

## AD 2 AERODROMES

## RJCK AD 2.1 AERODROME LOCATION INDICATOR AND NAME

## RJCK - KUSHIRO

## RJCK AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

|   |  |  |
|---|--|--|
| 1 | ARP coordinates and site at AD   | 430227N/1441135E<br>158°/1.25km from RWY 17 THR  |
| 2 | Direction and distance from (city)   | 9nm WNW from Kushiro city  |
| 3 | Elevation/ Reference temperature   | 311ft / 23°C(2004-2008)  |
| 4 | Geoid undulation at AD ELEV PSN  | Nil  |
| 5 | MAG VAR/ Annual change   | 9° W(2009) / 2'E   |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Hokkaido Airports Co.,Ltd. Kushiro Airport Office<br>Post:2-260 Tsuruoka, Kushiro-city, Hokkaido<br>Tel:0154-57-8880<br>Fax:0154-57-8881 |
| 7 | Types of traffic permitted(IFR/VFR)  | IFR/VFR  |
| 8 | Remarks  | Nil  |

## RJCK AD 2.3 OPERATIONAL HOURS

|    |                           |  |
|----|---------------------------|--|
| 1  | AD Administration         | 2300 - 1200  |
| 2  | Customs and immigration   | On request<br>Customs: 0154-22-3730<br>Immigration: 0154-22-2430   |
| 3  | Health and sanitation     | On request<br>Quarantine(human): 0154-23-3340<br>Quarantine(animal): 0123-24-6080<br>Quarantine(plant): 0154-22-4291 |
| 4  | AIS Briefing Office       | Nil  |
| 5  | ATS Reporting Office(ARO) | Nil  |
| 6  | MET Briefing Office       | H24 (NEW CHITOSE)  |
| 7  | ATS                       | 2300 - 1200  |
| 8  | Fuelling                  | 2300 - 1100  |
| 9  | Handling                  | 2245 - 1000  |
| 10 | Security                  | 2300 - 1130  |
| 11 | De-icing                  | Nil  |
| 12 | Remarks                   | Nil  |

**RJCK AD 2.4 HANDLING SERVICES AND FACILITIES**

|   |   |   |
|---|---|---|
| 1 | Cargo-handling facilities               | All the modern institutions that deal with the weight thing to B767 type. |
| 2 | Fuel/ oil types                         | JET A-1   |
| 3 | Fuelling facilities/ capacity           | Fuel Truck Refuelling   |
| 4 | De-icing facilities                     | Nil   |
| 5 | Hangar space for visiting aircraft      | Nil   |
| 6 | Repair facilities for visiting aircraft | Nil   |
| 7 | Remarks                                 | Nil   |

**RJCK AD 2.5 PASSENGER FACILITIES**

|   |                      |                               |
|---|----------------------|-------------------------------|
| 1 | Hotels               | Nil                           |
| 2 | Restaurants          | At Airport                    |
| 3 | Transportation       | Buses, Taxi                   |
| 4 | Medical facilities   | Hospital in Kushiro city 10km |
| 5 | Bank and Post Office | Nil                           |
| 6 | Tourist Office       | Nil                           |
| 7 | Remarks              | Nil                           |

**RJCK AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

|   |   |  |
|---|---|--|
| 1 | AD category for fire fighting               | CAT 8  |
| 2 | Rescue equipment                            | 3 Chemical fire fighting trucks, 1 Water-supply truck, 1 Lighting power supply truck, 1 Emergency medical equipments conveyance truck. |
| 3 | Capability for removal of disabled aircraft | Nil  |
| 4 | Remarks                                     | Nil  |

**RJCK AD 2.7 SEASONAL AVAILABILITY-CLEARING**

|   |                             |   |
|---|-----------------------------|---|
| 1 | Types of clearing equipment | Snow remove equipments:<br>4 Snow plows, 2 Rotaries, 4 Snow sweeper, 1 Urea sprinkler equipment |
| 2 | Clearance priorities        | (1) RWY 17/35, TWY T1 and T7, P1-P6, APRON    (2) TWY T2-T6 APRON                               |
| 3 | Remarks                     | Seasonal availability: All seasons  |

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

|   |                                     |   |
|---|-------------------------------------|---|
| 1 | Apron surface and strength          | Spot NR1, 2, 3, 5, 6 and 7<br>Surface : Concrete<br>Strength: PCN 74/R/B/X/T  |
| 2 | Taxiway width, surface and strength | WIDTH & STRENGTH<br>T1,T7,P6 : 26.5m PCN 106/F/C/X/T<br>T2,T3,T4,T5,T6 : 30m PCN 106/F/C/X/T<br>P1,P2,P3,P4,P5 : 23m PCN 106/F/C/X/T  |
| 3 | ACL and elevation                   | Not Available   |
| 4 | VOR checkpoints                     | Not Available   |
| 5 | INS checkpoints                     | (Spot NR)<br>1: 430247.60N1441141.22E<br>2: 430246.01N1441142.06E<br>3: 430244.19N1441143.01E<br>5: 430242.23N1441144.04E<br>6: 430240.11N1441145.15E<br>7: 430237.35N1441145.22E |
| 6 | Remarks                             | Nil   |

## RJCK 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 | Aircraft stand ID sign:Spot NR1, 2, 3, 5, 6, 7, A, B   |
| 2 | RWY and TWY markings and LGT   | RWY:17/35<br>(Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe<br>(LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY17), WBAR(RWY17), RWY DIST marker LGT<br><br>TWY:T1-T7<br>(Marking) TWY CL, RWY HLDG PSN, TWY side stripe, Mandatory instruction marking<br>(LGT) TWY edge LGT, TWY CL LGT, Stop bar LGT, RWY guard LGT, Taxiing guidance sign<br><br>TWY:P1-P6<br>(Marking) TWY CL, TWY side stripe<br>(LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance sign   |
| 3 | Stop bars  | Stop bar LGT: TWY T1 - T7<br>Stop bar LGT operations;<br>1) Stop bar LGT are installed at each taxi-holding position associated with RWY 17/35.<br>2) Stop bar LGT will be operated when the visibility or the lowest RVR of RWY 17/35 is at or less than 600m.<br>3) Stop bar LGT on TWY T1 and T7 are controlled individually by ATC.<br>4) Stop bar LGT on TWY T2 through T6 are not controlled individually by ATC.<br>5) During the period stop bar LGT are operated, TWY T2 through T6 are not available for the departing aircraft. |
| 4 | Remarks  | (Marking) Overrun area<br>(LGT) Apron flood LGT  |

## RJCK AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

## RJCK AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

|    |  |  |
|----|--|--|
| 1  | Associated MET Office  | NEW CHITOSE  |
| 2  | Hours of service<br>MET Office outside hours                           | H24 (NEW CHITOSE)  |
| 3  | Office responsible for TAF preparation<br>Periods of validity          | NEW CHITOSE<br>30 Hours  |
| 4  | Trend forecast<br>Interval of issuance                                 | Nil  |
| 5  | Briefing/ consultation provided  | Briefing is available upon inquiry at NEW CHITOSE  |
| 6  | Flight documentation<br>Language(s) used                               | C<br>En  |
| 7  | Charts and other information available<br>for briefing or consultation | S <sub>6</sub> , U <sub>85</sub> , U <sub>7</sub> , U <sub>5</sub> , U <sub>3</sub> , U <sub>25</sub> , U <sub>2</sub> /T <sub>r</sub> , P <sub>S</sub> , P <sub>5</sub> , P <sub>3</sub> , P <sub>25</sub> , P <sub>SWE</sub> , P <sub>SWF</sub> , P <sub>SWG</sub> , P <sub>SWI</sub> ,<br>P <sub>SWM</sub> , P <sub>SW</sub> (domestic), E, C, W <sub>E</sub> , W <sub>F</sub> , W <sub>G</sub> , W <sub>I</sub> , 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  |

## RJCK AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations<br>RWY NR | TRUE BRG | Dimensions of<br>RWY(M) | Strength(PCN) and<br>surface of RWY | THR coordinates<br>THR geoid undulation                           | THR elevation and<br>highest elevation of TDZ<br>of precision APP RWY |
|------------------------|----------|-------------------------|-------------------------------------|---|---|
| 1                      | 2        | 3                       | 4                                   | 5   | 6   |
| 17                     | 158.96°  | 2500×45                 | PCN 106/F/C/X/T<br>Asphalt Concrete | 430305.30N1441114.92E   | THR ELEV:322.5ft<br>TDZ ELEV:325.1ft                                  |
| 35                     | 338.96°  | 2500×45                 |                                     | 430149.68N1441154.58E   | THR ELEV:290ft  |
| Slope of RWY           |          | Strip<br>Dimensions(M)  |                                     | RESA(Overrun)<br>Dimensions(M)                                    | Remarks   |
| 7                      |          | 10                      |                                     | 11  | 14  |
| See AD 2.24 AD Chart   |          | 2620×300                |                                     | 192x(MNM:95 MAX:283)  |   |
|                        |          | 2620×300                |                                     | 90x(MNM:90 MAX:300)*<br>*For detail,<br>ask airport administrator |   |
|                        |          |                         |                                     | RWY Grooving 2500×45m   |   |

## RJCK AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA<br>(m) | TODA<br>(m) | ASDA<br>(m) | LDA<br>(m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1              | 2           | 3           | 4           | 5          | 6       |
| 17             | 2500        | 2500        | 2500        | 2500       | Nil     |
| 35             | 2500        | 2500        | 2500        | 2500       | Nil     |

## RJCK 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              |
| 17  | PALS (CAT III) 900m LIH | Green Green     | PAPI 3.0°/LEFT 400m 66ft            | 900m     | 2500m 15m Coded color (White/Red) LIH | 2500m 60m Coded color (White/Yellow) LIH | Red             | Nil(*1)        |
| 35  | SALS 420m LIH           | Green -         | PAPI 3.0°/LEFT 425m 74ft            | Nil      | 2500m 15m Coded color (White/Red) LIH | 2500m 60m Coded color (White/Yellow) LIH | Red             | Nil(*1)        |
| Remarks   |                         |                 |                                     |          |                                       |  |                 |                |
| 10  |                         |                 |                                     |          |                                       |  |                 |                |
| Overrun area edge LGT(LEN:60m Color:Red) (*1)<br>RWY THR ID LGT for RWY 35 THR (Color: White) |                         |                 |                                     |          |                                       |  |                 |                |

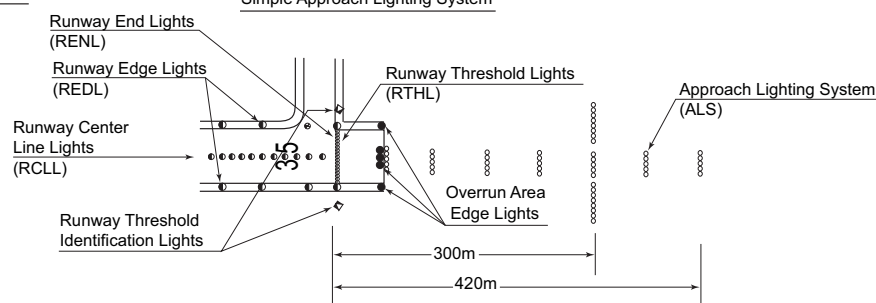
RUNWAY 17

Precision Approach Lighting System



RUNWAY 35

Simple Approach Lighting System



**RJCK AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

|   |  |  |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 430247N/1441143E, White/Green EV4.3sec, HO  |
| 2 | LDI location and LGT<br>Anemometer location and LGT      | LDI : Nil<br>Anemometer : RWY 17 : 295.5m from RWY 17 THR, LGTD<br>RWY 35 : 341.1m from RWY 35 THR, LGTD   |
| 3 | TWY edge and centerline lighting                         | TWY edge and center line lights installed, see AD2.9   |
| 4 | Secondary power supply/ switch-over time                 | Within 1sec: PALS, REDL, RENL, RTHL, WBAR, RCLL, RTZL, Overrun area edge LGT, Stop bar LGT, RWY guard LGT, TWY centerline LGT<br><br>Within 15sec: other LGT |
| 5 | Remarks  | WDI LGT  |

**RJCK AD 2.16 HELICOPTER LANDING AREA**

|     |
|-----|
| Nil |
|-----|

**RJCK 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       |
| Kushiro CTR                    | Area within a radius of 9km(5NM) of ARP (430227N/1441135E) | 3,000 or below       | D                       | Kushiro Tower<br>En         |         |
| Hidaka ACA                     | See RJEC attached chart                                    |                      | E                       | Hidaka APP<br>En            |         |

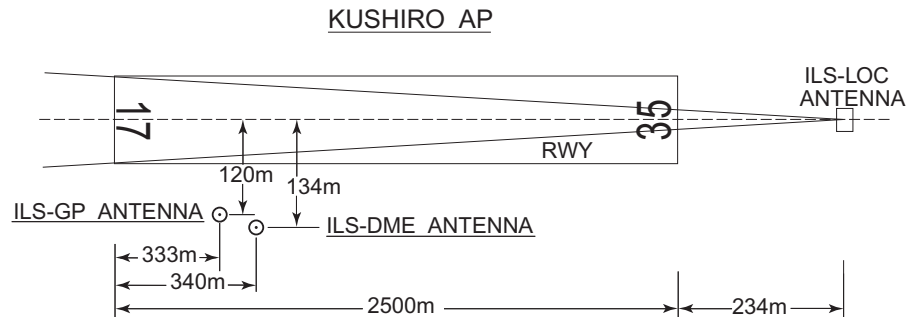
**RJCK AD 2.18 ATS COMMUNICATION FACILITIES**

| Service designation | Call sign       | Frequency                           | Hours of operation | Remarks    |
|---------------------|-----------------|-------------------------------------|--------------------|------------|
| 1                   | 2               | 3                                   | 4                  | 5          |
| APP                 | Hidaka Approach | 128.325MHz<br>246.1MHz<br>134.55MHz | 2230 - 1200        |            |
| TWR                 | Kushiro Tower   | 118.05MHz(1)<br>126.2MHz            | 2300 - 1200        | (1)Primary |

