

### RNAV SID and TRANSITION RJNK / KOMATSU MANAH TWO DEPARTURE RNAV1 Note 1) DME/DME/IRU or GNSS required. RWY06 \*The aircraft equipped with only DME/DME/IRU KMC, YME: 10NM to KAETU - 30NM to MANAH, must be able to update its position without delay at the starting point of take-off roll. 23NM to MANAH - 3NM to MANAH Critical DME RWY24 2) RADAR service required. KMC, YME: 23NM to MANAH - 3NM to MANAH RWY06 06DER - 10NM to KAETU DMF GAP 30NM to MANAH - 23NM to MANAH RWY24 24DER - 23NM to MANAH See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 Inappropriate Navaids VAR 8° W(2014) **VORTAC KOMATSU** 112.0 KMC CH-57X $\equiv :=$ 36°23′47″N/136°24′15″E 500 KAETU 362407.8N 1361447.7E 500 **AWAZU** 361946.6N 1361737.0E MANAH TWO DEPARTURE **MANAH** 355428.0N 1363223.1E KOMAKI TRANSITION **VORTAC NAGOYA** 114.2 KCC CH-89X ≣:≣: NAGOYA(KCC) 35°15′55″N/136°54′54″E -100FT 1365453.7E

### MANAH TWO DEPARTURE

RWY06: Climb on HDG063° at or above 500FT, turn left direct to KAETU, to MANAH. RWY24: Climb on HDG243° at or above 500FT, direct to <u>AWAZU</u>, to MANAH.

NOTE RWY06: 4.1% climb gradient required up to 3900FT.

OBST ALT 3215FT located at 13.0NM 200° FM end of RWY06.

RWY24: 4.8% climb gradient required up to 3900FT.

OBST ALT 3215FT located at 12.0NM 195° FM end of RWY24.

### **KOMAKI TRANSITION**

From MANAH to KCC.

## RJNK / KOMATSU

# **RNAV SID and TRANSITION**

# MANAH TWO DEPARTURE

### RWY06

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) |   |       |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|---|-------|
| 001              | VA                 | _                      | _           | 063<br>(055.0)   | -7.7                  | _    | _                 | +500             | _               | _ | RNAV1 |
| 002              | DF                 | KAETU                  |             | _                | -7.7                  | _    | Г                 | _                | _               | _ | RNAV1 |
| 003              | TF                 | MANAH                  | _           | 162<br>(154.3)   | -7.7                  | 32.9 | _                 | _                | _               | _ | RNAV1 |

## RWY24

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | VA                 | _                      | _           | 243<br>(235.0)   | -7.7                  | _    | _                 | +500             | _               | _                 | RNAV1                       |
| 002              | DF                 | AWAZU                  | Υ           | _                | -7.7                  | _    | -                 | _                | -               | _                 | RNAV1                       |
| 003              | TF                 | MANAH                  | _           | 162<br>(154.7)   | -7.7                  | 28.0 | _                 | _                | _               | _                 | RNAV1                       |

## KOMAKI TRANSITION

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over |                | Magnetic<br>Variation |      | Turn<br>Direction |   | Speed<br>(KIAS) |   | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|------|-------------------|---|-----------------|---|-----------------------------|
| 001              | IF                 | MANAH                  | _           | _              | -7.7                  | _    | _                 | _ | _               | _ | RNAV1                       |
| 002              | TF                 | KCC                    | _           | 162<br>(154.5) | -7.7                  | 42.7 | _                 | _ | _               | _ | RNAV1                       |

### RJNK / KOMATSU RNAV SID and TRANSITION RNAV1 GINJO TWO DEPARTURE RWY06 Note 1) DME/DME/IRU or GNSS required. \*The aircraft equipped with only DME/DME/IRU TOE: 14NM to HAKUI - NOTO must be able to update its position without delay at the starting point of take-off roll. RWY24 KMC, YME: 29.5NM to HAKUI - 19NM to HAKUI 2) RADAR service required. TOE: 13NM to HAKUI - NOTO KINZAN TRANSITION Critical DMF TOE: NOTO - 81 NM to GOLDO 81NM to GOLDO - 73NM to GOLDO KMC: 81NM to GOLDO - 73NM to GOLDO GTC: 66NM to GOLDO - 35NM to GOLDO 7NM to GOLDO - GOLDO RWY06 06DER - 14NM to HAKUI DME GAP RWY24 24DER - 29.5NM to HAKUI See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 Inappropriate Navaids VAR 8° W(2014) KINZAN TRANSITION **GOLDO** 380356.9N 1382435.5E 83.0 NOTO(NTE) 371723.9N 1365746.5E 15.0 064 VOR/DME **GINJO** NOTO 370902.0N 111.45 NTE 1364210.5E CH-51Y 37°17′24″N/136°57′46″E **GINJO TWO DEPARTURE** 800FT 23.3 014 **HAKUI** 364552.3N 1363853.2E **VORTAC KOMATSU** 500 112.0 KMC 063 CH-57X $\equiv :=$ 500 243° 36°23′47″N/136°24′15″E **GINJO TWO DEPARTURE** RWY06: Climb on HDG063° at or above 500FT, turn left direct to HAKUI, to GINJO, to NTE. RWY24: Climb on HDG243° at or above 500FT, turn right direct to HAKUI, to GINJO, to NTE. **KINZAN** TRANSITION From NTE to GOLDO.

## RJNK / KOMATSU

# RNAV SID and TRANSITION

# GINJO TWO DEPARTURE

## RWY06

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | VA                 | -                      | _           | 063<br>(055.0)   | -7.7                  | _    | _                 | +500             | _               | _                 | RNAV1                       |
| 002              | DF                 | HAKUI                  | _           | _                | -7.7                  | _    | L                 | _                | _               | _                 | RNAV1                       |
| 003              | TF                 | GINJO                  | _           | 014<br>(006.5)   | -7.7                  | 23.3 | -                 | _                | _               | _                 | RNAV1                       |
| 004              | TF                 | NTE                    | _           | 064<br>(056.0)   | -7.7                  | 15.0 | -                 | _                | _               | _                 | RNAV1                       |

## RWY24

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | VA                 | _                      | _           | 243<br>(235.0)   | -7.7                  | _                | _                 | +500             |                 | _                 | RNAV1                       |
| 002              | DF                 | HAKUI                  | 1           | -                | -7.7                  | _                | R                 | _                | _               | _                 | RNAV1                       |
| 003              | TF                 | GINJO                  | 1           | 014<br>(006.5)   | -7.7                  | 23.3             | 1                 | -                | _               | _                 | RNAV1                       |
| 004              | TF                 | NTE                    | _           | 064<br>(056.0)   | -7.7                  | 15.0             | _                 | -                | _               | _                 | RNAV1                       |

