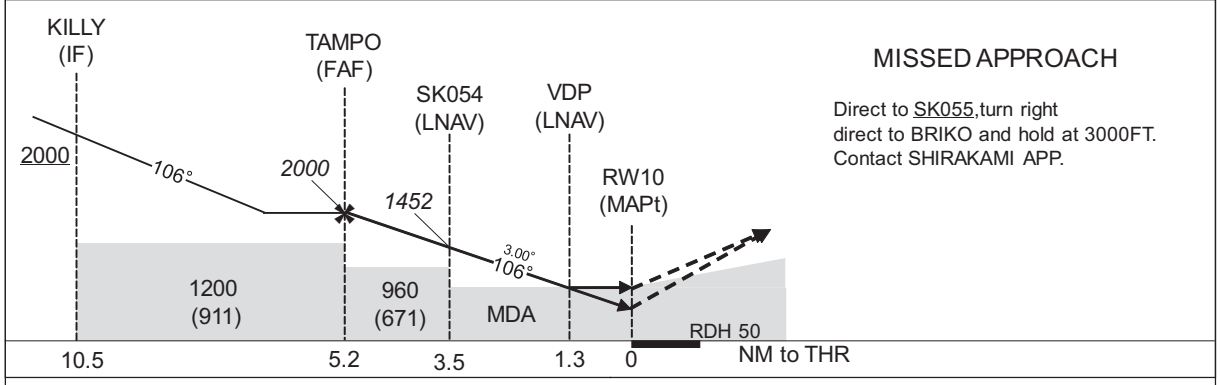
RJSK / AKITA — RNP Z RWY10

| SHIRAKAMI APP | RNP APCH | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | MSAS CH91409 M10A | 118.6 - 126.2 | |




| | BRIKO (IAF/MAHF) | POLTA (IAF) | KILLY (IF) | TAMPO (FAF) | SK054 | RW10 (MAPt) | SK055 (MATF) |
|---|---|---|---|---|---|---|---|
| | *393314.17N* *1395801.19E* | *394311.05N* *1395928.46E* | *393812.61N* *1395844.78E* | *393736.78N* *1400532.45E* | *393725.03N* *1400745.07E* | *393700.98N* *1401215.14E* | *393640.22N* *1401606.59E* |

| NM to Next Fix | FAF | 5 | 4 | 3 | 2 | MAPt |
|---|---|---|---|---|---|---|
| ALT(3.0°APCH Path) | 2000 | 1930 | 1611 | 1293 | 975 | - |




**MISSED APPROACH**

Direct to SK055,turn right
direct to BRIKO and hold at 3000FT.
Contact SHIRAKAMI APP.

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 289 AD elev. 305

| CAT | LPV | | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|---|---|
| | DA(H) | CMV | DA(H) | CMV | MDA(H) | CMV | MDA(H) | VIS |
| A | 569(280) | 1000 | 653(364) | 1200 | 740(451) | 1400 | 830(525) | 1600 |
| B | 579(290) | 1100 | | 1300 | | 1500 | | |
| C | 589(300) | 1400 | | 1400 | | 1600 | 900(595) | 2400 |
| D | 599(310) | 1600 | | 1600 | | 1800 | | 3200 |

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

INSTRUMENT APPROACH CHART

RJSK / AKITA RNP Z RWY10

## FAS DATA BLOCK

| | | | |
|---|---|---|---|
| Operation type | 0 | LTP/FTP ellipsoidal height | +01268 |
| SBAS service provider identifier | 2 | FPAP latitude | *393651.6070N* |
| Airport identifier | RJSK | FPAP longitude | *1401359.3150E* |
| Runway | 10 | Threshold crossing height | 00015.0 |
| Approach performance designator | 0 | TCH units selector | 1 |
| Route indicator | Z | Glide path angle | 03.00 |
| Reference path data selector | 0 | Course width at threshold | 105.00 |
| Reference path ID | M10A | ⊿ length offset | 0000 |
| LTP/FTP latitude | *393700.9295N* | HAL | 40.0 |
| LTP/FTP longitude | *1401215.1950E* | VAL | 50.0 |
| CRC remainder | 884983FD | | |