## RJCK AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid<br>(VOR<br>declination) | ID  | Frequency            | Hours of<br>operation | Position of<br>transmitting<br>antenna<br>coordinates | Elevation of<br>DME<br>transmitting<br>antenna | Remarks  |
|-------------------------------------|-----|----------------------|-----------------------|---|--|--|
| 1                                   | 2   | 3                    | 4                     | 5   | 6  | 7  |
| VOR<br>(9°W/2022)                   | TCE | 111.0MHz             | H24                   | 430209.78N/1441202.72E                                |  |  |
| DME                                 | TCE | 1008MHz<br>(CH-47X)  | H24                   | 430209.78N/1441202.72E                                | 342ft  | DME unusable:<br>300°-310° beyond 35NM BLW 5000ft.<br>340°-350° beyond 35NM BLW 7000ft.                                |
| ILS-LOC 17                          | IKS | 108.9MHz             | 2300 - 1200           | 430142.60N/1441158.28E                                |  | LOC: 234m (768ft) away FM RWY 35<br>THR, BRG (MAG) 168.15°   |
| ILS-GP 17                           | -   | 329.3MHz<br>(CH-26X) | 2300 - 1200           | 430253.79N/1441115.22E                                |  | GP:333m (1093ft) inside FM RWY17<br>THR, 120m (394ft) W of RCL.<br>HGT of ILS REF datum 16.7m (55ft). GP<br>angle 3.0° |
| ILS-DME 17                          | IKS | 987MHz<br>(CH-26X)   | 2300 - 1200           | 430253.40N/1441114.78E                                | 333ft  | DME: 340m (1115ft) inside FM RWY17<br>THR, 134m (440ft) W of RCL   |
| MSAS                                |     | 1575.42MHz           | H24                   |   |  | Transmitting antennas are satellite based.   |

## ILS



REMARKS : 1 . LOC beam BRG(MAG) 168.15°  
2 . HGT of ILS REF datum 16.7m(55ft)  
3 . GP Angle 3.0°  
4 . ELEV of ILS-DME 101.4m(333ft)

**RJCK AD 2.20 LOCAL TRAFFIC REGULATIONS**

## 1. Airport regulations

## PPR

Prior permission is required for transient aircraft except scheduled and/or emergency flight.  
Tel : Hokkaido Airports Co.,Ltd. Kushiro Airport Office 0154-57-8880

## 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

## 1. 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.

(1)When B763 holding at the stop marking on TWY T5 or T6

| wing span (WS) of ACFT taxiing on TWY P4-P6 | WS ≤23m | 23m <WS ≤40m | WS >40m |
|---|---------|--------------|---------|
| wing tip clearance                          | *A      | *B           | *C      |

(2)When MD90 holding at the stop marking on TWY T2

| wing span (WS) of ACFT taxiing on TWY P1-P2 | WS ≤47m | 47m <WS ≤64m | WS >64m |
|---|---------|--------------|---------|
| 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

Nil

## 8. Helicopter traffic - limitation

Nil

## 9. Removal of disabled aircraft from runways

Nil



RJCK AD 2.21 NOISE ABATEMENT PROCEDURES

|     |
|-----|
| Nil |
|-----|

RJCK 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 | 17/35 | A,B,C    | 400m<br>*200m<br>**150m | 400m<br>*200m | 400m<br>*250m               | 400m<br>*250m | -                  | 500m |
|   |       | D        | 400m<br>*250m<br>**200m | 400m<br>*250m | 400m<br>*300m               | 400m<br>*300m | -                  | 500m |
| OTHER                                     | 17/35 | A,B,C,D  | AVBL LDG MINIMA         |               |                             |               |                    |      |

\* APPLICABLE WHEN LVP/LVPD IN FORCE.  
\*\* APPLICABLE WHEN LVP/LVPD IN FORCE and MULTIPLE RVRs AVAILABLE.

|  |
|--|
| <b>2. Lost communication procedures for arrival aircraft under radar navigational guidance</b><br>If radio communications with Hidaka Approach are lost for 1 minute, squawk Mode A/3 Code 7600 and;<br>(I) 1. Contact Kushiro Tower.<br>2. If unable, proceed in accordance with visual flight rules.<br>3. If unable, proceed to KUSHIRO VOR/DME at last assigned altitude or 3,500 feet whichever is higher, and execute instrument approach.<br>(II) Procedures other than above will be issued when situation requires. |
|--|

### 3. ILS Category III Operations at Kushiro Airport

#### 1) Facilities

The following facilities are available:

|   |
|---|
| RWY 17  |
| (1) ILS RWY 17 - CAT III  |
| (2) Lighting system RWY 17 - CAT III  |
| (3) RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the RWY) |

#### 2) Conditions

A. The following systems must be operative:

|   |
|---|
| For ILS RWY17 approach (CAT III)  |
| (1) ILS comprising; <ul style="list-style-type: none"> <li>• ILS-LOC17 with standby transmitter (including far field monitor)</li> <li>• ILS-GP17 with standby transmitter<br/>(When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.)</li> <li>• ILS-DME17</li> </ul> |
| (2) Lighting systems comprising; <ul style="list-style-type: none"> <li>• PALS 17 (including side row barrettes)</li> <li>• High INTST REDL</li> <li>• High INTST RTHL</li> <li>• RCLL and RTZL</li> </ul>  |
| (3) Secondary power supply  |
| (4) RVR by forward-scatter meters at the touchdown zone, the mid-point and stop-end of the RWY.   |

B. The following information must be currently available:

- Surface wind speed and direction
- RVR

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

#### 3) Operating Minimum

Approach minima stated in AD2.24(Instrument Approach Chart) are observed.

#### 4) LVP

LVP will be available when the following conditions are met;

- Ceiling is at or less than 400ft and/or RVR is at or less than 1,000m.
- Facilities listed 1) above are operational.
- ILS Critical Area is protected.

In order to protect ILS Critical Area for the succeeding arrival aircraft, an arrival aircraft may be given the following instruction by ATC :

**"REPORT OUT OF ILS CRITICAL AREA"**

The exit TWY centerline LGT are fixed alternate green and yellow inside the ILS Critical Area. If an aircraft is given the above instruction, she is expected to advise the ATC when the TWY centerline LGT change from alternate green and yellow to steady green.

#### 5) Approval for CAT III Operations

Operators must obtain operational approval from the State of Registry or the State of Operator, as appropriate, to conduct CAT III Operations. (See GEN1.5)

#### 6) TWY available for CAT III Operations

Exit taxiway: T1, T5, T6, T7 and the parallel TWY.

**4. LVTO at Kushiro Airport**

## 1) Facilities

The following facilities are available:

| RWY 17   | RWY 35   |
|--|--|
| <ul style="list-style-type: none"><li>• Lighting system RWY 17 for LVTO</li><li>• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)</li></ul> | <ul style="list-style-type: none"><li>• Lighting system RWY 35 for LVTO</li><li>• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)</li></ul> |

## 2) Conditions

A. The following systems must be operative:

| For LVTO   |
|--|
| (1) Lighting system comprising; <ul style="list-style-type: none"><li>• High INTST REDL</li><li>• High INTST RENL</li><li>• RCLL</li></ul> |
| (2) Secondary power supply   |

B. The following information must be currently available:

- a) Surface wind speed and direction.
- b) RVR or VIS

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

## 3) Operating Minima

Take-off minima stated in AD2.22(TAKE-OFF MINIMA) are observed.

## 4) LVP/LVPD

(1)LVP/LVPD will be available when the following conditions are met:

- a)RVR is at or less than 1000m.
- b)Facilities listed 1) above are operational.

(2)Taxiway available for LVTO

Entering taxiway: T1 and T7

---

**RJCK AD 2.23 ADDITIONAL INFORMATION**

|     |
|-----|
| Nil |
|-----|

**RJCK AD 2.24 CHARTS RELATED TO AN AERODROME**

|   |
|---|
| <p>Aerodrome/Heliport Chart<br/>Precision Approach Terrain Chart (precision approach CAT II and III runways)<br/>Standard Departure Chart - Instrument (KUSHIRO REVERSAL)<br/>Standard Departure Chart - Instrument (TANCHO - RNAV)<br/>Standard Departure Chart - Instrument (HIDAKA - RNAV)<br/>Standard Departure Chart - Instrument (RUGMO - RNAV)<br/>Standard Departure Chart - Instrument (ENTOD - RNAV)<br/>Standard Arrival Chart - Instrument (MARNY - RNAV)<br/>Standard Arrival Chart - Instrument (AKESI, IGAMO-N, RUGMO-N, RUNPA-N - RNAV)<br/>Standard Arrival Chart - Instrument (IGAMO-S, RUGMO-S, RUNPA-S - RNAV)<br/>Standard Arrival Chart - Instrument (LEKUP-N/S - RNAV)<br/>Instrument Approach Chart (ILS Z or LOC Z RWY17 (CAT III))<br/>Instrument Approach Chart (ILS Y or LOC Y RWY17 (CAT III))<br/>Instrument Approach Chart (VOR RWY17)<br/>Instrument Approach Chart (VOR RWY35)<br/>Instrument Approach Chart (RNP Z RWY17(AR))<br/>Instrument Approach Chart (RNP Y RWY17(AR))<br/>Instrument Approach Chart (RNP X RWY17)<br/>Instrument Approach Chart (RNP RWY35)<br/>Other Chart (VISUAL REP)<br/>Other Chart (MVA CHART)</p> |
|---|

**LONGITUDINAL PROFILE OF RWY 35**

| Station (m) | Elevation (m) | Slope (%) |
|-------------|---------------|-----------|
| 0           | 322.5         | 0.53%     |
| 100         | 324.1         | 0.23%     |
| 200         | 324.9         | 0.05%     |
| 300         | 325.1         | 0.05%     |
| 400         | 324.8         | 0.56%     |
| 500         | 323.5         | 0.50%     |
| 600         | 320.1         | 0.49%     |
| 700         | 318.5         | 0.53%     |
| 800         | 315.0         | 0.55%     |
| 900         | 313.2         | 0.57%     |
| 1000        | 311.4         | 0.46%     |
| 1100        | 309.8         | 0.56%     |
| 1200        | 308.0         | 0.53%     |
| 1300        | 302.8         | 0.50%     |
| 1400        | 301.2         | 0.56%     |
| 1500        | 296.4         | 0.52%     |
| 1600        | 292.3         | 0.39%     |
| 1700        | 291.1         | 0.30%     |
| 1800        | 290.1         |           |

**INTENTIONALLY LEFT BLANK**

RJCK/KUSHIRO

PRECISION APPROACH TERRAIN CHART – ICAO



STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO

SID

KUSHIRO REVERSAL FIVE DEPARTURE

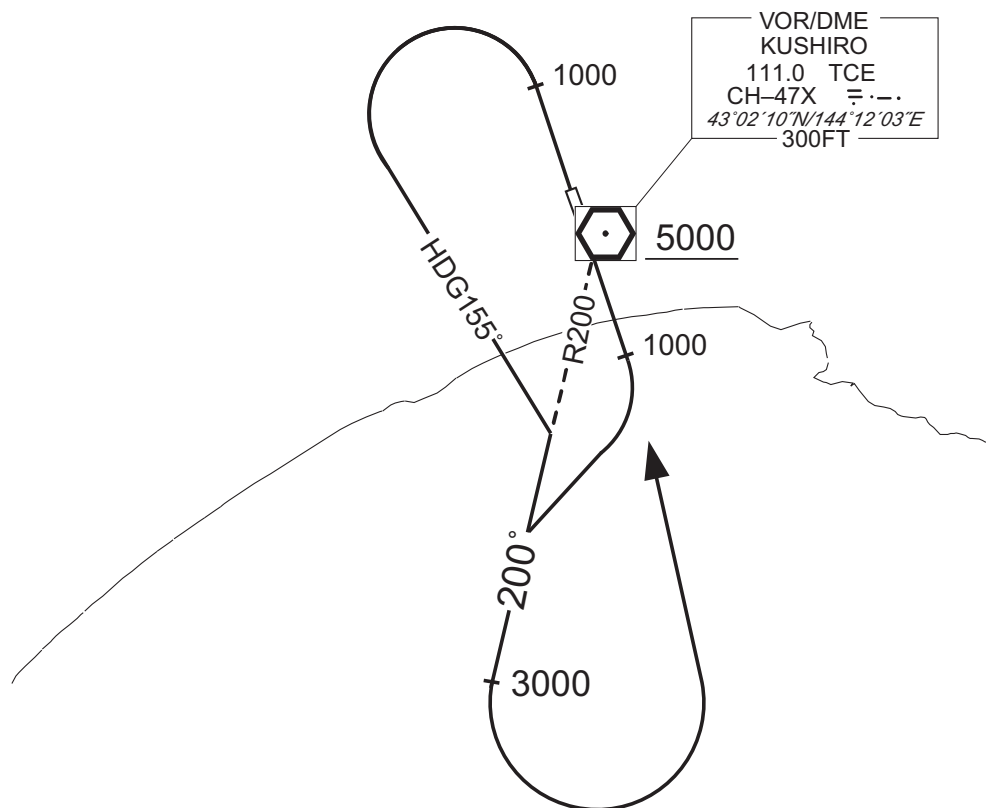
RWY17 : Climb RWY HDG to 1000FT, turn right...

