

**AD 2 AERODROMES****RJFT AD 2.1 AERODROME LOCATION INDICATOR AND NAME****RJFT - KUMAMOTO****RJFT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

|   |  |   |
|---|--|---|
| 1 | ARP coordinates and site at AD   | 325014N/1305119E<br>339° / 390m from TWR  |
| 2 | Direction and distance from (city)   | 16 km (8.6nm) NE of Kumamoto railway station  |
| 3 | Elevation/ Reference temperature   | 632ft / 33°C (2004-2008)  |
| 4 | Geoid undulation at AD ELEV PSN  | To be issued later  |
| 5 | MAG VAR/ Annual change   | 8° W (2023)<br>Annual change 5'W  |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Kyushu Kumamoto International Airport Co., Ltd.<br>Kumamoto Airport, 1802-2 Oyatsu, Mashiki-machi, Kamimashiki-gun Kumamoto Pref.<br>861-2204 , Japan<br><br>Tel:096(202)3363 |
| 7 | Types of traffic permitted (IFR/VFR)   | IFR/VFR   |
| 8 | Remarks  | Kumamoto Airport Office (Civil Aviation Bureau)<br>Kumamoto Airport, Oyatsu, Mashiki-machi, Kamimashiki-gun Kumamoto Pref.<br><br>Tel:096(232)2853                            |

**RJFT AD 2.3 OPERATIONAL HOURS**

|    |                           |  |
|----|---------------------------|--|
| 1  | AD Administration         | 2230 - 1230  |
| 2  | Customs and immigration   | Customs: 2330-0815<br>Immigration: INTL SKED FLT hours only            |
| 3  | Health and sanitation     | Quarantine(human, animal, plant): INTL SKED FLT hours only             |
| 4  | AIS Briefing Office       | Nil  |
| 5  | ATS Reporting Office(ARO) | Nil  |
| 6  | MET Briefing Office       | H24 (FUKUOKA)  |
| 7  | ATS                       | 2230 - 1230  |
| 8  | Fuelling                  | JET A-1: 2230 - 1200<br>AVGAS : On request 0000-0800 Tel: 096-232-3281 |
| 9  | Handling                  | 2230 - 1230  |
| 10 | Security                  | 2230 - 1230  |
| 11 | De-icing                  | 2230 - 1230  |
| 12 | Remarks                   | Nil  |

**RJFT AD 2.4 HANDLING SERVICES AND FACILITIES**

|   |   |                                  |
|---|---|----------------------------------|
| 1 | Cargo-handling facilities               | AVBL up to B777-200 aircraft     |
| 2 | Fuel/ oil types                         | Fuel Grades : JET A-1, AVGAS 100 |
| 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                              |

**RJFT AD 2.5 PASSENGER FACILITIES**

|   |                      |  |
|---|----------------------|--|
| 1 | Hotels               | Near the airport   |
| 2 | Restaurants          | At airport   |
| 3 | Transportation       | Buses and taxies   |
| 4 | Medical facilities   | First aid treatment at airport<br>Hospitals near the airport |
| 5 | Bank and Post Office | At airport (ATM)   |
| 6 | Tourist Office       | Nil  |
| 7 | Remarks              | Nil  |

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

|   |   |  |
|---|---|--|
| 1 | AD category for fire fighting               | CAT 9  |
| 2 | Rescue equipment                            | Chemical fire fighting truck x 3, Water-supply truck, Rescue and lighting power supply truck, Emergency medical equipment conveyance truck |
| 3 | Capability for removal of disabled aircraft | Ask AD administration  |
| 4 | Remarks                                     | Nil  |

**RJFT AD 2.7 SEASONAL AVAILABILITY-CLEARING**

|   |                             |  |
|---|-----------------------------|--|
| 1 | Types of clearing equipment | Snow removal equipment : Motor graders X 4, Tractor shovel x 2 |
| 2 | Clearance priorities        | Nil  |
| 3 | Remarks                     | Seasonal availability : DEC 15 THRU MAR 16                     |

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

|   |                                     |  |
|---|-------------------------------------|--|
| 1 | Apron surface and strength          | Surface : Concrete<br>Strength:<br>NR1, 1R spot : PCR 877/R/B/W/T<br>Other spot : PCR 1064/R/B/W/T   |
| 2 | Taxiway width, surface and strength | Width :<br>P1 THRU P6 : 23m<br>T1 and T7 : 28.5m<br>T2,T3,T4,T5 and T6 : 34m<br>Surface : Asphalt concrete<br>Strength :<br>PCR 2413/F/D/X/T   |
| 3 | ACL and elevation                   | Not available  |
| 4 | VOR checkpoints                     | Not available  |
| 5 | INS checkpoints                     | Spot NR<br>1R : 325004.73N/1305122.96E<br>1 : 325005.02N/1305123.69E<br>2R : 325004.70N/1305125.59E<br>2 : 325005.06N/1305126.13E<br>2L : 325006.15N/1305126.50E<br>3 : 325006.09N/1305129.00E<br>4R : 325006.88N/1305131.03E<br>4 : 325007.13N/1305131.51E<br>4L : 325008.33N/1305131.94E<br>5R : 325008.00N/1305133.84E<br>5 : 325008.56N/1305134.51E<br>5L : 325009.46N/1305134.75E<br>6R : 325009.13N/1305136.66E<br>6 : 325009.60N/1305137.25E<br>6L : 325010.58N/1305137.56E<br>7 : 325010.90N/1305139.85E |
| 6 | Remarks                             | Nil  |

**RJFT AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS**

|   |  |   |
|---|--|---|
| 1 | Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands | ACFT stand ID signs: NR1, NR2, NR3, NR4, NR5, NR6<br>TWY guide lines: AVBL  |
| 2 | RWY and TWY markings and LGT   | <p>RWY : 07/25<br/>(Marking) RWY designation, RWY CL, RWY THR, RWY middle point, Aiming point, TDZ, RWY side stripe<br/>(LGT) RCLL, REDL, RTHL, RENL, RTZL(RWY07), WBAR(RWY07)</p> <p>TWY : P1 - P6<br/>(Marking) :TWY CL, TWY side stripe<br/>(LGT) :TWY edge LGT, TWY CL LGT, Taxiing guidance sign</p> <p>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 signs as appropriate.</p>  |
| 3 | Stop bars  | <p>Stop bar Lights : T1 - T7<br/>Stop bar LGT operations</p> <ol style="list-style-type: none"> <li>1) Stop bar LGT are installed at each RWY holding position associated with Runway 07/25.</li> <li>2) Stop bar LGT will be operated when the visibility or the lowest RVR of the runway 07/25 is at or less than 600m.</li> <li>3) Stop bar LGT on TWY T1, T7 are controlled individually by ATC.</li> <li>4) Stop bar LGT on TWY T2 through T6 are not controlled individually by ATC.</li> <li>5) During the period Stop bar LGT operated,TWY T2 through T6 are not available for departure aircraft.</li> </ol> |
| 4 | Remarks  | (Marking) : Overrun area<br>(LGT) : Apron Flood LGT   |

**RJFT AD 2.10 AERODROME OBSTACLES**

In Area 2 See Obstacle data

In Area 3 To be developed

## RJFT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

|    |  |   |
|----|--|---|
| 1  | Associated MET Office  | FUKUOKA   |
| 2  | Hours of service<br>MET Office outside hours                           | H24 (FUKUOKA)   |
| 3  | Office responsible for TAF preparation<br>Periods of validity          | FUKUOKA<br>30 Hours   |
| 4  | Trend forecast<br>Interval of issuance                                 | Nil   |
| 5  | Briefing/ consultation provided  | Briefing is available upon inquiry at FUKUOKA   |
| 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/T<sub>r</sub></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> , 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, APP, ATIS  |
| 10 | Additional information(limitation of<br>service, etc.)                 | Nil   |

## RJFT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations<br>RWY NR | TRUE BRG               | Dimensions of<br>RWY(M)                | Strength(PCR) 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   |
| 07                     | 64.58°                 | 3000 x 45                              | PCR 1275/F/D/X/T<br>Asphalt concrete | 324953.45N<br>1305026.09E               | THR ELEV : 601ft<br>TDZ ELEV : 625ft                                  |
| 25                     | 244.58°                | 3000 x 45                              | PCR 1275/F/D/X/T<br>Asphalt concrete | 325035.24N<br>1305210.28E               | THR ELEV : 642ft  |
| Slope of RWY           | Strip<br>Dimensions(M) |  | RESA (Overrun)<br>Dimensions (M)     |   | Remarks   |
| 7                      | 10                     | 11                                     |                                      |   | 14  |
| See below figure       | 3120 x 300             | 190 x (MNM:117 MAX:300)*               |                                      |   |   |
|                        | 3120 x 300             | 90 x (MNM:150 MAX:300)*                | RWY grooving :<br>3000m x 30m        |   |   |
|                        |                        | *For detail, ask airport administrator |                                      |   |   |
|                        |                        |  |                                      |   |   |

## RJFT 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       |
| 07             | 3000        | 3000        | 3000        | 3000       | Nil     |
| TWY:T2         | 2440        | 2440        | 2440        |            |         |
| TWY:T3         | 1940        | 1940        | 1940        |            |         |
| 25             | 3000        | 3000        | 3000        | 3000       | Nil     |
| TWY:T6         | 2429        | 2429        | 2429        |            |         |
| TWY:T5         | 1929        | 1929        | 1929        |            |         |

TORA, TODA and ASDA for TWY indicate distances BTN the point where TWY CL meets RWY CL and RWY THR.

## RJFT AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator  | APCH<br>LGT<br>type<br>LEN<br>INTST | RTHL<br>Color<br>WBAR | PAPI<br>(VASIS)<br>Angle<br>DIST FM THR<br>MEHT | RTZL<br>LEN | RCLL<br>LEN<br>Spacing<br>Color<br>INTST           | REDL<br>LEN<br>Spacing<br>Color<br>INTST              | RENL<br>Color<br>WBAR | STWL<br>LEN<br>Color |
|---|-------------------------------------|-----------------------|---|-------------|--|---|-----------------------|----------------------|
| 1   | 2                                   | 3                     | 4   | 5           | 6  | 7   | 8                     | 9                    |
| 07  | PALS<br>(CAT III)<br>900m<br>LIH    | Green<br>Green        | PAPI<br>3.0°/LEFT<br>349m<br>64ft               | 900m        | 3,000m<br>15m<br>Coded color<br>(White/Red)<br>LIH | 3,000m<br>60m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil<br>(*2)          |
| 25  | SALS<br>(*1)<br>420m<br>LIH         | Green<br>Nil          | PAPI<br>3.0°/LEFT<br>464m<br>74ft               | Nil         | 3,000m<br>15m<br>Coded color<br>(White/Red)<br>LIH | 3,000m<br>60m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil<br>(*2)          |
| Remarks   |                                     |                       |   |             |  |   |                       |                      |
| 10  |                                     |                       |   |             |  |   |                       |                      |
| SALS with APCH LGT BCN(885m and 600m FM THR)(*1)<br>Overrun area edge LGT(LEN:60m, Color:Red)(*2)<br>CGL and RLLS for RWY25 |                                     |                       |   |             |  |   |                       |                      |

## RJFT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

|   |  |  |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 325004N/1305141E, White/Green EV4.3sec, HO  |
| 2 | LDI location and LGT<br>Anemometer location and LGT      | LDI:Nil<br><br>Anemometer:<br><br>RWY07:331m FM RWY07 THR, LGTD<br>RWY25:235m FM RWY25 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 1 SEC: PALS, REDL, RENL, RTHL, WBAR, RCLL, RTZL,<br>Overrun area edge LGT, Stop bar LGT<br><br>Within 15 SEC: Other LGT |
| 5 | Remarks  | WDI LGT  |

**RJFT AD 2.16 HELICOPTER LANDING AREA**

|   |  |   |
|---|--|---|
| 1 | Coordinates TLOF or THR of FATO<br>Geoid undulation          | 325027.15N/1305206.65E, Nil   |
| 2 | TLOF and/or FATO elevation                                   | 634ft   |
| 3 | TLOF and FATO area dimensions,<br>surface, strength, marking | TLOF and FATO area dimensions: 23mx22m<br>Surface: Asphalt - Concrete<br>Strength: 9ton<br>Marking: See AIP AD2.24 AD chart |
| 4 | True BRG of FATO   | 064.58°/244.58°   |
| 5 | Declared distance available                                  | Nil   |
| 6 | APCH and FATO lighting                                       | Nil   |
| 7 | Remarks  | <ul style="list-style-type: none"><li>• MAX helicopter type: AS32</li><li>• daytime use only</li></ul>                      |

