

AD 2 AERODROMES**RJFF AD 2.1 AERODROME LOCATION INDICATOR AND NAME****RJFF - FUKUOKA****RJFF AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

| | | |
|---|--|--|
| 1 | ARP coordinates and site at AD | 333504N/1302706E 151°/1.59km from RWY 16 THR |
| 2 | Direction and distance from (city) | 1.6nm E Hakata railway station. |
| 3 | Elevation/ Reference temperature | 30FT / 32°C (2012-2016) |
| 4 | Geoid undulation at AD ELEV PSN | 107FT |
| 5 | MAG VAR/ Annual change | 8°W (2020) / 5'W |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Fukuoka International Airport Co., Ltd. 782-1 Shimousui, Hakata-ku, Fukuoka, Japan Tel : 092(623)2255 (OPS) |
| 7 | Types of traffic permitted(IFR/VFR) | IFR/VFR |
| 8 | Remarks | Fukuoka Airport Office (Civil Aviation Bureau) 295 Yashiki, kamiusui, Hakata-ku, Fukuoka, Japan Tel : 092(621)2221 (2330-0815UTC MON THRU FRI) Tel : 092(622)6529 (AIS) AFS : RJFFYFYX |

RJFF AD 2.3 OPERATIONAL HOURS

| | | |
|----|---------------------------|--|
| 1 | AD Administration | H24 |
| 2 | Customs and immigration | Customs: 2200-1300 Immigration: 2200-1215 |
| 3 | Health and sanitation | Quarantine (human): 2145-1300 Quarantine (animal, plant): 2200-1300 |
| 4 | AIS Briefing Office | H24 |
| 5 | ATS Reporting Office(ARO) | Nil |
| 6 | MET Briefing Office | H24 |
| 7 | ATS | H24 |
| 8 | Fuelling | 2000 - 1400 |
| 9 | Handling | 2100 - 1400 |
| 10 | Security | 2100 - 1300 |
| 11 | De-icing | Nil |
| 12 | Remarks | Nil |

RJFF AD 2.4 HANDLING SERVICES AND FACILITIES

| | | |
|---|---|--|
| 1 | Cargo-handling facilities | All the modern institutions that deal with the weight thing to a Boeing747 type freighter. |
| 2 | Fuel/ oil types | Fuel grade : 100/130, JET A-1, JP-4(JSDF). Oil Grades : All piston and turbin grades. |
| 3 | Fuelling facilities/ capacity | Hydrant refueling and fuel truck / No limitation. |
| 4 | De-icing facilities | Nil |
| 5 | Hangar space for visiting aircraft | Ask AD administration |
| 6 | Repair facilities for visiting aircraft | Nil |
| 7 | Remarks | Fuel/Oil service : PN |

RJFF AD 2.5 PASSENGER FACILITIES

| | | |
|---|----------------------|--------------------------------------|
| 1 | Hotels | Hotels in the city |
| 2 | Restaurants | At airport |
| 3 | Transportation | Bus, taxi and subway |
| 4 | Medical facilities | At airport and hospitals in the city |
| 5 | Bank and Post Office | At airport |
| 6 | Tourist Office | At airport |
| 7 | Remarks | Nil |

RJFF 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 equipments conveyance truck |
| 3 | Capability for removal of disabled aircraft | Ask AD administration |
| 4 | Remarks | Nil |

RJFF AD 2.7 SEASONAL AVAILABILITY-CLEARING

| | | |
|---|-----------------------------|---|
| 1 | Types of clearing equipment | Snow removal equipment : (1) 4 Motor graders (2) 1 Wheel loader |
| 2 | Clearance priorities | (1) RWY, TWY(A1-A7, S, E2, E5(RWY34 in use), E9(RWY16 in use), E12, E13, K1, K3, K7, W1, W9, V and Y), ACFT STAND TAXI LANE(Q, M and G) (2) EAST APRON(From SPOT NR 1 to SPOT NR 12) and WEST APRON(From SPOT NR 53 to SPOT NR 58) |
| 3 | Remarks | Seasonal availability : All seasons TWY/APN to measure the coefficient of friction : TWY(A1-A7, S, E1-E3, E5, E9, E12, E13, K1, K3, K7, W1, W7, W9, V and Y), ACFT STAND TAXI LANE(Q, M and G) |

RJFF AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

| | | |
|---|-------------------------------------|--|
| 1 | Apron surface and strength | Surface : Concrete Strength : PCN 74/R/B/X/T : SPOT NR 1, 1L, 1R, 5, 6, 6L, 6R, 11, 11R, 12L, 12, 12R, 20 PCN 78/R/C/X/T : SPOT NR 13 PCN 62/R/B/X/T : SPOT NR 2, 3, 4, 32, 32R PCN 70/R/C/X/T : SPOT NR 7, 8, 9, 10, 11L PCN 60/R/C/X/T : SPOT NR 14, 15 PCN 71/R/C/X/T : SPOT NR 16, 17, 18, 19, 51, 51L, 51R, 52, 52L, 52R, 53, 54, 55, 56, 57, 59 PCN 66/R/C/X/T : SPOT NR 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32L PCN 70/R/B/X/T : SPOT NR 47, 48, 48L, 48R, 49, 49L, 49R, 50, 50L, 50R PCN 73/R/B/X/T : SPOT NR 58 |
| 2 | Taxiway width, surface and strength | Surface : Asphalt concrete and concrete Strength : PCN 74/R/B/X/T : A1, K6, K7 PCN 78/R/B/X/T : A2, A3, A7, E2, E13 PCN 77/R/B/X/T : A4, A5, A6 PCN 74/F/A/X/T : E6, E7, E8, E12 PCN 68/F/A/X/T : E3 PCN 64/F/A/X/T : W1 PCN 72/F/A/X/T : S, W2, W3, W4, W6, W7, W9 PCN 88/F/B/X/T : T3 PCN 59/F/A/X/T : W5 PCN 96/F/B/X/T : E1 PCN 85/F/B/X/T : E4 PCN 73/F/A/X/T : E5 PCN 85/F/A/X/T : E9 PCN 87/F/B/X/T : E10 PCN 66/F/A/X/T : E11 PCN 71/R/C/X/T : G PCN 70/R/B/X/T : Q, L, M PCN 70/F/A/X/T : W8 PCN 83/F/A/X/T : V PCN 62/R/B/X/T : K1, K2, Y PCN 70/R/C/X/T : K3, K4, K5 Width : 83M : U 60.5M : Q 51M : K7 50M : K4, K5 49M : K1, K2, K3, K6 34M : E4, E7, E10, W2, W5, W8, V 32M : E2 30M : T3, E1, E3, E5, E6, E8, E9, W3, W4, W6, W7 28.5M : E11, E12, E13, W9 24M : L 23M : A1 THRU A7, S, G, Y, M, W1, J1, J2, J3 |
| 3 | ACL and elevation | Not available |
| 4 | VOR checkpoints | Not available |

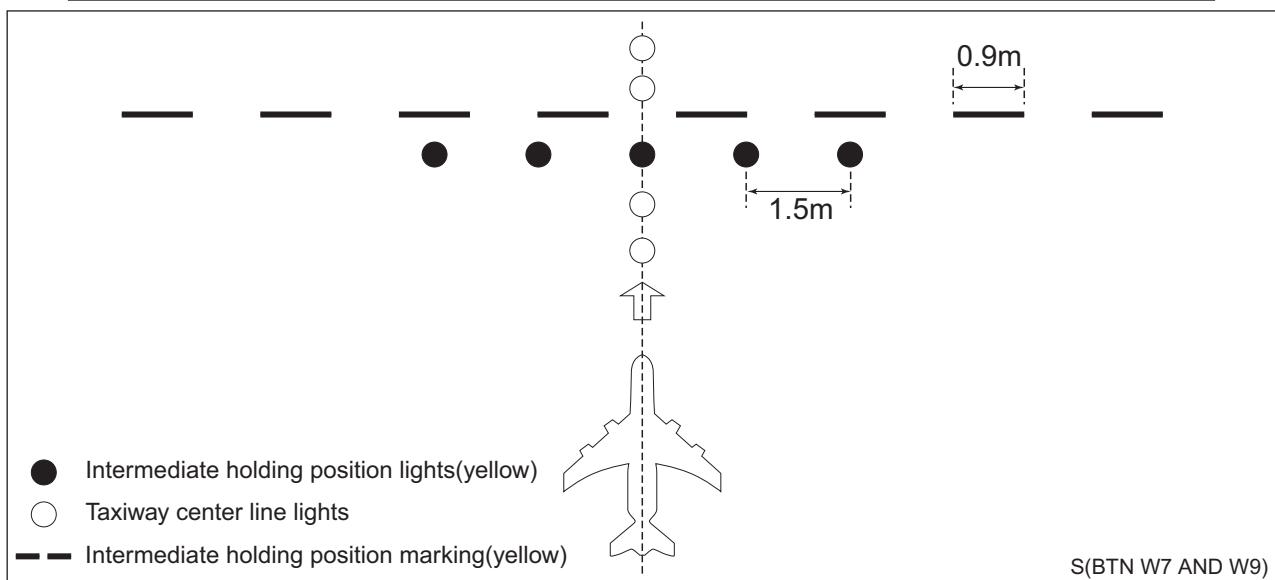
| | | |
|---|-----------------|---|
| 5 | INS checkpoints | <p>Spot NR</p> <p>1L : 333604.12N 1302640.21E 1 : 333603.77N 1302641.50E 1R : 333603.25N 1302641.57E 2 : 333601.96N 1302642.28E 3 : 333600.75N 1302643.11E 4 : 333559.55N 1302643.93E 5 : 333558.35N 1302644.75E 6L : 333557.24N 1302645.58E 6 : 333556.91N 1302646.93E 6R : 333556.40N 1302647.01E 7 : 333554.87N 1302648.32E 8 : 333552.82N 1302649.72E 9 : 333547.66N 1302653.25E 10 : 333545.62N 1302654.64E 11L : 333543.58N 1302654.91E 11 : 333543.25N 1302656.26E 11R : 333542.75N 1302656.34E 12L : 333541.21N 1302656.53E 12 : 333540.89N 1302657.88E 12R : 333540.38N 1302657.95E 13 : 333534.52N 1302657.98E 14 : 333532.60N 1302658.27E 15 : 333531.05N 1302659.33E 16 : 333529.53N 1302700.36E 17 : 333527.98N 1302701.41E 18 : 333526.44N 1302702.47E 19 : 333524.85N 1302703.56E 20 : 333524.16N 1302705.11E 21 : 333521.96N 1302705.53E 22 : 333521.27N 1302707.08E 23 : 333520.13N 1302707.87E 24 : 333518.99N 1302708.65E 25 : 333517.72N 1302709.51E 26 : 333516.45N 1302710.38E 27 : 333515.18N 1302711.24E 28 : 333514.21N 1302712.62E 29 : 333511.85N 1302714.23E 30 : 333508.81N 1302715.19E 31 : 333506.86N 1302716.36E 32 : 333505.93N 1302717.38E 32L : 333505.60N 1302717.23E 32R : 333504.14N 1302718.22E 47 : 333527.45N 1302629.47E 48R : 333525.60N 1302630.24E 48 : 333525.18N 1302630.50E 48L : 333524.66N 1302631.79E 49R : 333522.91N 1302631.66E 49 : 333522.51N 1302631.95E 49L : 333521.97N 1302633.21E 50R : 333520.34N 1302633.31E 50 : 333519.98N 1302633.68E 50L : 333519.37N 1302634.80E 51R : 333517.81N 1302635.05E 51 : 333517.44N 1302635.42E 51L : 333516.84N 1302636.54E 52R : 333515.32N 1302636.88E 52 : 333514.90N 1302637.15E 52L : 333514.30N 1302638.27E 53 : 333512.39N 1302638.90E 54 : 333510.27N 1302640.35E 55 : 333508.16N 1302641.79E 56 : 333505.49N 1302643.62E 57 : 333503.37N 1302645.06E 58 : 333501.26N 1302646.51E 59 : 333459.58N 1302647.81E </p> |
| 6 | Remarks | Nil |

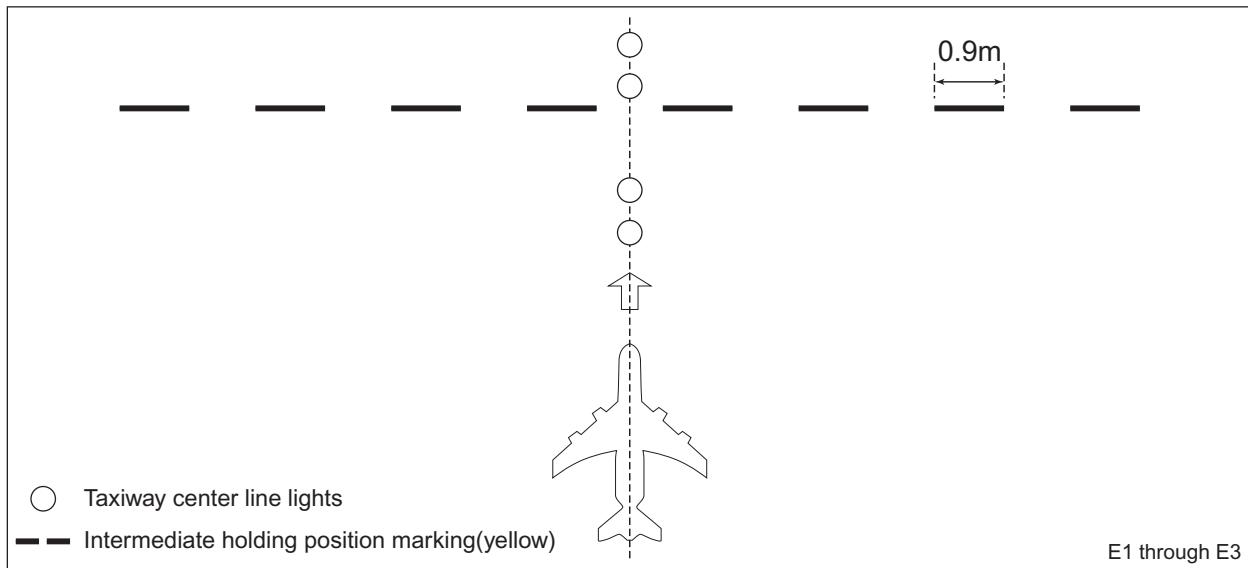
RJFF AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

| | | |
|---|---|--|
| 1 | Use of aircraft stand ID signs, TWY guide lines and Visual docking / parking guidance system of aircraft stands | ACFT stand ID sign : NR1, NR2 - 5, NR6, NR7 - 10, NR11, NR12, NR54 - 58 ACFT stand taxi lane : T3, G, L, Q, M, U Visual docking guidance system : NR1, NR2 - 5, NR6, NR7 - 10, NR11, NR12 (See attachment) |
| 2 | RWY and TWY markings and LGT | <p>RWY:16/34 (Marking): RWY designation, RWY CL, TDZ, Aiming point, RWY THR, RWY side stripe (LGT): REDL, RCLL, RTHL, RENL, RTZL, WBAR, RWY DIST marker, Takeoff Hold Lights (RWY status LGT)(see attached chart)</p> <p>TWY: ALL TWY (Marking): TWY CL, TWY side stripe (LGT): TWY edge LGT (EXC K1 - K7, Y, U)</p> <p>TWY: E1 - E13 and W1 - W9 (Marking): RWY HLDG PSN, Mandatory instruction (LGT): RWY guard LGT</p> <p>TWY: A1 - A3, A7, E1 - E5, T3, W5, Q, G, K1 - K7, Y (Marking): SFC painted direction sigh (see attached chart)</p> <p>TWY: E1 - E3, S(BTN W7 AND W9) (Marking): Intermediate holding position (LGT): Intermediate holding position (EXC E1 - E3)</p> <p>TWY: E1 - E13, W1 - W9, T3, S, A1 - A7, K1 - K7, Y (LGT): TWY CL LGT</p> <p>TWY: E1 - E13, W1 - W9, S, A1 - A4, A7 (LGT): Taxiing guidance sign</p> <p>TWY: E1 - E5, E7, E10 - E13, W1, W2, W5, W8, W9 (LGT): Runway Entrance Lights(RWY status LGT) (see attached chart)</p> |
| 3 | Stop bars | Nil |
| 4 | Remarks | (LGT): Apron flood LGT (Marking): Over run area |

GP HOLD LINE

The "GP HOLD LINE" is installed on TWY E1 through E3 and S(BTN W7 AND W9), consists of Intermediate holding position lights and marking.
(see below figure, and AD2.24-ADC-1 AD CHART) REF AD2.20.2.1 1) for taxiing procedure on the "GP HOLD LINE".





Runway Entrance Lights (REL) and Takeoff Hold Lights (THL)

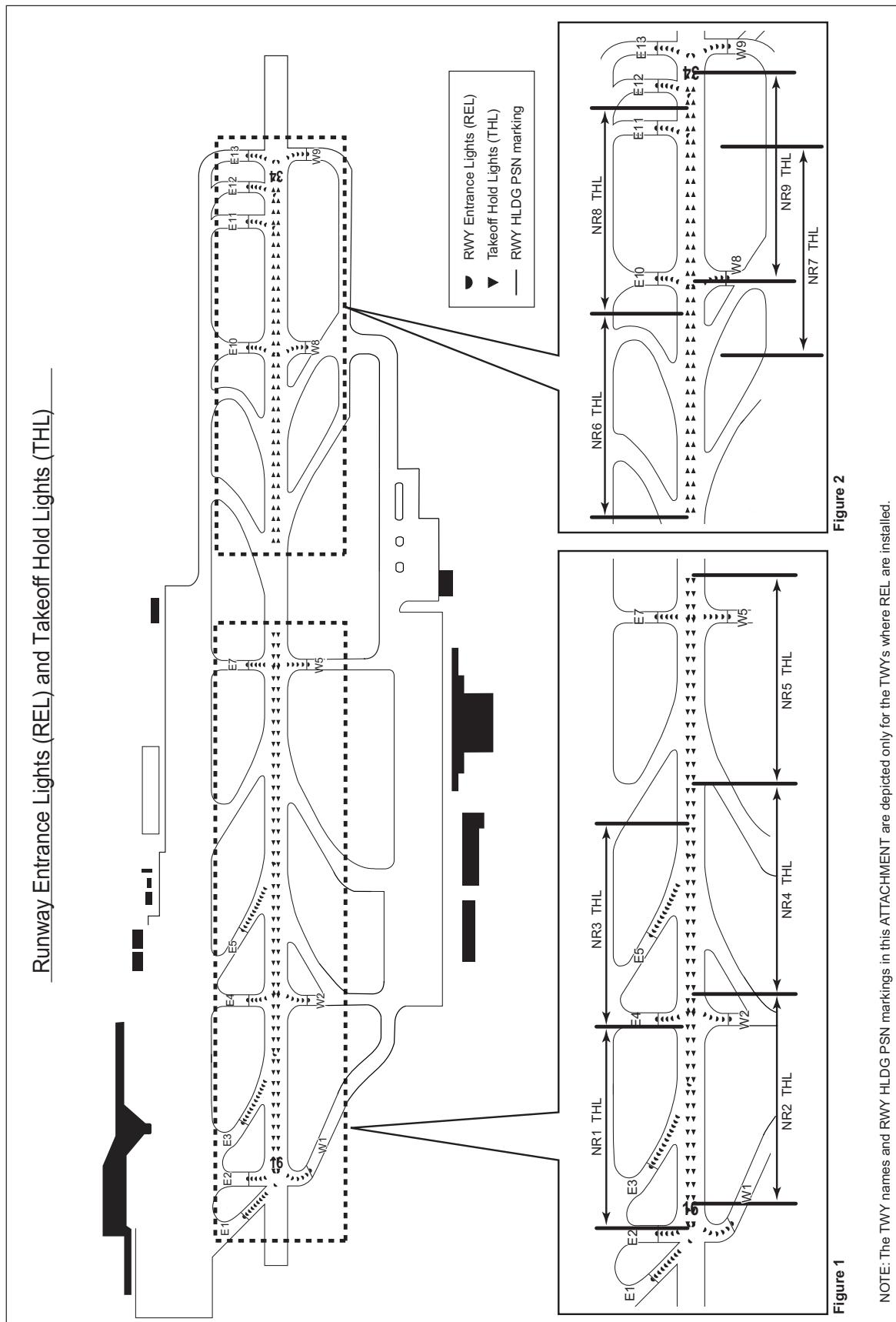


Figure 1

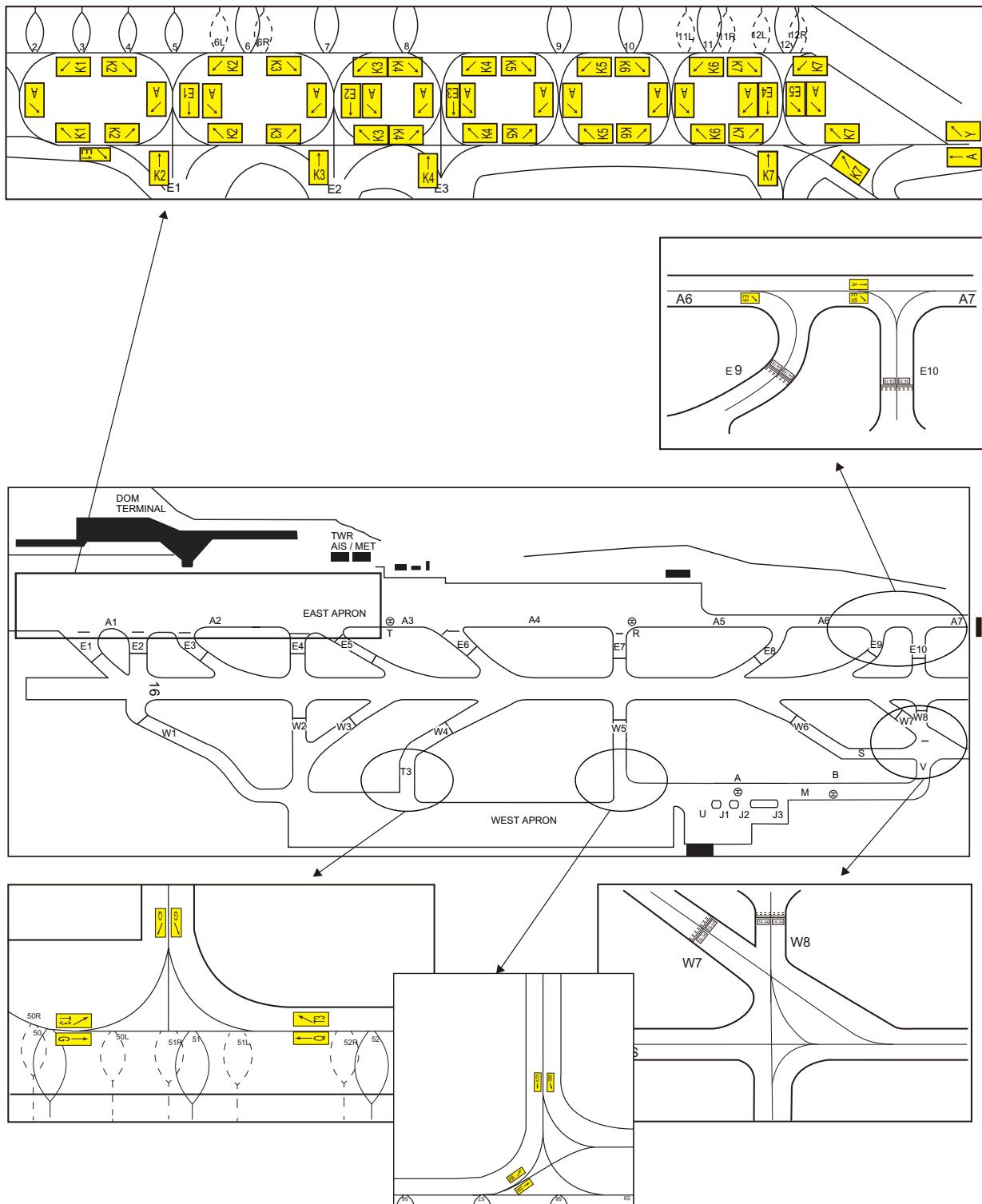
NOTE: The TWY names and RWY HDG PSN markings in this ATTACHMENT are depicted only for the TWYs where REL are installed.

