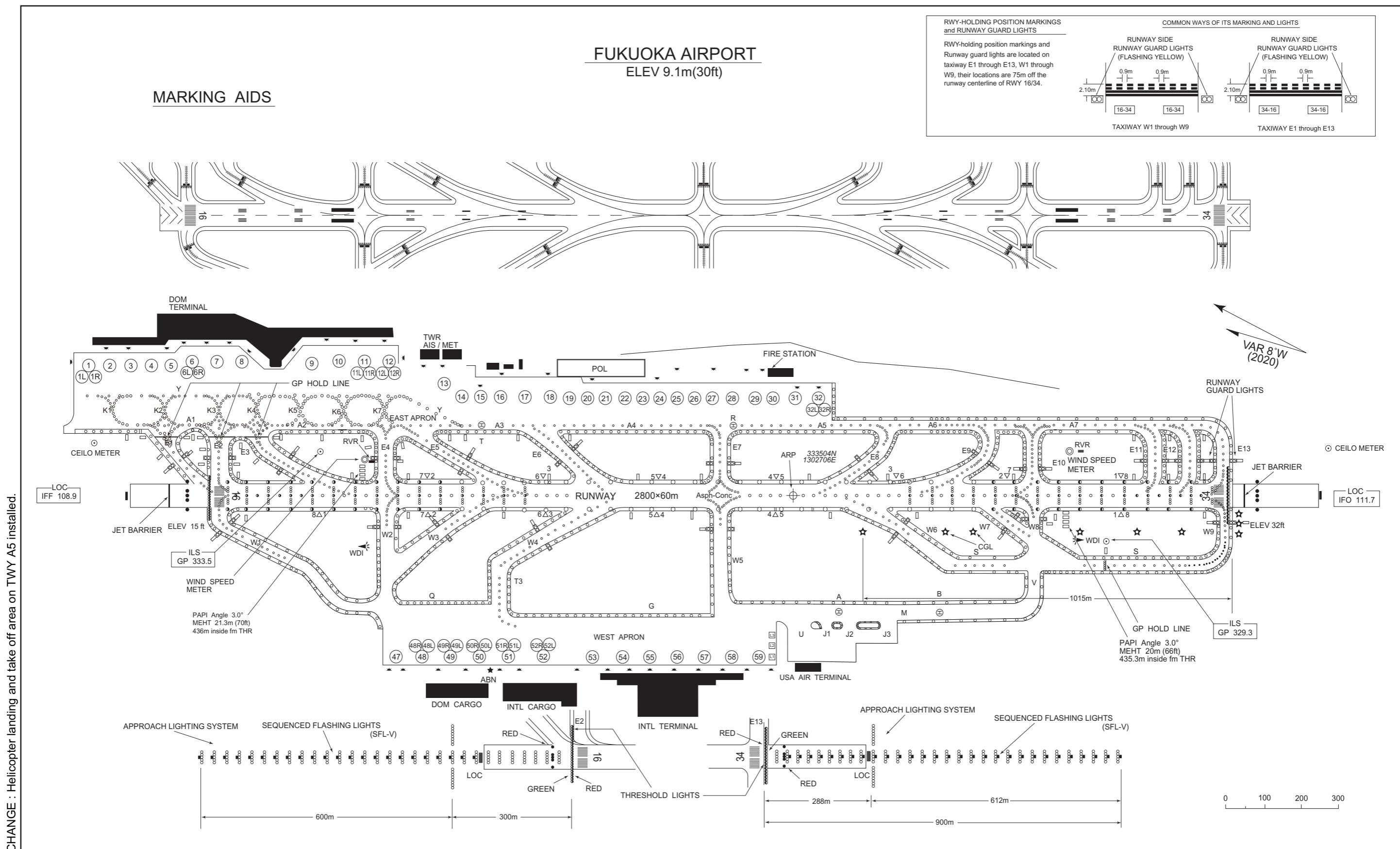
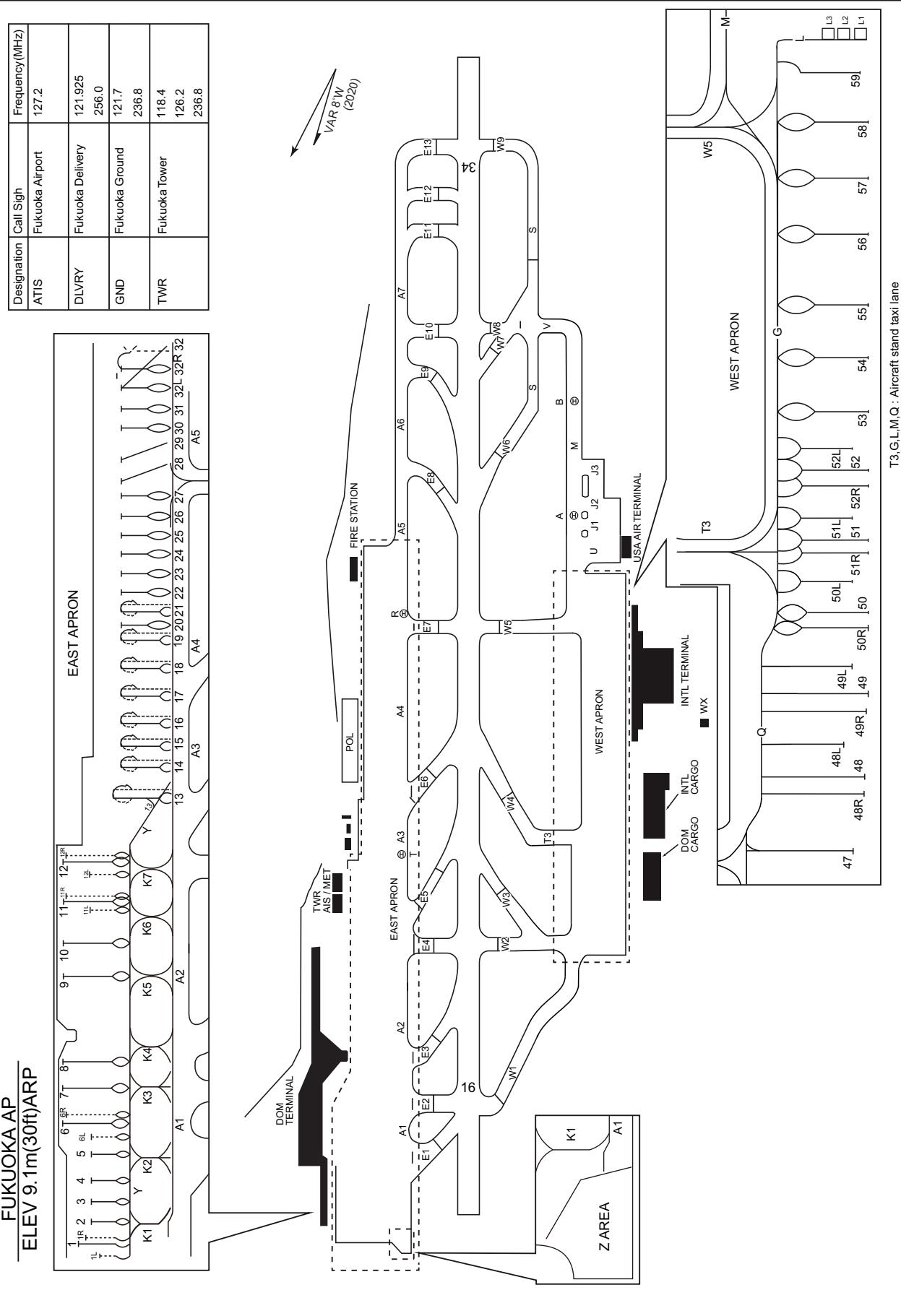


