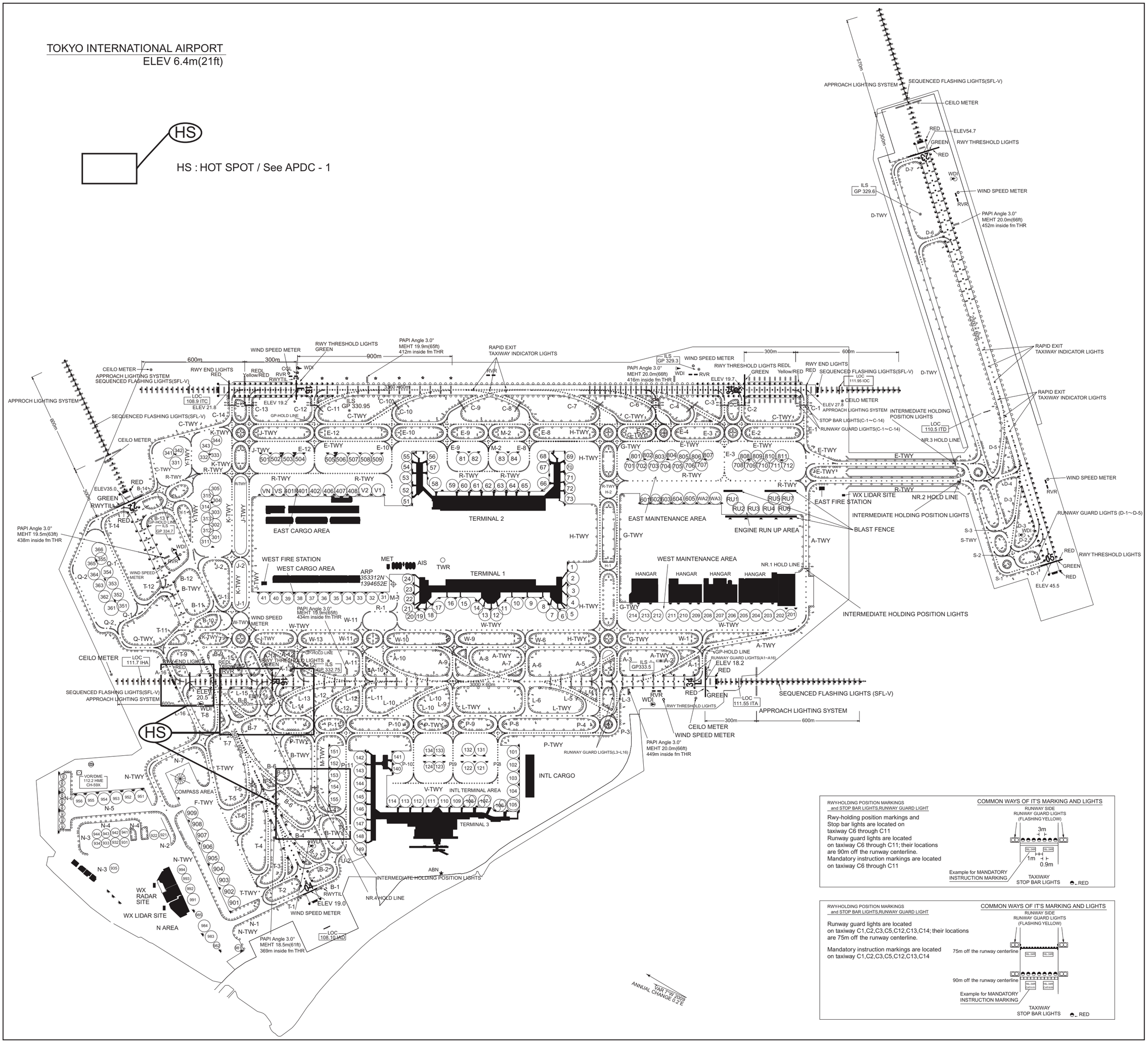
AERODROME CHART

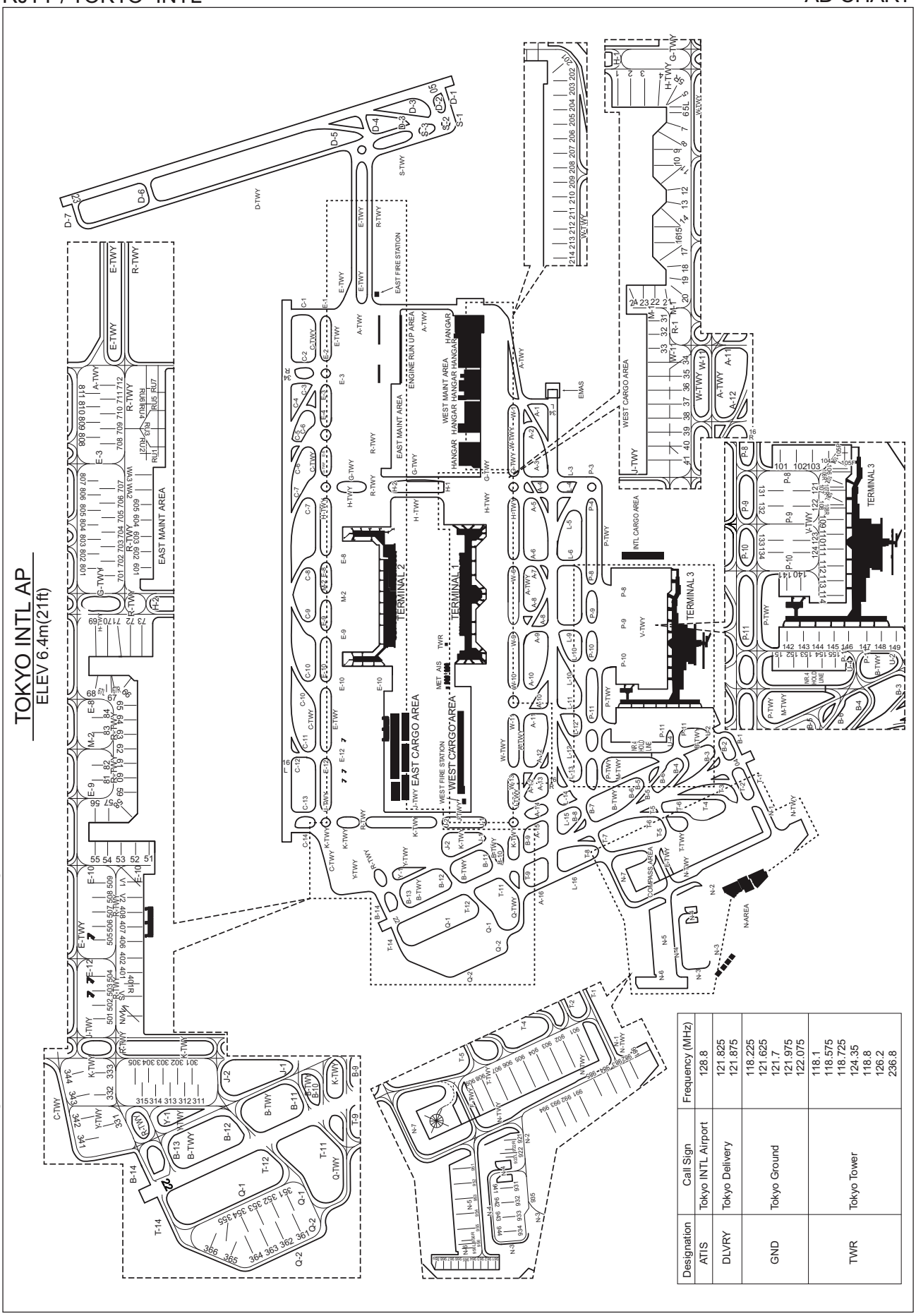
CHANGE: RWY GUARD LGT for TWY A1 THRU A16, L3 THRU L16 installed.



RJTT / TOKYO INTL

AD CHART

CHANGE: TWY CL marking for Y added. TWY CL marking for E4, U4 deleted.




| Designation | Call Sign | Frequency (MHz) |
|---|---|---|
| ATIS | Tokyo INTL Airport | 128.8 |
| DLVRY | Tokyo Delivery | 121.825<br>121.875 |
| GND | Tokyo Ground | 118.225<br>121.625<br>121.7<br>121.975<br>122.075 |
| TWR | Tokyo Tower | 118.1<br>118.575<br>118.725<br>124.35<br>118.8<br>126.2<br>236.8 |

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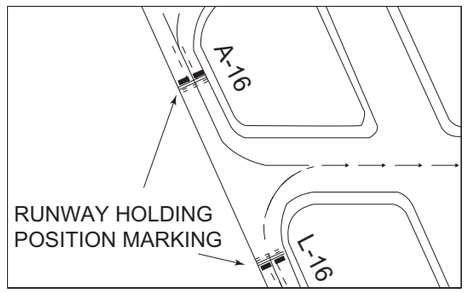
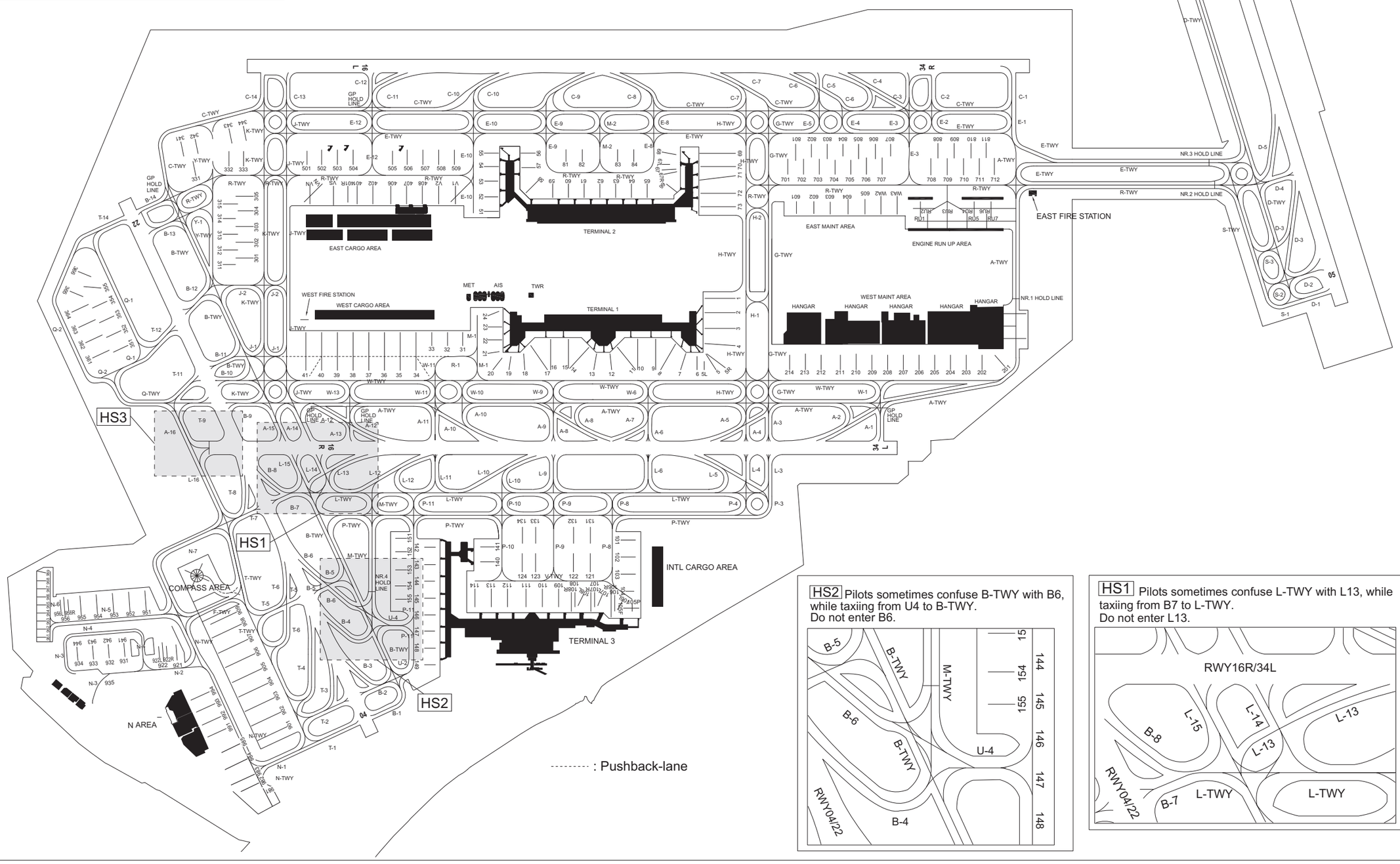
CHANGE: TWY CL marking for Y added. TWY CL marking for E4, U4 deleted.

## TAXIING GUIDE LINE AND PARKING AREAS

HS3 Runway holding position markings are installed. ATC authorization shall be required for crossing the runway.




HS2 Pilots sometimes confuse B-TWY with B6, while taxiing from U4 to B-TWY.
Do not enter B6.

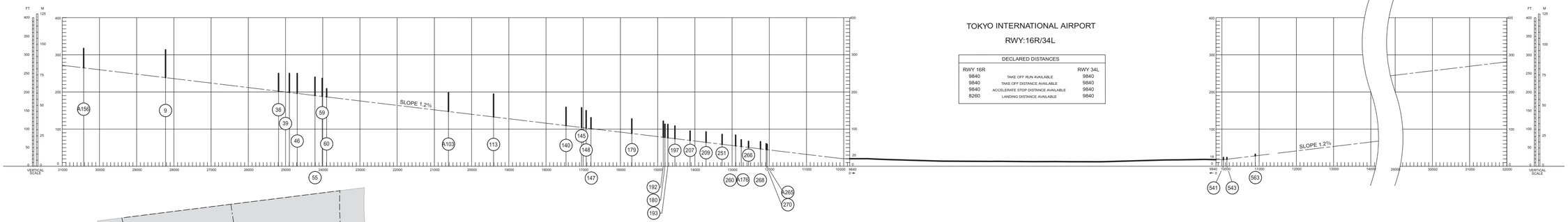



HS1 Pilots sometimes confuse L-TWY with L13, while taxiing from B7 to L-TWY.
Do not enter L13.

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

# AERODROME OBSTACLE CHART-ICAO
TYPE A(OPERATING LIMITATIONS)

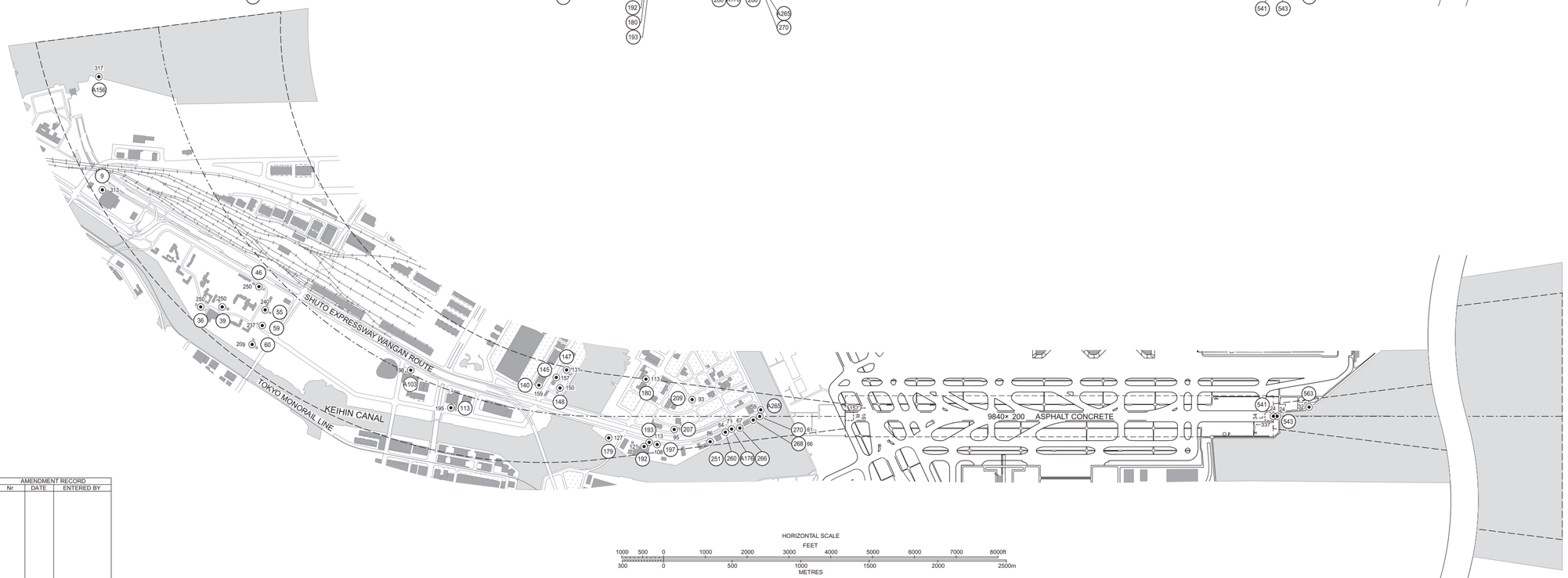
MAGNETIC VARIATION 7˚W-APR 2015




TOKYO INTERNATIONAL AIRPORT

RWY:16R/34L

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 16R | | RWY 34L |
| 9840 | TAKE OFF RUN AVAILABLE | 9840 |
| 9840 | TAKE OFF DISTANCE AVAILABLE | 9840 |
| 9840 | ACCELERATE STOP DISTANCE AVAILABLE | 9840 |
| 8260 | LANDING DISTANCE AVAILABLE | 9840 |




CHANGE: DECLARED DISTANCES

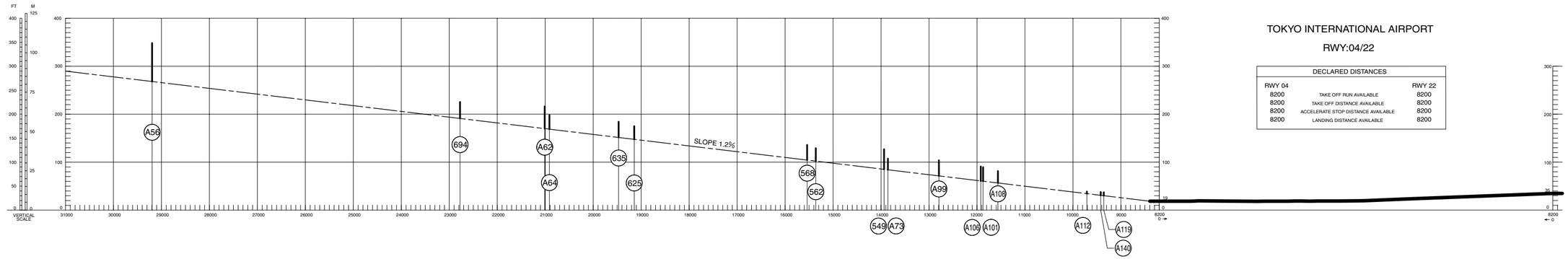
| LEGEND | |
|---|---|
| ① | IDENTIFICATION NUMBER |
| ◉ | POLE,TOWER,SPIRE,ANTENNA,ETC |
| ✱ | TREE |
| ═══ | RAILROAD |
| ═══ | RIVER |
| ═══ | TRANSMISSION LINE OR OVERHEAD CABLE |
| △ | TRIANGULATION POINT |
| ★ | AERONAUTICAL GROUND LIGHT |

| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |
| | | |

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

# AERODROME OBSTACLE CHART-ICAO
TYPE A(OPERATING LIMITATIONS)

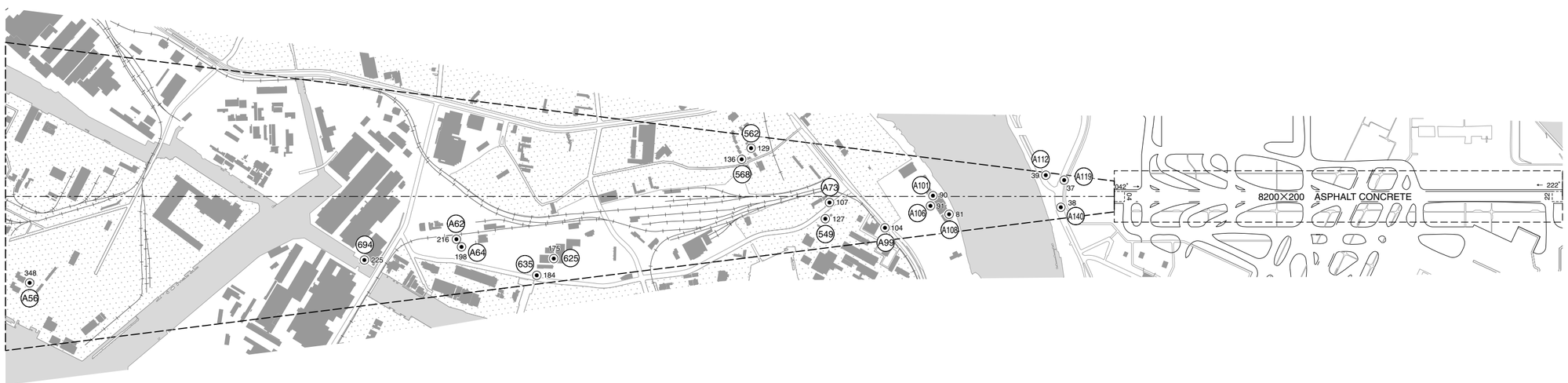
MAGNETIC VARIATION 7˚W-APR 2015




TOKYO INTERNATIONAL AIRPORT

RWY:04/22

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 04 | | RWY 22 |
| 8200 | TAKE OFF RUN AVAILABLE | 8200 |
| 8200 | TAKE OFF DISTANCE AVAILABLE | 8200 |
| 8200 | ACCELERATE STOP DISTANCE AVAILABLE | 8200 |
| 8200 | LANDING DISTANCE AVAILABLE | 8200 |




| LEGEND | AMENDMENT RECORD | | |
|---|---|---|---|
| | Nr | DATE | ENTERED BY |
| IDENTIFICATION NUMBER | | | |
| POLE,TOWER,SPIRE,ANTENNA,ETC | | | |
| TREE | | | |
| RAILROAD / RIVER | | | |
| TRANSMISSION LINE OR OVERHEAD CABLE | | | |
| TRIANGULATION POINT | | | |
| AERONAUTICAL GROUND LIGHT | | | |

HORIZONTAL SCALE

FEET

1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000ft

300 0 500 1000 1500 2000 2500m

METRES

# AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

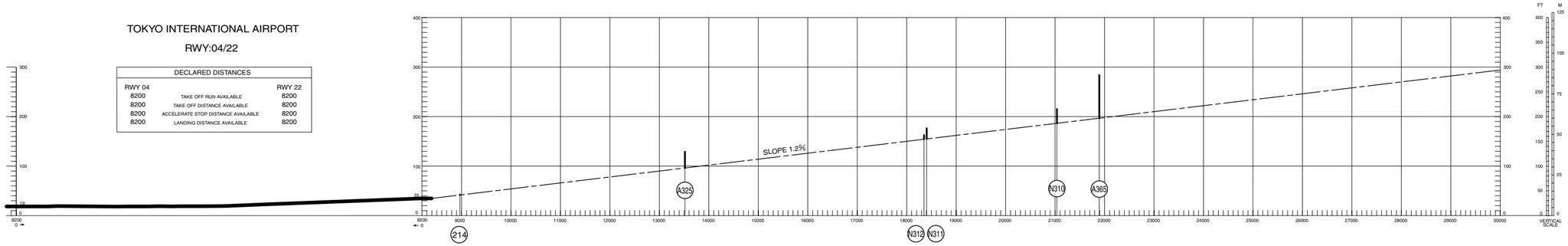
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

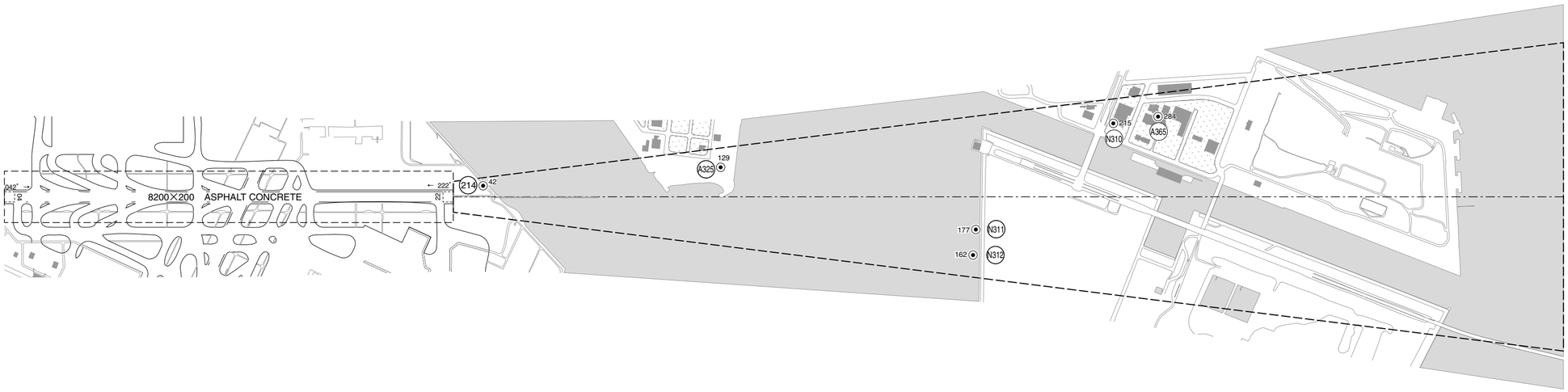
## MAGNETIC VARIATION 7°W-APR 2015

TOKYO INTERNATIONAL AIRPORT

RWY:04/22

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 04 | | RWY 22 |
| 8200 | TAKE OFF RUN AVAILABLE | 8200 |
| 8200 | TAKE OFF DISTANCE AVAILABLE | 8200 |
| 8200 | ACCELERATE STOP DISTANCE AVAILABLE | 8200 |
| 8200 | LANDING DISTANCE AVAILABLE | 8200 |




| LEGEND | |
|---|---|
| 1 | IDENTIFICATION NUMBER |
| | POLE,TOWER,SPIRE,ANTENNA,ETC |
| | TREE |
| | RAILROAD |
| | RIVER |
| | TRANSMISSION LINE OR OVERHEAD CABLE |
| | TRIANGULATION POINT |
| | AERONAUTICAL GROUND LIGHT |

| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |
| | | |

HORIZONTAL SCALE

FEET

1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000ft

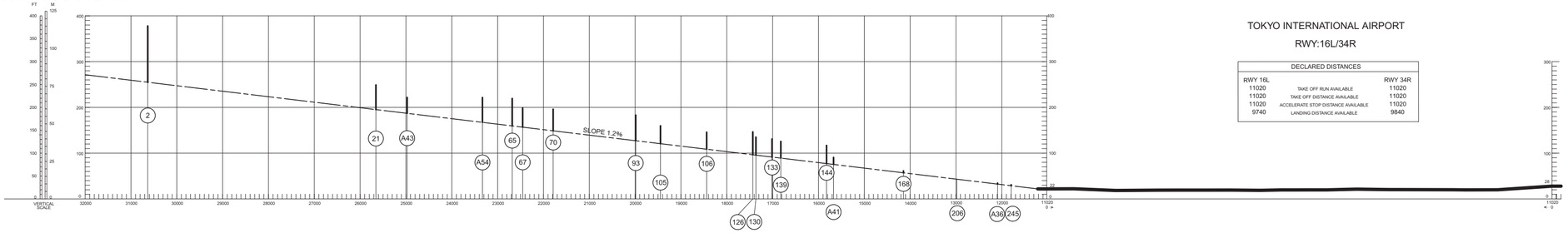
300 0 500 1000 1500 2000 2500m

METRES

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

# AERODROME OBSTACLE CHART-ICAO
TYPE A (OPERATING LIMITATIONS)

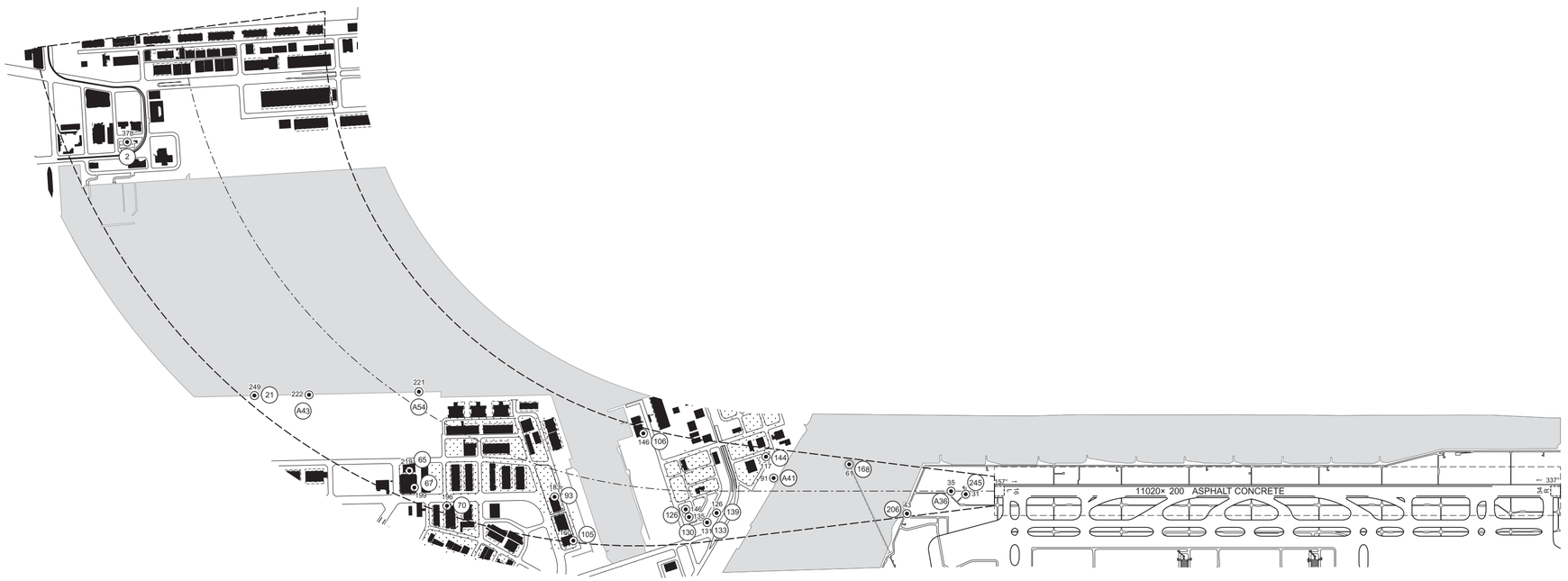
MAGNETIC VARIATION 7˚W-APR 2015




TOKYO INTERNATIONAL AIRPORT

RWY:16L/34R

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 16L | | RWY 34R |
| 11020 | TAKE OFF RUN AVAILABLE | 11020 |
| 11020 | TAKE OFF DISTANCE AVAILABLE | 11020 |
| 11020 | ACCELERATE STOP DISTANCE AVAILABLE | 11020 |
| 9740 | LANDING DISTANCE AVAILABLE | 9840 |




