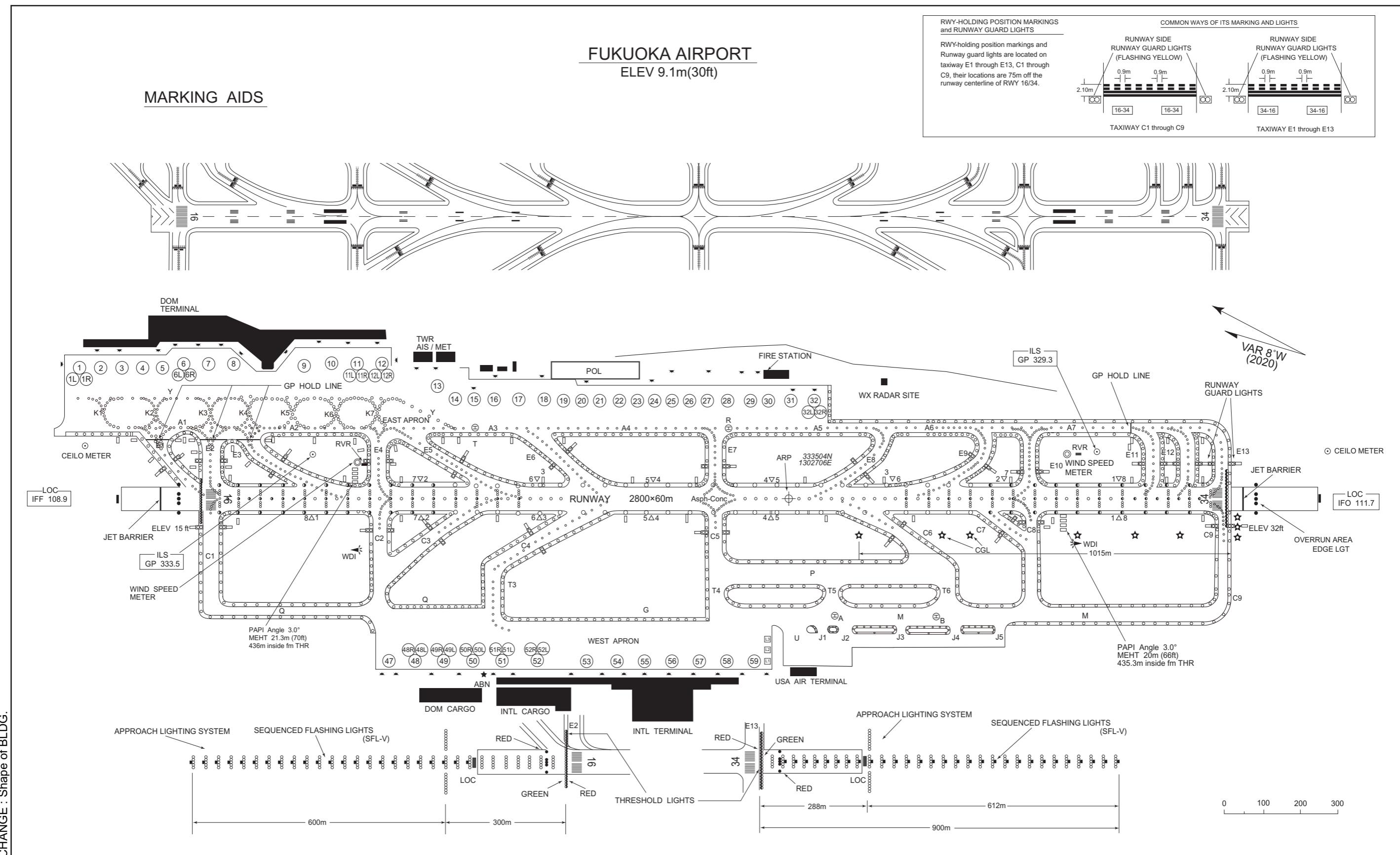
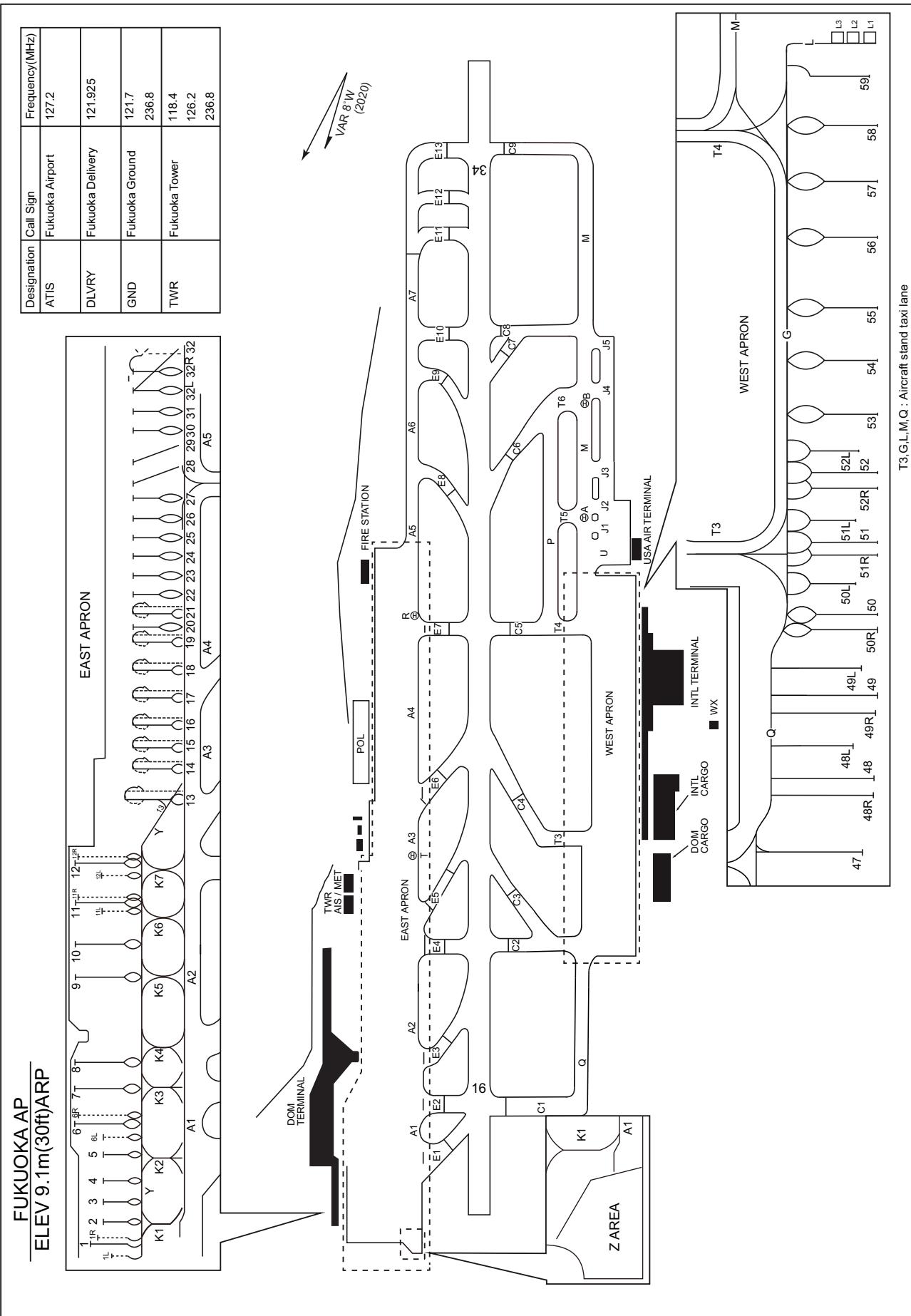


AERODROME CHART



CHANGE : Spot 50L,51L,52L relocated.



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.

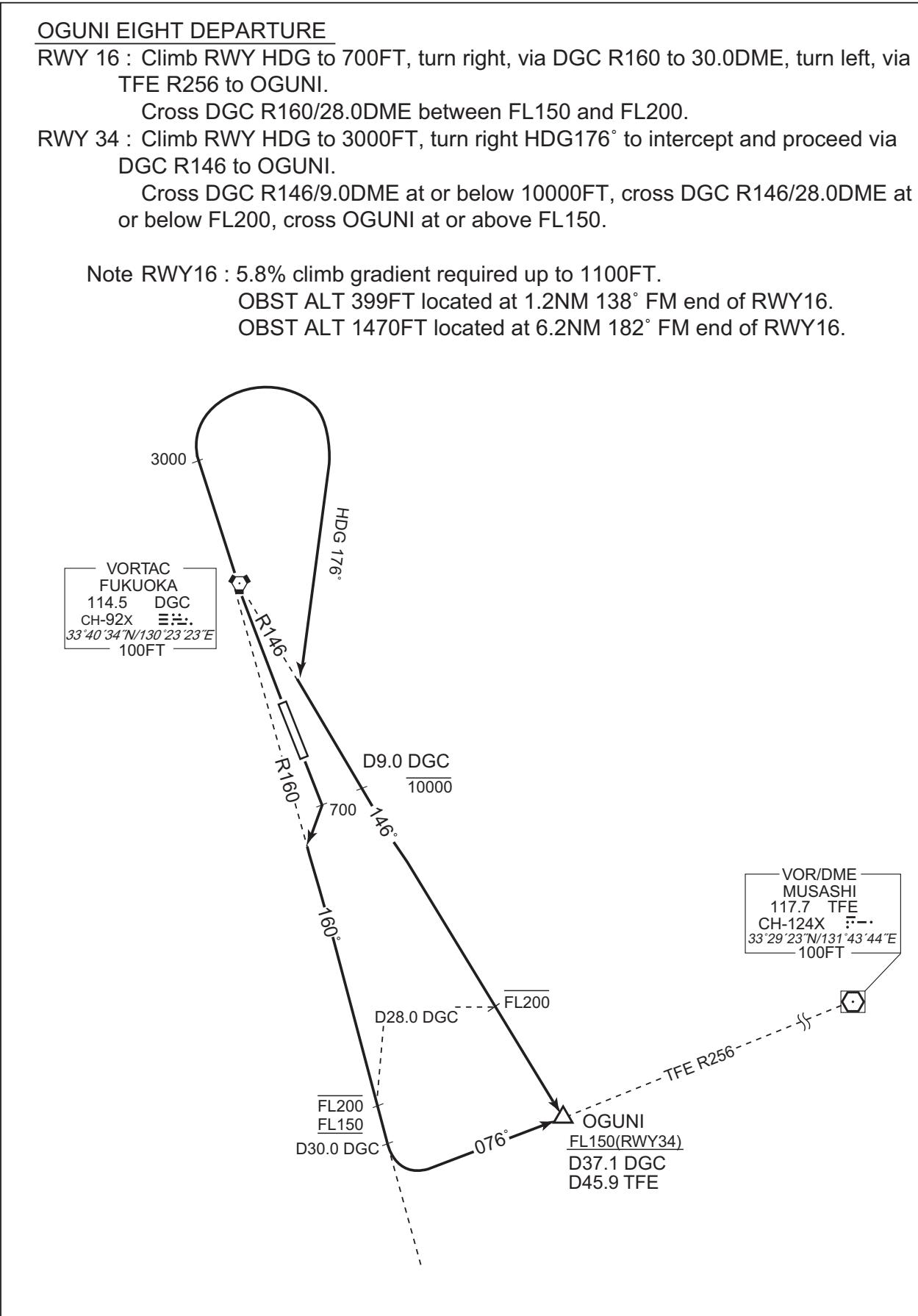
Cross DGC R146/9.0DME at or below 10000FT, cross DGC R146/28.0DME at or below FL200, cross OGUNI at or above FL150.

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.

CHANGE : Description of PROC name.



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.



CHANGE : Description of PROC name.

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.