AERODROME CHART



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



INTENTIONALLY LEFT BLANK

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



AERODROME OBSTACLE CHART - ICAO TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



CHANGE:Update

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.



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 .

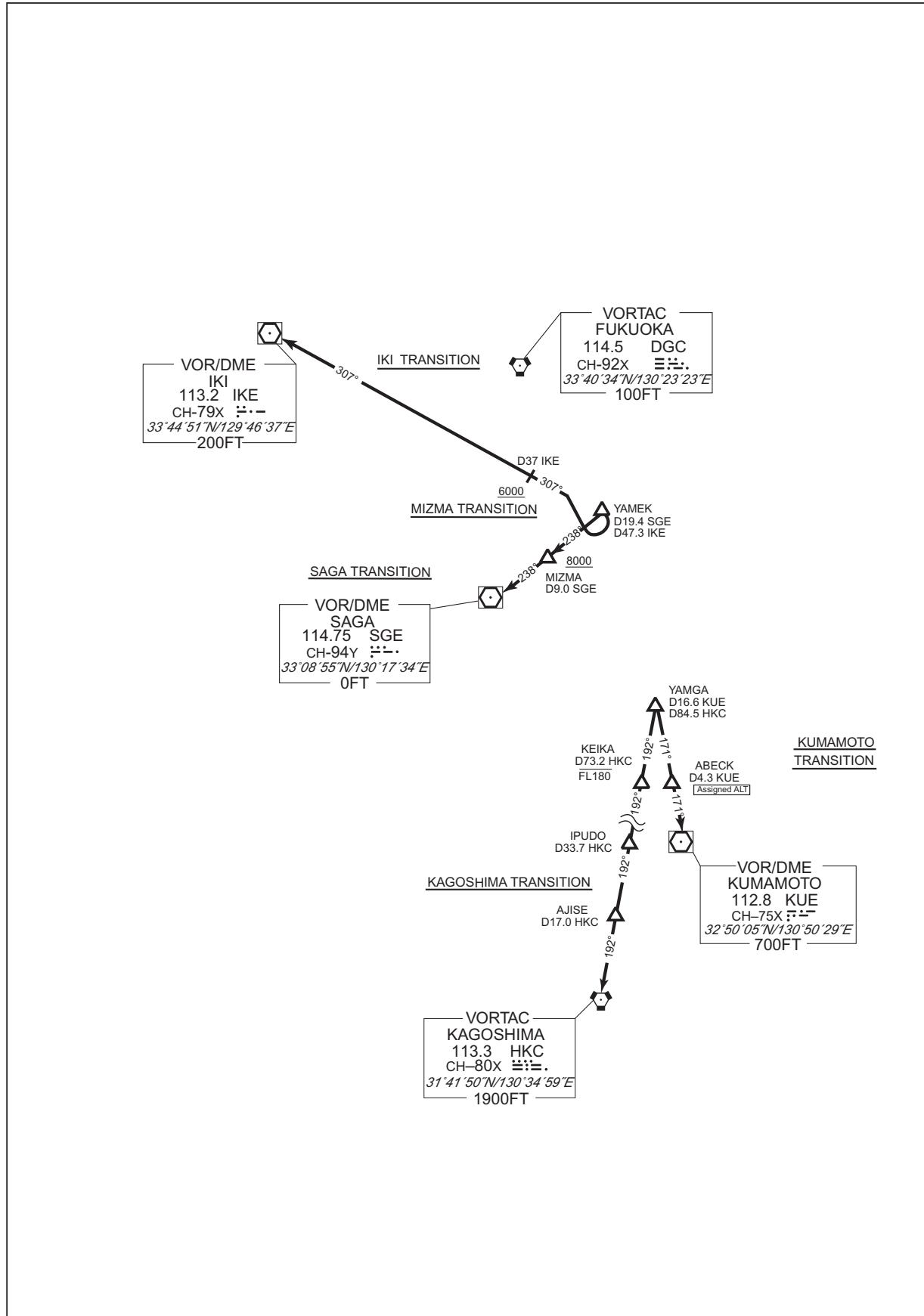
Cross IKE R127/37DME at or above 6000FT.

CHANGE : KAGOSHIMA TRANSITION.