## Required additional data

| | |
|---|---|
| LTP/FTP orthometric height | 87.9 |

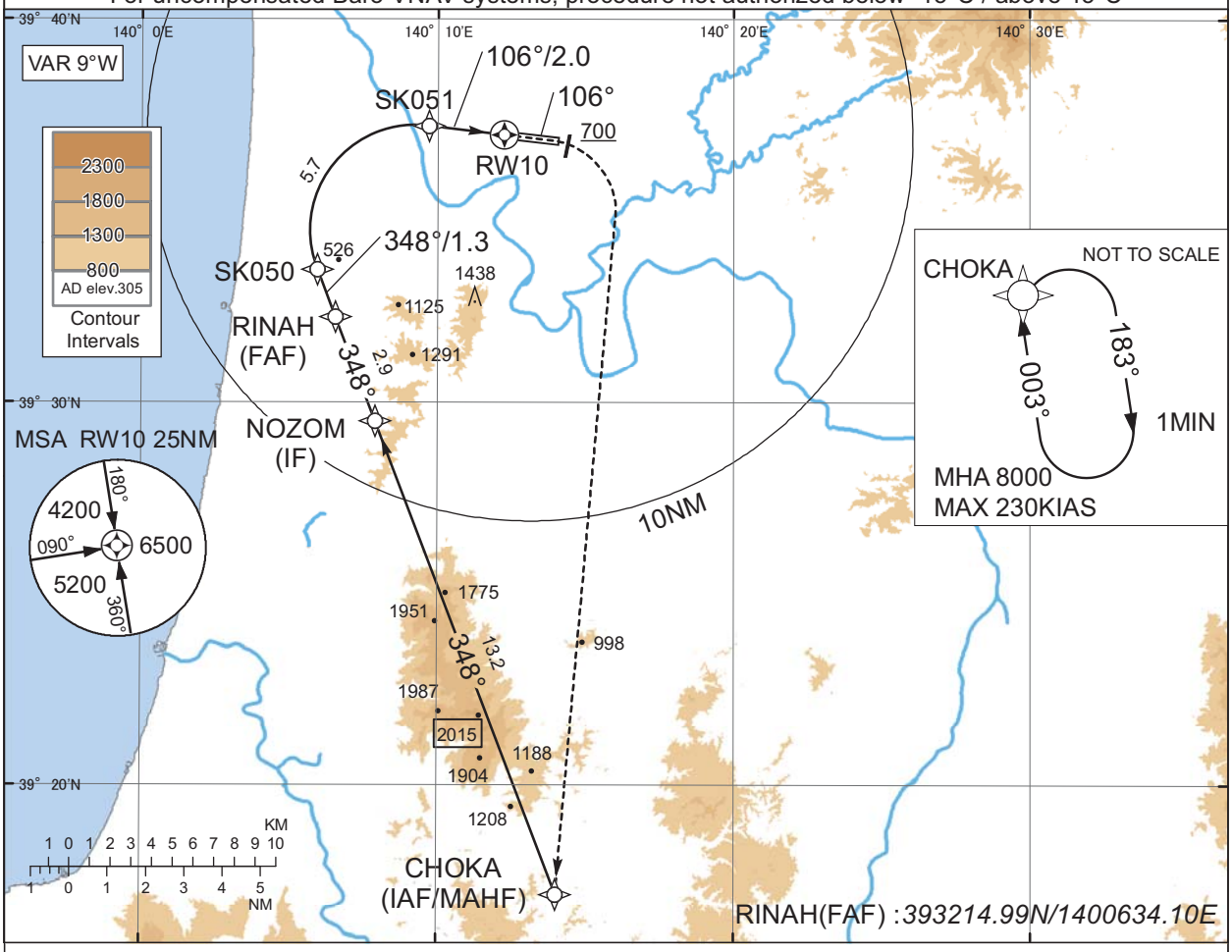
CHANGE : FAS DATA BLOCK, Required additional data established.

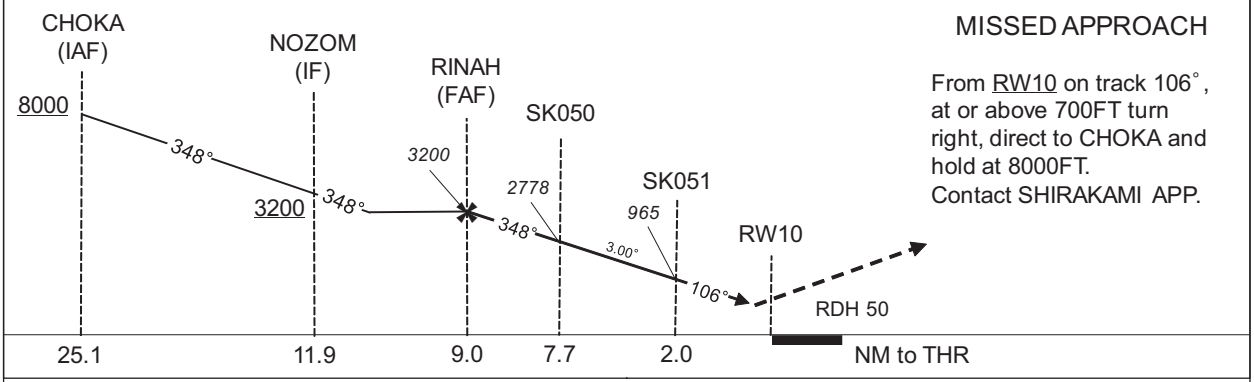
**INSTRUMENT APPROACH CHART**

RJSK / AKITA — RNP Y RWY10(AR)

| SHIRAKAMI APP | RNP AR | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | RF required. | 118.6 - 126.2 | |

