

RJFR / KITAKYUSHU SID

ASARI THREE DEPARTURE

RWY 18 : Climb RWY HDG to 500FT, turn left HDG039°,...

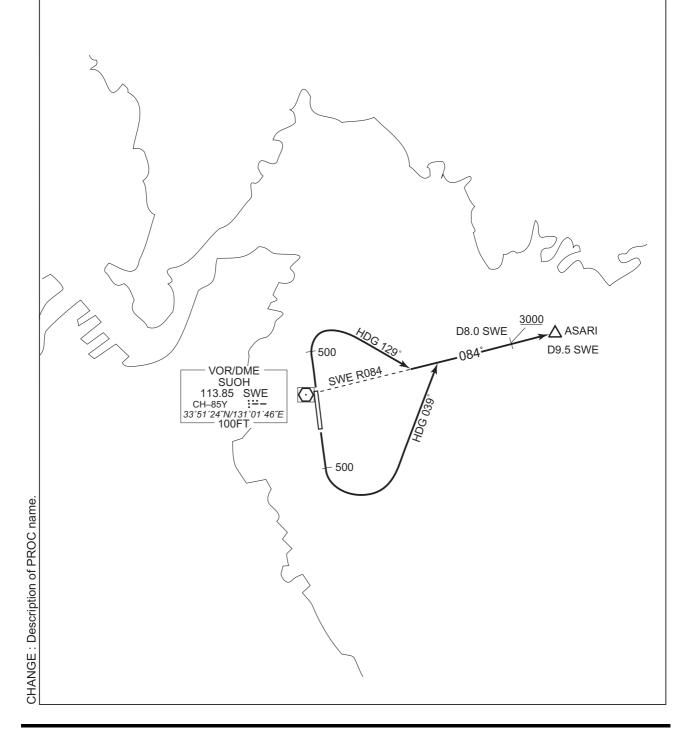
RWY 36: Climb RWY HDG to 500FT, turn right HDG129°, ...

...to intercept and proceed via SWE R084 to ASARI.

Cross SWE 8.0DME at or above 3000FT.

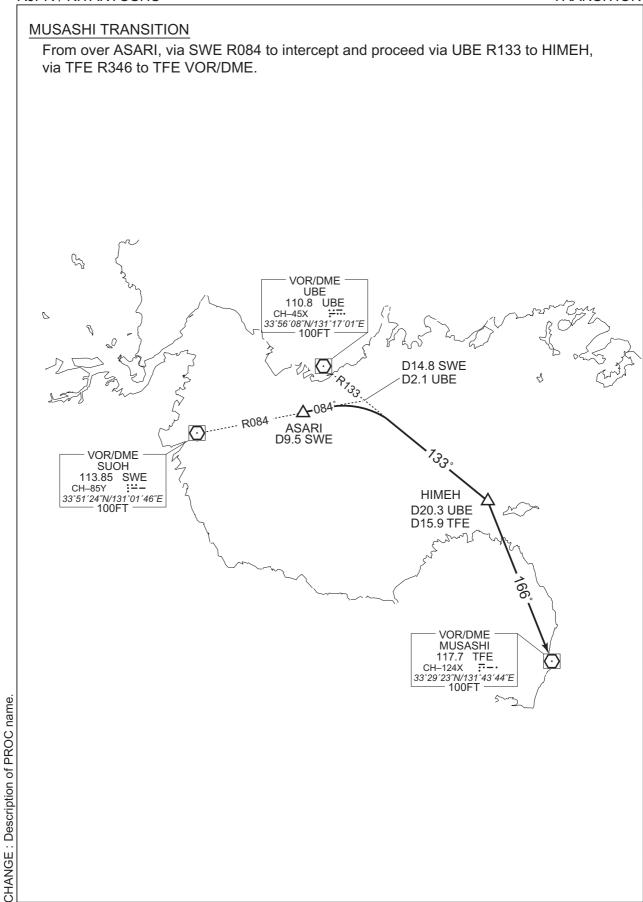
Note RWY18: 5.8% climb gradient required up to 500FT due to airspace restrictions only.

RWY36: 4.0% climb gradient required up to 500FT due to airspace restrictions only.