RWY35 : Climb RWY HDG to 1000FT, turn left HDG155°...

...to intercept and proceed via TCE R200 to 3000FT, turn left, direct to  
TCE VOR/DME.

Cross TCE VOR/DME at or above 5000FT.

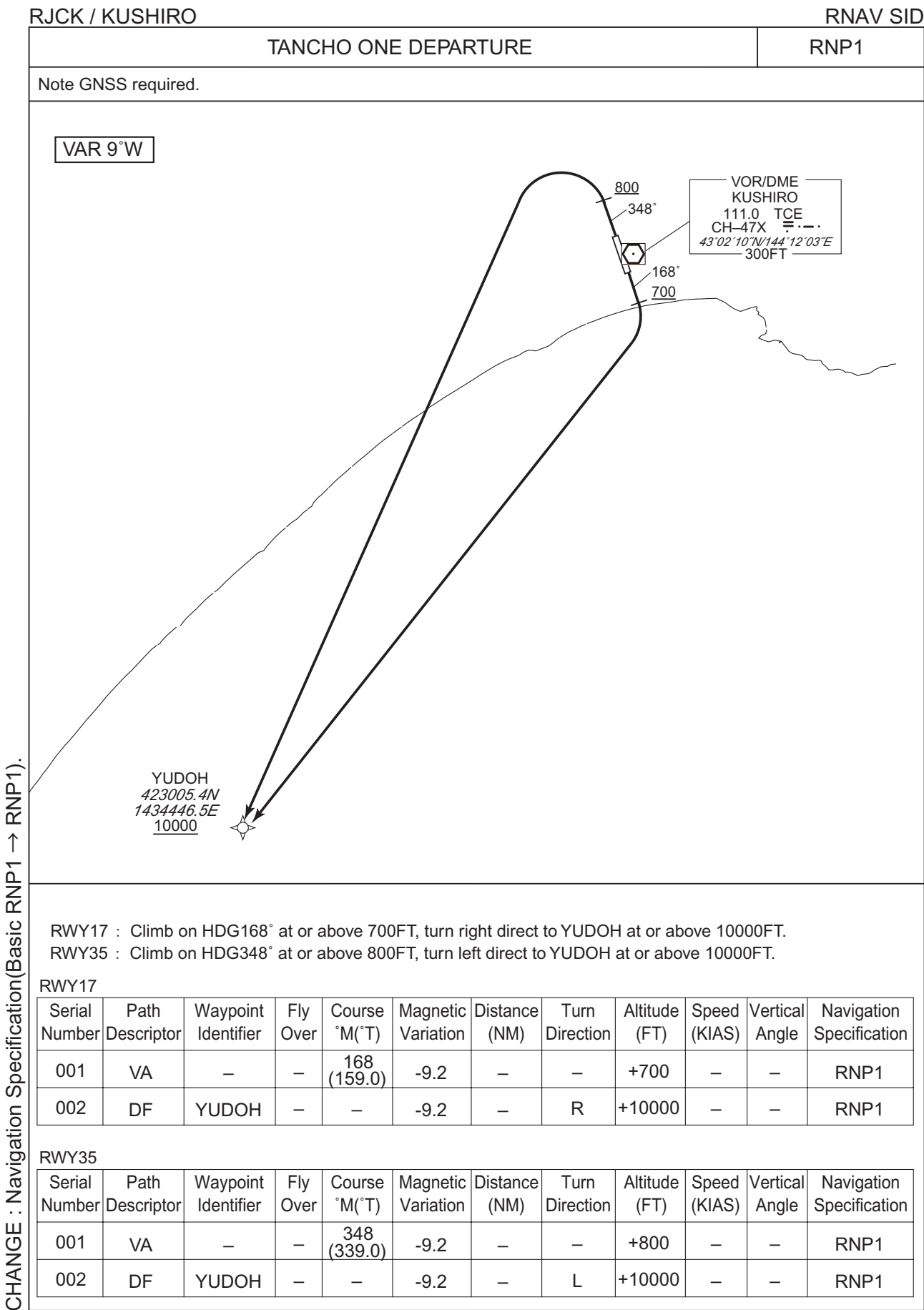
Note : No turn before DER.



CHANGE : PROC abolished(ALICE THREE DEPARTURE, ERIMO FOUR DEPARTURE, OBIHIRO THREE DEPARTURE, YUDOH TWO DEPARTURE, EATAK ONE DEPARTURE).  
PROC renamed. KUSHIRO VOR/DME relocated(KSE→TCE).

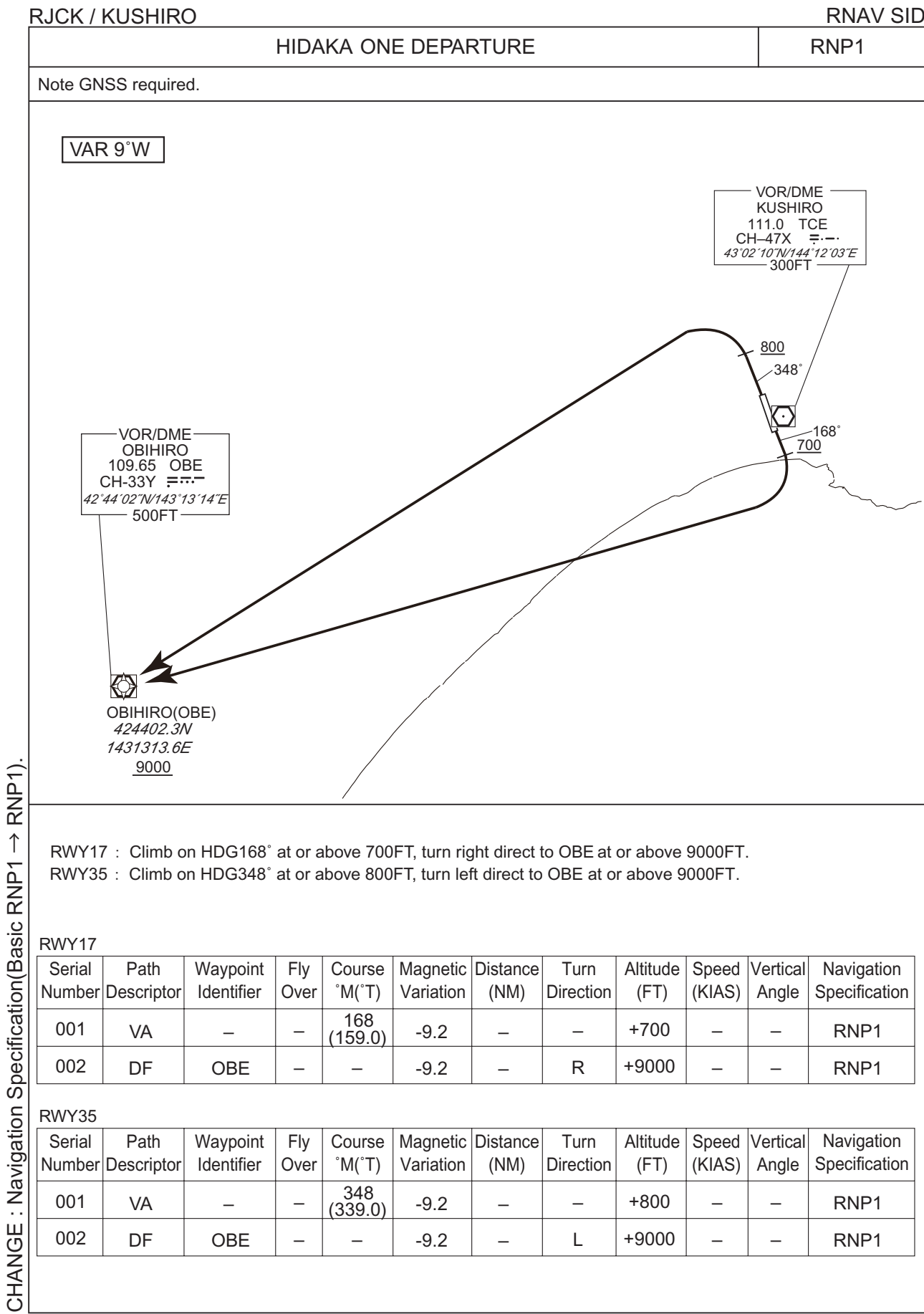


STANDARD DEPARTURE CHART -INSTRUMENT



CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT



STANDARD DEPARTURE CHART -INSTRUMENT

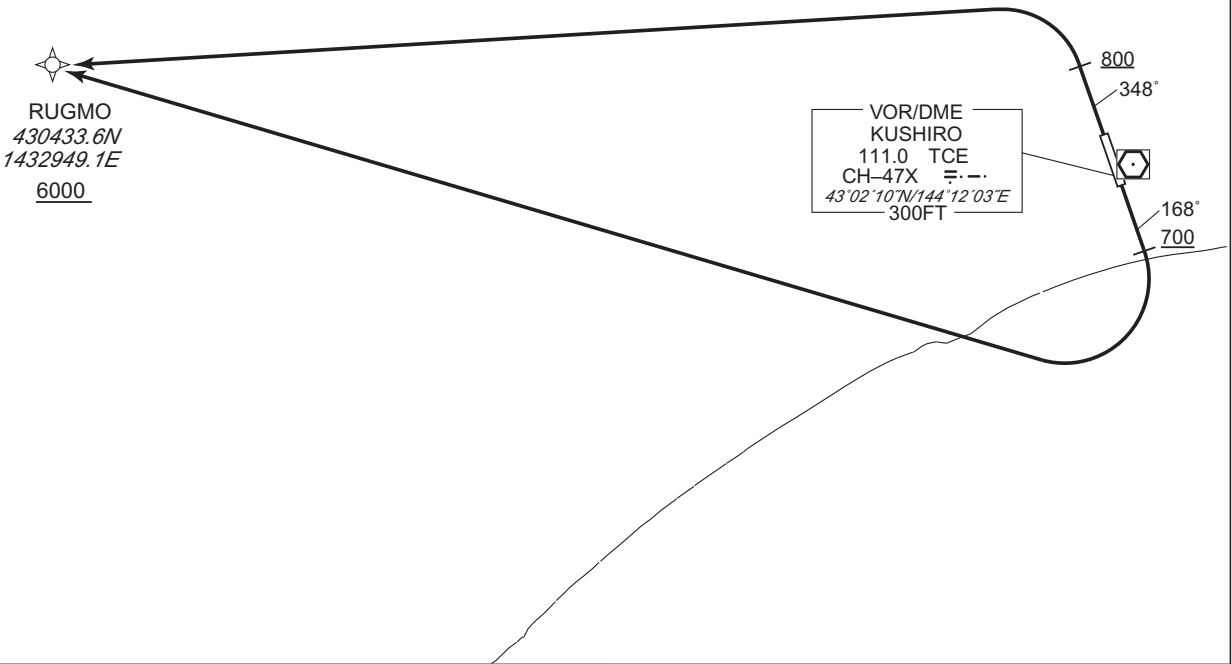
RJCK / KUSHIRO

RNAV SID

|                     |      |
|---------------------|------|
| RUGMO ONE DEPARTURE | RNP1 |
|---------------------|------|

Note GNSS required.

VAR 9°W



RWY17 : Climb on HDG168° at or above 700FT, turn right direct to RUGMO at or above 6000FT.  
RWY35 : Climb on HDG348° at or above 800FT, turn left direct to RUGMO at or above 6000FT.

RWY17

| 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              | —                   | —        | 168 (159.0)   | -9.2               | —             | —              | +700          | —            | —              | RNP1                     |
| 002           | DF              | RUGMO               | —        | —             | -9.2               | —             | R              | +6000         | —            | —              | RNP1                     |