STANDARD DEPARTURE CHART-INSTRUMENT

RJFF / FUKUOKA

TRANSITION



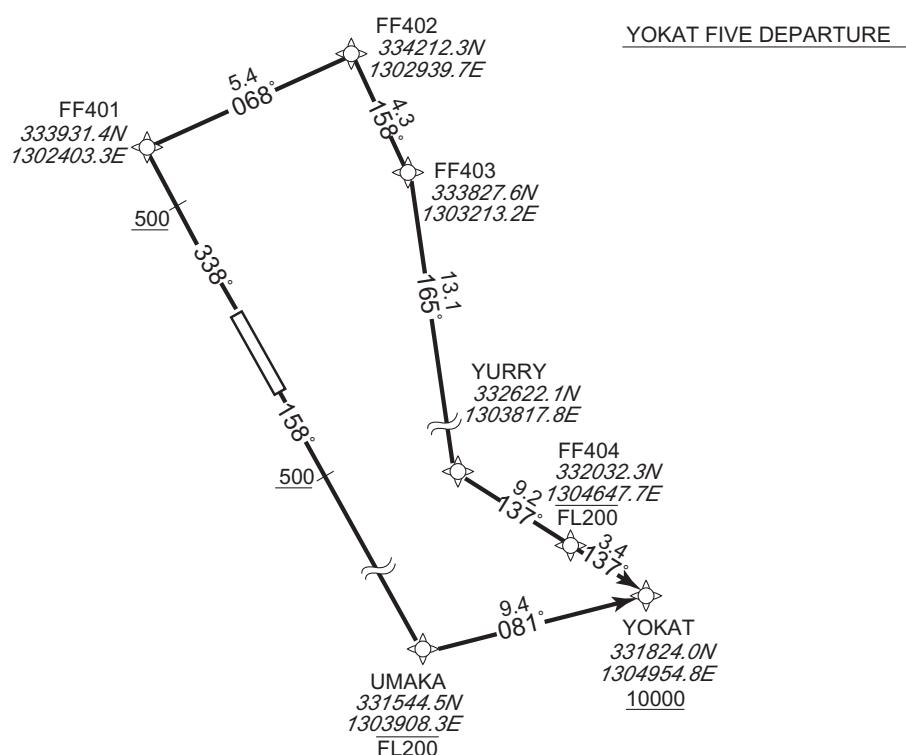
STANDARD DEPARTURE CHART-INSTRUMENT

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) | | <p>The chart illustrates the RNAV 1 transition routes originating from YOKAT at or above 10000FT. The routes include:</p> <ul style="list-style-type: none"> BRAID TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to MARCO (340446.0N, 1320850.2E) at 64.8°/057°. MATSUYAMA TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to MATSUYAMA (MYE) (334948.4N, 1324132.0E) at 078°/181.5°. SALTY TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to SALTY (335109.7N, 1325530.8E) at 080°/192.9°. SPIDE TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to SPIDE (333840.2N, 1325818.0E) at 088°/133.5°. SABAR TRANSITION: From YOKAT to AMAGA (FL140), then to HOSEN (FL170), and finally to RUISA (331425.9N, 1313022.0E) at 31.6°/105°. YANKS TRANSITION: From YOKAT to KOHZA (FL140), then to BRAID (FL170), and finally to LUFFY (333312.0N, 1321837.3E), CHOPP (335111.0N, 1332515.5E), SANJI (335458.4N, 1333940.0E), and finally to YANKS (340749.0N, 1342925.3E) at 12.6°/080°. |
| 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 (113.2) to FF401 (333931.4N, 1302403.3E). GENKAI TRANSITION: A route from IKI (113.2) to FF401 (333931.4N, 1302403.3E) via a VOR/DME station at SAGA (114.75) and a fix at DAIZE (331556.0N, 1302733.7E). GABAI TRANSITION: A route from YAMEK (332105.9N, 1303539.5E) to FF401 (333931.4N, 1302403.3E) via a fix at SAGA (330855.0N, 1301734.4E). BRUIN TRANSITION: A route from YAMEK (332105.9N, 1303539.5E) to FF403 (333827.6N, 1303213.2E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at BRUIN (330609.6N, 1302818.4E). RWY16: A route from YAMEK (332105.9N, 1303539.5E) to FF402 (334212.3N, 1302939.7E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at FF402 (334212.3N, 1302939.7E). RWY34: A route from YAMEK (332105.9N, 1303539.5E) to FF403 (333827.6N, 1303213.2E) via a fix at DAIZE (331556.0N, 1302733.7E) and a fix at FF403 (333827.6N, 1303213.2E). | |
| 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 332622.1N 1303817.8E</p> <p>FF401 333931.4N 1302403.3E</p> <p>FF402 334212.3N 1302939.7E</p> <p>FF403 333827.6N 1303213.2E</p> <p>FF405 331704.3N 1304125.8E</p> <p>FF603 331620.4N 1303847.3E</p> <p>YAMGA 330605.9N 1304507.3E 13000</p> | | | | | |
| <p>TRANSITION</p> <p>YAMGA 330605.9N 1304507.3E 13000</p> <p>KEIKA 325439.2N 1304343.3E FL180</p> <p>IPUDO 321522.6N 1303858.2E</p> <p>AJISE 315847.1N 1303659.2E</p> <p>KAGOSHIMA(HKC) 314150.0N 1303458.6E</p> <p>VORTAC KAGOSHIMA 113.3 HKC CH-80X 31°41'50"N/130°34'59"E 1900FT</p> <p>SATSUMA TRANSITION</p> <p>SAKURA TRANSITION</p> <p>KUMAMOTO(KUE) 325005.3N 1305029.5E</p> | | | | | |
| <p><u>MORIO FOUR DEPARTURE</u></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><u>SAKURA TRANSITION</u> From YAMGA at or above 13000FT, to KUE.</p> <p><u>SATSUMA TRANSITION</u> 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.