RJFR / KITAKYUSHU **TRANSITION** MATSUYAMA TRANSITION From over ASARI, via SWE R084 to intercept and proceed via UBE R133 to HIMEH, via UBE R133 to intercept and proceed via MYE R257 to MYE VOR/DME. VOR/DME ÜBĘ 110.8 UBE D14.8 SWE /D2.1 UBE O RO84 _ △ ASARI D9.5 SWE VOR/DME HIMEH D20.3 UBE SUOH VOR/DME D37.1 UBE D43.1 MYE 113.85 SWE CH–85Y **:∺−** MATSUYAMA 110.65 MYE CH-43Y =:--CH-85Y 33°51′24″N/131°01′46″E 100FT 33°49′48″N/132°41′32″E — 0FT — 0 CHANGE: Description of PROC name.

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ONGHA TWO DEPARTURE

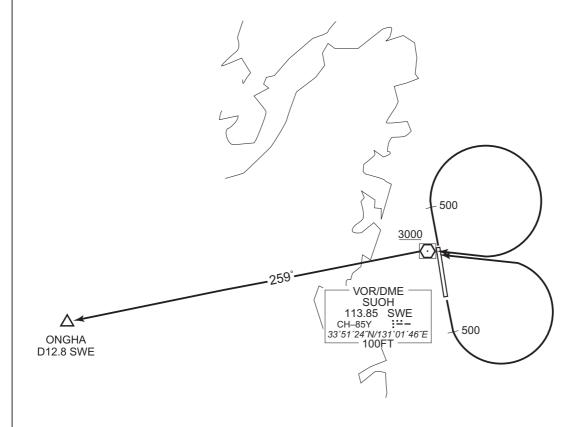
RWY 18 : Climb RWY HDG to 500FT, turn left,... RWY 36 : Climb RWY HDG to 500FT, turn right,...

...direct to SWE VOR/DME, proceed via SWE R259 to ONGHA.

Cross SWE VOR/DME at or above 3000FT.

Note RWY18: 5.8% climb gradient required up to 500FT due to airspace restrictions only.

RWY36: 4.0% climb gradient required up to 500FT due to airspace restrictions only.



RJFR / KITAKYUSHU **RNAV SID and TRANSITION** KOHEI ONE DEPARTURE RNAV1 DOUGO TRANSITION RWY18 Note 1) DME/DME/IRU or GNSS required. SWE: 2.0NM from DER - 12.0NM to KOHEI UBE: 16.0NM to KOHEI - KOHEI %The aircraft equipped with only DME/DME/IRU must be able to update its position without delay RWY36 UBE: 12.0NM to KOHEI - KOHEI Critical DME at the starting point of take-off roll. 2) RADAR service required. RWY18: DER - 2.0NM from DER RWY36: DER - 12.0NM to KOHEI DME GAP Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W VOR/DME TACAN UBE KUGA 110.8 UBE 1177 IWT CH–45X ;;···· 33°56′08″N/131°17′01″E CH-90X ::-34°04′48″N/132°08′50″E 100FT -2100FT **MATSUYAMA** (MYE) 334948.4N <u>500</u> KOHEI 335057.9N 358 1324132.0F 1312540.0E 77.5 **DOUGO TRANSITION** HIMEH 7უ 178 334414.9N 500 27.5 1313651.2E **GONBE** 29.8 333752.3N KOHEI ONE DEPARTURE 1321148.8E 110 VOR/DME SUOH 113.85 SWE VOR/DME CH-85Y 33°51′24″N/131°01′46″E **MATSUYAMA** 110.65 MYE CH-43Y ==--100FT $\langle \cdot \rangle$ VOR/DME 33°49′48″N/132°41′32″E MUSASHI ÖFT 117.7 TFE CH-124X 33°29′23″N/131°43′44″E - 100FT symbol(HIMEH) Ϋ́ KOHEI ONE DEPARTURE HANGE: Description of VAR. RWY18: Climb on HDG178° at or above 500FT, turn left direct to KOHEI. RWY36 : Climb on HDG358° at or above 500FT, turn right direct to KOHEI. RWY18: 5.8% climb gradient required up to 500FT due to airspace restrictions only. RWY36: 4.0% climb gradient required up to 500FT due to airspace restrictions only. **DOUGO TRANSITION** From KOHEI, to HIMEH, to GONBE, to MYE.