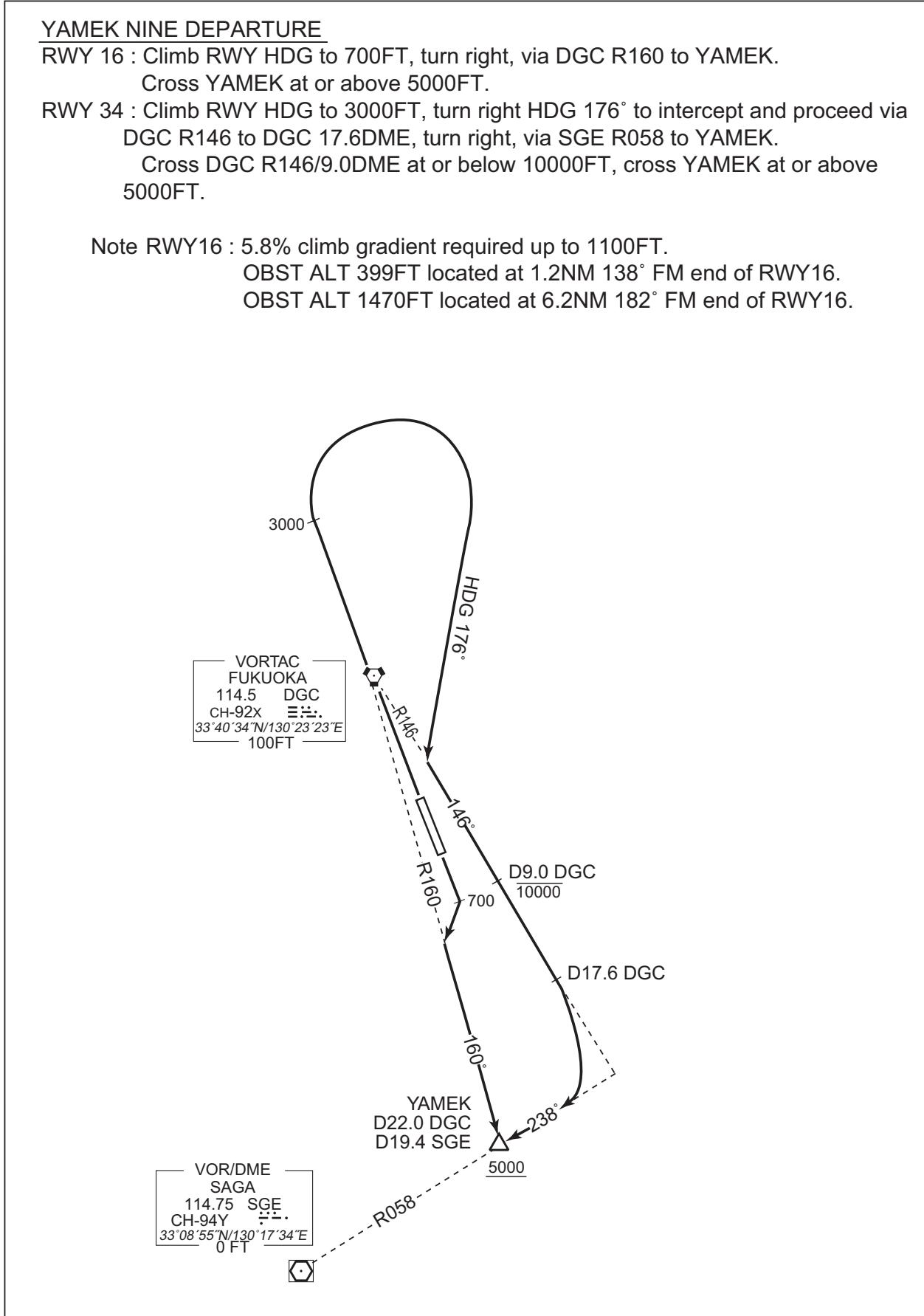
Cross DGC R146/9.0DME at or below 10000FT, cross YAMEK at or above 5000FT.

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.

CHANGE : Description of PROC name.



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.

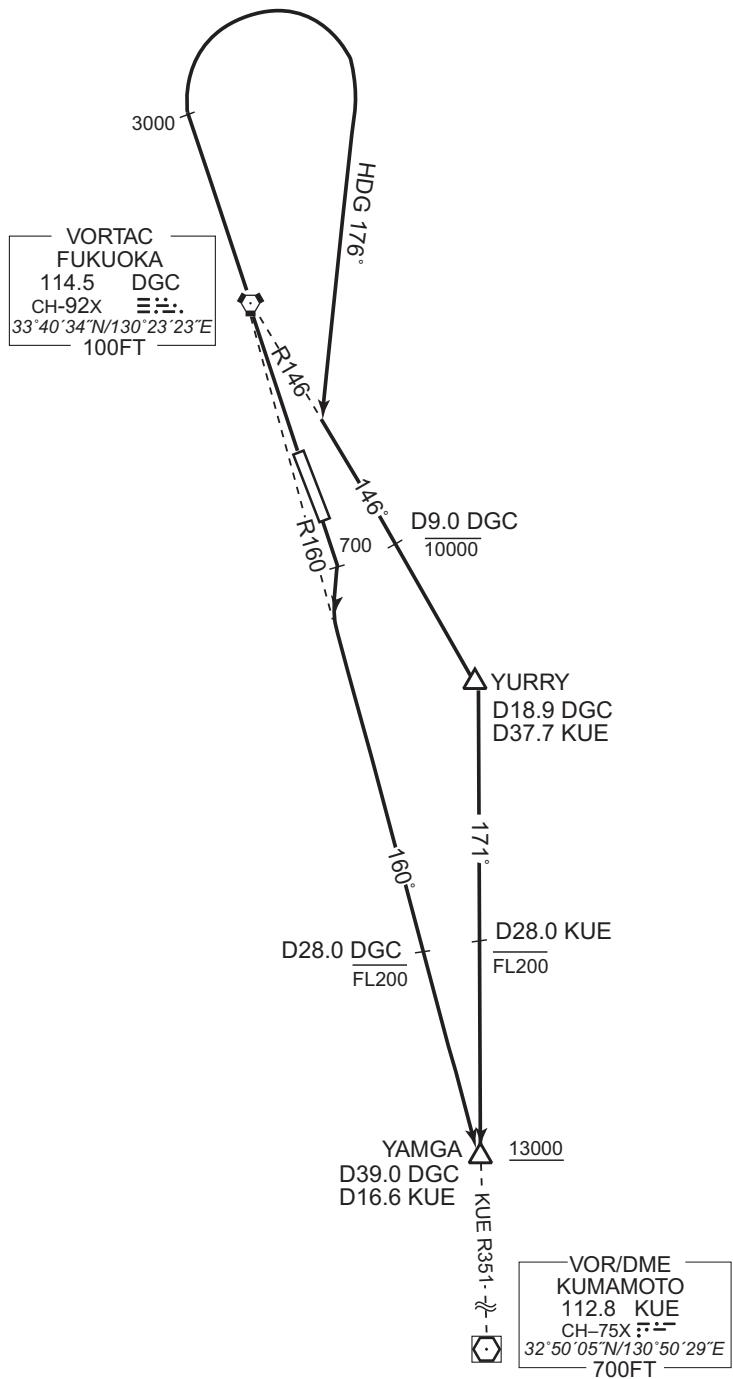
RWY 34 : Climb RWY HDG to 3000FT, turn right HDG 176° to intercept and proceed via DGC R146 to YURRY, turn right, via KUE R351 to YAMGA.

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 : Description of PROC name.

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.

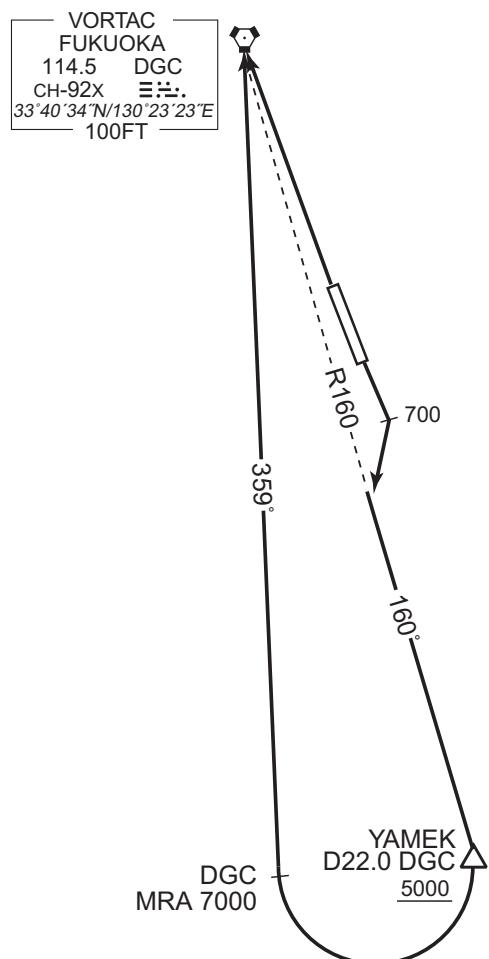
RWY 34 : Climb direct to DGC VORTAC.

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.

CHANGE : Description of PROC name.



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.

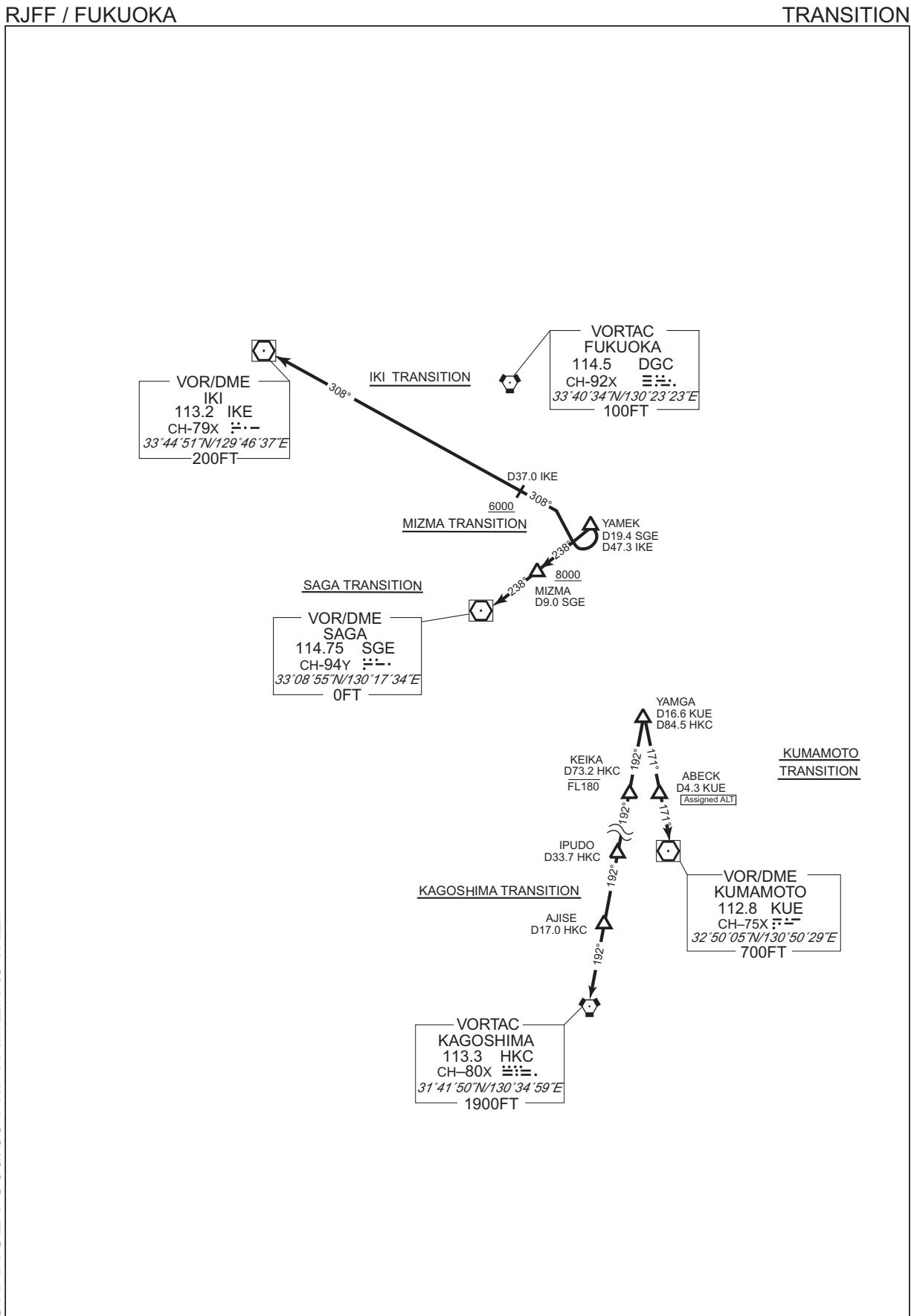
IKI TRANSITION

From over YAMEK, turn right, proceed via IKE R128 to IKE VOR/DME .