CHANGE: DECLARED DISTANCES

| LEGEND | |
|---|---|
| ① | IDENTIFICATION NUMBER |
| ◉ | POLE, TOWER, SPIRE, ANTENNA, ETC |
| ✱ | TREE |
| | RAILROAD / RIVER |
| | TRANSMISSION LINE OR OVERHEAD CABLE |
| △ | TRIANGLATION POINT |
| ★ | AERONAUTICAL GROUND LIGHT |

| AMENDMENT RECORD | | |
|---|---|---|
| N° | DAT E | ENTERED BY |
| | | |

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

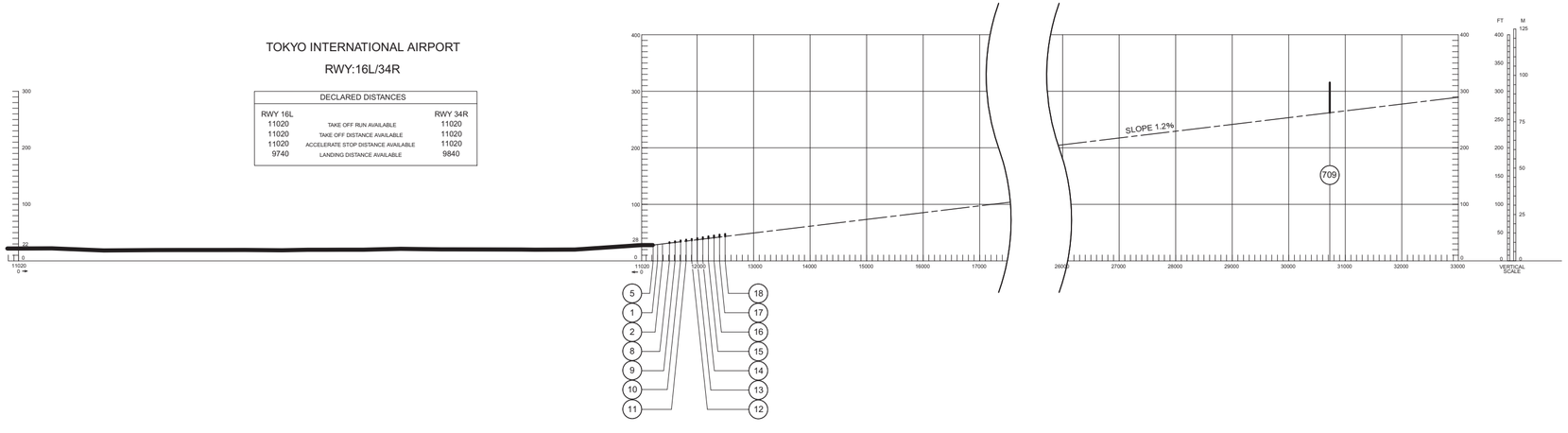
# AERODROME OBSTACLE CHART-ICAO
TYPE A(OPERATING LIMITATIONS)

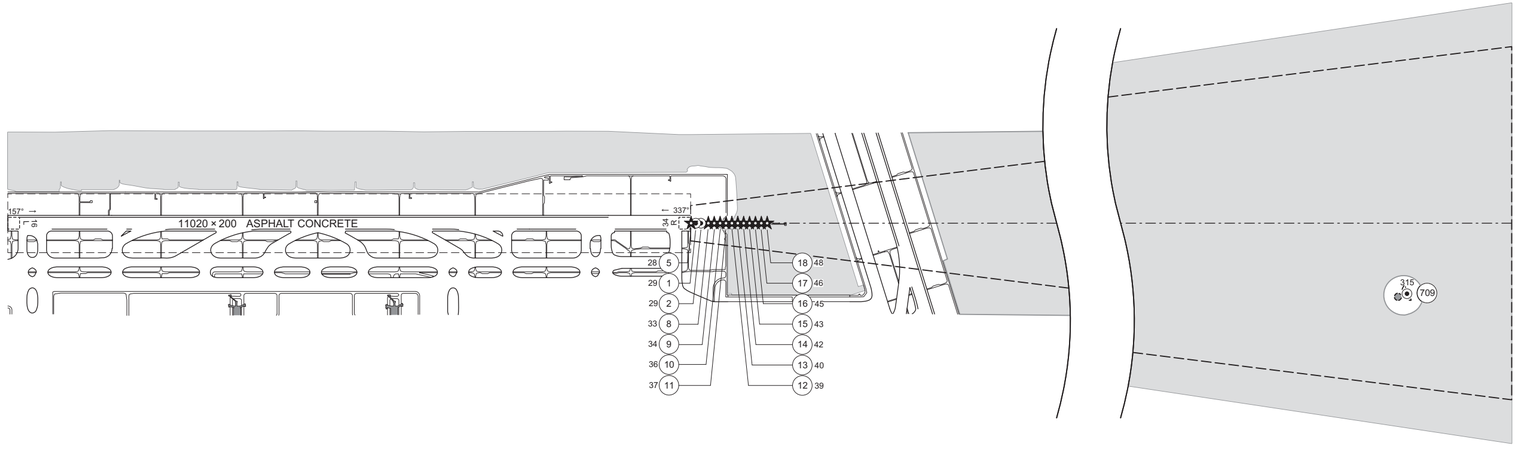
MAGNETIC VARIATION 7˚W-APR 2015

TOKYO INTERNATIONAL AIRPORT

RWY:16L/34R

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 16L | | RWY 34R |
| 11020 | TAKE OFF RUN AVAILABLE | 11020 |
| 11020 | TAKE OFF DISTANCE AVAILABLE | 11020 |
| 11020 | ACCELERATE STOP DISTANCE AVAILABLE | 11020 |
| 9740 | LANDING DISTANCE AVAILABLE | 9840 |




HORIZONTAL SCALE

FEET

METRES

CHANGE: DECLARED DISTANCES

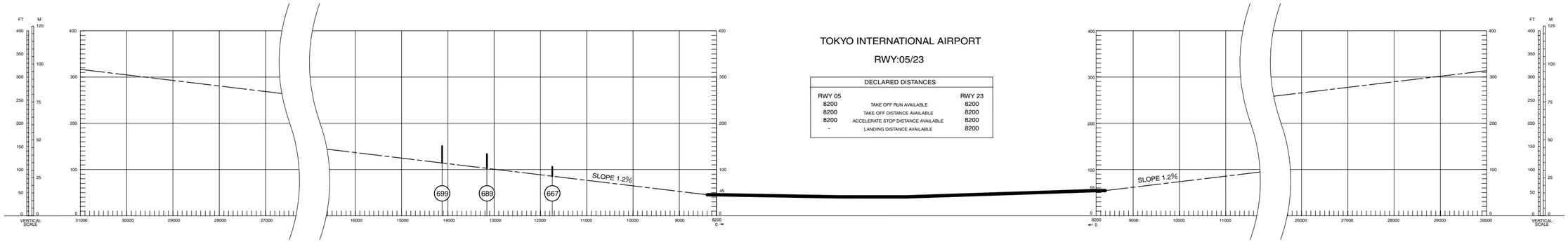
| LEGEND | |
|---|---|
| 1 | IDENTIFICATION NUMBER |
| | POLE, TOWER, SPIRE, ANTENNA, ETC |
| | TREE |
| | RAILROAD / RIVER |
| | TRANSMISSION LINE OR OVERHEAD CABLE |
| | TRIANGLATION POINT |
| | AERONAUTICAL GROUND LIGHT |

| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |
| | | |

# AERODROME OBSTACLE CHART-ICAO
TYPE A(OPERATING LIMITATIONS)

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC

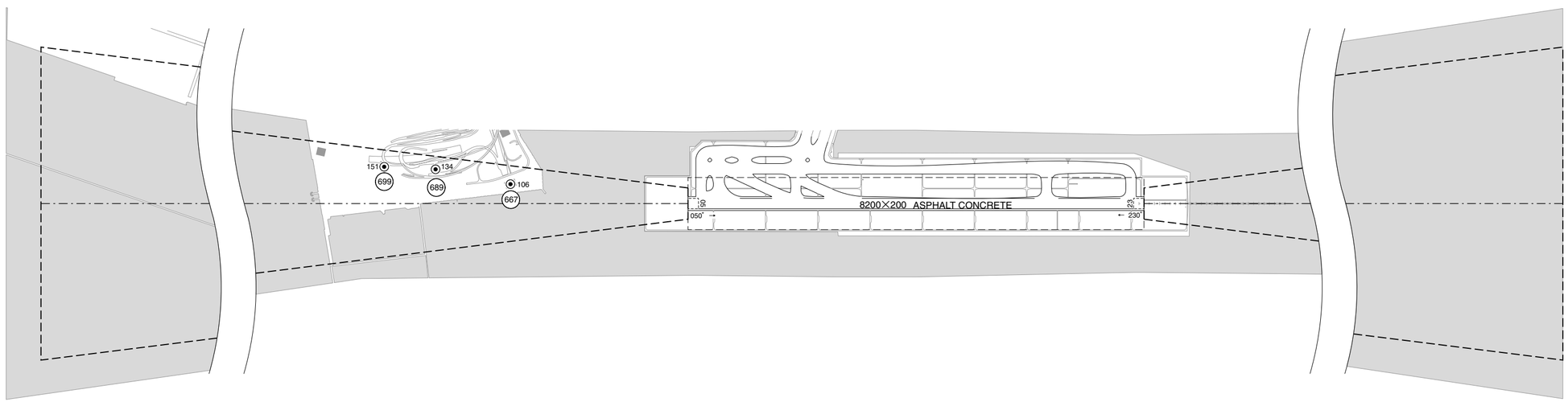
MAGNETIC VARIATION 7˚W-APR 2015




TOKYO INTERNATIONAL AIRPORT

RWY:05/23

| DECLARED DISTANCES | | |
|---|---|---|
| RWY 05 | | RWY 23 |
| 8200 | TAKE OFF RUN AVAILABLE | 8200 |
| 8200 | TAKE OFF DISTANCE AVAILABLE | 8200 |
| 8200 | ACCELERATE STOP DISTANCE AVAILABLE | 8200 |
| - | LANDING DISTANCE AVAILABLE | 8200 |




LEGEND

- ① IDENTIFICATION NUMBER
- POLE,TOWER,SPIRE,ANTENNA,ETC
- TREE
- RAILROAD
- RIVER
- TRANSMISSION LINE OR OVERHEAD CABLE
- TRIANGULATION POINT
- AERONAUTICAL GROUND LIGHT

| AMENDMENT RECORD | | |
|---|---|---|
| Nr | DATE | ENTERED BY |

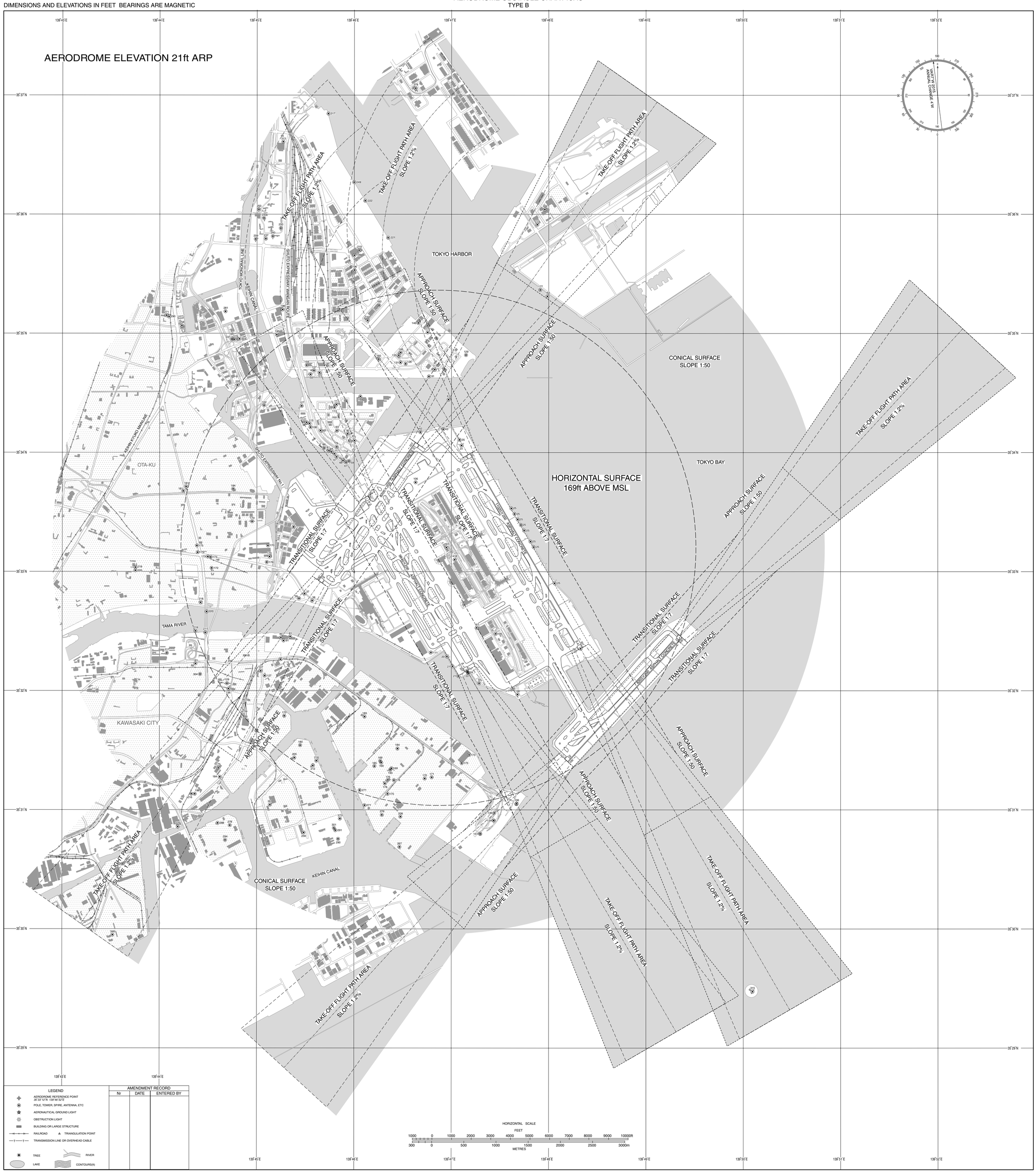
HORIZONTAL SCALE

FEET: 1000 500 0 1000 2000 3000 4000 5000 6000 7000 8000ft

METRES: 300 0 500 1000 1500 2000 2500m

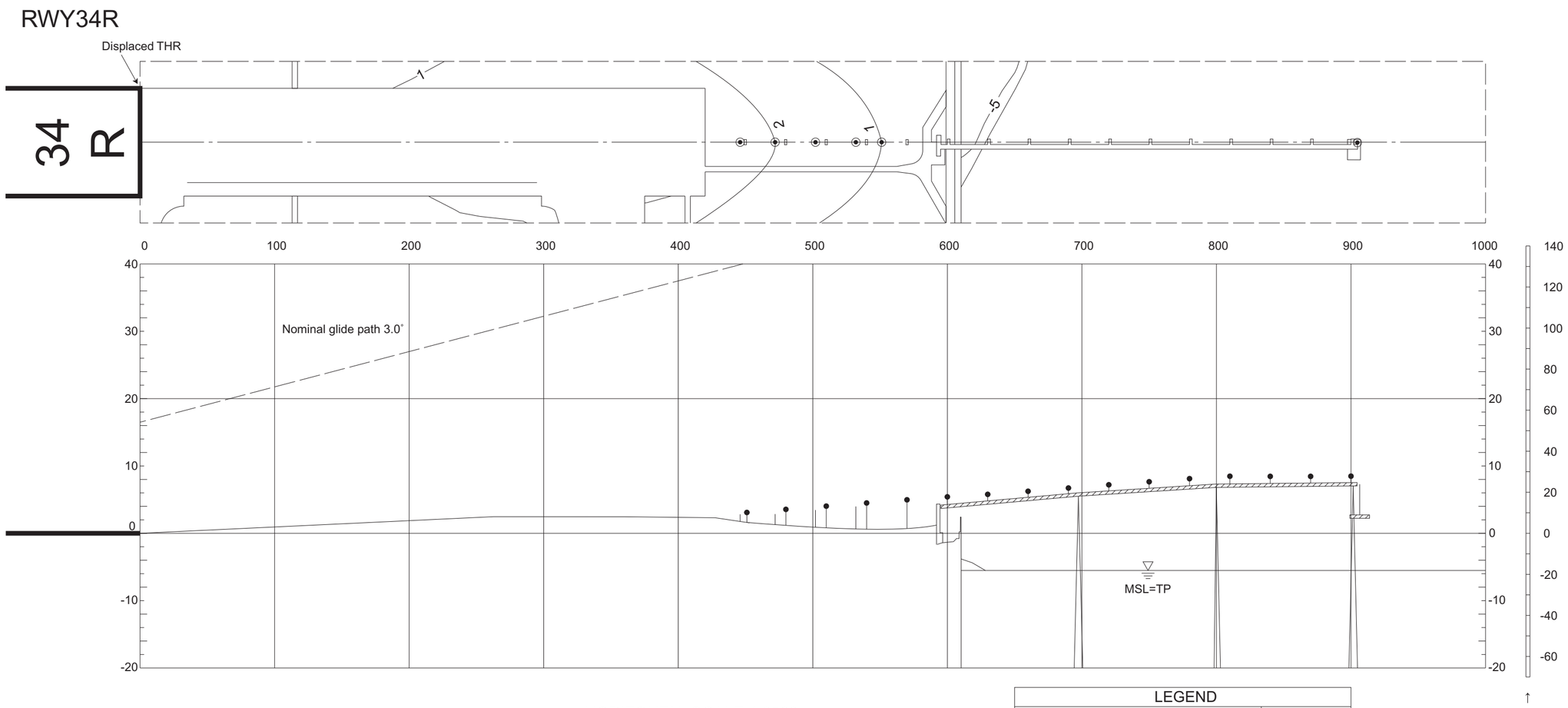
AERODROME OBSTACLE CHART-ICAO
TYPE B

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC



# PRECISION APPROACH TERRAIN CHART

DISTANCES AND HEIGHTS IN METRES




HORIZONTAL SCALE 1:2500

VERTICAL SCALE 1:500

CONTOUR AND HEIGHTS ARE RELATED

TO ELEVATION OF DISPLACED THR OF RWY34R

| LEGEND | |
|---|---|
| CONTOUR | -1 |
| CENTER-LINE PROFILE | |
| DEVIATION AT LEAST ±3m FROM CENTER-LINE PROFILE | |
| APPROACH LIGHTING | |
| ANTENNA | |

CHANGE: CONTOUR

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL SID

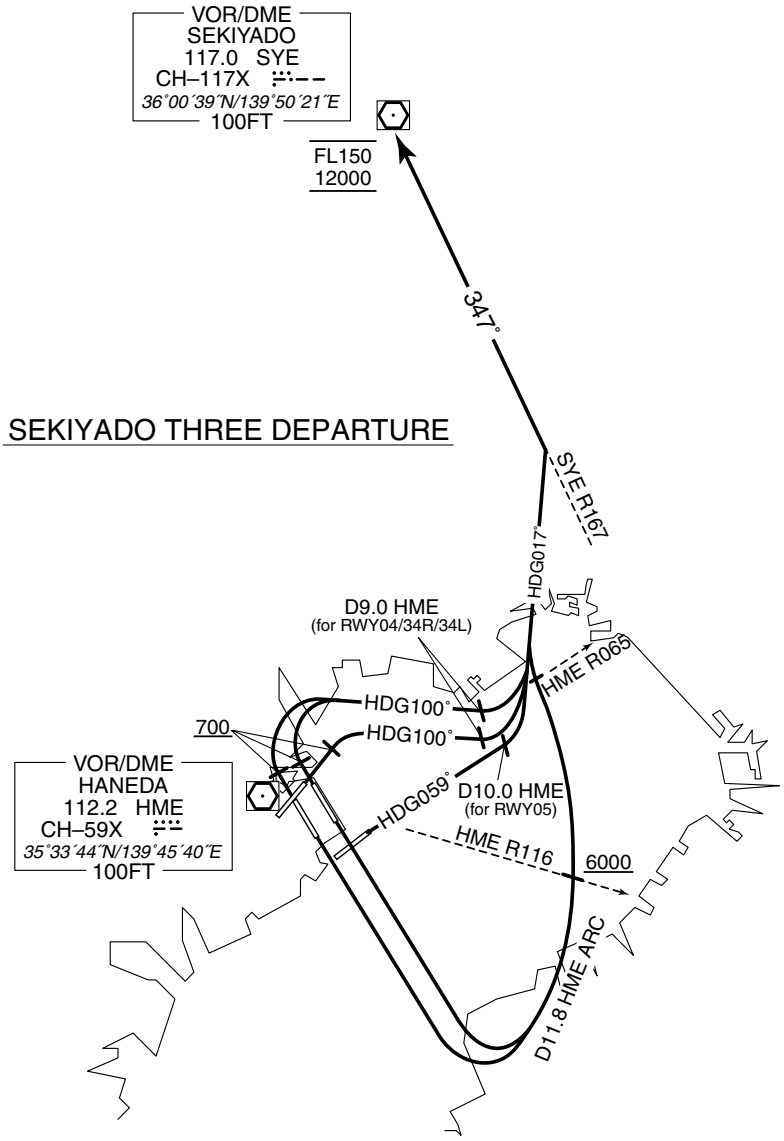
SEKIYADO THREE DEPARTURE

RWY04/34R/34L: Climb RWY HDG to 700FT, turn right HDG100˚ to HME 9.0DME, turn left HDG017˚ to intercept and proceed via SYE R167 to SYE VOR/DME.
Cross SYE VOR/DME between 12000FT and FL150.

RWY16R/16L: Climb RWY HDG to intercept and proceed via HME 11.8DME counterclockwise ARC to HME R065, turn right HDG017˚ to intercept and proceed via SYE R167 to SYE VOR/DME.
Cross HME R116 at or above 6000FT, cross SYE VOR/DME between 12000FT and FL150.

RWY05 : Climb on HDG059˚ to HME 10.0DME, turn left HDG017˚ to intercept and proceed via SYE R167 to SYE VOR/DME.
Cross SYE VOR/DME between 12000FT and FL150.

Note RWY34R/34L/04: 5.0% climb gradient required up to 700FT.
RWY05: 5.0% climb gradient required up to 500FT.



STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL SID

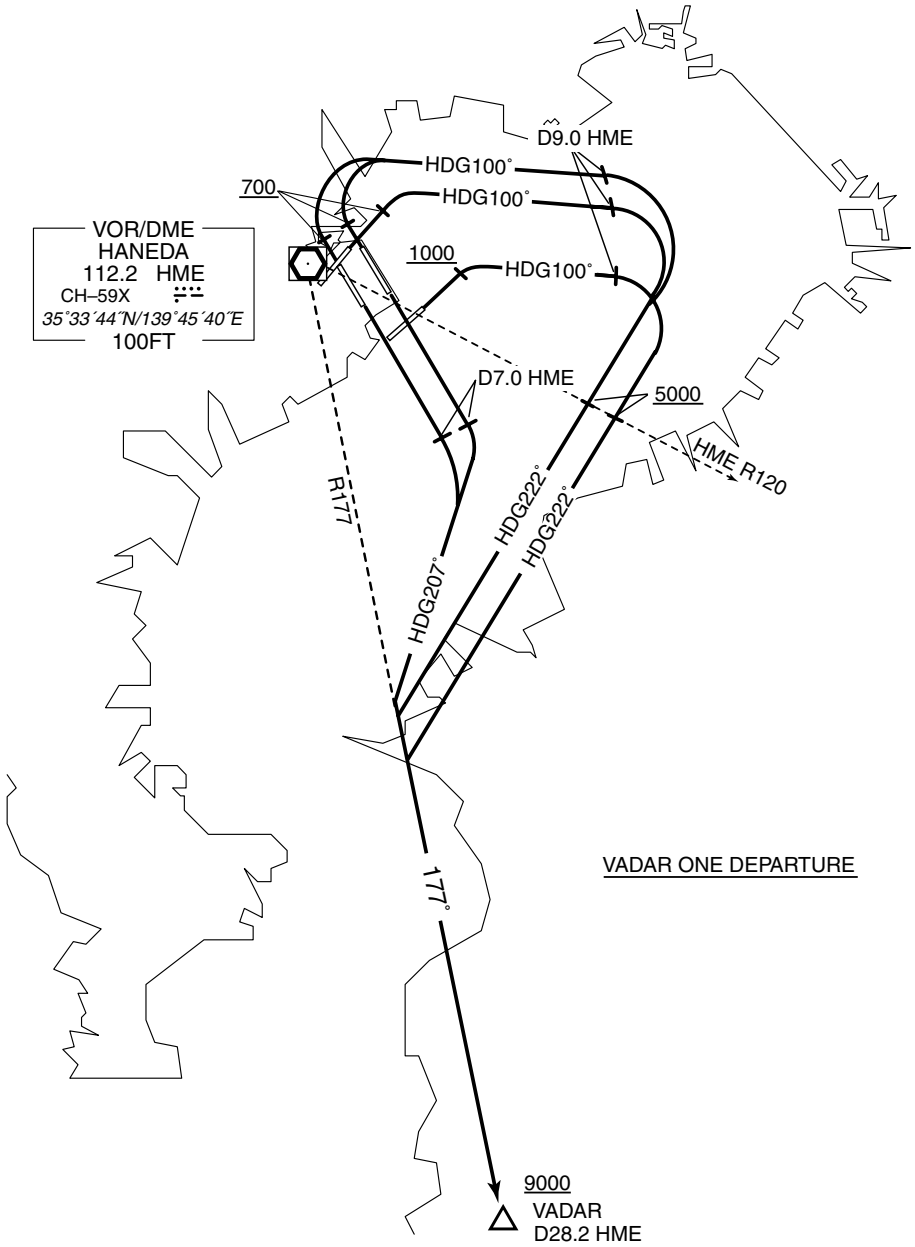
VADAR ONE DEPARTURE

RWY04/34R/34L: Climb RWY HDG to 700FT, turn right HDG100˚ to HME 9.0DME, turn right HDG222˚ to intercept and proceed via HME R177 to VADAR.
Cross HME R120 at or above 5000FT, cross VADAR at or above 9000FT.

RWY16R/16L: Climb RWY HDG to HME 7.0DME, turn right HDG207˚ to intercept and proceed via HME R177 to VADAR.
Cross VADAR at or above 9000FT.

RWY05: Climb RWY HDG to 1000FT, turn right HDG100˚ to HME 9.0DME, turn right HDG222˚ to intercept and proceed via HME R177 to VADAR.
Cross HME R120 at or above 5000FT, cross VADAR at or above 9000FT.

Note RWY04/34R/34L: 5.0% climb gradient required up to 700FT.
RWY05: 5.0% climb gradient required up to 1000FT.



STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL SID

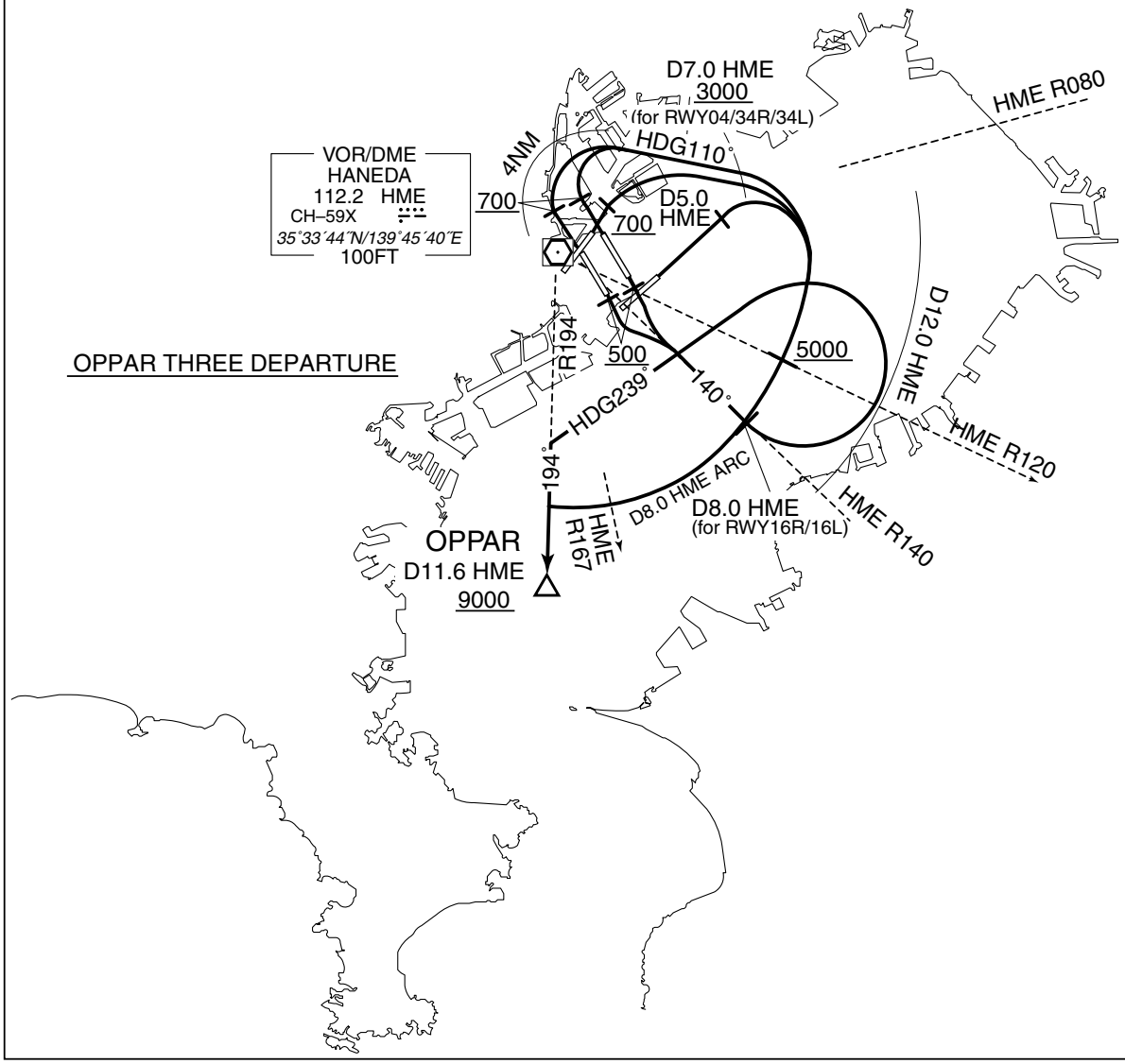
OPPAR THREE DEPARTURE

RWY04/34R/34L: Climb RWY HDG to 700FT, turn right within 4NM, climb via HDG110˚ to HME 7.0DME, turn right, via HME 8.0DME clockwise ARC to intercept and proceed via HME R194 to OPPAR.
Cross HME 7.0DME at or above 3000FT, cross HME R120 at or above 5000FT, cross OPPAR at or above 9000FT.

RWY16R/16L: Climb RWY HDG to 500FT, turn left climb via HME R140 to 8.0DME, turn left HDG239˚ within HME 12.0DME to intercept and proceed via HME R194 to OPPAR.
Cross OPPAR at or above 9000FT.

RWY05: Climb RWY HDG to HME 5.0DME, turn right, via HME 8.0DME clockwise ARC to intercept and proceed via HME R194 to OPPAR.
Cross HME R120 at or above 5000FT, cross OPPAR at or above 9000FT.

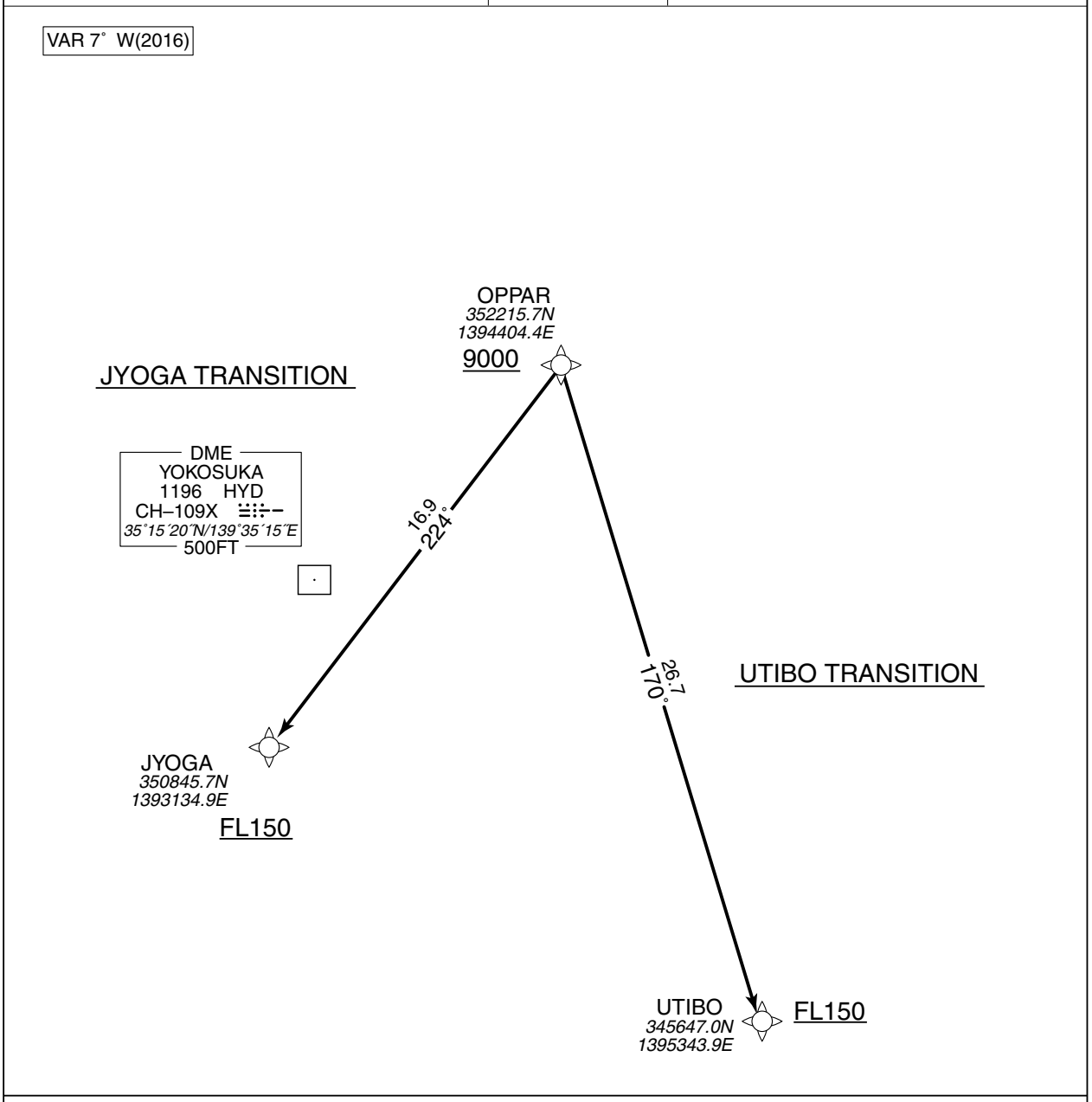
Note Aircraft taking off from RWY16R/16L are required to complete left turns south of HME R080.
RWY34R/34L/04: 5.0% climb gradient required up to 700FT.



STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL — RNAV TRANSITION

| JYOGA TRANSITION<br>UTIBO TRANSITION | | RNAV1 |
|---|---|---|
| Note 1 ) DME/DME/IRU or GNSS required.<br>2 ) RADAR service required. | Critical DME | – |
| | DME GAP | – |
| | Inappropriate Navaids | See AD1.1.6.10.3. Inappropriate NAVAIDs for RNAV1 |




JYOGA TRANSITION

From OPPAR at or above 9000FT, to JYOGA at or above FL150.

UTIBO TRANSITION

From OPPAR at or above 9000FT, to UTIBO at or above FL150.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV TRANSITION

JYOGA 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 | OPPAR | — | — | -7.4 | — | — | +9000 | — | — | RNAV1 |
| 002 | TF | JYOGA | — | 224 (217.1) | -7.4 | 16.9 | — | +FL150 | — | — | RNAV1 |

UTIBO 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 | OPPAR | — | — | -7.4 | — | — | +9000 | — | — | RNAV1 |
| 002 | TF | UTIBO | — | 170 (162.7) | -7.4 | 26.7 | — | +FL150 | — | — | RNAV1 |

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STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL SID

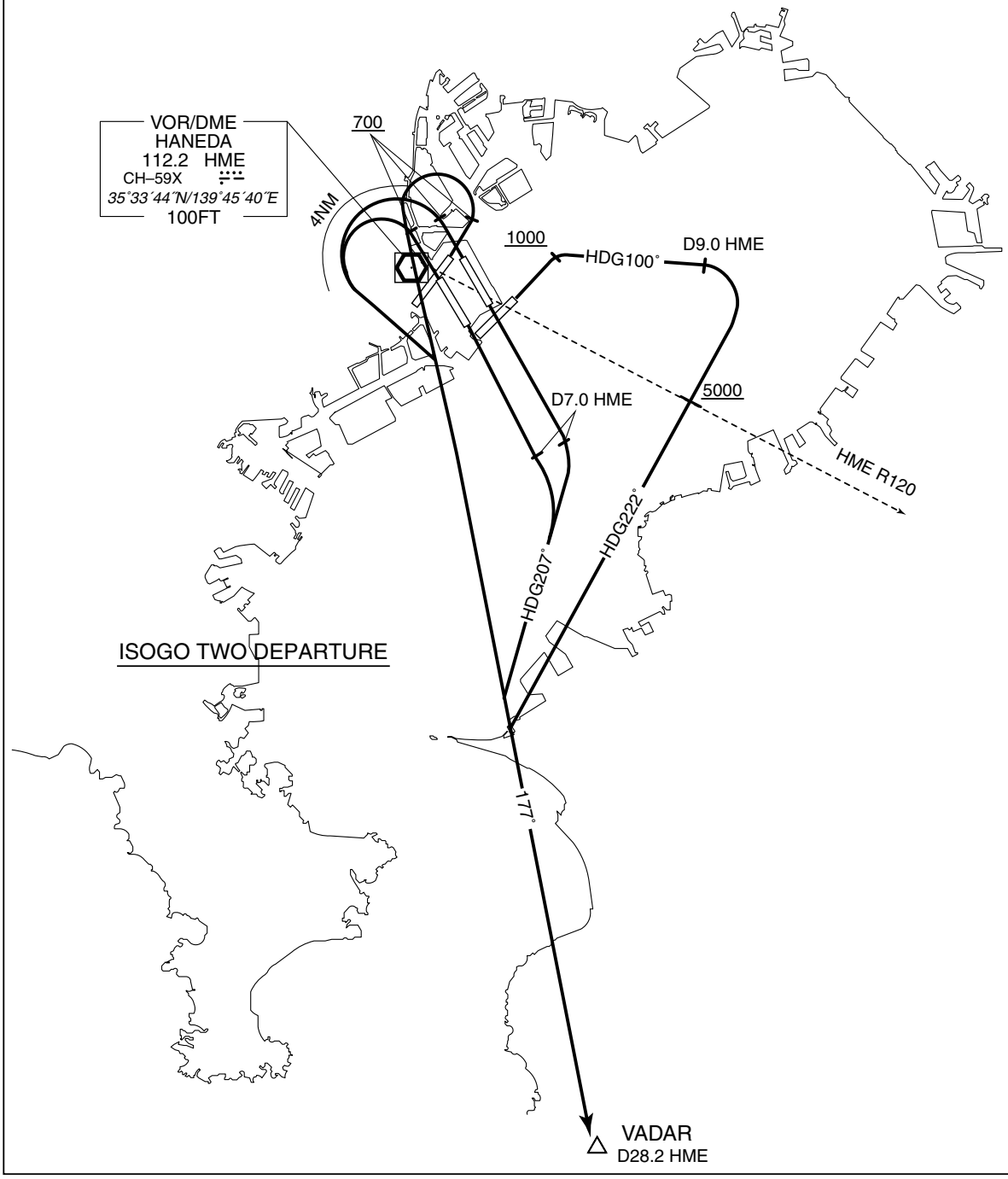
ISOGO TWO DEPARTURE (FOR PROP ONLY)

RWY04/34R/34L: Climb RWY HDG to 700FT or above, turn left within 4NM, climb via HME R177 to VADAR.

RWY16R/16L: Climb RWY HDG to HME 7.0DME, turn right HDG207˚ to intercept and proceed via HME R177 to VADAR.

RWY05: Climb RWY HDG to 1000FT, turn right HDG100˚ to HME 9.0DME, turn right HDG222˚ to intercept and proceed via HME R177 to VADAR.
Cross HME R120 at or above 5000FT.

Note RWY34R/34L/04: 5.0% climb gradient required up to 700FT.
RWY05: 5.0% climb gradient required up to 1000FT.



STANDARD DEPARTURE CHART-INSTRUMENT

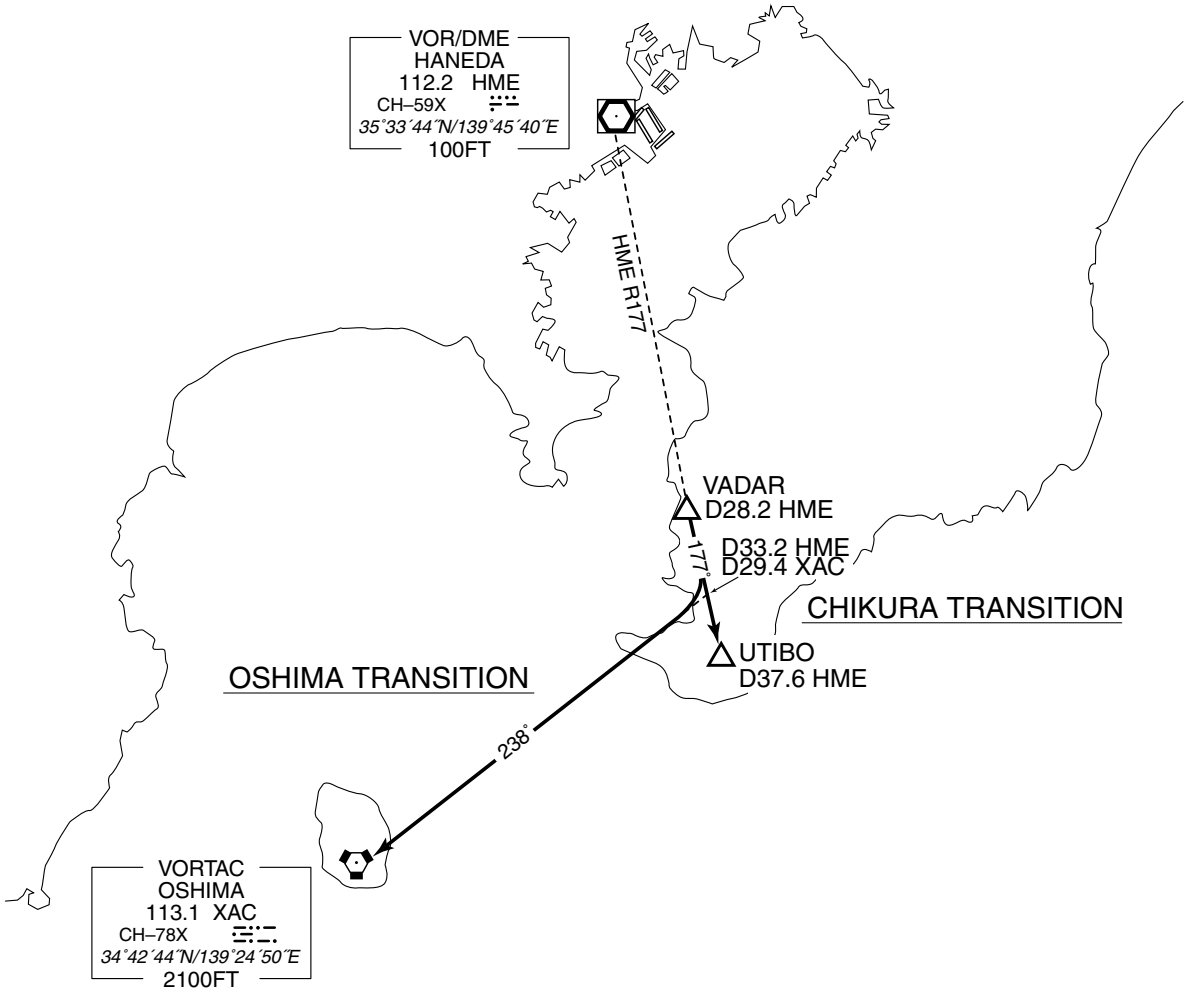
RJTT / TOKYO INTL TRANSITION

OSHIMA TRANSITION

From over VADAR, via HME R177 to intercept and proceed via XAC R058 to XAC VORTAC.

CHIKURA TRANSITION

From over VADAR, via HME R177 to UTIBO.

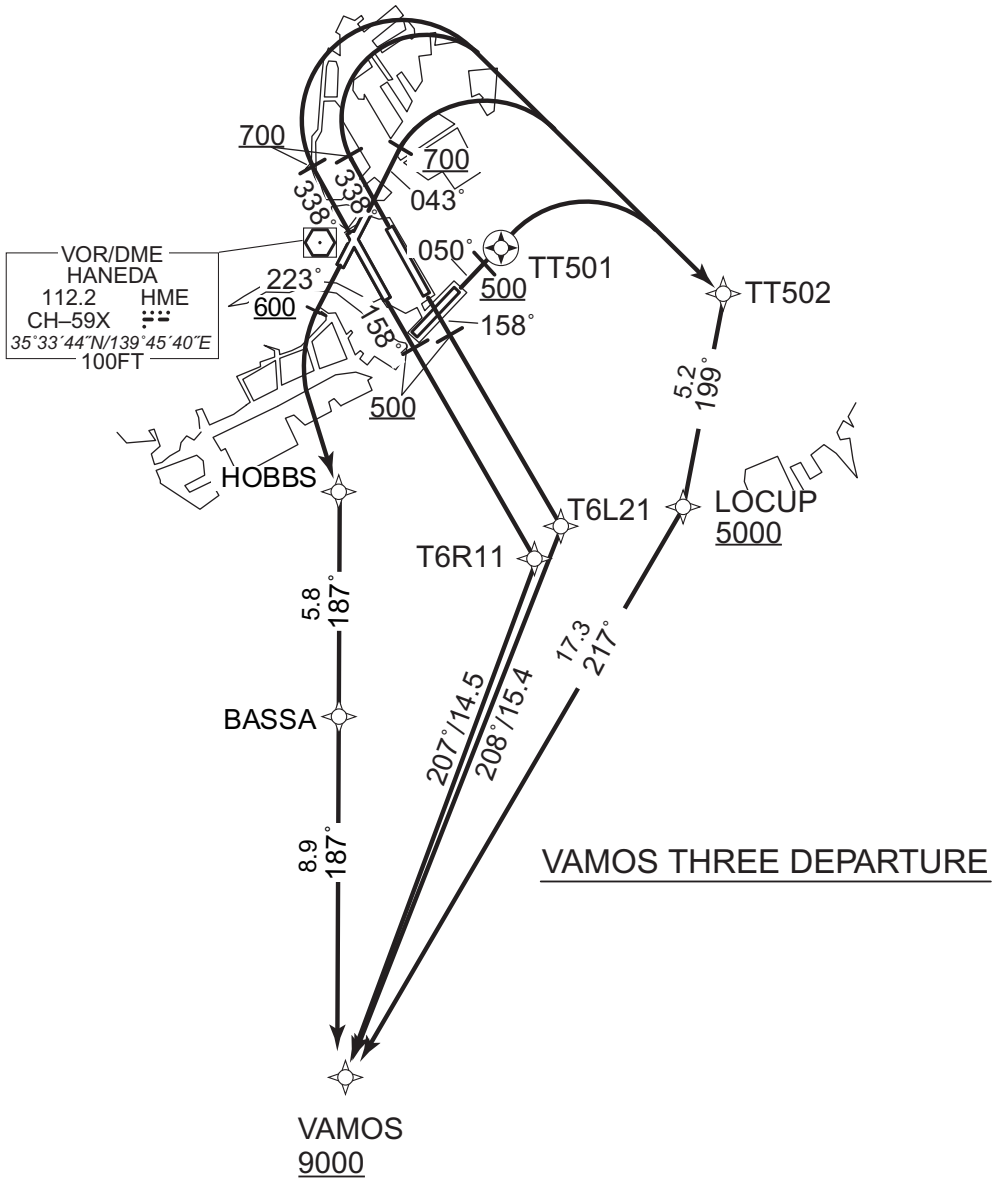


**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| VAMOS THREE DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R:HME 1.2NM FM DER - 1.9NM to T6R11<br>RWY16L:HME 1.0NM FM DER - 2.4NM to T6L21<br>RWY34R:HME 1.0NM FM DER - 2.5NM to TT502<br>RWY34L:HME 0.5NM FM DER - 2.5NM to TT502<br>RWY04:HME 1.7NM FM DER - 2.5NM to TT502<br>RWY05:HME DER - 2.7NM to TT502 |
| DME GAP | RWY16R:DER - 1.2NM FM DER<br>RWY16L:DER - 1.0NM FM DER<br>RWY34R:DER - 1.0NM FM DER<br>RWY34L:DER - 0.5NM FM DER<br>RWY04:DER - 1.7NM FM DER<br>RWY22:DER - 1.4NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)




CHANGE : PROC renamed. VAR. HDG after DEP FM RWY04,22. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

VAMOS THREE DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to VAMOS at or above 9000FT.

RWY16L : Climb on HDG 158˚ at or above 500FT, direct to T6L21, to VAMOS at or above 9000FT.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS at or above 9000FT.

RWY04: Climb on HDG 043˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS at or above 9000FT.

RWY05: Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS at or above 9000FT.

RWY22: Climb on HDG 223˚ at or above 600FT, turn left direct to HOBBS, to BASSA, to VAMOS at or above 9000FT.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.
RWY22 : 5.0% climb gradient required up to 600FT.

CHANGE : PROC renamed. HDG after DEP FM RWY04,22.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## VAMOS THREE DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | VAMOS | – | 207 (199.5) | -7.6 | 14.5 | – | +9000 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L21 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | VAMOS | – | 208 (200.7) | -7.6 | 15.4 | – | +9000 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | +9000 | – | – | RNAV1 |

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | +9000 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RWY34L/RWY34R:NR003(Course). RWY04:NR001,003(Course).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | +9000 | – | – | RNAV1 |

RWY22

| 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 | – | – | 223 (214.9) | -7.6 | – | – | +600 | – | – | RNAV1 |
| 002 | DF | HOBBS | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | BASSA | – | 187 (179.9) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | VAMOS | – | 187 (179.9) | -7.6 | 8.9 | – | +9000 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY05:NR004(Course). RWY22:NR001(Course).

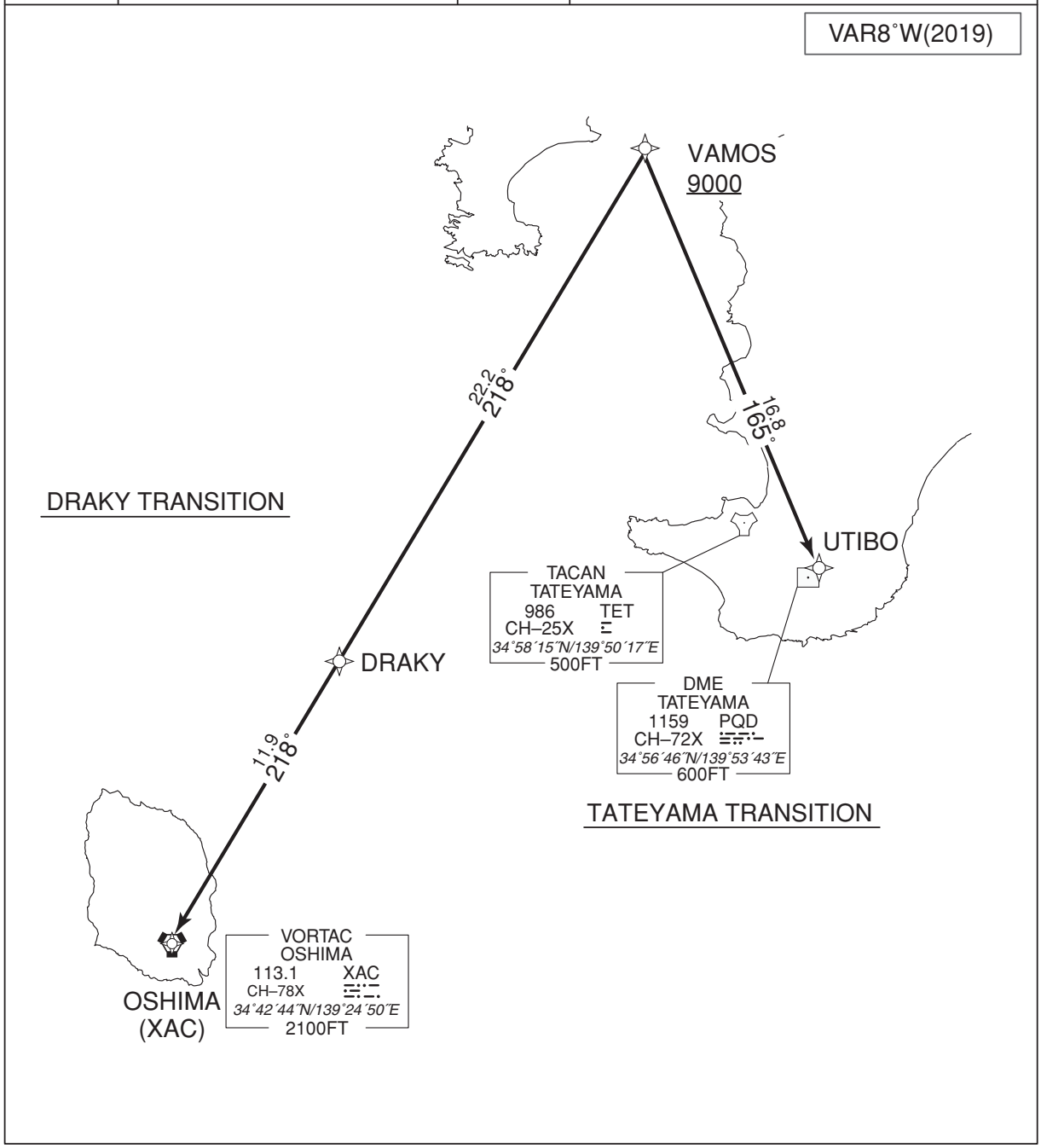
## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| BASSA | *352108.8N / 1394542.2E* | T6R11 | *352552.5N / 1395137.2E* |
| HOBBS | *352653.9N / 1394541.3E* | TT501 | *353328.7N / 1395029.9E* |
| LOCUP | *352718.8N / 1395608.5E* | TT502 | *353224.4N / 1395720.7E* |
| T6L21 | *352639.1N / 1395222.0E* | VAMOS | *351215.5N / 1394543.6E* |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV TRANSITION

| TATEYAMA TRANSITION / DRAKY TRANSITION | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>2) RADAR service required. | | Critical DME | – |
| DME GAP | – | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |




CHANGE : New PROC

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV TRANSITION

## TATEYAMA TRANSITION

From VAMOS at or above 9000FT, to UTIBO.

| 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 | VAMOS | – | – | -7.5 | – | – | +9000 | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 165 (157.0) | -7.5 | 16.8 | – | – | – | – | RNAV1 |

## DRAKY TRANSITION

From VAMOS at or above 9000FT, to DRAKY, to XAC.

| 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 | VAMOS | – | – | -7.5 | – | – | +9000 | – | – | RNAV1 |
| 002 | TF | DRAKY | – | 218 (210.2) | -7.5 | 22.2 | – | – | – | – | RNAV1 |
| 003 | TF | XAC | – | 218 (210.1) | -7.5 | 11.9 | – | – | – | – | RNAV1 |

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| DRAKY | *345301.7N / 1393205.5E* | VAMOS | *351215.5N / 1394543.6E* |
| UTIBO | *345647.0N / 1395343.9E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : New PROC

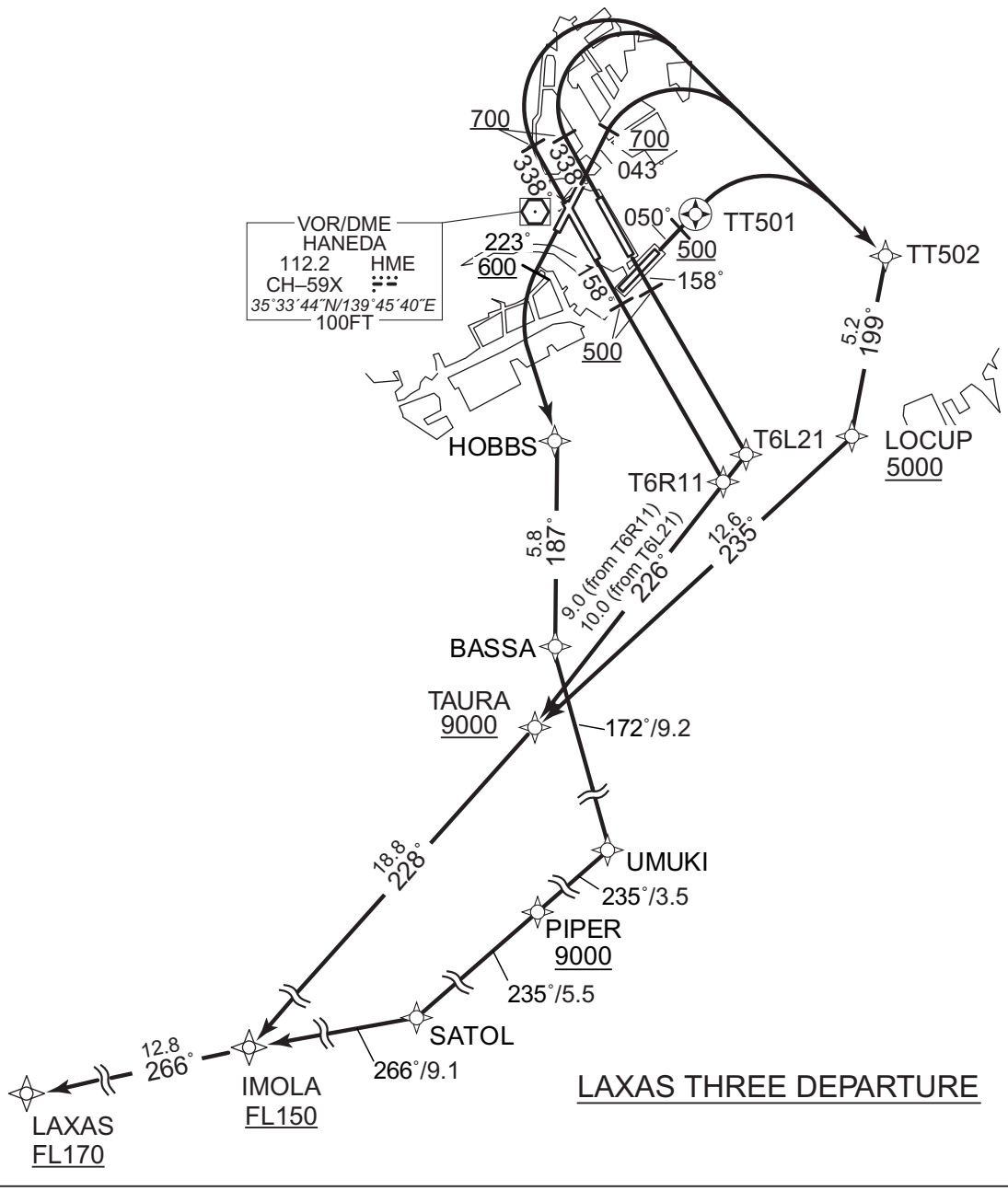
**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| LAXAS THREE DEPARTURE | RNAV1 |
|---|---|

| | | | |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R: HME 1.2NM FM DER - 1.9NM to T6R11<br>HYD T6R11 - TAURA<br>RWY16L: HME 1.0NM FM DER - 2.4NM to T6L21<br>HYD 9.0NM to TAURA - TAURA<br>RWY34R: HME 1.0NM FM DER - 2.5NM to TT502<br>HYD 8.6NM to TAURA - TAURA<br>RWY34L: HME 0.5NM FM DER - 2.5NM to TT502<br>HYD 8.6NM to TAURA - TAURA<br>RWY04: HME 1.7NM FM DER - 2.5NM to TT502<br>HYD 8.6NM to TAURA - TAURA<br>RWY05: HME DER - 2.7NM to TT502<br>HYD 8.6NM to TAURA - TAURA |
| DME GAP | RWY16R:DER - 1.2NM FM DER<br>RWY16L:DER - 1.0NM FM DER<br>RWY34R:DER - 1.0NM FM DER<br>RWY34L:DER - 0.5NM FM DER<br>RWY04:DER - 1.7NM FM DER<br>RWY22:DER - 1.4NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)




CHANGE : PROC renamed. VAR. HDG after DEP FM RWY04,22. Course FM TT502 to LOCUP. Course FM BASSA to UMUKI.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

LAXAS THREE DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to TAURA at or above 9000FT, to IMOLA at or above FL150, to LAXAS at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, direct to T6L21, to TAURA at or above 9000FT, to IMOLA at or above FL150, to LAXAS at or above FL170.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to TAURA at or above 9000FT, to IMOLA at or above FL150, to LAXAS at or above FL170.

RWY04 : Climb on HDG 043˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to TAURA at or above 9000FT, to IMOLA at or above FL150, to LAXAS at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TAURA at or above 9000FT, to IMOLA at or above FL150, to LAXAS at or above FL170.

RWY22 : Climb on HDG 223˚ at or above 600FT, turn left direct to HOBBS, to BASSA, to UMUKI, to PIPER at or above 9000FT, to SATOL, to IMOLA at or above FL150, to LAXAS at or above FL170.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.
RWY22 : 5.0% climb gradient required up to 600FT.

CHANGE : PROC renamed. HDG after DEP FM RWY04,22.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## LAXAS THREE DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | TAURA | – | 226 (218.1) | -7.6 | 9.0 | – | +9000 | – | – | RNAV1 |
| 004 | TF | IMOLA | – | 228 (220.5) | -7.6 | 18.8 | – | +FL150 | – | – | RNAV1 |
| 005 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L21 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | TAURA | – | 226 (218.1) | -7.6 | 10.0 | – | +9000 | – | – | RNAV1 |
| 004 | TF | IMOLA | – | 228 (220.5) | -7.6 | 18.8 | – | +FL150 | – | – | RNAV1 |
| 005 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | TAURA | – | 235 (227.3) | -7.6 | 12.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | IMOLA | – | 228 (220.5) | -7.6 | 18.8 | – | +FL150 | – | – | RNAV1 |
| 006 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RWY34L/RWY34R:NR003(Course).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | TAURA | – | 235 (227.3) | -7.6 | 12.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | IMOLA | – | 228 (220.5) | -7.6 | 18.8 | – | +FL150 | – | – | RNAV1 |
| 006 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TAURA | – | 235 (227.3) | -7.6 | 12.6 | – | +9000 | – | – | RNAV1 |
| 006 | TF | IMOLA | – | 228 (220.5) | -7.6 | 18.8 | – | +FL150 | – | – | RNAV1 |
| 007 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY04:NR001,003(Course). RWY05:NR004(Course).

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

RWY22

| 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 | – | – | 223 (214.9) | -7.6 | – | – | +600 | – | – | RNAV1 |
| 002 | DF | HOBBS | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | BASSA | – | 187 (179.9) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | UMUKI | – | 172 (163.9) | -7.6 | 9.2 | – | – | – | – | RNAV1 |
| 005 | TF | PIPER | – | 235 (227.4) | -7.6 | 3.5 | – | +9000 | – | – | RNAV1 |
| 006 | TF | SATOL | – | 235 (227.4) | -7.6 | 5.5 | – | – | – | – | RNAV1 |
| 007 | TF | IMOLA | – | 266 (258.7) | -7.6 | 9.1 | – | +FL150 | – | – | RNAV1 |
| 008 | TF | LAXAS | – | 266 (258.6) | -7.6 | 12.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY22:NR001,004(Course).