**RJFT 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       |
| KUMAMOTO CTR                   | Area within a radius of 5 nm of KUMAMOTO ARP(32°50'N130°51'E) | 3,000 or below       | D                       | KUMAMOTO TWR En                                      |         |
| KUMAMOTO ACA                   | See attached chart  |                      | E                       | KUMAMOTO APP<br>KUMAMOTO RADAR<br>KUMAMOTO DEP<br>En |         |
| KUMAMOTO TCA                   | See attached chart  |                      | E                       | KUMAMOTO TCA<br>En                                   |         |

熊本進入管制区  
Kumamoto Approach Control Area



Point list

- |                      |                      |
|----------------------|----------------------|
| (1) 324018N1301840E  | (11) 330555N1310757E |
| (2) 323828N1300526E  | (12) 330309N1302104E |
| (3) 323544N1295905E  | (13) 324950N1302218E |
| (4) 323353N1300008E  | (14) 324407N1301735E |
| (5) 321921N1300826E  | (15) 320333N1301644E |
| (6) 321921N1302514E  | (16) 321836N1305245E |
| (7) 322500N1302444E  | (17) 322421N1305624E |
| (8) 322522N1302306E  | (18) 325233N1311048E |
| (9) 322734N1302215E  | (19) 330719N1312355E |
| (10) 331513N1312903E |                      |

熊本ターミナルコントロールエリア  
KUMAMOTO TERMINAL CONTROL AREA



## RJFT AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign          | Frequency    | Hours of operation | Remarks    |
|---------------------|--------------------|--------------|--------------------|------------|
| 1                   | 2                  | 3            | 4                  | 5          |
| APP                 | Kumamoto Approach  | 127.0MHz     | 2230 - 1230        |            |
|                     |                    | 126.5MHz     |                    |            |
|                     |                    | 134.0MHz     |                    |            |
|                     |                    | 258.9MHz     |                    |            |
|                     |                    | 121.5MHz(E)  |                    |            |
|                     |                    | 243.0MHz(E)  |                    |            |
| ASR                 | Kumamoto Radar     | 126.5MHz     | 2230 - 1230        |            |
|                     |                    | 127.0MHz     |                    |            |
|                     |                    | 134.0MHz     |                    |            |
|                     |                    | 258.9MHz     |                    |            |
|                     |                    | 121.5MHz(E)  |                    |            |
|                     |                    | 243.0MHz(E)  |                    |            |
| DEP                 | Kumamoto Departure | 126.5 MHz    | 2230 - 1230        |            |
|                     |                    | 127.0MHz     |                    |            |
|                     |                    | 134.0MHz     |                    |            |
|                     |                    | 258.9MHz     |                    |            |
|                     |                    | 121.5MHz(E)  |                    |            |
|                     |                    | 243.0MHz(E)  |                    |            |
| TCA                 | Kumamoto TCA       | 123.85MHz    | 2300 - 1030        |            |
| TWR                 | Kumamoto Tower     | 118.7MHz (1) | 2230 - 1230        | (1)Primary |
|                     |                    | 126.2MHz     |                    |            |
|                     |                    | 134.0MHz     |                    |            |
|                     |                    | 258.9MHz     |                    |            |
|                     |                    | 121.5MHz(E)  |                    |            |
|                     |                    | 243.0MHz(E)  |                    |            |
| GND                 | Kumamoto Ground    | 121.8MHz     | 2230 - 1230        |            |
|                     |                    | 126.2MHz     |                    |            |
|                     |                    | 258.9MHz     |                    |            |
| ATIS                | Kumamoto Airport   | 128.8MHz     | 2230 - 1230        |            |

## RJFT AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid<br>(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<br>(7°W/2015)                | KUE | 112.8MHz            | H24                | 325005.29N/<br>1305029.45E                   |                                       | VOR Unusable:<br>030°-090° beyond 25nm<br>BLW 8000ft.<br>090°-120° beyond 15nm<br>BLW 8000ft.<br>120°-150° beyond 25nm<br>BLW 8000ft.<br>150°-180° beyond 35nm<br>BLW 8000ft. |
| DME                              | KUE | 1162MHz<br>(CH-75X) | H24                | 325005.29N/<br>1305029.45E                   | 651ft                                 | DME Unusable:<br>050°-100° beyond 35nm<br>BLW 8000ft.<br>100°-120° beyond 25nm<br>BLW 8000ft.<br>120°-130° beyond 30nm<br>BLW 8000ft.<br>130°-170° beyond 35nm<br>BLW 8000ft. |
| ILS-LOC 07                       | IKU | 109.3MHz            | 2230 - 1230        | 325038.52N/<br>1305218.45E                   |                                       | LOC: 235m(771ft) away<br>FM RWY 25 THR,<br>BRG (MAG) 072.23°.   |
| ILS-GP 07                        | -   | 332.0MHz            | 2230 - 1230        | 325000.72N/<br>1305033.50E                   |                                       | GP: 269m(883ft) inside<br>FM RWY 07 THR.<br>120m(394ft) N of RCL.<br>HGT of ILS REF Datum<br>16.4m(54ft).<br>GP Angle 3.0°.   |
| ILS-DME 07                       | IKU | 991MHz<br>(CH-30X)  | 2230 - 1230        | 325000.42N/<br>1305033.64E                   | 620ft                                 | DME: 269m(883ft) inside<br>FM RWY 07 THR.<br>110m(361ft) N of RCL.  |
| IM 07                            | -   | 75MHz               | 2230 - 1230        | 324947.81N/<br>1305012.03E                   |                                       | FM: 0.22NM FM RWY 07<br>THR.  |
| MSAS                             |     | 1575.42MHz          | H24                |  |                                       | Transmitting antennas are satellite based   |

ILSKUMAMOTO AP

REMARKS : 1. LOC beam BRG (MAG) 072.23°  
2. HGT of ILS REF datum 16.4m(54ft)  
3. GP Angle 3.0°  
4. ELEV of ILS-DME 188.9m(620ft)

**RJFT AD 2.20 LOCAL TRAFFIC REGULATIONS**

## 1. Airport regulations

**Use of the airport**

- 1) On use of this airport by transient aircraft, the operator is required to obtain the prior permission of the airport administrator in order to adjust of parking area.

## 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

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

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

When B772 holding at the stop marking on TWY T2 or T6

| Wing Span (WS) of aircraft taxiing on TWY P1-P2 or P5-P6 | WS =<22.6m | WS >22.6m |
|--|------------|-----------|
| Wing tip clearance                                       | *A         | *B        |

Legend:

\*A : 6.5m =&lt; wing tip clearance &lt; 15m

\*B : wing tip clearance &lt; 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

## RJFT AD 2.21 NOISE ABATEMENT PROCEDURES

### 1. 騒音軽減運航方式 (SEE AD1 6.5)

すべてのジェット機に対して、空港周辺における航空機騒音軽減のため、運航の安全に支障のない範囲で、以下の方針が適用される。ただし、これらの方針によることができない航空機は実効的にこれらと同等と認められる代替方針を実施するものとする。

1) 離陸について (滑走路 07/25)

急上昇方式

2) 着陸について (滑走路 07/25)

ディレイド・フラップ進入方式及び低フラップ角着陸  
方式

3) リバース・スラストについて

なし

### 2. 優先滑走路方式

なし

### 3. 優先飛行経路

なし

### 1. Noise Abatement Operating Procedures (SEE AD1 6.5)

For all jet aircraft, in order to reduce aircraft noise in the vicinity of airport, the following procedures shall be applied unless compliance of the procedures adversely affects the safety of aircraft operations. In case that the aircraft is unable to take these procedures, pilots should execute alternative procedures which are considered to be practically equivalent.

1) For take-off from RWY07/25

Steepest Climb Procedure

2) For landing to RWY07/25

Delayed Flap Approach Procedure and  
Reduced Flap Setting Procedure

3) Reverse Thrust

Nil.

### 2. Preferential Runways Procedures

Nil

### 3. Noise Preferential Routes

Nil

**RJFT 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 | 07/25 | 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                                     | 07/25 | A,B,C,D  | AVBL LDG MINIMA         |               |                             |               |                    |      |

\*APPLICABLE WHEN LVP/LVPD IN FORCE.

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

**2. Lost communication procedure for arrival aircraft under radar navigational guidance**

If radio communications with Kumamoto Approach/Radar are lost for 30 seconds, squawk mode A/3 code 7600 and;

- I 1. Attempt to contact Kumamoto Tower.
- 2. If unable, proceed in accordance with visual flight rules.
- 3. If unable, maintain last assigned altitude or 5,500ft whichever is higher, proceed to KUE VOR, and execute approach.
- II Procedure other than above will be issued when situation requires.

**3. Trajectory-based Airport Traffic Data Processing System(TAPS)**

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

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

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

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

**4.Category II / III operations at Kumamoto airport****熊本空港におけるカテゴリーII / III 運航****4.1 Facilities**

The following facilities are available:

|   |
|---|
| RWY07   |
| (1) ILS RWY 07 - CAT III  |
| (2) Lighting system RWY 07 - CAT III  |
| (3) RVR by forward-scatter meters(the touchdown zone, the mid-point and stop-end of the runway) |

**4.2 Conditions**

A.The following systems must be operative:

| For ILS RWY07 approach(CAT II)   | For ILS RWY07 approach(CAT III)  |
|--|--|
| (1) ILS comprising; <ul style="list-style-type: none"> <li>• ILS-LOC 07 with standby transmitter</li> <li>• ILS-GP 07 with standby transmitter<br/>(When any standby transmitters unserviceable, downgrade ILS-CAT I.)</li> <li>• IM07 (When IM unserviceable, RA could be used as an alternate method)</li> <li>• ILS-DME 07</li> </ul> | (1) ILS comprising; <ul style="list-style-type: none"> <li>• ILS-LOC 07 with standby transmitter (including far field monitor)</li> <li>• ILS-GP 07 with standby transmitter<br/>(When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.)</li> <li>• ILS-DME 07</li> </ul> |
| (2) Lighting systems comprising; <ul style="list-style-type: none"> <li>• PALS 07(including side row barrettes)</li> <li>• High INTST REDL</li> <li>• High INTST RTHL</li> <li>• RCLL and RTZL</li> </ul>  | (2) Lighting systems comprising; <ul style="list-style-type: none"> <li>• PALS 07(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   | (3) Secondary power supply   |
| (4) RVR by forward-scatter meters at the touchdown zone and either (the mid-point or stop-end of the runway).  | (4) RVR by forward-scatter meters at the touchdown zone, mid-point and stop-end of the runway.   |

B. The following information must be currently available:

- 1) Surface wind speed and direction
- 2) RVR

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

**4.3 Precision Approach Terrain Chart**

See RJFT AD2.24.

**4.4 Operating Minimum**

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

**4.5 LVP**

LVP will be available when the following conditions are met:

- 1) Ceiling is at or less than 600ft and/or RVR is at or less than 1,600m.
- 2) Facilities listed 4.1 above are operational.
- 3) 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 taxiway centerline lights 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 taxiway centerline lights change from alternate green and yellow to steady green.

**4.6 Approval for CAT II / III Operations**

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

**4.7 Taxiway available for CAT II / III Operations**

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

## 5. LVTO at Kumamoto Airport

### 5.1. Facilities

The following facilities are available:

| RWY 07  | RWY 25  |
|---|---|
| <ul style="list-style-type: none"> <li>• Lighting system RWY 07 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 25 for LVTO</li> <li>• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)</li> </ul> |

### 5.2. 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.

### 5.3. Operating Minima

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

### 5.4. LVP/LVPD

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

- a)RVR is at or less than 500m.
- b)Facilities listed 5.1 above are operational.