Cross IKE R128/37.0DME at or above 6000FT.

CHANGE : Course FM YAMEK to IKE.

STANDARD DEPARTURE CHART-INSTRUMENT



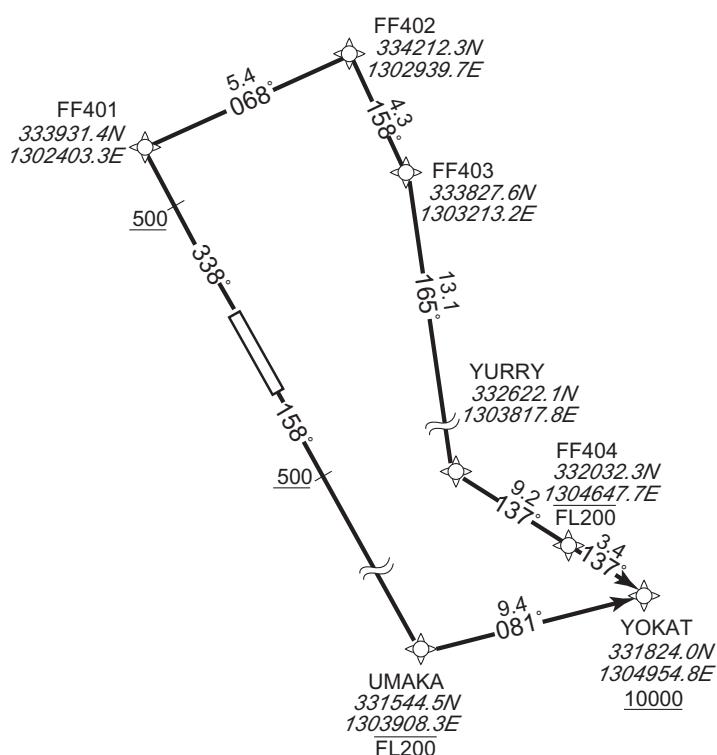
STANDARD DEPARTURE CHART-INSTRUMENT

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



CHANGE : Description of VAR and PROC name.

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.

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 |

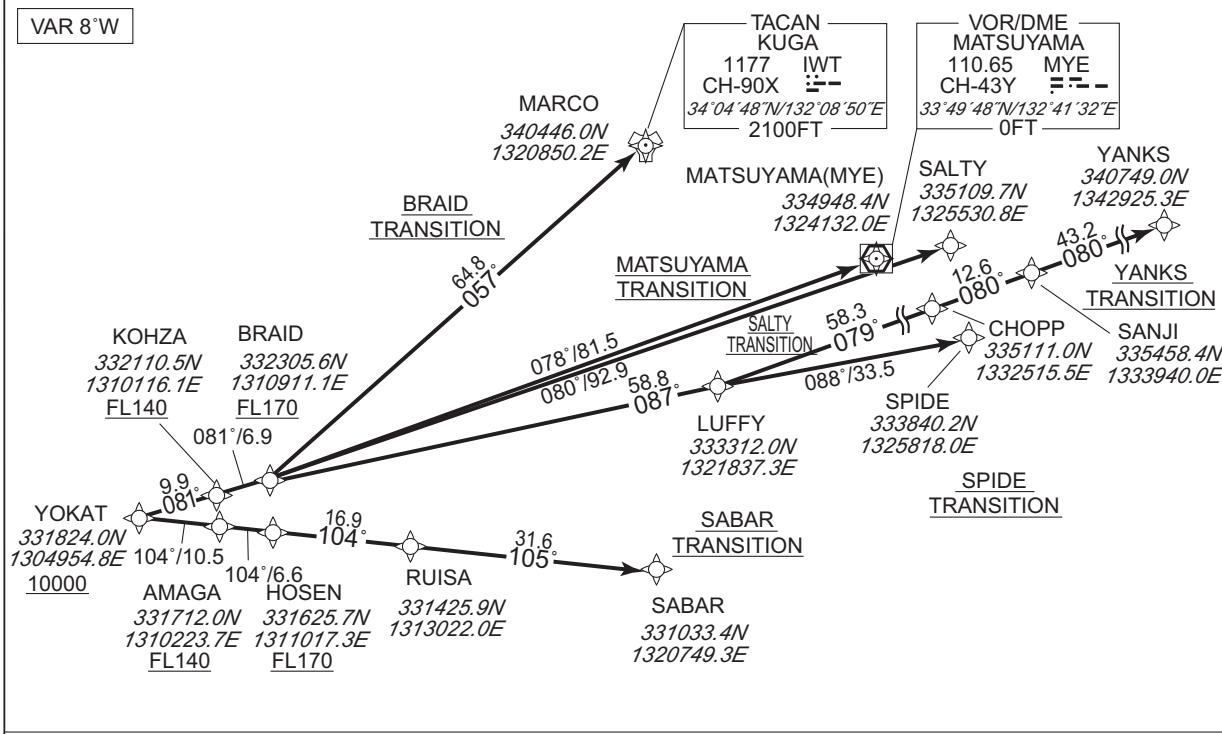
CHANGE : VAR. PROC renamed. PROC course.

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 |



CHANGE : Description of VAR.

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.

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

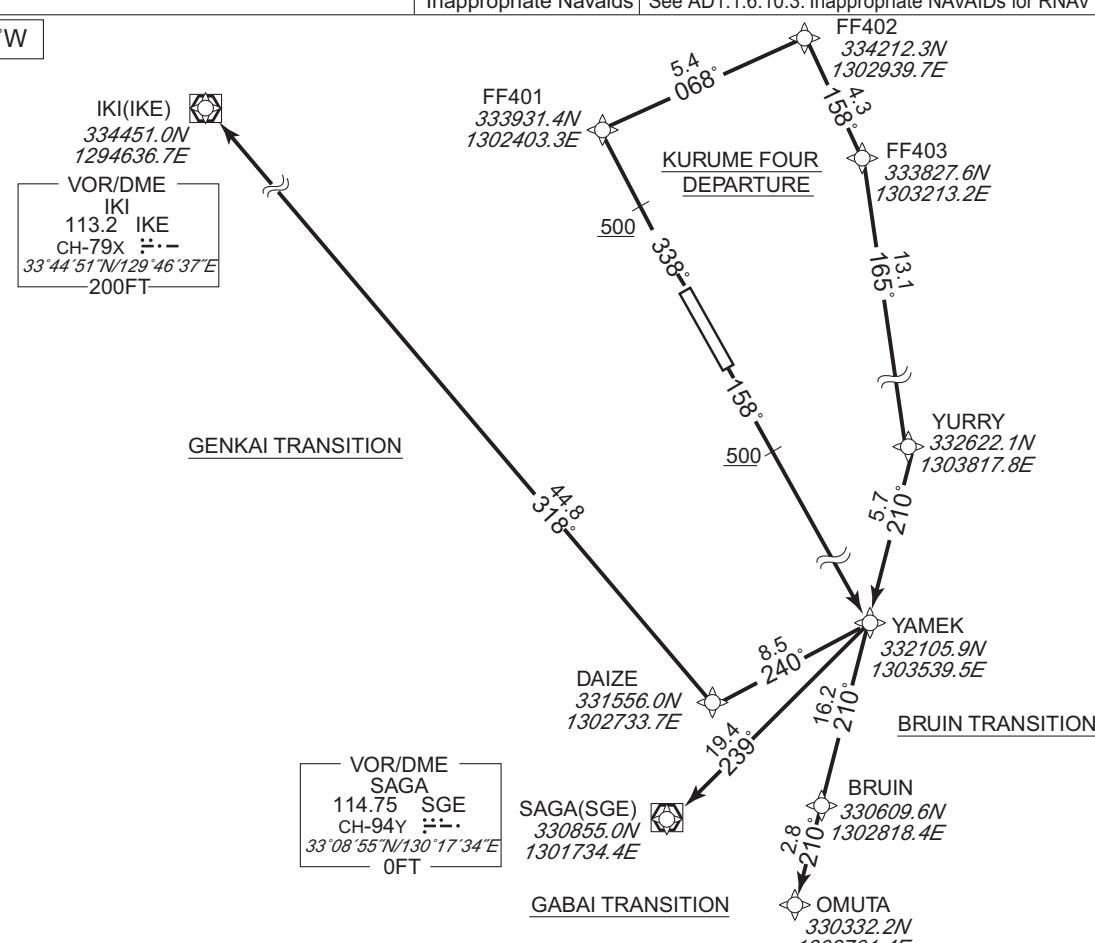
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 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 | 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 | See AD1.1.6.10.3. Inappropriate NAVIDs for RNAV1 |
| VAR 8°W  | | |
| 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. | | |
| 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. | | |
| BRUIN TRANSITION | | |
| From YAMEK, to BRUIN, to OMUTA. | | |
| GABAI TRANSITION | | |
| From YAMEK, to SGE. | | |
| GENKAI TRANSITION | | |
| From YAMEK, to DAIZE to IKE. | | |

CHANGE : Description of VAR.

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.

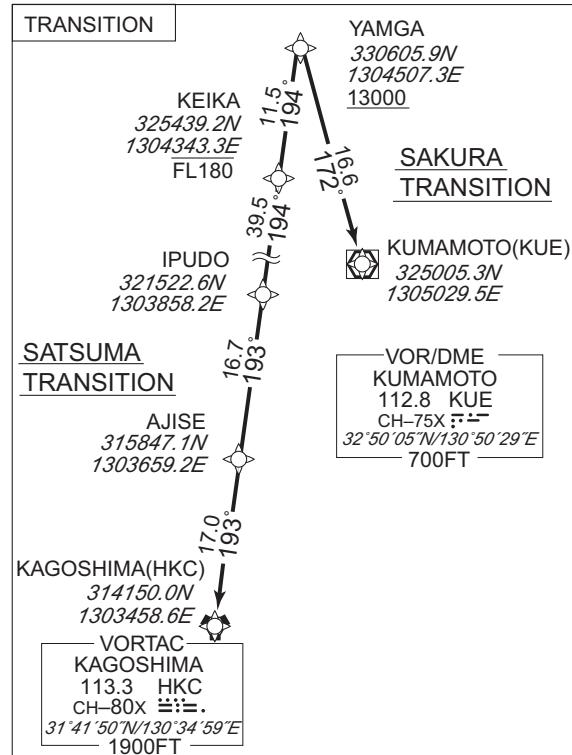
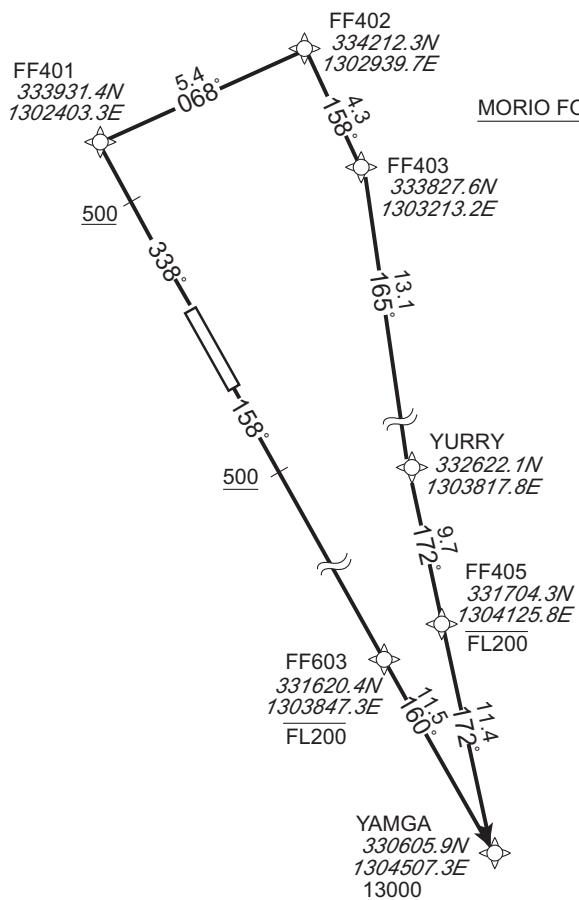
STANDARD DEPARTURE CHART - INSTRUMENT

RJFF / FUKUOKA

RNAV SID and TRANSITION

| MORIO FOUR DEPARTURE SATSUMA TRANSITION / SAKURA TRANSITION | | RNAV 1 |
|--|-----------------------|--|
| 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 "3.5NM to FF401~2.2NM to FF401" IKE "3.5NM to FF401~2.2NM to FF401" |
| 2) RADAR service required. | 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



MORIO FOUR DEPARTURE

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.