# KINZAN TRANSITION

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over |                | Magnetic<br>Variation |      | Turn<br>Direction |   | • |   | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|------|-------------------|---|---|---|-----------------------------|
| 001              | IF                 | NTE                    | _           | -              | -7.7                  | _    | _                 | _ | _ | _ | RNAV1                       |
| 002              | TF                 | GOLDO                  | _           | 063<br>(055.4) | -7.7                  | 83.0 | _                 | - | _ | _ | RNAV1                       |

RJNK / KOMATSU RNAV SID SONBU TWO DEPARTURE RNAV1 Note 1) DME/DME/IRU or GNSS required. RWY06 \*\*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. YME: 30NM to SONBU - 6NM to SONBU RWY24 YME: 23NM to SONBU - 6NM to SONBU 2) RADAR service required. RWY06 06DER - 44.5NM to SONBU DME GAP RWY24 24DER - 23NM to SONBU Inappropriate Navaids See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 VAR 8°W(2014) VORTAC **KOMATSU** 112.0 KMC CH-57X **Ξ**:Ξ 36°23′47″N/136°24′15″E SONBU TWO DEPARTURE 500 SONBU 361132.3N 1353502.9E

### SONBU TWO DEPARTURE

RWY06: Climb on HDG063° at or above 500FT, turn left direct to SONBU. RWY24: Climb on HDG243° at or above 500FT, turn right direct to SONBU.

RJNK / KOMATSU RNAV SID

# SONBU TWO DEPARTURE

## RWY06

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over |                | Magnetic<br>Variation |   | Turn<br>Direction |      | • |   | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|----------------|-----------------------|---|-------------------|------|---|---|-----------------------------|
| 001              | VA                 | _                      | _           | 063<br>(055.0) | -7.7                  | _ | _                 | +500 | _ | _ | RNAV1                       |
| 002              | DF                 | SONBU                  | _           | _              | -7.7                  | _ | L                 | _    | _ | _ | RNAV1                       |

## RWY24

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |   | Turn<br>Direction |      | ' |   | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|---|-------------------|------|---|---|-----------------------------|
| 001              | VA                 | _                      | _           | 243<br>(235.0)   | -7.7                  | _ | _                 | +500 | _ | _ | RNAV1                       |
| 002              | DF                 | SONBU                  | _           | _                | -7.7                  | _ | R                 | _    | _ | _ | RNAV1                       |

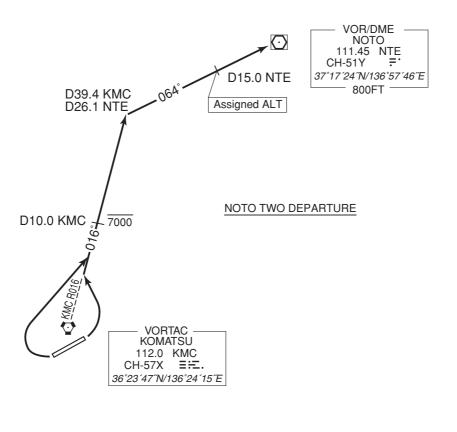
RJNK / KOMATSU SID

## NOTO TWO DEPARTURE

RWY06: Turn left,... RWY24: Turn right,...

... climb via KMC R016 to intercept and proceed via NTE R244 to NTE VOR/DME.

Cross KMC R016/10.0DME at or below 7000FT, cross NTE R244/15.0DME at assigned altitude.



CHANGE: SID renamed

RJNK / KOMATSU SID

# MIYAZU FOUR DEPARTURE

RWY 06: Turn left,... RWY 24: Turn right,...

...climb via KMC R286 to intercept and proceed via YME R040 to YME VOR/DME.

Cross KMC R286/10.0DME (YME R050) at or below 7000FT (\*at 7000FT), cross YME R040/48.0DME (KMC R256) at assigned altitude. \*YME R050 MRA 7000FT

### KOMATSU REVERSAL THREE DEPARTURE

RWY 06: Turn left,... RWY 24: Turn right,...

...climb via KMC R351, turn left to intercept and proceed via KMC R331 to KMC VORTAC within KMC 30.0DME.

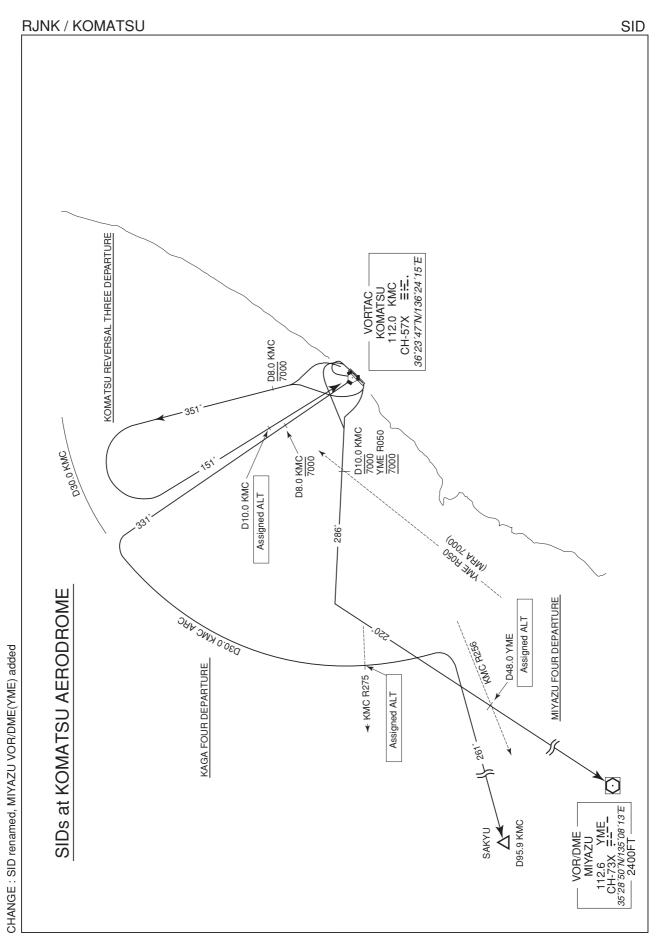
Cross KMC R351/8.0DME at or below 7000FT, cross KMC R331/10.0DME at assigned altitude.

### KAGA FOUR DEPARTURE

RWY 06: Turn left,... RWY 24: Turn right,...

...climb via KMC R331 to intercept and proceed via KMC 30.0DME counterclockwise ARC, turn right to intercept and proceed via KMC R261 to SAKYU.

Cross KMC R331/8.0DME at or below 7000FT, cross KMC R275 at assigned altitude.