(2)Taxiway available for LVTO

Entering taxiway: T1 and T7

**6. Local flying restrictions & remarks:**

- 1.VFR aircraft intending to land on Kumamoto AP or to cross control zone should call Kumamoto TWR at least 10nm from the AP.
- 2.Altitude traffic pattern
  - (1) FIXED ACFT
    - A.JET.....2,400ft
    - B.PROPELLER
      - Single engine.....1,400ft
      - Multi engine.....1,700ft
  - (2) ROTOR CRAFT.....1,100ft

**RJFT AD 2.23 ADDITIONAL INFORMATION**

Nil

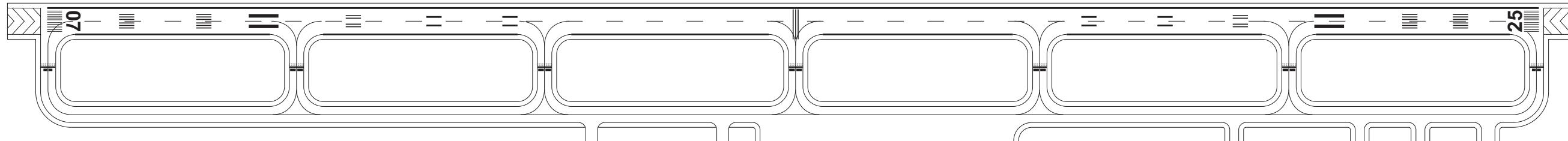
**RJFT AD 2.24 CHARTS RELATED TO AN AERODROME**

- Aerodrome/Heliport Chart-1
- Aerodrome/Heliport Chart-2
- Aerodrome Obstacle Chart - type A (RWY07/25)
- Aerodrome Obstacle Chart - type B
- Precision Approach Terrain Chart (precision approach Cat II and III runways)
- Standard Departure Chart - Instrument (KUMAMOTO, RINDO, HINAG)
- Standard Departure Chart - Instrument (IRUKA)
- Standard Departure Chart - Instrument (MIFNE-RNAV)
- Standard Departure Chart - Instrument
- Standard Arrival Chart - Instrument (MISMI SOUTH, TAKAS SOUTH)
- Standard Arrival Chart - Instrument (MISMI EAST, TAKAS EAST)
- Standard Arrival Chart - Instrument (KAZMA-RNAV)
- Instrument Approach Chart (ILS or LOC RWY07 CAT II & III)
- Instrument Approach Chart (VOR RWY07)
- Instrument Approach Chart (VOR A)
- Instrument Approach Chart (RNP RWY07)
- Instrument Approach Chart (RNP Z RWY25(AR))
- Instrument Approach Chart (RNP Y RWY25(AR))
- Other Chart (Profile of values of Radio Altimeter)
- Other Chart (Visual REP)
- Other Chart (LDG CHART)
- Other Chart (MVA CHART)

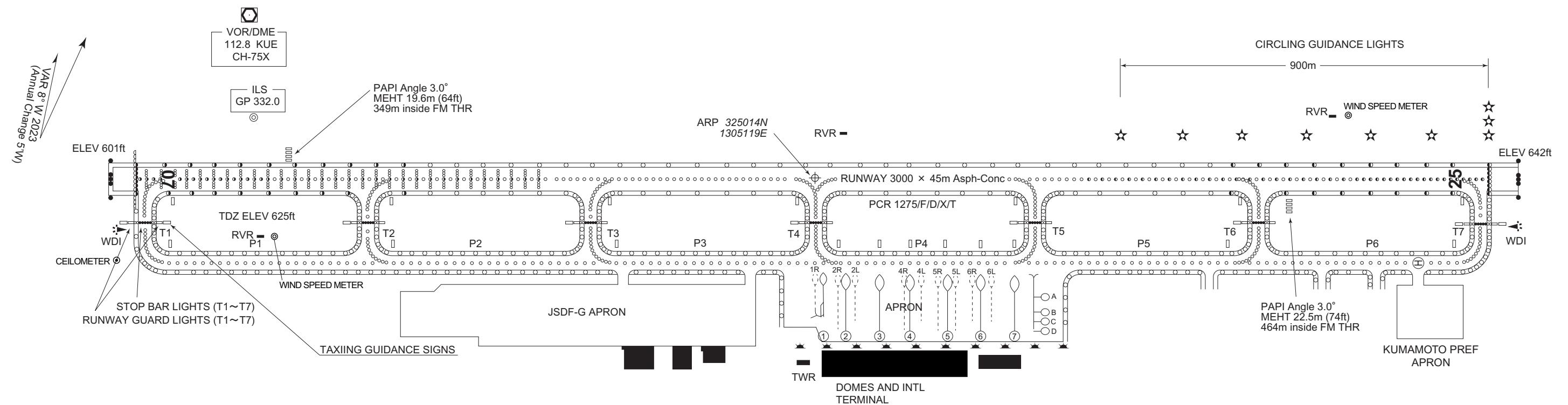
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AERODROME CHART

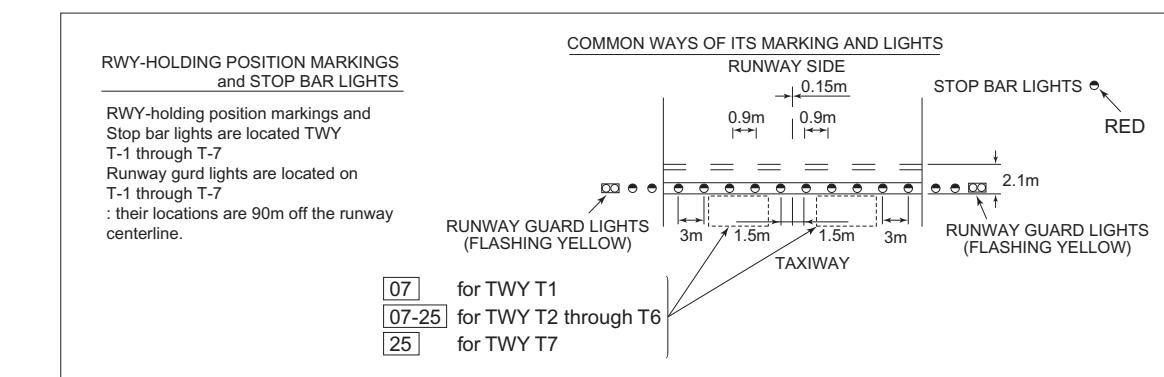
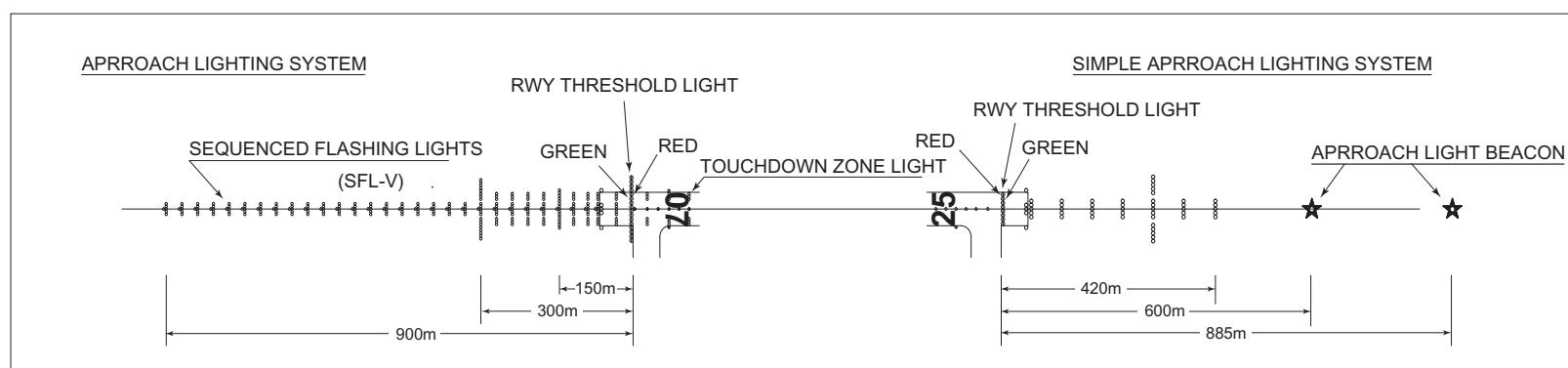
KUMAMOTO AIRPORT  
ELEV 192.7m(632ft)



MARKING AIDS

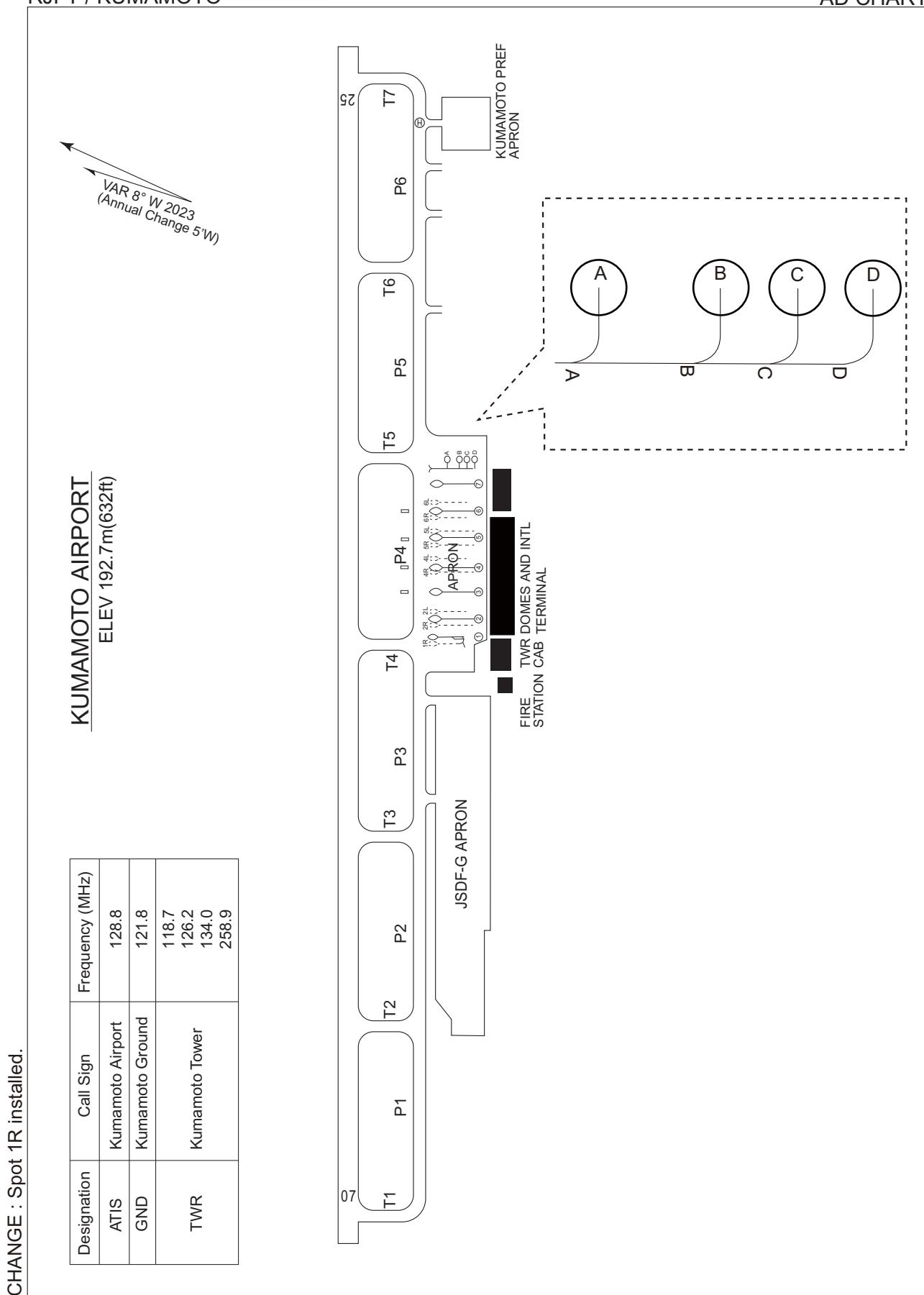


CHANGE : Spot 1R installed.