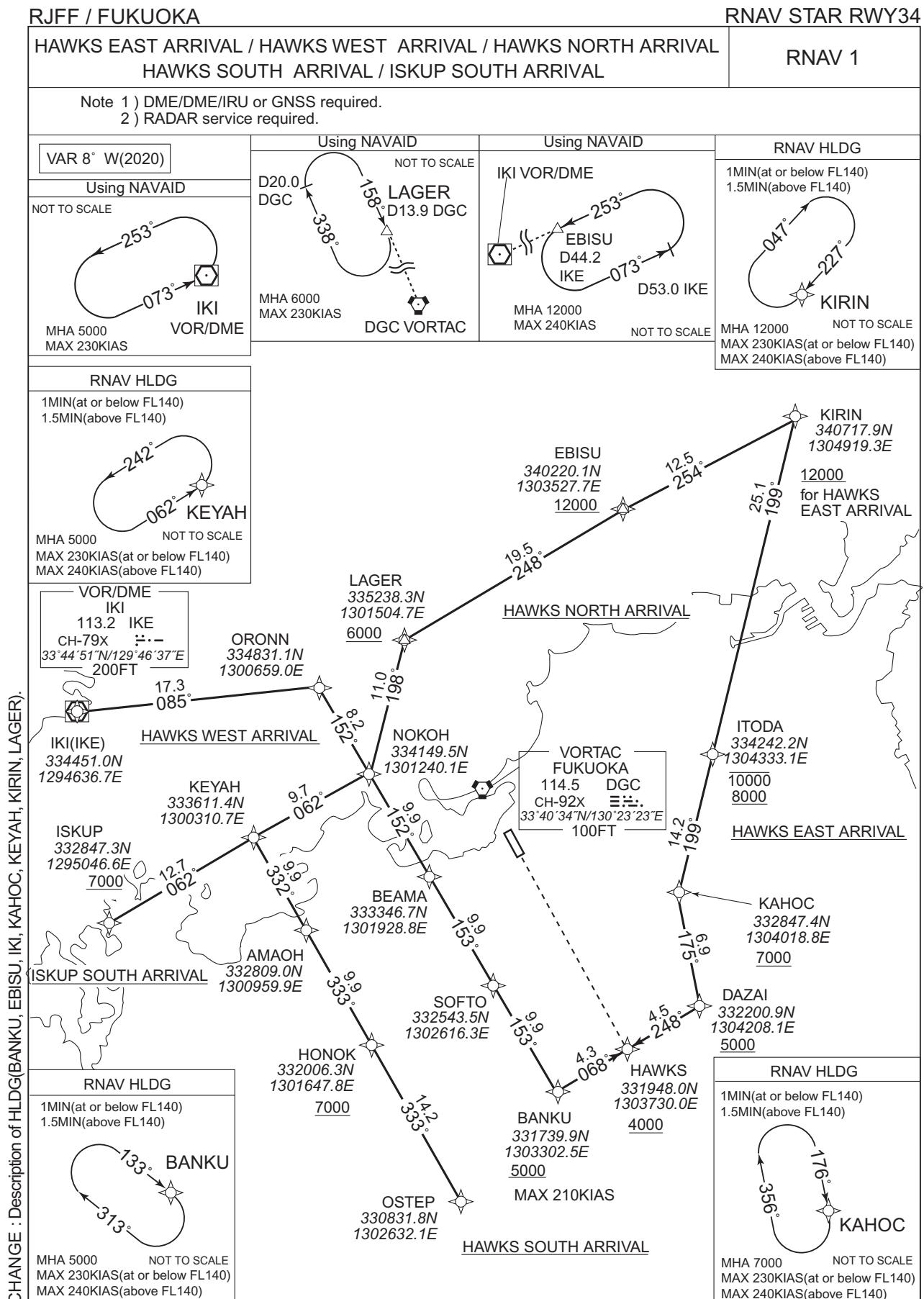
KAFRI WEST ARRIVAL

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

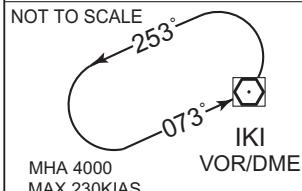
MALTS EAST ARRIVAL / MALTS WEST ARRIVAL
MALTS SOUTH ARRIVAL / ISKUP NORTH ARRIVAL

RNAV 1

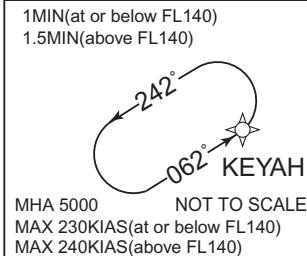
- Note 1) DME/DME/IRU or GNSS required.
2) RADAR service required.

[VAR 8° W(2020)]