RWY16 : Climb on HDG 158° at or above 500FT, direct to FF603 at or below FL200, to YAMGA at or above 13000FT.

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.

SAKURA TRANSITION

From YAMGA at or above 13000FT, to KUE.

SATSUMA TRANSITION

From YAMGA at or above 13000FT, to KEIKA at or below FL180, to IPUDO, to AJISE, to HKC.

CHANGE : Description of VAR.

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.

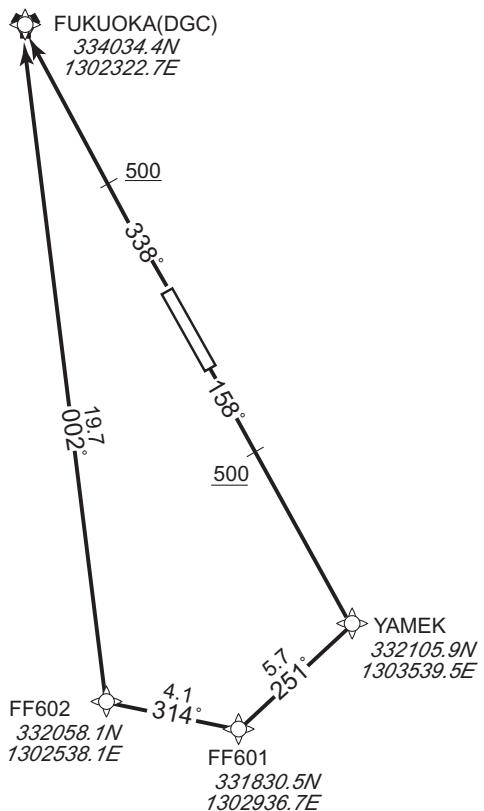
STANDARD DEPARTURE CHART - INSTRUMENT

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



CHANGE : Description of VAR and PROC name.

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 R074 to intercept and proceed via DGC R338 to MALTS via LAGER.

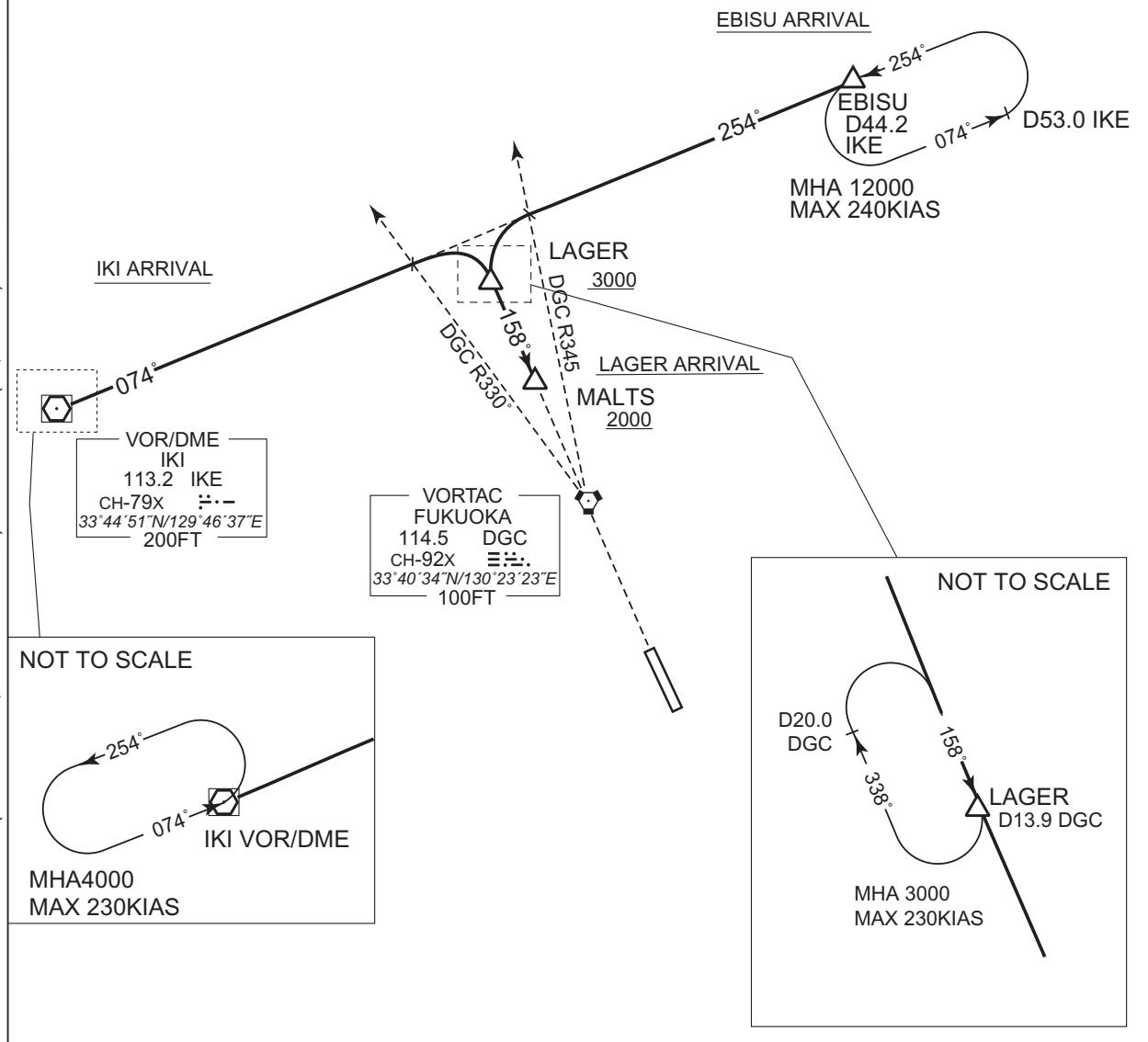
Cross LAGER at or above 3000FT, cross MALTS at or above 2000FT.

IKI ARRIVAL

From over IKE VOR/DME, via IKE R074 to intercept and proceed via DGC R338 to MALTS via LAGER.

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

CHANGE : PROC course(IKI ARRIVAL, EBISU ARRIVAL). HLDG course(IKI, EBISU).



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

STAR

KAFRI EAST ARRIVAL

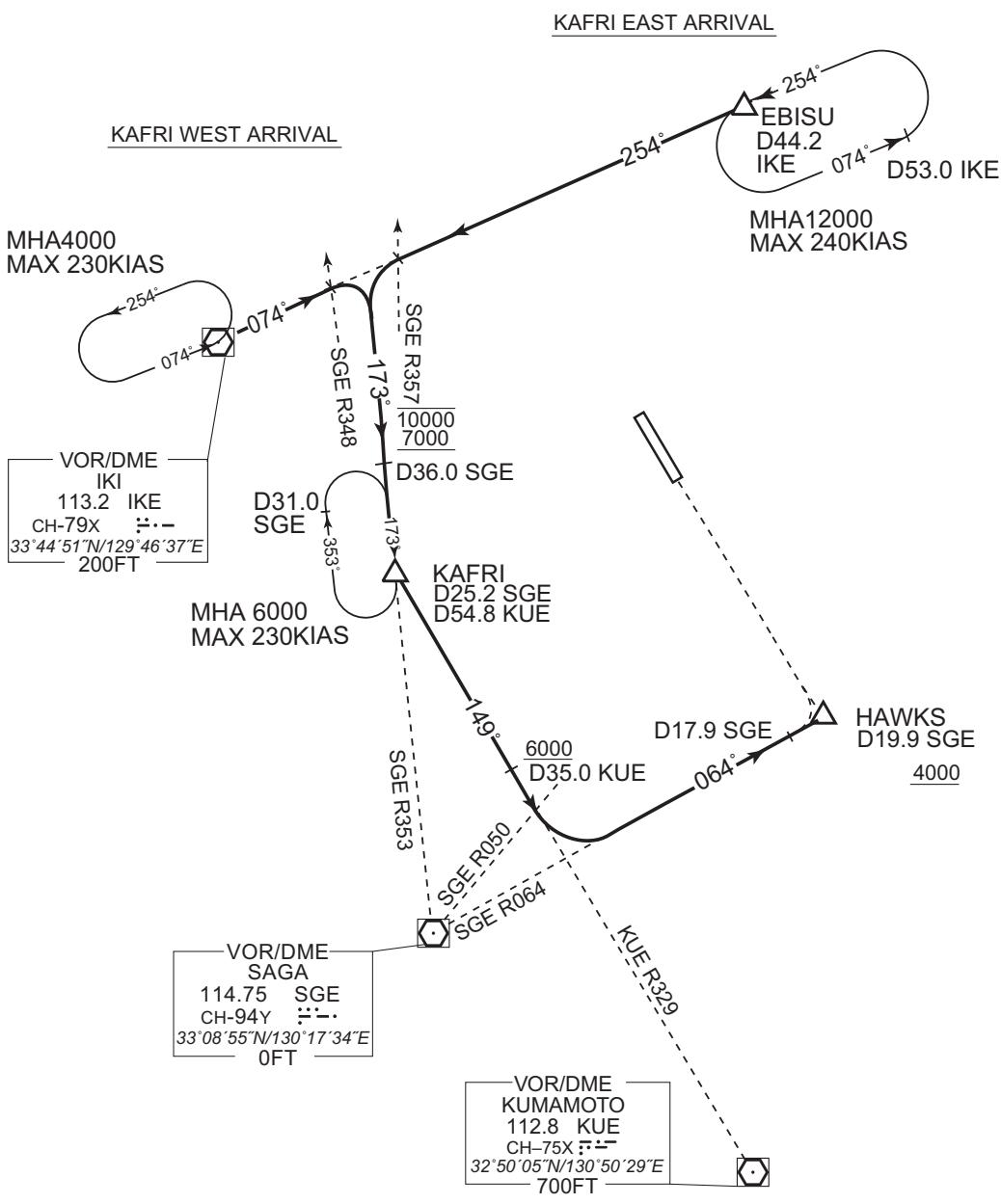
From over EBISU, proceed via IKE R074 to intercept and proceed via SGE R353 to KAFRI, via KUE R329 to intercept and proceed via SGE R064 to HAWKS.