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RNAV SID and TRANSITION

KOHEI ONE DEPARTURE

RWY18

| Serial Number | Path Descriptor | Waypoint Identifier | | | Magnetic Variation | | Turn Direction | | • | | Navigation Specification |
|------------------|--------------------|------------------------|---|----------------|-----------------------|---|-------------------|------|---|---|-----------------------------|
| 001 | VA | _ | _ | 178 (170.4) | -7.5 | _ | _ | +500 | _ | _ | RNAV1 |
| 002 | DF | KOHEI | _ | _ | -7.5 | _ | L | _ | _ | _ | RNAV1 |

RWY36

| Serial Number | Path Descriptor | Waypoint Identifier | | | _ | | Turn Direction | | • | | Navigation Specification |
|------------------|--------------------|------------------------|---|----------------|------|---|-------------------|------|---|---|-----------------------------|
| 001 | VA | _ | _ | 358 (350.4) | -7.5 | - | _ | +500 | _ | _ | RNAV1 |
| 002 | DF | KOHEI | _ | _ | -7.5 | ı | R | ı | ı | _ | RNAV1 |

DOUGO TRANSITION

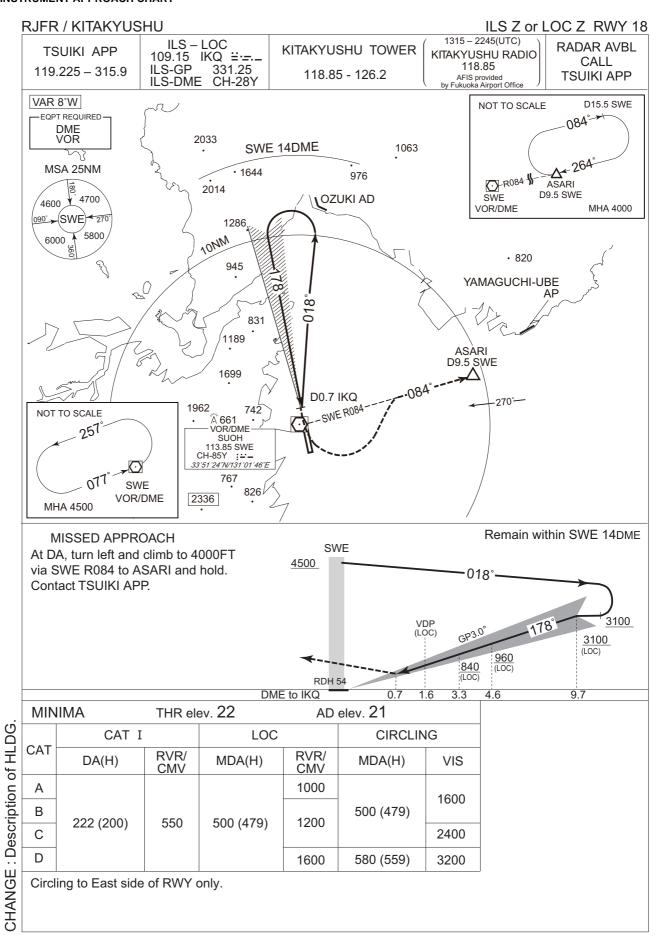
| Serial Number | | Waypoint Identifier | , , | Course °M(°T) | Magnetic Variation | | Turn Direction | | Speed (KIAS) | | Navigation Specification |
|------------------|----|------------------------|-----|------------------|-----------------------|------|-------------------|---|-----------------|---|-----------------------------|
| 001 | IF | KOHEI | _ | _ | -7.5 | _ | - | _ | _ | _ | RNAV1 |
| 002 | TF | HIMEH | _ | 133 (125.8) | -7.5 | 11.5 | _ | _ | _ | _ | RNAV1 |
| 003 | TF | GONBE | _ | 110 (102.2) | -7.5 | 29.8 | _ | _ | _ | _ | RNAV1 |
| 004 | TF | MYE | _ | 072 (064.1) | -7.5 | 27.5 | _ | _ | _ | _ | RNAV1 |