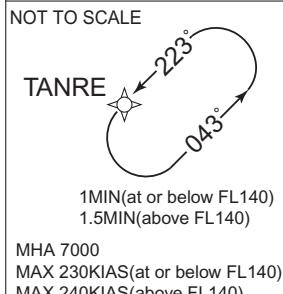
Using NAVAID



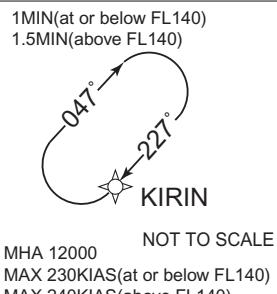
RNAV HLDG



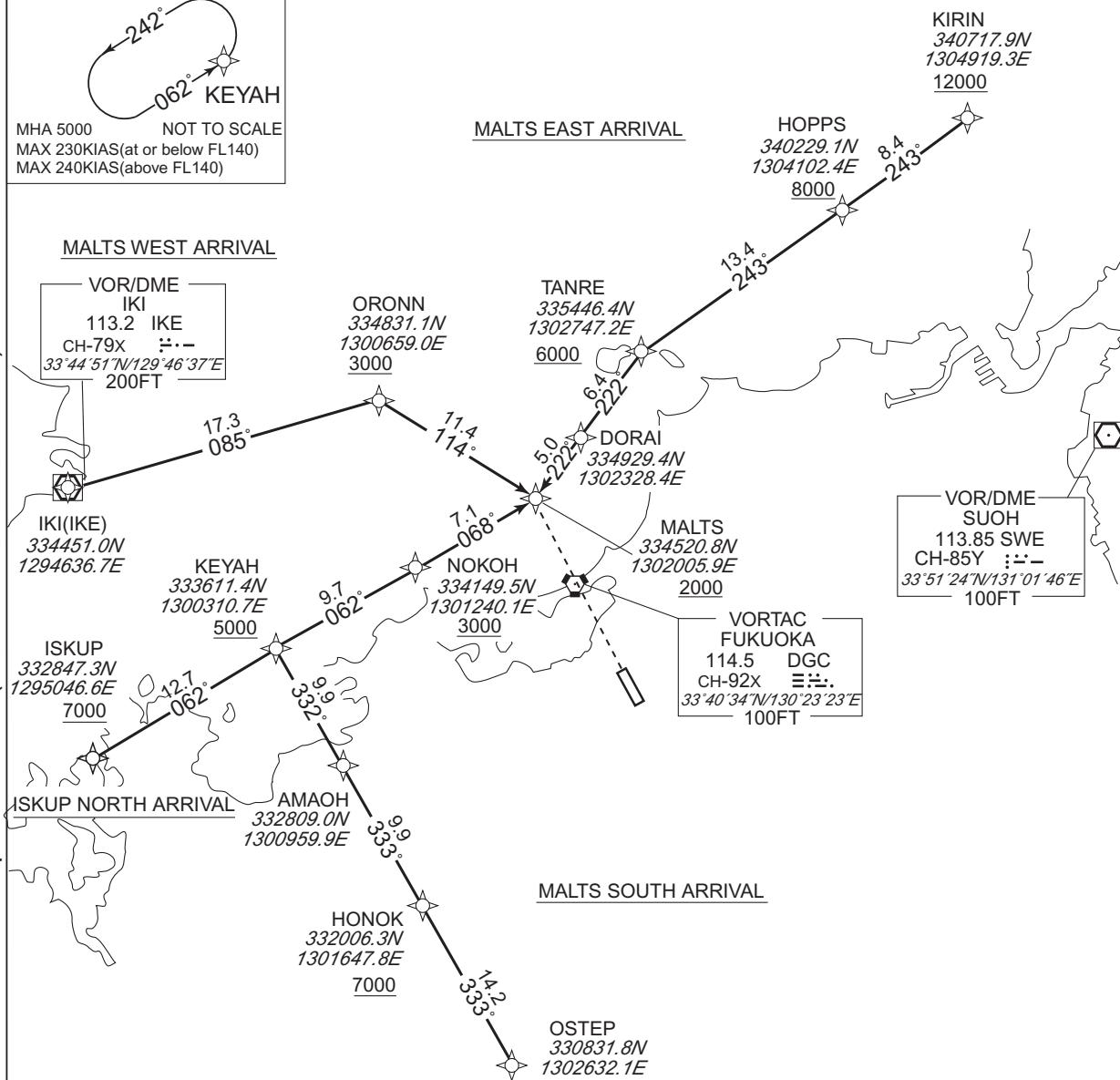
RNAV HLDG



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 |

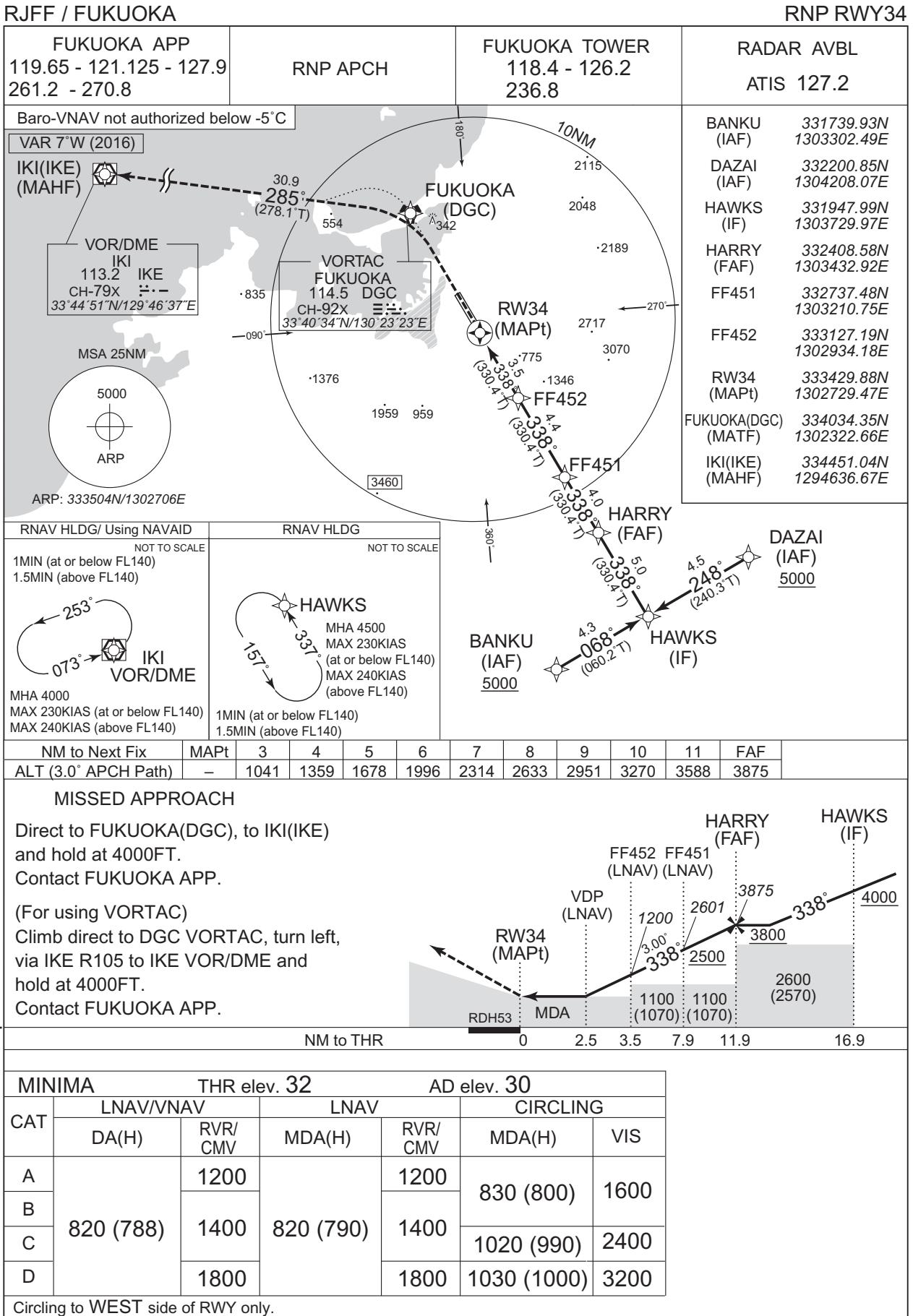
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|---------------------|-----------------------|--------------------|----------------------------|----------------|-----------------------|-----------------------|------------------------------|--------------------------|
| 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