Figure 2

Surface Painted Direction Sign

Type of Surface Markings

This type of marking at a taxiway intersection indicates the designation and direction of taxiway leading out of an intersection. Black inscriptions with an arrow with a yellow background.



VISUAL DOCKING GUIDANCE SYSTEM

1. General

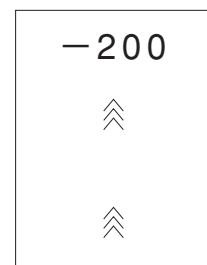
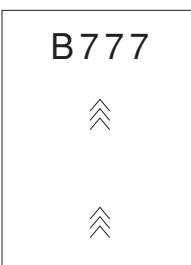
- (1) Aircraft parking stands NR1, NR2 - 5, NR6, NR7 - 10, NR11, NR12 are equipped with a visual docking guidance system. The pilots of an arriving aircraft assigned to park at one of these parking stands can use this system to be guided and stop the aircraft at the correct parking position.
- (2) This system is operational only in the automatic mode and in an event of a system failure, the aircraft shall be manually guided by a marshaller to the stopping position.
- (3) The visual docking guidance system consists of a display screen for pilots and a laser scanner. The system detects and analyses the aircraft type of an approaching aircraft, tracks it through the laser scanner, and displays these results on the display screen.
- (4) The display screen indicates the following information:
 - a) type of the approaching aircraft
 - b) deviation from the lead-in center line
 - c) distance to the stopping position

The above information is provided equally to the pilots on both left seat and right seat.

2. Aircraft Type Indication

- (1) An operator on ground shall input the aircraft type into the system before the aircraft approaches the parking stand. Upon accepting the input, the system carries out internal calibration, starts the laser scanner simultaneously, and indicates the aircraft type according to the input. The system then will begin to indicate yellow lead-in arrows scrolling upwards prompting the aircraft to proceed. (Fig.1, Fig.2)

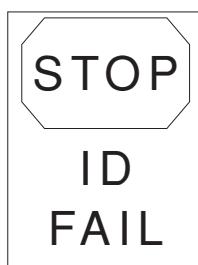
→ Fig. 1 → Fig. 2 →



- (2) When the laser scanner detects the approaching aircraft, the display screen will indicate the aircraft type, a "T" bar, and a lead-in upward arrow in yellow.
- (3) At least until the approaching aircraft arrives at a point 15 meters before the stopping position, the system will identify the aircraft type and will compare with the previously input aircraft type. If these data match, the system will continue its operation. If they do not match, the display screen will indicate "STOP" with a red border, and "ID FAIL" simultaneously. (Fig.3)

NOTE: At this moment, the pilots must stop the aircraft immediately.

When the operator re-input the correct aircraft type into the system and the system finds it correct, it resumes normal operations indicating the correct aircraft type on its display screen.



3. Taxiing and Lateral Center line Guidance

- (1) While taxiing the aircraft using the system, the pilots should maneuver the aircraft at a low speed to the stopping position. In an event when "SLOW" is indicated on the display screen, the pilots should further decelerate the taxiing speed to avoid overshooting. (Fig.4)



Fig. 4

- (2) Deviation of an upward yellow arrow from the center line of "T" indicates the deviation of the approaching aircraft relative to the center line of the parking stand either to right or left. Further, an additional flashing red arrow on the either side indicates the required direction for the aircraft to turn(Fig.5, Fig.6) and indicate numerical value of remaining distance. (Fig.7, Fig.8)

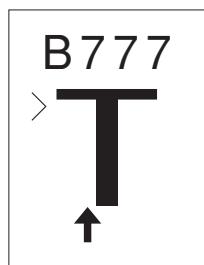


Fig. 5

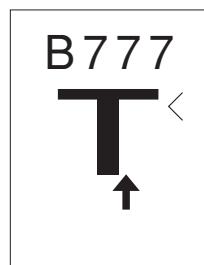


Fig. 6

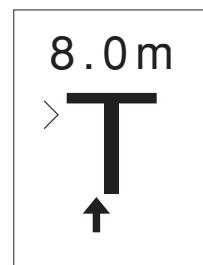


Fig. 7

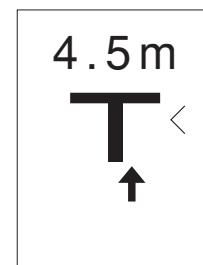


Fig. 8

4. Stop Guidance

- (1) When the approaching aircraft is within 20 meters from the stopping position, the shaft of the illuminated "T" will start to reduce in its length from the bottom to indicate the approaching rate of the aircraft, indicating the remaining distance to the stopping position successively. (Fig.9, Fig.10) As the aircraft approaches the stopping position, the shaft of the illuminated "T" will retract one row for every 0.3 m.

At aircraft parking stands when the approaching aircraft is within 30 meters from the stopping position, display of digital countdown will start.

As the aircraft approaches the stopping position, a digital countdown shows the distance to stop position numerically, for every 1.0 meters (from 30 to 5 meters to the stop position), for every 0.5 meters (from 5 to 2 meters to the stop position) or for every 0.1 meters (from 2 to 0 meters to the stop position).

When the approaching aircraft is within 20 meters from the stopping position, the shaft of the illuminated "T" will start to reduce in its length from the bottom to indicate the approaching rate of the aircraft, indicating the remaining distance to the stopping position successively. (Fig.11, Fig.12)



Fig. 9



Fig. 10

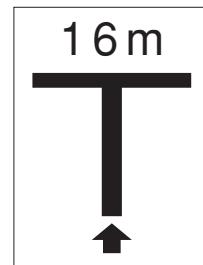


Fig. 11



Fig. 12

- (2) When the aircraft reaches the stopping position, a message "STOP" will be displayed on the screen with a red border. (Fig.13)



Fig. 13

- (3) When the aircraft is stopped at the correct stopping position, a message "OK" will be displayed on the screen in several seconds. (Fig.14)

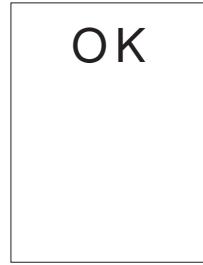


Fig. 14



Fig. 15

- (4) When the operator applies chocks, and switches on "CHOCK ON" switch, the display screen will display "CHOCK ON." (Fig.15)

- (5) If the aircraft stops at a position beyond the correct stopping position, a message "TOO FAR" will be displayed on the screen. (Fig.16)



Fig. 16

5. Cautions and Safety

- (1) When the system displays an incorrect aircraft type, or when such a message as "STOP", "ID FAIL", or "WAIT" appears on the display screen, the pilots should stop the aircraft immediately. (Fig.3, Fig.13, Fig.17)

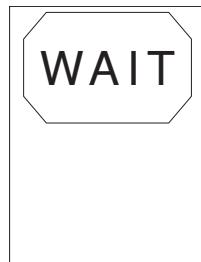


Fig. 17

- (2) During heavy fog, rain or snow the visibility for the docking system can be reduced. When the system is activated and in capture mode, the display will deactivate the floating arrows and show "SLOW" (Fig.18). The message will be superseded by the closing rate bar as soon as the system detects the approaching aircraft. The pilot must not proceed beyond the bridge, unless the "SLOW" text has been superseded by the closing rate bar.



Fig. 18

RJFF AD 2.10 AERODROME OBSTACLES

In Area 2 See Obstacle data

In Area 3 To be developed

RJFF AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

| | | |
|----|--|---|
| 1 | Associated MET Office | FUKUOKA |
| 2 | Hours of service MET Office outside hours | H24 |
| 3 | Office responsible for TAF preparation Periods of validity | FUKUOKA 30 Hours |
| 4 | Trend forecast Interval of issuance | TREND 30 min |
| 5 | Briefing/ consultation provided | P, Ja, En |
| 6 | Flight documentation Language(s) used | C En |
| 7 | Charts and other information available for briefing or consultation | S ₆ , U ₆₅ , U ₇ , U ₅ , U ₃ , U ₂₅ , U _{2/T_r} , P _S , P ₅ , P ₃ , P ₂₅ , P _{SWE} , P _{SWF} , P _{SWG} , P _{SWI} , P _{SWM} , P _{SW} (domestic), E, C, W _E , W _F , W _G , W _I , W, N |
| 8 | Supplementary equipment available for providing information | Doppler Radar for Airport Weather (See attached chart) |
| 9 | ATS units provided with information | TWR, APP, ATIS |
| 10 | Additional information(limitation of service, etc.) | Nil |

Airspace for the advisory service
concerning low level wind shear (RWY16)



Airspace for the advisory service
concerning low level wind shear (RWY34)



RJFF AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations RWY NR | TRUE BRG | Dimensions of RWY(M) | Strength(PCN) and surface of RWY | THR coordinates THR geoid undulation | THR elevation and highest elevation of TDZ of precision APP RWY | | |
|--|-------------|-------------------------|--|--|---|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | | |
| 16 | 150.24° | 2800×60 | PCN 92/F/B/X/T Asphalt Concrete | 333548.91N 1302635.47E 106.7ft | THR ELEV:15.0FT TDZ ELEV:17.6FT | | |
| 34 | 330.24° | 2800×60 | PCN 92/F/B/X/T Asphalt Concrete | 333429.88N 1302729.47E 106.8ft | THR ELEV:32.2FT TDZ ELEV:30FT | | |
| Slope of RWY | | Strip Dimensions(M) | RESA (Overrun) Dimensions(M) | | Remarks | | |
| 7 | 10 | 2920×300 | 221 × (MMN:235 MAX:300)* 240 × (MMN:154 MAX:300)* | RWY grooving 2800m×40m | | | |
| *For detail, ask airport administrator | | | | | | | |
| | | | | | | | |

RJFF AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 16 | 2800 | 2800 | 2800 | 2800 | 9187ft |
| TWY:E3 | 2372 | 2372 | 2372 | | 7783ft |
| TWY:E4,W2 | 2263 | 2263 | 2263 | | 7425ft |
| TWY:W3 | 1931 | 1931 | 1931 | | 6336ft |
| TWY:E5 | 1825 | 1825 | 1825 | | 5988ft |
| TWY:W4 | 1551 | 1551 | 1551 | | 5089ft |
| TWY:E6 | 1531 | 1531 | 1531 | | 5023ft |
| TWY:E7,W5 | 1353 | 1353 | 1353 | | 4439ft |
| 34 | 2800 | 2800 | 2800 | 2800 | 9187ft |
| TWY:E12 | 2654 | 2654 | 2654 | | 8708ft |
| TWY:E11 | 2569 | 2569 | 2569 | | 8429ft |
| TWY:E10,W8 | 2212 | 2212 | 2212 | | 7258ft |
| TWY:W7 | 1941 | 1941 | 1941 | | 6368ft |
| TWY:E9 | 1802 | 1802 | 1802 | | 5912ft |
| TWY:W6 | 1651 | 1651 | 1651 | | 5417ft |
| TWY:E8 | 1531 | 1531 | 1531 | | 5023ft |
| TWY:E7,W5 | 1350 | 1350 | 1350 | | 4429ft |

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

RJFF 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 |
| 16 | PALS (CAT I) 900m LIH | Green Green | PAPI 3.0°/LEFT 436m 70ft | 900m | 2,800m 30m Coded color (White/Red) LIH | 2,800m 60m Coded color (White/Yellow) LIH | Red | Nil (*1) |
| 34 | PALS (CAT I) 900m LIH | Green Green | PAPI 3.0°/LEFT 435.3m 66ft | 900m | 2,800m 30m Coded color (White/Red) LIH | 2,800m 60m Coded color (White/Yellow) LIH | Red | Nil (*1) |
| Remarks | | | | | | | | |
| 10 | | | | | | | | |
| Overrun area edge LGT(LEN:60m Color:Red)(*1) | | | | | | | | |

RJFF AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

| | | |
|---|--|---|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 333518N/1302634E, White/Green EV4.3sec, HO |
| 2 | LDI location and LGT Anemometer location and LGT | LDI:Nil Anemometer: RWY16 side 397m inside of RWY 16 THR RWY34 side 380m inside of RWY 34 THR |
| 3 | TWY edge and center line lighting | TWY edge and center line lights installed, see AD2.9. |
| 4 | Secondary power supply/ switch-over time | Within 1 sec : REDL, RENL, RTHL, WBAR, RCLL, Overrun area edge LGT, Runway Entrance Lights, Takeoff Hold Lights Within 15 sec : Other LGT |
| 5 | Remarks | Nil |

RJFF AD 2.16 HELICOPTER LANDING AREA

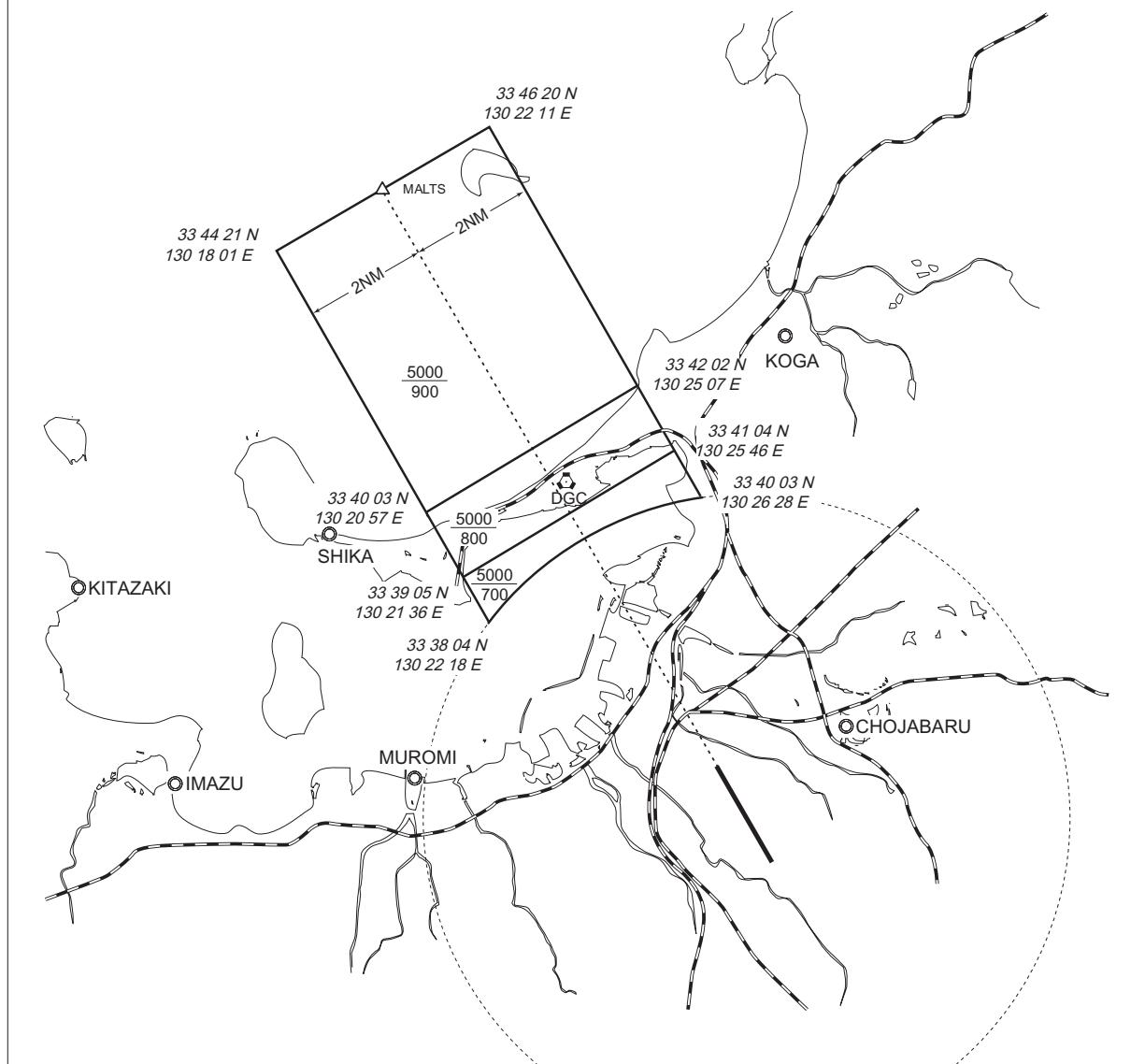
Nil

RJFF 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 |
| FUKUOKA CTR | Area defined follows Area within a radius of 5 nm of FUKUOKA ARP | 3 000 or below | D | Fukuoka tower En | |
| FUKUOKA POSITIVE CONTROL AREA | See RJFF attached chart | | C | Fukuoka approach, Fukuoka departure, Fukuoka radar En | Operational hour : 2145 - 1315 UTC |
| FUKUOKA APPROACH CONTROL AREA | See RJFF attached chart | | E | Fukuoka approach, Fukuoka departure, Fukuoka radar En | |
| FUKUOKA TERMINAL CONTROL AREA | See RJFF attached chart | | E | Fukuoka TCA En | |

福岡特別管制区
Fukuoka Positive Control Area

| NAME | LATERAL LIMITS | UPPER LIMIT (AMSL) | UNIT PROVIDING SERVICE | REMARKS |
|---------------|-----------------------------------|--------------------------------|--|--|
| | | LOWER LIMIT (AMSL) M(ft) | | |
| 1 | 2 | 3 | 4 | 5 |
| 福岡 FUKUOKA | 下記に示される区域 The area shown below | | Primary Fukuoka APP 119.1 - 261.2 Secondary Fukuoka TWR 118.4 - 236.8 | 当該空域を飛行しようとする航空機は、福岡アプローチ又は福岡タワーに連絡し、コールサイン、現在位置、高度及び意図を通報し、指示を受けること。 Pilots requiring transit of Fukuoka Positive Control Area must call Fukuoka Approach or Tower prior to the point of entry to provide aircraft identification, position, altitude and intention. |