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

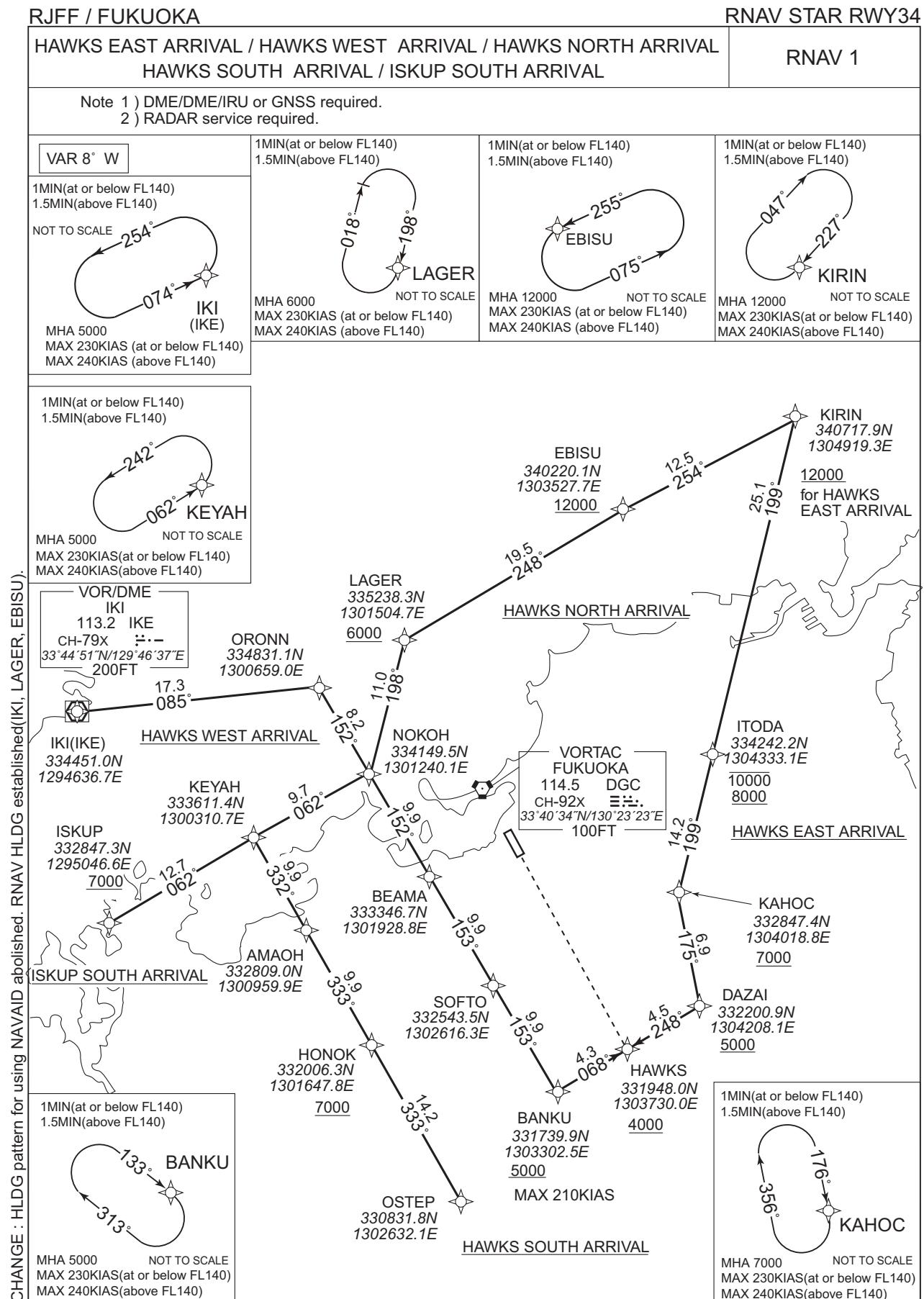
KAFRI WEST ARRIVAL

From over IKE VOR/DME, proceed via IKE R074 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 | IKE | 074 (066.4) | -8.0 | 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 : RNAV HLDG established(IKE).

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 | EBISU | 255 (246.6) | -8.0 | 1.0(-14000) 1.5(+14001) | L | 12000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | LAGER | 198 (190.5) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 6000 | - | -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 : RNAV HLDG established(EBISU, LAGER).

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.

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

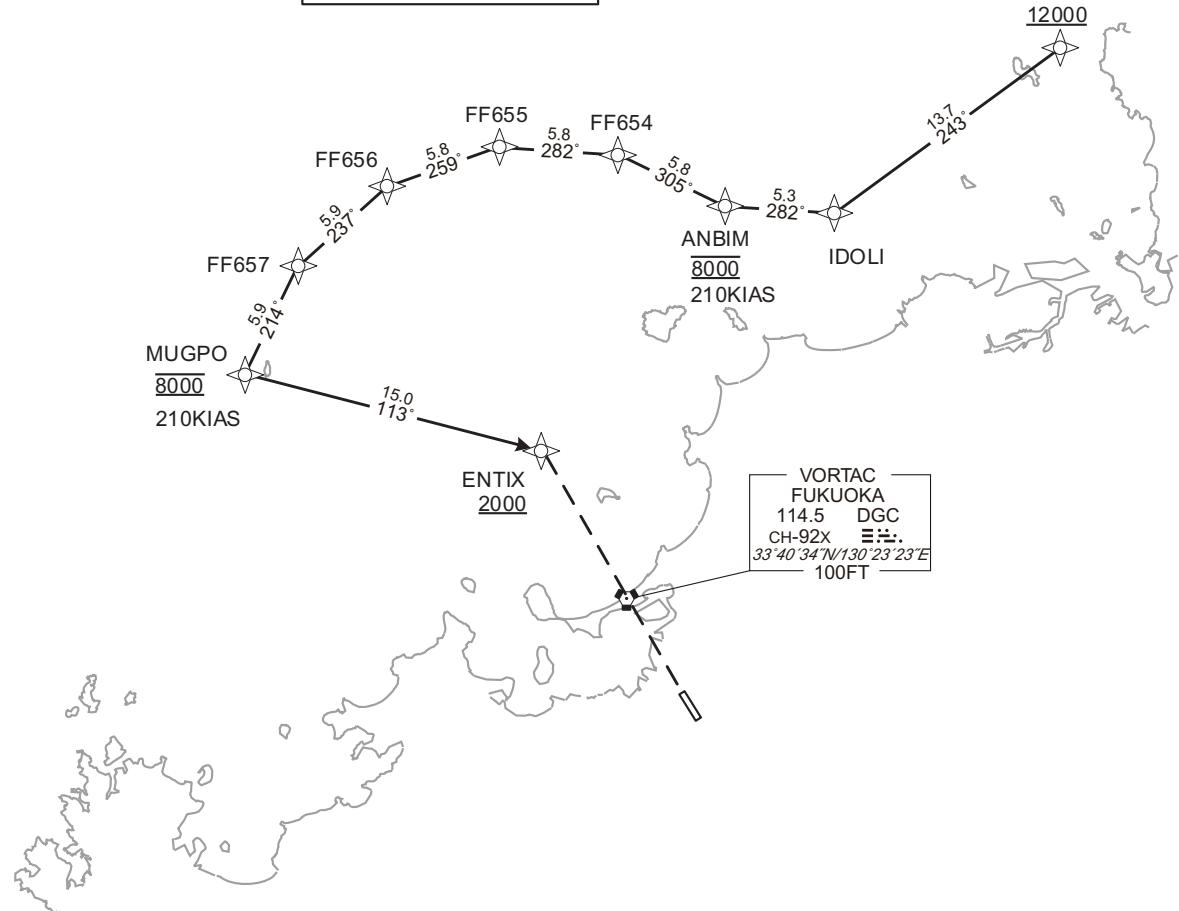
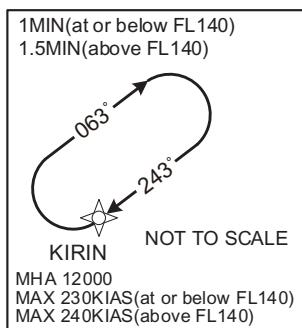
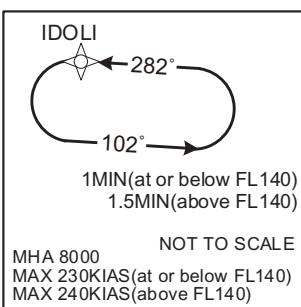
KIRIN ARRIVAL

RNAV 1

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

2) RADAR service required.

VAR 8° W



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

KIRIN ARRIVAL

From KIRIN at or above 12000FT, to IDOLI, to ANBIM at 8000FT, to FF654, to FF655, to FF656, to FF657, to MUGPO at 8000FT, to ENTIX at or above 2000FT.

| | |
|-----------------------|---|
| 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 | - | - | -8.0 | - | - | +12000 | - | - | RNAV1 |
| 002 | TF | IDOLI | - | 243 (235.0) | -8.0 | 13.7 | - | - | - | - | RNAV1 |
| 003 | TF | ANBIM | - | 282 (274.2) | -8.0 | 5.3 | - | 8000 | 210 | - | RNAV1 |
| 004 | TF | FF654 | - | 305 (296.8) | -8.0 | 5.8 | - | - | - | - | RNAV1 |
| 005 | TF | FF655 | - | 282 (274.1) | -8.0 | 5.8 | - | - | - | - | RNAV1 |
| 006 | TF | FF656 | - | 259 (251.4) | -8.0 | 5.8 | - | - | - | - | RNAV1 |
| 007 | TF | FF657 | - | 237 (228.8) | -8.0 | 5.9 | - | - | - | - | RNAV1 |
| 008 | TF | MUGPO | - | 214 (206.3) | -8.0 | 5.9 | - | 8000 | 210 | - | RNAV1 |
| 009 | TF | ENTIX | - | 113 (105.2) | -8.0 | 15.0 | - | +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 | 243 (235.1) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 12000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | IDOLI | 282 (274.3) | -8.0 | 1.0(-14000) 1.5(+14001) | L | 8000 | - | -230(-14000) -240(+14001) | RNAV1 |

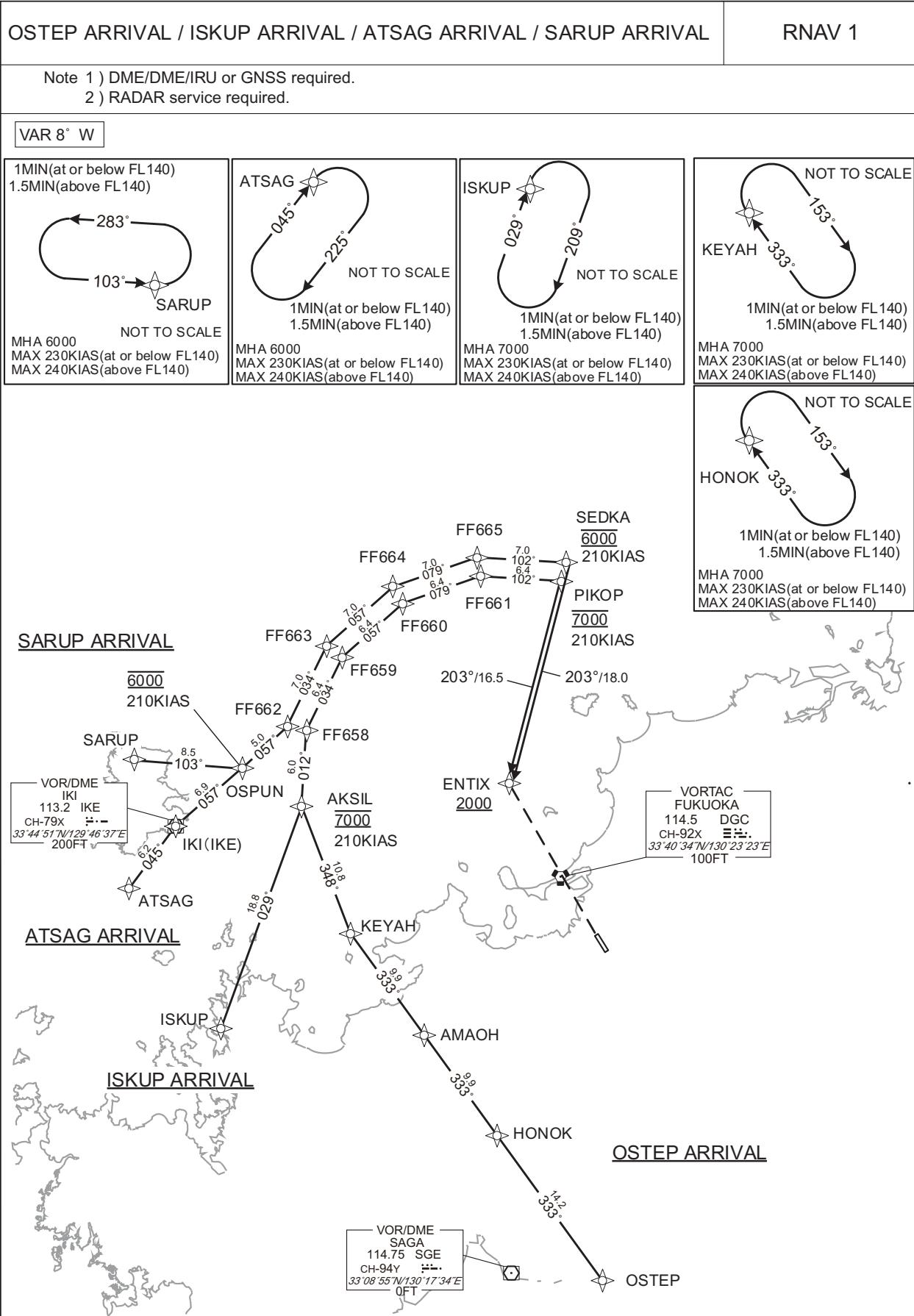
Waypoint Coordinates

| Waypoint Identifier | Coordinates |
|---------------------|------------------------|
| KIRIN | 340717.9N / 1304919.3E |
| IDOLI | 335926.2N / 1303546.7E |
| ANBIM | 335949.6N / 1302922.5E |
| FF654 | 340227.2N / 1302304.8E |
| FF655 | 340252.2N / 1301603.1E |
| FF656 | 340100.5N / 1300922.3E |
| FF657 | 335709.4N / 1300403.8E |
| MUGPO | 335154.2N / 1300056.2E |
| ENTIX | 334757.5N / 1301818.9E |