For uncompensated Baro-VNAV systems, procedure not authorized below -15°C / above 45°C




MISSED APPROACH

From RW10 on track 106°, at or above 700FT turn right, direct to CHOKA and hold at 8000FT.
Contact SHIRAKAMI APP.

Missed APCH climb gradient MNM 5.0%

| MINIMA | THR elev. 289 | AD elev. 305 |
|---|---|---|
| CAT | RNP 0.30 | |
| | DA(H) | CMV |
| A | - | - |
| B | | |
| C | 686(397) | 1400 |
| D | | 1600 |

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

**Authorization Required**

CHANGE : HLDG pattern for using NAVAID abolished.

**INSTRUMENT APPROACH CHART**

RJSK / AKITA RNP Y RWY10(AR)

## Coding Table

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | CHOKA | - | - | -9.0 | - | - | +8000 | - | - | - |
| 002 | TF | NOZOM | - | 348 (339.2) | -9.0 | 13.2 | - | +3200 | - | - | 1.0 |
| 003 | TF | RINAH | - | 348 (339.1) | -9.0 | 2.9 | - | 3200 | - | - | 1.0 |
| 004 | TF | SK050 | - | 348 (339.1) | -9.0 | 1.3 | - | 2778 | - | -3.00 | 0.3 |
| 005 | RF Center: SKRF1 r=2.78NM | SK051 | - | - | -9.0 | 5.7 | R | 965 | - | -3.00 | 0.3 |
| 006 | TF | RW10 | Y | 106 (096.6) | -9.0 | 2.0 | - | 339 | - | -3.00/50 | 0.3 |
| 007 | FA | - | - | 106 (096.6) | -9.0 | - | - | +700 | - | - | 1.0 |
| 008 | DF | CHOKA | - | - | -9.0 | - | R | 8000 | - | - | 1.0 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|
| Hold | CHOKA | 003 (353.8) | -9.0 | 1.0 (-14000) | R | 8000 | FL140 | -230 (-14000) | 1.0 |