RWY35

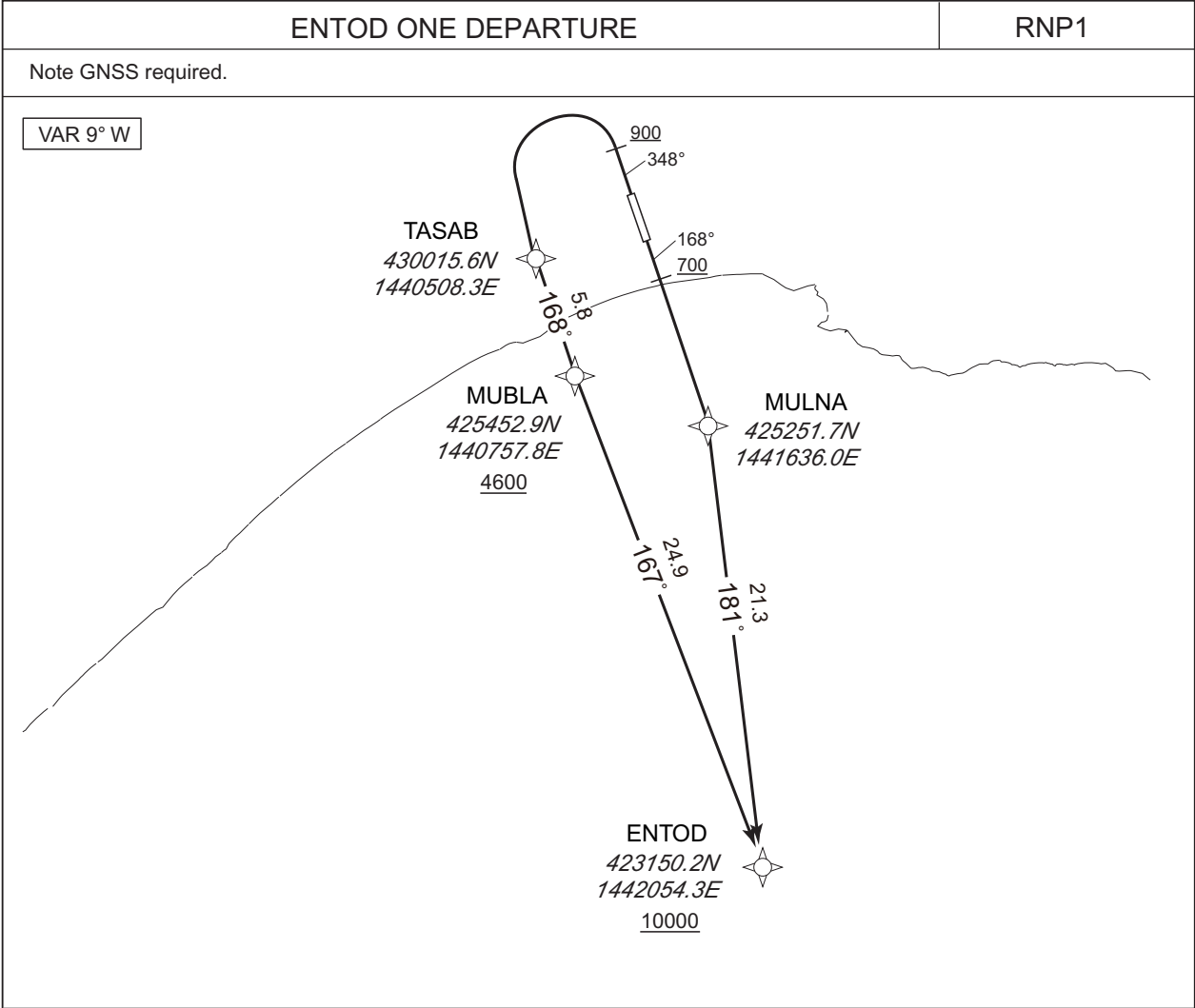
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | VA              | —                   | —        | 348 (339.0)   | -9.2               | —             | —              | +800          | —            | —              | RNP1                     |
| 002           | DF              | RUGMO               | —        | —             | -9.2               | —             | L              | +6000         | —            | —              | RNP1                     |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD DEPARTURE CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV SID



RWY17 : Climb on HDG168° at or above 700FT, direct to MULNA, to ENTOD at or above 10000FT.  
RWY35 : Climb on HDG348° at or above 900FT, turn left direct to TASAB, to MUBLA at or above 4600FT, to ENTOD at or above 10000FT.

RWY17

| 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              | —                   | —        | 168 (159.0)   | -9.3               | —             | —              | +700          | —            | —              | RNP1                     |
| 002           | DF              | MULNA               | —        | —             | -9.3               | —             | —              | —             | —            | —              | RNP1                     |
| 003           | TF              | ENTOD               | —        | 181 (171.4)   | -9.3               | 21.3          | —              | +10000        | —            | —              | RNP1                     |

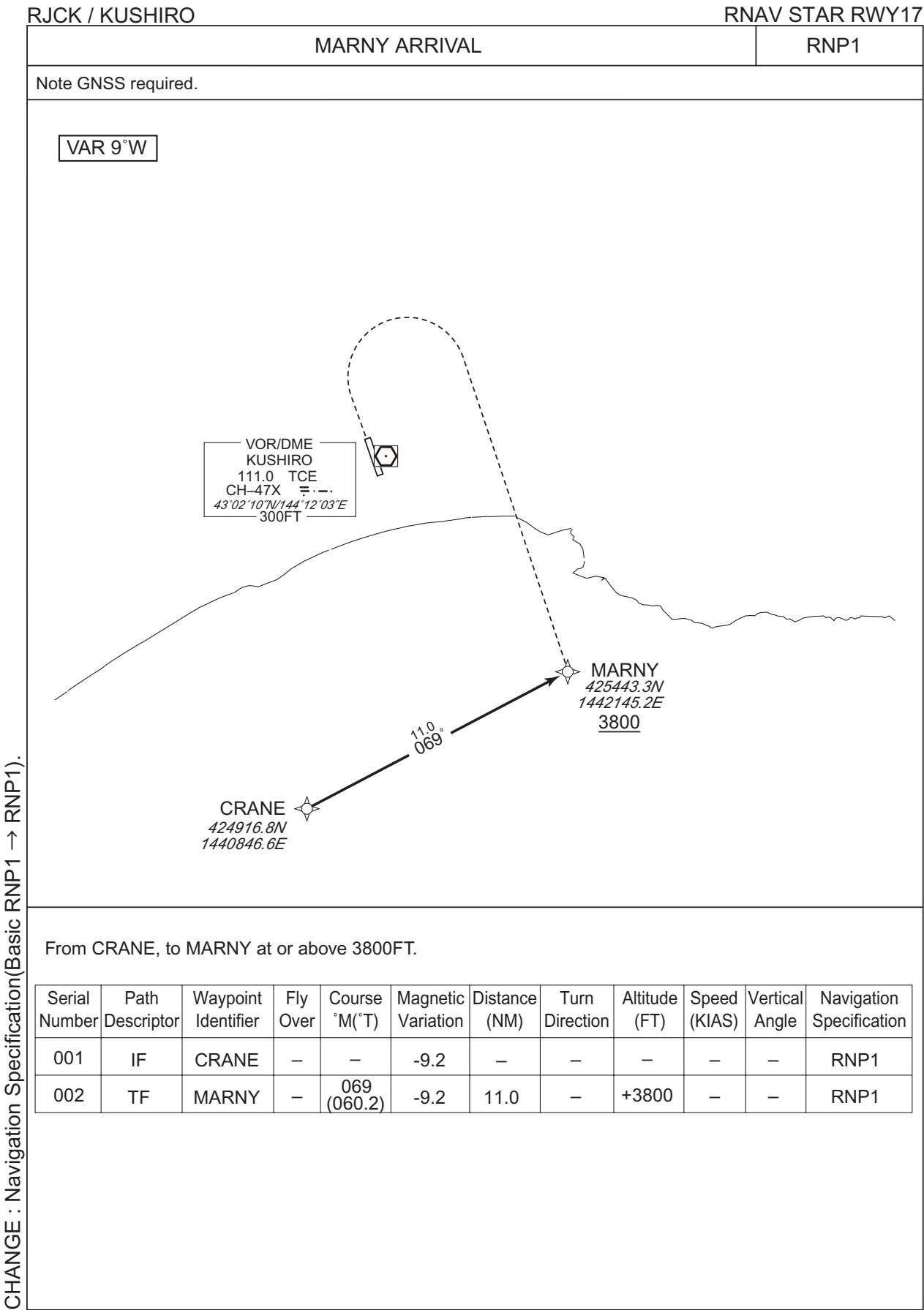
RWY35

| 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              | —                   | —        | 348 (339.0)   | -9.3               | —             | —              | +900          | —            | —              | RNP1                     |
| 002           | DF              | TASAB               | —        | —             | -9.3               | —             | L              | —             | —            | —              | RNP1                     |
| 003           | TF              | MUBLA               | —        | 168 (159.0)   | -9.3               | 5.8           | —              | +4600         | —            | —              | RNP1                     |
| 004           | TF              | ENTOD               | —        | 167 (157.5)   | -9.3               | 24.9          | —              | +10000        | —            | —              | RNP1                     |

CHANGE : New PROC.

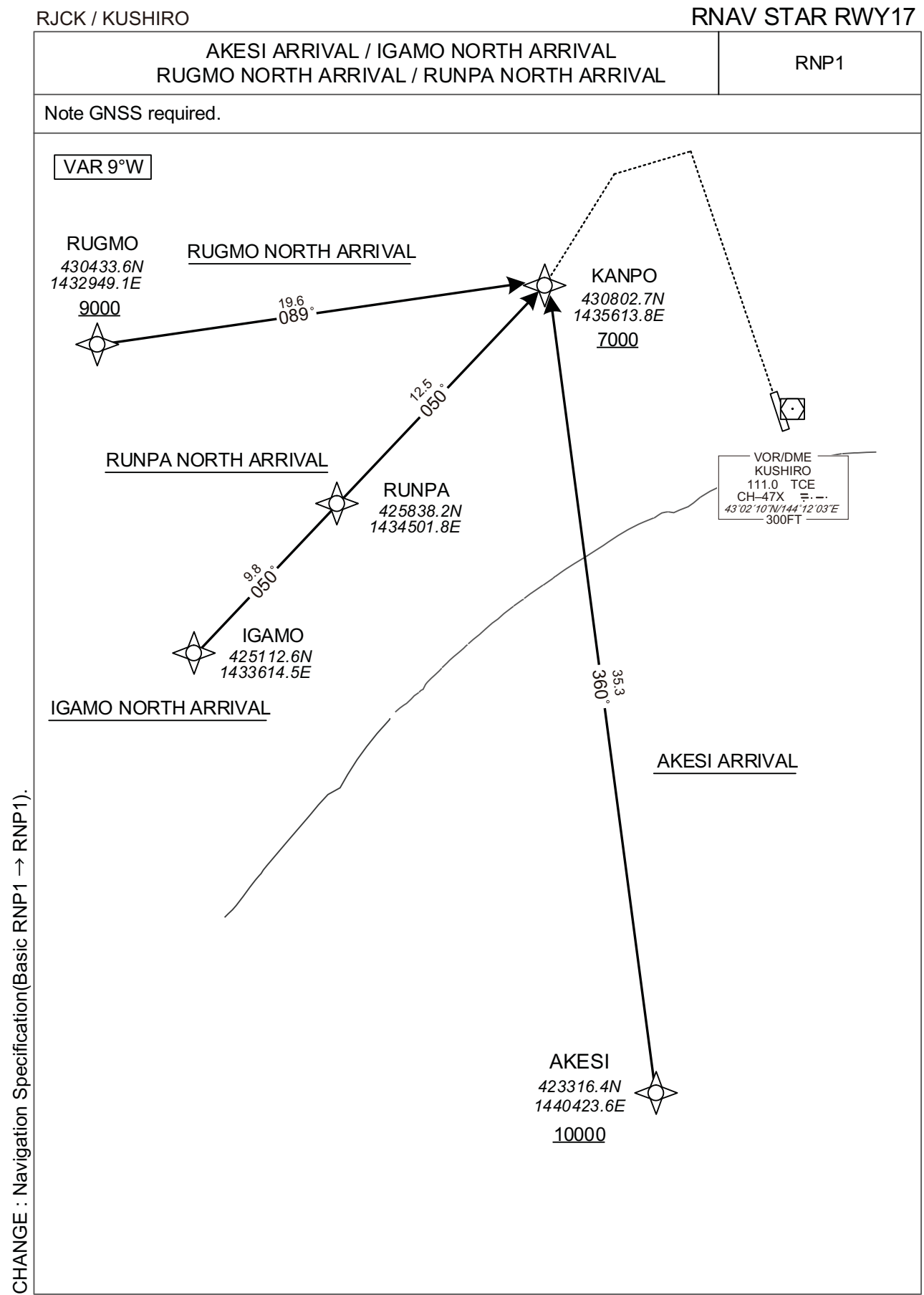
**INTENTIONALLY LEFT BLANK**

STANDARD ARRIVAL CHART -INSTRUMENT



**INTENTIONALLY LEFT BLANK**

STANDARD ARRIVAL CHART -INSTRUMENT





## STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR RWY17

AKESI ARRIVAL

From AKESI at or above 10000FT, to KANPO at or above 7000FT.

| 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              | AKESI               | -        | -              | -9.2               | -             | -              | +10000        | -            | -              | RNP1                     |
| 002           | TF              | KANPO               | -        | 360<br>(350.3) | -9.2               | 35.3          | -              | +7000         | -            | -              | RNP1                     |

IGAMO NORTH ARRIVAL

From IGAMO, to RUNPA, to KANPO at or above 7000FT.

| 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              | IGAMO               | -        | -              | -9.2               | -             | -              | -             | -            | -              | RNP1                     |
| 002           | TF              | RUNPA               | -        | 050<br>(040.9) | -9.2               | 9.8           | -              | -             | -            | -              | RNP1                     |
| 003           | TF              | KANPO               | -        | 050<br>(041.0) | -9.2               | 12.5          | -              | +7000         | -            | -              | RNP1                     |

RUGMO NORTH ARRIVAL

From RUGMO at or above 9000FT, to KANPO at or above 7000FT.

| 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              | RUGMO               | -        | -              | -9.2               | -             | -              | +9000         | -            | -              | RNP1                     |
| 002           | TF              | KANPO               | -        | 089<br>(079.6) | -9.2               | 19.6          | -              | +7000         | -            | -              | RNP1                     |

RUNPA NORTH ARRIVAL

From RUNPA, to KANPO at or above 7000FT.