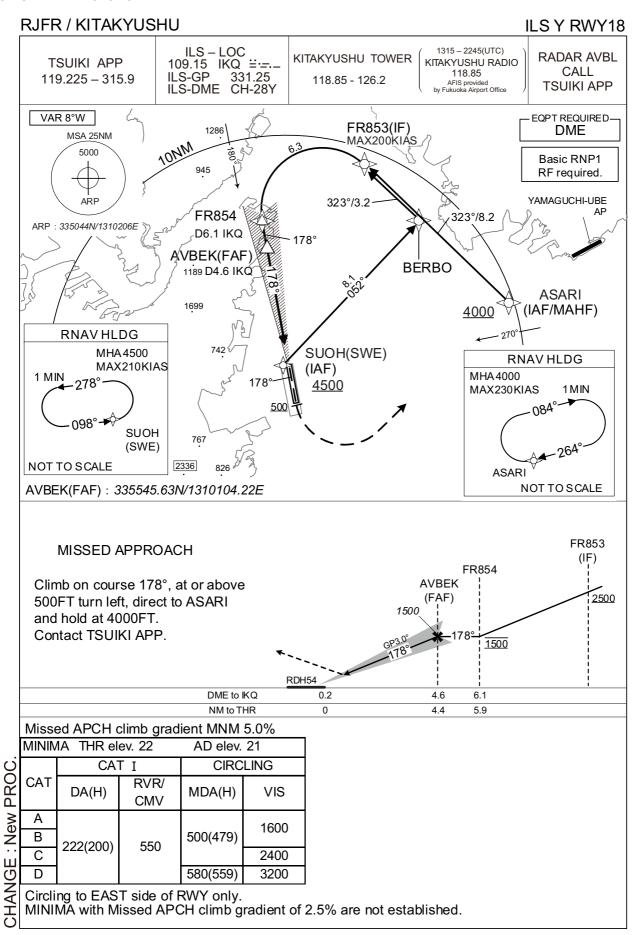
| RJFR / KITAKYUSHU | | RNAV TRANSITION | |
|--|--|-------------------------|---|
| FIATO TR | ANSITION | | RNAV1 |
| Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. | Critical DME | | _ |
| | DME GAP | | - |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inapp | propriate NAVAIDs for RNAV1 |
| VAR 8°W KOHEI 73.5 335057.9N 1312540.0E HIMEH 334414.9N 1313651.2E | 31.3 012 ALFET 334001.5N 1320007.2E FL160 | Δ | 19.7 082° FIATO 340037.4N 1330354.6E |

From KOHEI, to HIMEH, to ALFET at or above FL160, to MILAN, to FIATO.

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | | Turn Direction | | Speed (KIAS) | | Navigation Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|--------|-----------------|---|-----------------------------|
| 001 | IF | KOHEI | _ | _ | -7.5 | _ | _ | _ | _ | _ | RNAV1 |
| 002 | TF | HIMEH | _ | 133 (125.8) | -7.5 | 11.5 | _ | _ | _ | _ | RNAV1 |
| 003 | TF | ALFET | _ | 109 (102.2) | -7.5 | 19.8 | _ | +FL160 | _ | _ | RNAV1 |
| 004 | TF | MILAN | _ | 072 (065.1) | -7.5 | 37.3 | _ | _ | _ | _ | RNAV1 |
| 005 | TF | FIATO | _ | 082 (075.2) | -7.5 | 19.7 | _ | _ | _ | _ | RNAV1 |