## Waypoint Coordinates

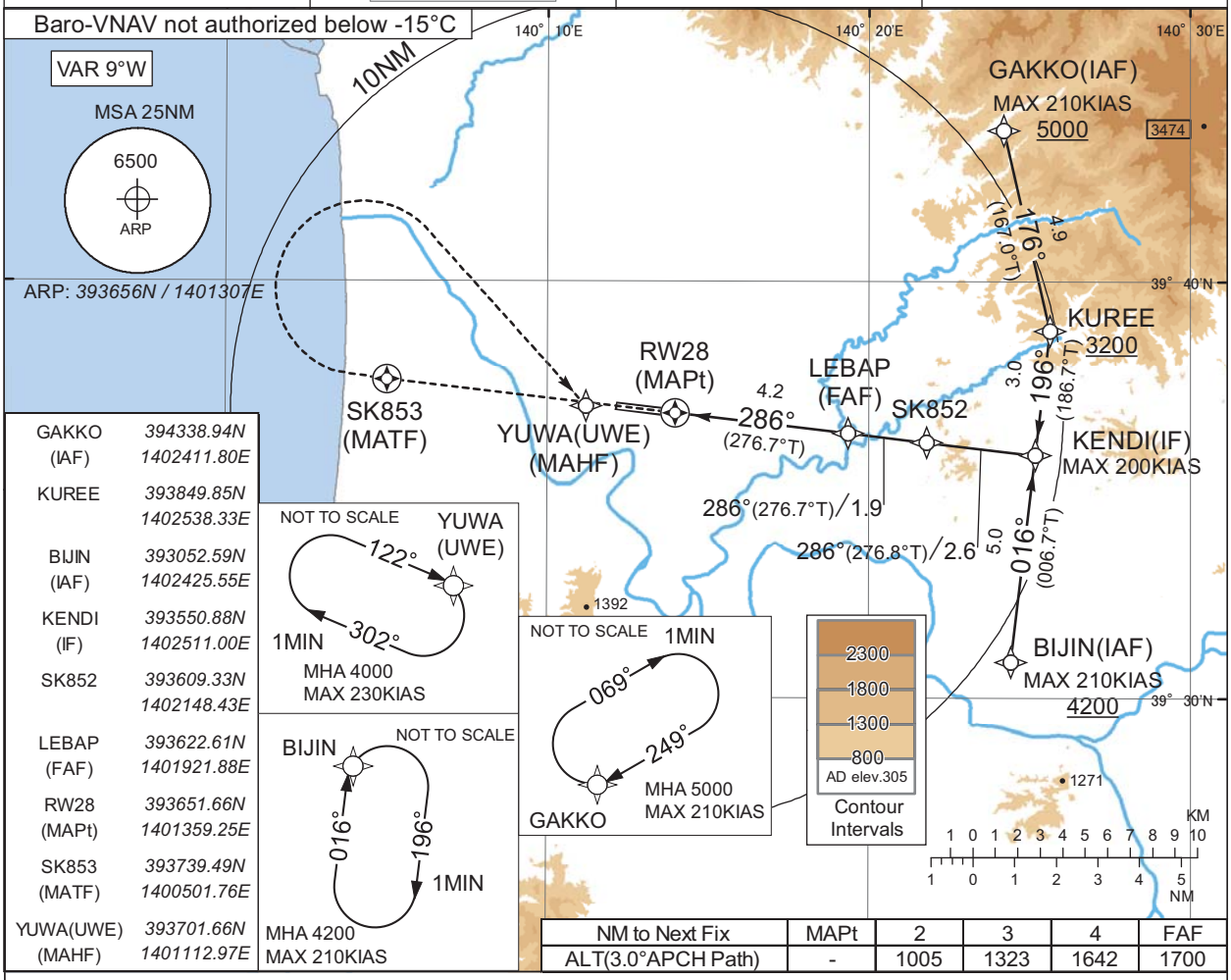
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---|---|---|
| CHOKA | *391709.51N / 1401401.06E* | SKRF1 | *393428.91N / 1400918.43E* |
| NOZOM | *392931.83N / 1400754.90E* | | |
| RINAH | *393214.99N / 1400634.10E* | | |
| SK050 | *393329.21N / 1400557.30E* | | |
| SK051 | *393714.55N / 1400943.07E* | | |
| RW10 | *393700.98N / 1401215.14E* | | |

**INSTRUMENT APPROACH CHART**

RJSK / AKITA

RNP Z RWY28

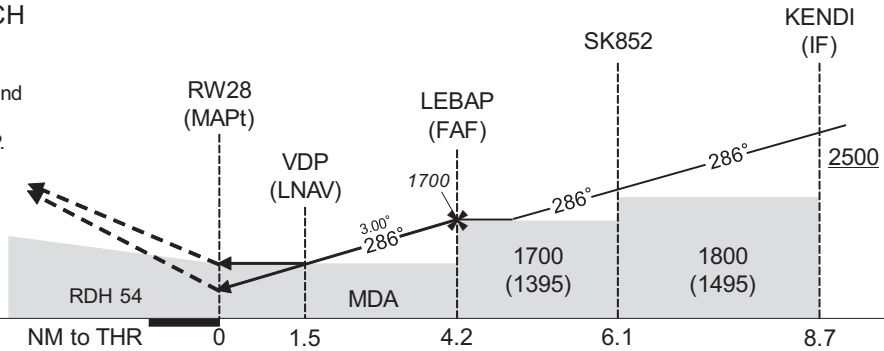
| SHIRAKAMI APP | RNP APCH | AKITA TOWER | RADAR AVBL |
|---|---|---|---|
| 119.25 - 315.3 - 120.65 | MSAS CH43906<br>M28A | 118.6 - 126.2 | |




| NM to Next Fix | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT(3.0°APCH Path) | - | 1005 | 1323 | 1642 | 1700 |

## MISSED APPROACH

Direct to SK853,
turn right direct to UWE and
hold at 4000FT.
Contact SHIRAKAMI APP.




Missed APCH climb gradient MNM 5.0%

| MINIMA | THR elev. 314 | | AD elev. 305 | | | | | |
|---|---|---|---|---|---|---|---|---|
| CAT | LPV | | LNAV/VNAV | | LNAV | | CIRCLING | |
| | DA(H) | RVR/CMV | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 591(277) | 800 | 810(496) | 1000 | 810(505) | 1000 | 830(525) | 1600 |
| B | 601(287) | | | 1200 | | 1200 | | |
| C | 644(330) | 1000 | | | | | 900(595) | 2400 |
| D | 653(339) | 1400 | | 1600 | | 1600 | | 3200 |

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

CHANGE : New PROC.