### RJNK / KOMATSU **RNAV STAR RWY06** RNAV 1 KOMATSU WEST ARRIVAL Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 8°W (2014) SAWRA 362735.2N 1361253.1E KOMATSU WEST ARRIVAL KOMATSU(KMC) 362347.3N 1362415.3E 4000 VORTAC -**MEGIS** KOMATSU 362054.4N 112.0 KMC 1360645.1E CH-57X $\equiv :=$ 36°23′47″N/136°24′15″E 183 4.3 093 **KANOH DAIJO** 361631.0N 361653.7N 1360713.9E 1361231.8E

### KOMATSU WEST ARRIVAL

From KMC, to SAWRA, to MEGIS at or above 4000FT, to KANOH, to DAIJO at or above 2000FT.

| Critical DME          | KMC: 6.9nm to SAWRA - 5.0nm to SAWRA<br>KMC: 2.0nm to SAWRA - 5.0nm to MEGIS<br>KMC: MEGIS - 3.0nm to KANOH<br>YME: 6.9nm to SAWRA - 5.0nm to SAWRA<br>YME: 2.0nm to SAWRA - 5.0nm to MEGIS<br>YME: MEGIS - 3.0nm to KANOH |
|-----------------------|--|
| DME GAP               | KMC - 6.9nm to SAWRA<br>5.0nm to SAWRA - 2.0nm to SAWRA<br>5.0nm to MEGIS - MEGIS<br>3.0nm to KANOH - DAIJO  |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1   |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | KMC                    | _           | _                | -7.7                  | _                | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | SAWRA                  | _           | 300<br>(292.6)   | -7.7                  | 9.9              | _                 | _                | _               | _                 | RNAV1                       |
| 003              | TF                 | MEGIS                  |             | 224<br>(216.5)   | -7.7                  | 8.3              | _                 | +4000            | 1               | _                 | RNAV1                       |
| 004              | TF                 | KANOH                  | _           | 183<br>(175.0)   | -7.7                  | 4.4              | _                 | _                | ı               | _                 | RNAV1                       |
| 005              | TF                 | DAIJO                  | _           | 093<br>(084.9)   | -7.7                  | 4.3              | _                 | +2000            | _               | _                 | RNAV1                       |

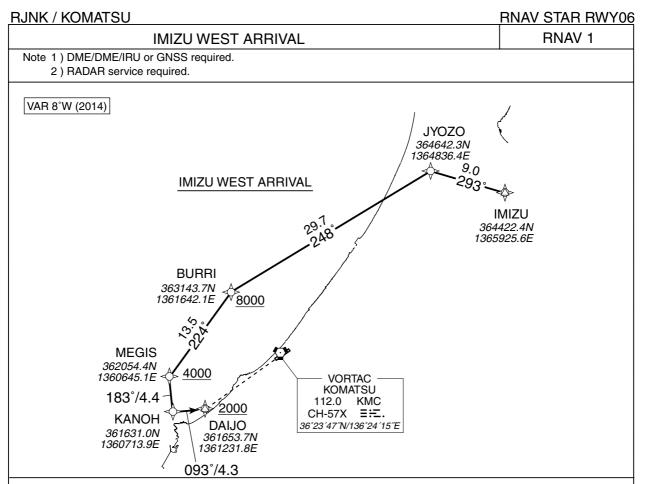
### RJNK / KOMATSU **RNAV STAR RWY06** RNAV 1 HIMMY WEST ARRIVAL Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 8°W (2014) HIMMY HIMMY WEST ARRIVAL 364916.0N 1365406.9E 34.<sup>8</sup> 248 **BURRI** 363143.7N 1361642.1E **№8000 MEGIS** 362054.4N 4000 1360645.1E VORTAC KOMATSU 183°/4.4 112.0 KMC <u>2000</u> CH-57X **Ξ**:Ξ. **KANOH DAIJO** 36°23′47″N/136°24′15″E 361631.0N 361653.7N 1360713.9E 1361231.8E 093°/4.3

## HIMMY WEST ARRIVAL

From HIMMY, to BURRI at or above 8000FT, to MEGIS at or above 4000FT, to KANOH, to DAIJO at or above 2000FT.

| Critical DME          | TOE: HIMMY - 11.0nm to BURRI TOE: 8.0nm to MEGIS - 7.0nm to MEGIS KMC: HIMMY - 30.0nm to BURRI KMC: 24.0nm to BURRI - 22.0nm to BURRI KMC: 17.0nm to BURRI - 15.0nm to BURRI KMC: 8.0nm to MEGIS - 7.0nm to MEGIS KMC: MEGIS - 3.0nm to KANOH YME: MEGIS - 3.0nm to KANOH |
|-----------------------|---|
| DME GAP               | 7.0nm to MEGIS - MEGIS<br>3.0nm to KANOH - DAIJO  |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1  |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | HIMMY                  | _           | _                | -7.7                  | _                | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | BURRI                  | _           | 248<br>(239.9)   | -7.7                  | 34.8             | -                 | +8000            | 1               | _                 | RNAV1                       |
| 003              | TF                 | MEGIS                  | _           | 224<br>(216.5)   | -7.7                  | 13.5             | 1                 | +4000            | 1               | _                 | RNAV1                       |
| 004              | TF                 | KANOH                  | _           | 183<br>(175.0)   | -7.7                  | 4.4              | _                 | _                | _               | _                 | RNAV1                       |
| 005              | TF                 | DAIJO                  | _           | 093<br>(084.9)   | -7.7                  | 4.3              | ı                 | +2000            | _               | _                 | RNAV1                       |

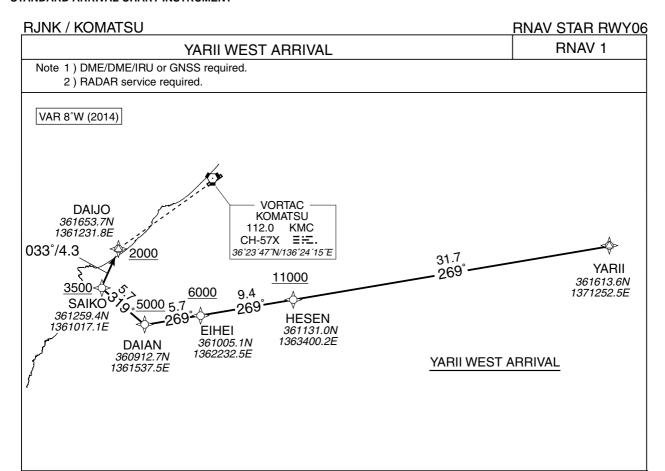


### IMIZU WEST ARRIVAL

From IMIZU, to JYOZO, to BURRI at or above 8000FT, to MEGIS at or above 4000FT, to KANOH, to DAIJO at or above 2000FT.