福岡進入管制区

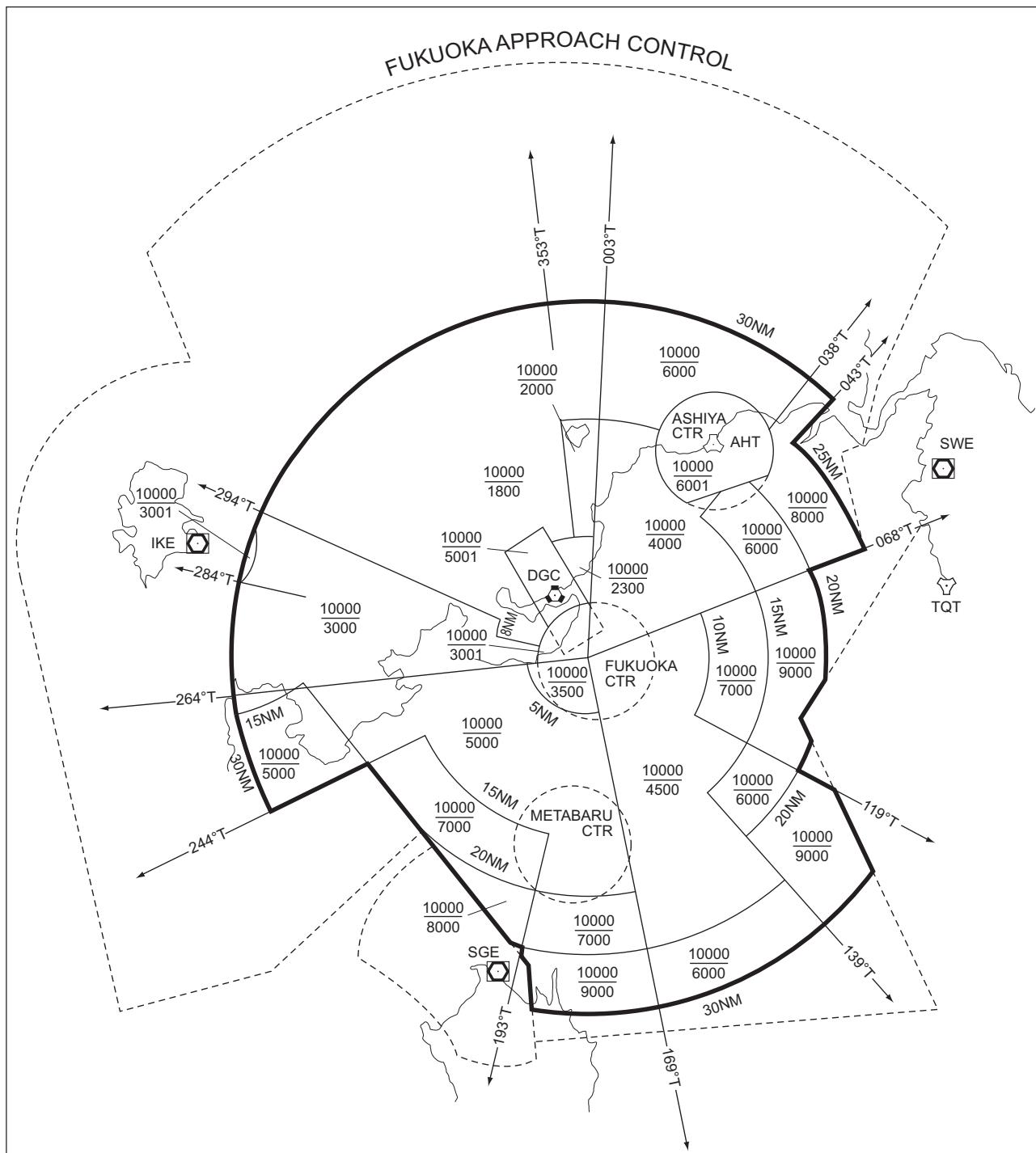
Fukuoka Approach Control Area



Point list

- | | | | |
|----------------------|----------------------|----------------------|----------------------|
| (1) 331929N1301048E | (11) 335111N1304558E | (21) 340937N1294200E | (31) 335905N1305538E |
| (2) 330951N1300318E | (12) 334621N1302850E | (22) 334508N1294656E | (32) 335327N1305356E |
| (3) 330147N1301316E | (13) 330353N1303303E | (23) 340007N1294626E | (33) 341128N1310245E |
| (4) 330132N1302113E | (14) 330533N1310128E | (24) 334447N1292857E | (34) 341648N1310822E |
| (5) 330915N1302028E | (15) 334228N1304858E | (25) 332519N1300516E | (35) 341502N1305813E |
| (6) 333611N1304424E | (16) 335247N1305140E | (26) 332231N1293403E | (36) 330615N1293818E |
| (7) 332944N1304800E | (17) 334351N1305445E | (27) 334138N1292902E | (37) 330921N1295252E |
| (8) 333437N1305145E | (18) 335836N1311215E | (28) 330309N1302104E | (38) 332024N1300955E |
| (9) 334458N1305945E | (19) 334829N1311425E | (29) 335135N1304720E | |
| (10) 334047N1304149E | (20) 341554N1305655E | (30) 340133N1305404E | |

福岡ターミナルコントロールエリア
Fukuoka Terminal Control Area

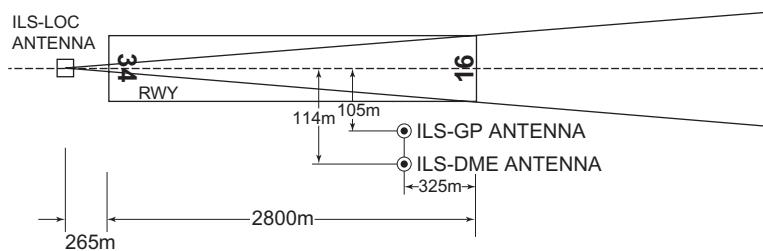


RJFF AD 2.18 ATS COMMUNICATION FACILITIES

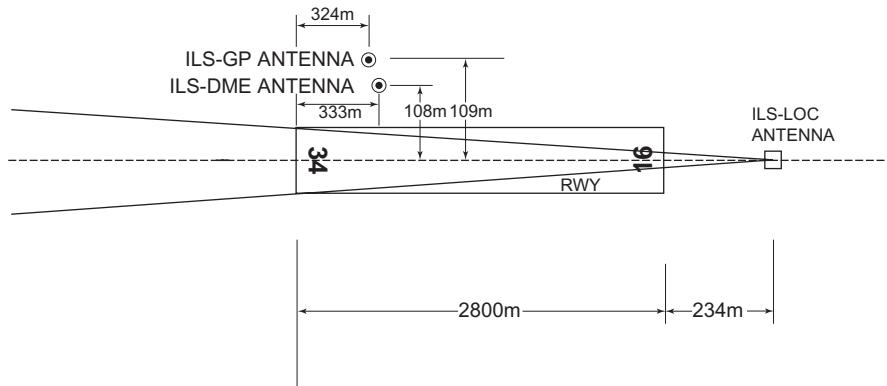
| Service designation | Call sign | Frequency | Hours of operation | Remarks |
|---------------------|----------------------------------|--|--------------------|--|
| 1 | 2 | 3 | 4 | 5 |
| APP / ASR | Fukuoka Approach / Fukuoka Radar | 119.65MHz 121.125MHz 119.7MHz(ASR) 127.9MHz 261.2MHz 270.8MHz 279.2MHz 121.5MHz(E) 243.0MHz(E) | 2145 - 1315 | 1315 - 2145 : APP service provided by Kobe Control |
| DEP | Fukuoka Departure | 127.9MHz 119.1MHz 261.2MHz 270.8MHz 279.2MHz 121.5MHz(E) 243.0MHz(E) | 2145 - 1315 | |
| TCA | Fukuoka TCA | 121.275MHz 318.2MHz | 2300 - 1030 | |
| TWR | Fukuoka Tower | 118.4MHz 126.2MHz 236.8MHz 121.5MHz(E) 243.0MHz(E) | H24 | |
| GND | Fukuoka Ground | 121.7MHz 236.8MHz 121.5MHz(E) 243.0MHz(E) | H24 | |
| DLVRY | Fukuoka Delivery | 121.925MHz | H24 | |
| ATIS | Fukuoka Airport | 127.2MHz | 2130 - 1300 | |

RJFF AD 2.19 RADIO NAVIGATION AND LANDING AIDS

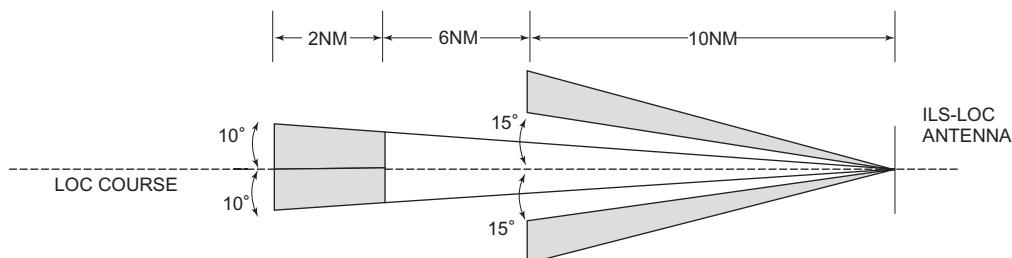
| Type of aid (VOR declination) | ID | Frequency | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks |
|-------------------------------------|-----|---------------------|-----------------------|---|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| VOR (8°W/2018) | DGC | 114.5MHz | H24 | 334034.35N/ 1302322.66E | | VOR unusable: 080°-100° beyond 30nm BLW 5,000ft. 120°-130° beyond 30nm BLW 6,000ft. 130°-140° beyond 30nm BLW 7,000ft. 180°-200° beyond 25nm BLW 6,000ft. 200°-210° beyond 35nm BLW 6,000ft. |
| TACAN | DGC | 1179MHz (CH-92X) | H24 | 334033.52N/ 1302320.98E | 65ft | TACAN DME unusable: 070°-090° beyond 30nm BLW 5,000ft. 090°-120° beyond 30nm BLW 6,000ft. 120°-130° beyond 25nm BLW 6,000ft. 130°-140° beyond 30nm BLW 6,000ft. 190°-240° beyond 35nm BLW 6,000ft. TACAN AZM unusable: 070°-090° beyond 20nm BLW 5,000ft. 090°-140° beyond 25nm BLW 6,000ft. 170°-190° beyond 30nm BLW 6,000ft. 190°-230° beyond 25nm BLW 6,000ft. 230°-240° beyond 35nm BLW 6,000ft. 260°-270° beyond 30nm BLW 3,000ft. 270°-280° beyond 25nm BLW 3,000ft. 280°-290° beyond 35nm BLW 3,000ft. |
| ILS-LOC 16 | IFO | 111.7MHz | H24 | 333422.43N/ 1302734.55E | | [For RWY16] LOC 16: 265m(869ft) FM RWY34 THR, BRG(MAG)158° |
| ILS-GP 16 | - | 333.5MHz | H24 | 333541.40N/ 1302645.25E | | [For RWY16] GP 16: 325m (1066ft) inside FM RWY16 THR, 105m (344ft) NE of RCL. HGT of ILS reference datum 17.7m(58ft) GP angle 3.0° |
| ILS-DME 16 | IFO | 1015MHz (CH-54X) | H24 | 333541.55N/ 1302645.55E | 32ft | [For RWY16] DME 16: 325m(1066ft) inside FM RWY16 THR, 114m (374ft) NE of RCL. |
| ILS-LOC 34 | IFF | 108.9MHz | H24 | 333555.49N/ 1302630.97E | | [For RWY34] LOC 34: 234M(768ft) away FM RWY16 THR , BRG (MAG) 337.75° LOC unusable in the following areas: beyond 16NM FM LOC antenna. beyond 015° W side of LOC course. beyond 015° E side of LOC course. |
| ILS-GP 34 | - | 329.3MHz | H24 | 333437.25N/ 1302719.52E | | [For RWY34] GP 34: 324m(1063ft) inside FM RWY34 THR. 109m (378ft) SW of RCL. HGT of ILS reference datum 16.2m(53ft). GP angle 3.0° |
| ILS-DME 34 | IFF | 987MHz (CH-26X) | H24 | 333437.51N/ 1302719.39E | 43ft | [For RWY34] DME 34: 333m(1092ft) inside FM RWY34 THR, 108m (354ft) SW of RCL. |
| MSAS | | 1575.42MHz | H24 | | | Transmitting antennas are satellite based |

FUKUOKA APILS for RWY16

REMARKS : 1. ILS-LOC beam BRG(MAG) 158°
 2. HGT of ILS REF datum 17.7m(58ft)
 3. ILS-GP Angle 3.0°
 4. ELEV of ILS-DME 9.76m (32ft)

ILS for RWY34

REMARKS : 1. ILS-LOC beam BRG(MAG) 337.75°
 2. HGT of ILS REF datum 16.2m(53ft)
 3. ILS-GP Angle 3.0°
 4. ELEV of ILS-DME 12.9m(43ft)



LOC unusable in the following areas:
 beyond 16NM FM LOC antenna.
 beyond 015° W side of LOC course.
 beyond 015° E side of LOC course.

RJFF AD 2.20 LOCAL TRAFFIC REGULATIONS

1. Airport regulations

1.1 ATC Procedure

Aircraft operators in accordance with IFR are requested to comply with the following.

1) ATC clearance

ATC clearance will be obtained by "Voice radiotelephone (Voice RTF)" or "Departure Clearance by data link (DCL)". Shown in detail below (a) or (b).

| CLEARANCE FLOW | (a) Voice RTF | (b) DCL |
|-------------------|---|---|
| REQUEST CLEARANCE | Call Fukuoka Delivery (121.925) at 5 minutes before starting engines, with the following information. (1) Call sign (2) Destination (3) Proposal flight level/altitude (alternative flight level/altitude, if any.) (4) Parking position (spot number) | - Send RCD message at 15 minutes before starting engines. - Monitor Fukuoka Delivery (121.925). NOTE: - Start monitoring Fukuoka Delivery (121.925) once RCD message is sent. In case coordination is required, Fukuoka Delivery calls the pilot on Voice RTF. |
| OTHERS | After receiving clearance from Fukuoka Delivery, monitor Fukuoka Ground (121.7). Call Fukuoka Ground when ready for push back/for taxiing. | |

2) Intersection departure

- a) Separation for departure as in AD1.1.6.3.2.2(2)(2) will not be applied to aircraft departing from TWY E-12 or TWY E-11 behind departing aircraft from E-12. Aircraft requiring separation in AD1.1.6.3.2.2(2)(2) shall advise "FUKUOKA GROUND/TOWER" accordingly.
- b) Departing aircraft may be instructed intersection departure from TWY E-12 without Pilot's consent. Aircraft unable to depart from TWY E-12 shall advise "FUKUOKA GROUND/TOWER" accordingly.

1.2 RWY relations

RWY16 : 1) RWY16 will be preferentially used when tail wind component is 10kt or less.

2) RNP RWY16 or LOC RWY16 approach is primarily applied.

RWY34 : 1) Visual approach is primarily applied.

2) RNP RWY34 or LOC RWY34 approach is applied when visual approach is not applicable.

Remarks : RWY relations described above will be applied when radar service provided by Fukuoka approach/radar.

1.3 小型航空機の空港利用

(1) 福岡空港における運航の安全の確保及び円滑な空港運用の維持の観点から、混雑時間帯（日本時間午前9時から午後7時まで）において、以下の要件等を満たさない小型航空機（回転翼航空機を除く）については、福岡空港における離着陸のための施設利用を認めない。

- 1) ATC トランスポンダー並びに ILS、VOR/DME 及び ADF 受信装置を装備していること。
- 2) 飛行方式は計器飛行方式によること。
- 3) 機長が福岡空港の出発進入方式を含む管制方式を熟知していること。
- 4) 以下の飛行が可能であること。
 - (a) 高度 10,000 フィートにおいて、250 ノットの速度を保持することが可能であること。
 - (b) 高度 10,000 フィートから 5,000 フィートまで降下するにあたっては、200 ノットから 250 ノットまでの間で一定の速度を保持することが可能であること。

1.3 On use of Fukuoka airport for small aircraft

(1) In order to cope with the increasing flight frequencies and to ensure the safety of flight, during the hours from 0000UTC to 1000UTC, small aircraft flights* shall be prohibited from take-off and landing at Fukuoka airport unless they meet the following requirements.
*except HEL.

- 1) ATC transponder, ILS, VOR/DME and ADF equipped.
- 2) Operation in accordance with IFR.
- 3) Aircraft crew shall be familiar with ATC procedures at Fukuoka airport.
- 4) According to the instructions of ATC, they can keep.
 - (a) Maintaining 250kts at 10,000ft.
 - (b) Maintaining between 200kts and 250kts during the descent from 10,000ft to 5,000ft.

以下の小型航空機（回転翼航空機を除く）については、本取扱いを適用しないこととする。

- 1) 急患、臓器等の輸送、災害派遣等緊急を要する小型航空機
- 2) 国、地方公共団体その他の公的機関の使用に係る小型航空機
- 3) 新聞社その他の報道機関の取材のための使用に係る小型航空機
- 4) その他福岡空港事務所長が認める小型航空機

(2) 回転翼航空機については、空港管理者が認める場合を除き、福岡空港における離着陸のための施設利用を認めない。福岡空港（奈多地区）「奈多ヘリポート」の施設利用についてはヘリポート管理者に連絡すること。（参照：AIP AD3 RJFH）

NOTE. Small aircraft* in the following situations are exempted from applying any of the above-mentioned limitations.

*except HEL.

- 1) Aircraft operation for the transportation of urgent patients or internal organs and disaster dispatches etc (in a state of emergency).
- 2) Aircraft operation for the purpose of Government Agency and Local Government activities.
- 3) Aircraft operation for the purpose of news gathering activities by newspaper companies etc (such as media organizations).
- 4) Small aircraft permitted by Director of Fukuoka Airport Office (CAB).

(2) Take-off and landing of Helicopters shall not be permitted at Fukuoka airport except those permitted by Fukuoka airport administrator.
Helicopter operators are requested to contact NATA HELIPORT (FUKUOKA AIRPORT NATA AREA) administrator for the use of NATA HELIPORT (See AIP AD3 RJFH).

1.4 PDA (parts departing aircraft) reporting to Airport Administration

In order to secure the safety of aircraft operations and to rectify the issue of falling objects from aircraft operating in the vicinity of Fukuoka Airport, aircraft operators are required to notify Airport Administration (Tel 092-623-2255 (OPS)) of any "Parts Departing Aircraft" from flights operating to/from Fukuoka Airport, without delay. This information shall be shared by relevant parties in order to prevent recurrence of such.

1.5 Other information

- 1) On use of this airport by transient ACFT, the operator is required to obtain the prior permission of the airport administrator in order to adjust parking area.
- 2) When RWY, TWY and other facilities will be closed due to scheduled maintenance (see NOTAM RJFF), aircraft using this airport should obtain the prior permission of the airport administrator until 2 hour before take off or landing.(TEL 092-623-2255 (OPS))
- 3) Restrictions about the use of auxiliary power units (APU)

When an aircraft is using an aircraft parking stand with fixed power facilities, APU shall not be used outside the time periods specified below except when specifically acknowledged by the authority as necessary.

- a) Less than 30 minutes prior to the estimated time of departure.
- b) The minimum time required for switching over to the fixed power facilities, after arrival at the parking stand.
- c) For the minimum time required for aircraft maintenance purposes if needed.

NOTE:

Spot 1 - 12 and 53 - 58 are aircraft parking stands with fixed power facilities.

2. Taxiing to and from stands

2.1 Taxiing procedure

- 1) All aircraft are required to hold at "GP HOLD LINE" on TWY E1 through E3 for RWY 16 or TWY S(BTN W7 AND W9) for RWY 34 until receiving further taxi clearance to protect the ILS glide slope signal.
- 2) When ILS approach for RWY34 is in operation, aircraft on the west side of the RWY may need to cross the RWY to protect the ILS glide slope signal. The main taxi routes for crossing the RWY is either from W5 to E7 or from W8 to E10.
- 3) In order to keep clearance between aircraft and OBST(42.5m from taxiway center line), all aircraft shall reduce taxiing speed on TWY A(between A3 and A5), Y or K1 and follow the taxiway center line strictly.
- 4) After vacating RWY, aircraft may be instructed to hold short of TWY A or S in order to separate from aircraft on TWY A or S.

White lines that can be used as a guidance for holding short of TWY A, S are painted on TWYs E1 through E7, W7 and W8.

(See RJFF AD2.24 AD CHART)

2.2 Push back procedures

- 1) Push back from SPOT 1, 1L and 1R should be made to Z unless otherwise instructed by ATC.
- 2) Push back from SPOT 2 to 12R should be made facing to the south due to apron and taxiing restrictions.
- 3) An aircraft at the SPOT other than 1, 1L and 1R might be instructed to make push back to Z if necessary.
e.g. Push back to Z approved RWY16/34.
(See RJFF AD2.24 AD CHART)

2.3 Safety measures on the TWY

When taxiing on the TWY K or TWY Y, reduce engine power to the extent practicable.