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ILS Y RWY18

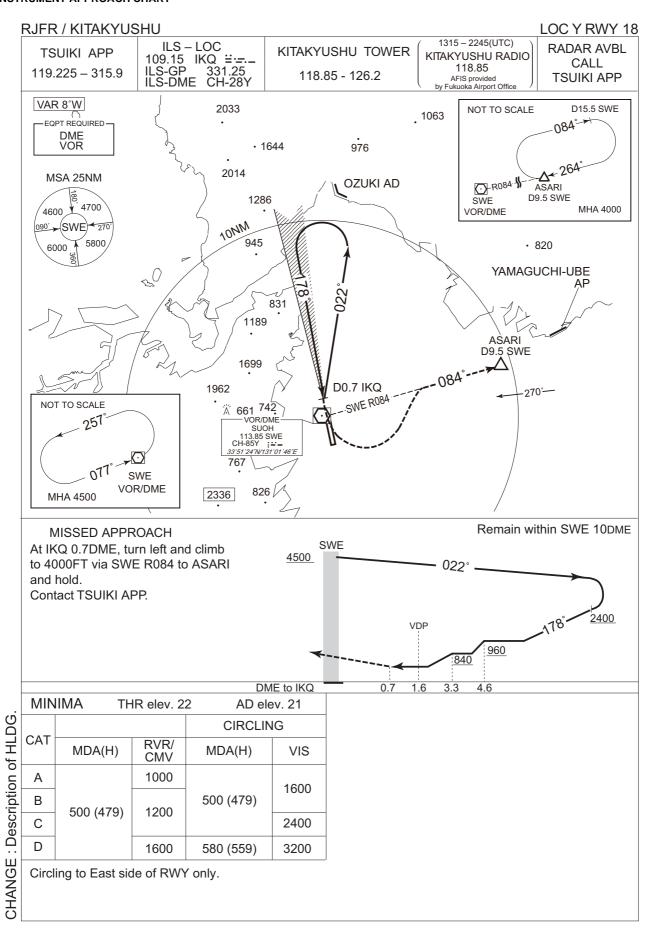
Coding Table

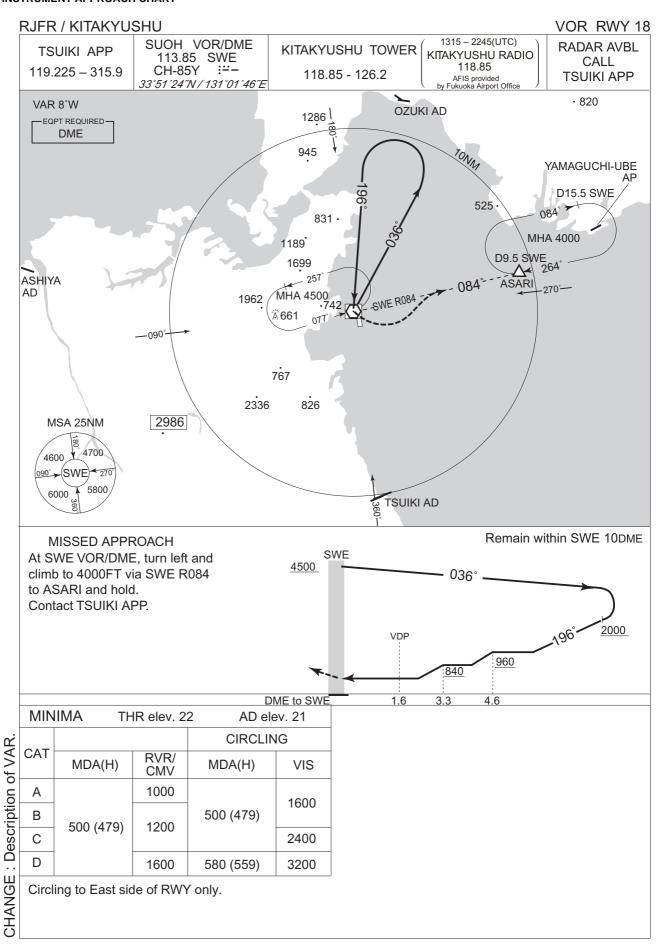
| Serial Number | Path Descriptior | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001 | IF | ASARI | - | - | -8.0 | - | - | +4000 | - | - | Basic RNP1 |
| 002 | TF | FR853 | - | 323 (314.8) | -8.0 | 8.2 | - | +2500 | -200 | - | Basic RNP1 |
| | | | , | | | | | | - | | |
| 001 | IF | SWE | - | - | -8.0 | - | - | +4500 | - | - | Basic RNP1 |
| 002 | TF | BERBO | - | 052 (044.5) | -8.0 | 8.1 | - | 1 | - | - | Basic RNP1 |
| 003 | TF | FR853 | - | 323 (314.8) | -8.0 | 3.2 | - | +2500 | -200 | - | Basic RNP1 |
| | | | | | | | | | | | |
| 001 | IF | FR853 | - | - | -8.0 | - | - | +2500 | -200 | - | Basic RNP1 |
| 002 | RF Center: FRRF3 r=2.50NM | FR854 | i | 1 | -8.0 | 6.3 | L | 1500 | - | - | Basic RNP1 |
| | | | | | | | | | | | |
| 001 | CA | - | - | 178 (170.4) | -8.0 | - | - | +500 | 1 | - | Basic RNP1 |
| 002 | DF | ASARI | 1 | - | -8.0 | - | L | 4000 | 1 | - | Basic RNP1 |