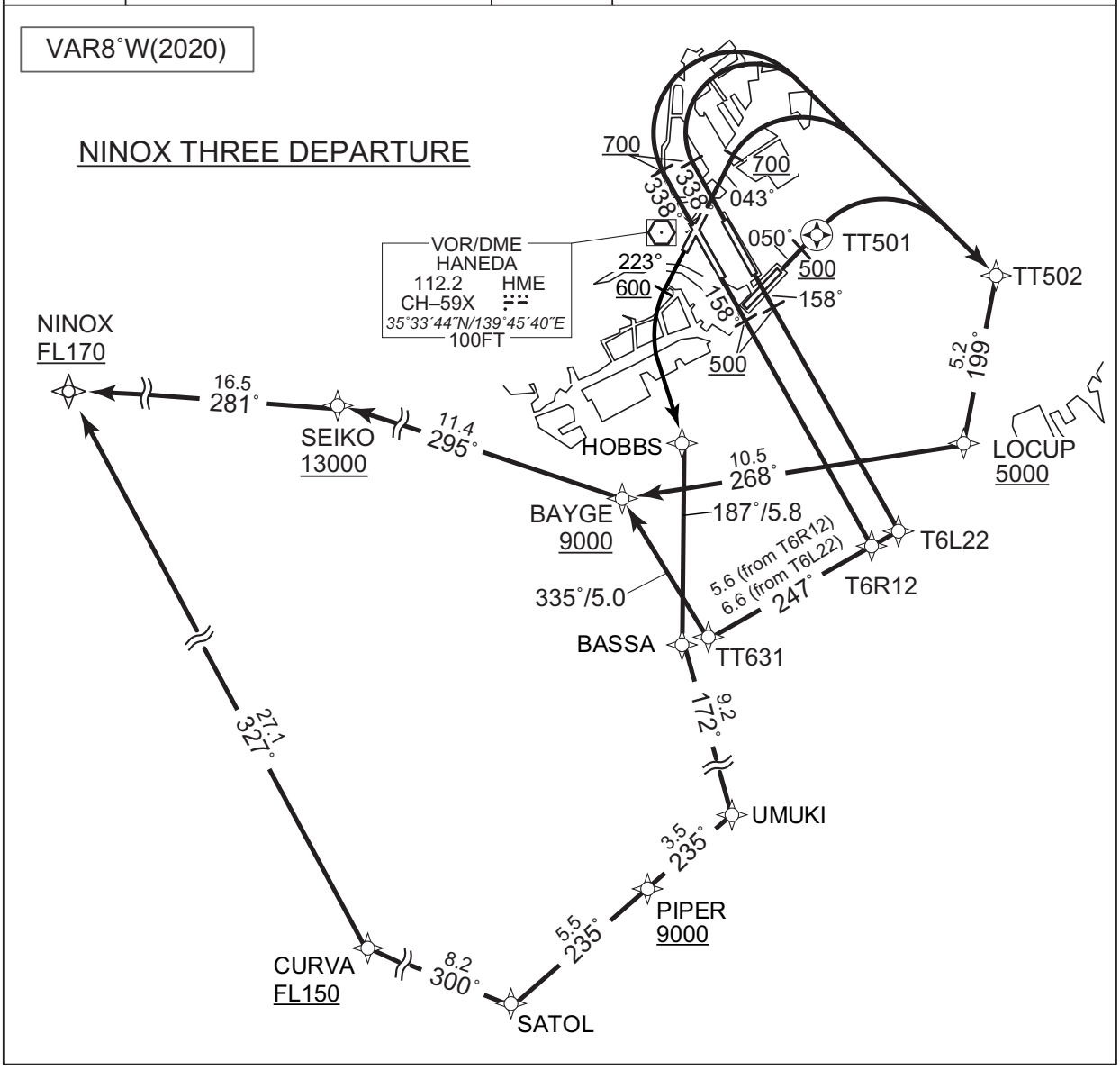
## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| BASSA | *352108.8N / 1394542.2E* | T6L21 | *352639.1N / 1395222.0E* |
| HOBBS | *352653.9N / 1394541.3E* | T6R11 | *352552.5N / 1395137.2E* |
| IMOLA | *350426.0N / 1392951.0E* | TAURA | *351846.1N / 1394447.3E* |
| LAXAS | *350153.1N / 1391432.8E* | TT501 | *353328.7N / 1395029.9E* |
| LOCUP | *352718.8N / 1395608.5E* | TT502 | *353224.4N / 1395720.7E* |
| PIPER | *350958.3N / 1394542.0E* | UMUKI | *351219.1N / 1394849.2E* |
| SATOL | *350613.3N / 1394043.4E* | | |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| NINOX THREE DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 3.8NM to T6R12<br>HYD T6R12 - TT631<br>PQD 1.0NM to BAYGE - 6.5NM to SEIKO<br>RWY16L : HME 1.0NM FM DER - 4.7NM to T6L22<br>HYD 5.6NM to TT631 - TT631<br>PQD 1.0NM to BAYGE - 6.5NM to SEIKO<br>RWY34R : HME 1.0NM FM DER - 2.5NM to TT502<br>HYD 6.5NM to BAYGE – BAYGE<br>PQD BAYGE - 6.5NM to SEIKO<br>RWY34L : HME 0.5NM FM DER - 2.5NM to TT502<br>HYD 6.5NM to BAYGE – BAYGE<br>PQD BAYGE - 6.5NM to SEIKO<br>RWY04 : HME 1.7NM FM DER - 2.5NM to TT502<br>HYD 6.5NM to BAYGE – BAYGE<br>PQD BAYGE - 6.5NM to SEIKO<br>RWY05 : HME DER - 2.7NM to TT502<br>HYD 6.5NM to BAYGE – BAYGE<br>PQD BAYGE - 6.5NM to SEIKO |
| DME GAP | RWY16R：DER - 1.2NM FM DER<br>RWY16L：DER - 1.0NM FM DER<br>RWY34R：DER - 1.0NM FM DER<br>RWY34L：DER - 0.5NM FM DER<br>RWY04：DER - 1.7NM FM DER<br>RWY22：DER - 1.4NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |




CHANGE : PROC renamed. VAR. HDG after DEP FM RWY04,22. Course FM TT502 to LOCUP. Course FM TT631 to BAYGE. Course FM BASSA to UMUKI. Course FM SEIKO to NINOX.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

NINOX THREE DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R12, to TT631, to BAYGE at or above 9000FT, to SEIKO at or above 13000FT, to NINOX at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, direct to T6L22, to TT631, to BAYGE at or above 9000FT, to SEIKO at or above 13000FT, to NINOX at or above FL170.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to BAYGE at or above 9000FT, to SEIKO at or above 13000FT, to NINOX at or above FL170.

RWY04 : Climb on HDG 043˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to BAYGE at or above 9000FT, to SEIKO at or above 13000FT, to NINOX at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to BAYGE at or above 9000FT, to SEIKO at or above 13000FT, to NINOX at or above FL170.

RWY22 : Climb on HDG 223˚ at or above 600FT, turn left direct to HOBBS, to BASSA, to UMUKI, to PIPER at or above 9000FT, to SATOL, to CURVA at or above FL150, to NINOX at or above FL170.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.
RWY22 : 5.0% climb gradient required up to 600FT.

CHANGE : PROC renamed. HDG after DEP FM RWY04,22.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

CHANGE : PROC renamed. Magnetic Variation. RWY16R:NR004,006(Course). RWY16L:NR004,006(Course). RWY34L/RWY34R:NR003,006(Course).

## NINOX THREE DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R12 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | TT631 | – | 247 (239.8) | -7.6 | 5.6 | – | – | – | – | RNAV1 |
| 004 | TF | BAYGE | – | 335 (327.0) | -7.6 | 5.0 | – | +9000 | – | – | RNAV1 |
| 005 | TF | SEIKO | – | 295 (287.8) | -7.6 | 11.4 | – | +13000 | – | – | RNAV1 |
| 006 | TF | NINOX | – | 281 (272.9) | -7.6 | 16.5 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L22 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | TT631 | – | 247 (239.8) | -7.6 | 6.6 | – | – | – | – | RNAV1 |
| 004 | TF | BAYGE | – | 335 (327.0) | -7.6 | 5.0 | – | +9000 | – | – | RNAV1 |
| 005 | TF | SEIKO | – | 295 (287.8) | -7.6 | 11.4 | – | +13000 | – | – | RNAV1 |
| 006 | TF | NINOX | – | 281 (272.9) | -7.6 | 16.5 | – | +FL170 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | BAYGE | – | 268 (260.6) | -7.6 | 10.5 | – | +9000 | – | – | RNAV1 |
| 005 | TF | SEIKO | – | 295 (287.8) | -7.6 | 11.4 | – | +13000 | – | – | RNAV1 |
| 006 | TF | NINOX | – | 281 (272.9) | -7.6 | 16.5 | – | +FL170 | – | – | RNAV1 |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | BAYGE | – | 268 (260.6) | -7.6 | 10.5 | – | +9000 | – | – | RNAV1 |
| 005 | TF | SEIKO | – | 295 (287.8) | -7.6 | 11.4 | – | +13000 | – | – | RNAV1 |
| 006 | TF | NINOX | – | 281 (272.9) | -7.6 | 16.5 | – | +FL170 | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | BAYGE | – | 268 (260.6) | -7.6 | 10.5 | – | +9000 | – | – | RNAV1 |
| 006 | TF | SEIKO | – | 295 (287.8) | -7.6 | 11.4 | – | +13000 | – | – | RNAV1 |
| 007 | TF | NINOX | – | 281 (272.9) | -7.6 | 16.5 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY04:NR001,003,006(Course). RWY05:NR004,007(Course).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY22

| 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 | – | – | 223 (214.9) | -7.6 | – | – | +600 | – | – | RNAV1 |
| 002 | DF | HOBBS | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | BASSA | – | 187 (179.9) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | UMUKI | – | 172 (163.9) | -7.6 | 9.2 | – | – | – | – | RNAV1 |
| 005 | TF | PIPER | – | 235 (227.4) | -7.6 | 3.5 | – | +9000 | – | – | RNAV1 |
| 006 | TF | SATOL | – | 235 (227.4) | -7.6 | 5.5 | – | – | – | – | RNAV1 |
| 007 | TF | CURVA | – | 300 (292.2) | -7.6 | 8.2 | – | +FL150 | – | – | RNAV1 |
| 008 | TF | NINOX | – | 327 (319.6) | -7.6 | 27.1 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY22:NR001,004(Course).

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| BASSA | *352108.8N / 1394542.2E* | SEIKO | *352904.5N / 1393005.0E* |
| BAYGE | *352535.4N / 1394327.4E* | T6L22 | *352441.2N / 1395345.4E* |
| CURVA | *350919.0N / 1393124.4E* | T6R12 | *352413.6N / 1395247.1E* |
| HOBBS | *352653.9N / 1394541.3E* | TT501 | *353328.7N / 1395029.9E* |
| LOCUP | *352718.8N / 1395608.5E* | TT502 | *353224.4N / 1395720.7E* |
| NINOX | *352953.4N / 1390953.1E* | TT631 | *352123.4N / 1394648.6E* |
| PIPER | *350958.3N / 1394542.0E* | UMUKI | *351219.1N / 1394849.2E* |
| SATOL | *350613.3N / 1394043.4E* | | |

**STANDARD DEPARTURE CHART-INSTRUMENT**

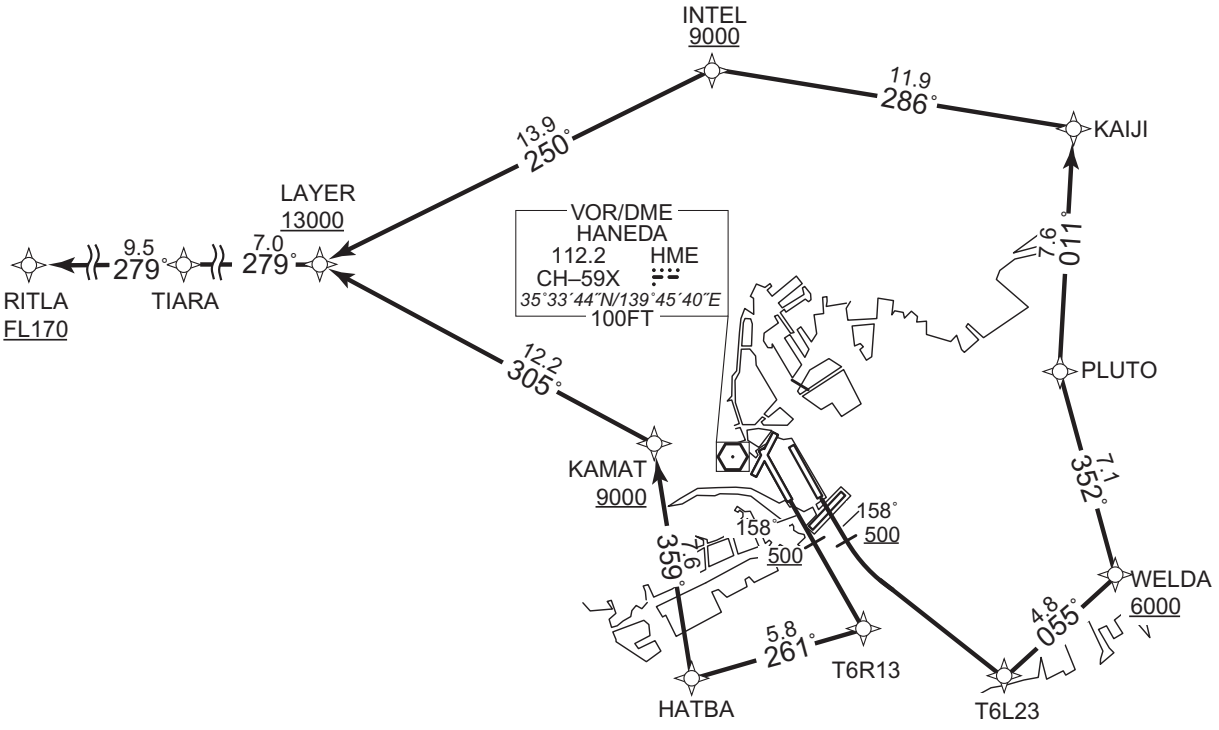
RJTT/TOKYO INTL — RNAV SID

| RITLA TWO A DEPARTURE | RNAV1 |
|---|---|

| | | | |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - HATBA<br>HYD 2.8NM to HATBA - 1.6NM to HATBA<br>KAMAT - 9.2NM to LAYER<br>PQD HATBA - 1.6NM to KAMAT<br>KAMAT - 9.2NM to LAYER<br>SND 11.2NM to LAYER - LAYER<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY34R : HME 1.0NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY34L : HME 0.5NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY04 : HME 1.7NM FM DER - 1.1NM to PLUTO<br>SND 2.2NM to TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT<br>PQD KAMAT - 9.2NM to LAYER<br>SND 11.2NM to LAYER - LAYER |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY34L : DER - 0.5NM FM DER<br>RWY04 : DER - 1.7NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)

RITLA TWO A DEPARTURE RWY16R/16L



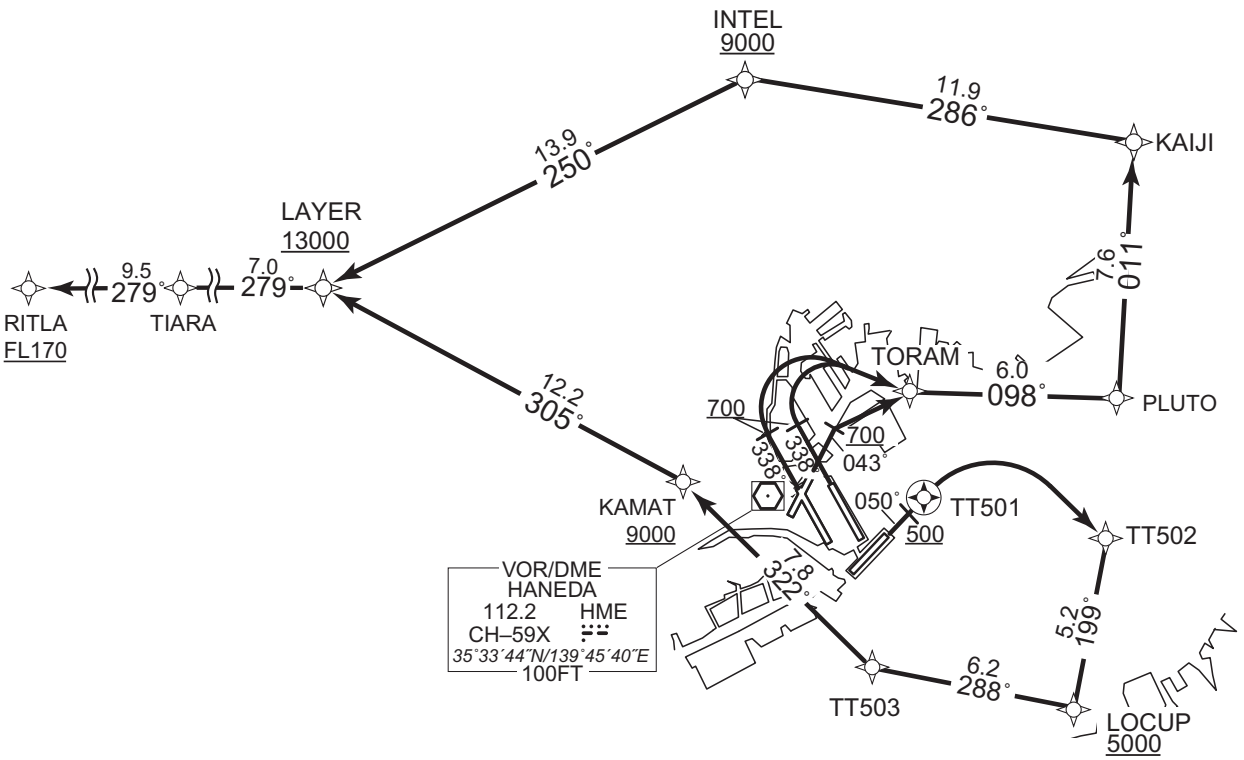

CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

## RITLA TWO A DEPARTURE RWY 34L/34R/04/05




CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established. HDG after DEP FM RWY04. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

CHANGE : PROC renamed. RTE after LAYER. TIARA established. HDG after DEP FM RWY04.

RITLA TWO A DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R13, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TORAM, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY04 : Climb on HDG 043˚ at or above 700FT, direct to TORAM, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## RITLA TWO A DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R13 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | HATBA | – | 261 (253.8) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | KAMAT | – | 359 (351.1) | -7.6 | 7.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 006 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 007 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 006 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 007 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 008 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RTE after LAYER. TIARA established.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

CHANGE : Magnetic Variation. RTE after LAYER. TIARA established. RWY04:NR001(Course). RWY05:NR004(Course).

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 006 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 007 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 008 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| HATBA | *352623.4N / 1394315.9E* | T6L23 | *352627.6N / 1395539.1E* |
| INTEL | *354553.0N / 1394340.2E* | T6R13 | *352800.8N / 1395006.4E* |
| KAIJI | *354409.6N / 1395806.6E* | TIARA | *353934.0N / 1391954.2E* |
| KAMAT | *353353.6N / 1394148.9E* | TORAM | *353636.8N / 1395011.0E* |
| LAYER | *353925.4N / 1392829.5E* | TT501 | *353328.7N / 1395029.9E* |
| LOCUP | *352718.8N / 1395608.5E* | TT502 | *353224.4N / 1395720.7E* |
| PLUTO | *353632.1N / 1395736.8E* | TT503 | *352828.0N / 1394840.4E* |
| RITLA | *353944.8N / 1390813.1E* | WELDA | *352941.4N / 1395956.7E* |

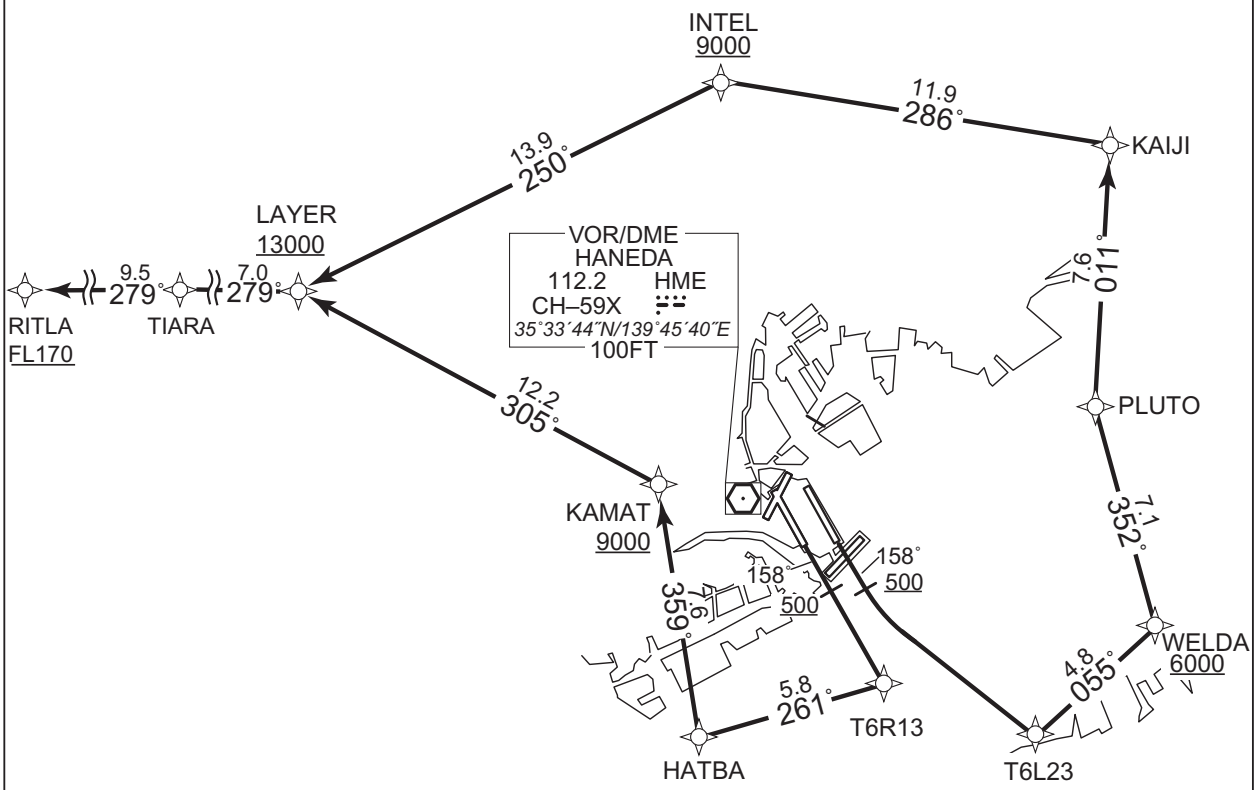
**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| RITLA TWO B DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - HATBA<br>HYD 2.8NM to HATBA - 1.6NM to HATBA<br>KAMAT - 9.2NM to LAYER<br>PQD HATBA - 1.6NM to KAMAT<br>KAMAT - 9.2NM to LAYER<br>SND 11.2NM to LAYER - LAYER<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT<br>PQD KAMAT - 9.2NM to LAYER<br>SND 11.2NM to LAYER - LAYER |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)

RITLA TWO B DEPARTURE RWY16R/16L



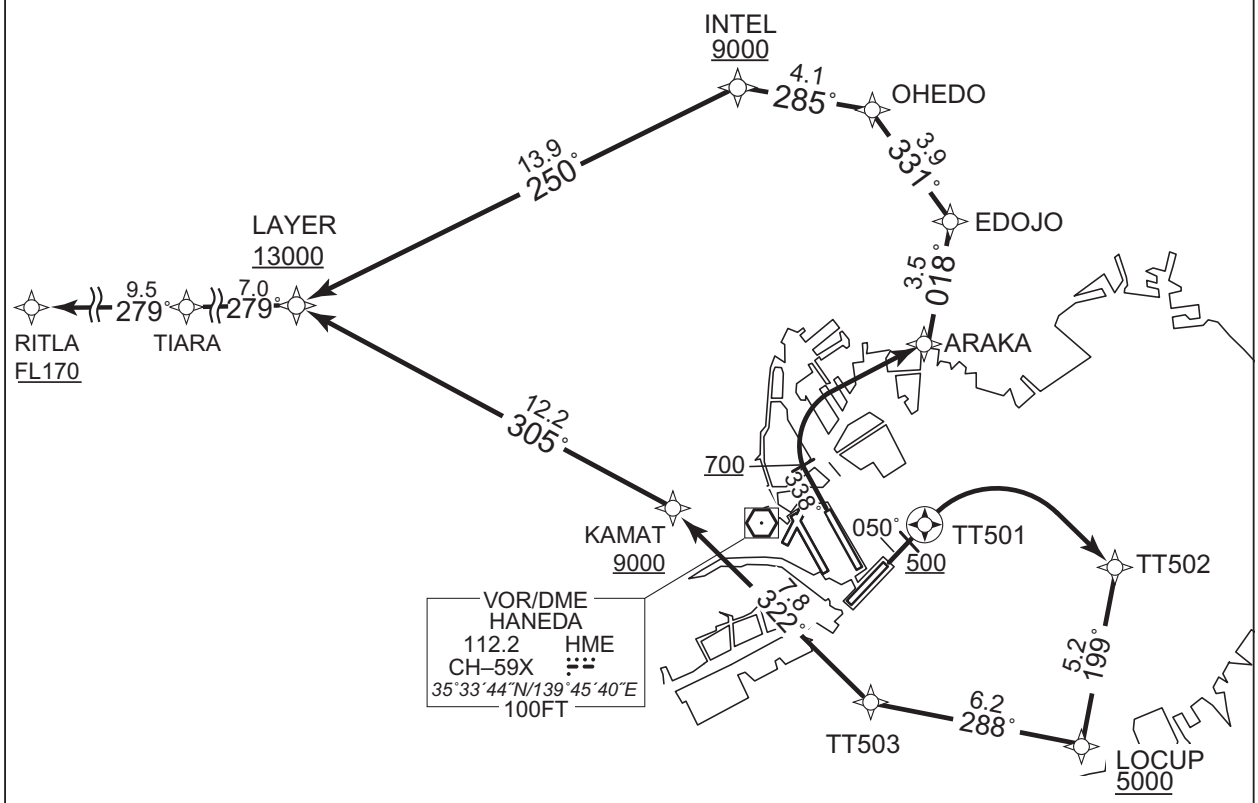

CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

## RITLA TWO B DEPARTURE RWY 34R/05




CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RITLA TWO B DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R13, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed. RTE after LAYER. TIARA established.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## RITLA TWO B DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R13 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | HATBA | – | 261 (253.8) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | KAMAT | – | 359 (351.1) | -7.6 | 7.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 006 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 007 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 285 (277.0) | -7.6 | 4.1 | – | +9000 | – | – | RNAV1 |
| 006 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 007 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 008 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RTE after LAYER. TIARA established.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RTE after LAYER. TIARA established. RWY05:NR004(Course).

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | PLUTO | *353632.1N / 1395736.8E* |
| EDOJO | *354214.0N / 1395129.9E* | RITLA | *353944.8N / 1390813.1E* |
| HATBA | *352623.4N / 1394315.9E* | T6L23 | *352627.6N / 1395539.1E* |
| INTEL | *354553.0N / 1394340.2E* | T6R13 | *352800.8N / 1395006.4E* |
| KAIJI | *354409.6N / 1395806.6E* | TIARA | *353934.0N / 1391954.2E* |
| KAMAT | *353353.6N / 1394148.9E* | TT501 | *353328.7N / 1395029.9E* |
| LAYER | *353925.4N / 1392829.5E* | TT502 | *353224.4N / 1395720.7E* |
| LOCUP | *352718.8N / 1395608.5E* | TT503 | *352828.0N / 1394840.4E* |
| OHEDO | *354523.4N / 1394838.6E* | WELDA | *352941.4N / 1395956.7E* |

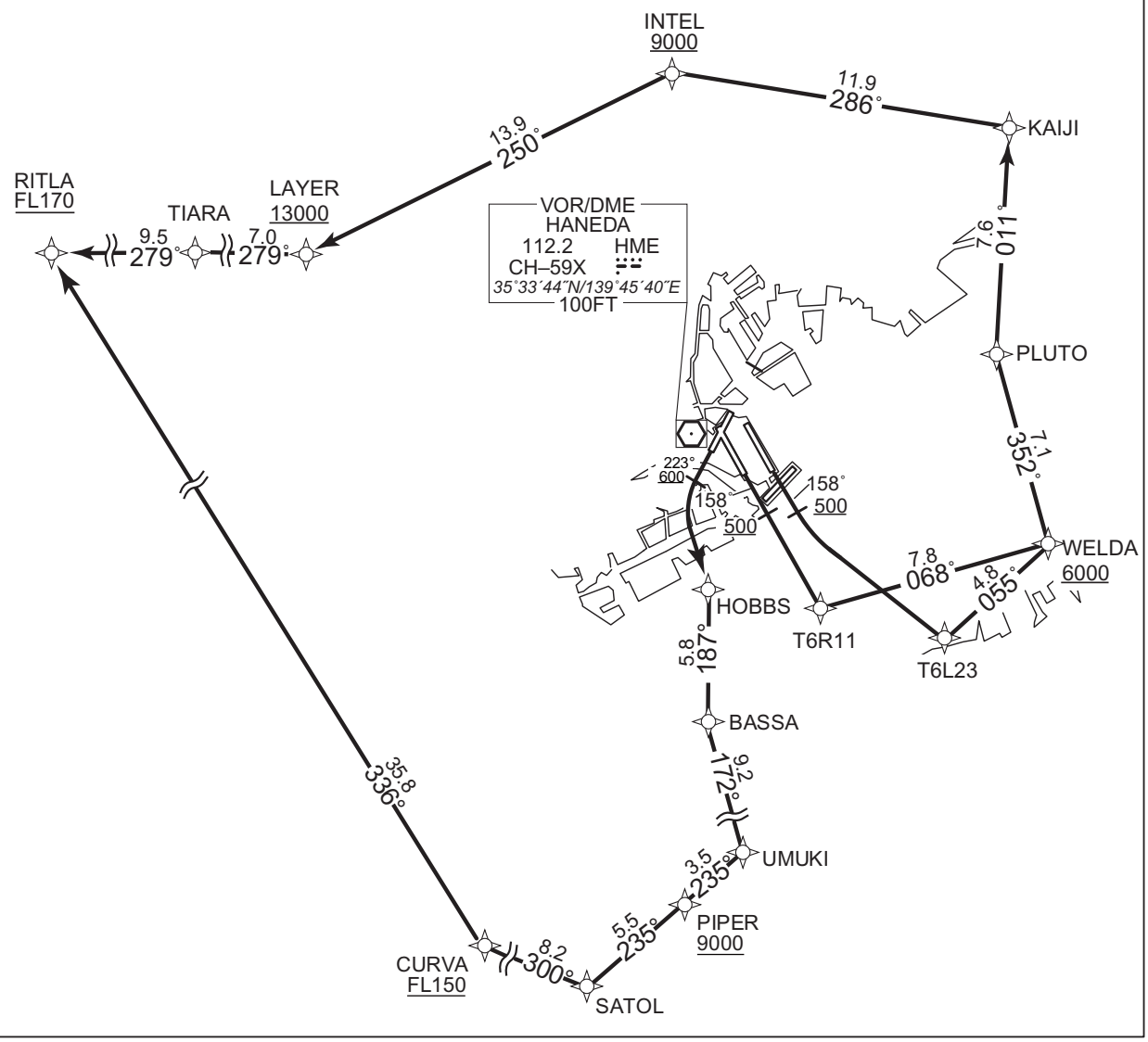
**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| RITLA TWO C DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT<br>PQD KAMAT - 9.2NM to LAYER<br>SND 11.2NM to LAYER - LAYER |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT<br>RWY22 : DER - 1.4NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)

RITLA TWO C DEPARTURE RWY16R/16L/22



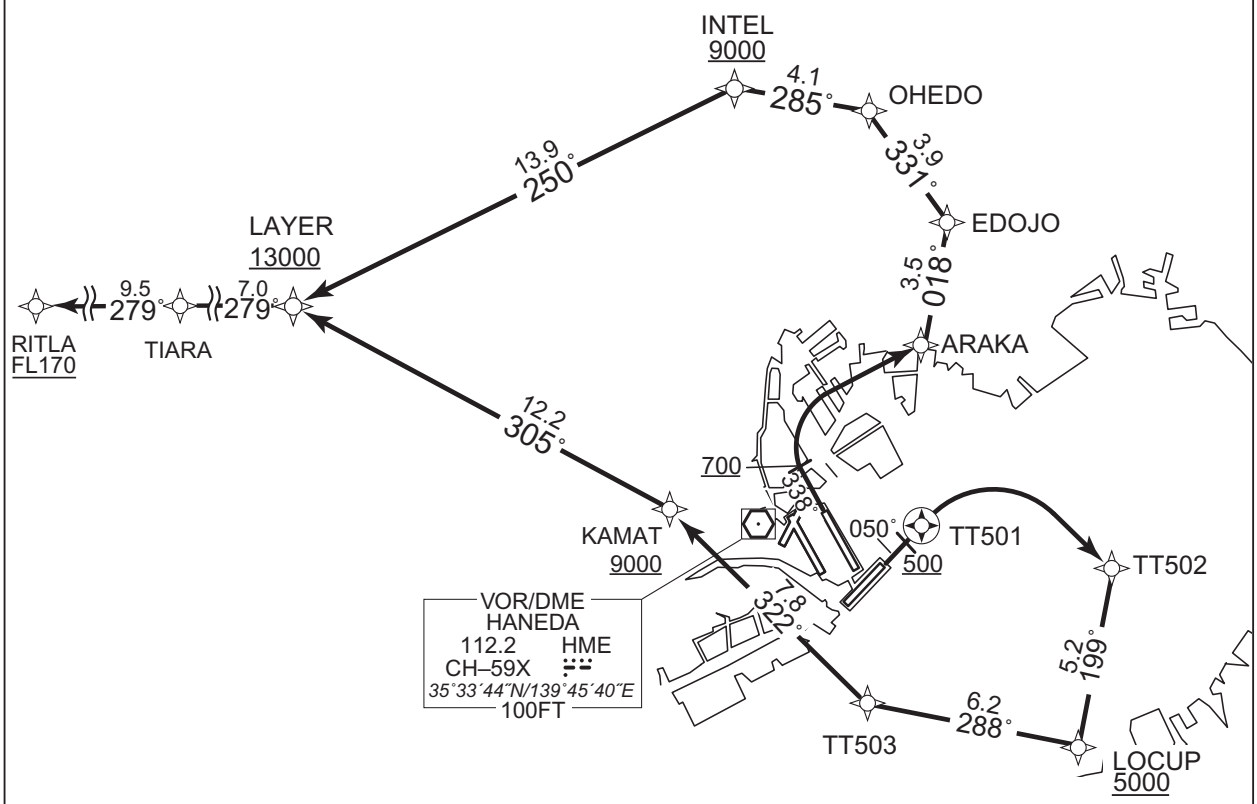

CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established. HDG after DEP FM RWY22. Course FM BASSA to UMUKI.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

## RITLA TWO C DEPARTURE RWY 34R/05




CHANGE : PROC renamed. VAR. RTE after LAYER. TIARA established. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

CHANGE : PROC renamed. RTE after LAYER. TIARA established. HDG after DEP FM RWY22.