INSTRUMENT APPROACH CHART

RJSK / AKITA RNP Z RWY28

## FAS DATA BLOCK

| | | | |
|---|---|---|---|
| Operation type | 0 | LTP/FTP ellipsoidal height | +01346 |
| SBAS service provider identifier | 2 | FPAP latitude | *393700.9295N* |
| Airport identifier | RJSK | FPAP longitude | *1401215.1950E* |
| Runway | 28 | Threshold crossing height | 00016.5 |
| Approach performance designator | 0 | TCH units selector | 1 |
| Route indicator | Z | Glide path angle | 03.00 |
| Reference path data selector | 0 | Course width at threshold | 105.00 |
| Reference path ID | M28A | ⊿ length offset | 0000 |
| LTP/FTP latitude | *393651.6070N* | HAL | 40.0 |
| LTP/FTP longitude | *1401359.3150E* | VAL | 50.0 |
| CRC remainder | CA86C5B4 | | |

## Required additional data

| | |
|---|---|
| LTP/FTP orthometric height | 95.6 |

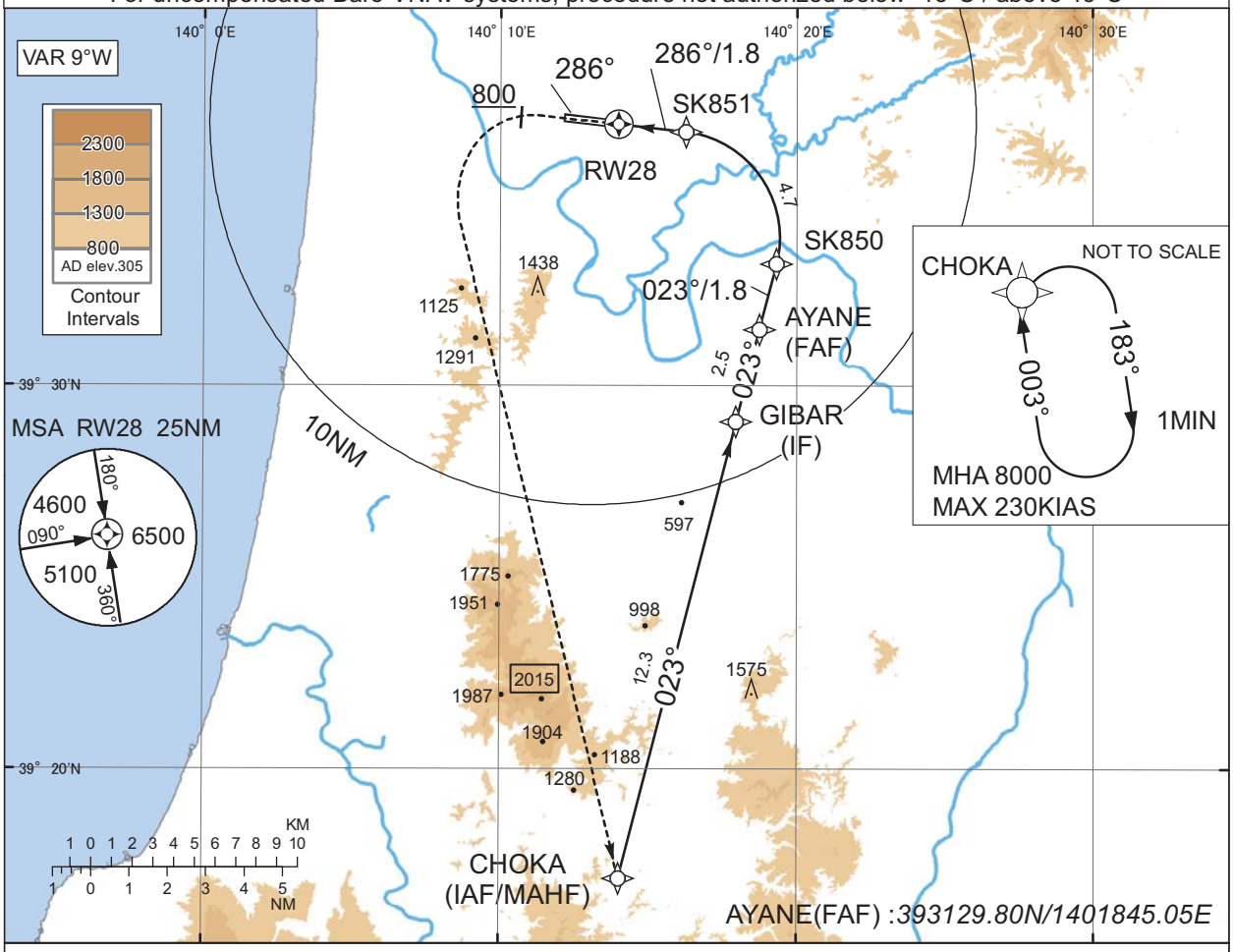
CHANGE : New PROC.