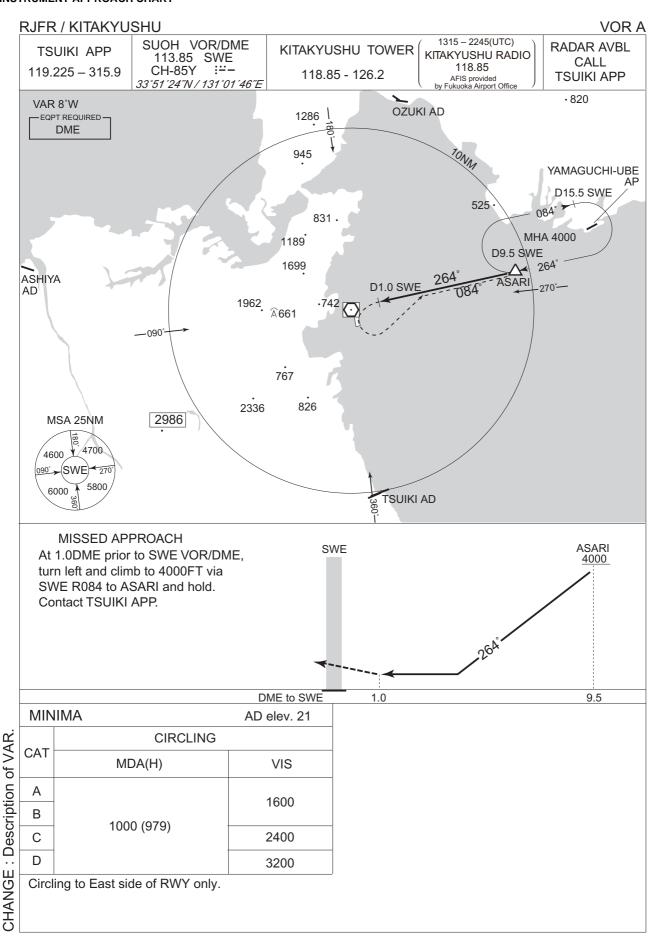
| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|------|------------------------|-----------------------------|-----------------------|---------------------------|-------------------|-----------------------------|-----------------------------|-----------------|-----------------------------|
| Hold | ASARI | 264 (256.4) | -8.0 | 1.0 (-14000) | R | 4000 | FL140 | -230(-14000) | Basic RNP1 |
| Hold | SWE | 098 (090.0) | -8.0 | 1.0 (-14000) | L | 4500 | FL140 | -210(-14000) | Basic RNP1 |

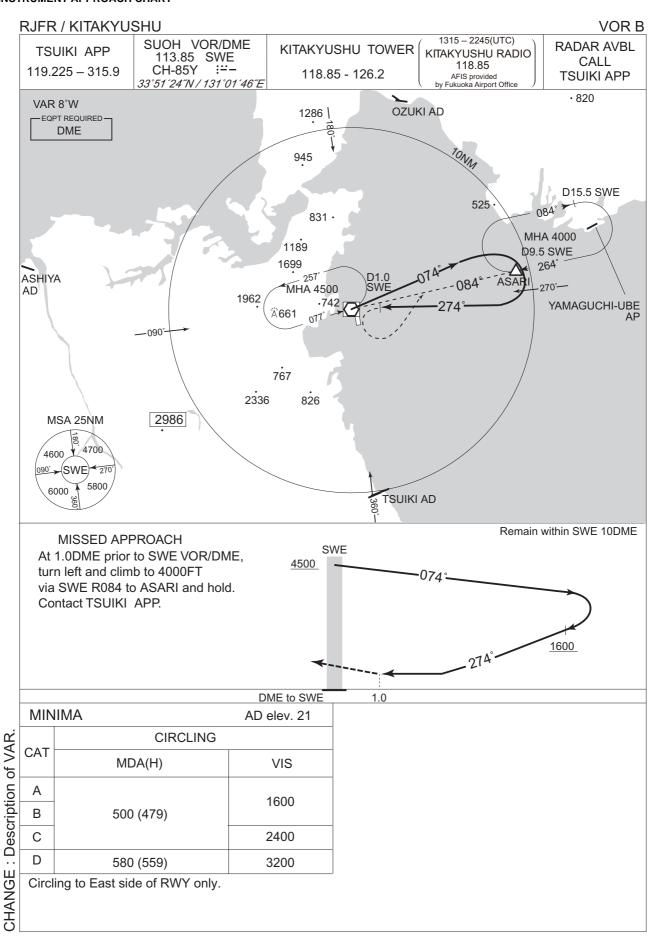
Waypoint Coordinates

| | Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---------------------|------------------------|--------------------------|------------------------|
| | ASARI | 335338.98N/1311252.32E | FRRF3 | 335739.78N/1310343.74E |
| 5 | BERBO | 335710.25N/1310836.17E | | |
| 5 | FR853 | 335926.70N/1310550.48E | | |
| | FR854 | 335714.50N/1310045.99E | | |
| - | SUOH(SWE) | 335123.82N/1310145.84E | | |
| 5 | | | | |