RITLA TWO C DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to RITLA at or above FL170.

RWY22 : Climb on HDG 223˚ at or above 600FT, turn left direct to HOBBS, to BASSA, to UMUKI, to PIPER at or above 9000FT, to SATOL, to CURVA at or above FL150, to RITLA at or above FL170.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.
RWY22 : 5.0% climb gradient required up to 600FT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## RITLA TWO C DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 068 (060.6) | -7.6 | 7.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 285 (277.0) | -7.6 | 4.1 | – | +9000 | – | – | RNAV1 |
| 006 | TF | LAYER | – | 250 (242.4) | -7.6 | 13.9 | – | +13000 | – | – | RNAV1 |
| 007 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 008 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RTE after LAYER. TIARA established.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | TIARA | – | 279 (271.2) | -7.6 | 7.0 | – | – | – | – | RNAV1 |
| 009 | TF | RITLA | – | 279 (271.1) | -7.6 | 9.5 | – | +FL170 | – | – | RNAV1 |

RWY22

| 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 | – | – | 223 (214.9) | -7.6 | – | – | +600 | – | – | RNAV1 |
| 002 | DF | HOBBS | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | BASSA | – | 187 (179.9) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | UMUKI | – | 172 (163.9) | -7.6 | 9.2 | – | – | – | – | RNAV1 |
| 005 | TF | PIPER | – | 235 (227.4) | -7.6 | 3.5 | – | +9000 | – | – | RNAV1 |
| 006 | TF | SATOL | – | 235 (227.4) | -7.6 | 5.5 | – | – | – | – | RNAV1 |
| 007 | TF | CURVA | – | 300 (292.2) | -7.6 | 8.2 | – | +FL150 | – | – | RNAV1 |
| 008 | TF | RITLA | – | 336 (328.3) | -7.6 | 35.8 | – | +FL170 | – | – | RNAV1 |

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | PLUTO | *353632.1N / 1395736.8E* |
| BASSA | *352108.8N / 1394542.2E* | RITLA | *353944.8N / 1390813.1E* |
| CURVA | *350919.0N / 1393124.4E* | SATOL | *350613.3N / 1394043.4E* |
| EDOJO | *354214.0N / 1395129.9E* | T6L23 | *352627.6N / 1395539.1E* |
| HOBBS | *352653.9N / 1394541.3E* | T6R11 | *352552.5N / 1395137.2E* |
| INTEL | *354553.0N / 1394340.2E* | TIARA | *353934.0N / 1391954.2E* |
| KAIJI | *354409.6N / 1395806.6E* | TT501 | *353328.7N / 1395029.9E* |
| KAMAT | *353353.6N / 1394148.9E* | TT502 | *353224.4N / 1395720.7E* |
| LAYER | *353925.4N / 1392829.5E* | TT503 | *352828.0N / 1394840.4E* |
| LOCUP | *352718.8N / 1395608.5E* | UMUKI | *351219.1N / 1394849.2E* |
| OHEDO | *354523.4N / 1394838.6E* | WELDA | *352941.4N / 1395956.7E* |
| PIPER | *350958.3N / 1394542.0E* | | |

CHANGE : Magnetic Variation. RTE after LAYER. TIARA established. RWY05:NR004(Course). RWY22:NR001,004(Course).

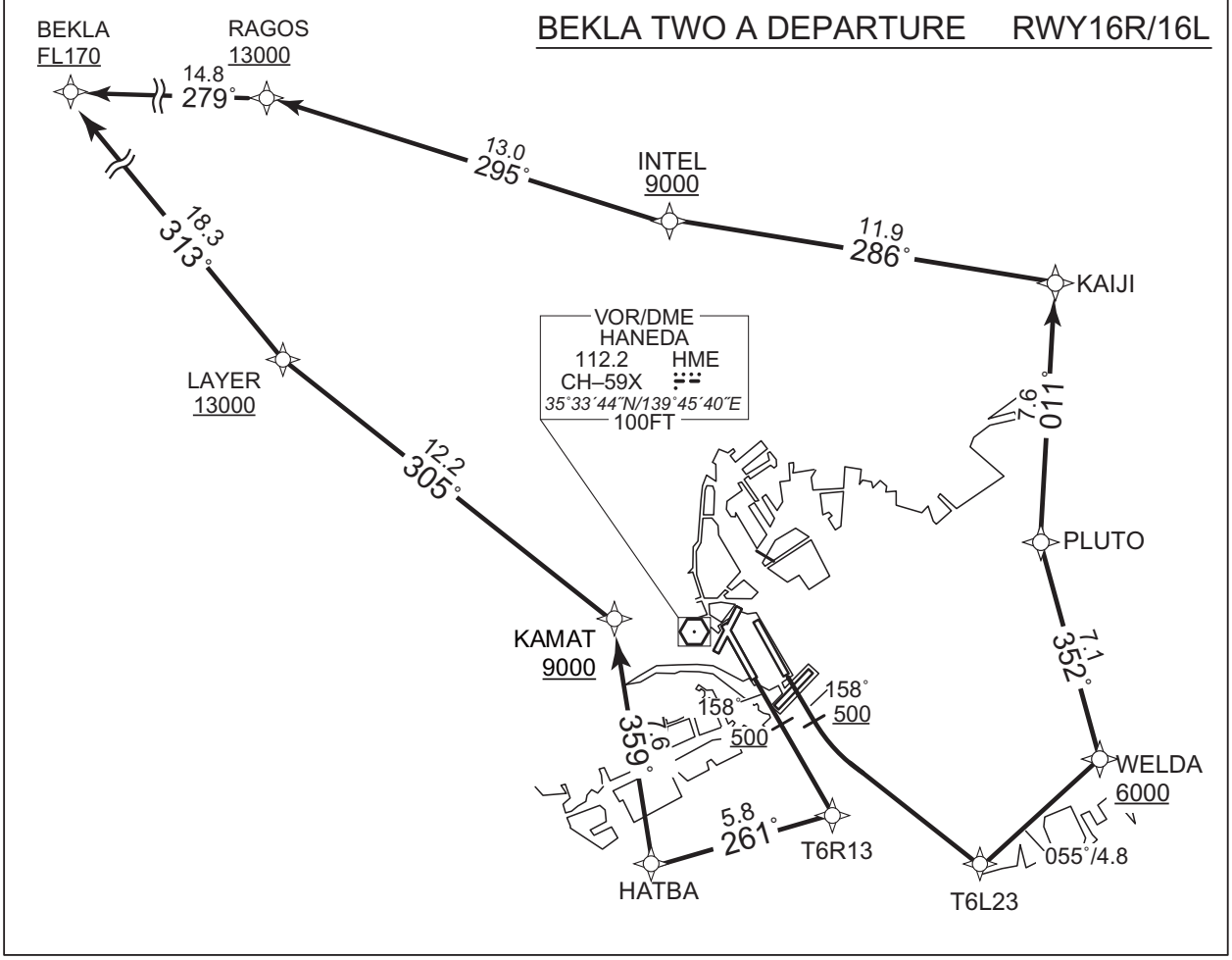
**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| BEKLA TWO A DEPARTURE | RNAV1 |
|---|---|

| | | | |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - HATBA<br>HYD 2.8NM to HATBA - 1.6NM to HATBA<br>PQD HATBA - 1.6NM to KAMAT<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY34R : HME 1.0NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY34L : HME 0.5NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY04 : HME 1.7NM FM DER - 1.1NM to PLUTO<br>SND 2.2NM to TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY34L : DER - 0.5NM FM DER<br>RWY04 : DER - 1.7NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)



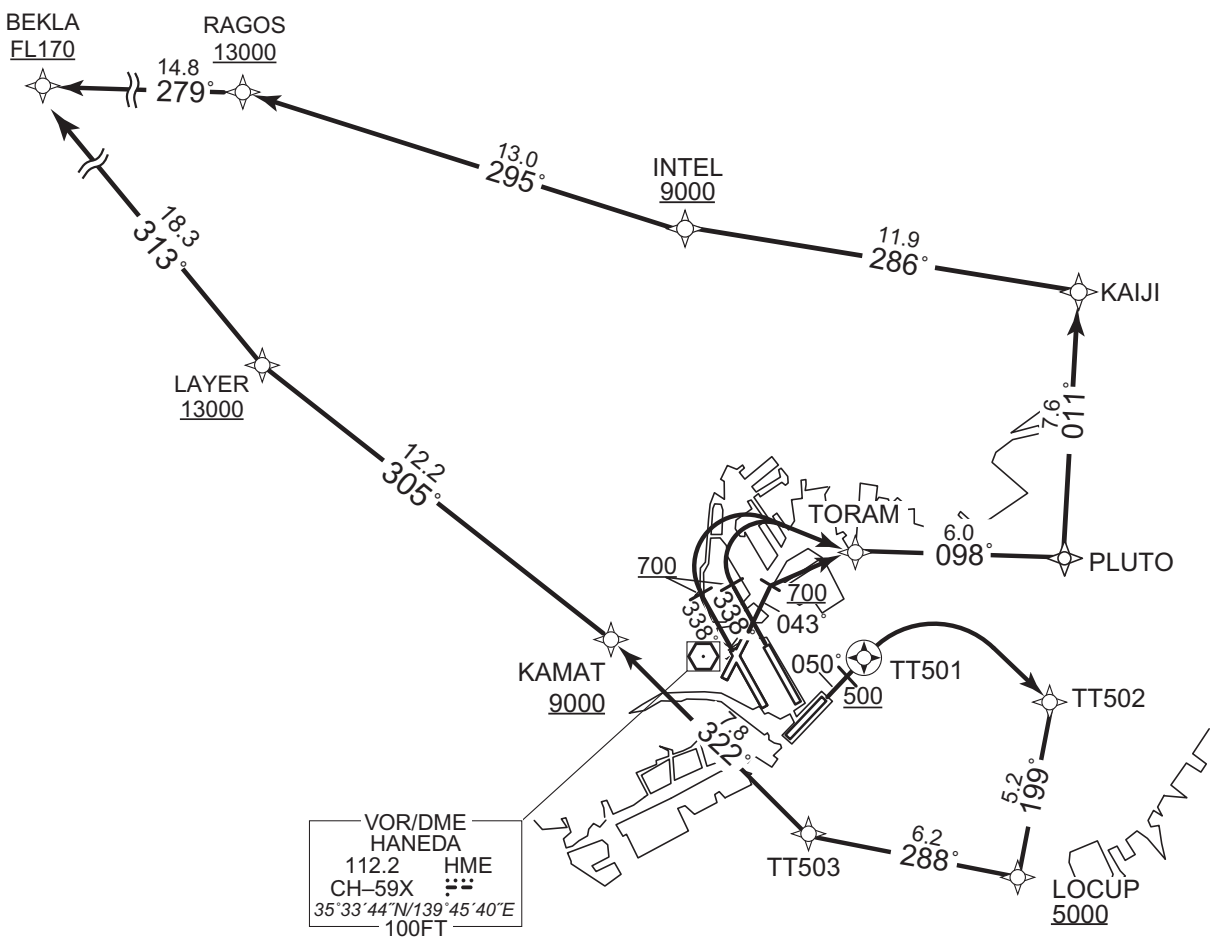

CHANGE : PROC renamed. VAR. RTE after KAMAT.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

## BEKLA TWO A DEPARTURE RWY34L/34R/04/05




CHANGE : PROC renamed. VAR. RTE after KAMAT. Course FM TT502 to LOCUP. HDG after DEP FM RWY04.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

BEKLA TWO A DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R13, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to BEKLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TORAM, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY04 : Climb on HDG 043˚ at or above 700FT, direct to TORAM, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to BEKLA at or above FL170.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed. RTE after KAMAT(RWY16R,05). HDG after DEP FM RWY04.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## BEKLA TWO A DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R13 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | HATBA | – | 261 (253.8) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | KAMAT | – | 359 (351.1) | -7.6 | 7.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 006 | TF | BEKLA | – | 313 (305.4) | -7.6 | 18.3 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 006 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 007 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RWY16R:RTE after KAMAT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

CHANGE : Magnetic Variation. RWY04:NR001(Course). RWY05:NR004(Course),RTE after KAMAT. Waypoint Coordinates(LAYER added).

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 006 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 007 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 313 (305.4) | -7.6 | 18.3 | – | +FL170 | – | – | RNAV1 |

## Waypoint Coordinates

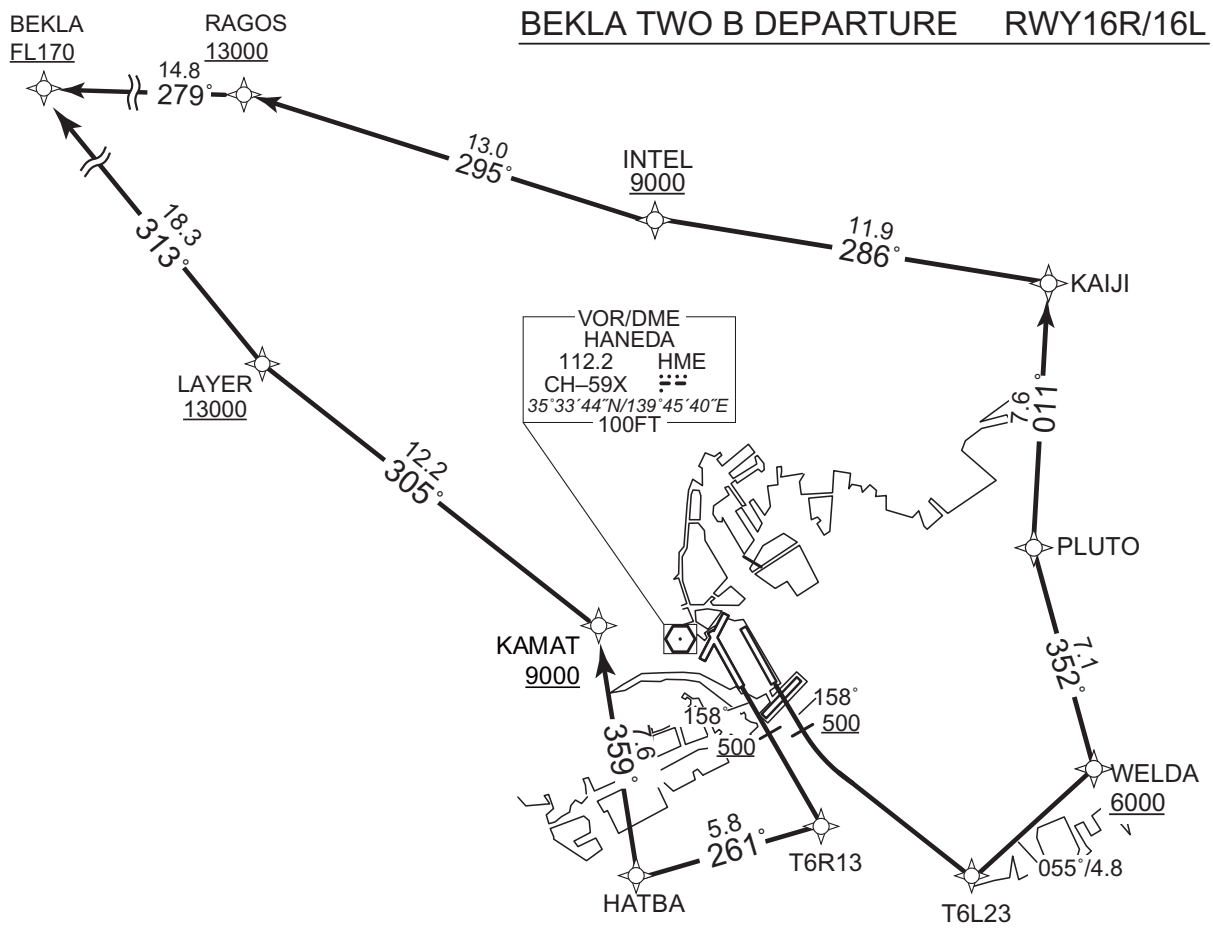
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| BEKLA | *354958.7N / 1391009.5E* | RAGOS | *354942.2N / 1392821.2E* |
| HATBA | *352623.4N / 1394315.9E* | T6L23 | *352627.6N / 1395539.1E* |
| INTEL | *354553.0N / 1394340.2E* | T6R13 | *352800.8N / 1395006.4E* |
| KAIJI | *354409.6N / 1395806.6E* | TORAM | *353636.8N / 1395011.0E* |
| KAMAT | *353353.6N / 1394148.9E* | TT501 | *353328.7N / 1395029.9E* |
| LAYER | *353925.4N / 1392829.5E* | TT502 | *353224.4N / 1395720.7E* |
| LOCUP | *352718.8N / 1395608.5E* | TT503 | *352828.0N / 1394840.4E* |
| PLUTO | *353632.1N / 1395736.8E* | WELDA | *352941.4N / 1395956.7E* |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| BEKLA TWO B DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - HATBA<br>HYD 2.8NM to HATBA - 1.6NM to HATBA<br>PQD HATBA - 1.6NM to KAMAT<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)



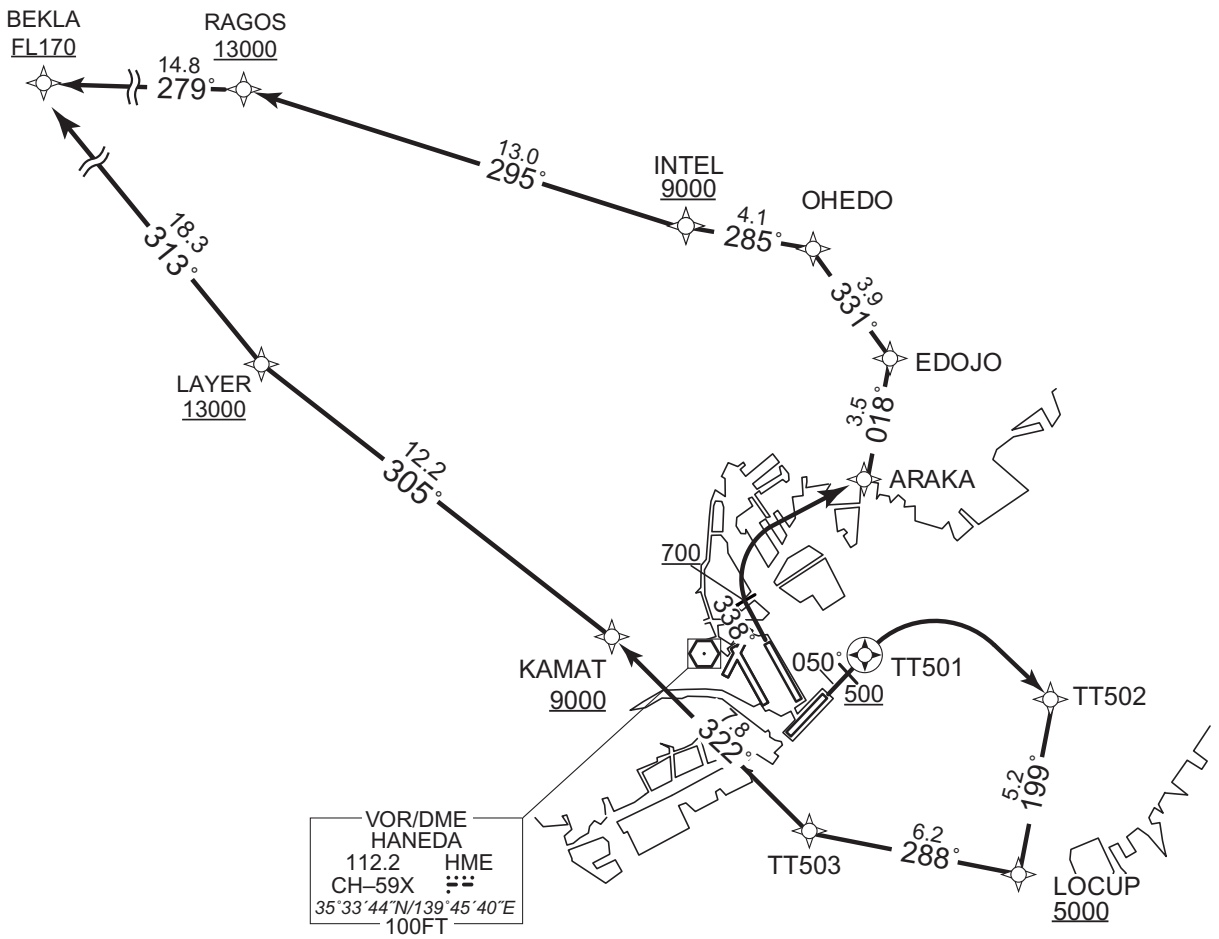

CHANGE : PROC renamed. VAR. RTE after KAMAT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

## BEKLA TWO B DEPARTURE RWY34R/05




CHANGE : PROC renamed. VAR. RTE after KAMAT. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

BEKLA TWO B DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R13, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to BEKLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to BEKLA at or above FL170.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed. RTE after KAMAT(RWY16R,05).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## BEKLA TWO B DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R13 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | HATBA | – | 261 (253.8) | -7.6 | 5.8 | – | – | – | – | RNAV1 |
| 004 | TF | KAMAT | – | 359 (351.1) | -7.6 | 7.6 | – | +9000 | – | – | RNAV1 |
| 005 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 006 | TF | BEKLA | – | 313 (305.4) | -7.6 | 18.3 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 285 (277.0) | -7.6 | 4.1 | – | +9000 | – | – | RNAV1 |
| 006 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 007 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation. RWY16R:RTE after KAMAT.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 313 (305.4) | -7.6 | 18.3 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY05:NR004(Course),RTE after KAMAT. Waypoint Coordinates(LAYER added).

Waypoint Coordinates

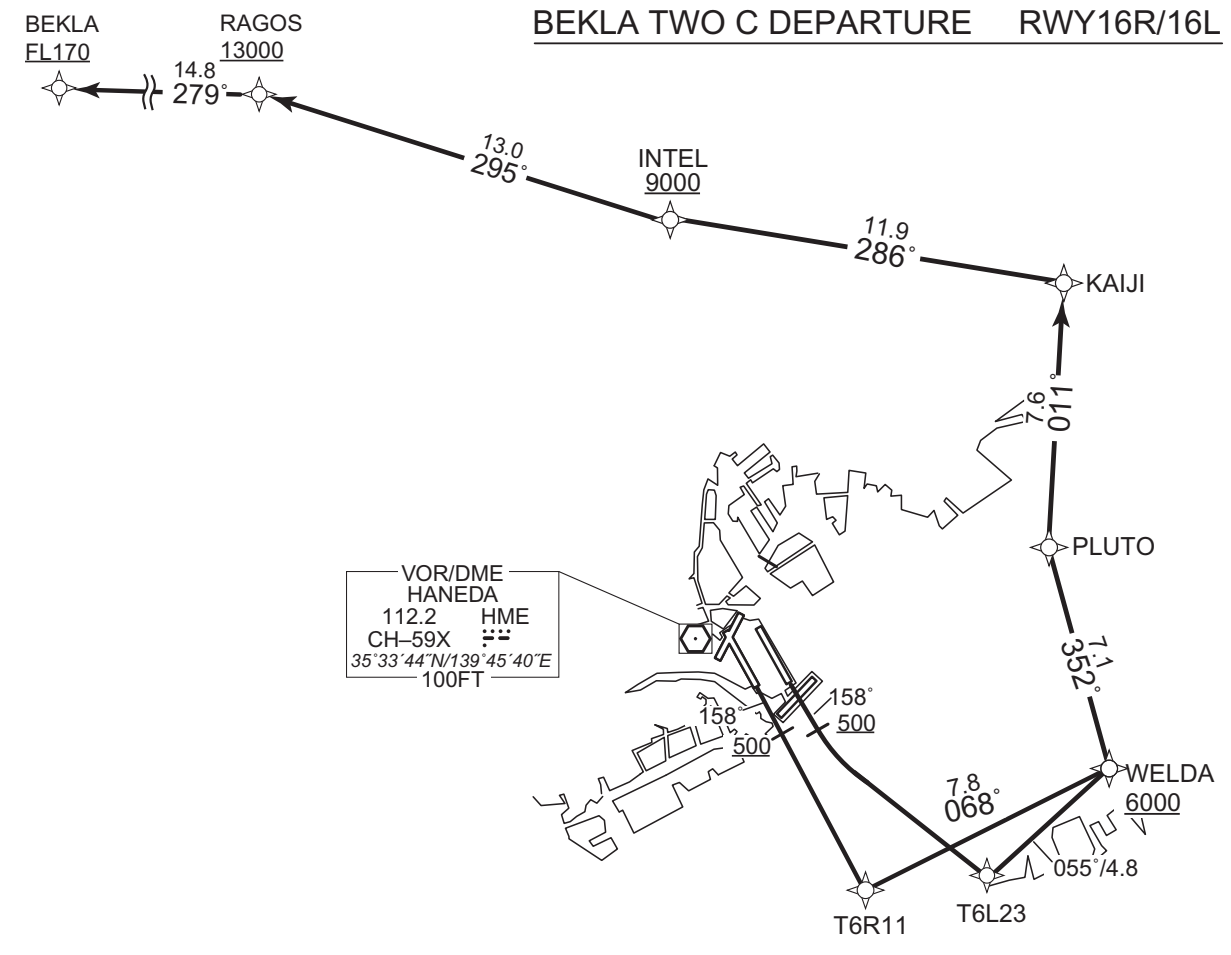
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | OHEDO | *354523.4N / 1394838.6E* |
| BEKLA | *354958.7N / 1391009.5E* | PLUTO | *353632.1N / 1395736.8E* |
| EDOJO | *354214.0N / 1395129.9E* | RAGOS | *354942.2N / 1392821.2E* |
| HATBA | *352623.4N / 1394315.9E* | T6L23 | *352627.6N / 1395539.1E* |
| INTEL | *354553.0N / 1394340.2E* | T6R13 | *352800.8N / 1395006.4E* |
| KAIJI | *354409.6N / 1395806.6E* | TT501 | *353328.7N / 1395029.9E* |
| KAMAT | *353353.6N / 1394148.9E* | TT502 | *353224.4N / 1395720.7E* |
| LAYER | *353925.4N / 1392829.5E* | TT503 | *352828.0N / 1394840.4E* |
| LOCUP | *352718.8N / 1395608.5E* | WELDA | *352941.4N / 1395956.7E* |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

| BEKLA TWO C DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>NRE 6.9NM to INTEL - INTEL<br>RWY05 : HME DER - 2.7NM to TT502<br>TT503 - 3.8NM to KAMAT<br>1.8NM to KAMAT - KAMAT<br>HYD 1.2NM to TT503 - TT503<br>4.8NM to KAMAT - 3.8NM to KAMAT |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |

VAR8˚W(2020)



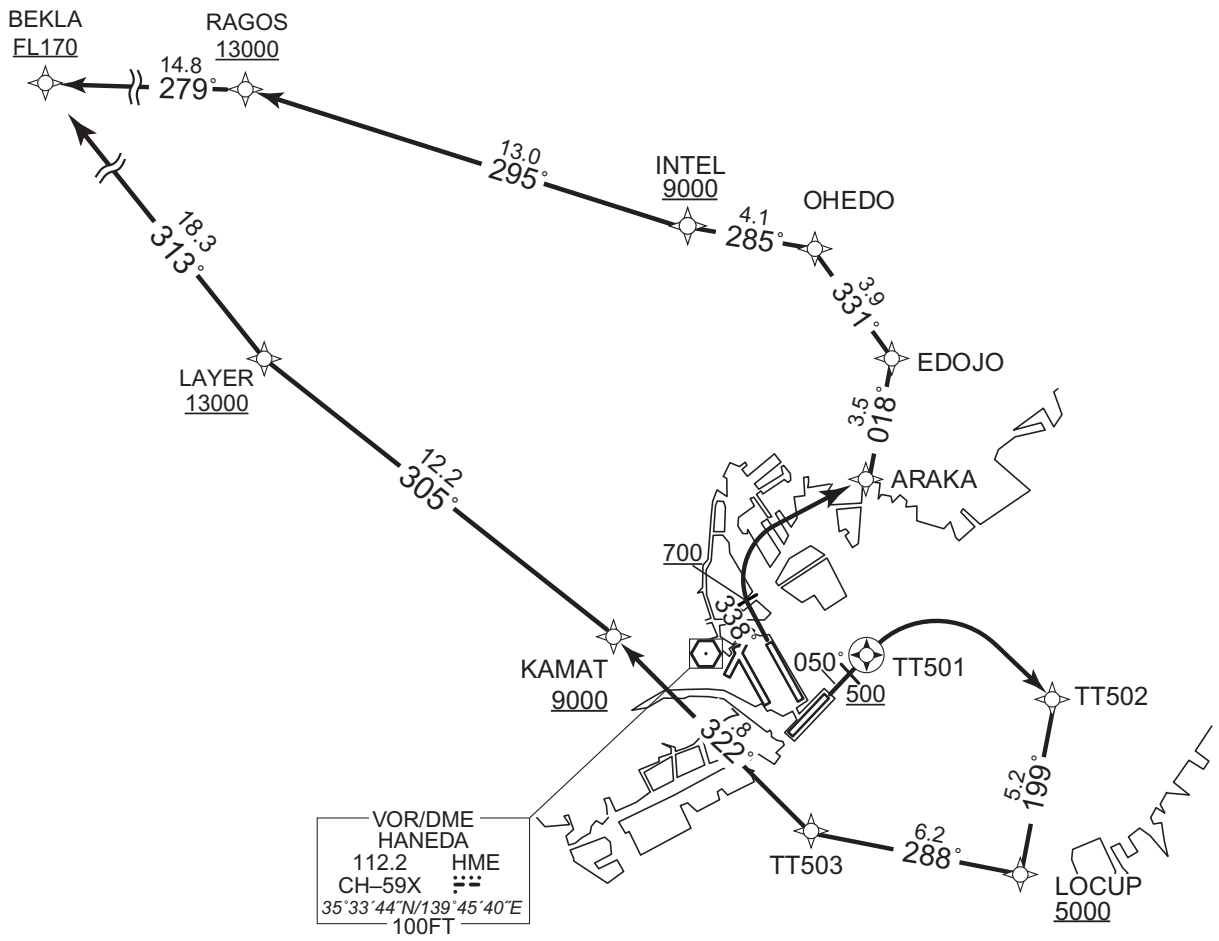

CHANGE : PROC renamed. VAR.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

VAR8˚W(2020)

BEKLA TWO C DEPARTURE RWY34R/05




CHANGE : PROC renamed. VAR. RTE after KAMAT. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

BEKLA TWO C DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to INTEL at or above 9000FT, to RAGOS at or above 13000FT, to BEKLA at or above FL170.

RWY05 : Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to BEKLA at or above FL170.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed. RTE after KAMAT(RWY05).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## BEKLA TWO C DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 068 (060.6) | -7.6 | 7.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | INTEL | – | 286 (278.4) | -7.6 | 11.9 | – | +9000 | – | – | RNAV1 |
| 007 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | INTEL | – | 285 (277.0) | -7.6 | 4.1 | – | +9000 | – | – | RNAV1 |
| 006 | TF | RAGOS | – | 295 (287.2) | -7.6 | 13.0 | – | +13000 | – | – | RNAV1 |
| 007 | TF | BEKLA | – | 279 (271.2) | -7.6 | 14.8 | – | +FL170 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | TT503 | – | 288 (280.8) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 006 | TF | KAMAT | – | 322 (314.2) | -7.6 | 7.8 | – | +9000 | – | – | RNAV1 |
| 007 | TF | LAYER | – | 305 (297.1) | -7.6 | 12.2 | – | +13000 | – | – | RNAV1 |
| 008 | TF | BEKLA | – | 313 (305.4) | -7.6 | 18.3 | – | +FL170 | – | – | RNAV1 |

CHANGE : Magnetic Variation. RWY05:NR004(Course),RTE after KAMAT. Waypoint Coordinates(LAYER added).