RJFT / KUMAMOTO

AD CHART

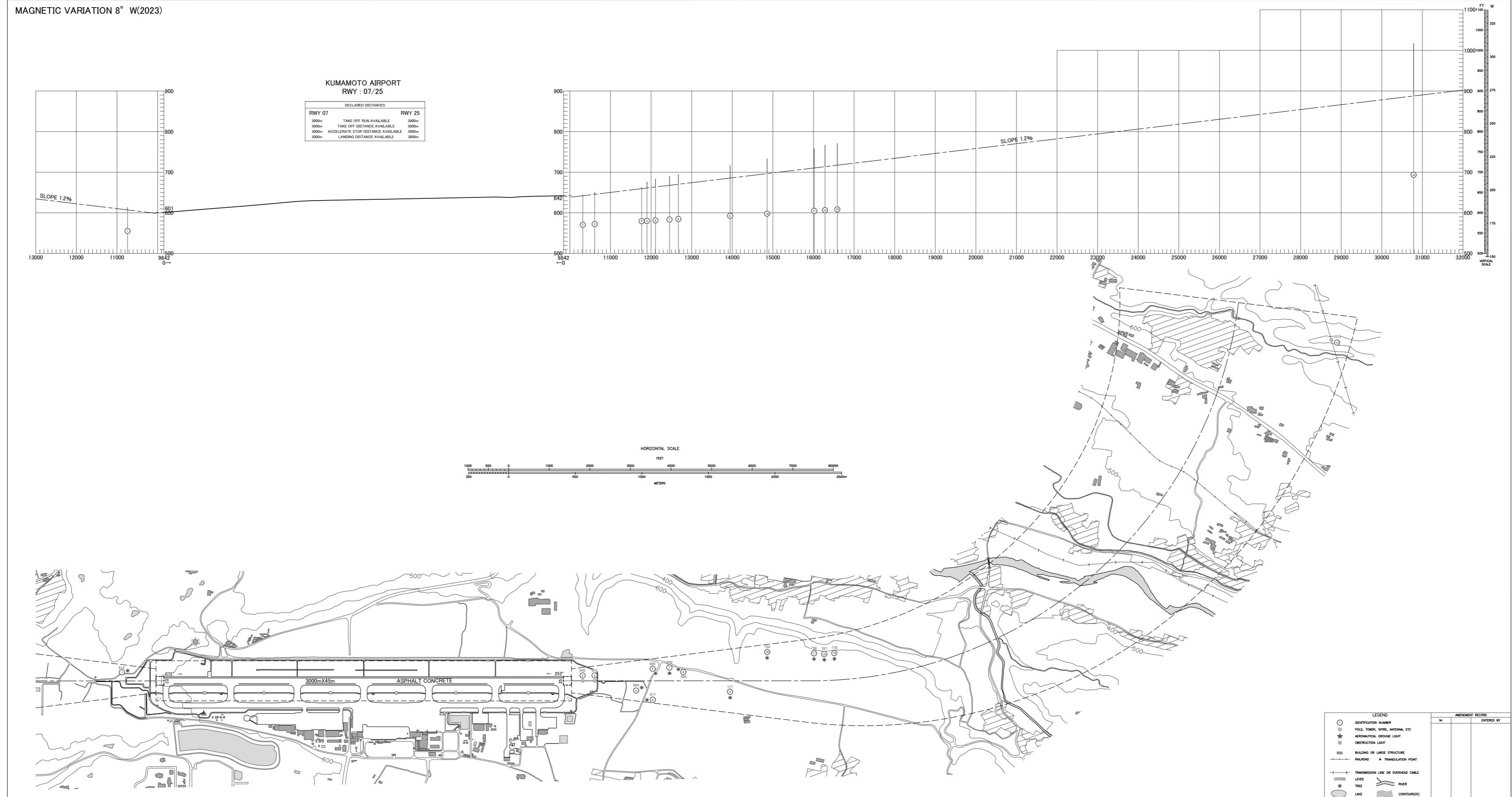


# AERODROME OBSTACLE CHART-ICAO

## TYPE A (OPERATING LIMITATIONS)

**DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC**

## MAGNETIC VARIATION 8° W(2023)



# AERODROME OBSTACLE CHART-ICAO TYPE B

## DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

## Transverse Mercator Projection

AERODROME ELEVATION 632ft ARP



CHANGE : Update

## PRECISION APPROACH TERRAIN CHART-ICAO



STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

SID and TRANSITION

KUMAMOTO REVERSAL SEVEN DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...  
RWY07 : Turn left, proceed direct to KUE VOR/DME,...  
...climb via KUE R206 to RINDO, turn left to intercept and proceed via KUE R186 to KUE VOR/DME.  
Cross RINDO at or above 7000FT, cross KUE R186/8.0DME at or above FL140.

Note RWY07 : 5.7% climb gradient required up to 2700FT.  
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

RINDO FIVE DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...  
RWY07 : Turn left, proceed direct to KUE VOR/DME,...  
...climb via KUE R206 to RINDO.  
Cross RINDO at or above 7000FT.

Note RWY07 : 5.7% climb gradient required up to 2700FT.  
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

MIYAZAKI TRANSITION

From over RINDO, turn left, proceed via KUE 25.0DME counterclockwise ARC to intercept and proceed via KUE R159/MZE R339 (MRA 8000FT) to MZE VOR/DME.

KAGOSHIMA TRANSITION

From over RINDO, turn left, proceed via HKC 45.0DME clockwise ARC to intercept and proceed via HKC R039 (MRA 9000FT) to HKC VORTAC.

MUSASHI TRANSITION

From over RINDO, turn left, proceed via KUE 25.0DME counterclockwise ARC to intercept and proceed via TFE R211 (MRA FL150) to TFE VOR/DME.

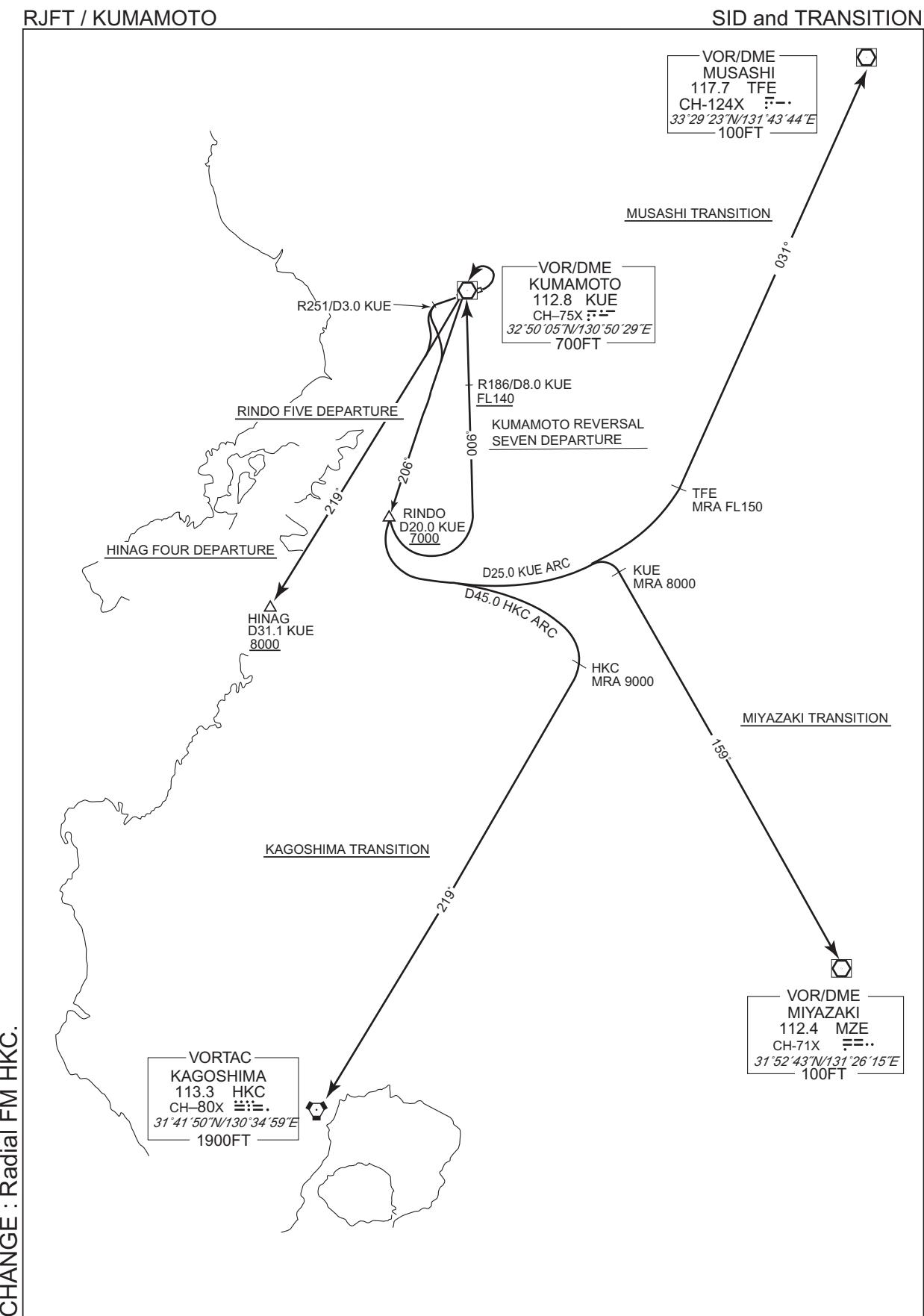
HINAG FOUR DEPARTURE

- RWY25 : Climb via KUE R251 to 3.0DME, turn left,...  
RWY07 : Turn left, proceed direct to KUE VOR/DME,...  
...climb via KUE R219 to HINAG.  
Cross HINAG at or above 8000FT.

Note RWY07 : 5.7% climb gradient required up to 2700FT.  
OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

CHANGE : Radial FM HKC.

## STANDARD DEPARTURE CHART-INSTRUMENT



STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

SID

IRUKA TWO DEPARTURE

RWY07 : Turn left, direct to KUE VOR/DME,...

RWY25 : Climb via KUE R251 to 3.0DME, turn left,...  
...climb via KUE R228 to IRUKA.  
Cross IRUKA at or above 4000FT.

Note RWY07 : 5.7% climb gradient required up to 2700FT.

OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

CHANGE : Description of PROC name.



## STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV SID and TRANSITION

**MIFNE ONE DEPARTURE**  
**DONAR TRANSITION / MATSUYAMA TRANSITION**  
**KIRISHIMA TRANSITION / NICHINAN TRANSITION**

RNAV 1

Note 1) DME/DME/IRU or GNSS required

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

2) RADAR service required

Critical DME

KIRISHIMA TRANSITION  
MZE : 14.0NM to HKC - HKC

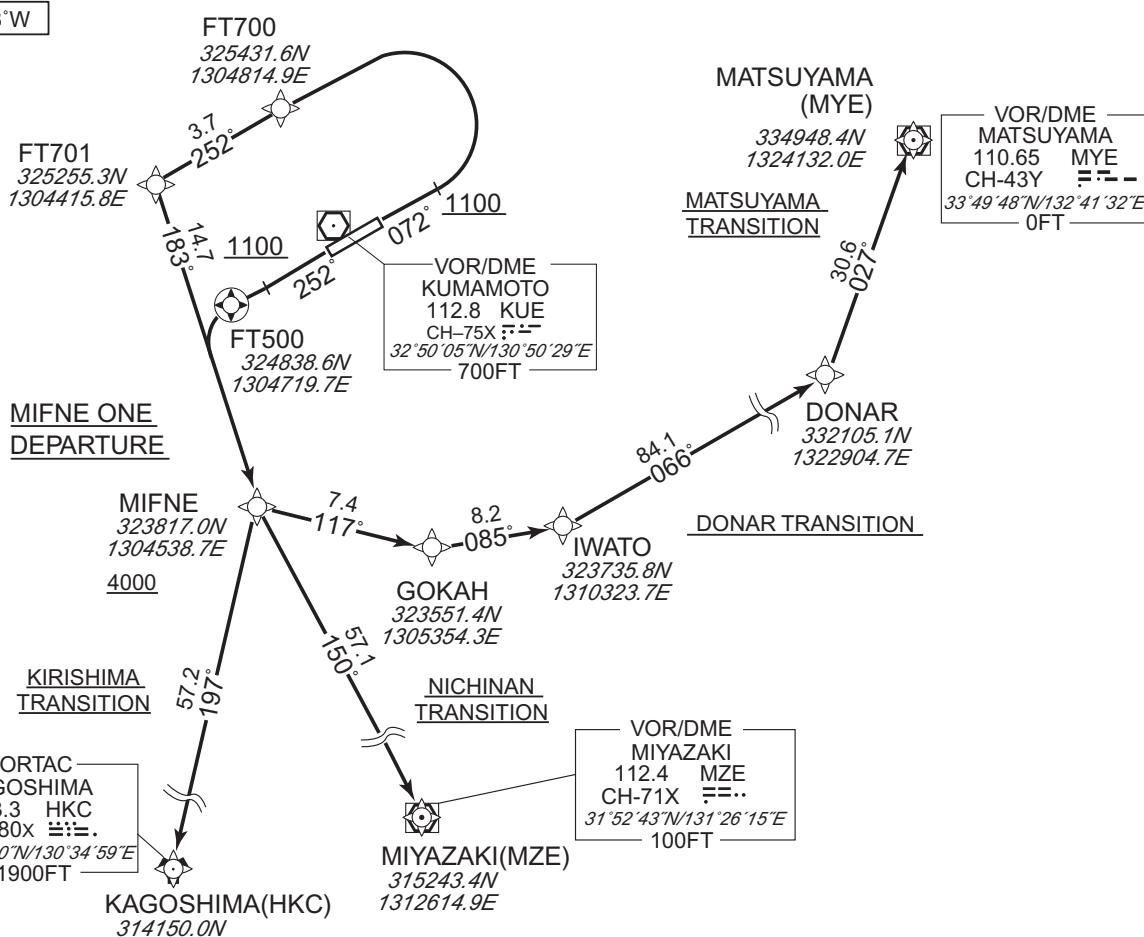
DME GAP

RWY07 : DER - FT701  
RWY25 : DER - FT500

Inappropriate Navaids

See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1

VAR 8°W

**MIFNE ONE DEPARTURE**

RWY07 : Climb on HDG072° at or above 1100FT, turn left direct to FT700, to FT701, to MIFNE at or above 4000FT.

RWY25 : Climb on HDG252° at or above 1100FT, direct to FT500, turn left direct to MIFNE at or above 4000FT.

Note : RWY07 : 5.7% climb gradient required up to 2700FT.

OBST ALT 2362FT located at 6.0NM 034° FM end of RWY07.

**DONAR TRANSITION**

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR.

**MATSUYAMA TRANSITION**

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to MYE.

**KIRISHIMA TRANSITION**

From MIFNE at or above 4000FT, to HKC.

**NICHINAN TRANSITION**

From MIFNE at or above 4000FT, to MZE.

CHANGE : VAR. PROC course.

## STANDARD DEPARTURE CHART-INSTRUMENT

| RJFT / KUMAMOTO      |                 |                     |          |               |                    |               |                |               |              |                | RNAV SID and TRANSITION  |  |  |
|----------------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|--|--|
| MIFNE ONE DEPARTURE  |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| RWY07                |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | -                   | -        | 072 (064.5)   | -7.6               | -             | -              | +1100         | -            | -              | RNAV1                    |  |  |
| 002                  | DF              | FT700               | -        | -             | -7.6               | -             | L              | -             | -            | -              | RNAV1                    |  |  |
| 003                  | TF              | FT701               | -        | 252 (244.4)   | -7.6               | 3.7           | -              | -             | -            | -              | RNAV1                    |  |  |
| 004                  | TF              | MIFNE               | -        | 183 (175.5)   | -7.6               | 14.7          | -              | +4000         | -            | -              | RNAV1                    |  |  |
| RWY25                |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | -                   | -        | 252 (244.5)   | -7.6               | -             | -              | +1100         | -            | -              | RNAV1                    |  |  |
| 002                  | DF              | FT500               | Y        | -             | -7.6               | -             | -              | -             | -            | -              | RNAV1                    |  |  |
| 003                  | DF              | MIFNE               | -        | -             | -7.6               | -             | L              | +4000         | -            | -              | RNAV1                    |  |  |
| DONAR TRANSITION     |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |  |  |
| 002                  | TF              | GOKAH               | -        | 117 (109.2)   | -7.6               | 7.4           | -              | -             | -            | -              | RNAV1                    |  |  |
| 003                  | TF              | IWATO               | -        | 085 (077.7)   | -7.6               | 8.2           | -              | -             | -            | -              | RNAV1                    |  |  |
| 004                  | TF              | DONAR               | -        | 066 (058.4)   | -7.6               | 84.1          | -              | -             | -            | -              | RNAV1                    |  |  |
| MATSUYAMA TRANSITION |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |  |  |
| 002                  | TF              | GOKAH               | -        | 117 (109.2)   | -7.6               | 7.4           | -              | -             | -            | -              | RNAV1                    |  |  |
| 003                  | TF              | IWATO               | -        | 085 (077.7)   | -7.6               | 8.2           | -              | -             | -            | -              | RNAV1                    |  |  |
| 004                  | TF              | DONAR               | -        | 066 (058.4)   | -7.6               | 84.1          | -              | -             | -            | -              | RNAV1                    |  |  |
| 005                  | TF              | MYE                 | -        | 027 (019.8)   | -7.6               | 30.6          | -              | -             | -            | -              | RNAV1                    |  |  |
| KIRISHIMA TRANSITION |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |  |  |
| 002                  | TF              | HKC                 | -        | 197 (189.1)   | -7.6               | 57.2          | -              | -             | -            | -              | RNAV1                    |  |  |
| NICHINAN TRANSITION  |                 |                     |          |               |                    |               |                |               |              |                |                          |  |  |
| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |  |  |
| 002                  | TF              | MZE                 | -        | 150 (142.8)   | -7.6               | 57.1          | -              | -             | -            | -              | RNAV1                    |  |  |

CHANGE : VAR. PROC course.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV TRANSITION

| SPIDE TRANSITION / SALTY TRANSITION                                 |                       | RNAV 1  |
|---|-----------------------|---|
| Note 1 ) DME/DME/IRU or GNSS required<br>2 ) RADAR service required | Critical DME          | —   |
|   | DME GAP               | —   |
|   | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 8° W



CHANGE : VAR. PROC course.

SPIDE TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to SPIDE.

SALTY TRANSITION

From MIFNE at or above 4000FT, to GOKAH, to IWATO, to DONAR, to SALTY.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV TRANSITION

| SPIDE TRANSITION |                 |                     |          |               |                    |               |                |               |              |                |                          |  |
|------------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|--|
| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |  |
| 002              | TF              | GOKAH               | -        | 117 (109.2)   | -7.6               | 7.4           | -              | -             | -            | -              | RNAV1                    |  |
| 003              | TF              | IWATO               | -        | 085 (077.7)   | -7.6               | 8.2           | -              | -             | -            | -              | RNAV1                    |  |
| 004              | TF              | DONAR               | -        | 066 (058.4)   | -7.6               | 84.1          | -              | -             | -            | -              | RNAV1                    |  |
| 005              | TF              | SPIDE               | -        | 062 (054.1)   | -7.6               | 30.1          | -              | -             | -            | -              | RNAV1                    |  |

SALTY TRANSITION

| 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              | MIFNE               | -        | -             | -7.6               | -             | -              | +4000         | -            | -              | RNAV1                    |
| 002           | TF              | GOKAH               | -        | 117 (109.2)   | -7.6               | 7.4           | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | IWATO               | -        | 085 (077.7)   | -7.6               | 8.2           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | DONAR               | -        | 066 (058.4)   | -7.6               | 84.1          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | SALTY               | -        | 044 (036.1)   | -7.6               | 37.3          | -              | -             | -            | -              | RNAV1                    |

CHANGE : VAR. PROC course.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

STAR

MISMI SOUTH ARRIVAL

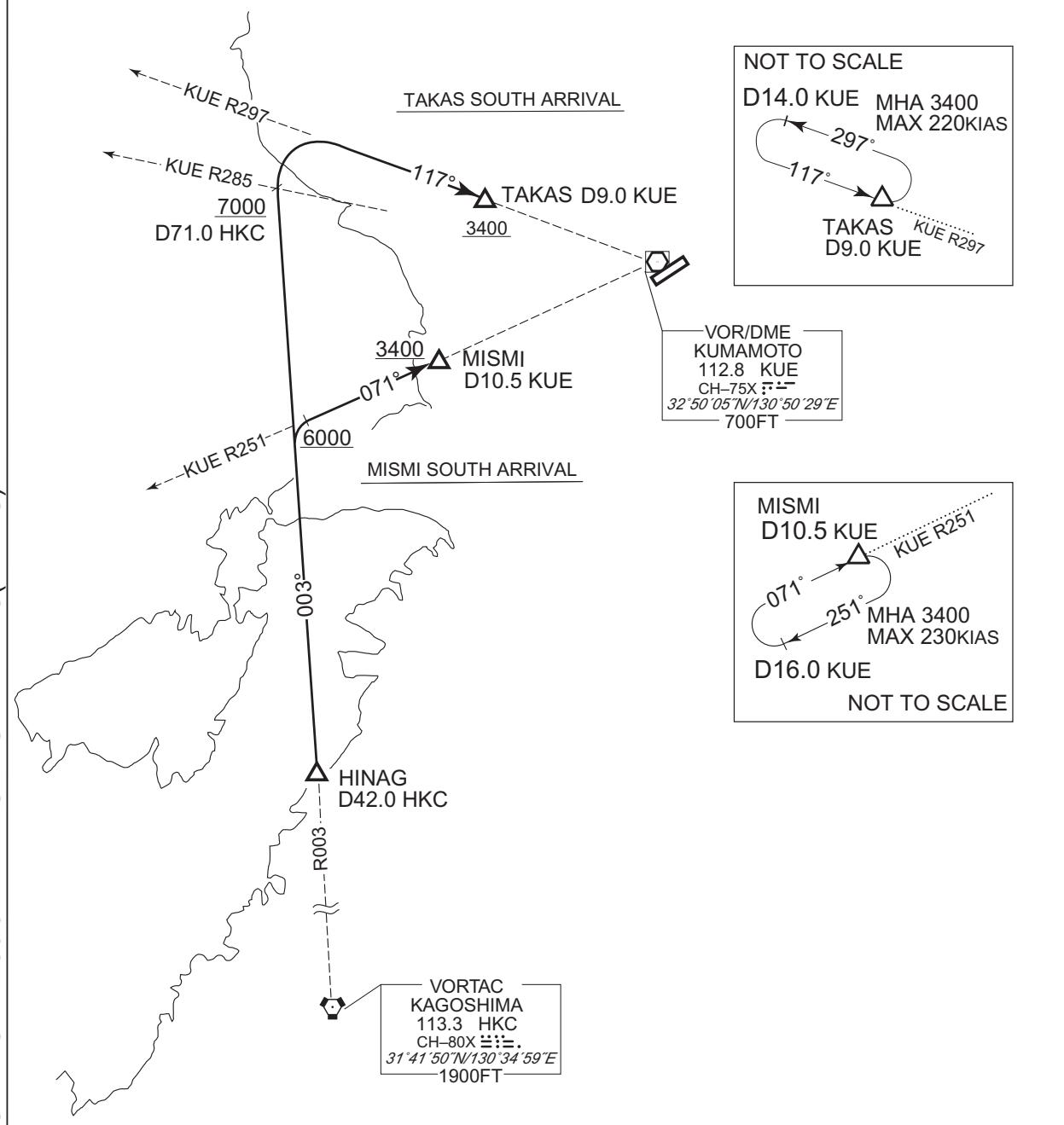
From over HINAG, proceed via HKC R003 to intercept and proceed via KUE R251 to MISMI. Maintain 6000FT or above until intercepting KUE R251, cross MISMI at or above 3400FT.

TAKAS SOUTH ARRIVAL

From over HINAG, proceed via HKC R003 until HKC 71.0DME (KUE R285), turn right to intercept and proceed via KUE R297 to TAKAS.

Cross HKC R003/71.0DME(KUE R285) at or above 7000FT, cross TAKAS at or above 3400FT.

CHANGE : Radial FM HKC. DIST FM HKC(HINAG).



## STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

STAR

MISMI EAST ARRIVAL

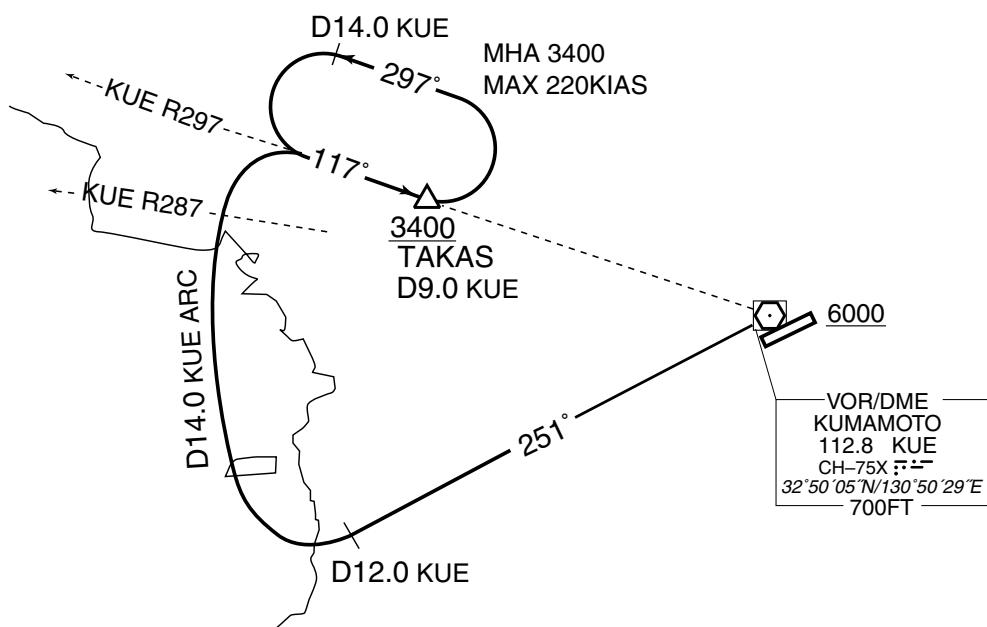
From over KUE VOR/DME, proceed via KUE R297 to KUE 12.0DME, turn left, proceed via KUE 14.0DME counterclockwise ARC to intercept and proceed via KUE R251 to MISMI.

Cross KUE VOR/DME at or above 6000FT, cross MISMI at or above 3400FT.

TAKAS EAST ARRIVAL

From over KUE VOR/DME, proceed via KUE R251 to KUE 12.0DME, turn right, proceed via KUE 14.0DME clockwise ARC to intercept and proceed via KUE R297 to TAKAS.

Cross KUE VOR/DME at or above 6000FT, cross TAKAS at or above 3400FT.



STANDARD ARRIVAL CHART-INSTRUMENT

RJFT / KUMAMOTO

RNAV STAR RWY07

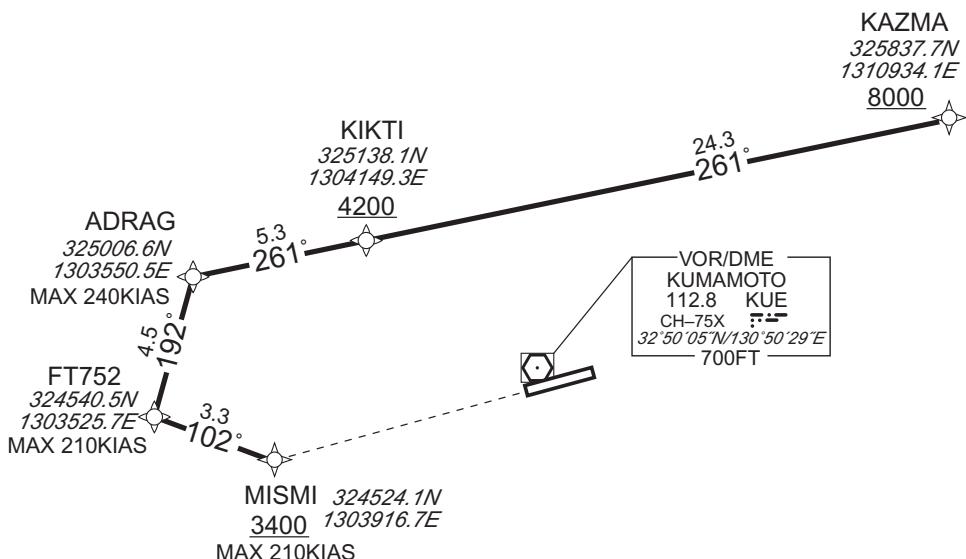
KAZMA ARRIVAL

RNAV1

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

2) RADAR service required.

VAR 8°W



From KAZMA at or above 8000FT, to KIKTI at or above 4200FT, to ADRAG, to FT752, to MISMI at or above 3400FT.

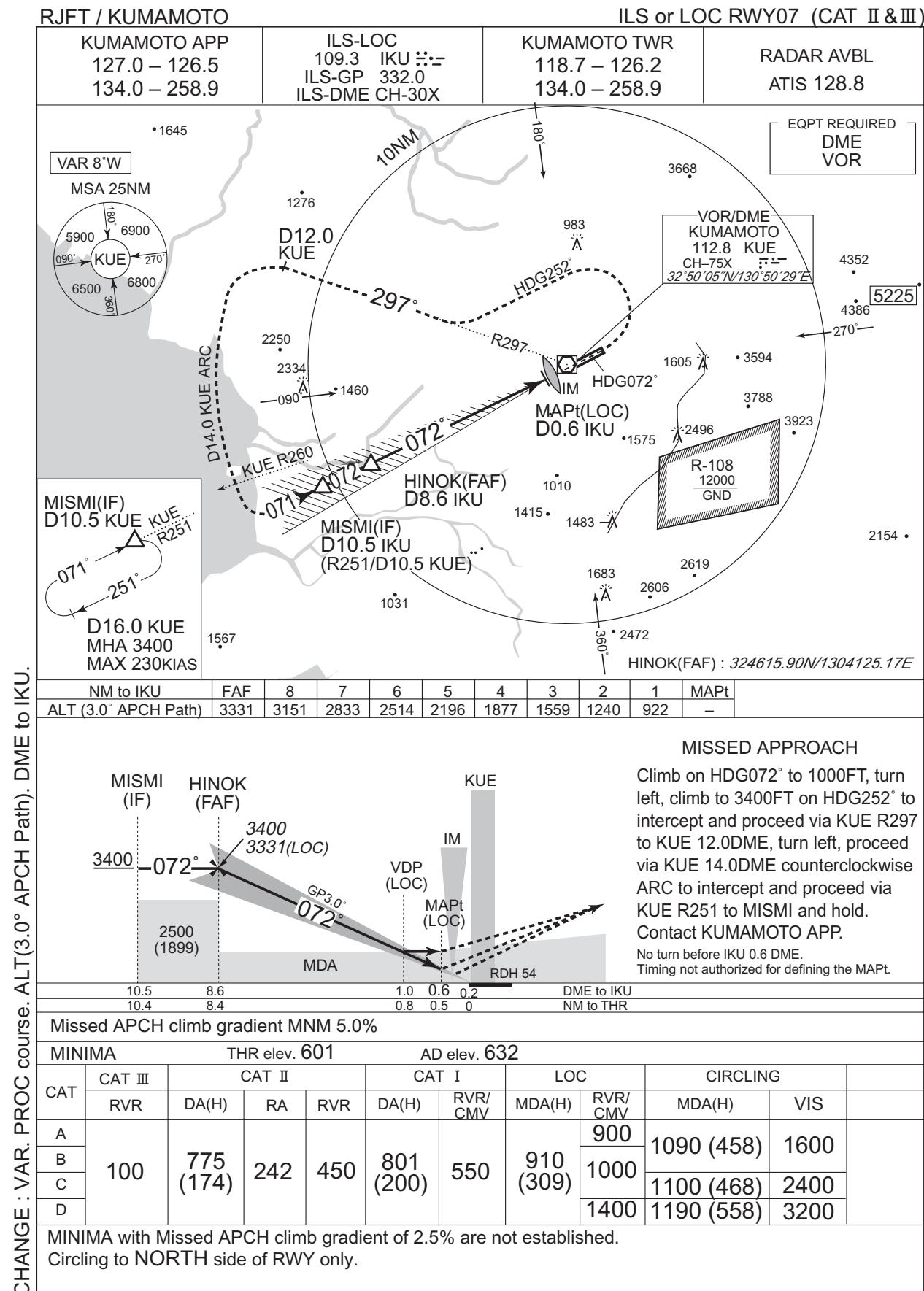
|                                  |   |
|----------------------------------|---|
| Critical DME                     | SGE : 20NM to KIKTI – 8NM to KIKTI<br>5NM to ADRAG – FT752<br>KUE : 12NM to KIKTI – 8NM to KIKTI<br>5NM to ADRAG – 2NM to ADRAG |
| DME GAP<br>Inappropriate Navaids | 8NM to KIKTI – 5NM to ADRAG<br>See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1.   |

CHANGE : ADRAG established. FT751 abolished.

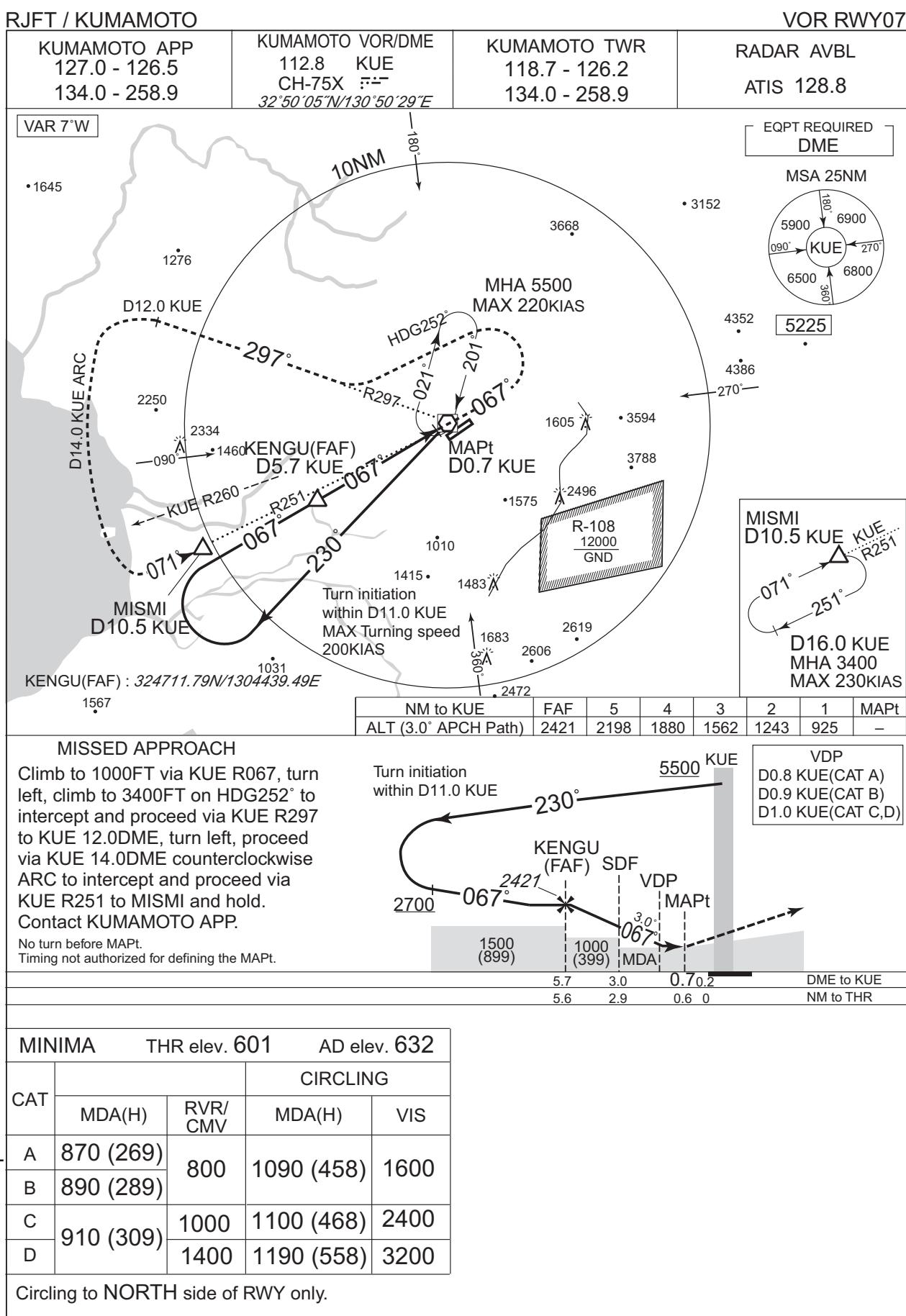
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | IF              | KAZMA               | –        | –             | -7.6               | –             | –              | +8000         | –            | –              | RNAV1                    |
| 002           | TF              | KIKTI               | –        | 261 (253.4)   | -7.6               | 24.3          | –              | +4200         | –            | –              | RNAV1                    |
| 003           | TF              | ADRAG               | –        | 261 (253.2)   | -7.6               | 5.3           | –              | –             | -240         | –              | RNAV1                    |
| 004           | TF              | FT752               | –        | 192 (184.5)   | -7.6               | 4.5           | –              | –             | -210         | –              | RNAV1                    |
| 005           | TF              | MISMI               | –        | 102 (094.8)   | -7.6               | 3.3           | –              | +3400         | -210         | –              | RNAV1                    |