| Critical DME          | TOE: IMIZU - 10.0nm to BURRI<br>KMC: 4.0nm to JYOZO - JYOZO<br>KMC: 24.0nm to BURRI - 22.0nm to BURRI<br>KMC: 17.0nm to BURRI - 15.0nm to BURRI<br>KMC: 7.0nm to MEGIS - 5.0nm to MEGIS<br>KMC: MEGIS - 3.0nm to KANOH<br>YME: 7.0nm to MEGIS - 5.0nm to MEGIS<br>YME: MEGIS - 3.0nm to KANOH |
|-----------------------|---|
| DME GAP               | 5.0nm to MEGIS - MEGIS<br>3.0nm to KANOH - DAIJO  |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1  |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | IMIZU                  | _           | -                | -7.7                  | _                | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | JYOZO                  | _           | 293<br>(285.1)   | -7.7                  | 9.0              | _                 | _                | _               | _                 | RNAV1                       |
| 003              | TF                 | BURRI                  | _           | 248<br>(239.8)   | -7.7                  | 29.7             | _                 | +8000            | _               | _                 | RNAV1                       |
| 004              | TF                 | MEGIS                  | _           | 224<br>(216.5)   | -7.7                  | 13.5             | _                 | +4000            | _               | _                 | RNAV1                       |
| 005              | TF                 | KANOH                  | _           | 183<br>(175.0)   | -7.7                  | 4.4              | _                 | _                | _               | _                 | RNAV1                       |
| 006              | TF                 | DAIJO                  | _           | 093<br>(084.9)   | -7.7                  | 4.3              | _                 | +2000            | _               | _                 | RNAV1                       |

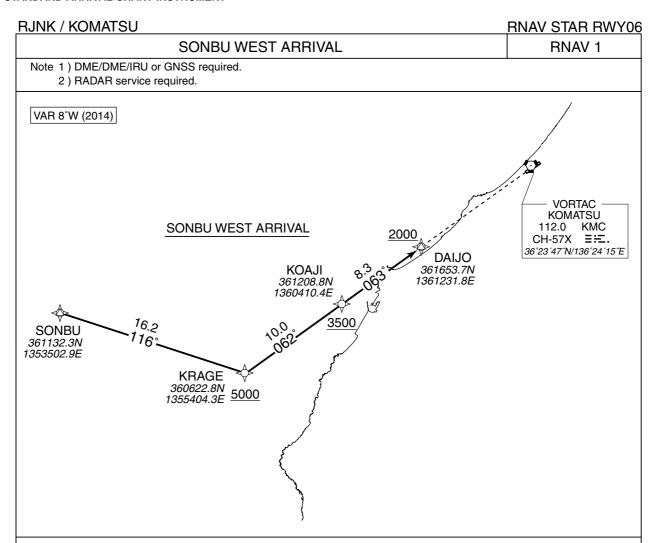


### YARII WEST ARRIVAL

From YARII, to HESEN at or above 11000FT, to EIHEI at or above 6000FT, to DAIAN at or above 5000FT, to SAIKO at or above 3500FT, to DAIJO at or above 2000FT.

| Critical DME          | KMC : 14.0nm to HESEN -EIHEI<br>YME : HESEN-EIHEI |
|-----------------------|---|
| DME GAP               | EIHEI - DAIJO                                     |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1  |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | YARII                  | _           | _                | -7.7                  | _                | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | HESEN                  | _           | 269<br>(261.6)   | -7.7                  | 31.7             | _                 | +11000           |                 | _                 | RNAV1                       |
| 003              | TF                 | EIHEI                  | _           | 269<br>(261.3)   | -7.7                  | 9.4              | _                 | +6000            | ı               | _                 | RNAV1                       |
| 004              | TF                 | DAIAN                  | _           | 269<br>(261.1)   | -7.7                  | 5.7              | _                 | +5000            | -               | _                 | RNAV1                       |
| 005              | TF                 | SAIKO                  | _           | 319<br>(311.3)   | -7.7                  | 5.7              | _                 | +3500            | 1               | _                 | RNAV1                       |
| 006              | TF                 | DAIJO                  | -           | 033<br>(024.9)   | -7.7                  | 4.3              | _                 | +2000            | ı               | _                 | RNAV1                       |



## SONBU WEST ARRIVAL

From SONBU, to KRAGE at or above 5000FT, to KOAJI at or above 3500FT, to DAIJO at or above 2000FT.

| Critical DME          | KMC : SONBU - 8.0nm to KRAGE<br>YME : SONBU - 8.0nm to KRAGE |
|-----------------------|--|
| DME GAP               | 8.0nm to KRAGE - DAIJO                                       |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1             |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | SONBU                  | _           | _                | -7.7                  | _    | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | KRAGE                  | -           | 116<br>(108.5)   | -7.7                  | 16.2 | _                 | +5000            | _               | _                 | RNAV1                       |
| 003              | TF                 | KOAJI                  |             | 062<br>(054.7)   | -7.7                  | 10.0 | -                 | +3500            | _               | _                 | RNAV1                       |
| 004              | TF                 | DAIJO                  | _           | 063<br>(054.8)   | -7.7                  | 8.3  | _                 | +2000            | _               | _                 | RNAV1                       |

## RJNK / KOMATSU **RNAV STAR RWY24** RNAV 1 KOMATSU EAST ARRIVAL Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 8°W (2014) 2600 HIMRO 5.0 4000 <sup>/</sup>363553.0N 083 1363402.3E 4.5 080° **ZEBRA** 363438.8N YAMJI -1362801.2E 363316.8N 1362242.5E KOMATSU EAST ARRIVAL VORTAC KOMATSU 112.0 KMC CH-57X **Ξ :**Ξ. KOMATSU(KMC) 36°23′47″N/136°24′15″E 362347.3N 1362415.3E

# KOMATSU EAST ARRIVAL

From KMC, to YAMJI, to ZEBRA at or above 4000FT, to HIMRO at or above 2600FT.

| Critical DME          | KMC : 6.6nm to YAMJI - YAMJI<br>YME : 6.6nm to YAMJI - YAMJI |
|-----------------------|--|
| DME GAP               | KMC - 6.6nm to YAMJI<br>YAMJI - HIMRO                        |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1             |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |     | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|-----|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | KMC                    | _           | _                | -7.7                  | _   | _                 | -                | _               | _                 | RNAV1                       |
| 002              | TF                 | YAMJI                  | _           | 360<br>(352.5)   | -7.7                  | 9.6 | _                 | _                | _               | _                 | RNAV1                       |
| 003              | TF                 | ZEBRA                  | _           | 080<br>(072.2)   | -7.7                  | 4.5 | 1                 | +4000            | _               | -                 | RNAV1                       |
| 004              | TF                 | HIMRO                  | _           | 083<br>(075.6)   | -7.7                  | 5.0 | _                 | +2600            | _               | _                 | RNAV1                       |

# RJNK / KOMATSU **RNAV STAR RWY24** HIMMY EAST ARRIVAL RNAV 1 Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 8°W (2014) HIMMY 364916.0N 1365406.9E 10.7 VOR/DME **TOYAMA** 110.85 TOE CH-45Y = -36°39′08″N/137°11′28″E 100FT 7000 **GINRE** 363841.4N 1365621.2E 5000 HIMMY EAST ARRIVAL **KINKA** 363210.7N 1364250.6E VORTAC KOMATSU 112.0 KMC CH-57X **Ξ**:Ξ.

## HIMMY EAST ARRIVAL

From HIMMY, to GINRE at or above 7000FT, to KINKA at or above 5000FT.