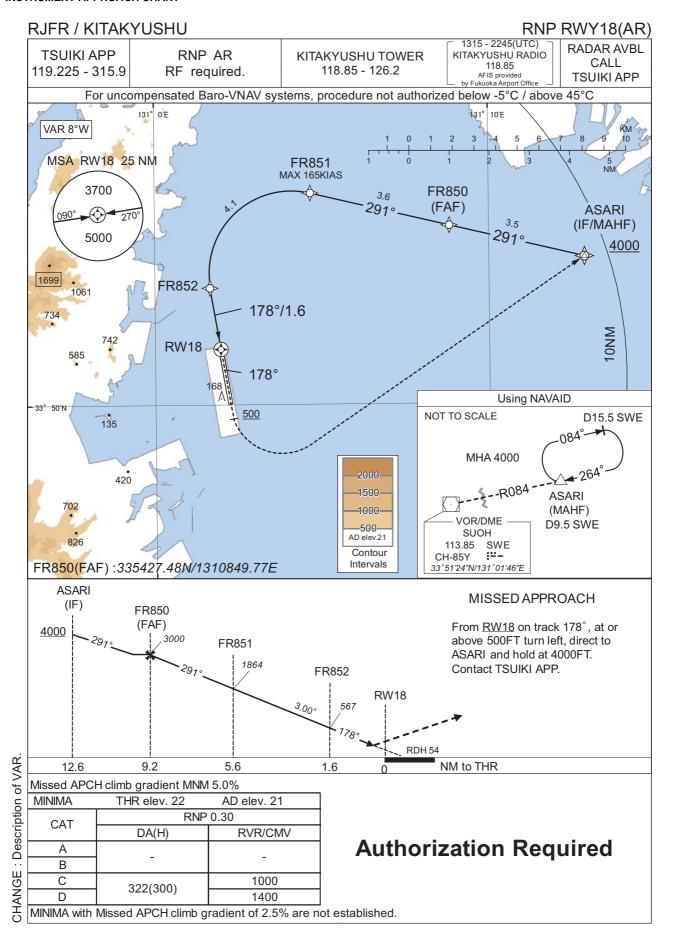








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RNP RWY18(AR)