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16



STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

OSTEP ARRIVAL

From OSTEP, to HONOK, to AMAOH, to KEYAH, to AKSIL at 7000FT, to FF658, to FF659, to FF660, to FF661, to PIKOP at 7000FT, to ENTIX at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | DGC | 7.0NM to ENTIX - ENTIX |
| | IKE | 1.0NM to ENTIX - ENTIX |
| 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 | OSTEP | - | - | -8.0 | - | - | - | - | - | RNAV1 |
| 002 | TF | HONOK | - | 333 (324.9) | -8.0 | 14.2 | - | - | - | - | RNAV1 |
| 003 | TF | AMAOH | - | 333 (324.8) | -8.0 | 9.9 | - | - | - | - | RNAV1 |
| 004 | TF | KEYAH | - | 333 (324.8) | -8.0 | 9.9 | - | - | - | - | RNAV1 |
| 005 | TF | AKSIL | - | 348 (339.9) | -8.0 | 10.8 | - | 7000 | 210 | - | RNAV1 |
| 006 | TF | FF658 | - | 012 (003.8) | -8.0 | 6.0 | - | - | - | - | RNAV1 |
| 007 | TF | FF659 | - | 034 (026.3) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 008 | TF | FF660 | - | 057 (048.8) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 009 | TF | FF661 | - | 079 (071.4) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 010 | TF | PIKOP | - | 102 (094.0) | -8.0 | 6.4 | - | 7000 | 210 | - | RNAV1 |
| 011 | TF | ENTIX | - | 203 (195.3) | -8.0 | 16.5 | - | +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 | HONOK | 333 (324.9) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 7000 | - | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KEYAH | 333 (324.8) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 7000 | - | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

ISKUP ARRIVAL

From ISKUP, to AKSIL, at 7000FT, to FF658, to FF659, to FF660, to FF661, to PIKOP, at 7000FT, to ENTIX at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | DGC | 7.0NM to ENTIX - ENTIX |
| | IKE | 1.0NM to ENTIX - ENTIX |
| 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 | ISKUP | - | - | -8.0 | - | - | - | - | - | RNAV1 |
| 002 | TF | AKSIL | - | 029 (020.6) | -8.0 | 18.8 | - | 7000 | 210 | - | RNAV1 |
| 003 | TF | FF658 | - | 012 (003.8) | -8.0 | 6.0 | - | - | - | - | RNAV1 |
| 004 | TF | FF659 | - | 034 (026.3) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 005 | TF | FF660 | - | 057 (048.8) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 006 | TF | FF661 | - | 079 (071.4) | -8.0 | 6.4 | - | - | - | - | RNAV1 |
| 007 | TF | PIKOP | - | 102 (094.0) | -8.0 | 6.4 | - | 7000 | 210 | - | RNAV1 |
| 008 | TF | ENTIX | - | 203 (195.3) | -8.0 | 16.5 | - | +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 | ISKUP | 029 (020.6) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 7000 | - | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

ATSAG ARRIVAL

From ATSAG, to IKE, to OSPUN, at 6000FT, to FF662, to FF663, to FF664, to FF665, to SEDKA at 6000FT, to ENTIX at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | DGC | 6.0NM to ENTIX - ENTIX |
| 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 | ATSAG | - | - | -8.0 | - | - | - | - | - | RNAV1 |
| 002 | TF | IKE | - | 045 (036.6) | -8.0 | 6.2 | - | - | - | - | RNAV1 |
| 003 | TF | OSPUN | - | 057 (049.2) | -8.0 | 6.9 | - | 6000 | 210 | - | RNAV1 |
| 004 | TF | FF662 | - | 057 (048.7) | -8.0 | 5.0 | - | - | - | - | RNAV1 |
| 005 | TF | FF663 | - | 034 (026.2) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 006 | TF | FF664 | - | 057 (048.8) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 007 | TF | FF665 | - | 079 (071.4) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 008 | TF | SEDKA | - | 102 (094.0) | -8.0 | 7.0 | - | 6000 | 210 | - | RNAV1 |
| 009 | TF | ENTIX | - | 203 (195.3) | -8.0 | 18.0 | - | +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 | ATSAG | 045 (036.6) | -8.0 | 1.0(-14000) 1.5(+14001) | R | 6000 | - | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJFF / FUKUOKA

RNAV STAR RWY16

SARUP ARRIVAL

From SARUP, to OSPUN at 6000FT, to FF662, to FF663, to FF664, to FF665, to SEDKA at 6000FT, to ENTIX at or above 2000FT.

| | | |
|-----------------------|---|------------------------|
| Critical DME | DGC | 6.0NM to ENTIX - ENTIX |
| DME GAP | | - |
| Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 | |

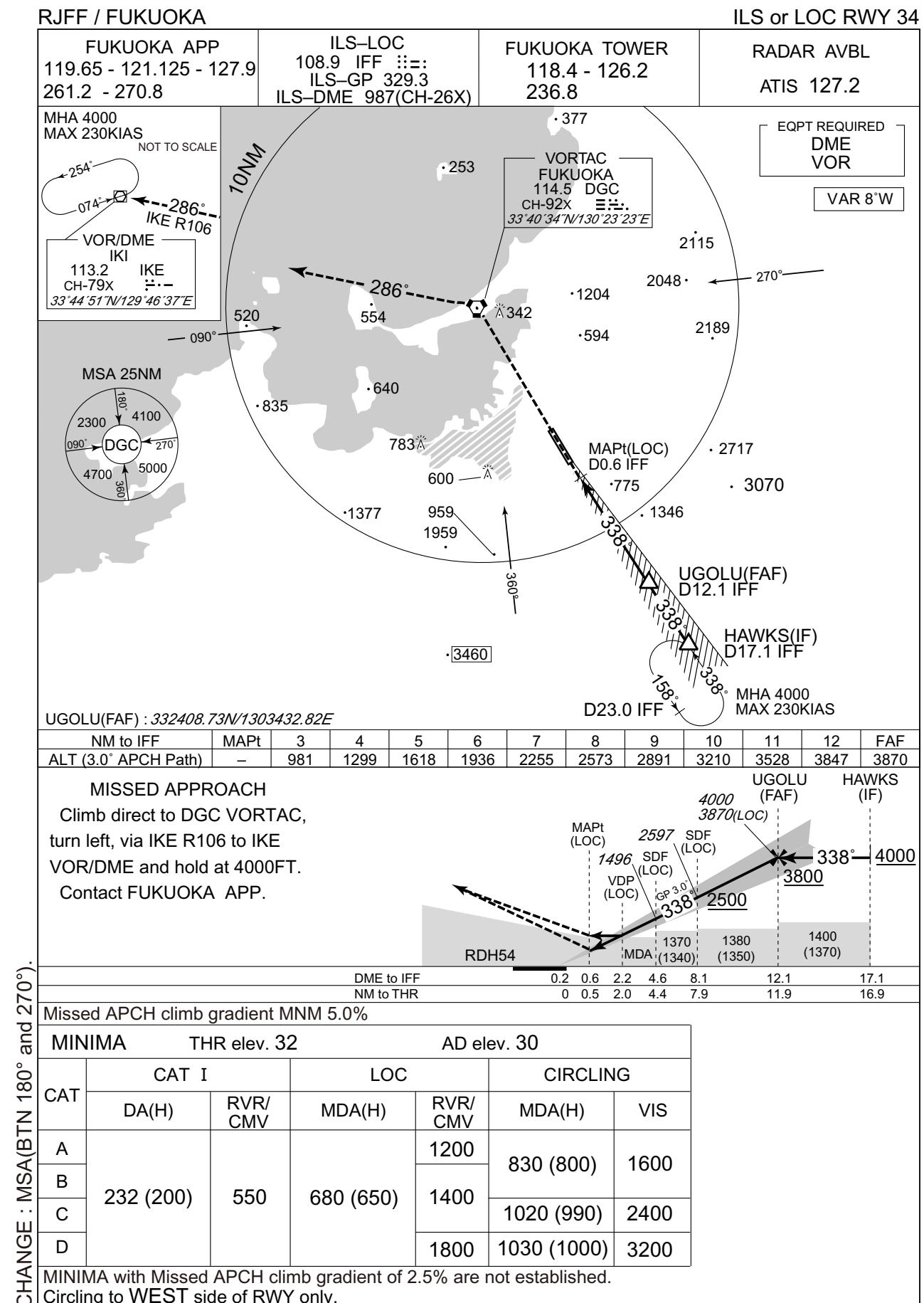
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001 | IF | SARUP | - | - | -8.0 | - | - | - | - | - | RNAV1 |
| 002 | TF | OSPUN | - | 103 (095.0) | -8.0 | 8.5 | - | 6000 | 210 | - | RNAV1 |
| 003 | TF | FF662 | - | 057 (048.7) | -8.0 | 5.0 | - | - | - | - | RNAV1 |
| 004 | TF | FF663 | - | 034 (026.2) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 005 | TF | FF664 | - | 057 (048.8) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 006 | TF | FF665 | - | 079 (071.4) | -8.0 | 7.0 | - | - | - | - | RNAV1 |
| 007 | TF | SEDKA | - | 102 (094.0) | -8.0 | 7.0 | - | 6000 | 210 | - | RNAV1 |
| 008 | TF | ENTIX | - | 203 (195.3) | -8.0 | 18.0 | - | +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 | SARUP | 103 (094.9) | -8.0 | 1.0(-14000) 1.5(+14001) | L | 6000 | - | -230(-14000) -240(+14001) | RNAV1 |