3. Parking area for small aircraft(General aviation)

| |
|-----------------------|
| Ask AD administration |
|-----------------------|

4. Parking area for helicopters

| |
|-----------------------|
| Ask AD administration |
|-----------------------|

5. Apron - taxiing during winter conditions

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

6. Taxiing - limitations

6.1 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 B744 holding at the stop marking on TWY E1

| Wing span(WS) of ACFT taxiing on TWY A1 | WS < 18.6m | 18.6m < WS < 35.6m | WS > 35.6m |
|---|------------|--------------------|------------|
| Wing tip clearance | A | B | C |

(2) When B744 holding at the stop marking on TWY E2

| Wing span(WS) of ACFT taxiing on TWY A1-A2 | WS < 22.0m | WS > 22.0m |
|--|------------|------------|
| Wing tip clearance | B | C |

(3) When B744 holding at the stop marking on TWY E3

| Wing span(WS) of ACFT taxiing on TWY A1-A2 | WS < 31m | 31m < WS < 48m | WS > 48m |
|--|----------|----------------|----------|
| Wing tip clearance | A | B | C |

(4) When B744 holding at the stop marking on TWY E4, E7, E10, E11, E12, W5 or W8

| Wing span(WS) of ACFT taxiing on TWY A2-A3, A4-A5, A6-A7 or S | WS < 21.2m | WS > 21.2m |
|---|------------|------------|
| Wing tip clearance | B | C |

Legend

- A : wing tip clearance $\geq 15m$
B : $6.5m \leq \text{wing tip clearance} < 15m$
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

RJFF AD 2.21 NOISE ABATEMENT PROCEDURES**1. 騒音軽減運航方式**

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、以下の方式が適用される。ただし、これらの方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式を実施するものとする。

1) 離陸について（滑走路 16/34）

急上昇方式

2) 着陸について（滑走路 34）

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

19時以降翌朝7時までの間、着陸機におけるリバース・スラスト使用についてはアイドルまでに制限する。

2. 優先滑走路方式

なし

3. 優先飛行経路

なし

4. その他

空港周辺における航空機騒音軽減のため、「22時以降翌朝7時までの間、航空運送事業の用に供する航空機による離着陸は避けること」が望まれる。

1. Noise Abatement Operating Procedures

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 RWY16/34

Steepest Climb Procedure

2) For landing to RWY34

Delayed Flap Approach Procedure and Reduced Flap Setting Procedure

3) Reverse Thrust

Between 1000UTC(1900JST) and 2200UTC(0700JST), pilots are requested to limit the use of reverse thrust to idle reverse after landing.

2. Preferential Runways Procedures

Nil

3. Preferential Routes

Nil

4. Remarks

In order to reduce aircraft noise in the vicinity of airport, it is desirable that aircraft used for commercial air transport to avoid take-offs and landings between 1300UTC (2200JST) and 2200UTC(0700JST).

RJFF AD 2.22 FLIGHT PROCEDURES**1. TAKE OFF MINIMA**

| | RWY | ACFT CAT | REDL & RCLL | | REDL or RCLL or RCL markings | | Nil(Daylight only) | |
|---|-------|----------|-----------------|------|------------------------------|------|--------------------|------|
| | | | RVR | VIS | RVR | VIS | RVR | VIS |
| Multi-engine ACFT with TKOF ALTN AP filed | 16/34 | A,B,C,D | 400m | 400m | 400m | 400m | - | 500m |
| Others | | | AVBL LDG MINIMA | | | | | |

2. Lost Communication Procedures for Arrival Aircraft under radar navigational guidance

If radio communications with Fukuoka Approach/Radar are lost for 30 seconds, squawk Mode A/3 Code 7600 and:

- (I) 1. Contact Fukuoka tower.
- 2. If unable, proceed in accordance with visual flight rules.
- 3. If unable, proceed to Fukuoka VORTAC at last assigned altitude or 5000ft whichever is higher, and execute instrument approach.
- (II) Procedures other than above will be issued when situation required.

3. Trajectorydized Airport Traffic Data Processing System(TAPS)

福岡アプローチの指示のもとに、当該進入管制区を行なう航空機は、モード A/3 の二次レーダー個別コード及びモード 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、管制官に対し、その旨通報すること。

Aircraft flying under control of Fukuoka 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.

4. Traffic pattern altitude

- 1) Fixed wing ACFT
 - a) JET.....1,500ft
 - b) PROPELLER
 - Single engine.....800ft
 - Multi engine.....1,000ft
 - (Except SF34, SB20, any type of DH8 and any type of ATR should follow 1,500ft.)
 - c) MILITARY SMALL JET.....2,000ft
- 2) Rotor craft

RJFF AD 2.23 ADDITIONAL INFORMATION

Local Flying Restrictions :

1. BAK-12/15 JET barrier is located at 40m (131ft) outside from RWY34 threshold. BAK-12/15 JET barrier is located at 91m (299ft) outside from RWY16 threshold.
2. ILS
RWY16 and 34 ILS radiate simultaneously. Pilot shall confirm type of APCH and using RWY.
3. Helicopter Landing and take off area: located on TWY A3, A5 and ACFT STAND TAXI LANE M.(See AD chart)
4. Antenna Tower



5. 空港周辺における鳥の密集

春（4月～5月）と秋（9月～10月）に鳥の群れが見られる。

鳥種：ハチクマ

飛翔高度：地上 -3000FT（目視による計測）

特徴：体重 約 800～1500g、大型タカ種

備考：よく晴れた昼間帯において丘陵や海上で発生する上昇気流を利用し、多数のハチクマが旋回して帆翔する現象（タカ柱）が見られる。

空港管理者の対策：空港内でのバードパトロールを実施している。

5.The flocks of birds in the vicinity of the airport

Bird flocks are found in spring (April-May) and autumn (September-October).

Species of birds: Honey Buzzard

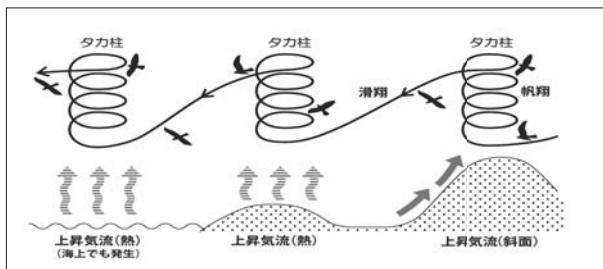
Flying Altitude: GND-APRX 3000FT(visual estimation of bird activities)

Characteristics: Weight 800-1500g, large-sized hawk species

Remarks: Many Honey Buzzards soar using the thermals that occur in the hills and the sea during the sunny daytime.

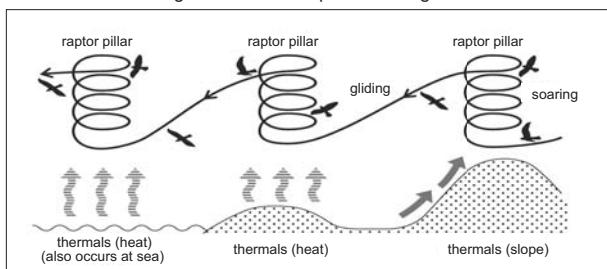
Measure of AD administration: Regular bird patrols are conducted in the airport.

【タカ柱と渡りのイメージ図】



(出典)「図鑑日本のワシタカ類」(1995 文一総合出版)

【Figure of buzzards pillar and migration】



"Zukan nihon no washitakarui" (1995 Bun-ichiSogo Shuppan)
* translated with permission

RJFF AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome Chart

Aircraft Parking/Docking Chart

Aerodrome Obstacle Chart -ICAO type A (RWY16)

Aerodrome Obstacle Chart -ICAO type A (RWY34)

Aerodrome Obstacle Chart -ICAO type B (RWY16/34)

Standard Departure Chart - Instrument (OGUNI)

Standard Departure Chart - Instrument (YAMEK)

Standard Departure Chart - Instrument (YAMGA)

Standard Departure Chart - Instrument (FUKUOKA)

Standard Departure Chart - Instrument (TRANSITION)

Standard Departure Chart - Instrument (YOKAT-RNAV)

Standard Departure Chart - Instrument (KURUME-RNAV)

Standard Departure Chart - Instrument (MORIO-RNAV)

Standard Departure Chart - Instrument (HAKATA-RNAV)

Standard Arrival Chart - Instrument (LAGER, EBISU, IKI)

Standard Arrival Chart - Instrument (KAFRI-E/W)

Standard Arrival Chart - Instrument (HAWKS-E/W/N/S, ISKUP-S-RNAV)

Standard Arrival Chart - Instrument (MALTS-E/W/S, ISKUP-N-RNAV)

Instrument Approach Chart (ILS or LOC RWY34)

Instrument Approach Chart (RNP RWY34)

Instrument Approach Chart (ILS or LOC RWY16)

Instrument Approach Chart (RNP RWY16)

Instrument Approach Chart (VOR RWY16)

Instrument Approach Chart (TACAN RWY16)

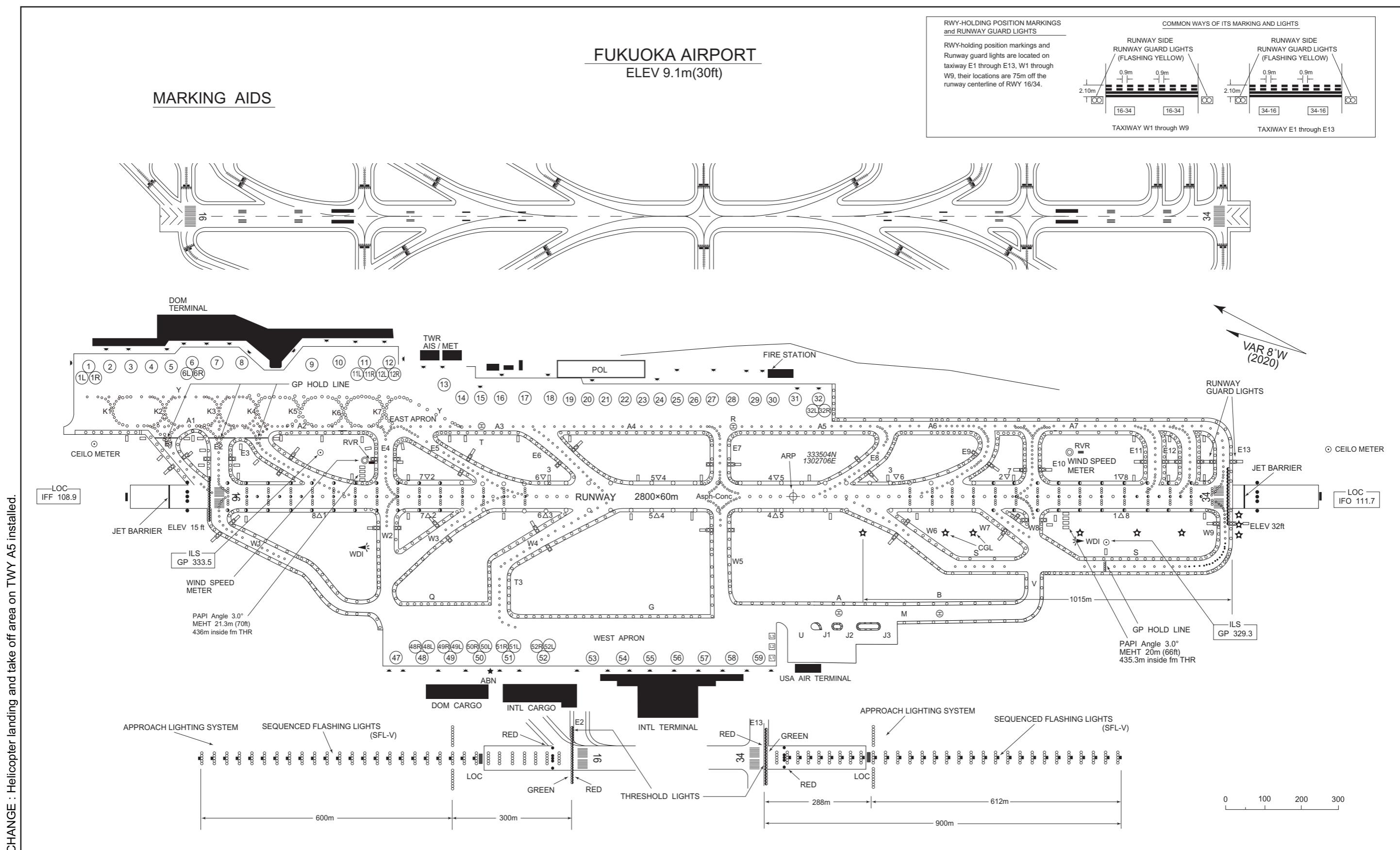
Other Chart (Visual REP)

Other Chart (LDG CHART)

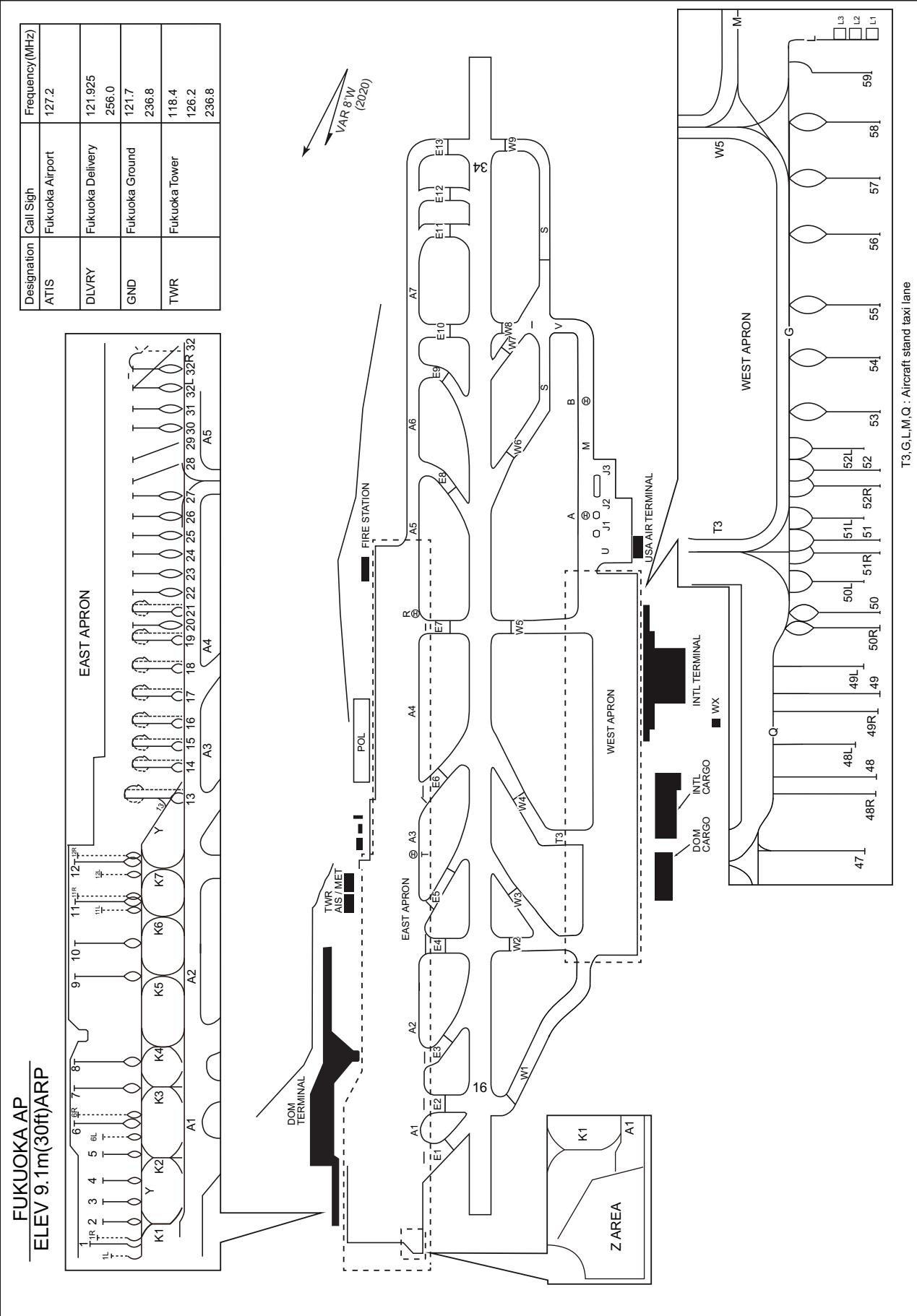
Other Chart (MVA CHART)

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AERODROME CHART



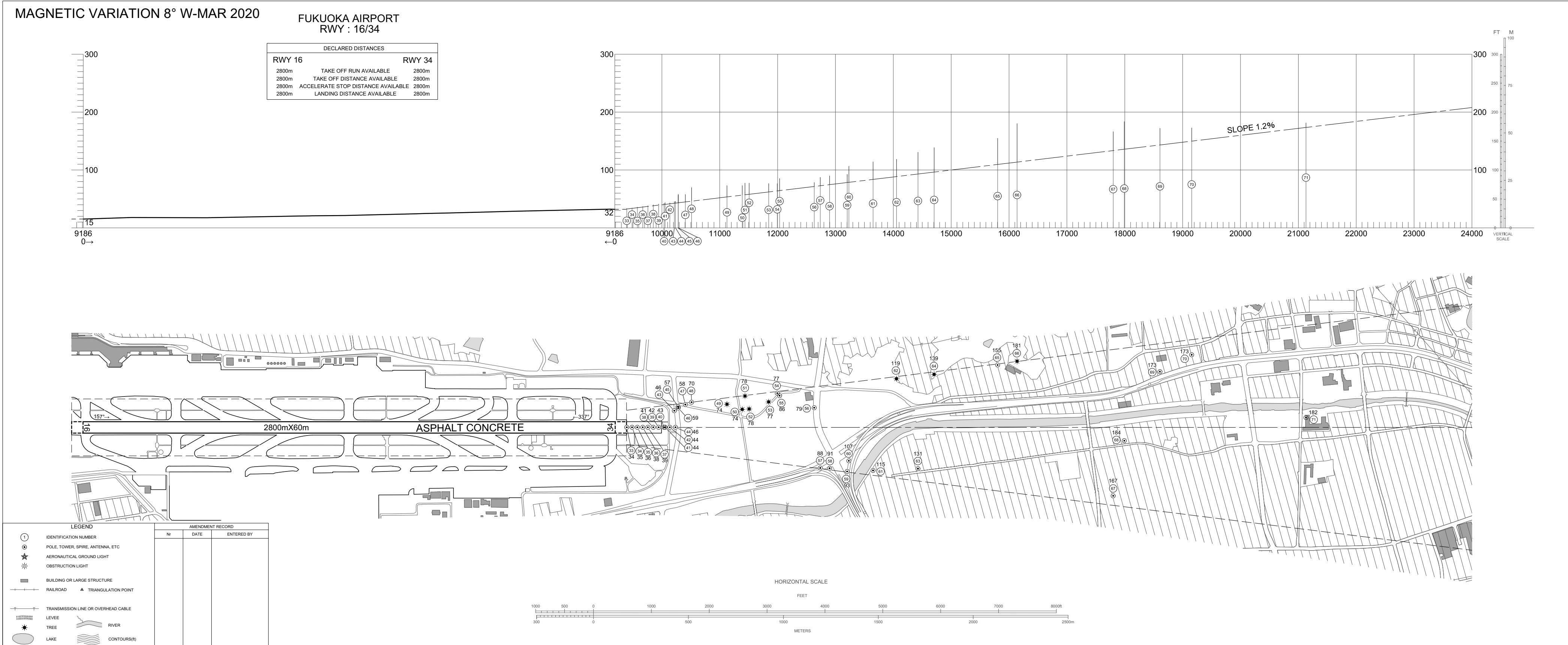
CHANGE : Helicopter landing and take off area on TWY A5 installed.