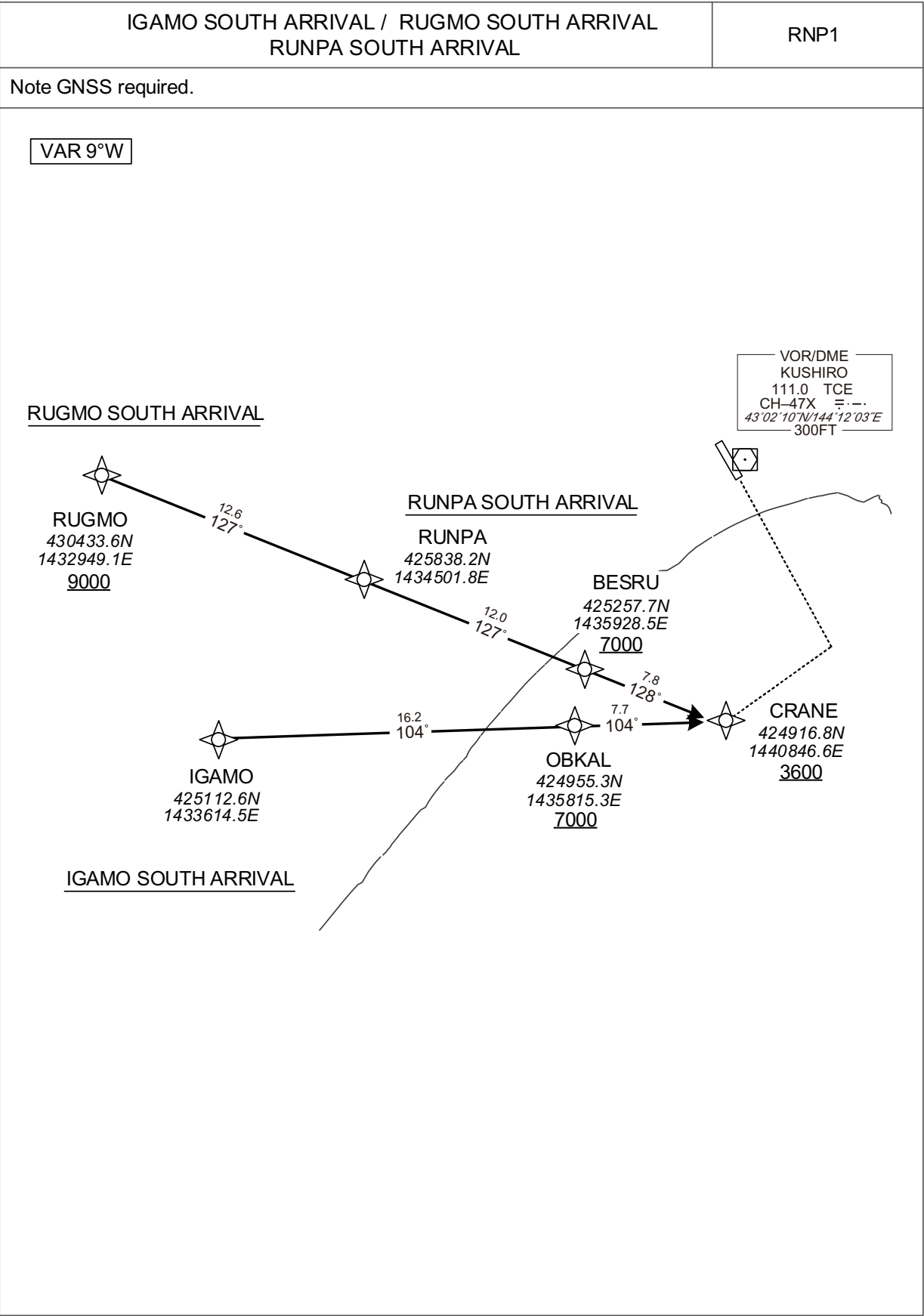
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T)  | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | IF              | RUNPA               | -        | -              | -9.2               | -             | -              | -             | -            | -              | RNP1                     |
| 002           | TF              | KANPO               | -        | 050<br>(041.0) | -9.2               | 12.5          | -              | +7000         | -            | -              | RNP1                     |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR RWY35



STANDARD ARRIVAL CHART -INSTRUMENT

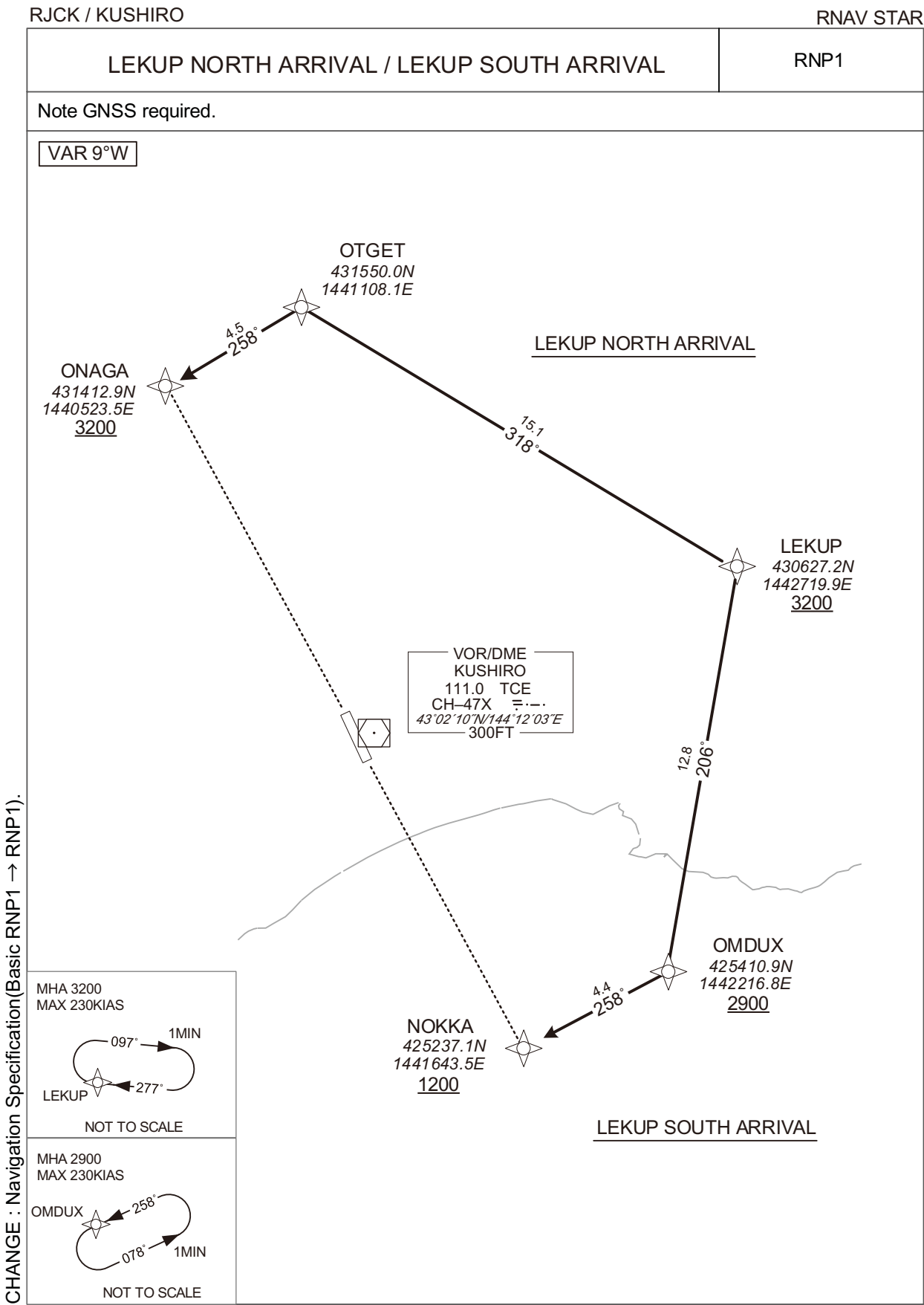
RJCK / KUSHIRO

RNAV STAR RWY35

| <div>IGAMO SOUTH ARRIVAL</div> <div>From IGAMO, to OBKAL at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>IGAMO</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>OBKAL</td><td>-</td><td>104<br/>(094.4)</td><td>-9.2</td><td>16.2</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>CRANE</td><td>-</td><td>104<br/>(094.7)</td><td>-9.2</td><td>7.7</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table>   |                 |                     |          |                |                    |               |                |               |              |                |                          | 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 | IGAMO | - | - | -9.2 | - | - | -     | - | - | RNP1 | 002 | TF | OBKAL | - | 104<br>(094.4) | -9.2 | 16.2 | - | +7000 | - | - | RNP1 | 003 | TF | CRANE | - | 104<br>(094.7) | -9.2 | 7.7  | - | +3600 | - | - | RNP1 |     |    |       |   |                |      |     |   |       |   |   |      |
|---|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|-----|----|-------|---|---|------|---|---|-------|---|---|------|-----|----|-------|---|----------------|------|------|---|-------|---|---|------|-----|----|-------|---|----------------|------|------|---|-------|---|---|------|-----|----|-------|---|----------------|------|-----|---|-------|---|---|------|
| 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              | IGAMO               | -        | -              | -9.2               | -             | -              | -             | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 002   | TF              | OBKAL               | -        | 104<br>(094.4) | -9.2               | 16.2          | -              | +7000         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 003   | TF              | CRANE               | -        | 104<br>(094.7) | -9.2               | 7.7           | -              | +3600         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| <div>RUGMO SOUTH ARRIVAL</div> <div>From RUGMO at or above 9000FT, to RUNPA, to BESRU at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>RUGMO</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>+9000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>RUNPA</td><td>-</td><td>127<br/>(118.0)</td><td>-9.2</td><td>12.6</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>BESRU</td><td>-</td><td>127<br/>(118.1)</td><td>-9.2</td><td>12.0</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>004</td><td>TF</td><td>CRANE</td><td>-</td><td>128<br/>(118.3)</td><td>-9.2</td><td>7.8</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table> |                 |                     |          |                |                    |               |                |               |              |                |                          | 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 | RUGMO | - | - | -9.2 | - | - | +9000 | - | - | RNP1 | 002 | TF | RUNPA | - | 127<br>(118.0) | -9.2 | 12.6 | - | -     | - | - | RNP1 | 003 | TF | BESRU | - | 127<br>(118.1) | -9.2 | 12.0 | - | +7000 | - | - | RNP1 | 004 | TF | CRANE | - | 128<br>(118.3) | -9.2 | 7.8 | - | +3600 | - | - | RNP1 |
| 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              | RUGMO               | -        | -              | -9.2               | -             | -              | +9000         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 002   | TF              | RUNPA               | -        | 127<br>(118.0) | -9.2               | 12.6          | -              | -             | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 003   | TF              | BESRU               | -        | 127<br>(118.1) | -9.2               | 12.0          | -              | +7000         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 004   | TF              | CRANE               | -        | 128<br>(118.3) | -9.2               | 7.8           | -              | +3600         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| <div>RUNPA SOUTH ARRIVAL</div> <div>From RUNPA, to BESRU at or above 7000FT, to CRANE at or above 3600FT.</div> <table><tr><th>Serial Number</th><th>Path Descriptor</th><th>Waypoint Identifier</th><th>Fly Over</th><th>Course °M(°T)</th><th>Magnetic Variation</th><th>Distance (NM)</th><th>Turn Direction</th><th>Altitude (FT)</th><th>Speed (KIAS)</th><th>Vertical Angle</th><th>Navigation Specification</th></tr><tr><td>001</td><td>IF</td><td>RUNPA</td><td>-</td><td>-</td><td>-9.2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>002</td><td>TF</td><td>BESRU</td><td>-</td><td>127<br/>(118.1)</td><td>-9.2</td><td>12.0</td><td>-</td><td>+7000</td><td>-</td><td>-</td><td>RNP1</td></tr><tr><td>003</td><td>TF</td><td>CRANE</td><td>-</td><td>128<br/>(118.3)</td><td>-9.2</td><td>7.8</td><td>-</td><td>+3600</td><td>-</td><td>-</td><td>RNP1</td></tr></table>   |                 |                     |          |                |                    |               |                |               |              |                |                          | 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 | RUNPA | - | - | -9.2 | - | - | -     | - | - | RNP1 | 002 | TF | BESRU | - | 127<br>(118.1) | -9.2 | 12.0 | - | +7000 | - | - | RNP1 | 003 | TF | CRANE | - | 128<br>(118.3) | -9.2 | 7.8  | - | +3600 | - | - | RNP1 |     |    |       |   |                |      |     |   |       |   |   |      |
| 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              | RUNPA               | -        | -              | -9.2               | -             | -              | -             | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 002   | TF              | BESRU               | -        | 127<br>(118.1) | -9.2               | 12.0          | -              | +7000         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |
| 003   | TF              | CRANE               | -        | 128<br>(118.3) | -9.2               | 7.8           | -              | +3600         | -            | -              | RNP1                     |               |                 |                     |          |               |                    |               |                |               |              |                |                          |     |    |       |   |   |      |   |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |      |   |       |   |   |      |     |    |       |   |                |      |     |   |       |   |   |      |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

STANDARD ARRIVAL CHART -INSTRUMENT



STANDARD ARRIVAL CHART -INSTRUMENT

RJCK / KUSHIRO

RNAV STAR

| LEKUP NORTH ARRIVAL   |                 |                     |          |                |                    |               |                |               |              |                |                          |
|---|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| From LEKUP at or above 3200FT, to OTGET, to ONAGA at or above 3200FT. |                 |                     |          |                |                    |               |                |               |              |                |                          |
| 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              | LEKUP               | -        | -              | -9.2               | -             | -              | +3200         | -            | -              | RNP1                     |
| 002   | TF              | OTGET               | -        | 318<br>(308.5) | -9.2               | 15.1          | -              | -             | -            | -              | RNP1                     |
| 003   | TF              | ONAGA               | -        | 258<br>(248.9) | -9.2               | 4.5           | -              | +3200         | -            | -              | RNP1                     |