**INSTRUMENT APPROACH CHART**

RJSK / AKITA — RNP Y RWY28(AR)

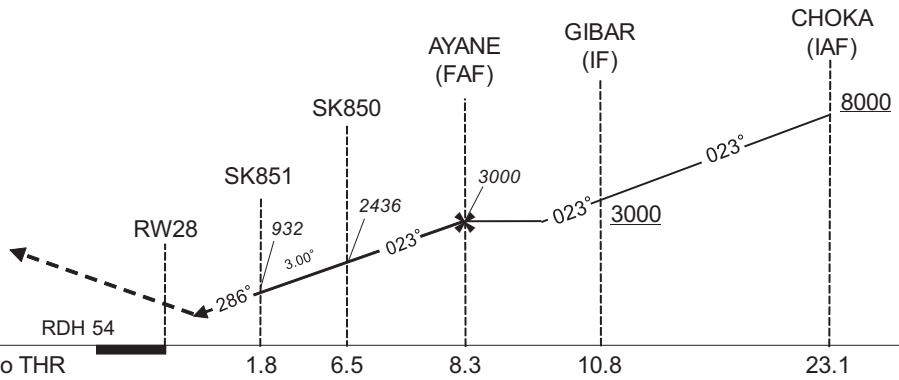
| SHIRAKAMI APP<br>119.25 - 315.3 - 120.65 | RNP AR<br>RF required. | AKITA TOWER<br>118.6 - 126.2 | RADAR AVBL |
|---|---|---|---|

For uncompensated Baro-VNAV systems, procedure not authorized below -15°C / above 45°C




MISSED APPROACH

From RW28 on track 286°, at or above 800FT turn left, direct to CHOKA and hold at 8000FT.
Contact SHIRAKAMI APP.




Missed APCH climb gradient MNM 5.0%

| MINIMA | THR elev. 314 | AD elev. 305 |
|---|---|---|
| CAT | RNP 0.30 | |
| | DA(H) | RVR/CMV |
| A | - | - |
| B | | |
| C | 653(339) | 1000 |
| D | | 1400 |

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

**Authorization Required**

CHANGE : PROC renamed. HLDG pattern for using NAVAID abolished.

INSTRUMENT APPROACH CHART

RJSK / AKITA

RNP Y RWY28(AR)

Coding Table

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | CHOKA | - | - | -9.0 | - | - | +8000 | - | - | - |
| 002 | TF | GIBAR | - | 023 (014.3) | -9.0 | 12.3 | - | +3000 | - | - | 1.0 |
| 003 | TF | AYANE | - | 023 (014.3) | -9.0 | 2.5 | - | 3000 | - | - | 1.0 |
| 004 | TF | SK850 | - | 023 (014.3) | -9.0 | 1.8 | - | 2436 | - | -3.00 | 0.3 |
| 005 | RF Center: SKRF2 r=2.77NM | SK851 | - | - | -9.0 | 4.7 | L | 932 | - | -3.00 | 0.3 |
| 006 | TF | RW28 | Y | 286 (276.7) | -9.0 | 1.8 | - | 368 | - | -3.00/54 | 0.3 |
| 007 | FA | - | - | 286 (276.7) | -9.0 | - | - | +800 | - | - | 1.0 |
| 008 | DF | CHOKA | - | - | -9.0 | - | L | 8000 | - | - | 1.0 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|
| Hold | CHOKA | 003 (353.8) | -9.0 | 1.0 (-14000) | R | 8000 | FL140 | -230 (-14000) | 1.0 |