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AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

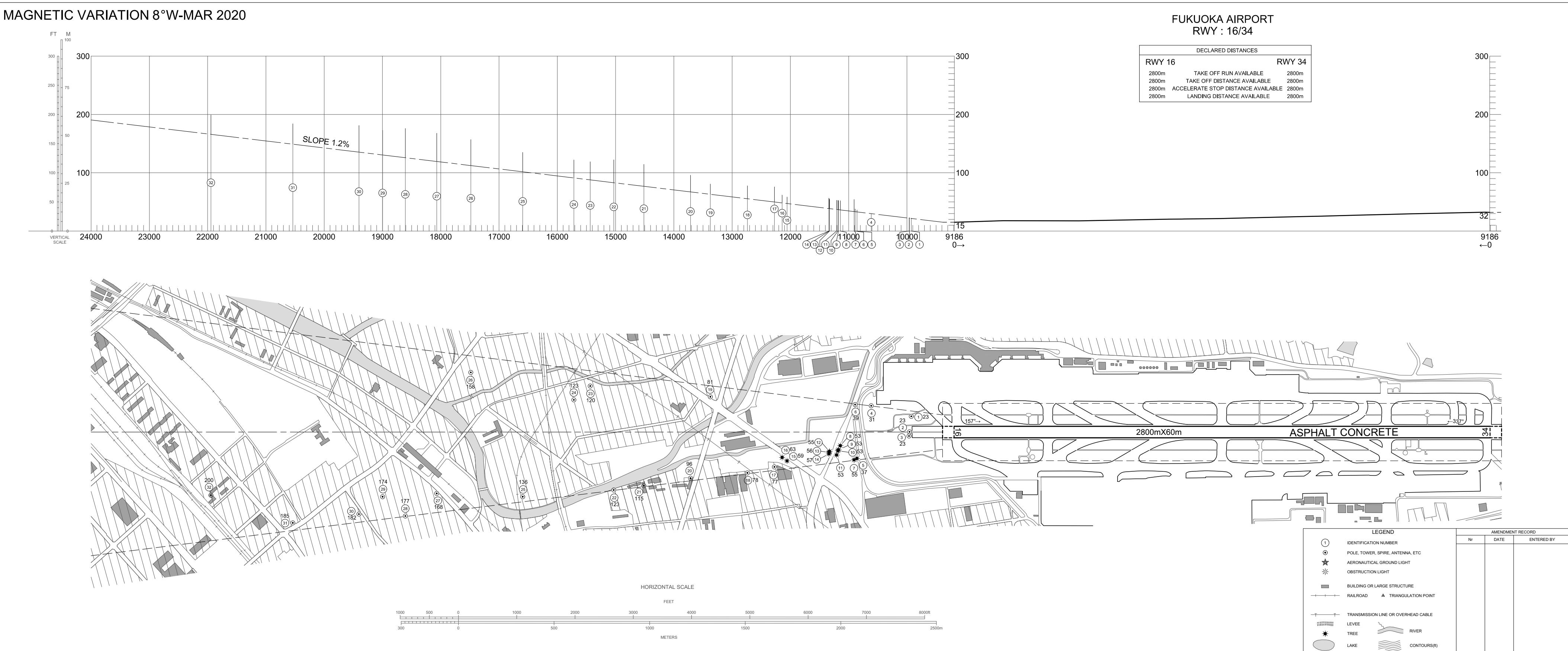
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



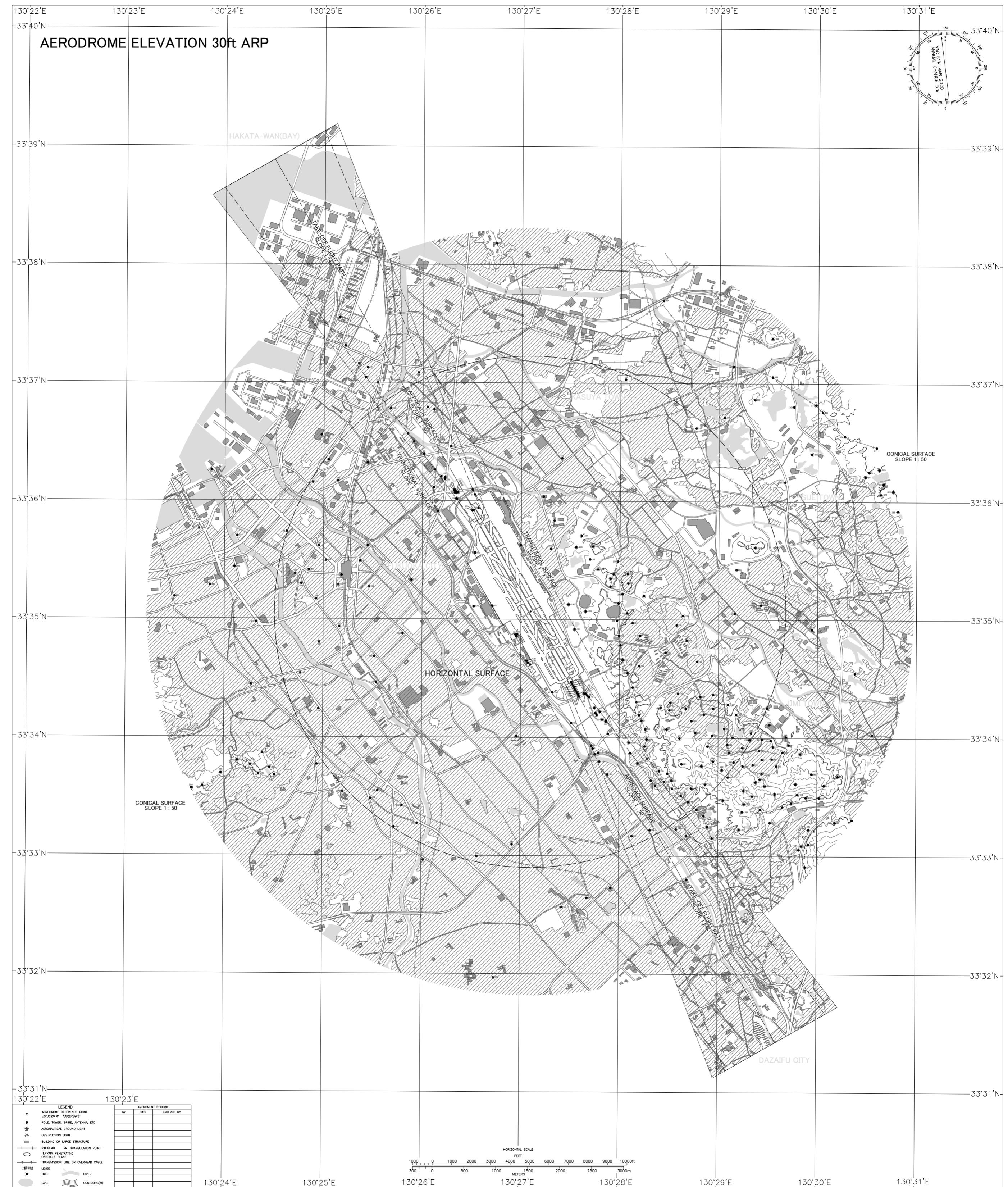
CHANGE:Update

AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

AERODROME OBSTACLE CHART - ICAO
TYPE B

STANDARD DEPARTURE CHART -INSTRUMENT

RJFF / FUKUOKA

SID

OGUNI EIGHT DEPARTURE

RWY 16 : Climb RWY HDG to 700FT, turn right, via DGC R160 to 30.0DME, turn left, via TFE R256 to OGUNI.

Cross DGC R160/28.0DME between FL150 and FL200.

RWY 34 : Climb RWY HDG to 3000FT, turn right HDG176° to intercept and proceed via DGC R146 to OGUNI.

Cross DGC R146/9.0DME at or below 10000FT, cross DGC R146/28.0DME at or below FL200, cross OGUNI at or above FL150.

Note RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.



STANDARD DEPARTURE CHART -INSTRUMENT

RJFF / FUKUOKA

TRANSITION

MUSASHI TRANSITION

From over OGUNI, via TFE R256 to TFE VOR/DME.

Cross TFE R256/30.0DME at or above FL170.



STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

SID

YAMEK NINE DEPARTURE

RWY 16 : Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMEK.

Cross YAMEK at or above 5000FT.

RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to DGC 17.6DME, turn right, via SGE R058 to YAMEK.

Cross DGC R146/9.0DME at or below 10000FT, cross YAMEK at or above 5000FT.

Note RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.



STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

SID

YAMGA SEVEN DEPARTURE

RWY 16 : Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMGA.

Cross DGC R160/28.0DME at or below FL200, cross YAMGA at or above 13000FT.

RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to YURRY, turn right, via KUE R351 to YAMGA.

Cross DGC R146/9.0DME at or below 10000FT, cross KUE R351/28.0DME at or below FL200, cross YAMGA at or above 13000FT.

Note RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.



CHANGE : PROC renamed, ALT restriction at YAMGA.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

SID

FUKUOKA FOUR DEPARTURE

RWY 16 : Climb RWY HDG to 700FT, turn right, via DGC R160 to YAMEK, turn right,
via DGC R179 (MRA 7000FT) to DGC VORTAC.

Cross YAMEK at or above 5000FT.

RWY 34 : Climb direct to DGC VORTAC.

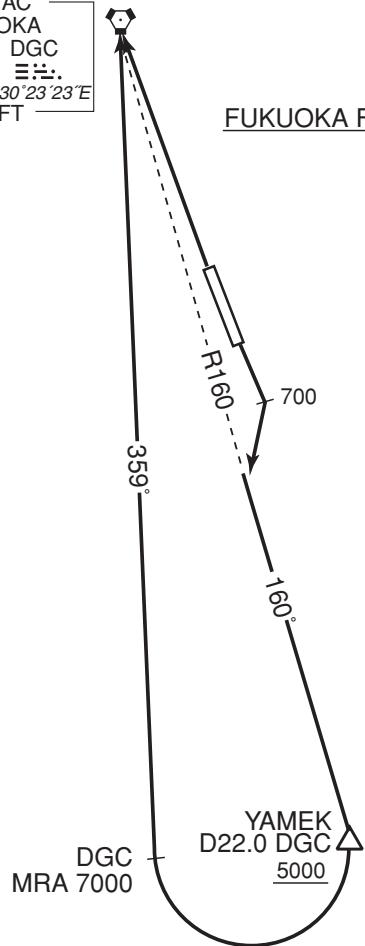
Note RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.

VORTAC
FUKUOKA
114.5 DGC
CH-92X
33°40'34"N/130°23'23"E
100FT

FUKUOKA FOUR DEPARTURE



CHANGE : MRA added

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

TRANSITION

KAGOSHIMA TRANSITION

From over YAMGA, proceed via HKC R012 to HKC VORTAC via KEIKA, IPUDO and AJISE.

Cross KEIKA at or below FL180.

KUMAMOTO TRANSITION

From over YAMGA, proceed via KUE R351 to KUE VOR/DME via ABECK.

Cross ABECK at assigned altitude.

SAGA TRANSITION

From over YAMEK, proceed via SGE R058 to SGE VOR/DME.

MIZMA TRANSITION

From over YAMEK, proceed via SGE R058 to MIZMA.

Cross MIZMA at or above 8000FT.

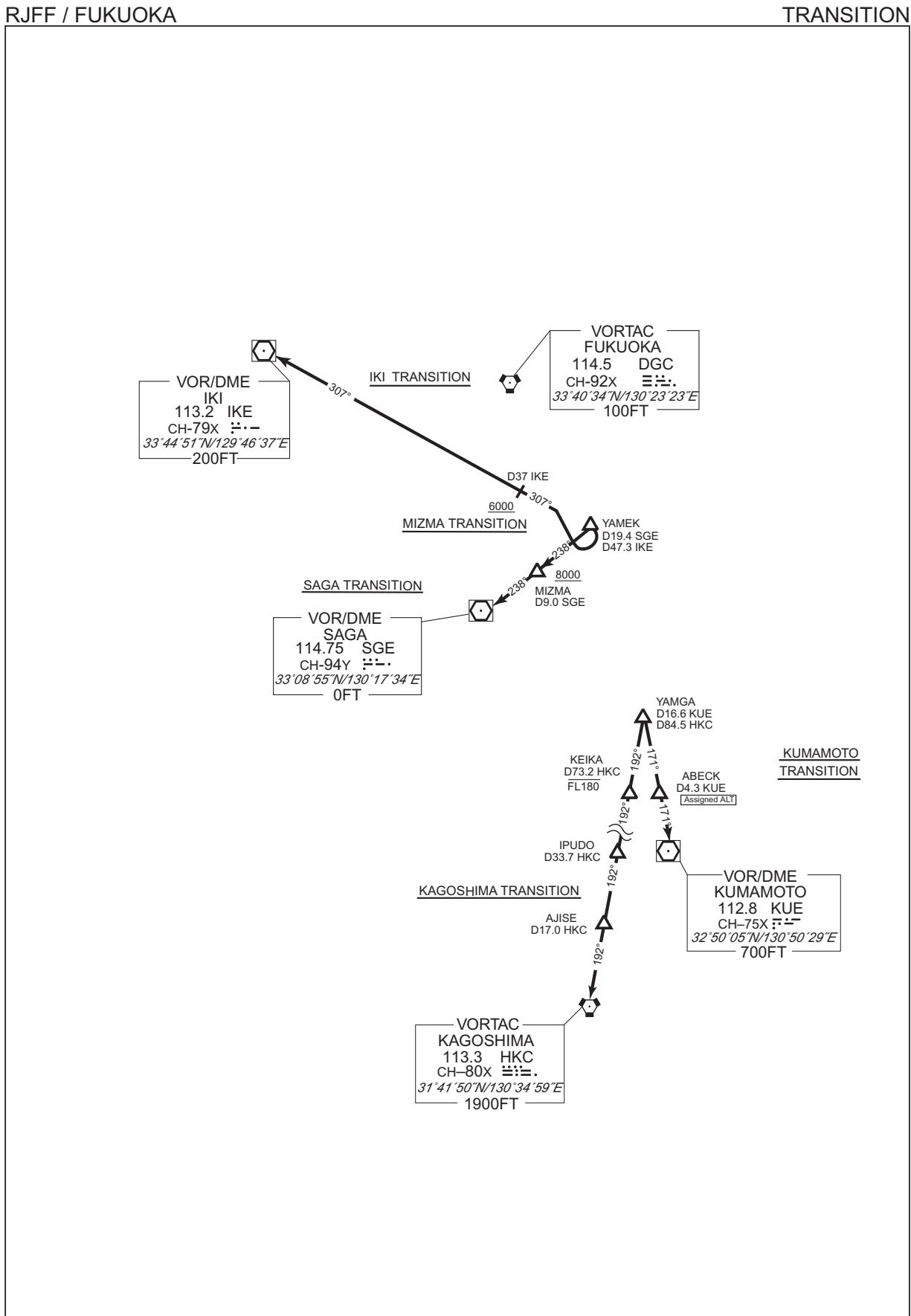
IKI TRANSITION

From over YAMEK, turn right, proceed via IKE R127 to IKE VOR/DME .

Cross IKE R127/37DME at or above 6000FT.

CHANGE : KAGOSHIMA TRANSITION.

STANDARD DEPARTURE CHART-INSTRUMENT



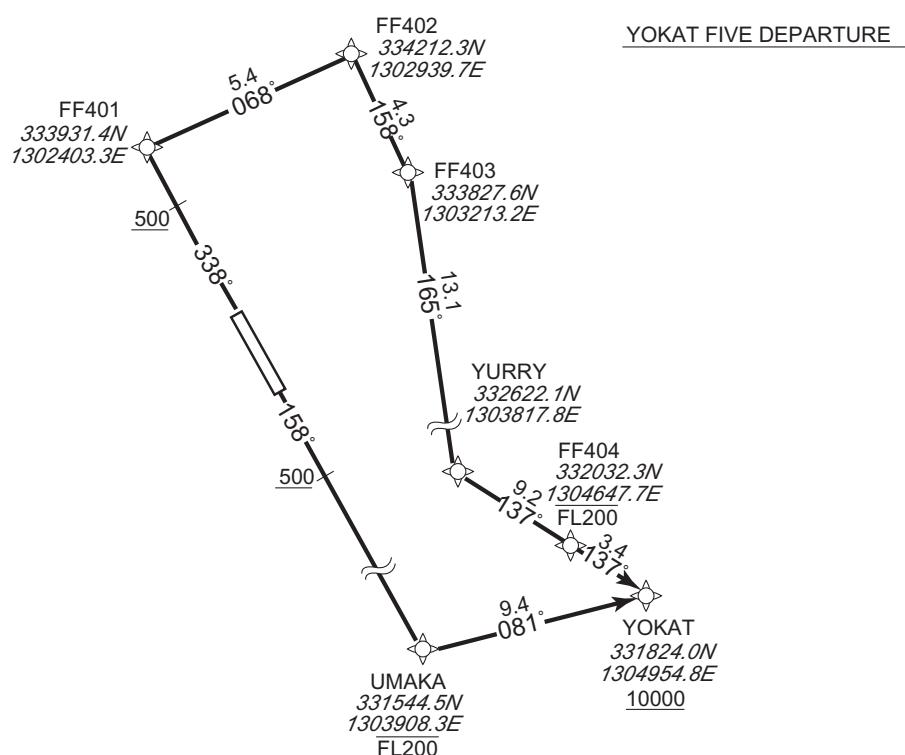
STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV SID

| YOKAT FIVE DEPARTURE | | 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 | RWY16 : DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 : DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401" |
| | DME GAP | RWY16 : DER~1.0NM FM DER RWY34 : DER~0.9NM FM DER 2.2NM to FF401~FF403 |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 8°W (2020)

YOKAT FIVE DEPARTURE

RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to FF404 at or below FL200, to YOKAT at or above 10000FT.

RWY16 : Climb on HDG 158° at or above 500FT, direct to UMAKA at or below FL200, to YOKAT at or above 10000FT.

CHANGE : FIX symbol(YURRY).

Note RWY34 : 7.0% climb gradient required up to 2800FT.

RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV SID

YOKAT FIVE DEPARTURE

RWY34

| 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 | — | — | 338 (330.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | FF401 | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 003 | TF | FF402 | — | 068 (060.1) | -7.7 | 5.4 | — | — | — | — | RNAV1 |
| 004 | TF | FF403 | — | 158 (150.4) | -7.7 | 4.3 | — | — | — | — | RNAV1 |
| 005 | TF | YURRY | — | 165 (157.2) | -7.7 | 13.1 | — | — | — | — | RNAV1 |
| 006 | TF | FF404 | — | 137 (129.4) | -7.7 | 9.2 | — | -FL200 | — | — | RNAV1 |
| 007 | TF | YOKAT | — | 137 (129.4) | -7.7 | 3.4 | — | +10000 | — | — | RNAV1 |

RWY16

| 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 | — | — | 158 (150.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | UMAKA | — | — | -7.7 | — | — | -FL200 | — | — | RNAV1 |
| 003 | TF | YOKAT | — | 081 (073.5) | -7.7 | 9.4 | — | +10000 | — | — | RNAV1 |

CHANGE : VAR. PROC renamed. PROC course.

STANDARD DEPARTURE CHART-INSTRUMENT

| RJFF / FUKUOKA | | RNAV TRANSITION |
|---|-----------------------|---|
| BRAID TRANSITION / MATSUYAMA TRANSITION / SALTY TRANSITON YANKS TRANSITION / SPIDE TRANSITION / SABAR TRANSITION | | RNAV 1 |
| Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. | Critical DME | SABAR TRANSITION : SWE "YOKAT ~ RUISA" SGE "HOSEN ~ RUISA" |
| | DME GAP | - |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVIDs for RNAV1 |
| VAR 8°W (2020) | | |
| BRAID TRANSITION | | From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to MARCO. |
| MATSUYAMA TRANSITION | | From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to MYE. |
| SALTY TRANSITION | | From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to SALTY. |
| YANKS TRANSITION | | From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to LUFFY, to CHOPP, to SANJI, to YANKS. |
| SPIDE TRANSITION | | From YOKAT at or above 10000FT, to KOHZA at or above FL140, to BRAID at or above FL170, to LUFFY, to SPIDE. |
| SABAR TRANSITION | | From YOKAT at or above 10000FT, to AMAGA at or above FL140, to HOSEN at or above FL170, to RUISA, to SABAR. |

CHANGE : VAR. CHOPP established. Course FM BRAID to SALTY. Course FM RUISA to SABAR.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

BRAID 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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KOHZA | — | 081 (073.6) | -7.7 | 9.9 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | BRAID | — | 081 (073.8) | -7.7 | 6.9 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | MARCO | — | 057 (049.7) | -7.7 | 64.8 | — | — | — | — | 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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KOHZA | — | 081 (073.6) | -7.7 | 9.9 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | BRAID | — | 081 (073.8) | -7.7 | 6.9 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | MYE | — | 078 (070.4) | -7.7 | 81.5 | — | — | — | — | 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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KOHZA | — | 081 (073.6) | -7.7 | 9.9 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | BRAID | — | 081 (073.8) | -7.7 | 6.9 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | SALTY | — | 080 (071.9) | -7.7 | 92.9 | — | — | — | — | RNAV1 |

CHANGE : VAR. Course FM BRAID to SALTY.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

YANKS 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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KOHZA | — | 081 (073.6) | -7.7 | 9.9 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | BRAID | — | 081 (073.8) | -7.7 | 6.9 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | LUFFY | — | 087 (079.8) | -7.7 | 58.8 | — | — | — | — | RNAV1 |
| 005 | TF | CHOPP | — | 079 (071.7) | -7.7 | 58.3 | — | — | — | — | RNAV1 |
| 006 | TF | SANJI | — | 080 (072.4) | -7.7 | 12.6 | — | — | — | — | RNAV1 |
| 007 | TF | YANKS | — | 080 (072.5) | -7.7 | 43.2 | — | — | — | — | RNAV1 |

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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | KOHZA | — | 081 (073.6) | -7.7 | 9.9 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | BRAID | — | 081 (073.8) | -7.7 | 6.9 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | LUFFY | — | 087 (079.8) | -7.7 | 58.8 | — | — | — | — | RNAV1 |
| 005 | TF | SPIDE | — | 088 (080.4) | -7.7 | 33.5 | — | — | — | — | RNAV1 |

SABAR 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 | YOKAT | — | — | -7.7 | — | — | +10000 | — | — | RNAV1 |
| 002 | TF | AMAGA | — | 104 (096.5) | -7.7 | 10.5 | — | +FL140 | — | — | RNAV1 |
| 003 | TF | HOSEN | — | 104 (096.6) | -7.7 | 6.6 | — | +FL170 | — | — | RNAV1 |
| 004 | TF | RUISA | — | 104 (096.7) | -7.7 | 16.9 | — | — | — | — | RNAV1 |
| 005 | TF | SABAR | — | 105 (096.9) | -7.7 | 31.6 | — | — | — | — | RNAV1 |

CHANGE : VAR. CHOPP established. Course FM RUISA to SABAR.