Waypoint Coordinates

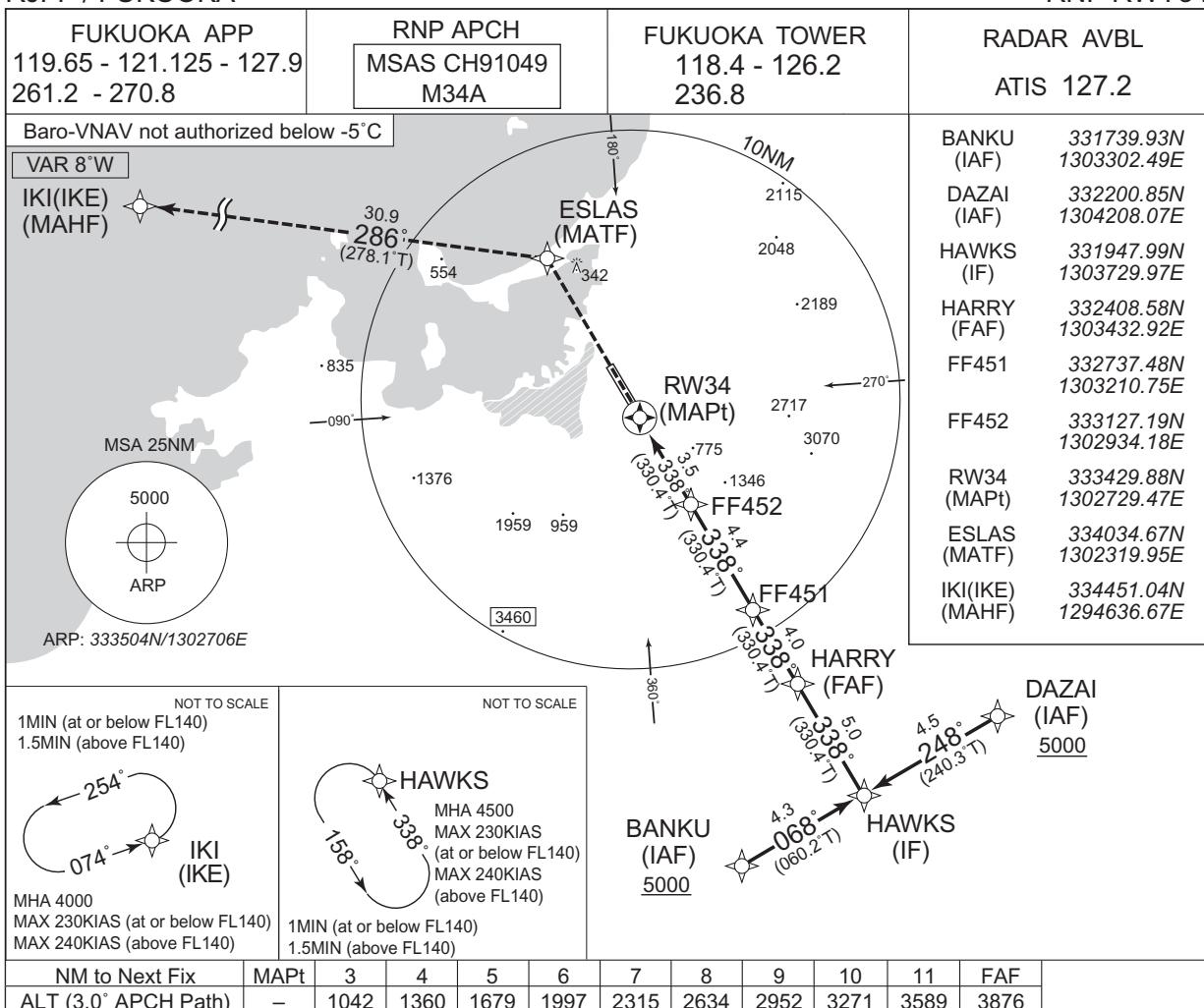
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---------------------|------------------------|---------------------|------------------------|
| OSTEP | 330831.8N / 1302632.1E | PIKOP | 340354.2N / 1302333.4E |
| HONOK | 332006.3N / 1301647.8E | ATSAG | 333953.2N / 1294210.5E |
| AMAOH | 332809.0N / 1300959.9E | SARUP | 335008.4N / 1294244.7E |
| KEYAH | 333611.4N / 1300310.7E | OSPUN | 334923.3N / 1295256.2E |
| ISKUP | 332847.3N / 1295046.6E | FF662 | 335241.2N / 1295727.4E |
| IKE | 334451.0N / 1294636.7E | FF663 | 335859.6N / 1300112.4E |
| AKSIL | 334619.9N / 1295842.8E | FF664 | 340337.0N / 1300734.7E |
| FF658 | 335217.7N / 1295911.8E | FF665 | 340551.1N / 1301535.9E |
| FF659 | 335804.5N / 1300238.1E | SEDKA | 340521.2N / 1302402.1E |
| FF660 | 340218.8N / 1300828.5E | ENTIX | 334757.5N / 1301818.9E |
| FF661 | 340421.6N / 1301549.5E | | |

INSTRUMENT APPROACH CHART



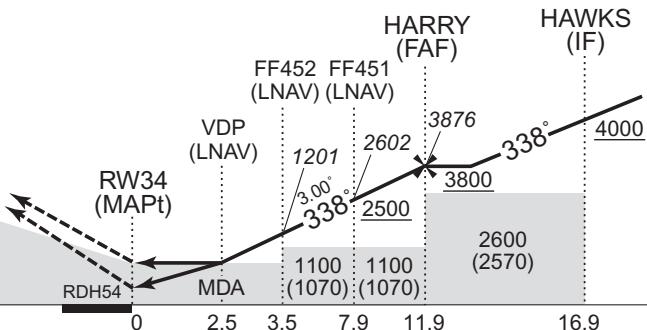
INSTRUMENT APPROACH CHART

RJFF / FUKUOKA



MISSSED APPROACH

Direct to ESLAS, to IKE and hold at 4000FT.
Contact FUKUOKA APP.



CHANGE : FF453 abolished. ESLAS established.

| CAT | LPV | | LNAV/VNAV | | LNAV | | CIRCLING | |
|-----|-----------|---------|-----------|---------|-----------|---------|-------------|------|
| | DA(H) | RVR/CMV | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 306 (274) | | 1200 | | 1200 | | 830 (800) | 1600 |
| B | 316 (284) | 800 | 820 (788) | 1400 | 820 (790) | 1400 | 1020 (990) | 2400 |
| C | 326 (294) | | | 1800 | | 1800 | 1030 (1000) | 3200 |
| D | 336 (304) | 1400 | | | | | | |

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

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

RNP RWY34

FAS DATA BLOCK

| | | | |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type | 0 | LTP/FTP ellipsoidal height | +00424 |
| SBAS service provider identifier | 2 | FPAP latitude | 333548.8630N |
| Airport identifier | RJFF | FPAP longitude | 1302635.4830E |
| Runway | 34 | Threshold crossing height | 00016.5 |
| Approach performance designator | 0 | TCH units selector | 1 |
| Route indicator | | Glide path angle | 03.00 |
| Reference path data selector | 0 | Course width at threshold | 105.00 |
| Reference path ID | M34A | Δ length offset | 0000 |
| LTP/FTP latitude | 333429.8705N | HAL | 40.0 |
| LTP/FTP longitude | 1302729.4540E | VAL | 50.0 |
| CRC remainder | 9DA9C0E7 | | |

Required additional data

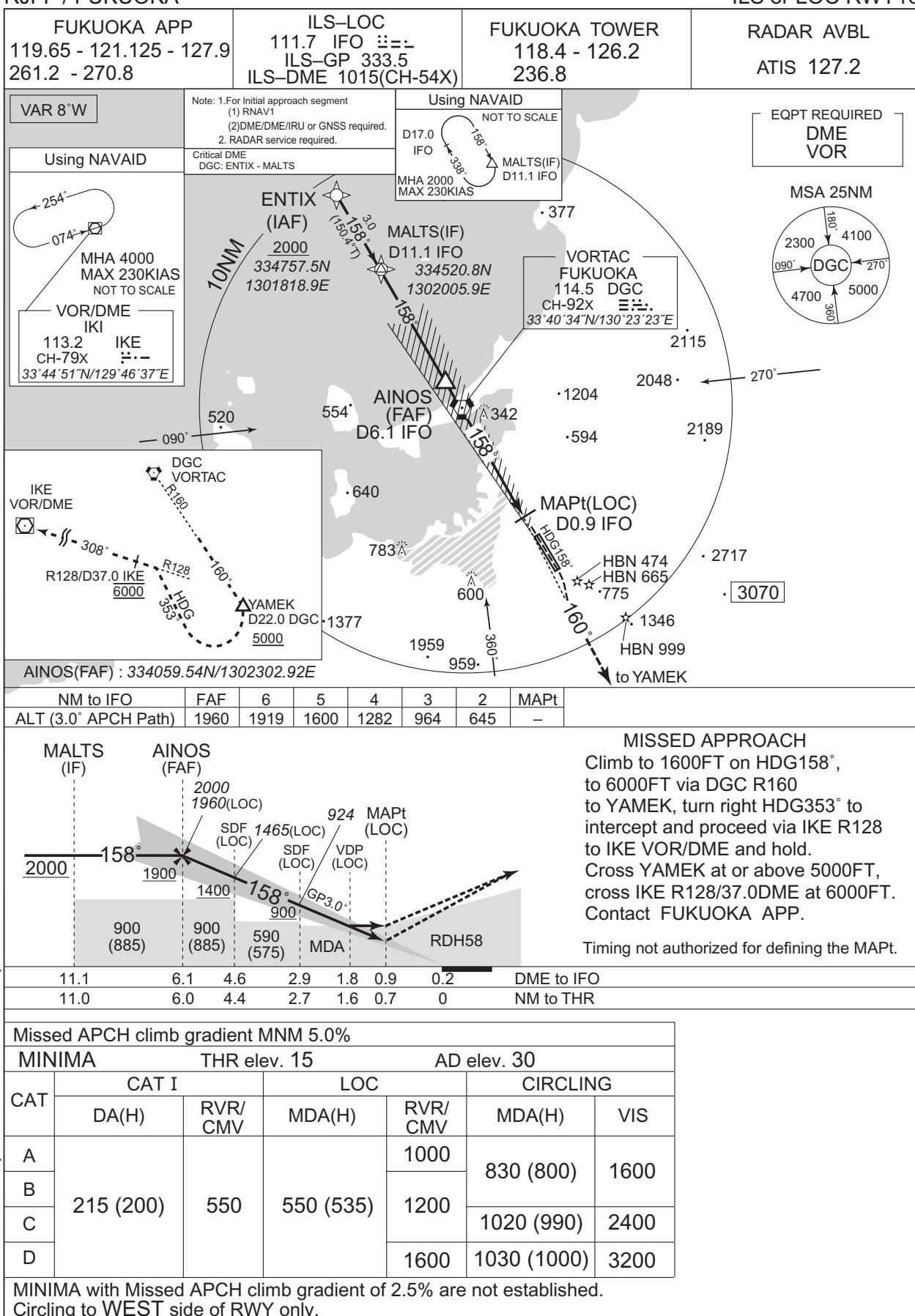
| | |
|----------------------------|-----|
| LTP/FTP orthometric height | 9.8 |
|----------------------------|-----|

CHANGE : FAS DATA BLOCK and Required additional data established.