36°23′47″N/136°24′15″E

| Critical DME          | TOE: HIMMY - GINRE TOE: 12.0nm to KINKA - 9.0nm to KINKA KMC: HIMMY - 7.0nm to GINRE KMC: 6.0nm to GINRE - 2.0nm to GINRE YME: 12.0nm to KINKA - 9.0nm to KINKA |
|-----------------------|---|
| DME GAP               | GINRE - 12.0nm to KINKA<br>9.0nm to KINKA - KINKA   |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1  |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | HIMMY                  | _           | _                | -7.7                  | _    | _                 | _                | _               | _                 | RNAV1                       |
| 002              | TF                 | GINRE                  | _           | 178<br>(170.4)   | -7.7                  | 10.7 | _                 | +7000            | _               | _                 | RNAV1                       |
| 003              | TF                 | KINKA                  | _           | 247<br>(239.1)   | -7.7                  | 12.7 | _                 | +5000            | _               | _                 | RNAV1                       |

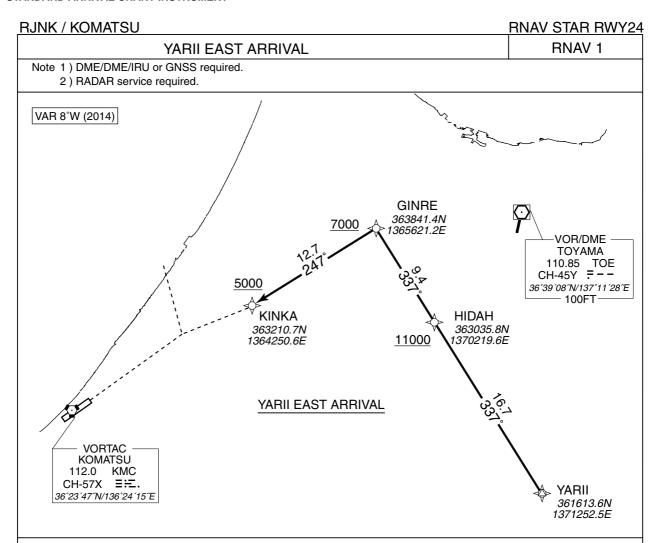
# **RNAV STAR RWY24** RJNK / KOMATSU RNAV 1 IMIZU EAST ARRIVAL Note 1) DME/DME/IRU or GNSS required. 2) RADAR service required. VAR 8°W (2014) **IMIZU** 364422.4N 1365925.6E 7000 **GINRE** 363841.4N 1365621.2E VOR/DME **TOYAMA** 110.85 TOE CH-45Y = --5000 36°39′08″N/137°11′28″E IMIZU EAST ARRIVAL 100FT **KINKA** 363210.7N 1364250.6E VORTAC KOMATSU 112.0 KMC CH-57X **Ξ**:**Ξ** 36°23′47″N/136°24′15″E

## IMIZU EAST ARRIVAL

From IMIZU, to GINRE at or above 7000FT, to KINKA at or above 5000FT.

|                       | TOE : IMIZU - GINRE                              |
|-----------------------|--|
| Oviti a al DME        | TOE: 12.0nm to KINKA - 9.0nm to KINKA            |
| Critical DME          | KMC: IMIZU - 2.0nm to GINRE                      |
|                       | YME: 12.0nm to KINKA - 9.0nm to KINKA            |
| DME GAP               | GINRE - 12.0nm to KINKA                          |
| DIVIE GAF             | 9.0nm to KINKA - KINKA                           |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1 |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) |   |       |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|---|-------|
| 001              | IF                 | IMIZU                  | _           | _                | -7.7                  | _    | _                 | _                | _               | _ | RNAV1 |
| 002              | TF                 | GINRE                  | _           | 211<br>(203.4)   | -7.7                  | 6.2  | _                 | +7000            | _               | _ | RNAV1 |
| 003              | TF                 | KINKA                  | _           | 247<br>(239.1)   | -7.7                  | 12.7 | _                 | +5000            | _               | _ | RNAV1 |

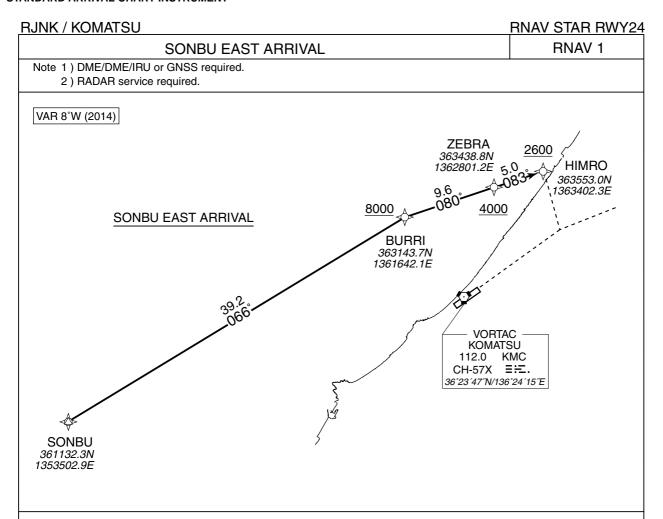


## YARII EAST ARRIVAL

From YARII, to HIDAH at or above 11000FT, to GINRE at or above 7000FT, to KINKA at or above 5000FT.

| Critical DME          | TOE: 8.0nm to HIDAH - 8.0nm to GINRE TOE: 1.0nm to GINRE - GINRE TOE: 12.0nm to KINKA - 9.0nm to KINKA KMC: 2.0nm to HIDAH - 8.0nm to GINRE YME: 1.0nm to GINRE - GINRE YME: 12.0nm to KINKA - 9.0nm to KINKA |  |  |  |  |  |
|-----------------------|---|--|--|--|--|--|
| DME GAP               | 8.0nm to GINRE - 1.0nm to GINRE<br>GINRE - 12.0nm to KINKA<br>9.0nm to KINKA - KINKA  |  |  |  |  |  |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1  |  |  |  |  |  |

| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation | Distance<br>(NM) | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | YARII                  | _           | _                | -7.7                  | _                | _                 | _                | -               | _                 | RNAV1                       |
| 002              | TF                 | HIDAH                  | _           | 337<br>(329.5)   | -7.7                  | 16.7             | _                 | +11000           | _               | _                 | RNAV1                       |
| 003              | TF                 | GINRE                  | _           | 337<br>(329.4)   | -7.7                  | 9.4              | _                 | +7000            | ı               | _                 | RNAV1                       |
| 004              | TF                 | KINKA                  | _           | 247<br>(239.1)   | -7.7                  | 12.7             | _                 | +5000            | _               | _                 | RNAV1                       |