STANDARD DEPARTURE CHART - INSTRUMENT

| RJFF / FUKUOKA | | RNAV SID and TRANSITION |
|---|---|---|
| KURUME FOUR DEPARTURE GABAI TRANSITION / BRUIN TRANSITION / GENKAI 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 | RWY16 :DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 :DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401" BRUIN TRANSITION : DGC "2NM to OMUTA~OMUTA" DME GAP |
| | DME GAP | RWY16 :DER~1.0NM FM DER RWY34 :DER~0.9NM FM DER 2.2NM to FF401~FF403 GABAI TRANSITION : 6.4NM to SGE~SGE |
| | Inappropriate Navaids | Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVADs for RNAV1 |
| VAR 8°W (2020) | <p>The chart shows the following key points and routes:</p> <ul style="list-style-type: none"> KURUME FOUR DEPARTURE: A direct route from the VOR/DME station at IKI(IKE) to YAMEK via FF401, FF402, and FF403. GENKAI TRANSITION: A route from IKI(IKE) to DAIZE via SAGA(SGE). GABAI TRANSITION: A route from YAMEK to BRUIN via DAIZE. BRUIN TRANSITION: A route from YAMEK to OMUTA via BRUIN. RWY16 / RWY34: Departure routes involving climb gradients of 5.4% and 7.0% respectively, leading to various waypoints like FF401, FF402, FF403, YURRY, YAMEK, DAIZE, SAGA(SGE), BRUIN, and OMUTA. NOTES: <ul style="list-style-type: none"> IKI(IKE) coordinates: 334451.0N 1294636.7E VOR/DME IKI coordinates: 113.2 IKE CH-79X 33°44'51"N 129°46'37"E 200FT VOR/DME SAGA coordinates: 114.75 SGE CH-94Y 33°08'55"N 130°17'34"E 0FT | |
| CHANGE : FIX symbol(BRUIN, OMUTA, YAMEK, YURRY). | <p>KURUME FOUR DEPARTURE RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to YAMEK. RWY16 : Climb on HDG 158° at or above 500FT, direct to YAMEK.</p> <p>Note RWY34 : 7.0% climb gradient required up to 2800FT. RWY16 : 5.8% climb gradient required up to 1100FT. OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.</p> <p>BRUIN TRANSITION From YAMEK, to BRUIN, to OMUTA.</p> <p>GABAI TRANSITION From YAMEK, to SGE.</p> <p>GENKAI TRANSITION From YAMEK, to DAIZE to IKE.</p> | |

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

KURUME FOUR DEPARTURE

RWY34

| 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 | — | — | 338 (330.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | FF401 | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 003 | TF | FF402 | — | 068 (060.1) | -7.7 | 5.4 | — | — | — | — | RNAV1 |
| 004 | TF | FF403 | — | 158 (150.4) | -7.7 | 4.3 | — | — | — | — | RNAV1 |
| 005 | TF | YURRY | — | 165 (157.2) | -7.7 | 13.1 | — | — | — | — | RNAV1 |
| 006 | TF | YAMEK | — | 210 (202.7) | -7.7 | 5.7 | — | — | — | — | RNAV1 |

RWY16

| 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 | — | — | 158 (150.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | YAMEK | — | — | -7.7 | — | — | — | — | — | RNAV1 |

CHANGE : VAR. SID renamed. PROC course.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

BRUIN 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 | YAMEK | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 002 | TF | BRUIN | — | 210 (202.4) | -7.7 | 16.2 | — | — | — | — | RNAV1 |
| 003 | TF | OMUTA | — | 210 (202.3) | -7.7 | 2.8 | — | — | — | — | RNAV1 |

GABAI 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 | YAMEK | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 002 | TF | SGE | — | 239 (231.2) | -7.7 | 19.4 | — | — | — | — | RNAV1 |

GENKAI 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 | YAMEK | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 002 | TF | DAIZE | — | 240 (232.7) | -7.7 | 8.5 | — | — | — | — | RNAV1 |
| 003 | TF | IKE | — | 318 (310.4) | -7.7 | 44.8 | — | — | — | — | RNAV1 |

CHANGE : VAR. PROC course.

STANDARD DEPARTURE CHART - INSTRUMENT

| RJFF / FUKUOKA | | RNAV SID and TRANSITION | | | |
|---|-----------------------|-------------------------|--|--|--|
| MORIO FOUR DEPARTURE SATSUMA TRANSITION / SAKURA TRANSITION | | | RNAV 1 | | |
| <p>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.</p> <p>2) RADAR service required.</p> | Critical DME | | RWY16 :DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 :DGC "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401" | | |
| | DME GAP | | RWY16 :DER~1.0NM FM DER RWY34 :DER~0.9NM FM DER 2.2NM to FF401~FF403 | | |
| | Inappropriate Navaids | | See AD1.1.6.10.3. Inappropriate NAVADs for RNAV1 | | |
| VAR 8°W (2020) | | | | | |
| <p>MORIO FOUR DEPARTURE</p> <p>YURRY</p> <p>YAMGA</p> <p>KEIKA</p> <p>IPUDO</p> <p>AJISE</p> <p>KAGOSHIMA(HKC)</p> <p>VORTAC KAGOSHIMA</p> | | | | | |
| <p>CHANGE : FIX symbol(AJISE, IPUDO, KEIKA, YAMGA, YURRY).</p> <p>MORIO FOUR DEPARTURE</p> <p>RWY34 : Climb on HDG 338° at or above 500FT, direct to FF401, to FF402, to FF403, to YURRY, to FF405 at or below FL200, to YAMGA at or above 13000FT.</p> <p>RWY16 : Climb on HDG 158° at or above 500FT, direct to FF603 at or below FL200, to YAMGA at or above 13000FT.</p> <p>Note RWY34 : 7.0% climb gradient required up to 2800FT. RWY16 : 5.8% climb gradient required up to 1100FT. OBST ALT 399FT located at 1.2NM 138° FM end of RWY16. OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.</p> <p>SAKURA TRANSITION From YAMGA at or above 13000FT, to KUE.</p> <p>SATSUMA TRANSITION From YAMGA at or above 13000FT, to KEIKA at or below FL180, to IPUDO, to AJISE, to HKC.</p> | | | | | |

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

MORIO FOUR DEPARTURE

RWY34

| 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 | — | — | 338 (330.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | FF401 | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 003 | TF | FF402 | — | 068 (060.1) | -7.7 | 5.4 | — | — | — | — | RNAV1 |
| 004 | TF | FF403 | — | 158 (150.4) | -7.7 | 4.3 | — | — | — | — | RNAV1 |
| 005 | TF | YURRY | — | 165 (157.2) | -7.7 | 13.1 | — | — | — | — | RNAV1 |
| 006 | TF | FF405 | — | 172 (164.3) | -7.7 | 9.7 | — | -FL200 | — | — | RNAV1 |
| 007 | TF | YAMGA | — | 172 (164.3) | -7.7 | 11.4 | — | +13000 | — | — | RNAV1 |

RWY16

| 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 | — | — | 158 (150.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | FF603 | — | — | -7.7 | — | — | -FL200 | — | — | RNAV1 |
| 003 | TF | YAMGA | — | 160 (152.6) | -7.7 | 11.5 | — | +13000 | — | — | RNAV1 |

CHANGE : VAR. PROC renamed. PROC course. ALT restriction at YAMGA.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV TRANSITION

SAKURA 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 | YAMGA | — | — | -7.7 | — | — | +13000 | — | — | RNAV1 |
| 002 | TF | KUE | — | 172 (164.3) | -7.7 | 16.6 | — | — | — | — | RNAV1 |

SATSUMA 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 | YAMGA | — | — | -7.7 | — | — | +13000 | — | — | RNAV1 |
| 002 | TF | KEIKA | — | 194 (185.9) | -7.7 | 11.5 | — | -FL180 | — | — | RNAV1 |
| 003 | TF | IPUDO | — | 194 (185.8) | -7.7 | 39.5 | — | — | — | — | RNAV1 |
| 004 | TF | AJISE | — | 193 (185.8) | -7.7 | 16.7 | — | — | — | — | RNAV1 |
| 005 | TF | HKC | — | 193 (185.8) | -7.7 | 17.0 | — | — | — | — | RNAV1 |

CHANGE : IPUDO established. ALT restriction at KEIKA.

STANDARD DEPARTURE CHART - INSTRUMENT

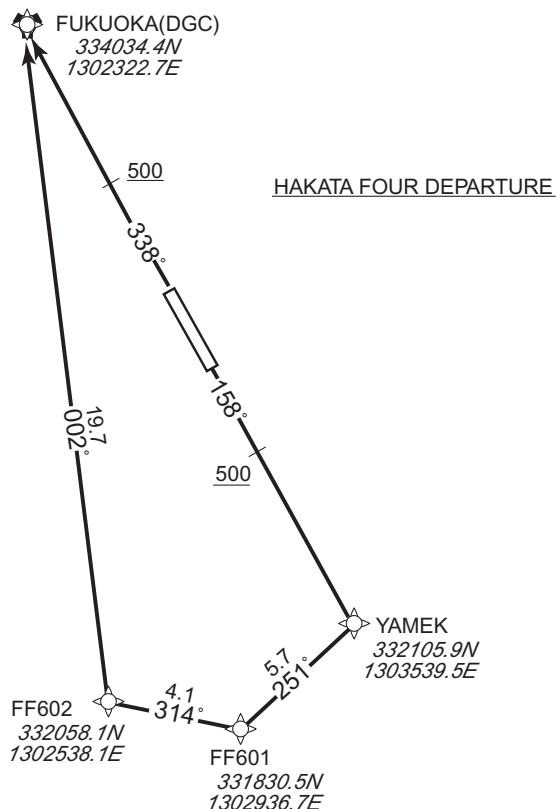
RJFF / FUKUOKA

RNAV SID

| HAKATA FOUR DEPARTURE | | 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. | Critical DME | RWY16 : DGC "1.0NM FM DER~5.4NM FM DER" IKE "1.0NM FM DER~5.4NM FM DER" RWY34 : DGC "4.6NM to DGC~3.0NM to DGC" IKE "4.6NM to DGC~3.0NM to DGC" |
| 2) RADAR service required. | DME GAP | RWY16 : DER~1.0NM FM DER RWY34 : DER~4.6NM to DGC 3.0NM to DGC~DGC |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

VAR 8°W (2020)

CHANGE : VAR. PROC renamed. PROC course.



HAKATA FOUR DEPARTURE

RWY34 : Climb on HDG 338° at or above 500FT, direct to DGC.

RWY16 : Climb on HDG 158° at or above 500FT, direct to YAMEK, to FF601, to FF602 to DGC.

Note RWY16 : 5.8% climb gradient required up to 1100FT.

OBST ALT 399FT located at 1.2NM 138° FM end of RWY16.

OBST ALT 1470FT located at 6.2NM 182° FM end of RWY16.

STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID

HAKATA FOUR DEPARTURE

RWY34

| 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 | — | — | 338 (330.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | DGC | — | — | -7.7 | — | — | — | — | — | RNAV1 |

RWY16

| 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 | — | — | 158 (150.3) | -7.7 | — | — | +500 | — | — | RNAV1 |
| 002 | DF | YAMEK | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 003 | TF | FF601 | — | 251 (242.9) | -7.7 | 5.7 | — | — | — | — | RNAV1 |
| 004 | TF | FF602 | — | 314 (306.5) | -7.7 | 4.1 | — | — | — | — | RNAV1 |
| 005 | TF | DGC | — | 002 (354.5) | -7.7 | 19.7 | — | — | — | — | RNAV1 |

CHANGE : VAR. PROC renamed. PROC course.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

STAR

LAGER ARRIVAL

From over LAGER, via DGC R338 to MALTS.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

EBISU ARRIVAL

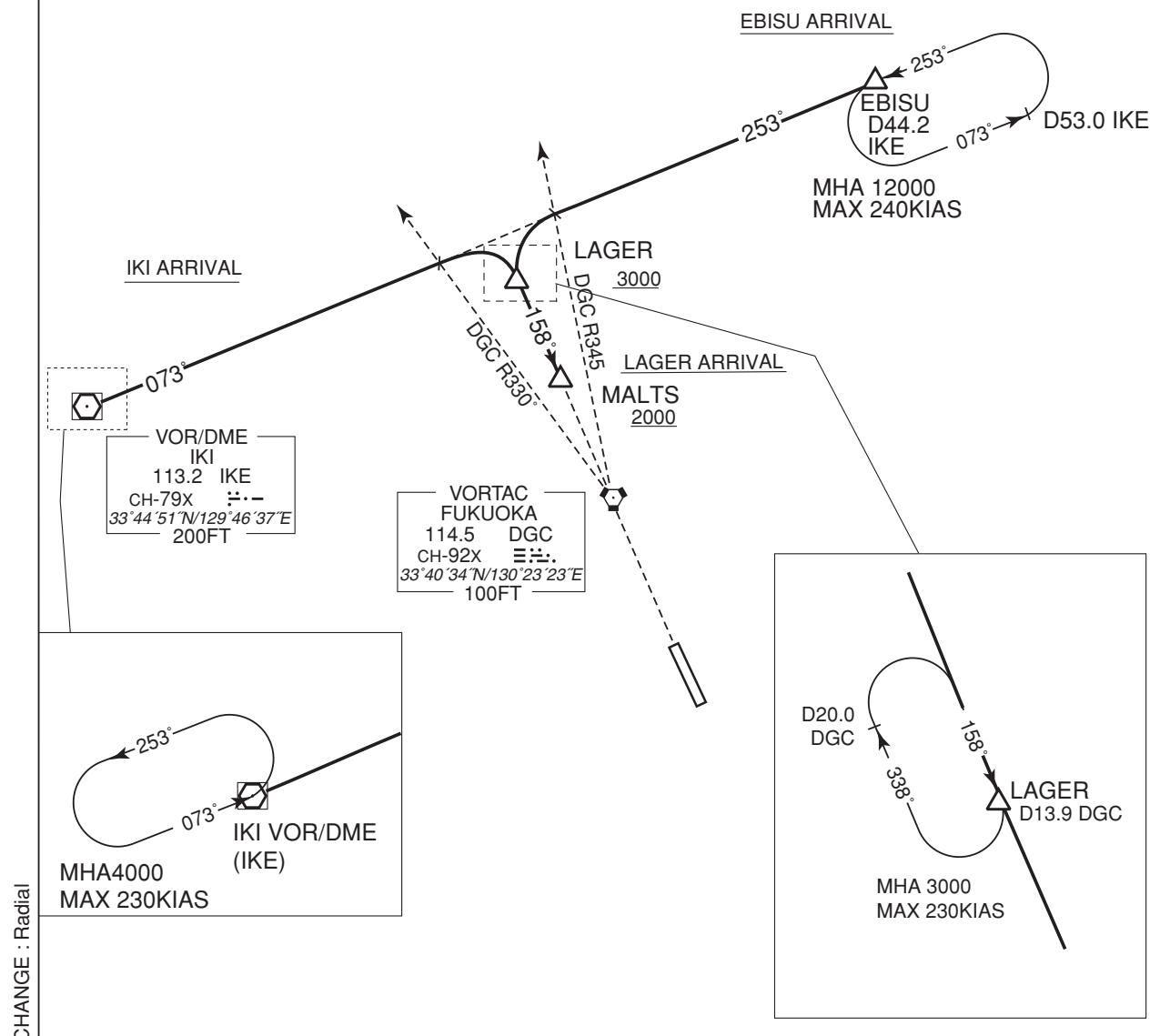
From over EBISU, via IKE R073 to intercept and proceed via DGC R338 to MALTS via LAGER.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

IKI ARRIVAL

From over IKI VOR/DME, via IKE R073 to intercept and proceed via DGC R338 to MALTS via LAGER.

Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

STAR

KAFRI EAST ARRIVAL

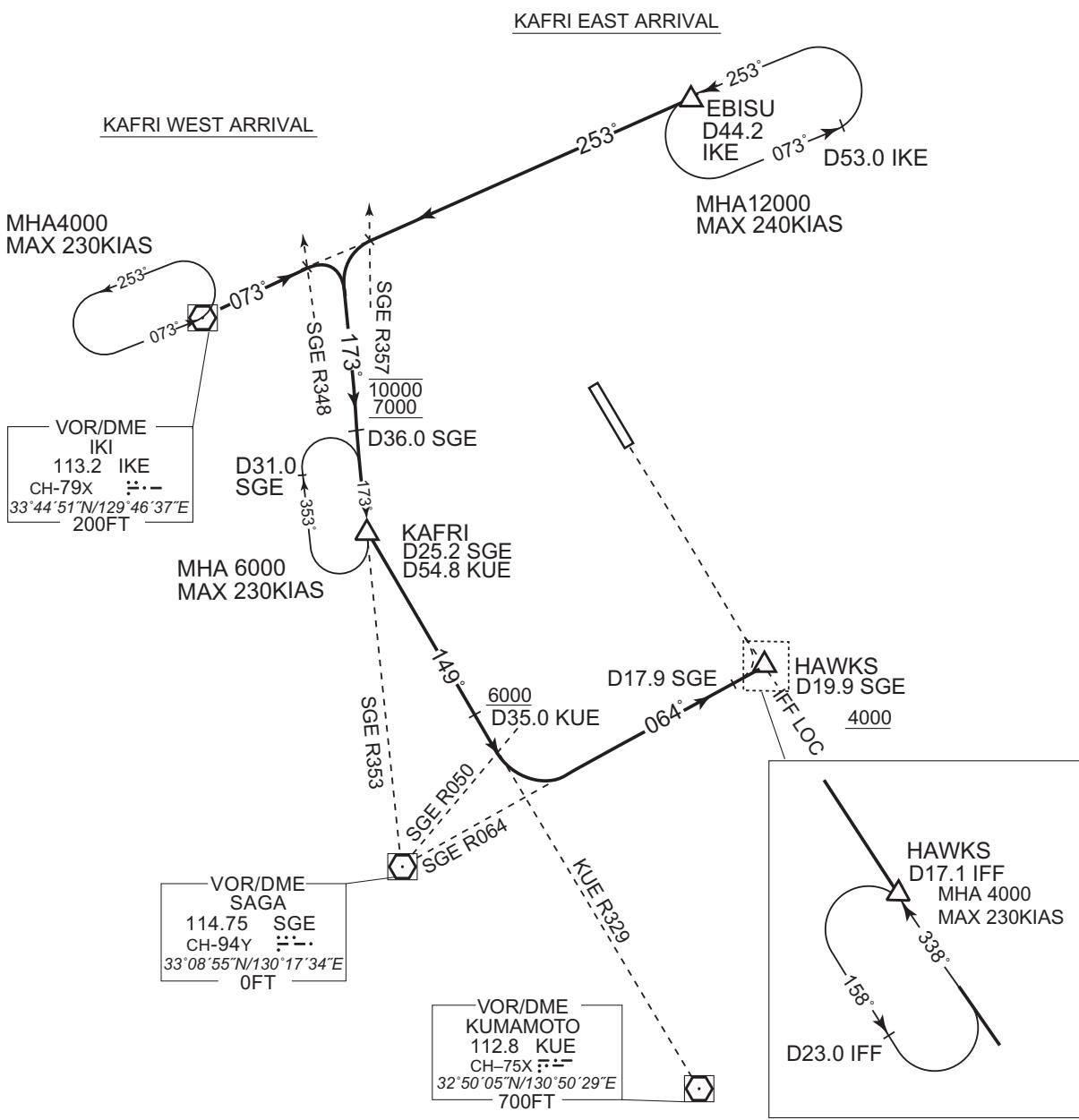
From over EBISU, proceed via IKE R073 to intercept and proceed via SGE R353 to KAFRI, via KUE R329 to intercept and proceed via SGE R064 to HAWKS.

Cross SGE R353/36.0DME between 7000FT and 10000FT, cross KUE R329/35.0DME at or above 6000FT, cross HAWKS at or above 4000FT.

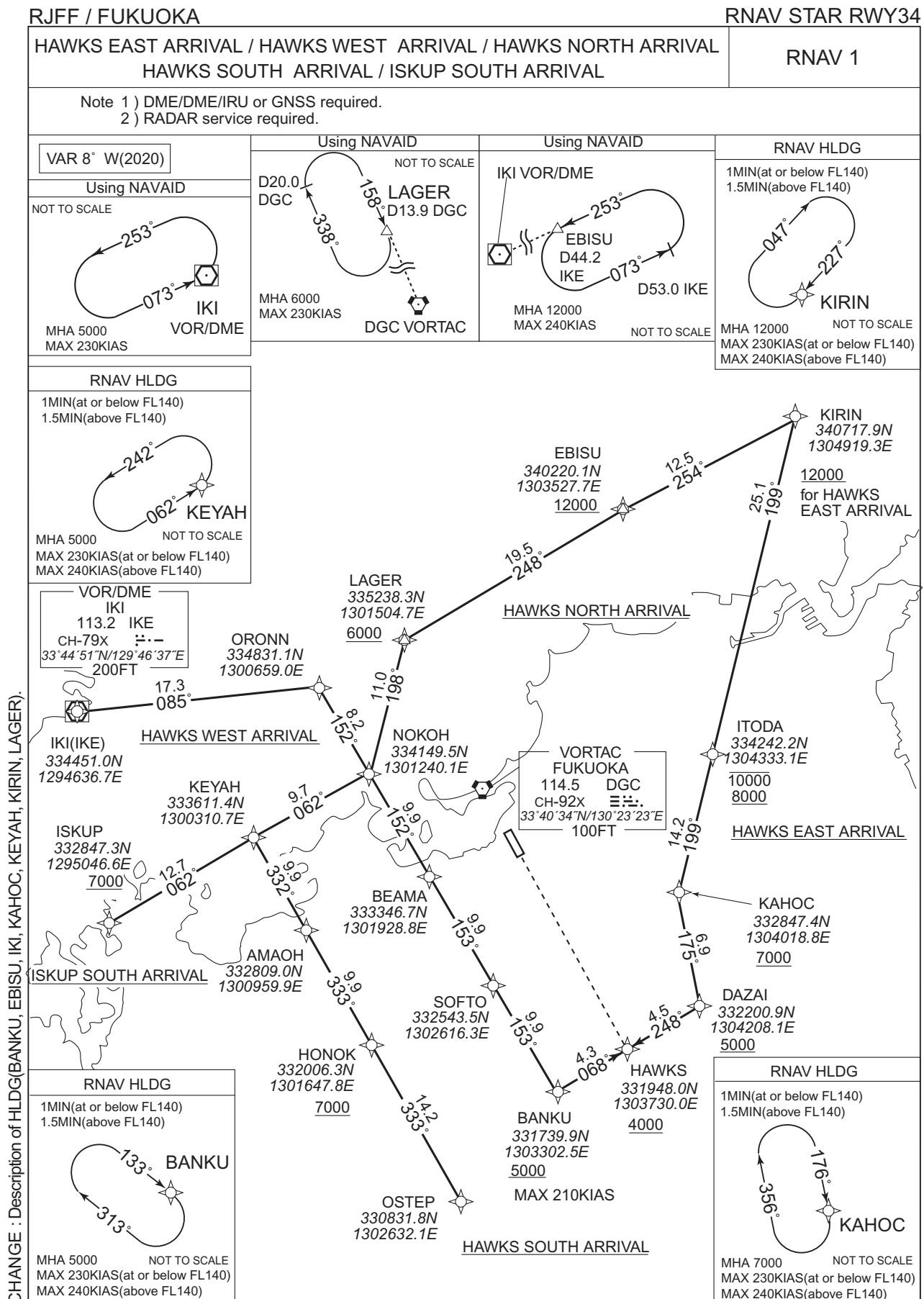
KAFRI WEST ARRIVAL

From over IKE VOR/DME, proceed via IKE R073 to intercept and proceed via SGE R353 to KAFRI, via KUE R329, to intercept and proceed via SGE R064 to HAWKS.