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

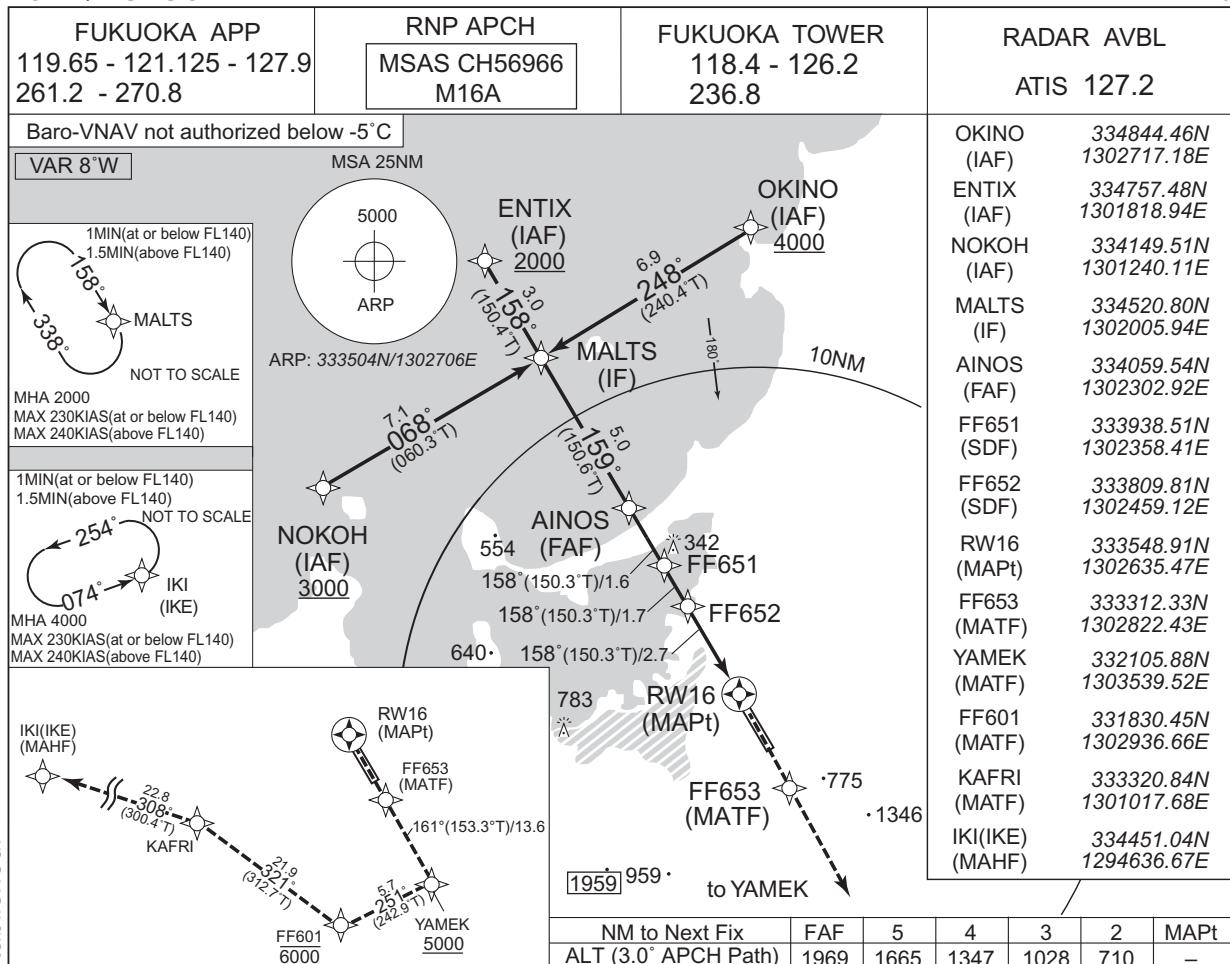
ILS or LOC RWY16



INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

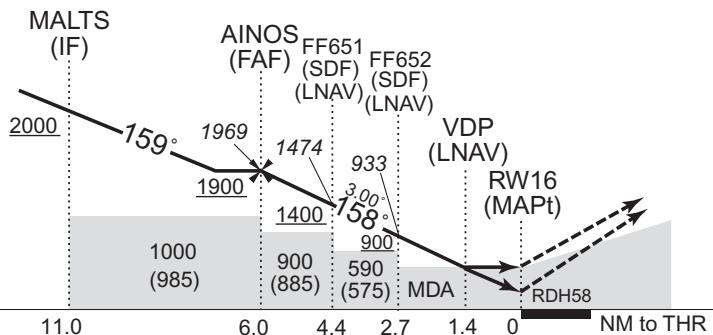
RNP RWY16



MISSSED APPROACH

Direct to FF653, to YAMEK at or above 5000FT, to FF601 at 6000FT, to KAFRI, to IKI and hold at 6000FT.

Contact FUKUOKA APP.



Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 15 AD elev. 30

| CAT | LPV | | LNAV/VNAV | | LNAV | | CIRCLING | |
|-----|-----------|---------|-----------|---------|-----------|---------|-------------|------|
| | DA(H) | RVR/CMV | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 265 (250) | 800 | 490 (475) | 1000 | 490 (475) | 1000 | 830 (800) | 1600 |
| B | 267 (252) | | | 1200 | | 1200 | | |
| C | 277 (262) | | | | | | 1020 (990) | 2400 |
| D | 287 (272) | 1200 | | 1600 | | 1600 | 1030 (1000) | 3200 |

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

Circling to WEST side of RWY only.

CHANGE : ENTIK established. Course FM ENTIK to MALTS established.

INSTRUMENT APPROACH CHART

RJFF / FUKUOKA

RNP RWY16

FAS DATA BLOCK

| | | | |
|----------------------------------|---------------|----------------------------|---------------|
| Operation type | 0 | LTP/FTP ellipsoidal height | +00371 |
| SBAS service provider identifier | 2 | FPAP latitude | 333429.8705N |
| Airport identifier | RJFF | FPAP longitude | 1302729.4540E |
| Runway | 16 | Threshold crossing height | 00017.7 |
| Approach performance designator | 0 | TCH units selector | 1 |
| Route indicator | | Glide path angle | 03.00 |
| Reference path data selector | 0 | Course width at threshold | 105.00 |
| Reference path ID | M16A | Δ length offset | 0000 |
| LTP/FTP latitude | 333548.8630N | HAL | 40.0 |
| LTP/FTP longitude | 1302635.4830E | VAL | 50.0 |
| CRC remainder | AA995500 | | |

Required additional data

| | |
|----------------------------|-----|
| LTP/FTP orthometric height | 4.5 |
|----------------------------|-----|

CHANGE : FAS DATA BLOCK and Required additional data established.

INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



RJFF / FUKUOKA

Visual REP

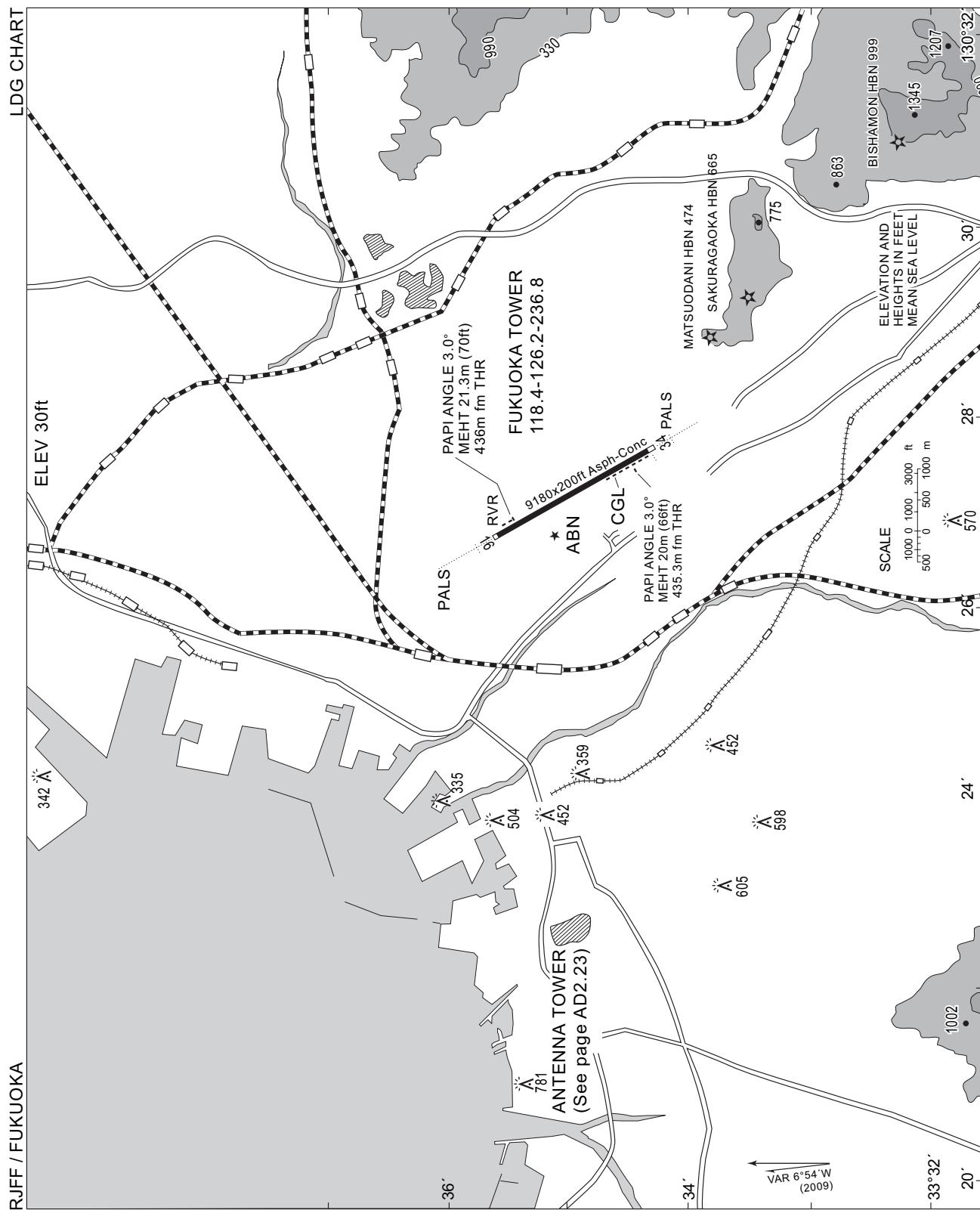


※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

| 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.

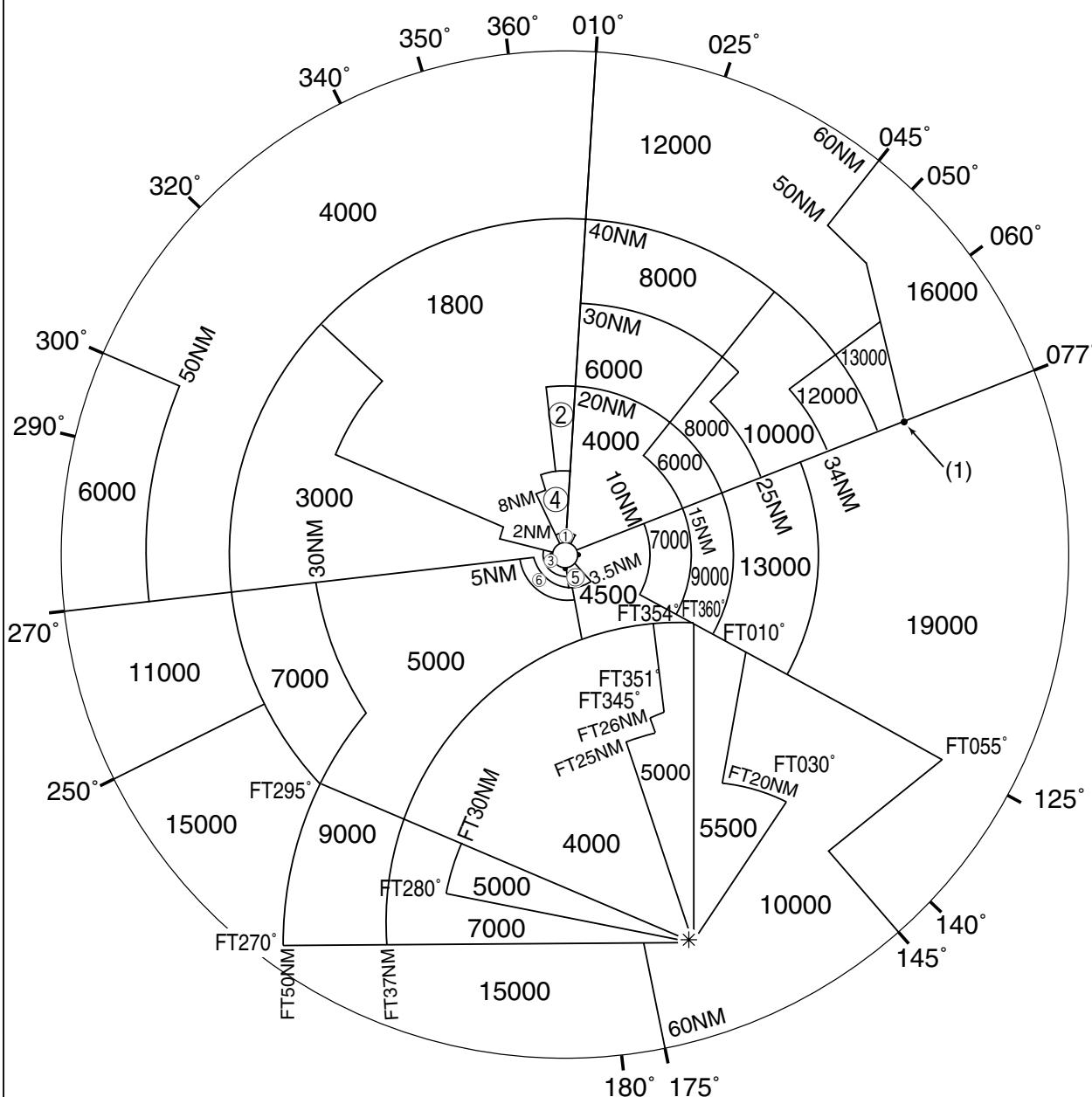
*ヘリコプター用 Use For Helicopter



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)