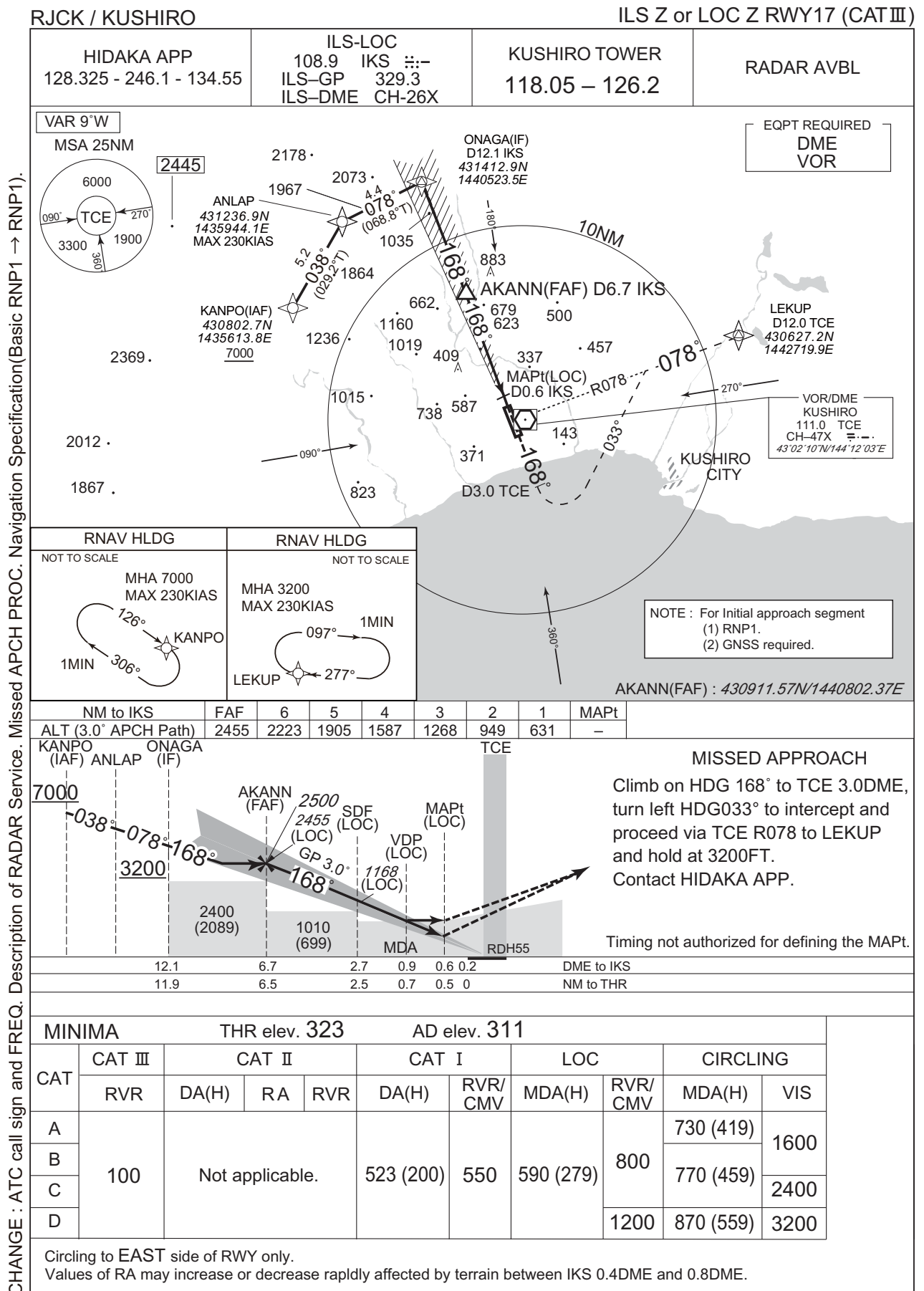
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|---------------------|-----------------------|--------------------|---------------------|----------------|-----------------------|-----------------------|--------------|--------------------------|
| Hold | LEKUP               | 277<br>(268.1)        | -9.2               | 1.0(-14000)         | R              | 3200                  | FL140                 | -230(-14000) | RNP1                     |

| LEKUP SOUTH ARRIVAL  |                 |                     |          |                |                    |               |                |               |              |                |                          |
|--|-----------------|---------------------|----------|----------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| From LEKUP at or above 3200FT, to OMDUX at or above 2900FT, to NOKKA at or above 1200FT. |                 |                     |          |                |                    |               |                |               |              |                |                          |
| 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              | LEKUP               | -        | -              | -9.2               | -             | -              | +3200         | -            | -              | RNP1                     |
| 002  | TF              | OMDUX               | -        | 206<br>(196.8) | -9.2               | 12.8          | -              | +2900         | -            | -              | RNP1                     |
| 003  | TF              | NOKKA               | -        | 258<br>(249.0) | -9.2               | 4.4           | -              | +1200         | -            | -              | 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 | LEKUP               | 277<br>(268.1)        | -9.2               | 1.0(-14000)         | R              | 3200                  | FL140                 | -230(-14000) | RNP1                     |
| Hold | OMDUX               | 258<br>(249.0)        | -9.2               | 1.0(-14000)         | L              | 2900                  | FL140                 | -230(-14000) | RNP1                     |

CHANGE : Navigation Specification(Basic RNP1 → RNP1).

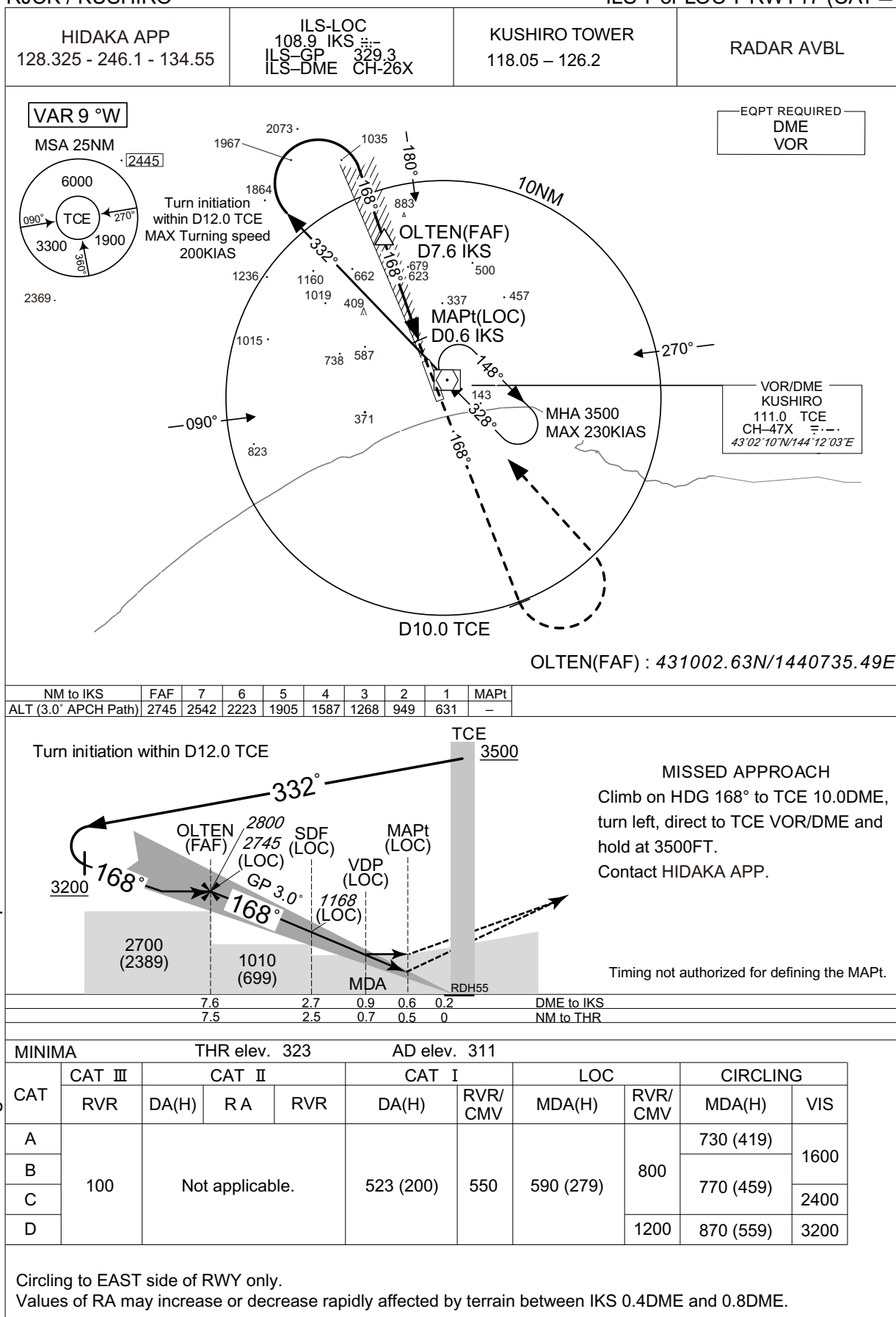
## INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

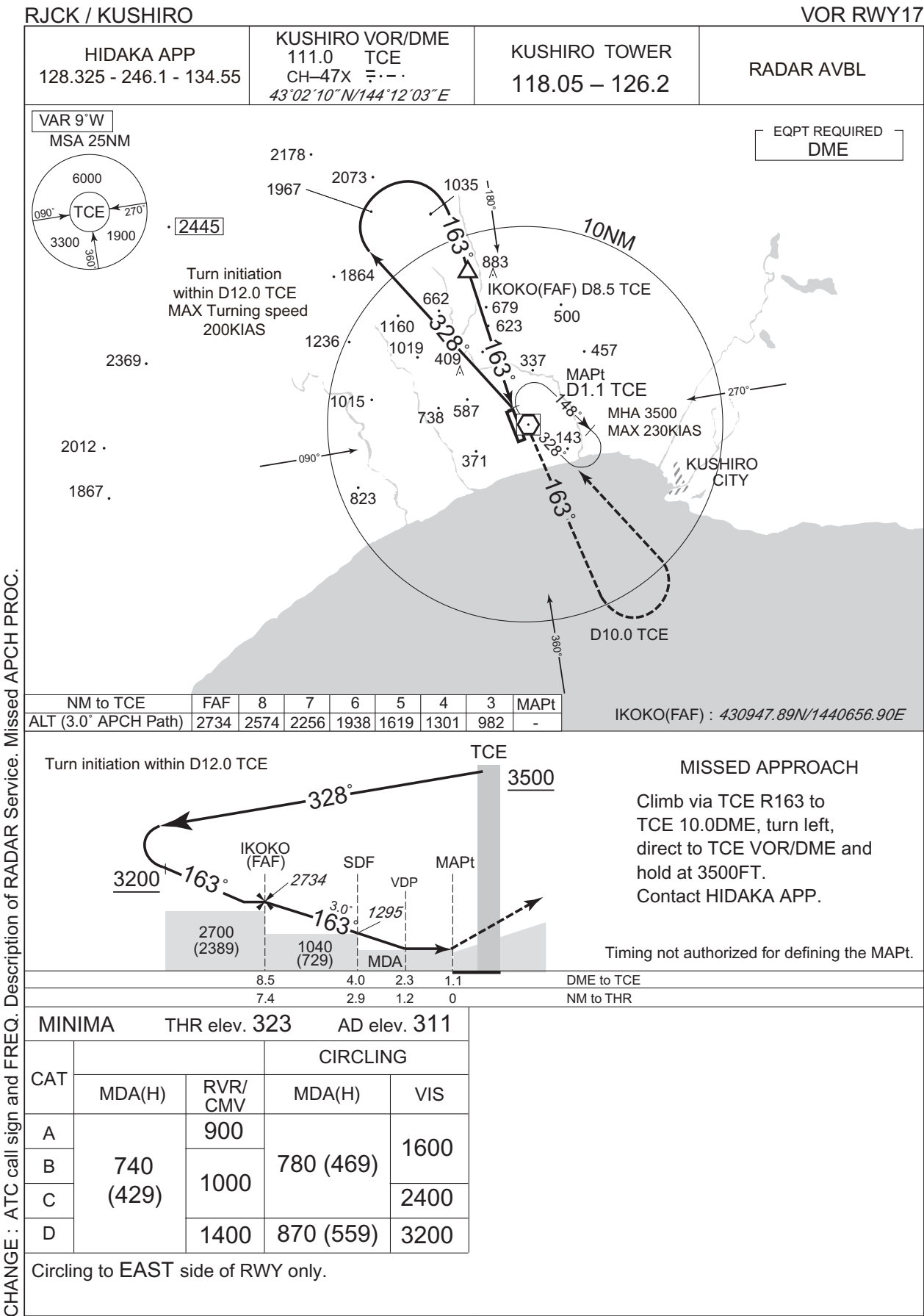
RJCK / KUSHIRO

ILS Y or LOC Y RWY17 (CAT III)



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

INSTRUMENT APPROACH CHART



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



## RJCK / KUSHIRO

HIDAKA APP  
128.325 - 246.1 - 134.55

KUSHIRO VOR/DME  
111.0 TCE  
CH-47X  
43°02'10"N/144°12'03"E

KUSHIRO TOWER  
118.05 - 126.2

RADAR AVBL

VAR 9°W

MSA 25NM  
TCE  
6000  
3300  
1900  
090°  
270°  
360°

EQPT REQUIRED  
DME

| NM to TCE            | MAPt | 2   | 3    | 4    | FAF  |
|----------------------|------|-----|------|------|------|
| ALT (3.0° APCH Path) | -    | 881 | 1199 | 1518 | 1836 |

IGNAM(FAF) : 425713.78N/1441309.25E

MISSED APPROACH

Climb via TCE R360 to  
TCE 10.0DME, turn left,  
direct to TCE VOR/DME and  
hold at 3500FT.  
Contact HIDAKA APP.

Timing not authorized for defining the MAPt.