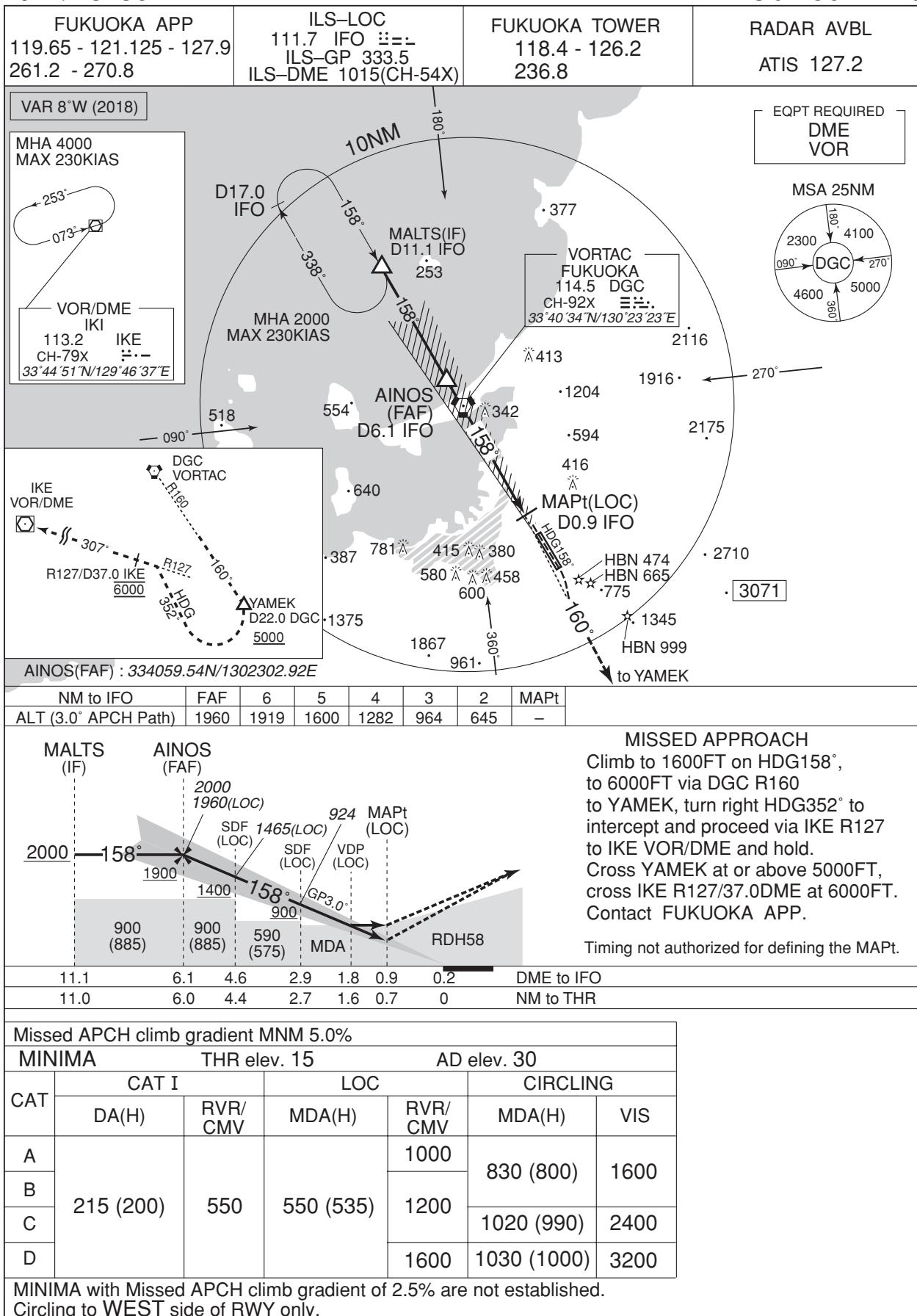


INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJFF / FUKUOKA



CHANGE : VAR

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

FUKUOKA APP
119.65 - 121.125 - 127.9
261.2 - 270.8

RNP APCH

FUKUOKA TOWER
118.4 - 126.2
236.8

RADAR AVBL
ATIS 127.2

Baro-VNAV not authorized below -5°C

VAR 7°W (2016)

RNAV HLDG
1MIN(at or below FL140)
1.5MIN(above FL140)

NOT TO SCALE

MHA 2000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

RNAV HLDG/ Using NAVAID
1MIN(at or below FL140)
1.5MIN(above FL140)

NOT TO SCALE

MHA 4000
MAX 230KIAS(at or below FL140)
MAX 240KIAS(above FL140)

VOR/DME

DGC VORTAC

IKI(IKE) (MAHF)

VOR/DME
IKI
113.2 IKE
CH-79X
33°44'51"N/129°46'37"E

MSA 25NM

5000
ARP

ARP: 333504N/1302706E

OKINO (IAF) 4000

6.9°
248°
(240.4°T)

10NM

MALTS (IF)

NOKOH (IAF) 3000

7.1°
068°
(060.3°T)

554

158°(150.3°T)/1.6

158°(150.3°T)/1.7

158°(150.3°T)/2.7

AINOS (FAF)

FF651 (SDF)

FF652 (SDF)

342

RW16 (MAPt)

DGC VORTAC

IKI(IKE) (MAHF)

VOR/DME
IKI
113.2 IKE
CH-79X
33°44'51"N/129°46'37"E

783 Å

22.8°
308°
(300.4°T)

307°
(327°T)

R127/
D37.0 IKE
6000

HDG 158°

1959 959· to YAMEK

1.75
.775
.1346

3070

OKINO (IAF)
334844.46N
1302717.18E

NOKOH (IAF)
334149.51N
1301240.11E

MALTS (IF)
334520.80N
1302005.94E

AINOS (FAF)
334059.54N
1302302.92E

FF651 (SDF)
333938.51N
1302358.41E

FF652 (SDF)
333809.81N
1302459.12E

RW16 (MAPt)
333548.91N
1302635.47E

YAMEK (MATF)
332105.88N
1303539.52E

FF601 (MATF)
331830.45N
1302936.66E

KAFRI (MATF)
333320.84N
1301017.68E

IKI(IKE) (MAHF)
334451.04N
1294636.67E

| | NM to Next Fix | FAF | 5 | 4 | 3 | 2 | MAPt |
|----------------------|----------------|------|------|------|-----|---|------|
| ALT (3.0° APCH Path) | 1969 | 1665 | 1347 | 1028 | 710 | - | |

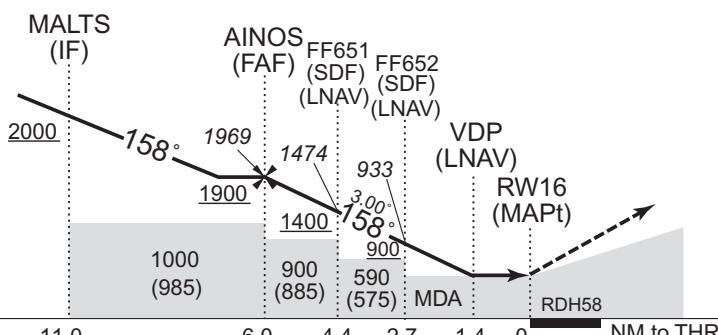
MISSED APPROACH

Direct to YAMEK at or above 5000FT, to FF601 at 6000FT, to KAFRI, to IKI(IKE) and hold at 6000FT. Contact FUKUOKA APP.

(For using VORTAC)

Climb to 1600FT on HDG158°, to 6000FT via DGC R160 to YAMEK, turn right HDG352° to intercept and proceed via IKE R127 to IKE VOR/DME and hold

Cross YAMEK at or above 5000FT,
Cross IKE R127 / 37.0DME at 6000FT.
Contact FUKUOKA APP.