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INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART



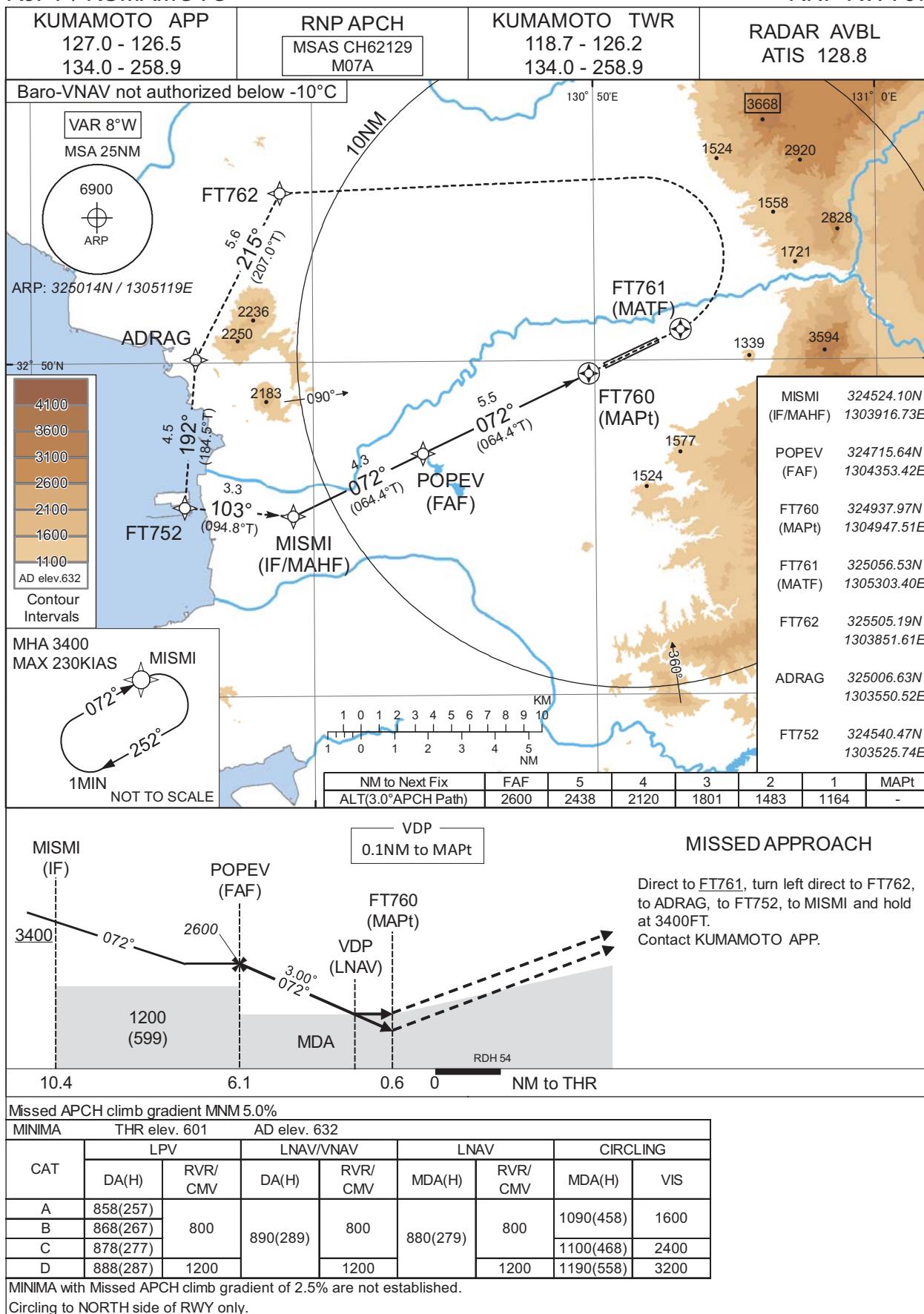
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNP RWY07



CHANGE : New PROC

INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNP RWY07

**FAS DATA BLOCK**

|                                  |               |                            |               |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type                   | 0             | LTP/FTP ellipsoidal height | +02153        |
| SBAS service provider identifier | 2             | FPAP latitude              | 325035.2220N  |
| Airport identifier               | RJFT          | FPAP longitude             | 1305210.3335E |
| Runway                           | 07            | Threshold crossing height  | 00016.4       |
| 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                | M07A          | △ length offset            | 0000          |
| LTP/FTP latitude                 | 324953.4390N  | HAL                        | 40.0          |
| LTP/FTP longitude                | 1305026.1345E | VAL                        | 50.0          |
| CRC remainder                    | 5C458595      |                            |               |

**Required additional data**

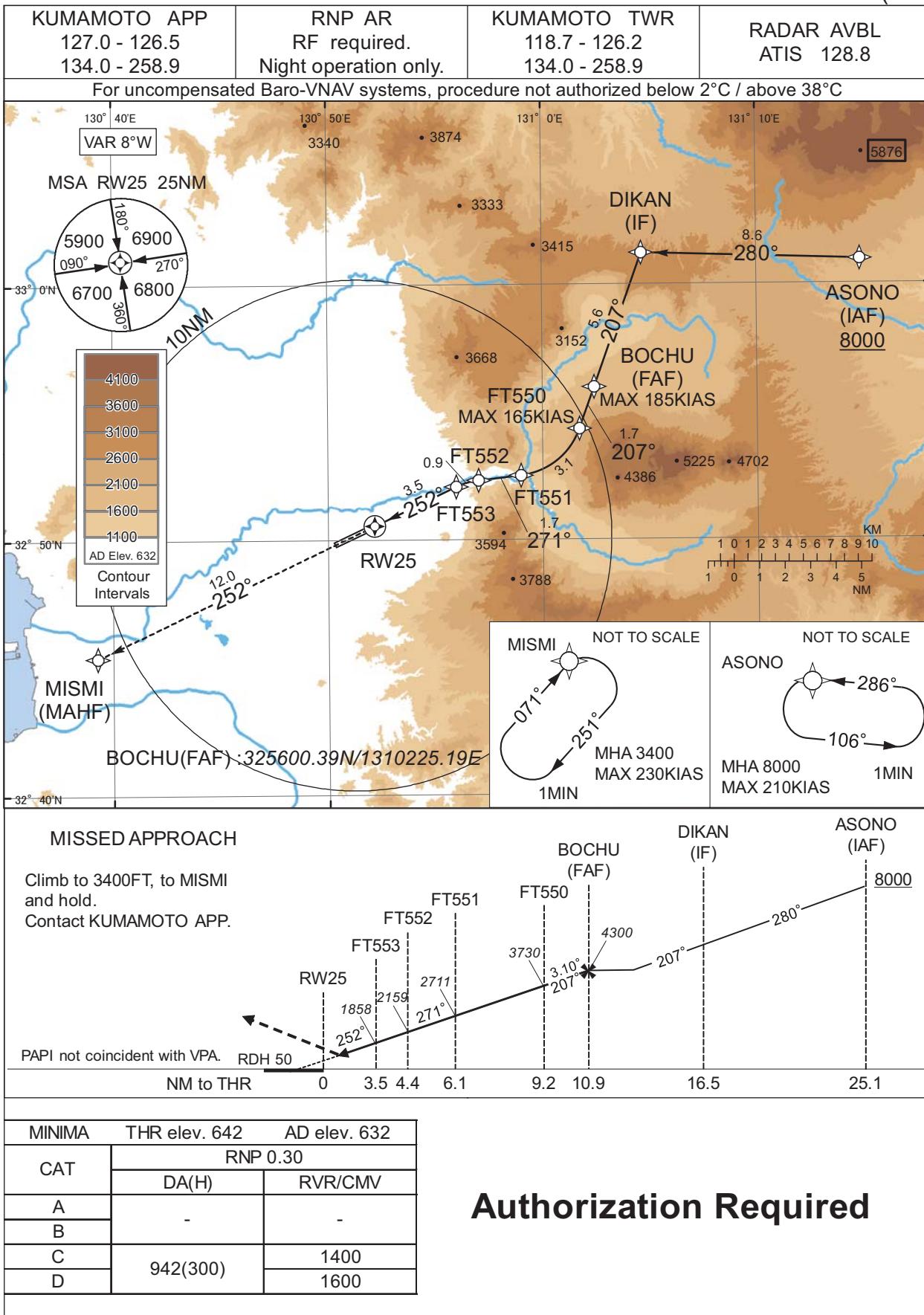
|                            |       |
|----------------------------|-------|
| LTP/FTP orthometric height | 182.5 |
|----------------------------|-------|

CHANGE : New PROC.

## INSTRUMENT APPROACH CHART

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RNP Z RWY25(AR)



## INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNP Z RWY25(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                              | ASONO               | -        | -             | -7.6               | -             | -              | +8000         | -            | -               | -         |
| 002           | TF                              | DIKAN               | -        | 280 (272.0)   | -7.6               | 8.6           | -              | -             | -            | -               | 1.0       |
| 003           | TF                              | BOCHU               | -        | 207 (199.6)   | -7.6               | 5.6           | -              | 4300          | -185         | -               | 1.0       |
| 004           | TF                              | FT550               | -        | 207 (199.6)   | -7.6               | 1.7           | -              | 3730          | -165         | -3.10           | 0.3       |
| 005           | RF Center:<br>FTRF1<br>r=2.77NM | FT551               | -        | -             | -7.6               | 3.1           | R              | 2711          | -            | -3.10           | 0.3       |
| 006           | TF                              | FT552               | -        | 271 (263.6)   | -7.6               | 1.7           | -              | 2159          | -            | -3.10           | 0.3       |
| 007           | RF Center:<br>FTRF2<br>r=2.77NM | FT553               | -        | -             | -7.6               | 0.9           | L              | 1858          | -            | -3.10           | 0.3       |
| 008           | TF                              | RW25                | Y        | 252 (244.5)   | -7.6               | 3.5           | -              | 692           | -            | -3.10/50        | 0.3       |
| 009           | TF                              | MISMI               | -        | 252 (244.5)   | -7.6               | 12.0          | -              | 3400          | -            | -               | 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 | ASONO               | 286 (278.5)           | -7.6               | 1.0 (-14000)        | L              | 8000                  | FL140                 | -210 (-14000) | 1.0       |
| Hold | MISMI               | 071 (063.5)           | -7.6               | 1.0 (-14000)        | R              | 3400                  | FL140                 | -230 (-14000) | 1.0       |