## Waypoint Coordinates

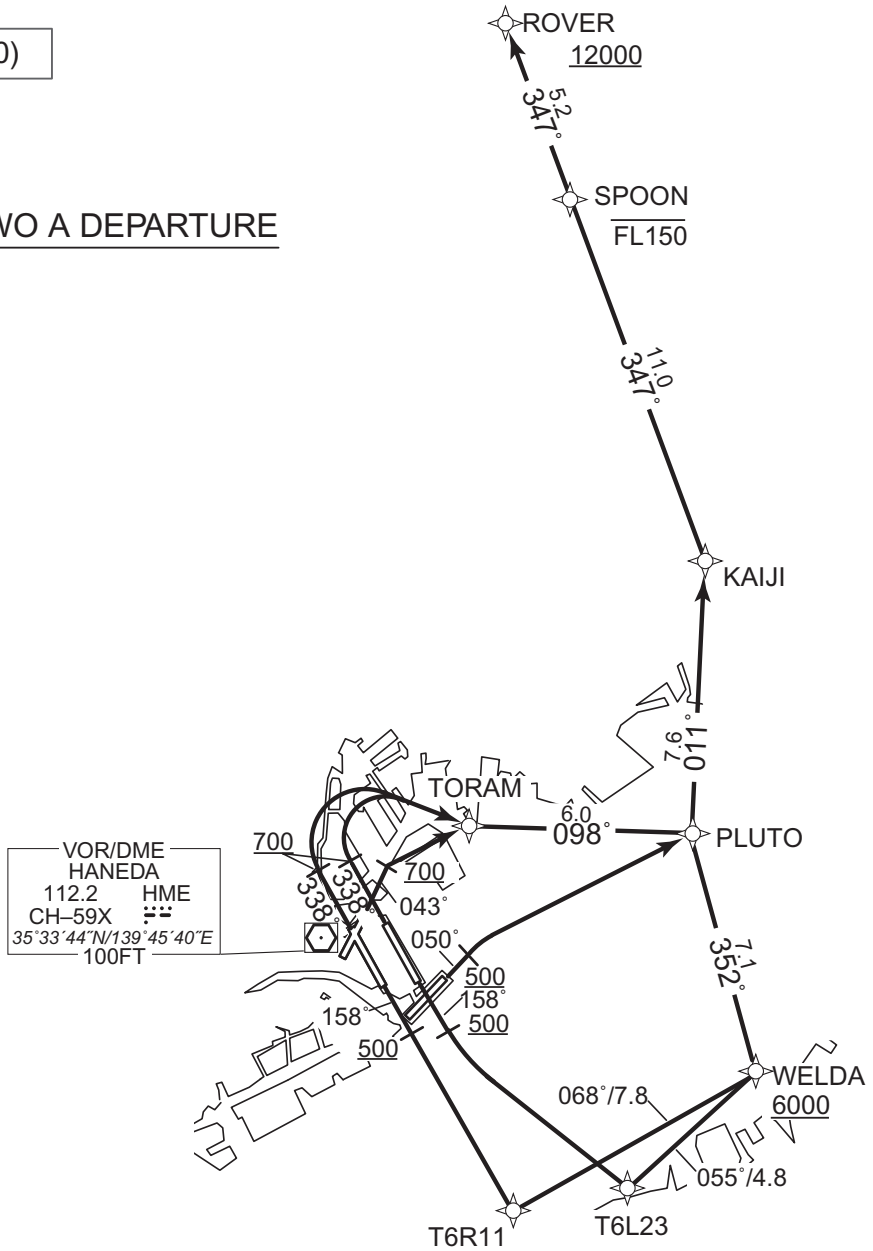
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | PLUTO | *353632.1N / 1395736.8E* |
| BEKLA | *354958.7N / 1391009.5E* | RAGOS | *354942.2N / 1392821.2E* |
| EDOJO | *354214.0N / 1395129.9E* | T6L23 | *352627.6N / 1395539.1E* |
| INTEL | *354553.0N / 1394340.2E* | T6R11 | *352552.5N / 1395137.2E* |
| KAIJI | *354409.6N / 1395806.6E* | TT501 | *353328.7N / 1395029.9E* |
| KAMAT | *353353.6N / 1394148.9E* | TT502 | *353224.4N / 1395720.7E* |
| LAYER | *353925.4N / 1392829.5E* | TT503 | *352828.0N / 1394840.4E* |
| LOCUP | *352718.8N / 1395608.5E* | WELDA | *352941.4N / 1395956.7E* |
| OHEDO | *354523.4N / 1394838.6E* | | |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| ROVER TWO A DEPARTURE | RNAV1 |
|---|---|

| | | | |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY34R : HME 1.0NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY34L : HME 0.5NM FM DER - 1.1NM to PLUTO<br>SND TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY04 : HME 1.7NM FM DER - 1.1NM to PLUTO<br>SND 2.2NM to TORAM - 3.1NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY05 : HME DER - 2.2NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>RWY34L : DER - 0.5NM FM DER<br>RWY04 : DER - 1.7NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |




CHANGE : PROC renamed. VAR. HDG after DEP FM RWY04.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

ROVER TWO A DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TORAM, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY04 : Climb on HDG 043˚ at or above 700FT, direct to TORAM, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 :Climb on HDG 050˚ at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : PROC renamed. HDG after DEP FM RWY04.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## ROVER TWO A DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 068 (060.6) | -7.6 | 7.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 007 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 007 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 006 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

CHANGE : PROC renamed. Magnetic Variation.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TORAM | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | PLUTO | – | 098 (090.7) | -7.6 | 6.0 | – | – | – | – | RNAV1 |
| 004 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 006 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | PLUTO | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 004 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 005 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

## Waypoint Coordinates

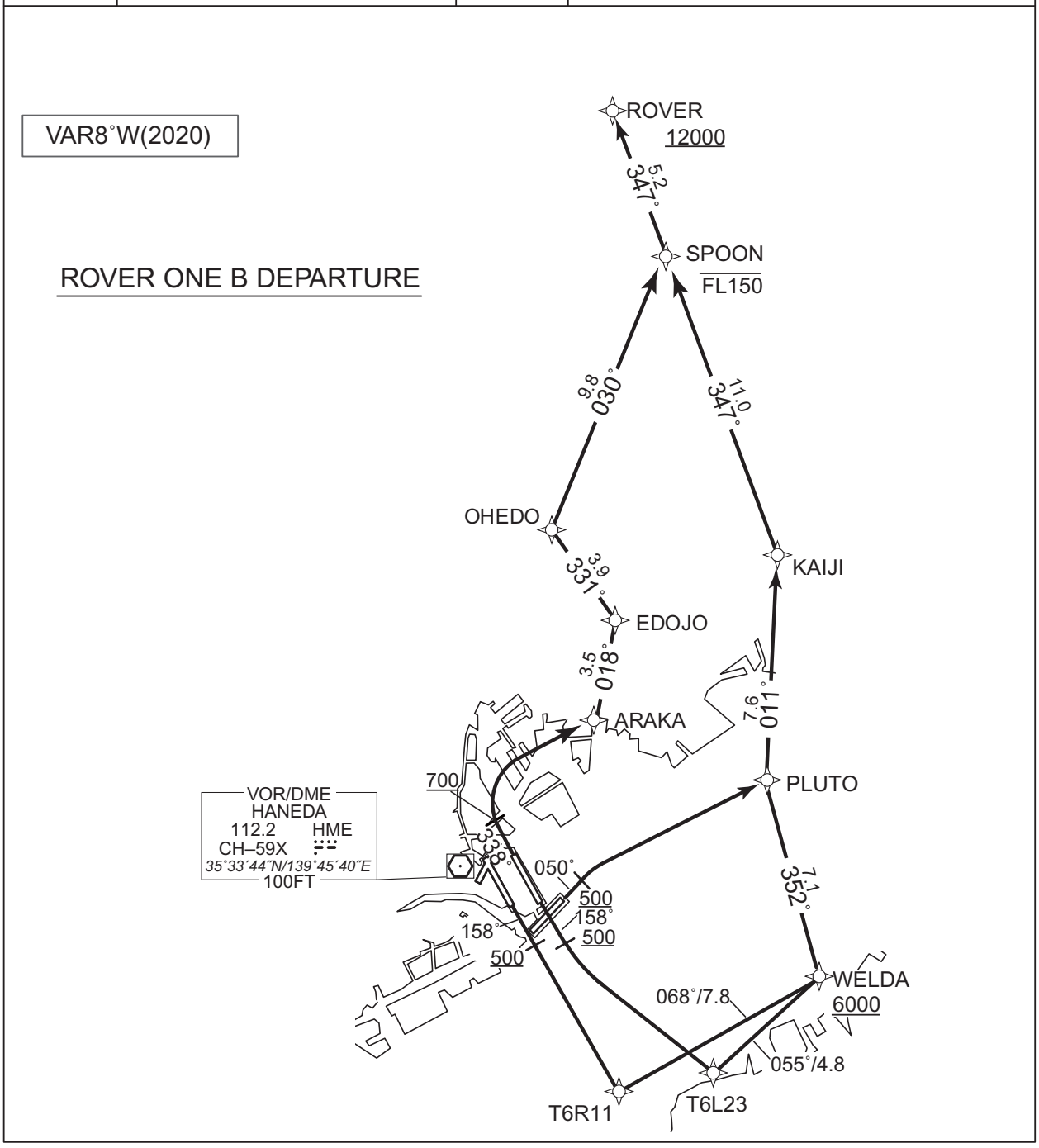
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| KAIJI | *354409.6N / 1395806.6E* | T6L23 | *352627.6N / 1395539.1E* |
| PLUTO | *353632.1N / 1395736.8E* | T6R11 | *352552.5N / 1395137.2E* |
| ROVER | *355918.3N / 1395059.3E* | TORAM | *353636.8N / 1395011.0E* |
| SPOON | *355428.3N / 1395316.0E* | WELDA | *352941.4N / 1395956.7E* |

CHANGE : Magnetic Variation. RWY04:NR001(Course).

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| ROVER ONE B DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23<br>PQD 6.6NM to KAIJI - KAIJI<br>RWY05 : HME DER - 2.2NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |



RJTT/TOKYO INTL RNAV SID

ROVER ONE B DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L23, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 : Climb on HDG 050˚ at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : New PROC

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## ROVER ONE B DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 068 (060.6) | -7.6 | 7.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 007 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L23 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 055 (047.3) | -7.6 | 4.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 007 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | SPOON | – | 030 (022.4) | -7.6 | 9.8 | – | -FL150 | – | – | RNAV1 |
| 006 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

CHANGE : Magnetic Variation.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | PLUTO | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 004 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 005 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

## Waypoint Coordinates

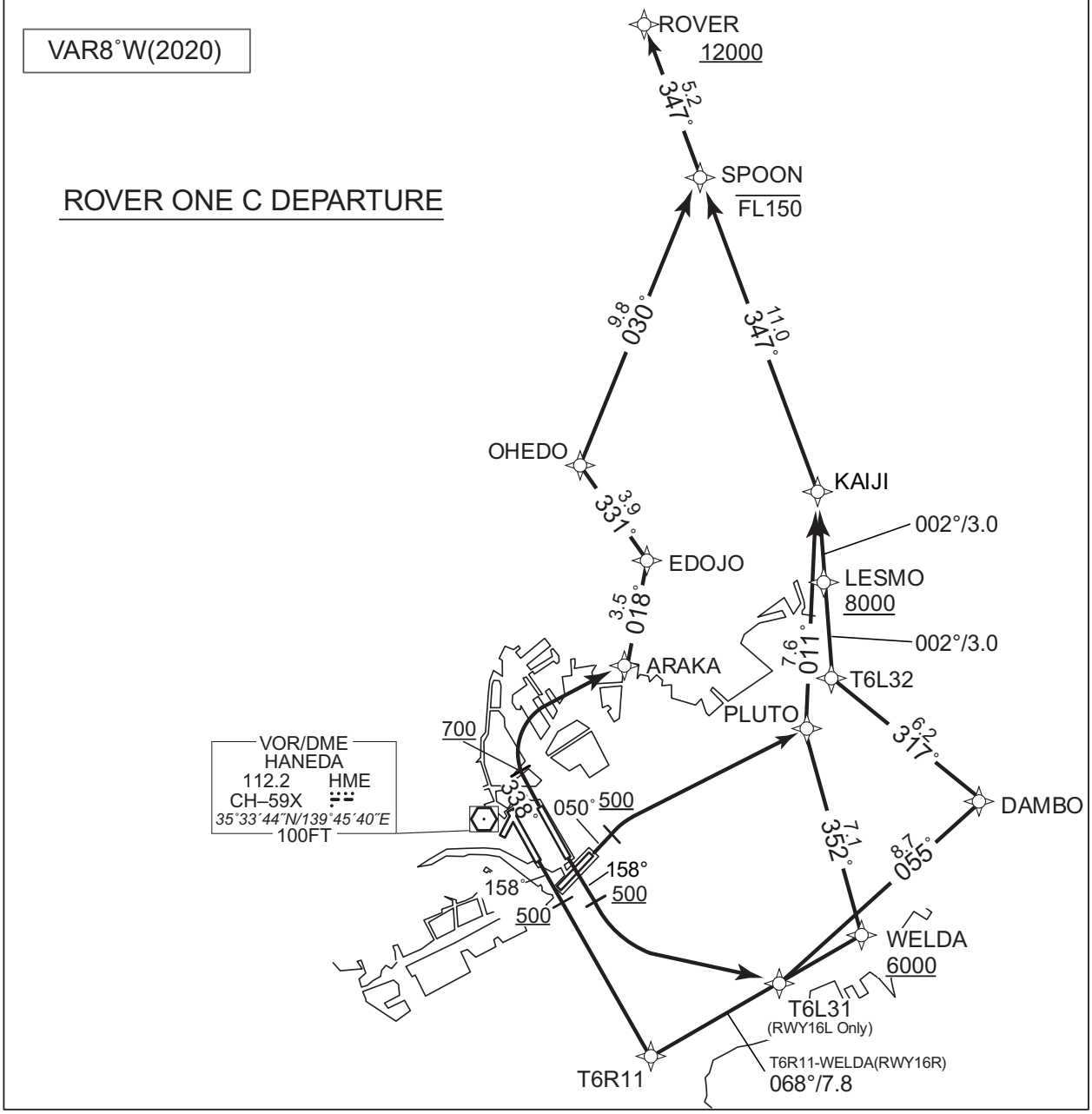
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | ROVER | *355918.3N / 1395059.3E* |
| EDOJO | *354214.0N / 1395129.9E* | SPOON | *355428.3N / 1395316.0E* |
| KAIJI | *354409.6N / 1395806.6E* | T6L23 | *352627.6N / 1395539.1E* |
| OHEDO | *354523.4N / 1394838.6E* | T6R11 | *352552.5N / 1395137.2E* |
| PLUTO | *353632.1N / 1395736.8E* | WELDA | *352941.4N / 1395956.7E* |

CHANGE : Magnetic Variation.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| ROVER ONE C DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11<br>PQD 6.6NM to KAIJI - KAIJI<br><br>RWY05 : HME DER - 2.2NM to PLUTO<br>PQD 6.6NM to KAIJI - KAIJI |
| DME GAP | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |



RJTT/TOKYO INTL RNAV SID

ROVER ONE C DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to WELDA at or above 6000FT, to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY16L : Climb on HDG 158˚ at or above 500FT, turn left direct to T6L31, to DAMBO, to T6L32, to LESMO at or above 8000FT, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY34R : Climb on HDG 338˚ at or above 700FT, turn right direct to ARAKA, to EDOJO, to OHEDO, to SPOON at or below FL150, to ROVER at or above 12000FT.

RWY05 :Climb on HDG 050˚ at or above 500FT, turn right direct to PLUTO, to KAIJI, to SPOON at or below FL150, to ROVER at or above 12000FT.

Note RWY34R : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

CHANGE : New PROC

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

## ROVER ONE C DEPARTURE

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | WELDA | – | 068 (060.6) | -7.6 | 7.8 | – | +6000 | – | – | RNAV1 |
| 004 | TF | PLUTO | – | 352 (344.5) | -7.6 | 7.1 | – | – | – | – | RNAV1 |
| 005 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 007 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L31 | – | – | -7.6 | – | L | – | – | – | RNAV1 |
| 003 | TF | DAMBO | – | 055 (047.5) | -7.6 | 8.7 | – | – | – | – | RNAV1 |
| 004 | TF | T6L32 | – | 317 (309.4) | -7.6 | 6.2 | – | – | – | – | RNAV1 |
| 005 | TF | LESMO | – | 002 (354.1) | -7.6 | 3.0 | – | +8000 | – | – | RNAV1 |
| 006 | TF | KAIJI | – | 002 (354.1) | -7.6 | 3.0 | – | – | – | – | RNAV1 |
| 007 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 008 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | ARAKA | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | EDOJO | – | 018 (010.8) | -7.6 | 3.5 | – | – | – | – | RNAV1 |
| 004 | TF | OHEDO | – | 331 (323.7) | -7.6 | 3.9 | – | – | – | – | RNAV1 |
| 005 | TF | SPOON | – | 030 (022.4) | -7.6 | 9.8 | – | -FL150 | – | – | RNAV1 |
| 006 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

CHANGE : Magnetic Variation.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | PLUTO | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | KAIJI | – | 011 (003.0) | -7.6 | 7.6 | – | – | – | – | RNAV1 |
| 004 | TF | SPOON | – | 347 (339.2) | -7.6 | 11.0 | – | -FL150 | – | – | RNAV1 |
| 005 | TF | ROVER | – | 347 (339.1) | -7.6 | 5.2 | – | +12000 | – | – | RNAV1 |

## Waypoint Coordinates

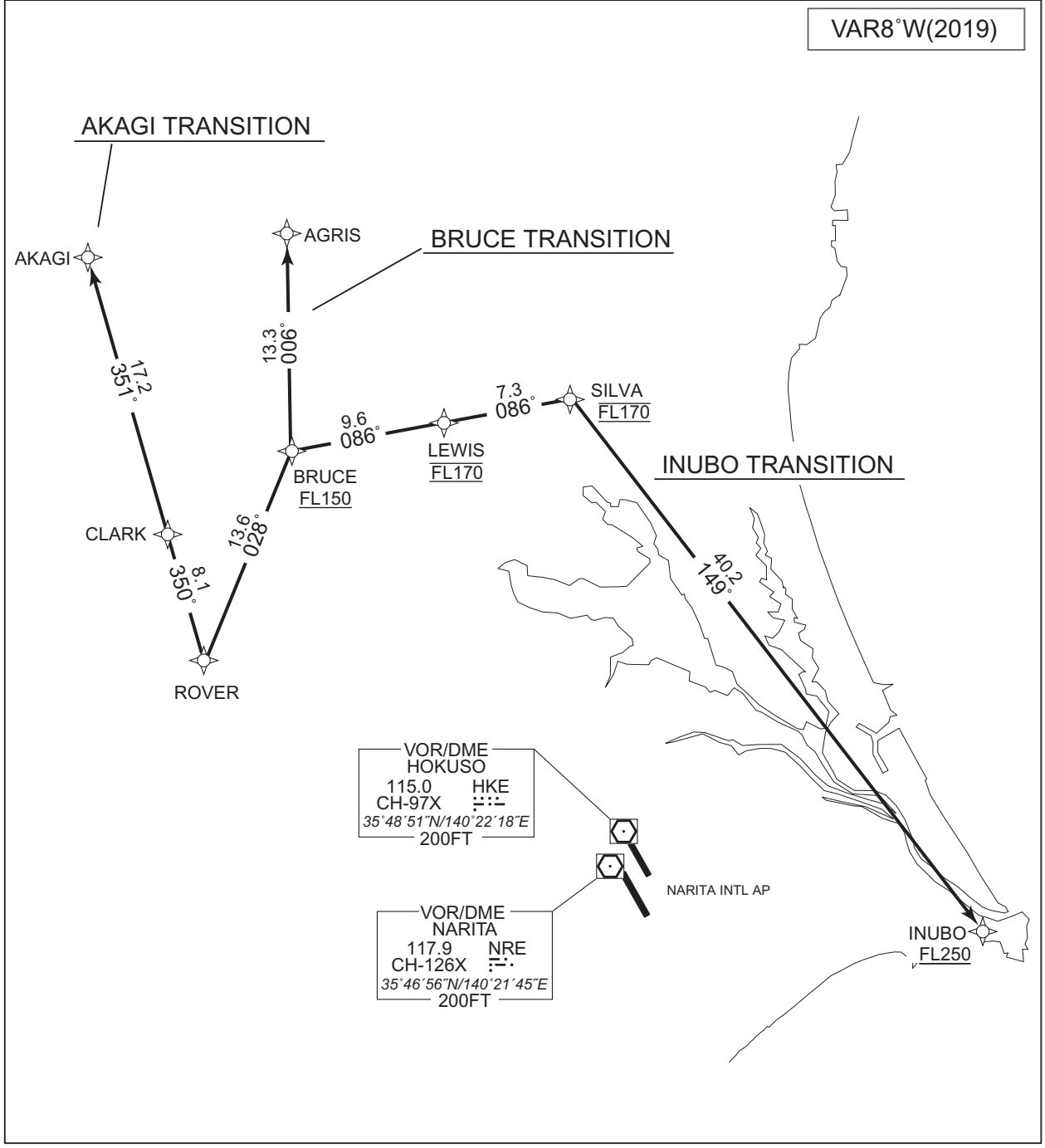
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARAKA | *353848.8N / 1395041.9E* | ROVER | *355918.3N / 1395059.3E* |
| DAMBO | *353416.5N / 1400443.4E* | SPOON | *355428.3N / 1395316.0E* |
| EDOJO | *354214.0N / 1395129.9E* | T6L31 | *352822.8N / 1395648.0E* |
| KAIJI | *354409.6N / 1395806.6E* | T6L32 | *353810.9N / 1395852.2E* |
| LESMO | *354110.3N / 1395829.4E* | T6R11 | *352552.5N / 1395137.2E* |
| OHEDO | *354523.4N / 1394838.6E* | WELDA | *352941.4N / 1395956.7E* |
| PLUTO | *353632.1N / 1395736.8E* | | |

CHANGE : Magnetic Variation.

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV TRANSITION

| AKAGI TRANSITION / BRUCE TRANSITION/ INUBO TRANSITION | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>2) RADAR service required. | | Critical DME | – |
| DME GAP | – | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |




CHANGE : ALT Restriction on BRUCE

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV TRANSITION

## AKAGI TRANSITION

From ROVER, to CLARK, to AKAGI.

| 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 | ROVER | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CLARK | – | 350 (342.7) | -7.5 | 8.1 | – | – | – | – | RNAV1 |
| 003 | TF | AKAGI | – | 351 (343.4) | -7.5 | 17.2 | – | – | – | – | RNAV1 |

## BRUCE TRANSITION

From ROVER, to BRUCE at or above FL150, to AGRIS.

| 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 | ROVER | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | BRUCE | – | 028 (020.7) | -7.5 | 13.6 | – | +FL150 | – | – | RNAV1 |
| 003 | TF | AGRIS | – | 006 (358.7) | -7.5 | 13.3 | – | – | – | – | RNAV1 |

## INUBO TRANSITION

From ROVER, to BRUCE at or above FL150, to LEWIS at FL170, to SILVA at FL170, to INUBO at or above FL250.

| 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 | ROVER | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | BRUCE | – | 028 (020.7) | -7.5 | 13.6 | – | +FL150 | – | – | RNAV1 |
| 003 | TF | LEWIS | – | 086 (078.6) | -7.5 | 9.6 | – | FL170 | – | – | RNAV1 |
| 004 | TF | SILVA | – | 086 (078.8) | -7.5 | 7.3 | – | FL170 | – | – | RNAV1 |
| 005 | TF | INUBO | – | 149 (141.9) | -7.5 | 40.2 | – | +FL250 | – | – | RNAV1 |

CHANGE : ALT Restriction on BRUCE

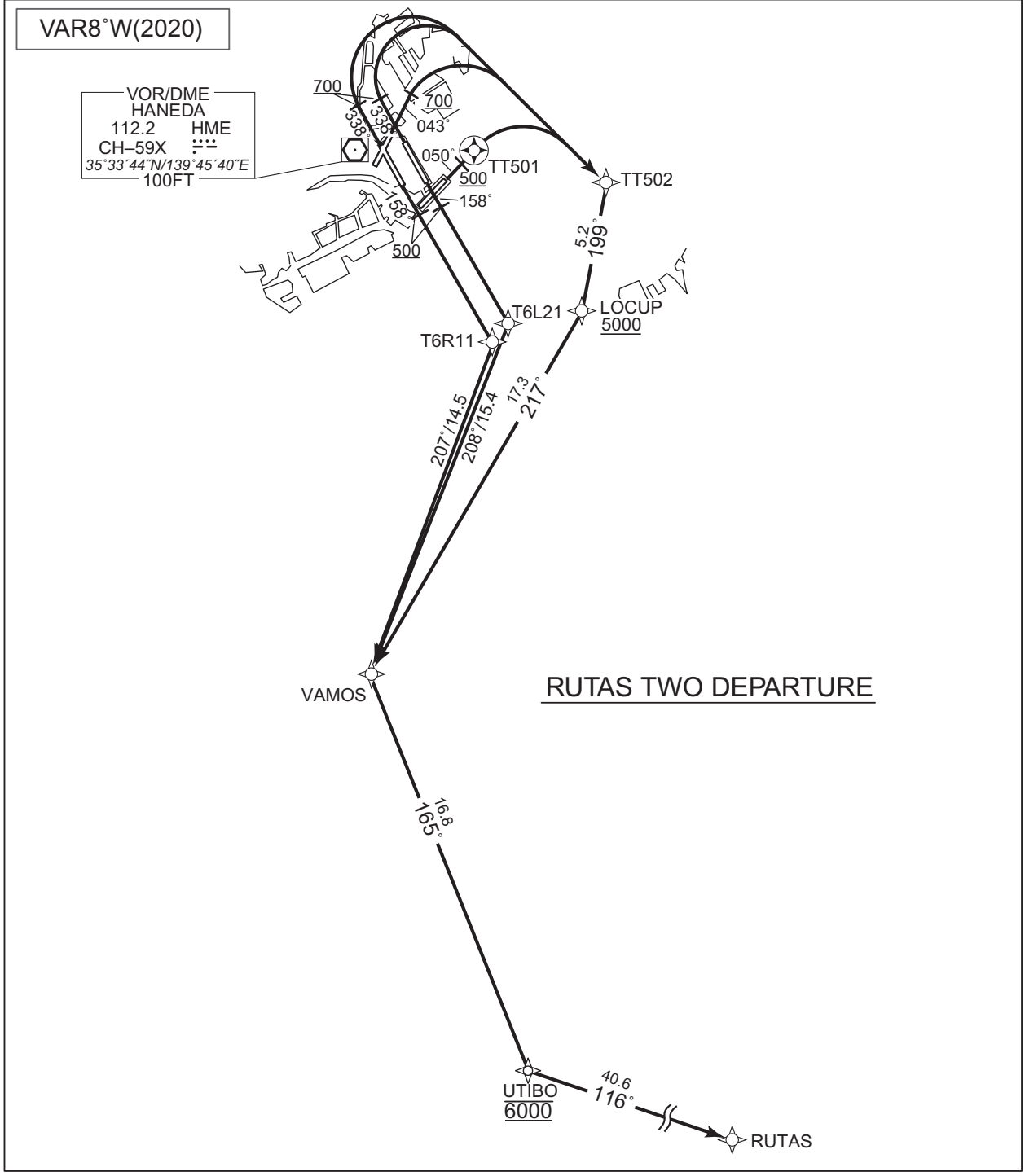
## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AGRIS | *362514.7N / 1395633.1E* | INUBO | *354335.3N / 1404757.9E* |
| AKAGI | *362328.3N / 1394156.3E* | LEWIS | *361353.2N / 1400834.7E* |
| BRUCE | *361200.4N / 1395655.9E* | ROVER | *355918.3N / 1395059.3E* |
| CLARK | *360702.0N / 1394800.5E* | SILVA | *361518.0N / 1401726.0E* |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL — RNAV SID

| RUTAS TWO DEPARTURE | | | RNAV1 |
|---|---|---|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required. | | Critical DME | RWY16R：HME 1.2NM FM DER - 1.9NM to T6R11<br>RWY16L：HME 1.0NM FM DER - 2.4NM to T6L21<br>RWY34R：HME 1.0NM FM DER - 2.5NM to TT502<br>RWY34L：HME 0.5NM FM DER - 2.5NM to TT502<br>RWY04：HME 1.7NM FM DER - 2.5NM to TT502<br>RWY05：HME DER - 2.7NM to TT502 |
| DME GAP | RWY16R:DER - 1.2NM FM DER<br>RWY16L:DER - 1.0NM FM DER<br>RWY34R:DER - 1.0NM FM DER<br>RWY34L:DER - 0.5NM FM DER<br>RWY04:DER - 1.7NM FM DER | | |
| Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | | |




CHANGE : PROC renamed. VAR. HDG after DEP FM RWY04. Course FM TT502 to LOCUP.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL RNAV SID

CHANGE : PROC renamed. Magnetic Variation. HDG after DEP FM RWY04.

## RUTAS TWO DEPARTURE

RWY16R : Climb on HDG 158˚ at or above 500FT, direct to T6R11, to VAMOS, to UTIBO at 6000FT, to RUTAS.

RWY16L : Climb on HDG 158˚ at or above 500FT, direct to T6L21, to VAMOS, to UTIBO at 6000FT, to RUTAS.

RWY34L/34R : Climb on HDG 338˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS, to UTIBO at 6000FT, to RUTAS.

RWY04: Climb on HDG 043˚ at or above 700FT, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS, to UTIBO at 6000FT, to RUTAS.

RWY05: Climb on HDG 050˚ at or above 500FT, direct to TT501, turn right direct to TT502, to LOCUP at or above 5000FT, to VAMOS, to UTIBO at 6000FT, to RUTAS.

Note RWY34L/34R/04 : 5.0% climb gradient required up to 700FT.
RWY05 : 5.0% climb gradient required up to 500FT.

RWY16R

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6R11 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | VAMOS | – | 207 (199.5) | -7.6 | 14.5 | – | – | – | – | RNAV1 |
| 004 | TF | UTIBO | – | 165 (157.0) | -7.6 | 16.8 | – | 6000 | – | – | RNAV1 |
| 005 | TF | RUTAS | – | 116 (108.4) | -7.6 | 40.6 | – | – | – | – | RNAV1 |

RWY16L

| 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 (150.0) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | T6L21 | – | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | TF | VAMOS | – | 208 (200.7) | -7.6 | 15.4 | – | – | – | – | RNAV1 |
| 004 | TF | UTIBO | – | 165 (157.0) | -7.6 | 16.8 | – | 6000 | – | – | RNAV1 |
| 005 | TF | RUTAS | – | 116 (108.4) | -7.6 | 40.6 | – | – | – | – | RNAV1 |

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL RNAV SID

CHANGE : Magnetic Variation. RWY34L/RWY34R:NR003(Course). RWY04:NR001,003(Course). RWY05:NR004(Course).

RWY34L/RWY34R

| 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 (330.0) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | – | – | – | RNAV1 |
| 005 | TF | UTIBO | – | 165 (157.0) | -7.6 | 16.8 | – | 6000 | – | – | RNAV1 |
| 006 | TF | RUTAS | – | 116 (108.4) | -7.6 | 40.6 | – | – | – | – | RNAV1 |

RWY04

| 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 | – | – | 043 (034.9) | -7.6 | – | – | +700 | – | – | RNAV1 |
| 002 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 003 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 004 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | – | – | – | RNAV1 |
| 005 | TF | UTIBO | – | 165 (157.0) | -7.6 | 16.8 | – | 6000 | – | – | RNAV1 |
| 006 | TF | RUTAS | – | 116 (108.4) | -7.6 | 40.6 | – | – | – | – | RNAV1 |

RWY05

| 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 | – | – | 050 (042.4) | -7.6 | – | – | +500 | – | – | RNAV1 |
| 002 | DF | TT501 | Y | – | -7.6 | – | – | – | – | – | RNAV1 |
| 003 | DF | TT502 | – | – | -7.6 | – | R | – | – | – | RNAV1 |
| 004 | TF | LOCUP | – | 199 (190.9) | -7.6 | 5.2 | – | +5000 | – | – | RNAV1 |
| 005 | TF | VAMOS | – | 217 (209.5) | -7.6 | 17.3 | – | – | – | – | RNAV1 |
| 006 | TF | UTIBO | – | 165 (157.0) | -7.6 | 16.8 | – | 6000 | – | – | RNAV1 |
| 007 | TF | RUTAS | – | 116 (108.4) | -7.6 | 40.6 | – | – | – | – | RNAV1 |

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| LOCUP | *352718.8N / 1395608.5E* | TT501 | *353328.7N / 1395029.9E* |
| RUTAS | *344349.3N / 1404034.2E* | TT502 | *353224.4N / 1395720.7E* |
| T6L21 | *352639.1N / 1395222.0E* | UTIBO | *345647.0N / 1395343.9E* |
| T6R11 | *352552.5N / 1395137.2E* | VAMOS | *351215.5N / 1394543.6E* |

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STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL STAR

SINGO ARRIVAL

From over STONE, via HME R036 to HME 22.2DME, via HME 22.2DME clockwise ARC to SINGO.