Missed APCH climb gradient MNM 5.0%

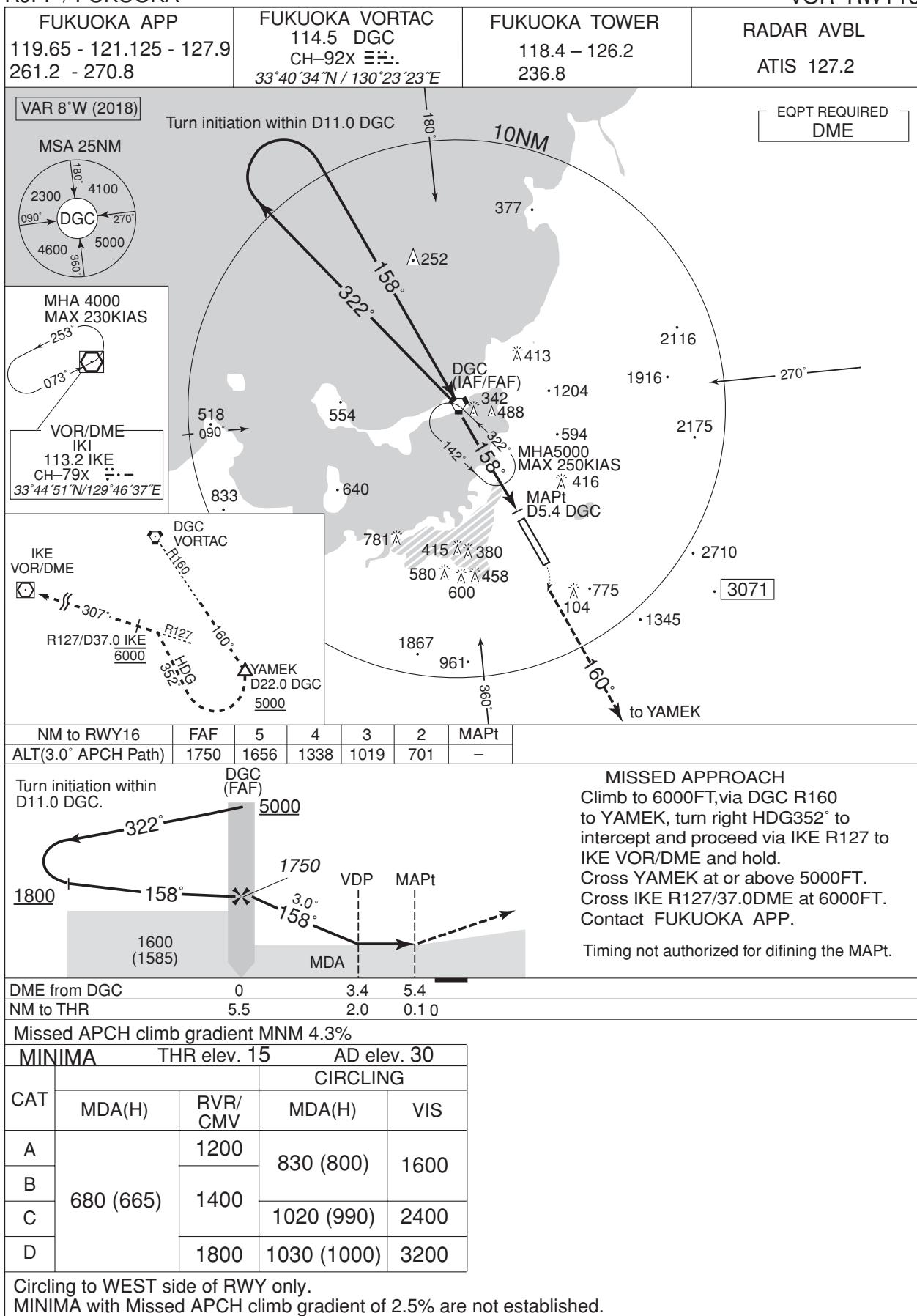
| MINIMA | | THR elev. 15 | | AD elev. 30 | | |
|--------|-----------|--------------|-----------|-------------|------------|------|
| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
| | DA(H) | RVR/ CMV | MDA(H) | RVR/ CMV | MDA(H) | VIS |
| A | 490 (475) | 1000 | 490 (475) | 1000 | 830 (800) | 1600 |
| B | | 1200 | | 1200 | | |
| C | | 1600 | | 1600 | 1020 (990) | 2400 |
| D | | 1600 | | 1030 (1000) | 3200 | |