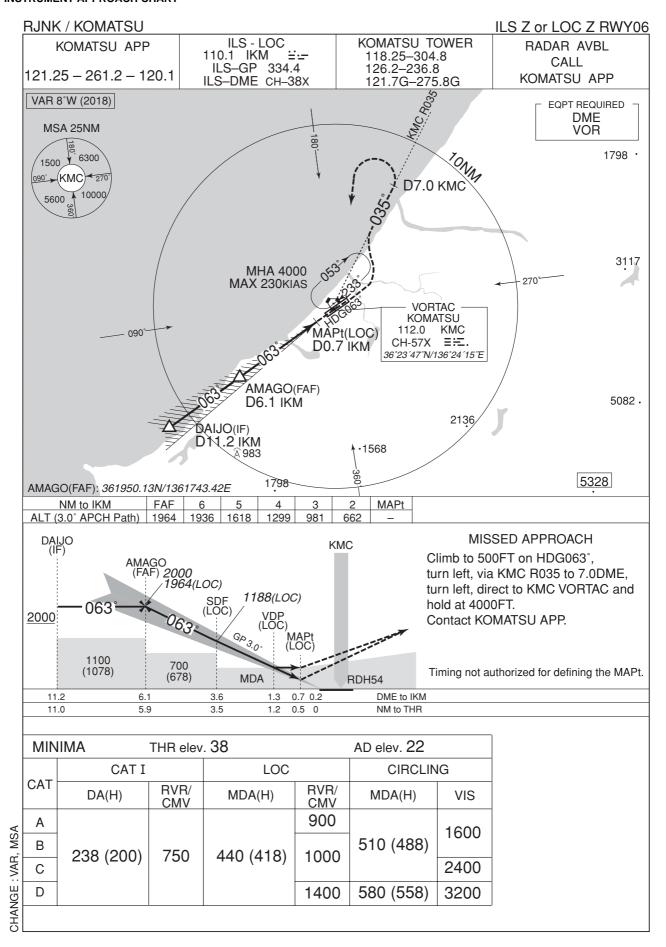


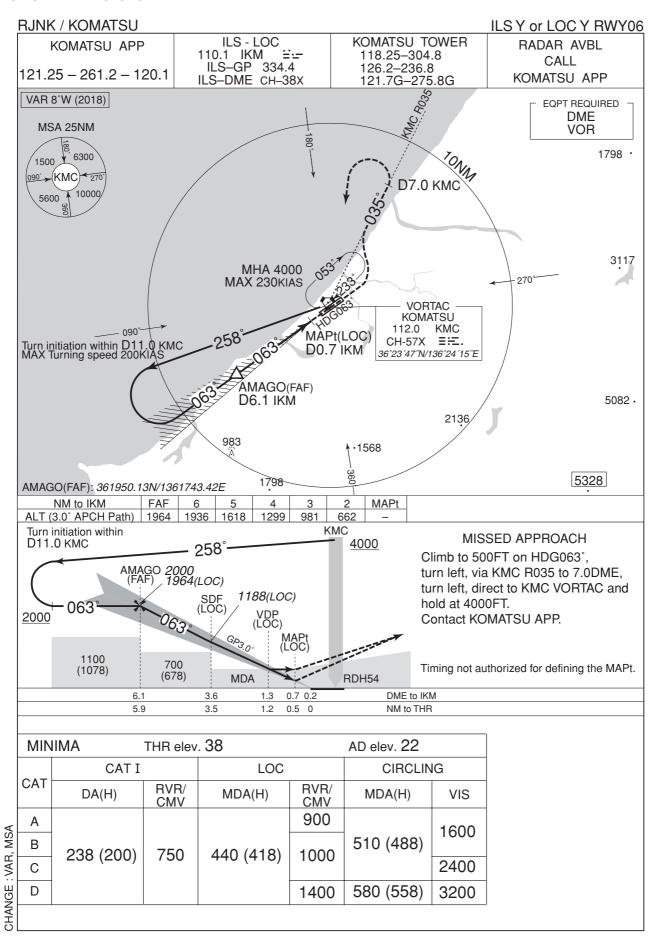
# **SONBU EAST ARRIVAL**

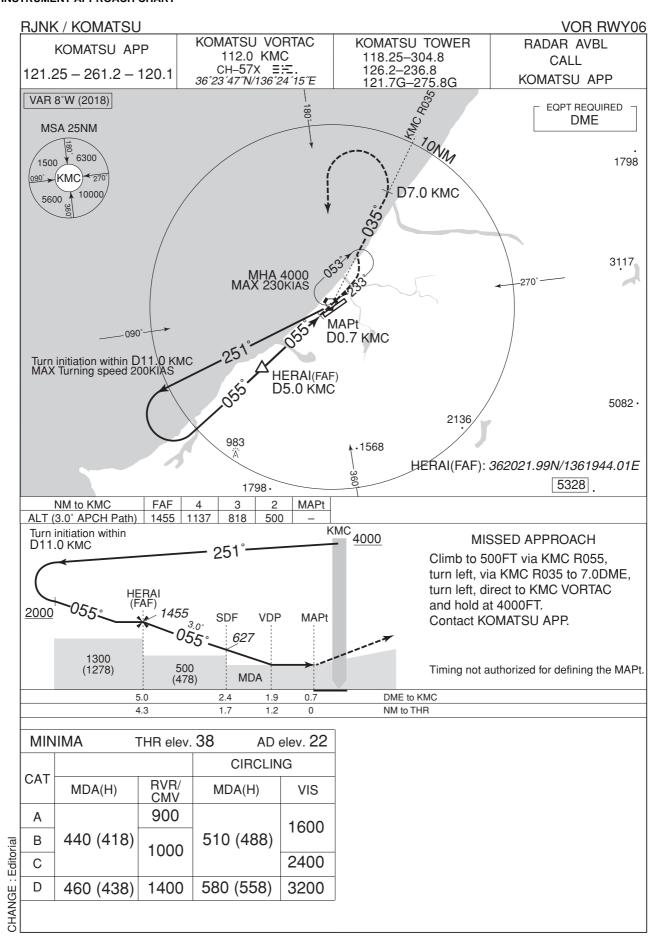
From SONBU, to BURRI at or above 8000FT, to ZEBRA at or above 4000FT, to HIMRO at or above 2600FT.