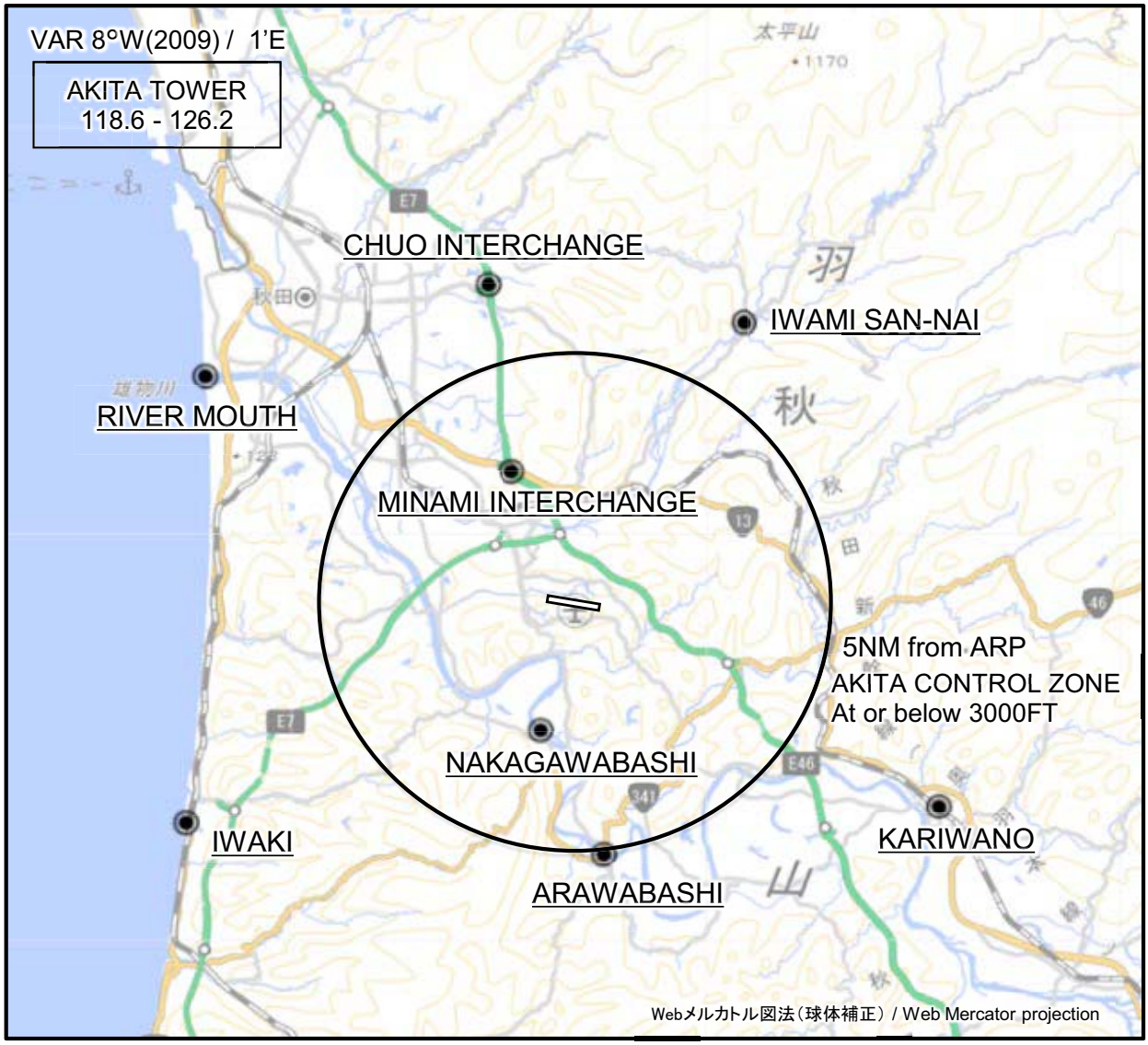
Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---|---|---|
| CHOKA | *391709.51N / 1401401.06E* | SKRF2 | *393354.17N / 1401551.05E* |
| GIBAR | *392905.47N / 1401757.27E* | | |
| AYANE | *393129.80N / 1401845.05E* | | |
| SK850 | *393312.87N / 1401919.21E* | | |
| SK851 | *393639.39N / 1401615.88E* | | |
| RW28 | *393651.66N / 1401359.25E* | | |

CHANGE : PROC renamed.