TCE  
3500

165°

Turn initiation  
within D11.0 TCE

VDP  
D1.2 TCE (CAT A)  
D1.3 TCE (CAT B)  
D1.4 TCE (CAT C)  
D1.5 TCE (CAT D)

IGNAM  
(FAF) 1836

360°

1400

MAPt

VDP

3.0°

360°

MDA

900  
(610)

DME to TCE  
0.3

5.0

NM to THR  
0

4.7

MINIMA

THR elev. 290

AD elev. 311

CAT

MDA(H)

RVR/  
CMV

CIRCLING

MDA(H)

VIS

A

640 (350)

1200

730 (419)

1600

B

670 (380)

1300

770 (459)

2400

C

700 (410)

1400

870 (559)

3200

D

720 (430)

1600

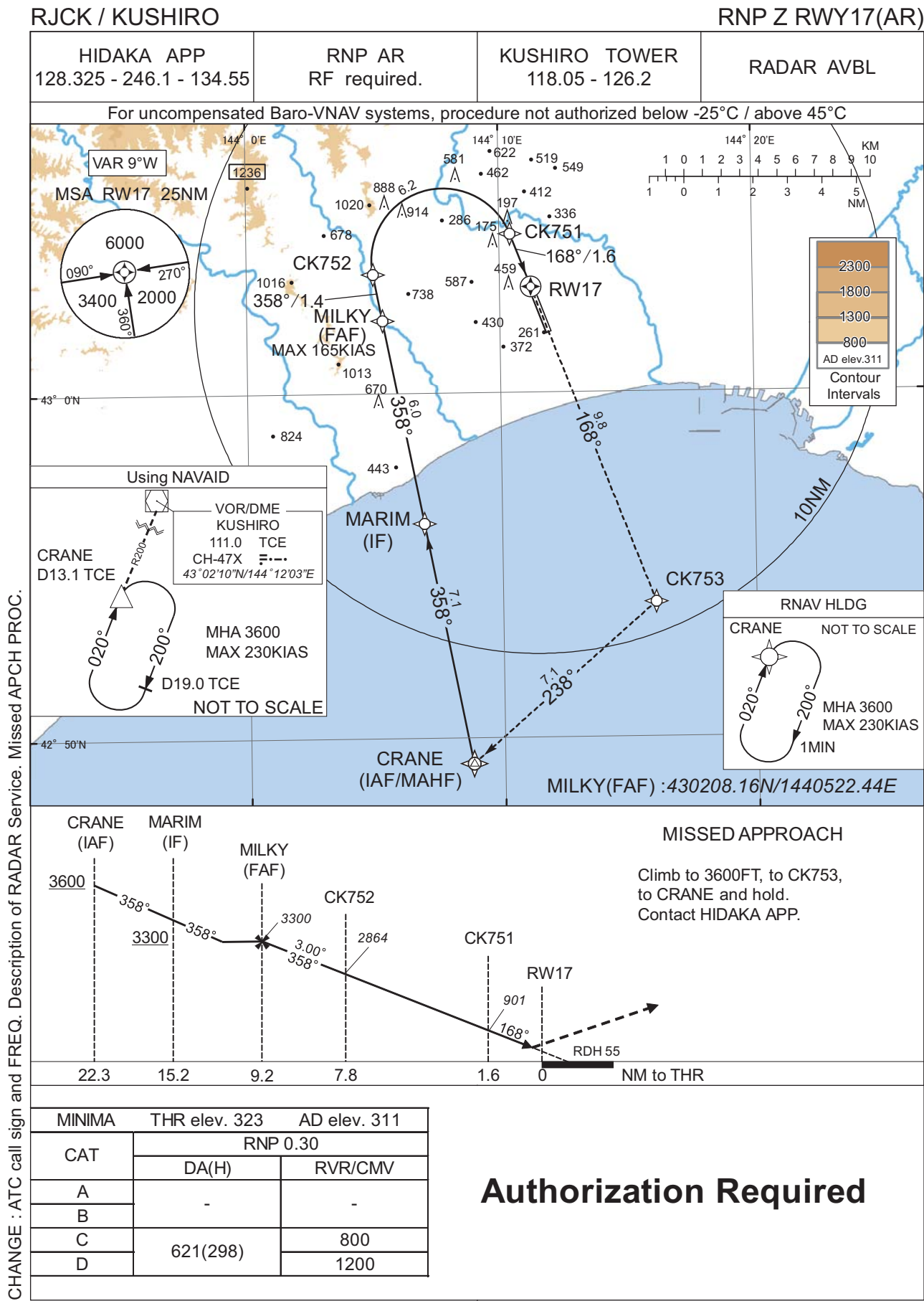
870 (559)

3200

Circling to EAST side of RWY only.

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

INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Z RWY17(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                                 | CRANE               | —        | —             | -9.2               | —             | —              | +3600         | —            | —               | —         |
| 002           | TF                                 | MARIM               | —        | 358 (349.1)   | -9.2               | 7.1           | —              | +3300         | —            | —               | 1.0       |
| 003           | TF                                 | MILKY               | —        | 358 (349.0)   | -9.2               | 6.0           | —              | 3300          | -165         | —               | 1.0       |
| 004           | TF                                 | CK752               | —        | 358 (349.0)   | -9.2               | 1.4           | —              | 2864          | —            | -3.00           | 0.3       |
| 005           | RF<br>Center:<br>CKRF1<br>r=2.08NM | CK751               | —        | —             | -9.2               | 6.2           | R              | 901           | —            | -3.00           | 0.3       |
| 006           | TF                                 | RW17                | Y        | 168 (159.0)   | -9.2               | 1.6           | —              | 378           | —            | -3.00/55        | 0.3       |
| 007           | TF                                 | CK753               | —        | 168 (159.0)   | -9.2               | 9.8           | —              | —             | —            | —               | 1.0       |
| 008           | TF                                 | CRANE               | —        | 238 (229.0)   | -9.2               | 7.1           | —              | 3600          | —            | —               | 1.0       |

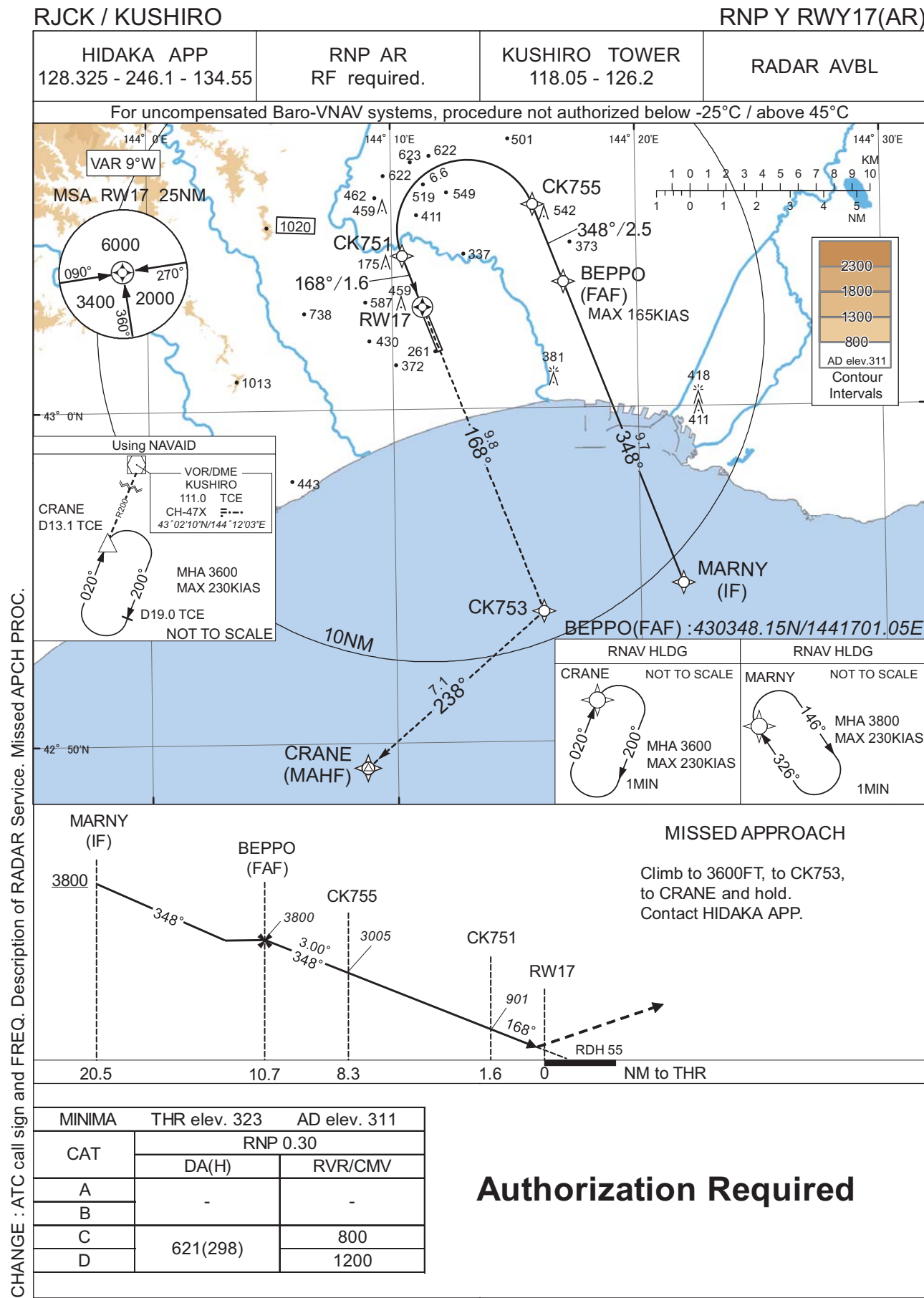
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | RNP Value |
|------|---------------------|-----------------------|--------------------|---------------------|----------------|-----------------------|-----------------------|--------------|-----------|
| Hold | CRANE               | 020 (010.5)           | -9.2               | 1.0(-14000)         | R              | 3600                  | FL140                 | -230(-14000) | 1.0       |

Waypoint Coordinates

| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| CRANE               | 424916.84N / 1440846.59E | CKRF1                    | 430352.65N / 1440747.87E |
| MARIM               | 425614.81N / 1440656.16E |                          |                          |
| MILKY               | 430208.16N / 1440522.44E |                          |                          |
| CK752               | 430328.83N / 1440501.00E |                          |                          |
| CK751               | 430437.47N / 1441026.54E |                          |                          |
| RW17                | 430305.30N / 1441114.92E |                          |                          |
| CK753               | 425355.48N / 1441602.58E |                          |                          |

CHANGE:PROC renamed.

INSTRUMENT APPROACH CHART



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

MARNY (IF)

BEPPO (FAF)

CK755

CK751

RW17

RDH 55

NM to THR

MINIMA

THR elev. 323

AD elev. 311

CAT

RNP 0.30

DA(H)

RVR/CMV

A

-

-

B

-

-

C

621(298)

800

D

621(298)

1200

Authorization Required

## INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP Y RWY17(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                                 | MARNY               | —        | —              | -9.2               | —             | —              | +3800         | —            | —               | —         |
| 002           | TF                                 | BEPP0               | —        | 348<br>(339.1) | -9.2               | 9.7           | —              | 3800          | -165         | —               | 1.0       |
| 003           | TF                                 | CK755               | —        | 348<br>(339.1) | -9.2               | 2.5           | —              | 3005          | —            | -3.00           | 0.3       |
| 004           | RF<br>Center:<br>CKRF2<br>r=2.10NM | CK751               | —        | —              | -9.2               | 6.6           | L              | 901           | —            | -3.00           | 0.3       |
| 005           | TF                                 | RW17                | Y        | 168<br>(159.0) | -9.2               | 1.6           | —              | 378           | —            | -3.00/55        | 0.3       |
| 006           | TF                                 | CK753               | —        | 168<br>(159.0) | -9.2               | 9.8           | —              | —             | —            | —               | 1.0       |
| 007           | TF                                 | CRANE               | —        | 238<br>(229.0) | -9.2               | 7.1           | —              | 3600          | —            | —               | 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 | CRANE               | 020<br>(010.5)        | -9.2               | 1.0(-14000)         | R              | 3600                  | FL140                 | -230(-14000) | 1.0       |
| Hold | MARNY               | 326<br>(316.4)        | -9.2               | 1.0(-14000)         | R              | 3800                  | FL140                 | -230(-14000) | 1.0       |