Cross STONE at 11000FT, cross HME R036/28.0DME at or above 8000FT.

DOYLE ARRIVAL

From over STONE, via HME R036 to HME 22.2DME, via HME 22.2DME clockwise ARC to intercept and proceed via ITL LOC course to DOYLE.

Cross STONE at 11000FT, cross HME R036/28.0DME at or above 8000FT.

ADDUM ARRIVAL

From over ADDUM, via HME R157 to HME 25.0DME, turn right, via IHA LOC course to ARLON.

Cross ADDUM at 10000FT.

BONUS ARRIVAL

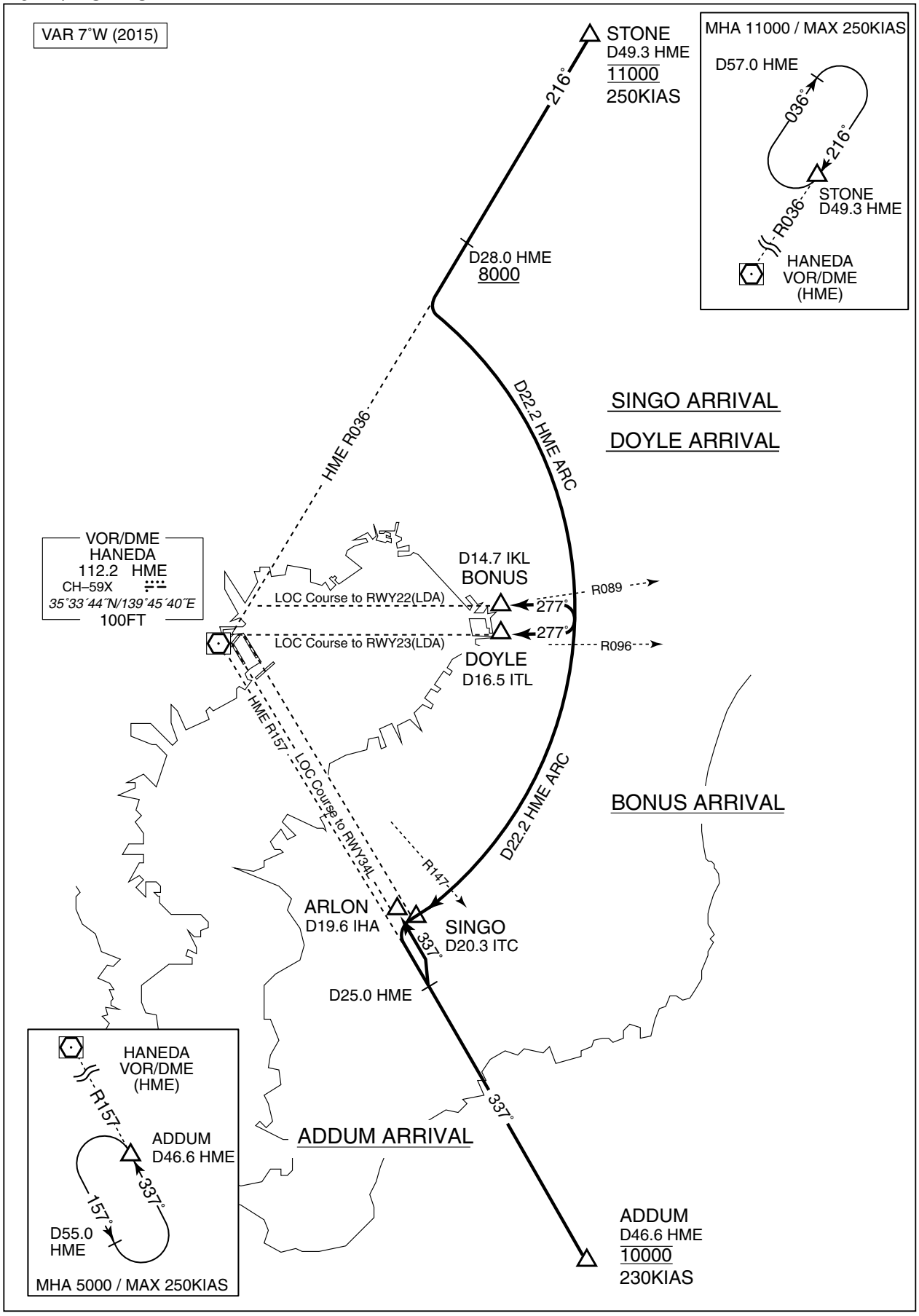
From over ADDUM, via HME R157 to HME 22.2DME, via HME 22.2DME counterclockwise ARC to intercept and proceed via IKL LOC course to BONUS.

Cross ADDUM at 10000FT.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

STAR



**STANDARD ARRIVAL CHART-INSTRUMENT**

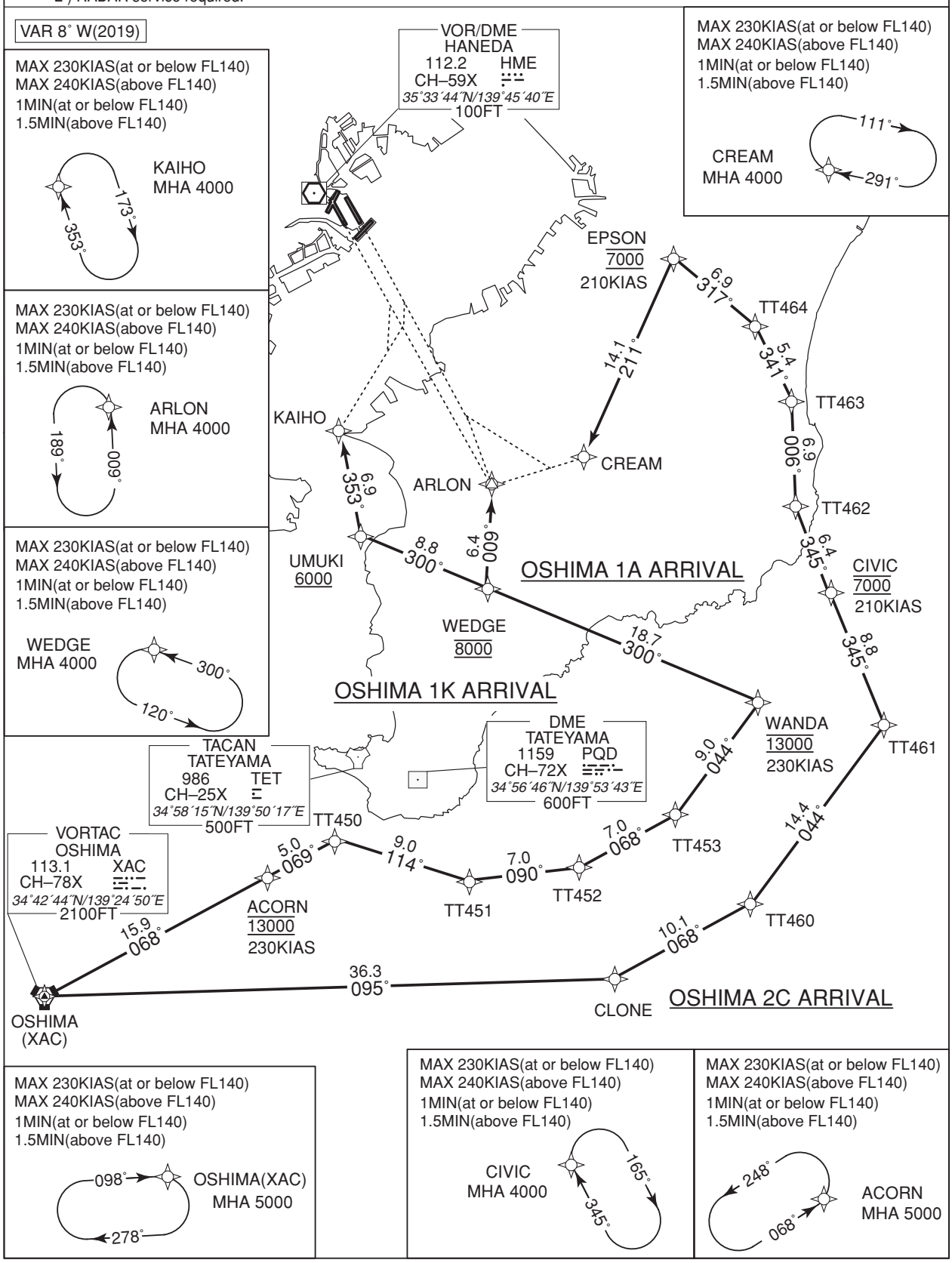
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

OSHIMA 1A ARRIVAL / OSHIMA 1K ARRIVAL
OSHIMA 2C ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## OSHIMA 1A ARRIVAL

From XAC, to ACORN at 13000FT, to TT450, to TT451, to TT452, to TT453, to WANDA at 13000FT, to WEDGE at 8000FT, to ARLON.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | 13000 | 230 | – | RNAV1 |
| 003 | TF | TT450 | – | 069 (061.0) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 004 | TF | TT451 | – | 114 (106.9) | -7.5 | 9.0 | – | – | – | – | RNAV1 |
| 005 | TF | TT452 | – | 090 (082.2) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT453 | – | 068 (060.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 007 | TF | WANDA | – | 044 (036.0) | -7.5 | 9.0 | – | 13000 | 230 | – | RNAV1 |
| 008 | TF | WEDGE | – | 300 (292.4) | -7.5 | 18.7 | – | 8000 | – | – | RNAV1 |
| 009 | TF | ARLON | – | 009 (001.6) | -7.5 | 6.4 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## OSHIMA 1K ARRIVAL

From XAC, to ACORN at 13000FT, to TT450, to TT451, to TT452, to TT453, to WANDA at 13000FT, to WEDGE at 8000FT, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | 13000 | 230 | – | RNAV1 |
| 003 | TF | TT450 | – | 069 (061.0) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 004 | TF | TT451 | – | 114 (106.9) | -7.5 | 9.0 | – | – | – | – | RNAV1 |
| 005 | TF | TT452 | – | 090 (082.2) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT453 | – | 068 (060.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 007 | TF | WANDA | – | 044 (036.0) | -7.5 | 9.0 | – | 13000 | 230 | – | RNAV1 |
| 008 | TF | WEDGE | – | 300 (292.4) | -7.5 | 18.7 | – | 8000 | – | – | RNAV1 |
| 009 | TF | UMUKI | – | 300 (292.2) | -7.5 | 8.8 | – | +6000 | – | – | RNAV1 |
| 010 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## OSHIMA 2C ARRIVAL

From XAC, to CLONE, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, to TT464, to EPSON at 7000FT, to CREAM.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CLONE | – | 095 (087.8) | -7.5 | 36.3 | – | – | – | – | RNAV1 |
| 003 | TF | TT460 | – | 068 (060.7) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ACORN | *345028.8N / 1394146.7E* | TT453 | *345438.5N / 1401325.9E* |
| ARLON | *351525.3N / 1395859.8E* | TT460 | *344852.6N / 1401936.8E* |
| CIVIC | *350840.6N / 1402552.1E* | TT461 | *350030.2N / 1402957.9E* |
| CLONE | *344357.8N / 1400856.0E* | TT462 | *351433.3N / 1402254.8E* |
| CREAM | *351743.4N / 1400612.4E* | TT463 | *352125.4N / 1402237.1E* |
| EPSON | *353036.2N / 1401305.9E* | TT464 | *352617.6N / 1401938.6E* |
| KAIHO | *351857.8N / 1394642.4E* | UMUKI | *351219.1N / 1394849.2E* |
| TT450 | *345254.0N / 1394706.0E* | WANDA | *350155.3N / 1401954.1E* |
| TT451 | *345016.8N / 1395734.3E* | WEDGE | *350900.4N / 1395846.5E* |
| TT452 | *345113.2N / 1400600.1E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

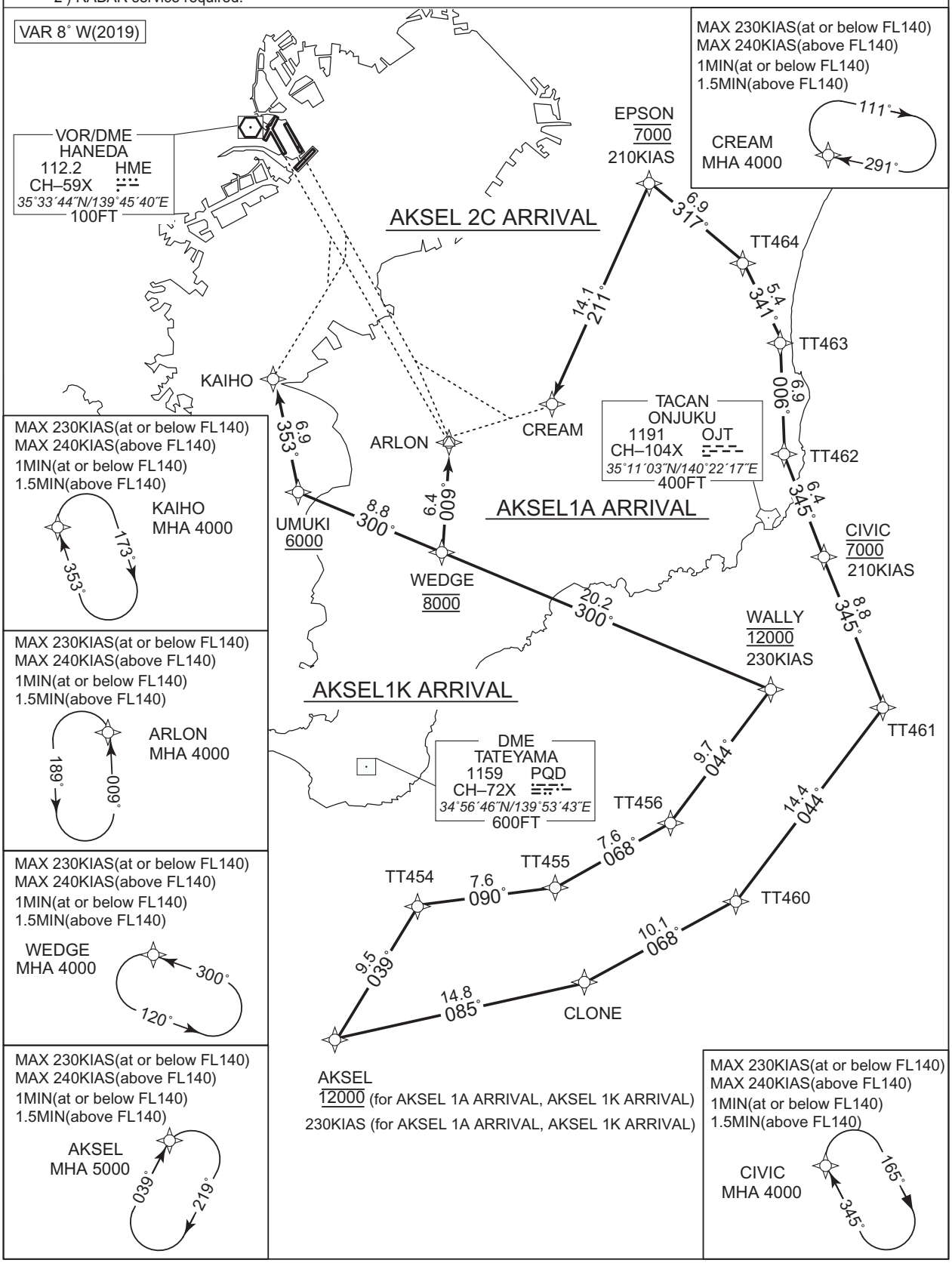
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

AKSEL 1A ARRIVAL / AKSEL 1K ARRIVAL
AKSEL 2C ARRIVAL

RNAV 1

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




CHANGE : WALLY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AKSEL 1A ARRIVAL

From AKSEL at 12000FT, to TT454, to TT455, to TT456, to WALLY at 12000FT, to WEDGE at 8000FT, to ARLON.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | TT454 | – | 039 (031.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |
| 003 | TF | TT455 | – | 090 (082.2) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 004 | TF | TT456 | – | 068 (060.7) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | WALLY | – | 044 (036.0) | -7.5 | 9.7 | – | 12000 | 230 | – | RNAV1 |
| 006 | TF | WEDGE | – | 300 (292.4) | -7.5 | 20.2 | – | 8000 | – | – | RNAV1 |
| 007 | TF | ARLON | – | 009 (001.6) | -7.5 | 6.4 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : WALLY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AKSEL 1K ARRIVAL

From AKSEL at 12000FT, to TT454, to TT455, to TT456, to WALLY at 12000FT, to WEDGE at 8000FT, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | TT454 | – | 039 (031.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |
| 003 | TF | TT455 | – | 090 (082.2) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 004 | TF | TT456 | – | 068 (060.7) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | WALLY | – | 044 (036.0) | -7.5 | 9.7 | – | 12000 | 230 | – | RNAV1 |
| 006 | TF | WEDGE | – | 300 (292.4) | -7.5 | 20.2 | – | 8000 | – | – | RNAV1 |
| 007 | TF | UMUKI | – | 300 (292.2) | -7.5 | 8.8 | – | +6000 | – | – | RNAV1 |
| 008 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : WALLY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AKSEL 2C ARRIVAL

From AKSEL, to CLONE, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, to TT464, to EPSON at 7000FT, to CREAM.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CLONE | – | 085 (077.0) | -7.5 | 14.8 | – | – | – | – | RNAV1 |
| 003 | TF | TT460 | – | 068 (060.7) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | TT456 | *345329.3N / 1401440.2E* |
| ARLON | *351525.3N / 1395859.8E* | TT460 | *344852.6N / 1401936.8E* |
| CIVIC | *350840.6N / 1402552.1E* | TT461 | *350030.2N / 1402957.9E* |
| CLONE | *344357.8N / 1400856.0E* | TT462 | *351433.3N / 1402254.8E* |
| CREAM | *351743.4N / 1400612.4E* | TT463 | *352125.4N / 1402237.1E* |
| EPSON | *353036.2N / 1401305.9E* | TT464 | *352617.6N / 1401938.6E* |
| KAIHO | *351857.8N / 1394642.4E* | UMUKI | *351219.1N / 1394849.2E* |
| TT454 | *344844.8N / 1395725.3E* | WALLY | *350120.1N / 1402138.6E* |
| TT455 | *344946.2N / 1400635.3E* | WEDGE | *350900.4N / 1395846.5E* |

CHANGE : WALLY renamed

**STANDARD ARRIVAL CHART-INSTRUMENT**

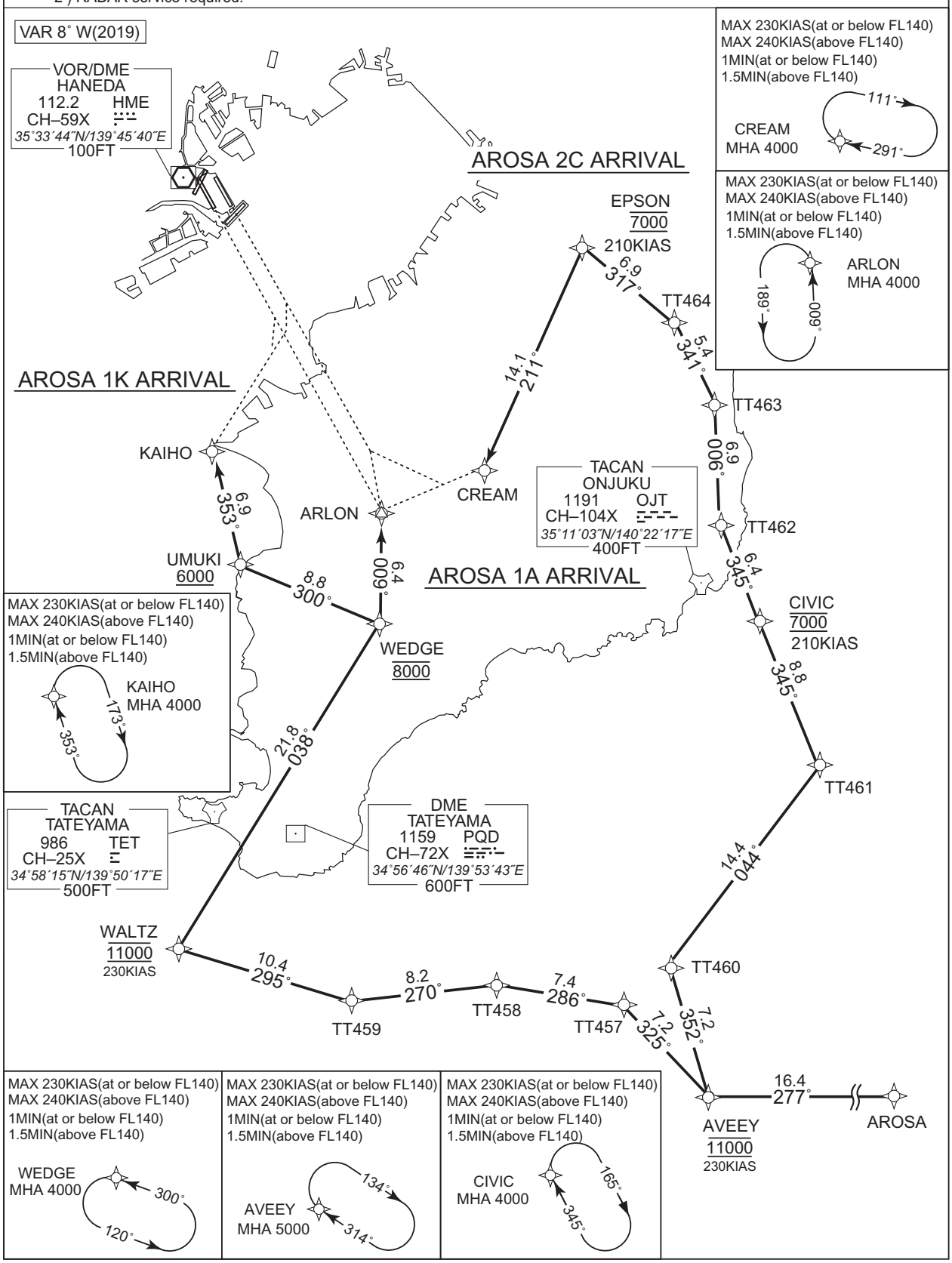
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

AROSA 1A ARRIVAL / AROSA 1K ARRIVAL
AROSA 2C ARRIVAL

RNAV 1

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




CHANGE : AVEEY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AROSA 1A ARRIVAL

From AROSA, to AVEEY at 11000FT, to TT457, to TT458, to TT459, to WALTZ at 11000FT, to WEDGE at 8000FT, to ARLON.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | TT457 | – | 325 (317.5) | -7.5 | 7.2 | – | – | – | – | RNAV1 |
| 004 | TF | TT458 | – | 286 (278.5) | -7.5 | 7.4 | – | – | – | – | RNAV1 |
| 005 | TF | TT459 | – | 270 (262.3) | -7.5 | 8.2 | – | – | – | – | RNAV1 |
| 006 | TF | WALTZ | – | 295 (287.0) | -7.5 | 10.4 | – | 11000 | 230 | – | RNAV1 |
| 007 | TF | WEDGE | – | 038 (030.6) | -7.5 | 21.8 | – | 8000 | – | – | RNAV1 |
| 008 | TF | ARLON | – | 009 (001.6) | -7.5 | 6.4 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : AVEEY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AROSA 1K ARRIVAL

From AROSA, to AVEEY at 11000FT, to TT457, to TT458, to TT459, to WALTZ at 11000FT, to WEDGE at 8000FT, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | TT457 | – | 325 (317.5) | -7.5 | 7.2 | – | – | – | – | RNAV1 |
| 004 | TF | TT458 | – | 286 (278.5) | -7.5 | 7.4 | – | – | – | – | RNAV1 |
| 005 | TF | TT459 | – | 270 (262.3) | -7.5 | 8.2 | – | – | – | – | RNAV1 |
| 006 | TF | WALTZ | – | 295 (287.0) | -7.5 | 10.4 | – | 11000 | 230 | – | RNAV1 |
| 007 | TF | WEDGE | – | 038 (030.6) | -7.5 | 21.8 | – | 8000 | – | – | RNAV1 |
| 008 | TF | UMUKI | – | 300 (292.2) | -7.5 | 8.8 | – | +6000 | – | – | RNAV1 |
| 009 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : AVEEY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## AROSA 2C ARRIVAL

From AROSA, to AVEEY at 11000FT, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, to TT464, to EPSON at 7000FT, to CREAM.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | TT460 | – | 352 (344.5) | -7.5 | 7.2 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARLON | *351525.3N / 1395859.8E* | TT459 | *344712.8N / 1395716.3E* |
| AROSA | *344201.7N / 1404157.3E* | TT460 | *344852.6N / 1401936.8E* |
| AVEEY | *344155.9N / 1402158.0E* | TT461 | *350030.2N / 1402957.9E* |
| CIVIC | *350840.6N / 1402552.1E* | TT462 | *351433.3N / 1402254.8E* |
| CREAM | *351743.4N / 1400612.4E* | TT463 | *352125.4N / 1402237.1E* |
| EPSON | *353036.2N / 1401305.9E* | TT464 | *352617.6N / 1401938.6E* |
| KAIHO | *351857.8N / 1394642.4E* | UMUKI | *351219.1N / 1394849.2E* |
| TT457 | *344714.3N / 1401602.7E* | WALTZ | *345014.4N / 1394510.7E* |
| TT458 | *344819.1N / 1400710.5E* | WEDGE | *350900.4N / 1395846.5E* |

CHANGE : AVEEY renamed

**STANDARD ARRIVAL CHART-INSTRUMENT**

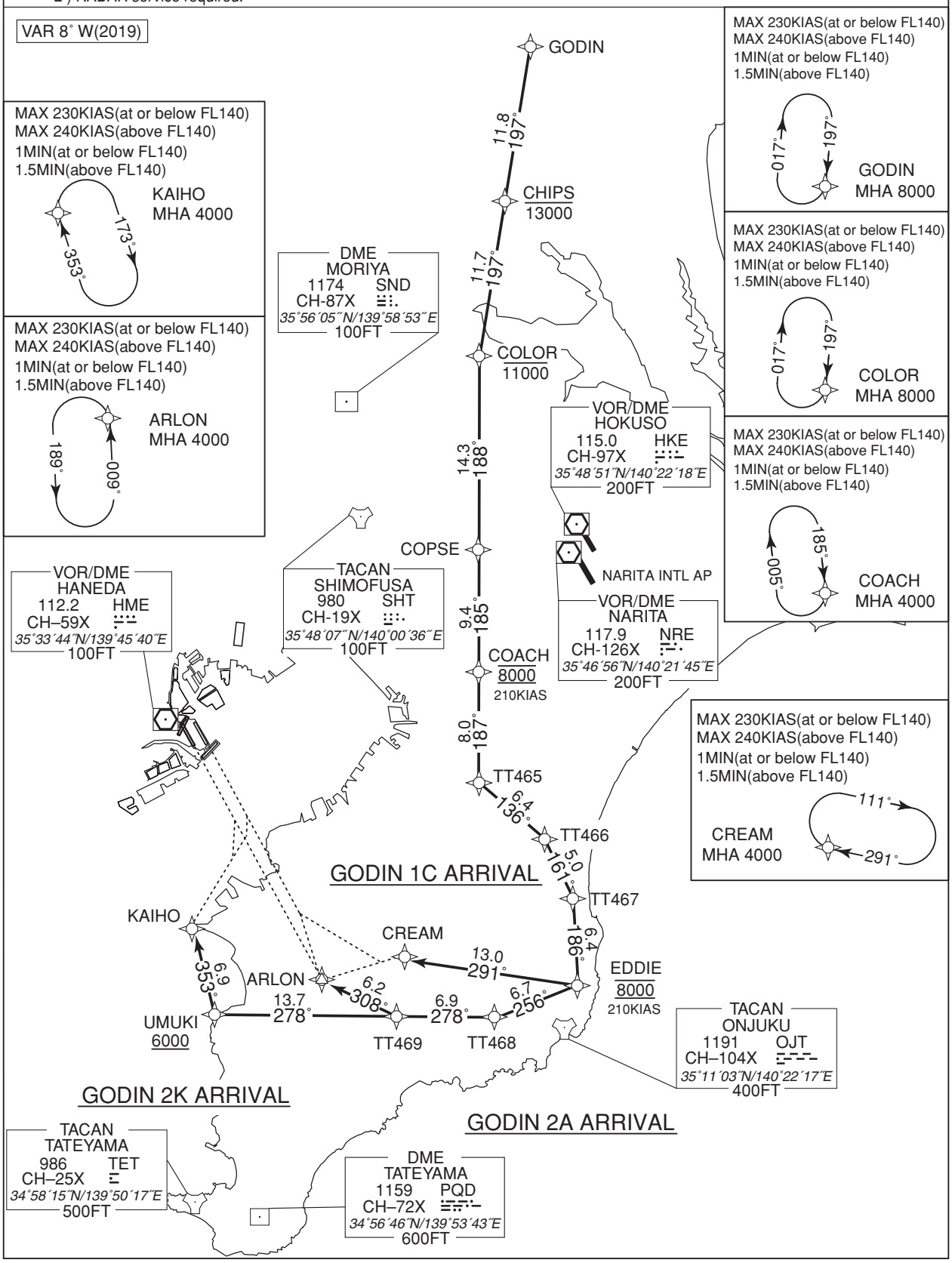
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

GODIN 2A ARRIVAL / GODIN 2K ARRIVAL
GODIN 1C ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## GODIN 2A ARRIVAL

From GODIN, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to TT468, to TT469, to ARLON.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 197 (189.1) | -7.5 | 11.8 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | TT468 | – | 256 (248.1) | -7.5 | 6.7 | – | – | – | – | RNAV1 |
| 011 | TF | TT469 | – | 278 (270.2) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 012 | TF | ARLON | – | 308 (300.2) | -7.5 | 6.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## GODIN 2K ARRIVAL

From GODIN ,to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to TT468, to TT469, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 197 (189.1) | -7.5 | 11.8 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | TT468 | – | 256 (248.1) | -7.5 | 6.7 | – | – | – | – | RNAV1 |
| 011 | TF | TT469 | – | 278 (270.2) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 012 | TF | UMUKI | – | 278 (270.2) | -7.5 | 13.7 | – | +6000 | – | – | RNAV1 |
| 013 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## GODIN 1C ARRIVAL

From GODIN ,to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to CREAM.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 197 (189.1) | -7.5 | 11.8 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 291 (283.1) | -7.5 | 13.0 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARLON | *351525.3N / 1395859.8E* | KAIHO | *351857.8N / 1394642.4E* |
| CHIPS | *361247.7N / 1401436.9E* | TT465 | *352939.2N / 1401235.4E* |
| COACH | *353736.0N / 1401231.5E* | TT466 | *352539.0N / 1401840.1E* |
| COLOR | *360116.3N / 1401219.8E* | TT467 | *352110.2N / 1402124.4E* |
| COPSE | *354658.8N / 1401205.4E* | TT468 | *351216.4N / 1401402.6E* |
| CREAM | *351743.4N / 1400612.4E* | TT469 | *351217.9N / 1400534.7E* |
| EDDIE | *351447.4N / 1402140.9E* | UMUKI | *351219.1N / 1394849.2E* |
| GODIN | *362425.3N / 1401655.9E* | | |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