RJSK / AKITA

Visual REP



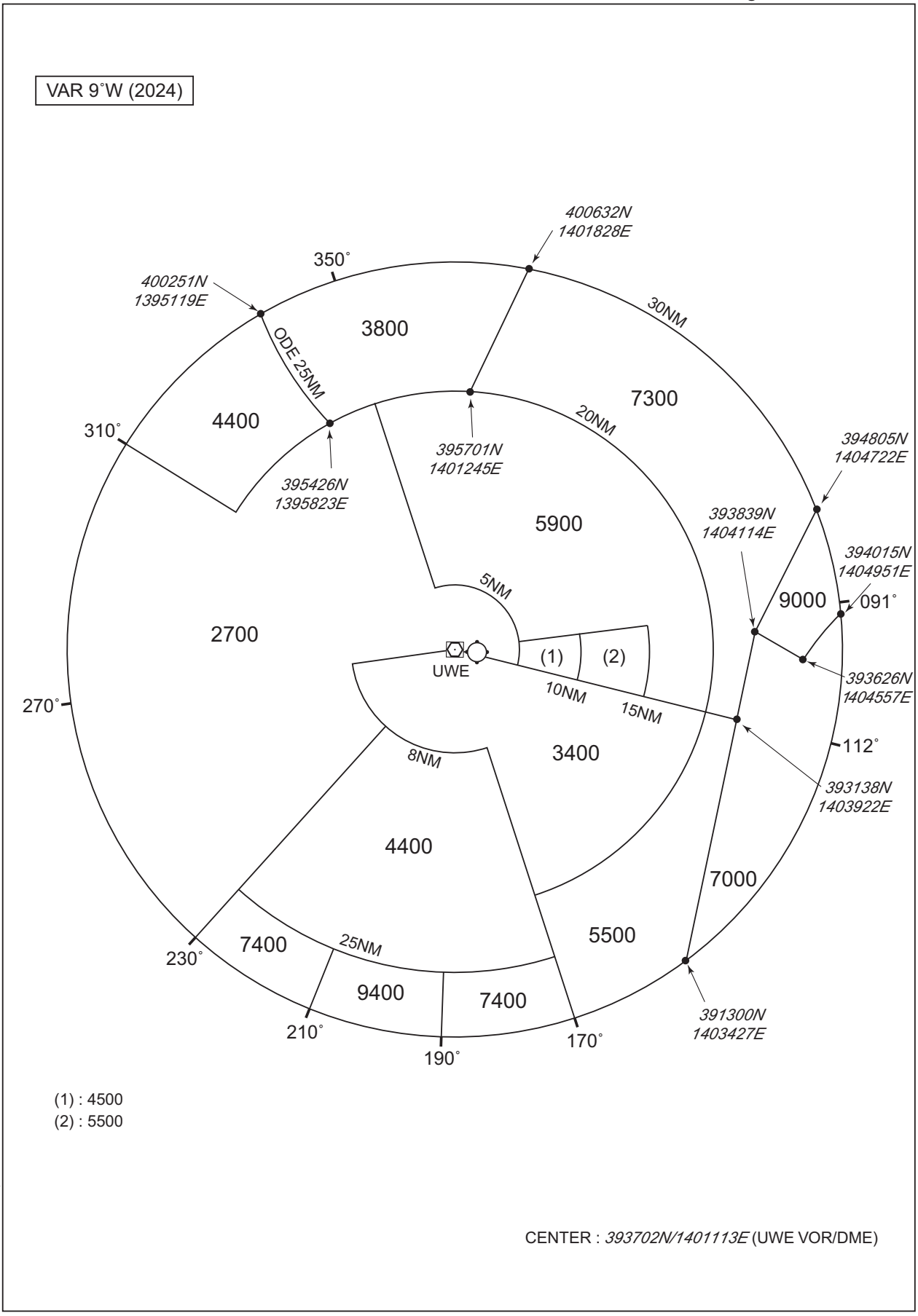

※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

CHANGE : Map updated. BRG/DIST from ARP.

| Call sign | BRG / DIST from ARP | Remarks |
|---|---|---|
| 中央インターチェンジ<br>Chuo Interchange | 345°T / 6.6NM | 秋田中央インターチェンジ（秋田自動車道）<br>Akita Chuo Interchange |
| 岩見三内<br>Iwami San-nai | 030°T / 6.5NM | 岩見川と三内川の合流点<br>Merging point of Iwamigawa River and San-naigawa River |
| リバーマウス<br>River Mouth | 302°T / 8.6NM | 雄物川河口<br>Omonogawa River Mouth |
| 南インターチェンジ<br>Minami Interchange | 334°T / 3.0NM | 秋田南インターチェンジ（秋田自動車道）<br>Akita Minami Interchange |
| 中川橋<br>Nakagawabashi | 196°T / 2.6NM | 中川橋（雄物川）<br>Nakagawabashi |
| 刈和野<br>Kariwano | 120°T / 8.2NM | JR刈和野駅<br>JR Kariwano Station |
| 岩城<br>Iwaki | 240°T / 8.8NM | 道の駅岩城<br>Michinoeki (Road Station) Iwaki |
| 新波橋<br>Arawabashi | 174°T / 5.0NM | 新波橋（雄物川）<br>Arawabashi |

RJSK / AKITA

Minimum Vectoring Altitude CHART




(1) : 4500
(2) : 5500

CHANGE : Update.

CENTER : *393702N/1401113E* (UWE VOR/DME)