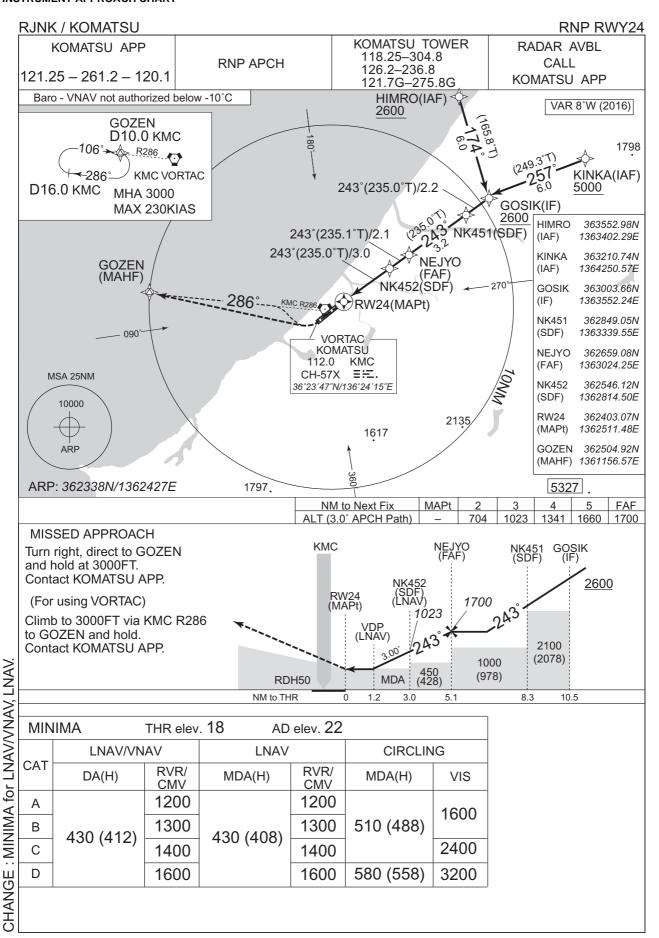
| Critical DME          | YME: SONBU - 8.0nm to BURRI<br>KMC: 34.0nm to BURRI - 8.0nm to BURRI<br>KMC: 7.0nm to BURRI - 5.0nm to BURRI<br>KMC: BURRI - 7.0nm to ZEBRA<br>KMC: 6.0nm to ZEBRA - 5.0nm to ZEBRA<br>TOE: 7.0nm to BURRI - 5.0nm to BURRI<br>TOE: BURRI - 7.0nm to ZEBRA<br>TOE: 6.0nm to ZEBRA - 5.0nm to ZEBRA |
|-----------------------|--|
| DME GAP               | 8.0nm to BURRI - 7.0nm to BURRI<br>5.0nm to ZEBRA - HIMRO  |
| Inappropriate Navaids | See AD1.1.6.10.3 Inappropriate NAVAIDs for RNAV1   |

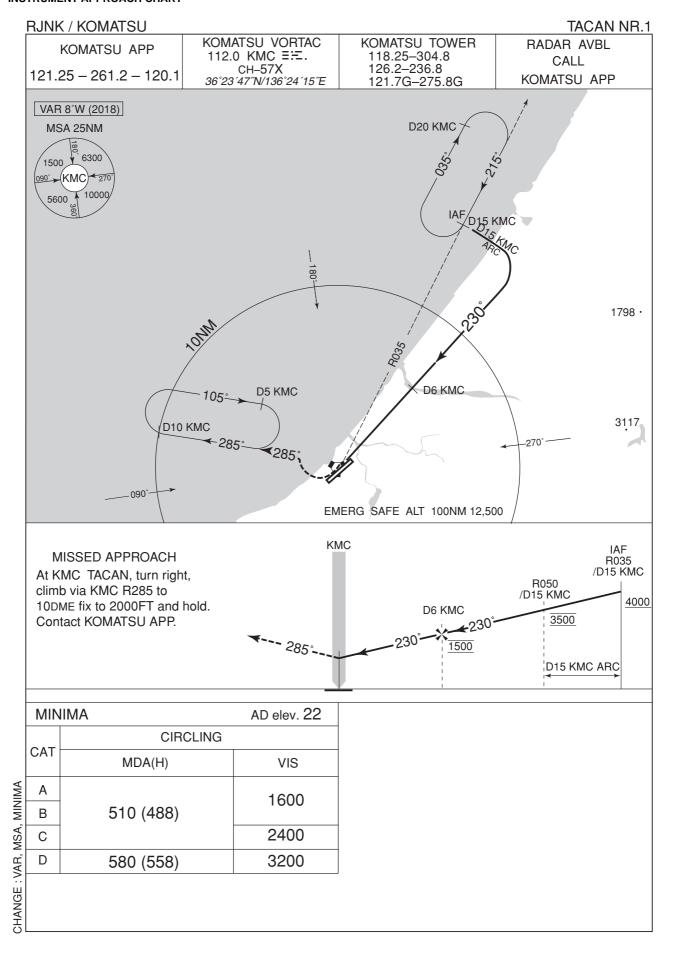
| Serial<br>Number | Path<br>Descriptor | Waypoint<br>Identifier | Fly<br>Over | Course<br>°M(°T) | Magnetic<br>Variation |      | Turn<br>Direction | Altitude<br>(FT) | Speed<br>(KIAS) | Vertical<br>Angle | Navigation<br>Specification |
|------------------|--------------------|------------------------|-------------|------------------|-----------------------|------|-------------------|------------------|-----------------|-------------------|-----------------------------|
| 001              | IF                 | SONBU                  | _           | _                | -7.7                  | _    | _                 | -                | _               | _                 | RNAV1                       |
| 002              | TF                 | BURRI                  | _           | 066<br>(058.8)   | -7.7                  | 39.2 | _                 | +8000            | _               | _                 | RNAV1                       |
| 003              | TF                 | ZEBRA                  | _           | 080<br>(072.1)   | -7.7                  | 9.6  | 1                 | +4000            | _               | _                 | RNAV1                       |
| 004              | TF                 | HIMRO                  | _           | 083<br>(075.6)   | -7.7                  | 5.0  | _                 | +2600            | _               | _                 | RNAV1                       |