Cross SGE R353/36.0DME between 7000FT and 10000FT, cross KUE R329/35.0DME at or above 6000FT, cross HAWKS at or above 4000FT.



STANDARD ARRIVAL CHART-INSTRUMENT



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY34

HAWKS EAST ARRIVAL

From KIRIN at or above 12000FT, to ITODA between 10000FT and 8000FT, to KAHOC at or above 7000FT, to DAZAI at or above 5000FT, to HAWKS at or above 4000FT.

| | | |
|-----------------------|---|---|
| Critical DME | - | - |
| | - | - |
| | - | - |
| DME GAP | - | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 | |

| 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 | KIRIN | - | - | -7.7 | - | - | +12000 | - | - | RNAV1 |
| 002 | TF | ITODA | - | 199 (191.0) | -7.7 | 25.1 | - | -10000 +8000 | - | - | RNAV1 |
| 003 | TF | KAHOC | - | 199 (191.0) | -7.7 | 14.2 | - | +7000 | - | - | RNAV1 |
| 004 | TF | DAZAI | - | 175 (167.3) | -7.7 | 6.9 | - | +5000 | - | - | RNAV1 |
| 005 | TF | HAWKS | - | 248 (240.3) | -7.7 | 4.5 | - | +4000 | - | - | RNAV1 |

| 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 | KIRIN | 227 (218.7) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 12000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAHOC | 176 (167.3) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 7000 | - | -230(-14000) -240(+14001) | RNAV1 |

HAWKS WEST ARRIVAL

From IKE, to ORONN, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

| | | |
|-----------------------|-----|---|
| Critical DME | DGC | IKE - 15.0NM to ORONN 6.0NM to ORONN - 5.0NM to NOKOH |
| | KUE | IKE - 15.0NM to ORONN |
| | IKE | 6.0NM to ORONN - 5.0NM to NOKOH |
| | SGE | 9.0NM to BEAMA - 6.0NM to BEAMA |
| DME GAP | | 15.0NM to ORONN - 6.0NM to ORONN 5.0NM to NOKOH - 9.0NM to BEAMA |
| Inappropriate Navaids | | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | IKE | - | - | -7.7 | - | - | - | - | - | RNAV1 |
| 002 | TF | ORONN | - | 085 (077.7) | -7.7 | 17.3 | - | - | - | - | RNAV1 |
| 003 | TF | NOKOH | - | 152 (144.7) | -7.7 | 8.2 | - | - | - | - | RNAV1 |
| 004 | TF | BEAMA | - | 152 (144.8) | -7.7 | 9.9 | - | - | - | - | RNAV1 |
| 005 | TF | SOFTO | - | 153 (144.9) | -7.7 | 9.9 | - | - | - | - | RNAV1 |
| 006 | TF | BANKU | - | 153 (144.9) | -7.7 | 9.9 | - | +5000 | -210 | - | RNAV1 |
| 007 | TF | HAWKS | - | 068 (060.2) | -7.7 | 4.3 | - | +4000 | - | - | RNAV1 |

| 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 | BANKU | 133 (125.0) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 5000 | - | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY34

HAWKS NORTH ARRIVAL

From KIRIN, to EBISU at or above 12000FT, to LAGER at or above 6000FT, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

| | | |
|-----------------------|-----|---|
| Critical DME | IKE | 4.0NM to LAGER - 3.0NM to NOKOH |
| | DGC | LAGER - 3.0NM to NOKOH |
| | SGE | 9.0NM to BEAMA - 6.0NM to BEAMA |
| DME GAP | | 3.0NM to NOKOH - 9.0NM to BEAMA |
| Inappropriate Navaids | | See AD1.1.6.10.3. Inappropriate NAVAIDS for RNAV1 |

| 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 | KIRIN | - | - | -7.7 | - | - | - | - | - | RNAV1 |
| 002 | TF | EBISU | - | 254 (246.7) | -7.7 | 12.5 | - | +12000 | - | - | RNAV1 |
| 003 | TF | LAGER | - | 248 (240.3) | -7.7 | 19.5 | - | +6000 | - | - | RNAV1 |
| 004 | TF | NOKOH | - | 198 (190.5) | -7.7 | 11.0 | - | - | - | - | RNAV1 |
| 005 | TF | BEAMA | - | 152 (144.8) | -7.7 | 9.9 | - | - | - | - | RNAV1 |
| 006 | TF | SOFTO | - | 153 (144.9) | -7.7 | 9.9 | - | - | - | - | RNAV1 |
| 007 | TF | BANKU | - | 153 (144.9) | -7.7 | 9.9 | - | +5000 | -210 | - | RNAV1 |
| 008 | TF | HAWKS | - | 068 (060.2) | -7.7 | 4.3 | - | +4000 | - | - | RNAV1 |

| 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 | KIRIN | 227 (218.7) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 12000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BANKU | 133 (125.0) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 5000 | - | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : VAR. PROC course. HLDG course.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY34

HAWKS SOUTH ARRIVAL

From OSTEP, to HONOK at or above 7000FT, to AMAOH, to KEYAH, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

| | | |
|-----------------------|---|---|
| Critical DME | SGE | 4.0NM to NOKOH - NOKOH 9.0NM to BEAMA - 6.0NM to BEAMA |
| DME GAP | NOKOH - 9.0NM to BEAMA | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 | OSTEP | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 002 | TF | HONOK | — | 333 (324.9) | -7.7 | 14.2 | — | +7000 | — | — | RNAV1 |
| 003 | TF | AMAOH | — | 333 (324.8) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 004 | TF | KEYAH | — | 332 (324.8) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 005 | TF | NOKOH | — | 062 (054.5) | -7.7 | 9.7 | — | — | — | — | RNAV1 |
| 006 | TF | BEAMA | — | 152 (144.8) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 007 | TF | SOFTO | — | 153 (144.9) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 008 | TF | BANKU | — | 153 (144.9) | -7.7 | 9.9 | — | +5000 | -210 | — | RNAV1 |
| 009 | TF | HAWKS | — | 068 (060.2) | -7.7 | 4.3 | — | +4000 | — | — | RNAV1 |

| 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 | KEYAH | 062 (054.5) | -7.7 | 1.0(-14000) 1.5(+14001) | L | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BANKU | 133 (125.0) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : VAR. PROC course. HLDG course(BANKU).

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY34

ISKUP SOUTH ARRIVAL

From ISKUP at or above 7000FT, to KEYAH, to NOKOH, to BEAMA, to SOFTO, to BANKU at or above 5000FT, to HAWKS at or above 4000FT.

| | | |
|-----------------------|---|---|
| Critical DME | SGE | 4.0NM to NOKOH - NOKOH 9.0NM to BEAMA - 6.0NM to BEAMA |
| DME GAP | | NOKOH - 9.0NM to BEAMA |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 | ISKUP | — | — | -7.7 | — | — | +7000 | — | — | RNAV1 |
| 002 | TF | KEYAH | — | 062 (054.3) | -7.7 | 12.7 | — | — | — | — | RNAV1 |
| 003 | TF | NOKOH | — | 062 (054.5) | -7.7 | 9.7 | — | — | — | — | RNAV1 |
| 004 | TF | BEAMA | — | 152 (144.8) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 005 | TF | SOFTO | — | 153 (144.9) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 006 | TF | BANKU | — | 153 (144.9) | -7.7 | 9.9 | — | +5000 | -210 | — | RNAV1 |
| 007 | TF | HAWKS | — | 068 (060.2) | -7.7 | 4.3 | — | +4000 | — | — | RNAV1 |

| 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 | KEYAH | 062 (054.5) | -7.7 | 1.0(-14000) 1.5(+14001) | L | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BANKU | 133 (125.0) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC.

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STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

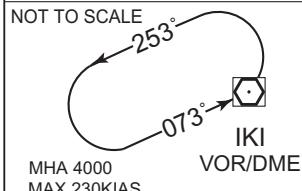
MALTS EAST ARRIVAL / MALTS WEST ARRIVAL
MALTS SOUTH ARRIVAL / ISKUP NORTH ARRIVAL

RNAV 1

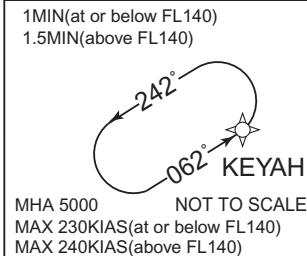
- Note 1) DME/DME/IRU or GNSS required.
2) RADAR service required.

[VAR 8° W(2020)]

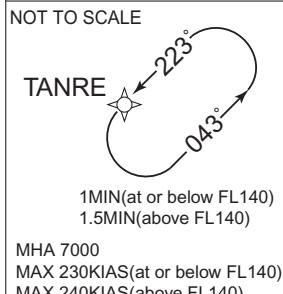
Using NAVAID



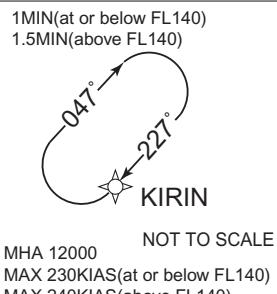
RNAV HLDG



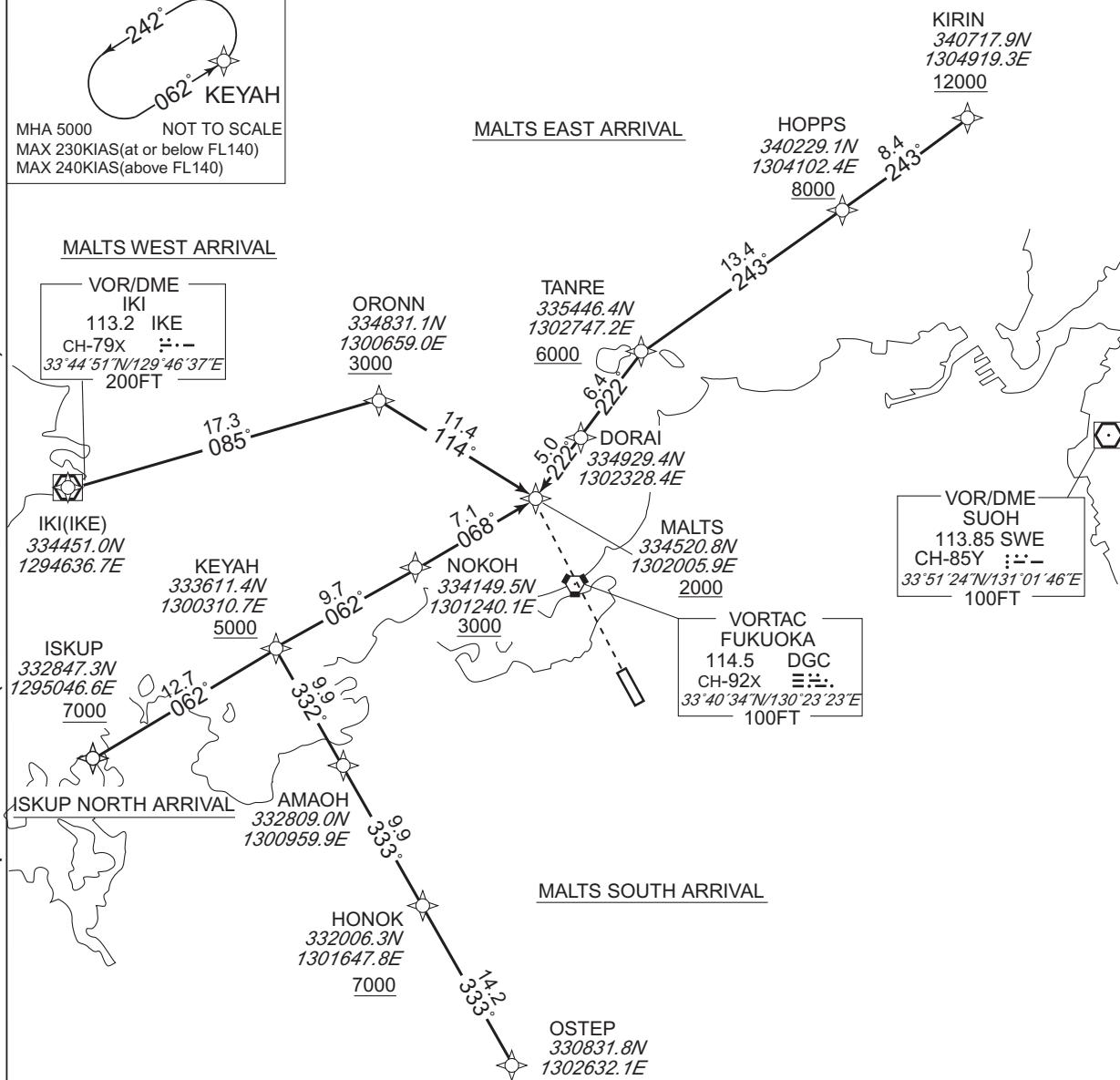
RNAV HLDG



RNAV HLDG



CHANGE : Description of HLDG(IKI, KEYAH, KIRIN, TANRE).



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

MALTS EAST ARRIVAL

From KIRIN at or above 12000FT, to HOPPS at or above 8000FT, to TANRE at or above 6000FT, to DORAI, to MALTS at or above 2000FT.

| | | |
|-----------------------|---|---------------|
| Critical DME | - | - |
| | DGC | TANRE - MALTS |
| DME GAP | - | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 | KIRIN | - | - | -7.7 | - | - | +12000 | - | - | RNAV1 |
| 002 | TF | HOPPS | - | 243 (235.0) | -7.7 | 8.4 | - | +8000 | - | - | RNAV1 |
| 003 | TF | TANRE | - | 243 (235.0) | -7.7 | 13.4 | - | +6000 | - | - | RNAV1 |
| 004 | TF | DORAI | - | 222 (214.2) | -7.7 | 6.4 | - | - | - | - | RNAV1 |
| 005 | TF | MALTS | - | 222 (214.1) | -7.7 | 5.0 | - | +2000 | - | - | RNAV1 |

| 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 | KIRIN | 227 (218.7) | -7.7 | 1.0(-14000) 1.5(+14001) | R | 12000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | TANRE | 223 (214.2) | -7.7 | 1.0(-14000) 1.5(+14001) | L | 7000 | - | -230(-14000) -240(+14001) | RNAV1 |

MALTS WEST ARRIVAL

From IKE, to ORONN at or above 3000FT, to MALTS at or above 2000FT.

| | | |
|-----------------------|-----|---|
| Critical DME | DGC | IKE - 15.0NM to ORONN 6.0NM to ORONN - MALTS |
| | KUE | IKE - 15.0NM to ORONN |
| | IKE | 6.0NM to ORONN - MALTS |
| DME GAP | | 15NM to ORONN - 6.0NM to ORONN |
| Inappropriate Navaids | | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |

| 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 | IKE | - | - | -7.7 | - | - | - | - | - | RNAV1 |
| 002 | TF | ORONN | - | 085 (077.7) | -7.7 | 17.3 | - | +3000 | - | - | RNAV1 |
| 003 | TF | MALTS | - | 114 (106.2) | -7.7 | 11.4 | - | +2000 | - | - | RNAV1 |

CHANGE : VAR. PROC course. HDG course.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

MALTS SOUTH ARRIVAL

From OSTEP, to HONOK at or above 7000FT, to AMAOH, to KEYAH at or above 5000FT, to NOKOH at or above 3000FT, to MALTS at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | SGE | 4.0NM to NOKOH - NOKOH |
| | IKE | 2.0NM to MALTS - MALTS |
| | DGC | 2.0NM to MALTS - MALTS |
| DME GAP | NOKOH - 2.0NM to MALTS | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 | OSTEP | — | — | -7.7 | — | — | — | — | — | RNAV1 |
| 002 | TF | HONOK | — | 333 (324.9) | -7.7 | 14.2 | — | +7000 | — | — | RNAV1 |
| 003 | TF | AMAOH | — | 333 (324.8) | -7.7 | 9.9 | — | — | — | — | RNAV1 |
| 004 | TF | KEYAH | — | 332 (324.8) | -7.7 | 9.9 | — | +5000 | — | — | RNAV1 |
| 005 | TF | NOKOH | — | 062 (054.5) | -7.7 | 9.7 | — | +3000 | — | — | RNAV1 |
| 006 | TF | MALTS | — | 068 (060.3) | -7.7 | 7.1 | — | +2000 | — | — | RNAV1 |

| 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 | KEYAH | 062 (054.5) | -7.7 | 1.0(-14000) 1.5(+14001) | L | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |

ISKUP NORTH ARRIVAL

From ISKUP at or above 7000FT, to KEYAH at or above 5000FT, to NOKOH at or above 3000FT, to MALTS at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | SGE | 4.0NM to NOKOH - NOKOH |
| | IKE | 2.0NM to MALTS - MALTS |
| | DGC | 2.0NM to MALTS - MALTS |
| DME GAP | NOKOH - 2.0NM to MALTS | |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

| 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 | ISKUP | — | — | -7.7 | — | — | +7000 | — | — | RNAV1 |
| 002 | TF | KEYAH | — | 062 (054.3) | -7.7 | 12.7 | — | +5000 | — | — | RNAV1 |
| 003 | TF | NOKOH | — | 062 (054.5) | -7.7 | 9.7 | — | +3000 | — | — | RNAV1 |
| 004 | TF | MALTS | — | 068 (060.3) | -7.7 | 7.1 | — | +2000 | — | — | RNAV1 |

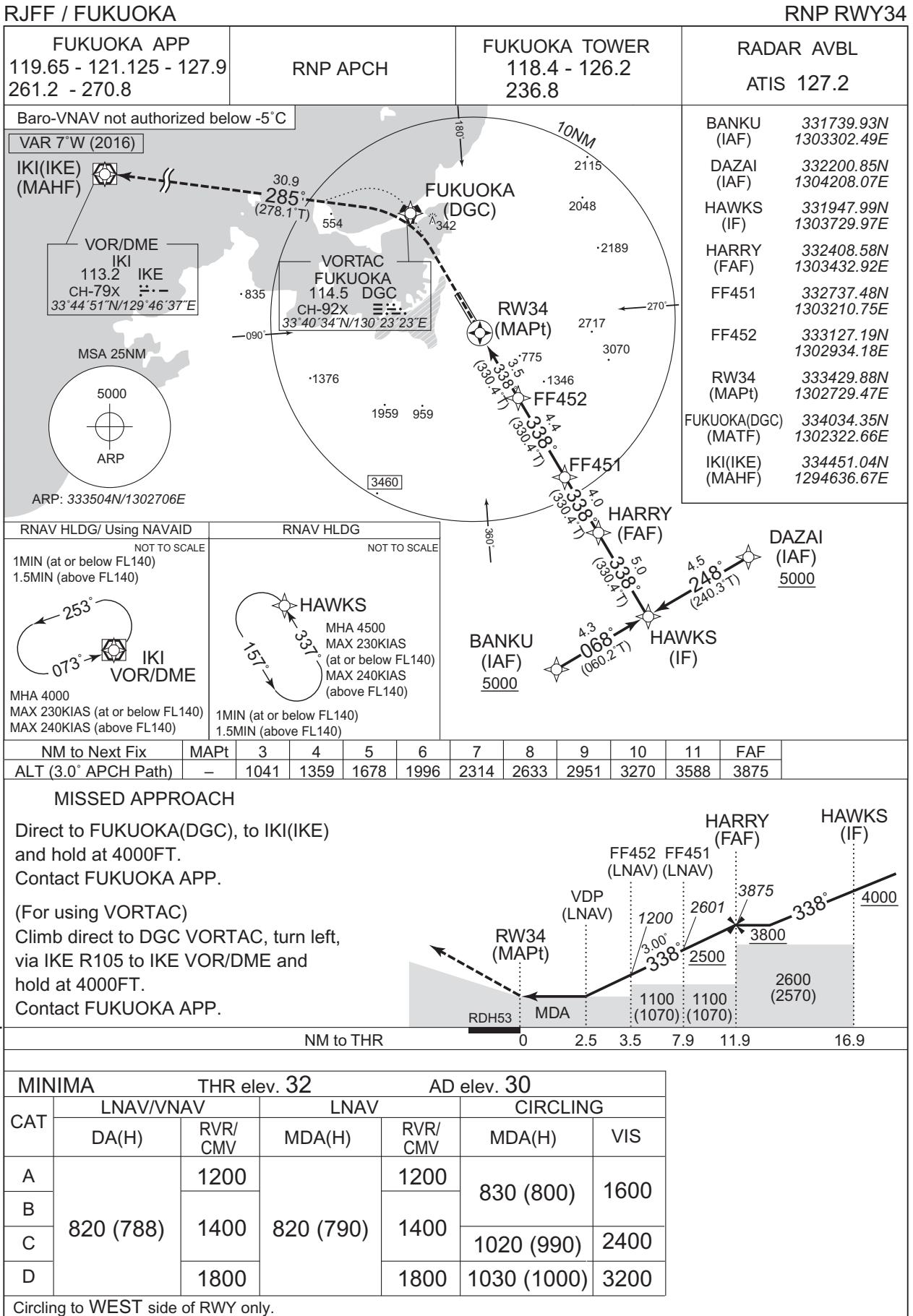
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|---------------------|-----------------------|--------------------|----------------------------|----------------|-----------------------|-----------------------|------------------------------|--------------------------|
| Hold | KEYAH | 062 (054.5) | -7.7 | 1.0(-14000) 1.5(+14001) | L | 5000 | — | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : VAR. New PROC(ISKUP NORTH ARRIVAL). PROC course.