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

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

VOR RWY16

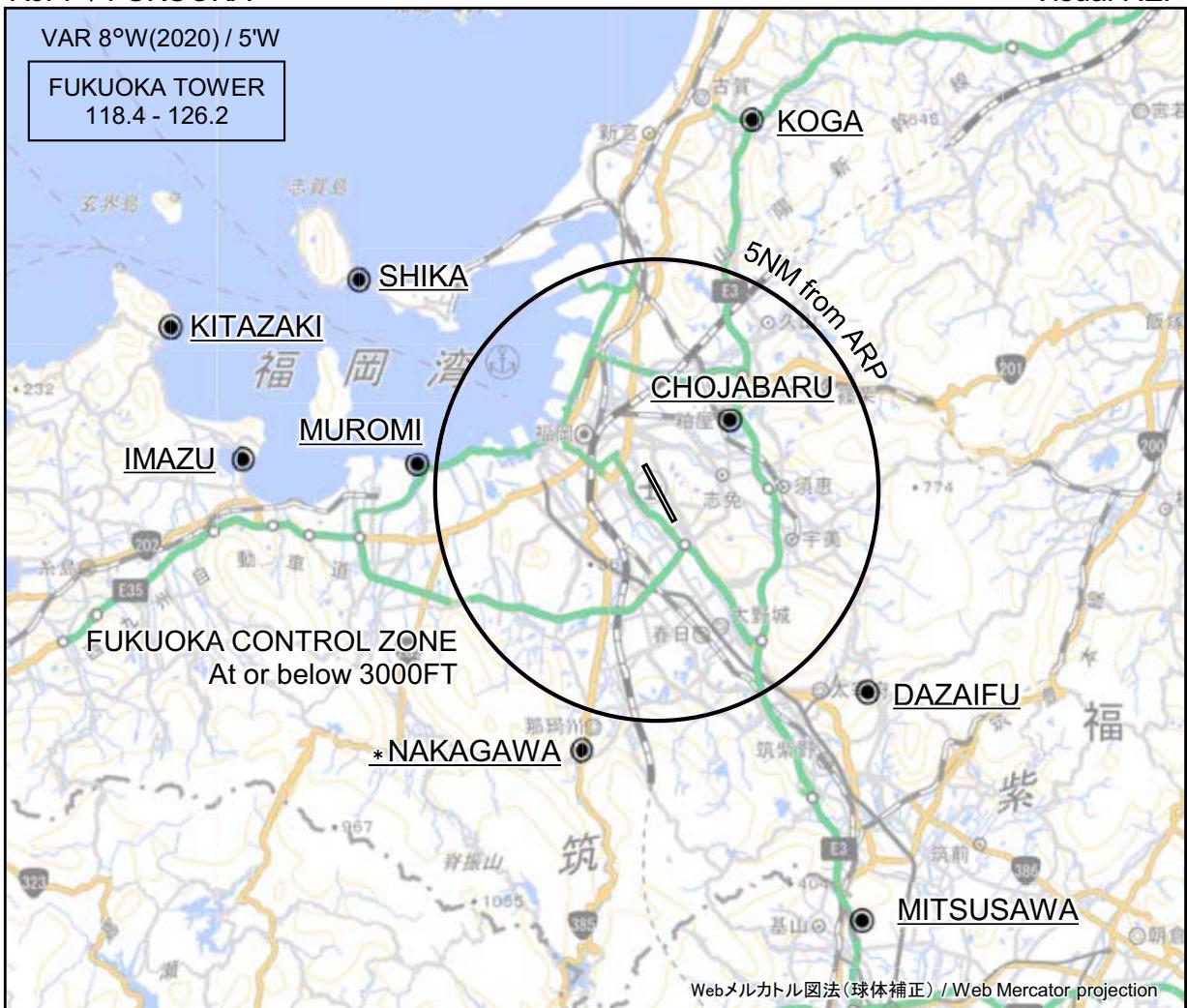


INSTRUMENT APPROACH CHART



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.

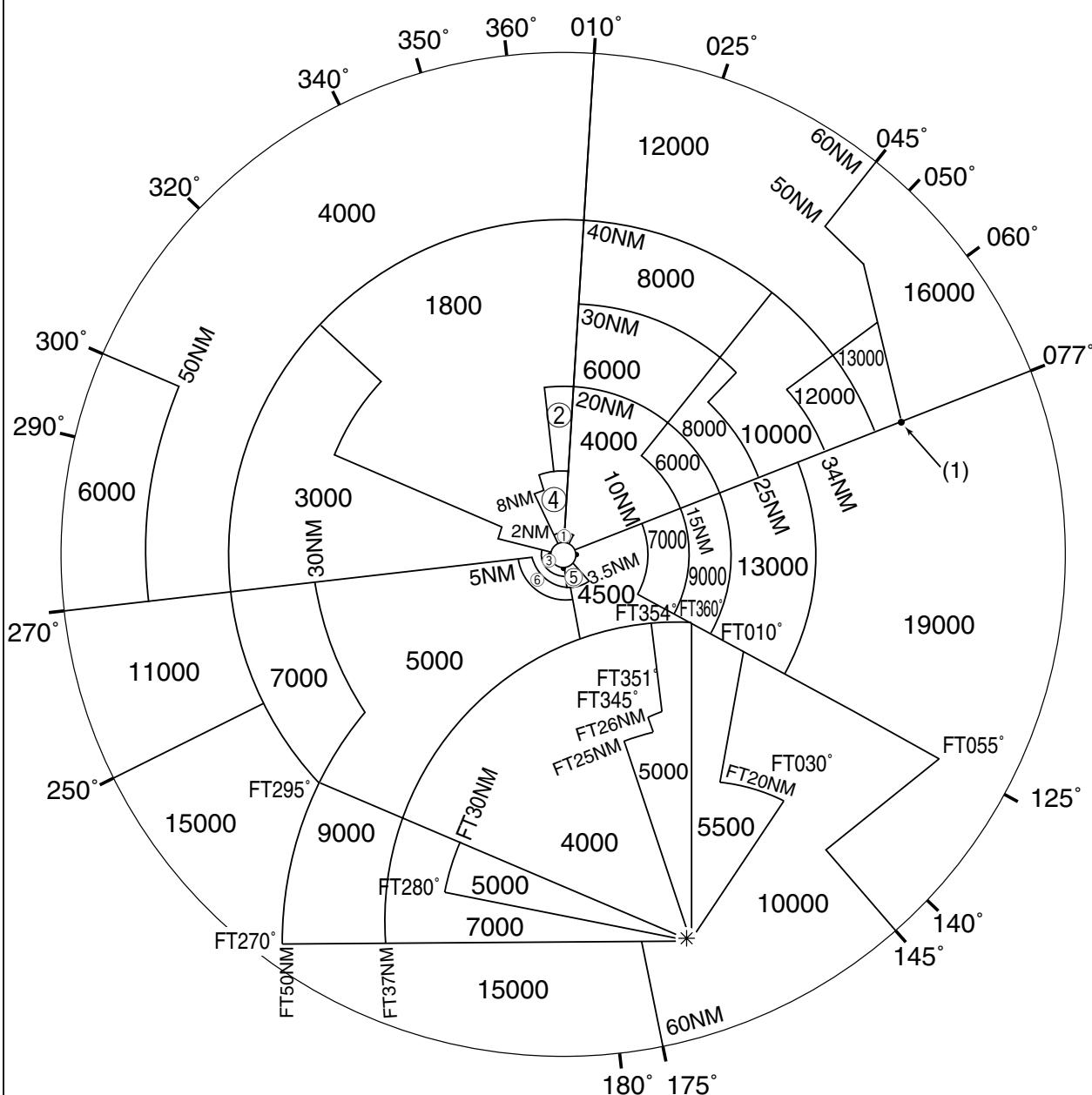
*ヘリコプター用 Use For Helicopter



RJFF / FUKUOKA

Minimum Vectoring Altitude CHART

VAR 7°W (2012)



- ① 1900
 - ② 2000
 - ③ 2200
 - ④ 2300
 - ⑤ 2400
 - ⑥ 3300

(1) 334821N/1311428E

CENTER : 333525N/1302627E(No.1 RADAR SITE)
CENTER : 333453N/1302650E(No.2 RADAR SITE)
* 324949N/1305040E(RJFT RADAR SITE)