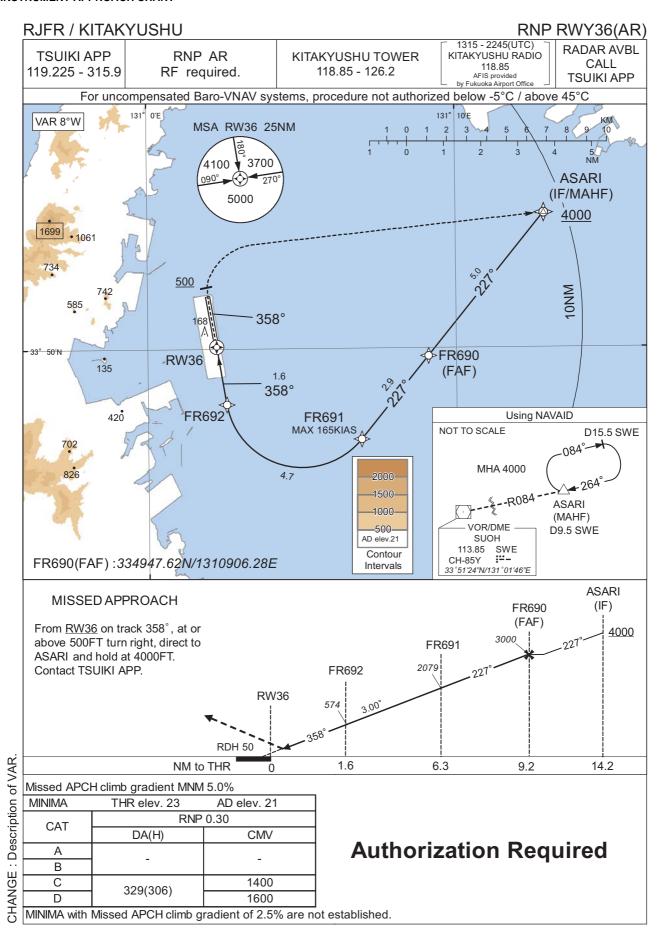
Coding Table

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-----------------------|--------------|
| 001 | IF | ASARI | , | - | -7.9 | - | 1 | +4000 | 1 | - | - |
| 002 | TF | FR850 | - | 291 (283.6) | -7.9 | 3.5 | ı | 3000 | 1 | 1 | 1.0 |
| 003 | TF | FR851 | - | 291 (283.5) | -7.9 | 3.6 | ı | 1864 | -165 | -3.00 | 0.3 |
| 004 | RF Center: FRRF1 r=2.06NM | FR852 | ı | 1 | -7.9 | 4.1 | L | 567 | 1 | -3.00 | 0.3 |
| 005 | TF | RW18 | Υ | 178 (170.4) | -7.9 | 1.6 | - | 76 | 1 | -3.00/54 | 0.3 |
| 006 | FA | - | - | 178 (170.4) | -7.9 | - | - | +500 | ı | - | 1.0 |
| 007 | DF | ASARI | - | - | -7.9 | 1 | L | 4000 | ı | - | 1.0 |

Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| ASARI | 335338.98N / 1311252.32E | FRRF1 | 335316.61N / 1310405.62E |
| FR850 | 335427.48N / 1310849.77E | | |
| FR851 | 335517.24N / 1310440.15E | | |
| FR852 | 335255.76N / 1310139.03E | | |
| RW18 | 335123.92N / 1310157.83E | | |

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RNP RWY36(AR)

Coding Table

| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|------------------|------------------------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-----------------------|--------------|
| 001 | IF | ASARI | - | - | -7.9 | - | - | +4000 | - | - | - |
| 002 | TF | FR690 | - | 227 (219.1) | -7.9 | 5.0 | - | 3000 | - | 1 | 1.0 |
| 003 | TF | FR691 | - | 227 (219.0) | -7.9 | 2.9 | - | 2079 | -165 | -3.00 | 0.3 |
| 004 | RF Center: FRRF2 r=2.06NM | FR692 | ı | 1 | -7.9 | 4.7 | R | 574 | ı | -3.00 | 0.3 |
| 005 | TF | RW36 | Υ | 358 (350.4) | -7.9 | 1.6 | - | 73 | - | -3.00/50 | 0.3 |
| 006 | FA | - | - | 358 (350.4) | -7.9 | - | - | +500 | - | - | 1.0 |
| 007 | DF | ASARI | - | - | -7.9 | - | R | 4000 | ı | - | 1.0 |

Waypoint Coordinates

| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---------------------|--------------------------|--------------------------|--------------------------|
| ASARI | 335338.98N / 1311252.32E | FRRF2 | 334851.32N / 1310459.78E |
| FR690 | 334947.62N / 1310906.28E | | |
| FR691 | 334733.05N / 1310655.02E | | |
| FR692 | 334830.46N / 1310233.32E | | |
| RW36 | 335004.08N / 1310214.17E | | |



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Visual REP

| Call sign | BRG / DIST from ARP | Remarks |
|----------------------------|---------------------|---|
| 部崎 Hesaki | 355°T / 6.8NM | 灯台 Lighthouse |
| 6NM NE | 045°T / 6.0NM | 海上 Over the sea |
| 6NM E | 090°T / 6.0NM | 海上 Over the sea |
| 6NM SE | 135°T / 6.0NM | 海上 Over the sea |
| 苅田 Kanda | 202°T / 5.5NM | 日産自動車九州工場 Automobile manufacturing plant |
| 石原町 Ishiharamachi | 247°T / 9.2NM | JR石原町駅 Station |
| 間島 Majima | 252°T / 3.1NM | 島 Island |
| 東インター Higashi Inter | 263°T / 6.2NM | 小倉東I.C.(九州自動車道) Interchange |
| 小倉ステーション Kokura Station | 288°T / 8.0NM | JR小倉駅 Station |