INSTRUMENT APPROACH CHART

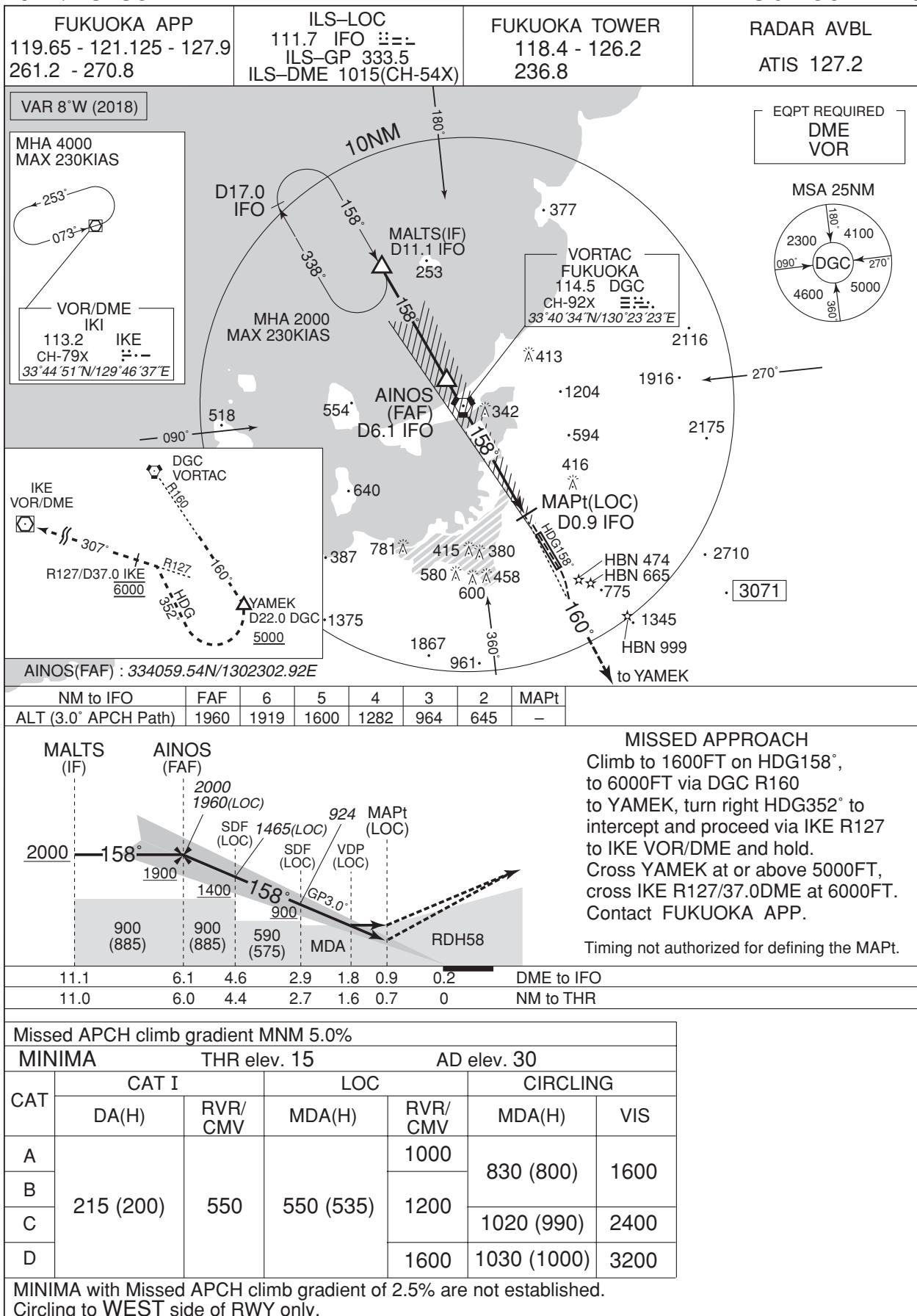


INSTRUMENT APPROACH CHART



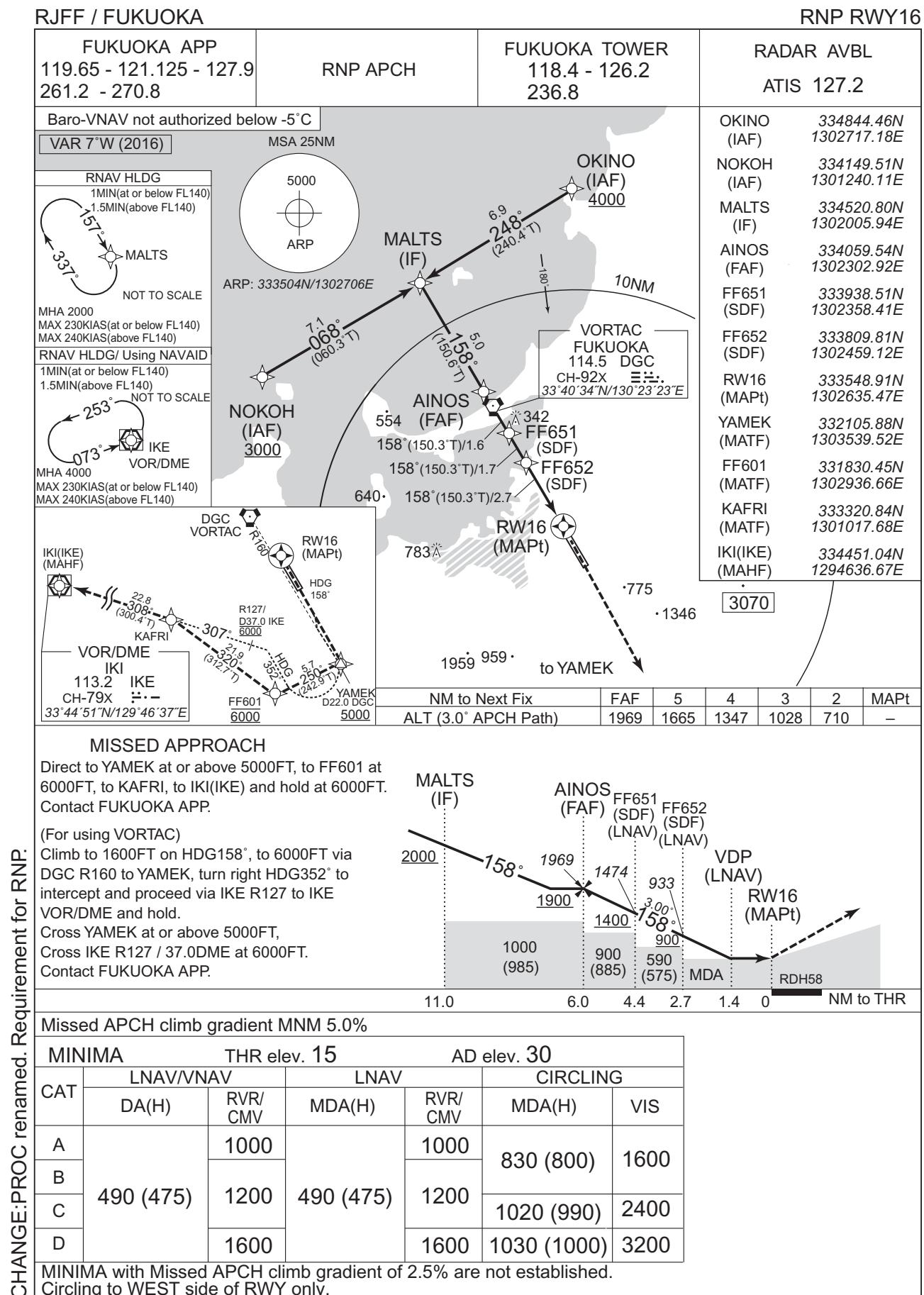
INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

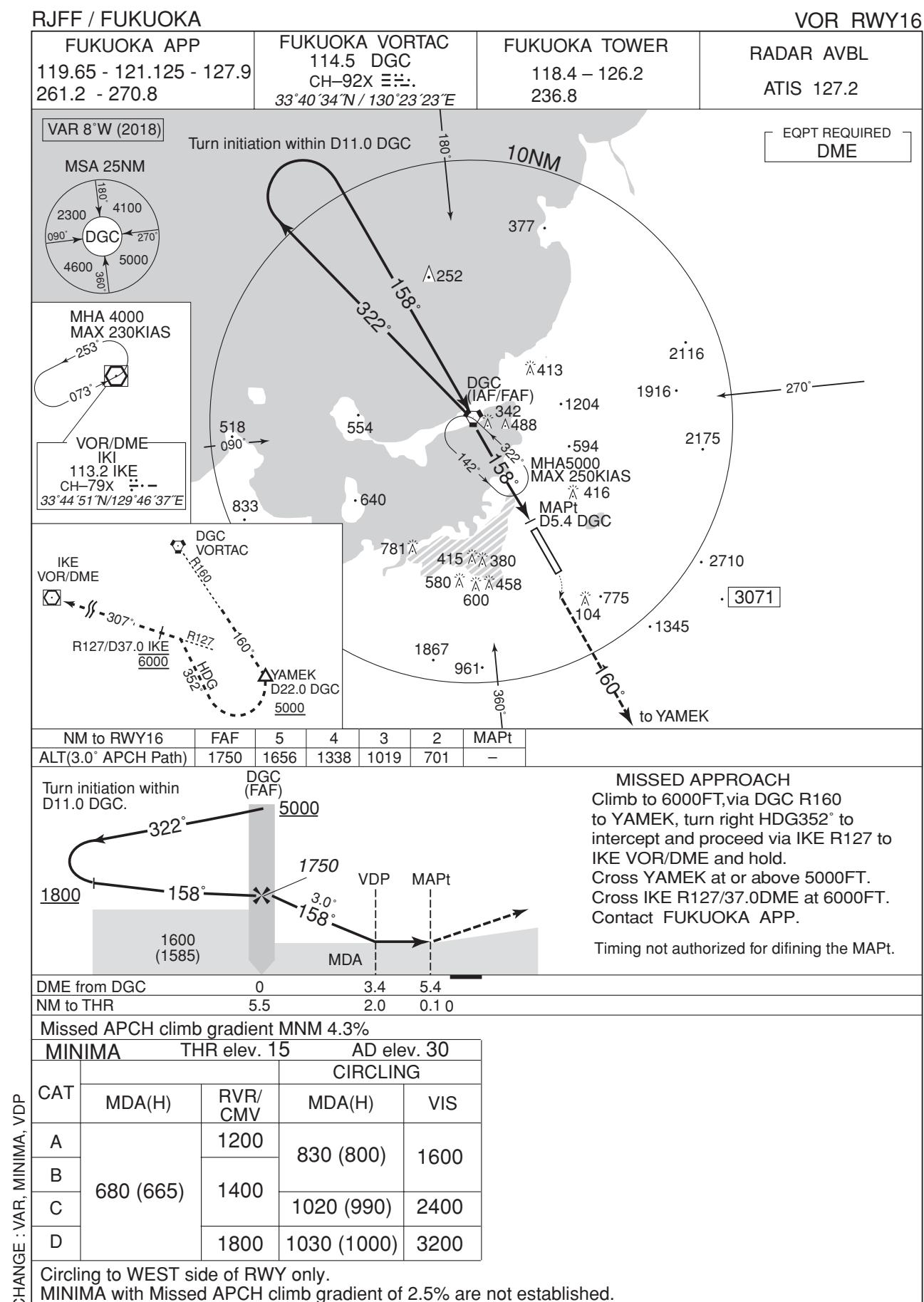


CHANGE : VAR

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

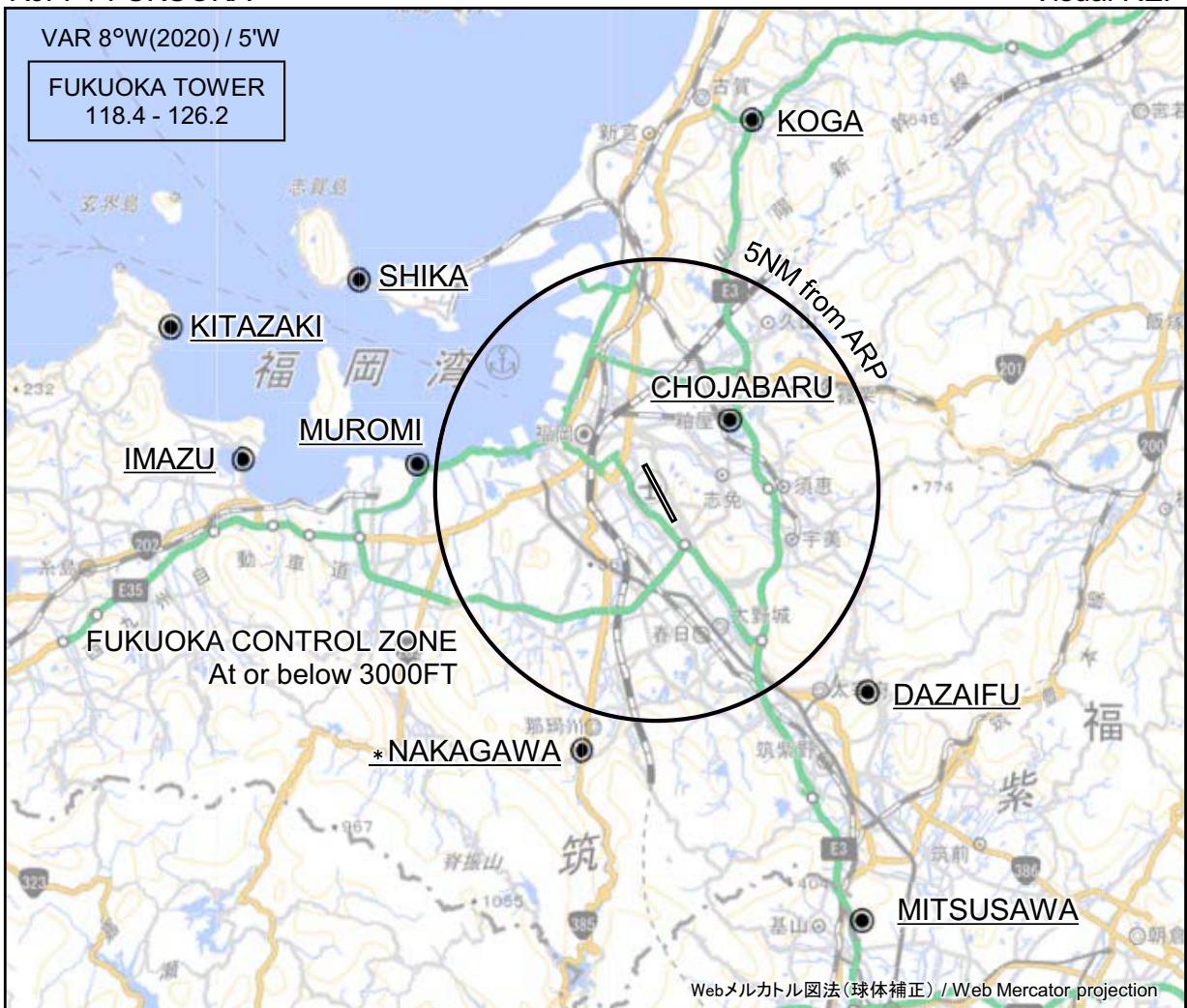


INSTRUMENT APPROACH CHART



RJFF / FUKUOKA

Visual REP

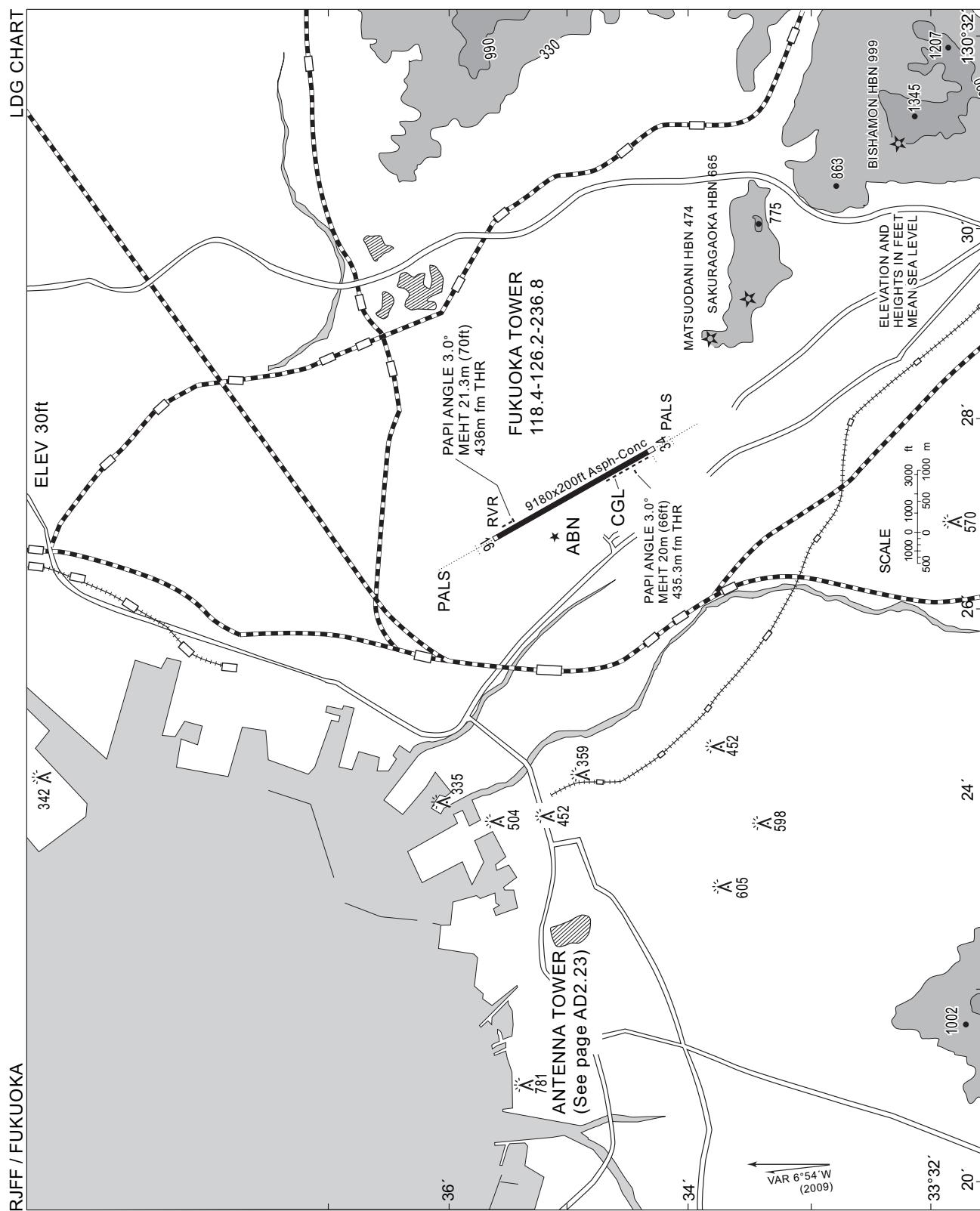


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

| Call sign | BRG / DIST from ARP | Remarks |
|-------------------|---------------------|-----------------------------|
| 古賀 Koga | 014°T / 8.4NM | 高速道路インターチェンジ Interchange |
| 長者原 Chojabaru | 046°T / 2.3NM | ドーム型建造物 Dome |
| 太宰府 Dazaifu | 133°T / 6.4NM | ゴルフ場 Golf Course |
| 三沢 Mitsusawa | 153°T / 10.4NM | ゴルフ場 Golf Course |
| * 那珂川 Nakagawa | 197°T / 5.8NM | 松尾橋 Bridge |
| 室見 Muromi | 277°T / 5.4NM | 室見川河口 River mouth |
| 今津 Imazu | 275°T / 9.4NM | 今津橋 Bridge |
| 志賀 Shika | 305°T / 8.2NM | 志賀島橋 Bridge |
| 北崎 Kitazaki | 289°T / 11.5NM | 漁港 Harbor |

CHANGE : Map updated. BRG/DIST from ARP.

*ヘリコプター用 Use For Helicopter



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Minimum Vectoring Altitude CHART