Waypoint Coordinates

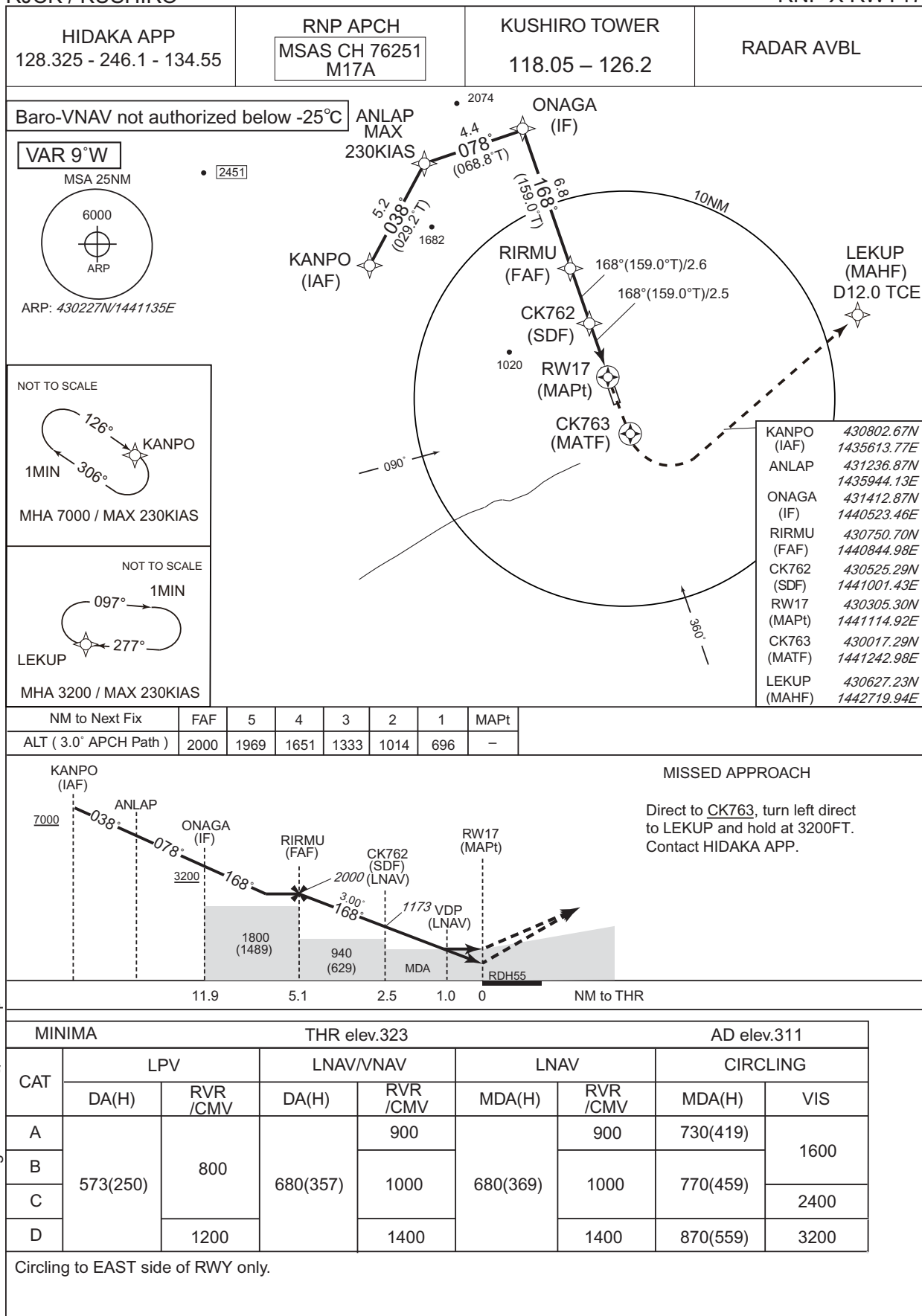
| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| MARNY               | 425443.27N / 1442145.22E | CKRF2                    | 430522.76N / 1441307.17E |
| BEPP0               | 430348.15N / 1441701.05E |                          |                          |
| CK755               | 430607.99N / 1441547.87E |                          |                          |
| CK751               | 430437.47N / 1441026.54E |                          |                          |
| RW17                | 430305.30N / 1441114.92E |                          |                          |
| CK753               | 425355.48N / 1441602.58E |                          |                          |
| CRANE               | 424916.84N / 1440846.59E |                          |                          |

CHANGE:PROC renamed.

## INSTRUMENT APPROACH CHART

RJCK / KUSHIRO

RNP X RWY17



## INSTRUMENT APPROACH CHART

RJCK /KUSHIRO

RNP X RWY17

**FAS DATA BLOCK**

|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +01279        |
| SBAS service provider identifier | 2             | FPAP latitude              | 430149.6680N  |
| Airport identifier               | RJCK          | FPAP longitude             | 1441154.5465E |
| Runway                           | 17            | Threshold crossing height  | 00016.7       |
| Approach performance designator  | 0             | TCH units selector         | 1             |
| Route indicator                  | X             | Glide path angle           | 03.00         |
| Reference path data selector     | 0             | Course width at threshold  | 105.00        |
| Reference path ID                | M17A          | ∠ length offset            | 0000          |
| LTP/FTP latitude                 | 430305.2840N  | HAL                        | 40.0          |
| LTP/FTP longitude                | 1441114.8770E | VAL                        | 50.0          |
| CRC remainder                    | A0B919FD      |                            |               |

**Required additional data**

|                            |      |
|----------------------------|------|
| LTP/FTP orthometric height | 98.0 |
|----------------------------|------|

CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

## RJCK / KUSHIRO

RNP RWY35





## INSTRUMENT APPROACH CHART

RJCK /KUSHIRO

RNP RWY35

**FAS DATA BLOCK**

|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +01179        |
| SBAS service provider identifier | 2             | FPAP latitude              | 430305.2840N  |
| Airport identifier               | RJCK          | FPAP longitude             | 1441114.8770E |
| Runway                           | 35            | Threshold crossing height  | 00015.0       |
| Approach performance designator  | 0             | TCH units selector         | 1             |
| Route indicator                  |               | Glide path angle           | 03.00         |
| Reference path data selector     | 0             | Course width at threshold  | 105.00        |
| Reference path ID                | M35A          | ∠ length offset            | 0000          |
| LTP/FTP latitude                 | 430149.6680N  | HAL                        | 40.0          |
| LTP/FTP longitude                | 1441154.5465E | VAL                        | 50.0          |
| CRC remainder                    | F9C3454C      |                            |               |

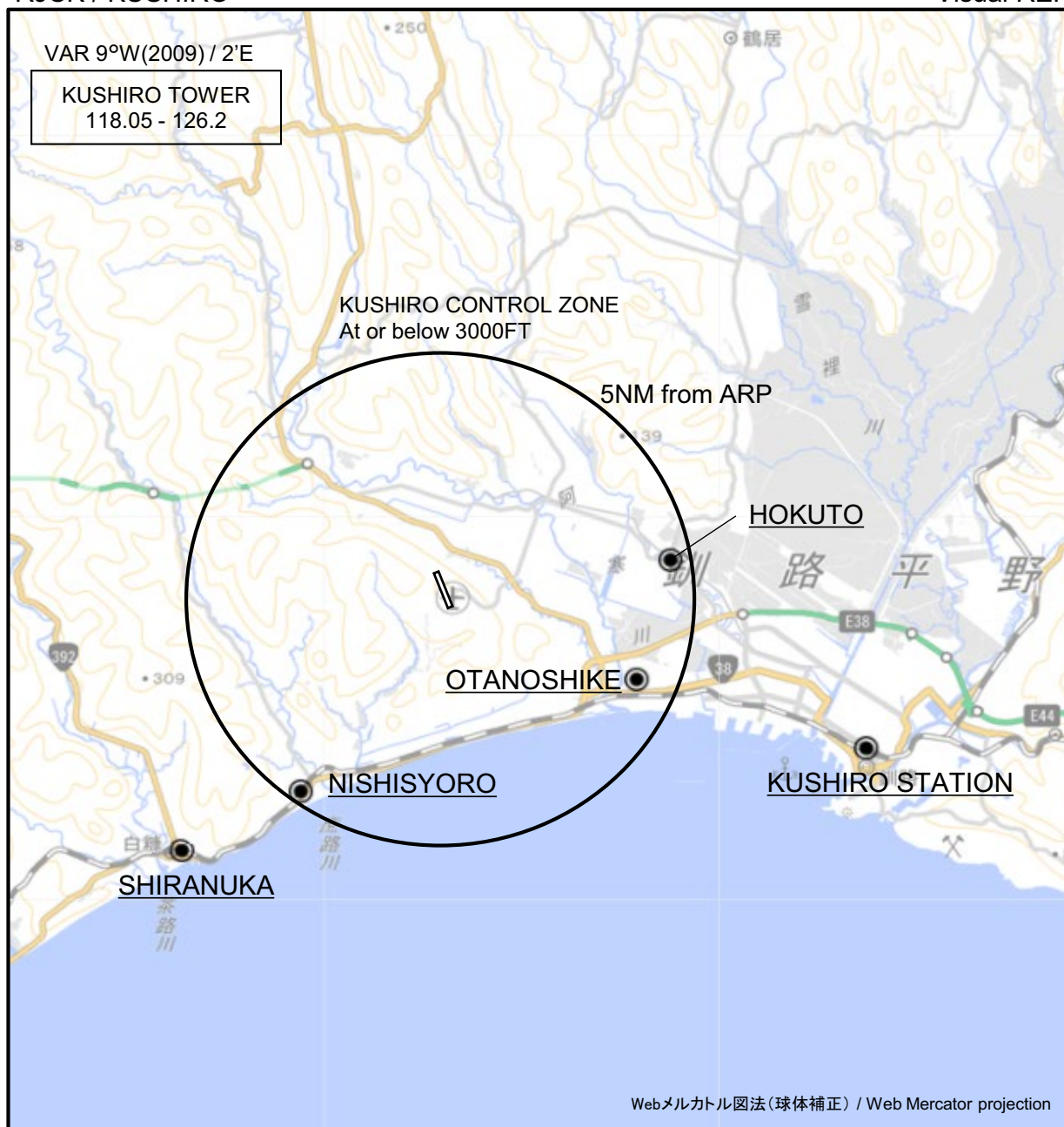
**Required additional data**

|                            |      |
|----------------------------|------|
| LTP/FTP orthometric height | 88.1 |
|----------------------------|------|

CHANGE : Description of FAS DATA BLOCK ITEM(CRC remainder).

RJCK / KUSHIRO

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).

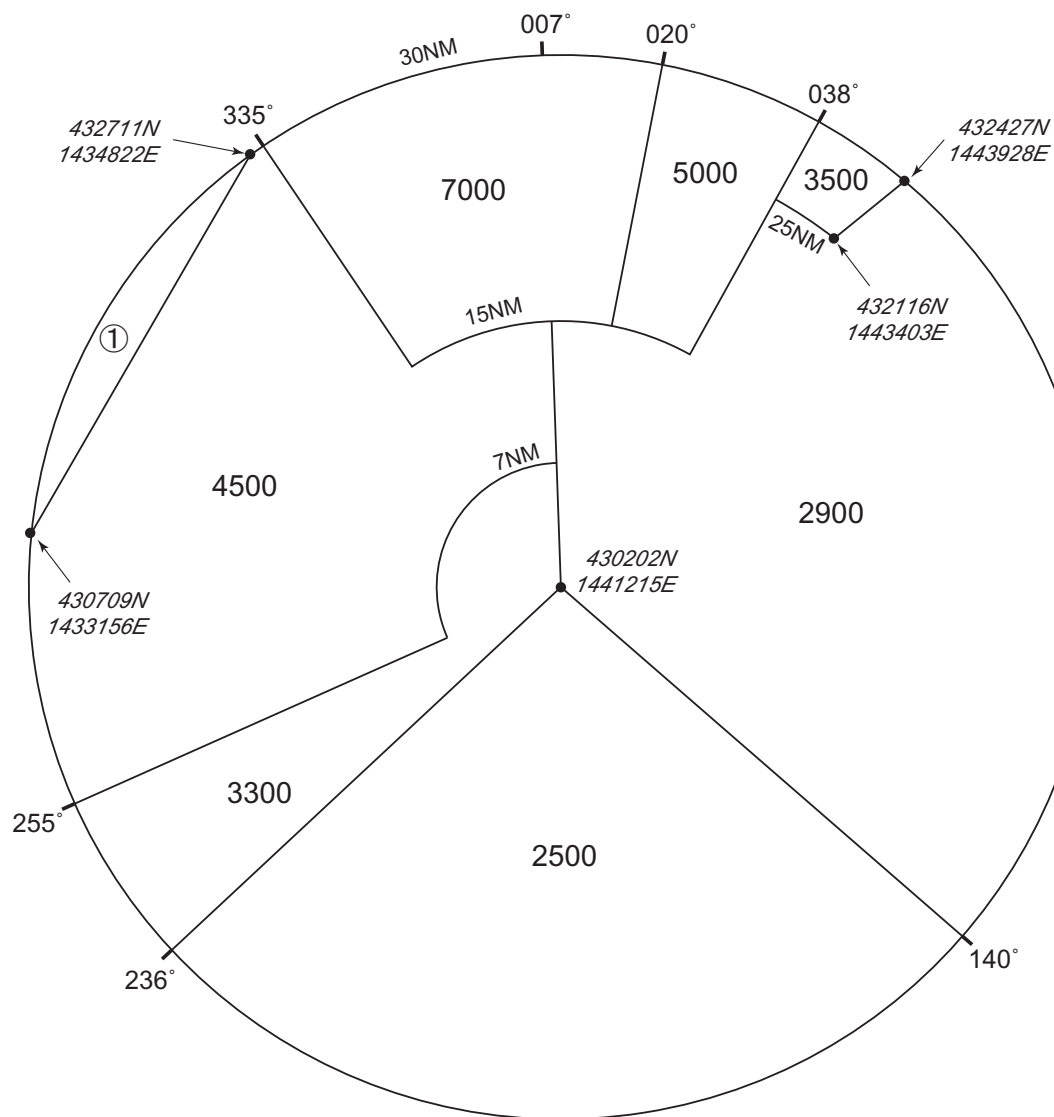
| Call sign                   | BRG / DIST from ARP | Remarks                |
|-----------------------------|---------------------|------------------------|
| 北斗<br>Hokuto                | 080°T / 4.6NM       | T字路交差点<br>Intersection |
| 大楽毛<br>Otanoshike           | 113°T / 4.2NM       | 製紙工場煙突群<br>Chimneys    |
| 釧路ステーション<br>Kushiro Station | 110°T / 8.8NM       | JR駅<br>Station         |
| 西庶路<br>Nishisyoro           | 215°T / 4.7NM       | JR駅<br>Station         |
| 白糖<br>Shiranuka             | 225°T / 7.2NM       | JR駅<br>Station         |

CHANGE : Map updated. BRG/DIST from ARP.

RJCK / KUSHIRO

Minimum Vectoring Altitude CHART

VAR 9°W (2007)



① 7000

CHANGE : KSE deleted.