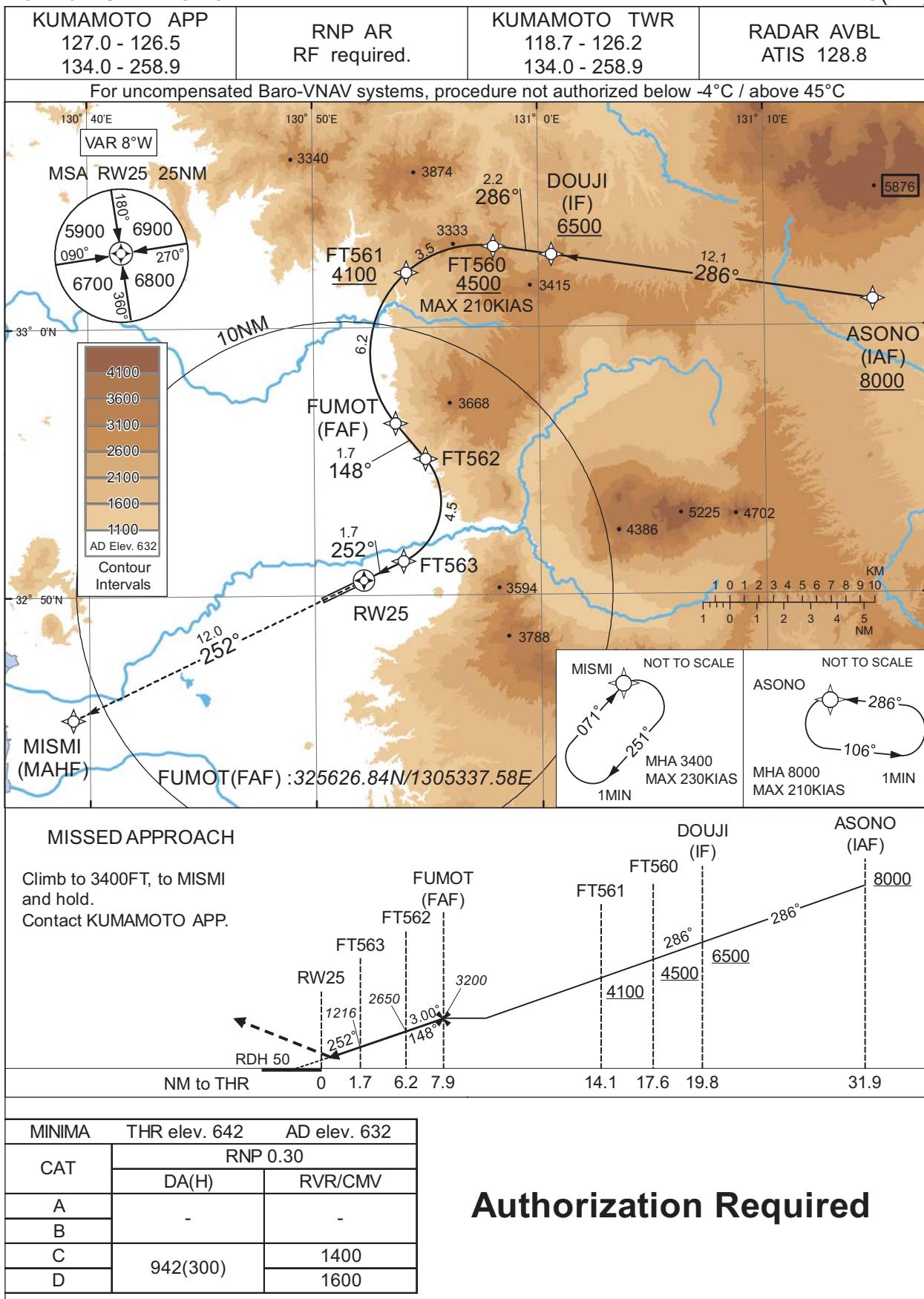
Waypoint Coordinates

| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| ASONO               | 330058.11N / 1311449.42E | FTRF1                    | 325518.34N / 1305837.73E |
| DIKAN               | 330115.22N / 1310438.68E | FTRF2                    | 324936.20N / 1305722.87E |
| BOCHU               | 325600.39N / 1310225.19E |                          |                          |
| FT550               | 325422.38N / 1310143.69E |                          |                          |
| FT551               | 325232.83N / 1305859.64E |                          |                          |
| FT552               | 325221.62N / 1305700.92E |                          |                          |
| FT553               | 325206.61N / 1305558.39E |                          |                          |
| RW25                | 325035.24N / 1305210.28E |                          |                          |
| MISMI               | 324524.10N / 1303916.73E |                          |                          |

## INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNP Y RWY25(AR)



## INSTRUMENT APPROACH CHART

RJFT / KUMAMOTO

RNP Y RWY25(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                        | ASONO               | -        | -             | -7.6               | -             | -              | +8000         | -            | -               | -         |
| 002           | TF                        | DOUJI               | -        | 286 (278.4)   | -7.6               | 12.1          | -              | +6500         | -            | -               | 1.0       |
| 003           | TF                        | FT560               | -        | 286 (278.3)   | -7.6               | 2.2           | -              | +4500         | -210         | -               | 1.0       |
| 004           | RF Center: FTRF3 r=4.04NM | FT561               | -        | -             | -7.6               | 3.5           | L              | +4100         | -            | -               | 1.0       |
| 005           | RF Center: FTRF3 r=4.04NM | FUMOT               | -        | -             | -7.6               | 6.2           | L              | 3200          | -            | -               | 0.7       |
| 006           | TF                        | FT562               | -        | 148 (140.4)   | -7.6               | 1.7           | -              | 2650          | -            | -3.00           | 0.3       |
| 007           | RF Center: FTRF4 r=2.47NM | FT563               | -        | -             | -7.6               | 4.5           | R              | 1216          | -            | -3.00           | 0.3       |
| 008           | TF                        | RW25                | Y        | 252 (244.5)   | -7.6               | 1.7           | -              | 692           | -            | -3.00/50        | 0.3       |
| 009           | TF                        | MISMI               | -        | 252 (244.5)   | -7.6               | 12.0          | -              | 3400          | -            | -               | 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 | ASONO               | 286 (278.5)           | -7.6               | 1.0 (-14000)        | L              | 8000                  | FL140                 | -210 (-14000) | 1.0       |
| Hold | MISMI               | 071 (063.5)           | -7.6               | 1.0 (-14000)        | R              | 3400                  | FL140                 | -230 (-14000) | 1.0       |

Waypoint Coordinates

| Waypoint Identifier | Coordinates              | RF Arc Center Identifier | Coordinates              |
|---------------------|--------------------------|--------------------------|--------------------------|
| ASONO               | 330058.11N / 1311449.42E | FTRF3                    | 325902.05N / 1305719.25E |
| DOUJI               | 330243.56N / 1310035.13E | FTRF4                    | 325331.98N / 1305240.81E |
| FT560               | 330302.45N / 1305800.60E |                          |                          |
| FT561               | 330204.49N / 1305408.90E |                          |                          |
| FUMOT               | 325626.84N / 1305337.58E |                          |                          |
| FT562               | 325506.96N / 1305456.29E |                          |                          |
| FT563               | 325117.72N / 1305356.28E |                          |                          |
| RW25                | 325035.24N / 1305210.28E |                          |                          |
| MISMI               | 324524.10N / 1303916.73E |                          |                          |

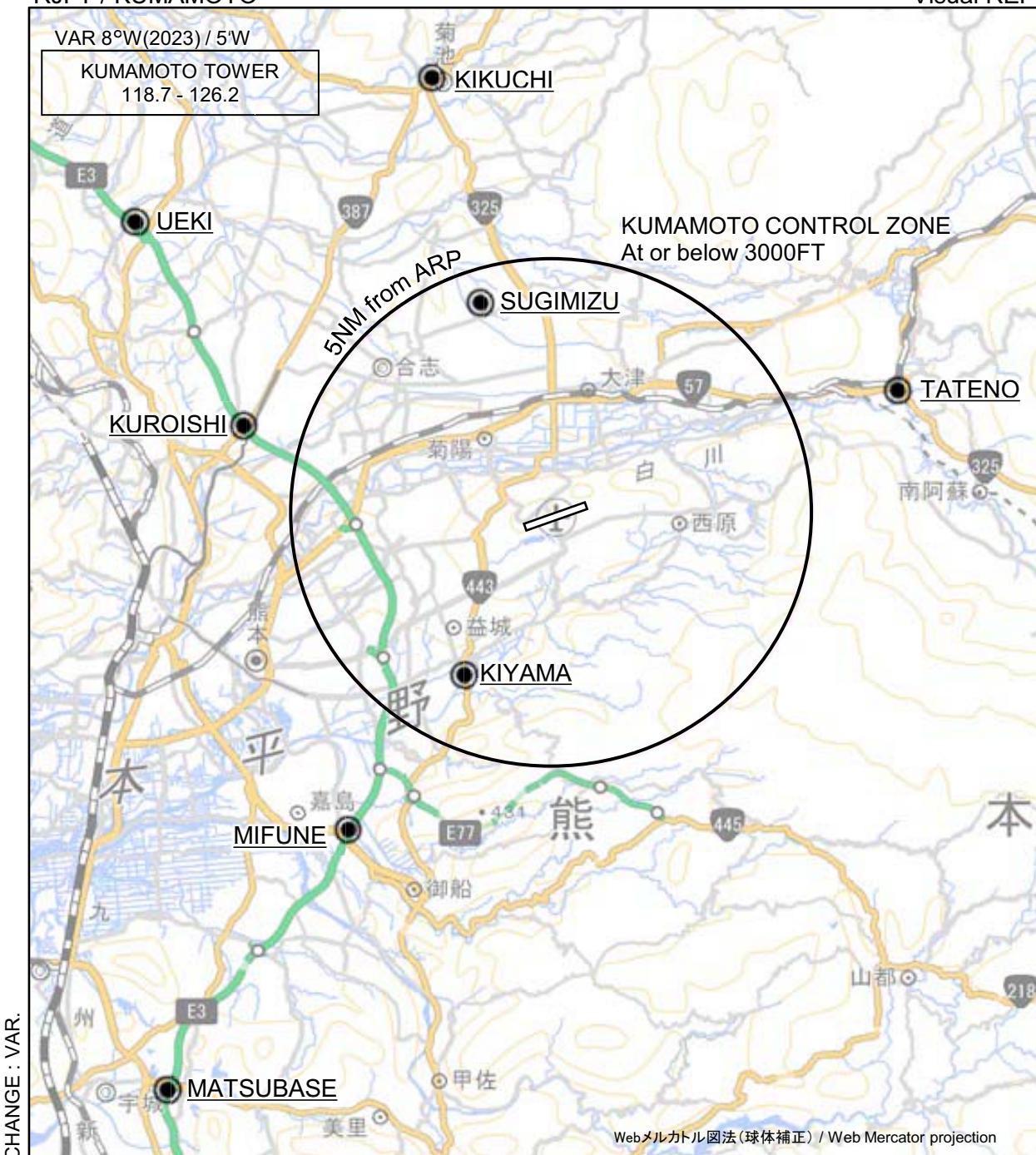
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PROFILE OF VALUES OF RADIO ALTIMETER



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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).

## RJFT / KUMAMOTO

Visual REP

| Call sign       | BRG / DIST from ARP | Remarks   |
|-----------------|---------------------|---|
| 植木<br>Ueki      | 305°T / 9.9NM       | 九州自動車道植木インターチェンジ<br>Kyushu expressway Ueki interchange                                |
| 黒石<br>Kuroishi  | 286°T / 6.2NM       | 九州自動車道と国道387号線との交点<br>Intersection of Kyushu expressway and national route 387        |
| 菊池<br>Kikuchi   | 345°T / 8.9NM       | NTT鉄塔(国道325号と国道387号の交点)<br>Antenna tower (Intersection of national route 325 and 387) |
| 杉水<br>Sugimizu  | 342°T / 4.5NM       | ゴルフ場(くまもと中央CC)<br>Golf course (Kumamoto Chuo CC)                                      |
| 立野<br>Tateno    | 070°T / 7.1NM       | 新阿蘇大橋<br>Bridge   |
| 木山<br>Kiyama    | 208°T / 3.6NM       | 木山川と国道443号との交点<br>Intersection of Kiyama river and national route 443                 |
| 御船<br>Mifune    | 212°T / 7.4NM       | 九州自動車道御船インターチェンジ<br>Kyushu expressway Mifune interchange                              |
| 松橋<br>Matsubase | 213°T / 13.6NM      | 九州自動車道松橋インターチェンジ<br>Kyushu expressway Matsubase interchange                           |

CHANGE : BRG/DIST from ARP. Visual REP established (KIKUCHI, MATSUBASE). Remarks (TATENO).

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LDG CHART



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Minimum Vectoring Altitude CHART