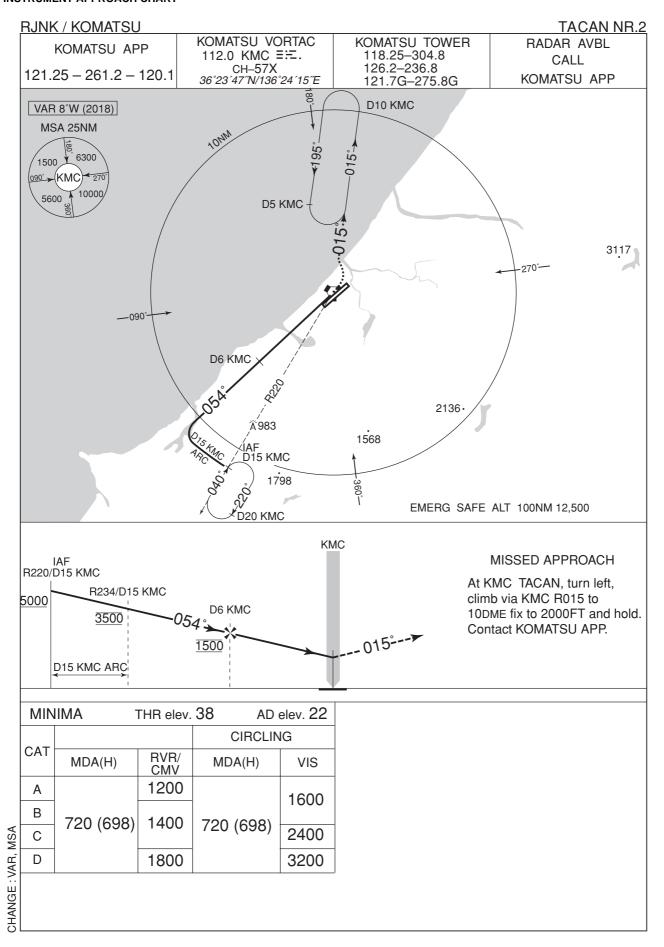


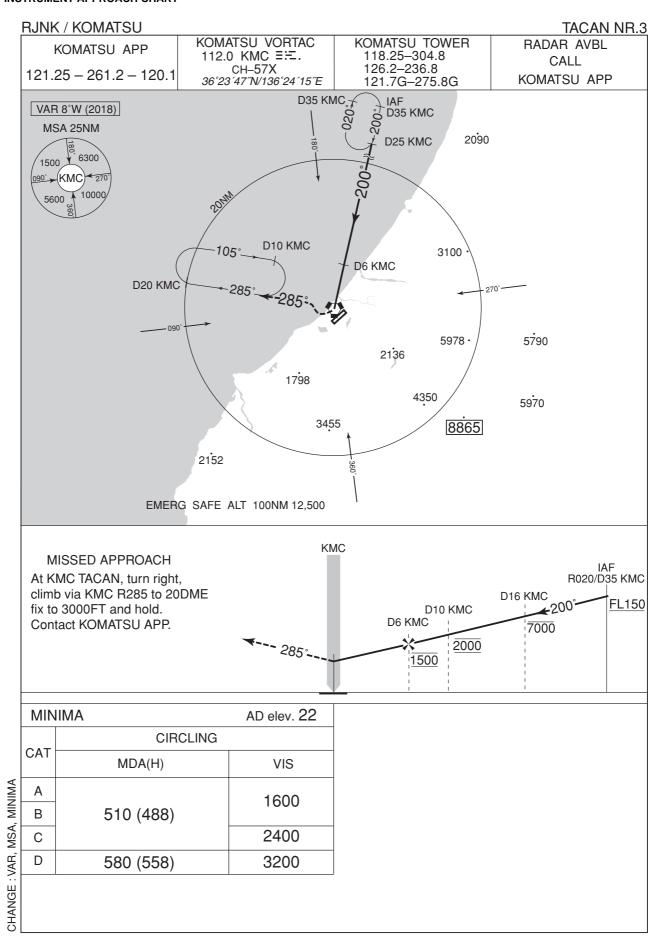


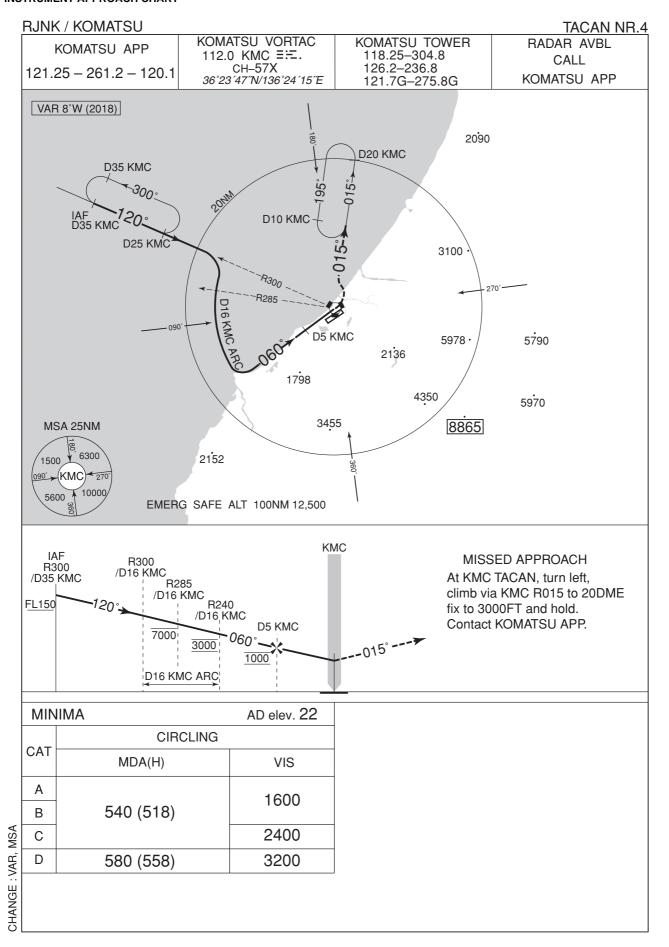


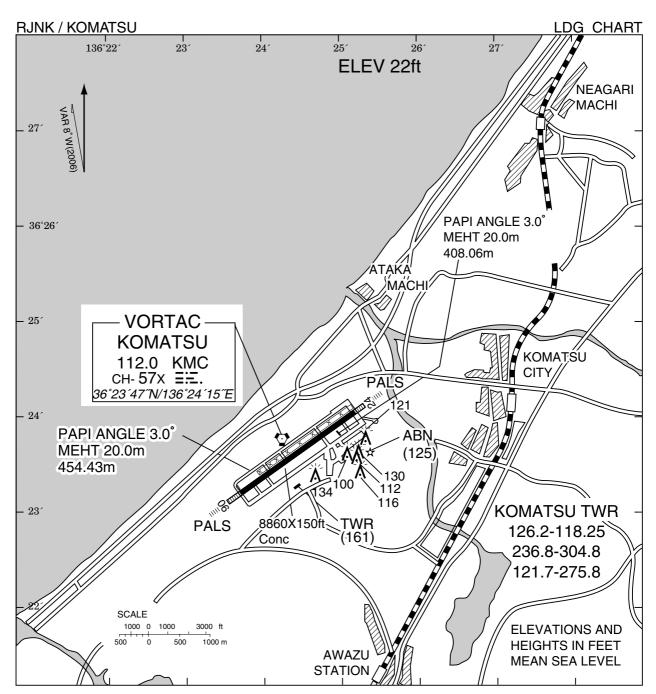












注: 小松飛行場の本滑走路の供用開始に伴い、着陸する航空機は、運用を廃止した仮設滑走路に誤認着陸しないように注意すること。

Note: With an in-service start of this runway of Komatsu aerodrome, warn a landing aircraft not to land at the out-service temporary runway.

- 備考:1. 仮設滑走路には禁止標識が設置される(300m以内に1個標準)。
  - 2. 航空機の到着機がある場合は、気象状態にかかわらず着陸滑走路の進入灯が常時点灯される。
  - 3. 管制官からの着陸許可発出後に注意喚起のため、次の用語が通報される場合がある。 用語例:「VERIFY LANDING RUNWAY.」
- Rem: 1. A closed marking is installed in a temporary runway (one less than 300m, standard).
  - 2. When there is arrival aircrft, approach lights of a landing runway is always turned on regardless of a weather state.
  - 3. There is the case that the next term is reported to for attention awakening after a landing permission from a ATC.
    - A term example: [VERIFY LANDING RUNWAY.] .