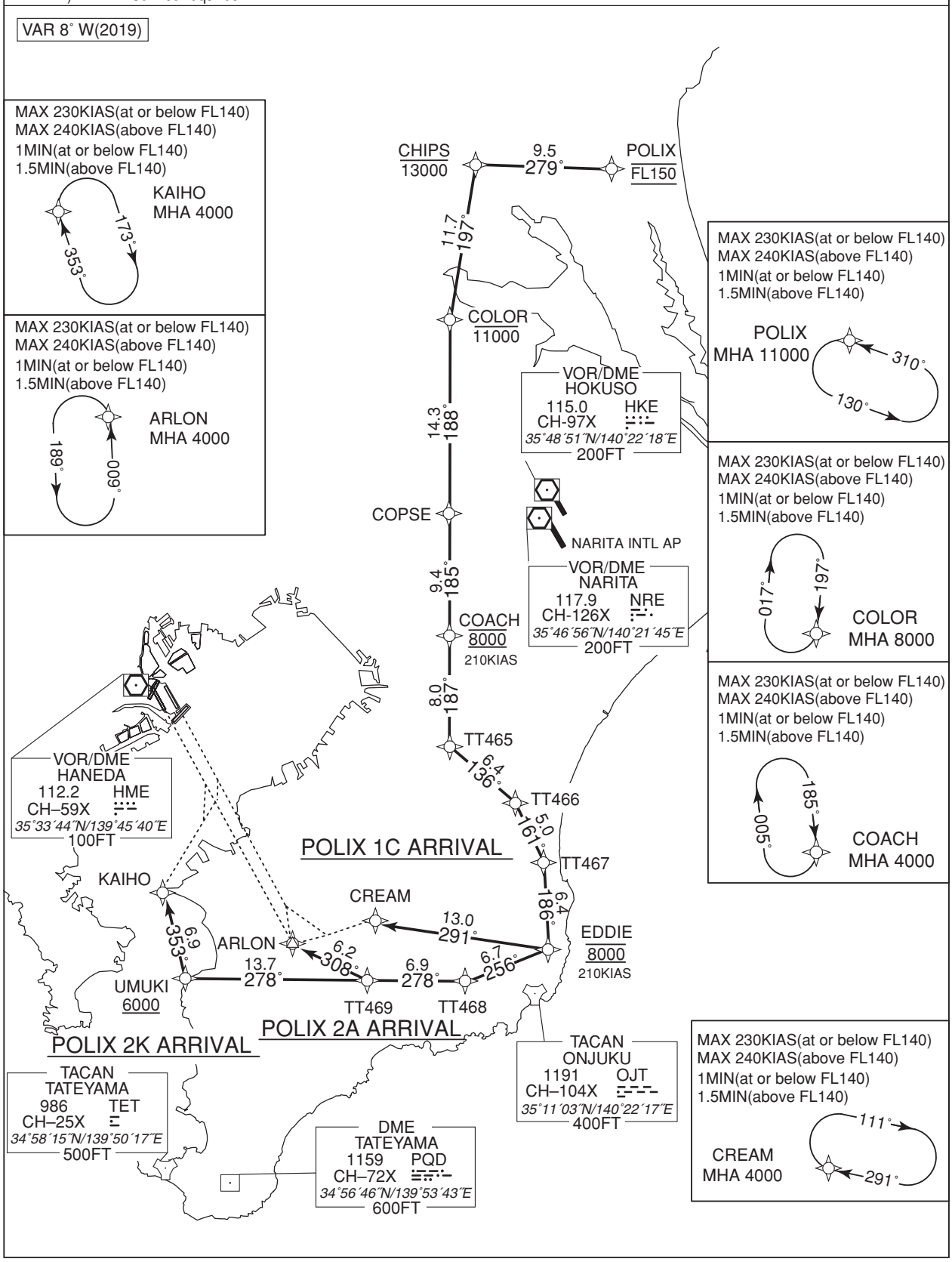
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

POLIX 2A ARRIVAL / POLIX 2K ARRIVAL
POLIX 1C ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## POLIX 2A ARRIVAL

From POLIX at FL150, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to TT468, to TT469, to ARLON.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 279 (271.1) | -7.5 | 9.5 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | TT468 | – | 256 (248.1) | -7.5 | 6.7 | – | – | – | – | RNAV1 |
| 011 | TF | TT469 | – | 278 (270.2) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 012 | TF | ARLON | – | 308 (300.2) | -7.5 | 6.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## POLIX 2K ARRIVAL

From POLIX at FL150, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to TT468, to TT469, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 279 (271.1) | -7.5 | 9.5 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | TT468 | – | 256 (248.1) | -7.5 | 6.7 | – | – | – | – | RNAV1 |
| 011 | TF | TT469 | – | 278 (270.2) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 012 | TF | UMUKI | – | 278 (270.2) | -7.5 | 13.7 | – | +6000 | – | – | RNAV1 |
| 013 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## POLIX 1C ARRIVAL

From POLIX at FL150, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to CREAM.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 279 (271.1) | -7.5 | 9.5 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 291 (283.1) | -7.5 | 13.0 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 11000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ARLON | *351525.3N / 1395859.8E* | POLIX | *361237.1N / 1402622.5E* |
| CHIPS | *361247.7N / 1401436.9E* | TT465 | *352939.2N / 1401235.4E* |
| COACH | *353736.0N / 1401231.5E* | TT466 | *352539.0N / 1401840.1E* |
| COLOR | *360116.3N / 1401219.8E* | TT467 | *352110.2N / 1402124.4E* |
| COPSE | *354658.8N / 1401205.4E* | TT468 | *351216.4N / 1401402.6E* |
| CREAM | *351743.4N / 1400612.4E* | TT469 | *351217.9N / 1400534.7E* |
| EDDIE | *351447.4N / 1402140.9E* | UMUKI | *351219.1N / 1394849.2E* |
| KAIHO | *351857.8N / 1394642.4E* | | |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

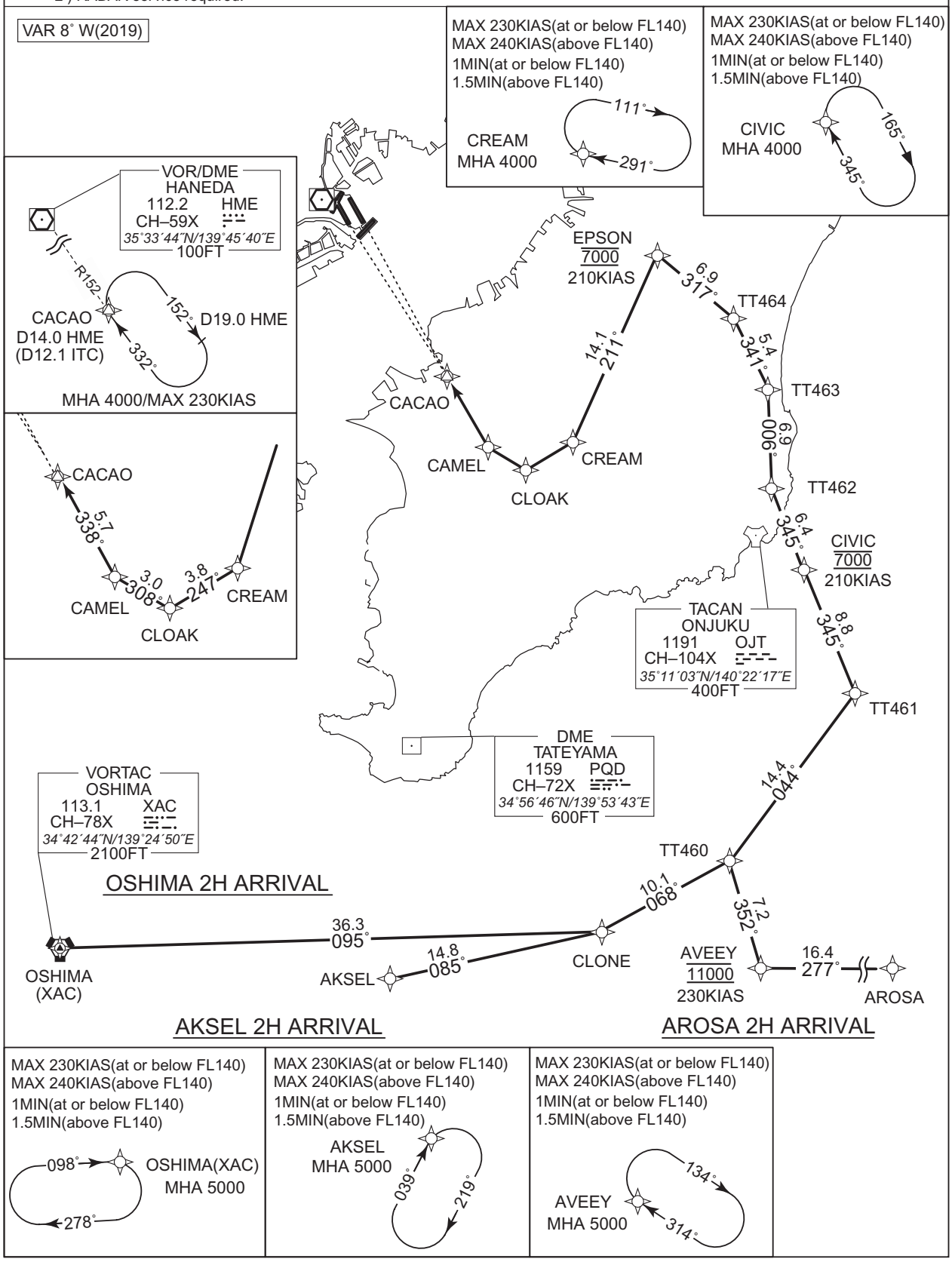
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

OSHIMA 2H ARRIVAL / AKSEL 2H ARRIVAL
AROSA 2H ARRIVAL

RNAV 1

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




CHANGE : AVEEY renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## OSHIMA 2H ARRIVAL

From XAC, to CLONE, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, to TT464, to EPSON at 7000FT, to CREAM, to CLOAK, to CAMEL, to CACAO.

Note: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CLONE | – | 095 (087.8) | -7.5 | 36.3 | – | – | – | – | RNAV1 |
| 003 | TF | TT460 | – | 068 (060.7) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 011 | TF | CLOAK | – | 247 (240.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |
| 012 | TF | CAMEL | – | 308 (300.1) | -7.5 | 3.0 | – | – | – | – | RNAV1 |
| 013 | TF | CACAO | – | 338 (330.1) | -7.5 | 5.7 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Note added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## AKSEL 2H ARRIVAL

From AKSEL, to CLONE, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, to TT464, to EPSON at 7000FT, to CREAM, to CLOAK, to CAMEL, to CACAO.

Note: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CLONE | – | 085 (077.0) | -7.5 | 14.8 | – | – | – | – | RNAV1 |
| 003 | TF | TT460 | – | 068 (060.7) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 011 | TF | CLOAK | – | 247 (240.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |
| 012 | TF | CAMEL | – | 308 (300.1) | -7.5 | 3.0 | – | – | – | – | RNAV1 |
| 013 | TF | CACAO | – | 338 (330.1) | -7.5 | 5.7 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Note added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## AROSA 2H ARRIVAL

From AROSA, to AVEEY at 11000FT, to TT460, to TT461, to CIVIC at 7000FT, to TT462, to TT463, toTT464, to EPSON at 7000FT, to CREAM, to CLOAK, to CAMEL, to CACAO.

Note: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | TT460 | – | 352 (344.5) | -7.5 | 7.2 | – | – | – | – | RNAV1 |
| 004 | TF | TT461 | – | 044 (036.1) | -7.5 | 14.4 | – | – | – | – | RNAV1 |
| 005 | TF | CIVIC | – | 345 (337.7) | -7.5 | 8.8 | – | 7000 | 210 | – | RNAV1 |
| 006 | TF | TT462 | – | 345 (337.7) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 007 | TF | TT463 | – | 006 (358.0) | -7.5 | 6.9 | – | – | – | – | RNAV1 |
| 008 | TF | TT464 | – | 341 (333.5) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 009 | TF | EPSON | – | 317 (309.0) | -7.5 | 6.9 | – | 7000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 211 (203.6) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 011 | TF | CLOAK | – | 247 (240.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |
| 012 | TF | CAMEL | – | 308 (300.1) | -7.5 | 3.0 | – | – | – | – | RNAV1 |
| 013 | TF | CACAO | – | 338 (330.1) | -7.5 | 5.7 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Note added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | CREAM | *351743.4N / 1400612.4E* |
| AROSA | *344201.7N / 1404157.3E* | EPSON | *353036.2N / 1401305.9E* |
| AVEEY | *344155.9N / 1402158.0E* | TT460 | *344852.6N / 1401936.8E* |
| CACAO | *352212.8N / 1395530.1E* | TT461 | *350030.2N / 1402957.9E* |
| CAMEL | *351718.2N / 1395857.8E* | TT462 | *351433.3N / 1402254.8E* |
| CIVIC | *350840.6N / 1402552.1E* | TT463 | *352125.4N / 1402237.1E* |
| CLOAK | *351548.0N / 1400208.2E* | TT464 | *352617.6N / 1401938.6E* |
| CLONE | *344357.8N / 1400856.0E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : AVEEY renamed

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**STANDARD ARRIVAL CHART-INSTRUMENT**

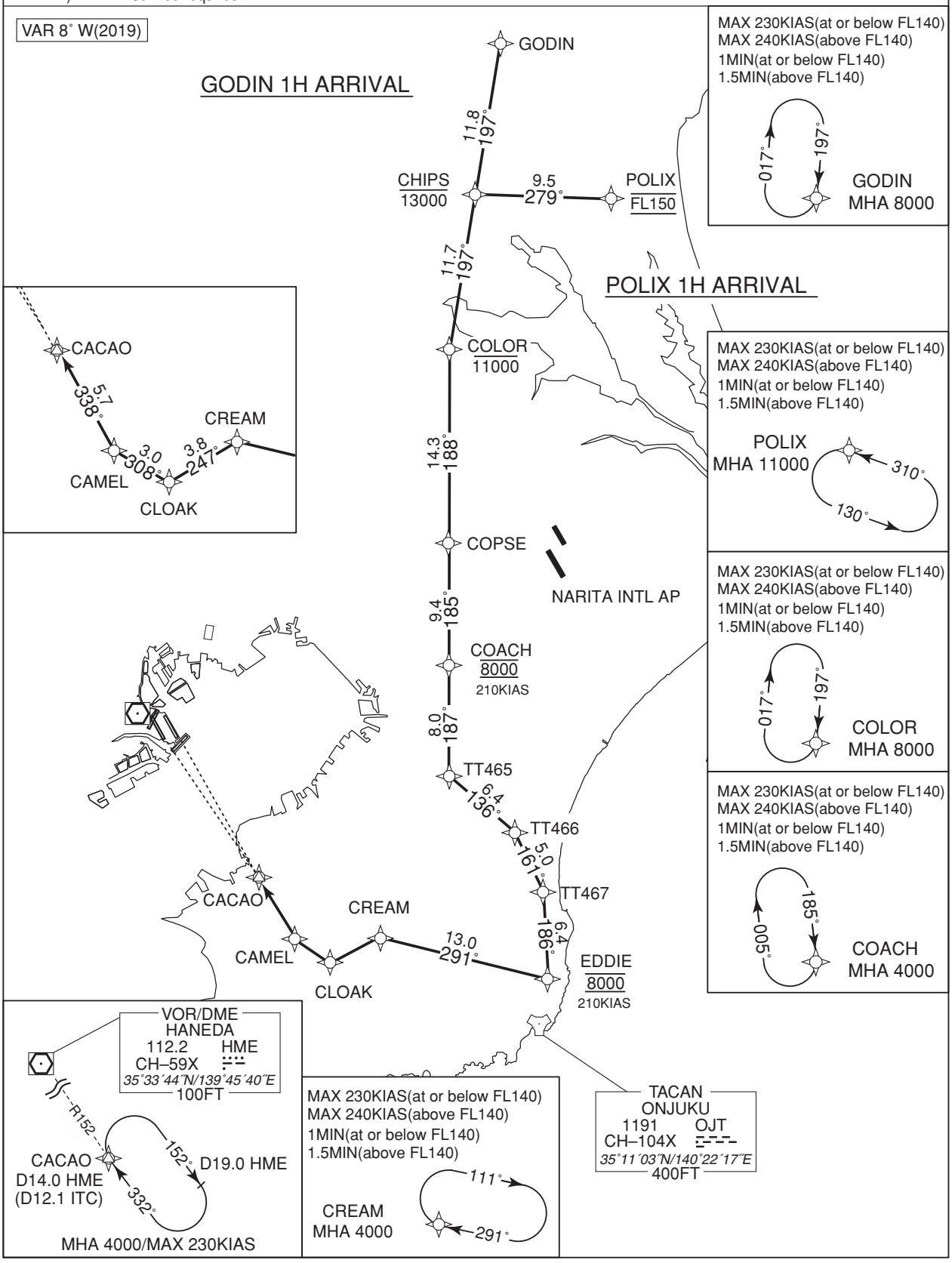
RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

GODIN 1H ARRIVAL
POLIX 1H ARRIVAL

RNAV 1

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



STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## GODIN 1H ARRIVAL

From GODIN, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to CREAM, to CLOAK, to CAMEL, to CACAO.

Note: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 197 (189.1) | -7.5 | 11.8 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 291 (283.1) | -7.5 | 13.0 | – | – | – | – | RNAV1 |
| 011 | TF | CLOAK | – | 247 (240.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |
| 012 | TF | CAMEL | – | 308 (300.1) | -7.5 | 3.0 | – | – | – | – | RNAV1 |
| 013 | TF | CACAO | – | 338 (330.1) | -7.5 | 5.7 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Note added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

## POLIX 1H ARRIVAL

From POLIX at FL150, to CHIPS at or below 13000FT, to COLOR at or below 11000FT, to COPSE, to COACH at 8000FT, to TT465, to TT466, to TT467, to EDDIE at 8000FT, to CREAM, to CLOAK, to CAMEL, to CACAO.

Note: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | CHIPS | – | 279 (271.1) | -7.5 | 9.5 | – | -13000 | – | – | RNAV1 |
| 003 | TF | COLOR | – | 197 (189.1) | -7.5 | 11.7 | – | -11000 | – | – | RNAV1 |
| 004 | TF | COPSE | – | 188 (180.8) | -7.5 | 14.3 | – | – | – | – | RNAV1 |
| 005 | TF | COACH | – | 185 (177.8) | -7.5 | 9.4 | – | 8000 | 210 | – | RNAV1 |
| 006 | TF | TT465 | – | 187 (179.6) | -7.5 | 8.0 | – | – | – | – | RNAV1 |
| 007 | TF | TT466 | – | 136 (128.9) | -7.5 | 6.4 | – | – | – | – | RNAV1 |
| 008 | TF | TT467 | – | 161 (153.5) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 009 | TF | EDDIE | – | 186 (178.0) | -7.5 | 6.4 | – | 8000 | 210 | – | RNAV1 |
| 010 | TF | CREAM | – | 291 (283.1) | -7.5 | 13.0 | – | – | – | – | RNAV1 |
| 011 | TF | CLOAK | – | 247 (240.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |
| 012 | TF | CAMEL | – | 308 (300.1) | -7.5 | 3.0 | – | – | – | – | RNAV1 |
| 013 | TF | CACAO | – | 338 (330.1) | -7.5 | 5.7 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 11000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : Note added.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY34R/34L

## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| CACAO | *352212.8N / 1395530.1E* | CREAM | *351743.4N / 1400612.4E* |
| CAMEL | *351718.2N / 1395857.8E* | EDDIE | *351447.4N / 1402140.9E* |
| CHIPS | *361247.7N / 1401436.9E* | GODIN | *362425.3N / 1401655.9E* |
| CLOAK | *351548.0N / 1400208.2E* | POLIX | *361237.1N / 1402622.5E* |
| COACH | *353736.0N / 1401231.5E* | TT465 | *352939.2N / 1401235.4E* |
| COLOR | *360116.3N / 1401219.8E* | TT466 | *352539.0N / 1401840.1E* |
| COPSE | *354658.8N / 1401205.4E* | TT467 | *352110.2N / 1402124.4E* |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

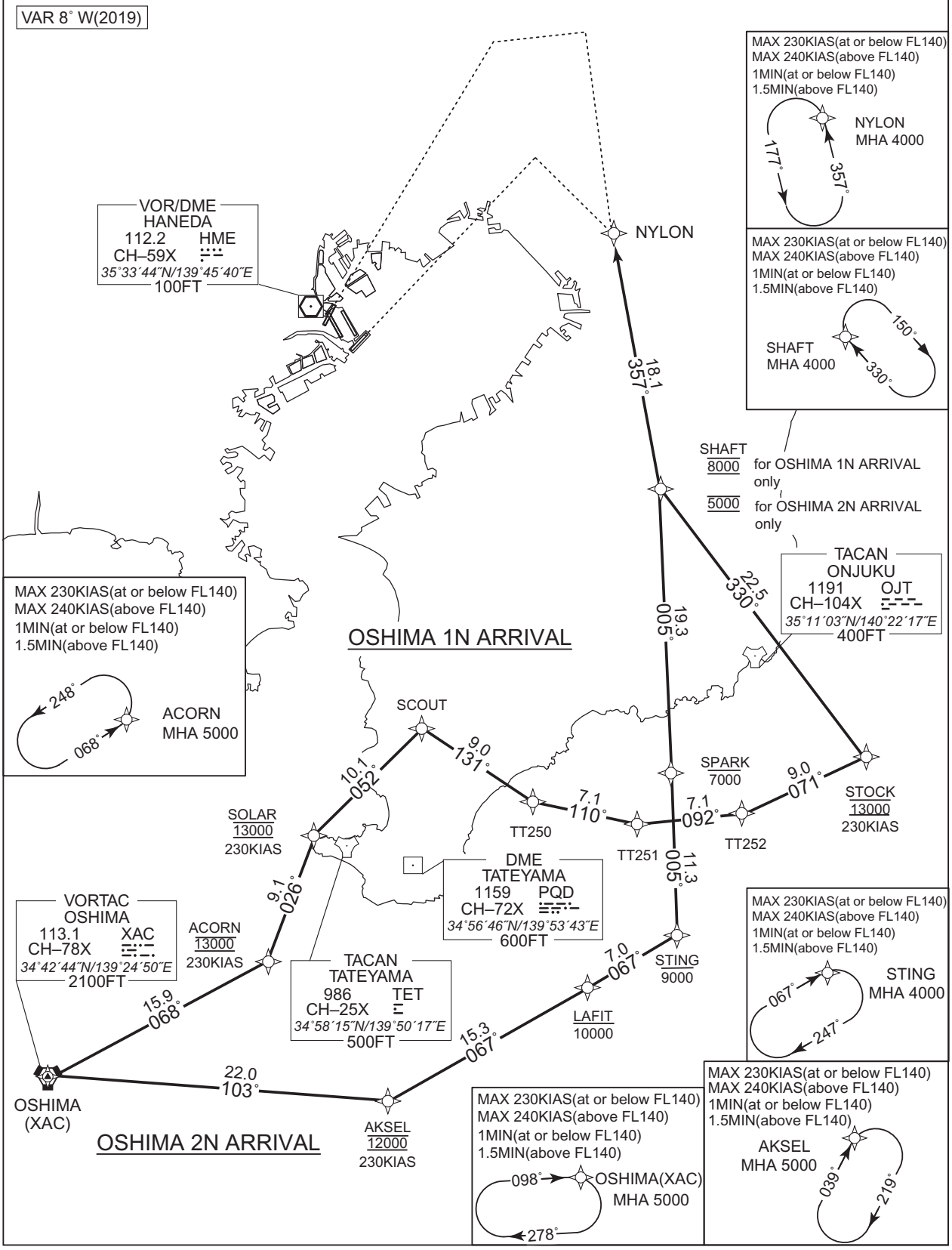
RJTT / TOKYO INTL

RNAV STAR RWY22/23

OSHIMA 1N ARRIVAL
OSHIMA 2N ARRIVAL

RNAV 1

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




CHANGE : SOLAR renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY22/23

## OSHIMA 1N ARRIVAL

From XAC, to ACORN at 13000FT, to SOLAR at 13000FT, to SCOUT, to TT250, to TT251, to TT252, to STOCK at 13000FT, to SHAFT at 8000FT, to NYLON.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | 13000 | 230 | – | RNAV1 |
| 003 | TF | SOLAR | – | 026 (018.4) | -7.5 | 9.1 | – | 13000 | 230 | – | RNAV1 |
| 004 | TF | SCOUT | – | 052 (044.3) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT250 | – | 131 (123.1) | -7.5 | 9.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT251 | – | 110 (102.5) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 007 | TF | TT252 | – | 092 (084.3) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 008 | TF | STOCK | – | 071 (063.6) | -7.5 | 9.0 | – | 13000 | 230 | – | RNAV1 |
| 009 | TF | SHAFT | – | 330 (322.4) | -7.5 | 22.5 | – | 8000 | – | – | RNAV1 |
| 010 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : SOLAR renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## OSHIMA 2N ARRIVAL

From XAC, to AKSEL at 12000FT, to LAFIT at or below 10000FT, to STING at or below 9000FT, to SPARK at or below 7000FT, to SHAFT at 5000FT, to NYLON.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AKSEL | – | 103 (095.3) | -7.5 | 22.0 | – | 12000 | 230 | – | RNAV1 |
| 003 | TF | LAFIT | – | 067 (059.5) | -7.5 | 15.3 | – | -10000 | – | – | RNAV1 |
| 004 | TF | STING | – | 067 (059.6) | -7.5 | 7.0 | – | -9000 | – | – | RNAV1 |
| 005 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 006 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 007 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ACORN | *345028.8N / 1394146.7E* | SPARK | *350312.0N / 1401416.7E* |
| AKSEL | *344039.5N / 1395126.9E* | STOCK | *350438.7N / 1403002.9E* |
| LAFIT | *344826.0N / 1400732.4E* | STING | *345157.9N / 1401453.4E* |
| NYLON | *354018.5N / 1400919.9E* | TT250 | *350129.7N / 1400308.5E* |
| SCOUT | *350624.1N / 1395356.8E* | TT251 | *345957.7N / 1401136.0E* |
| SHAFT | *352227.4N / 1401313.3E* | TT252 | *350039.9N / 1402013.0E* |
| SOLAR | *345909.2N / 1394518.5E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : SOLAR renamed

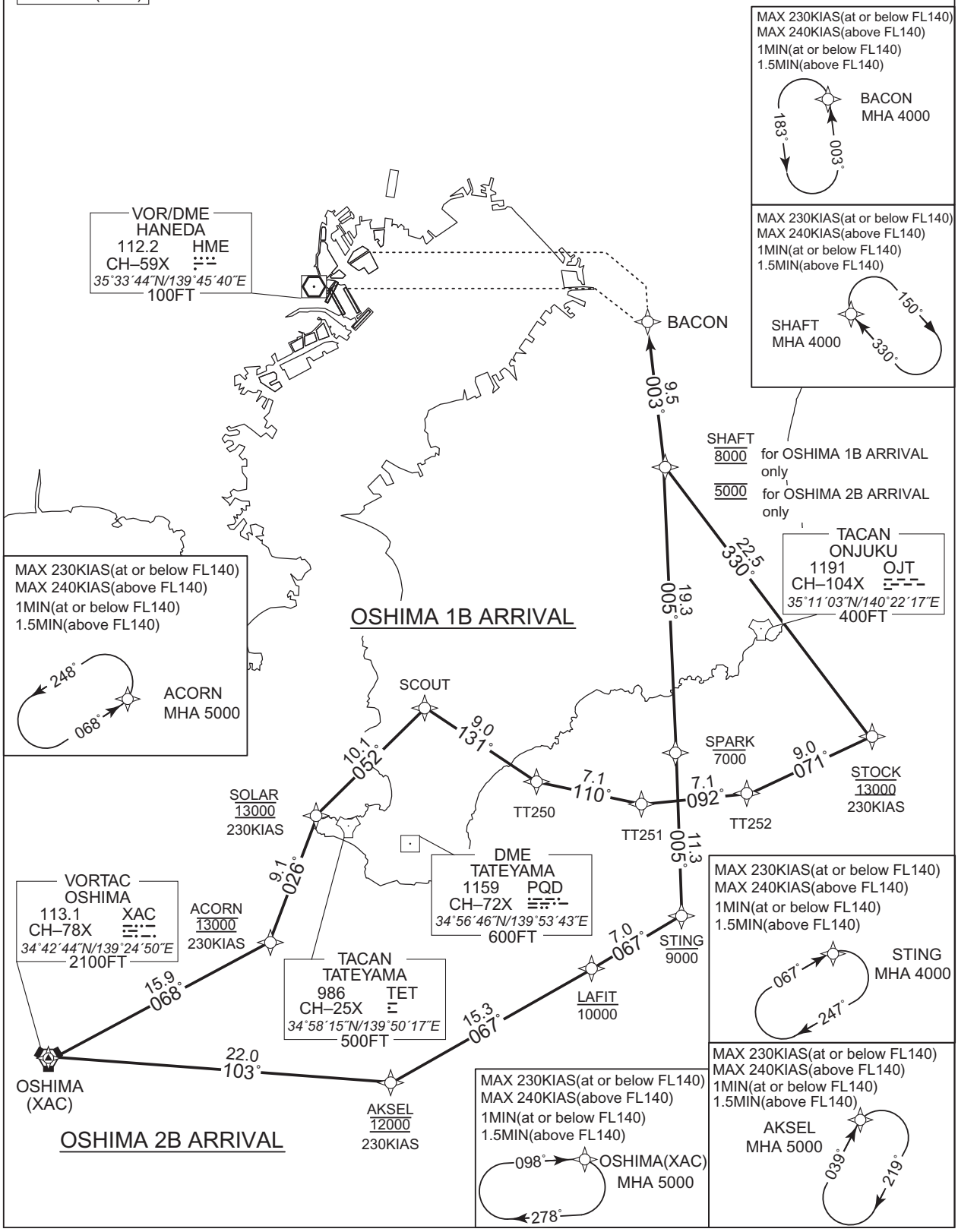
**STANDARD ARRIVAL CHART-INSTRUMENT**

RJTT / TOKYO INTL

RNAV STAR RWY22/23

| OSHIMA 1B ARRIVAL<br>OSHIMA 2B ARRIVAL | RNAV 1 |
|---|---|

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




CHANGE : SOLAR renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## OSHIMA 1B ARRIVAL

From XAC, to ACORN at 13000FT, to SOLAR at 13000FT, to SCOUT, to TT250, to TT251, to TT252, to STOCK at 13000FT, to SHAFT at 8000FT, to BACON.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | 13000 | 230 | – | RNAV1 |
| 003 | TF | SOLAR | – | 026 (018.4) | -7.5 | 9.1 | – | 13000 | 230 | – | RNAV1 |
| 004 | TF | SCOUT | – | 052 (044.3) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT250 | – | 131 (123.1) | -7.5 | 9.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT251 | – | 110 (102.5) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 007 | TF | TT252 | – | 092 (084.3) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 008 | TF | STOCK | – | 071 (063.6) | -7.5 | 9.0 | – | 13000 | 230 | – | RNAV1 |
| 009 | TF | SHAFT | – | 330 (322.4) | -7.5 | 22.5 | – | 8000 | – | – | RNAV1 |
| 010 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : SOLAR renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## OSHIMA 2B ARRIVAL

From XAC, to AKSEL at 12000FT, to LAFIT at or below 10000FT, to STING at or below 9000FT, to SPARK at or below 7000FT, to SHAFT at 5000FT, to BACON.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AKSEL | – | 103 (095.3) | -7.5 | 22.0 | – | 12000 | 230 | – | RNAV1 |
| 003 | TF | LAFIT | – | 067 (059.5) | -7.5 | 15.3 | – | -10000 | – | – | RNAV1 |
| 004 | TF | STING | – | 067 (059.6) | -7.5 | 7.0 | – | -9000 | – | – | RNAV1 |
| 005 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 006 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 007 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ACORN | *345028.8N / 1394146.7E* | SPARK | *350312.0N / 1401416.7E* |
| AKSEL | *344039.5N / 1395126.9E* | STOCK | *350438.7N / 1403002.9E* |
| BACON | *353155.0N / 1401215.1E* | STING | *345157.9N / 1401453.4E* |
| LAFIT | *344826.0N / 1400732.4E* | TT250 | *350129.7N / 1400308.5E* |
| SCOUT | *350624.1N / 1395356.8E* | TT251 | *345957.7N / 1401136.0E* |
| SHAFT | *352227.4N / 1401313.3E* | TT252 | *350039.9N / 1402013.0E* |
| SOLAR | *345909.2N / 1394518.5E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : SOLAR renamed

**STANDARD ARRIVAL CHART-INSTRUMENT**

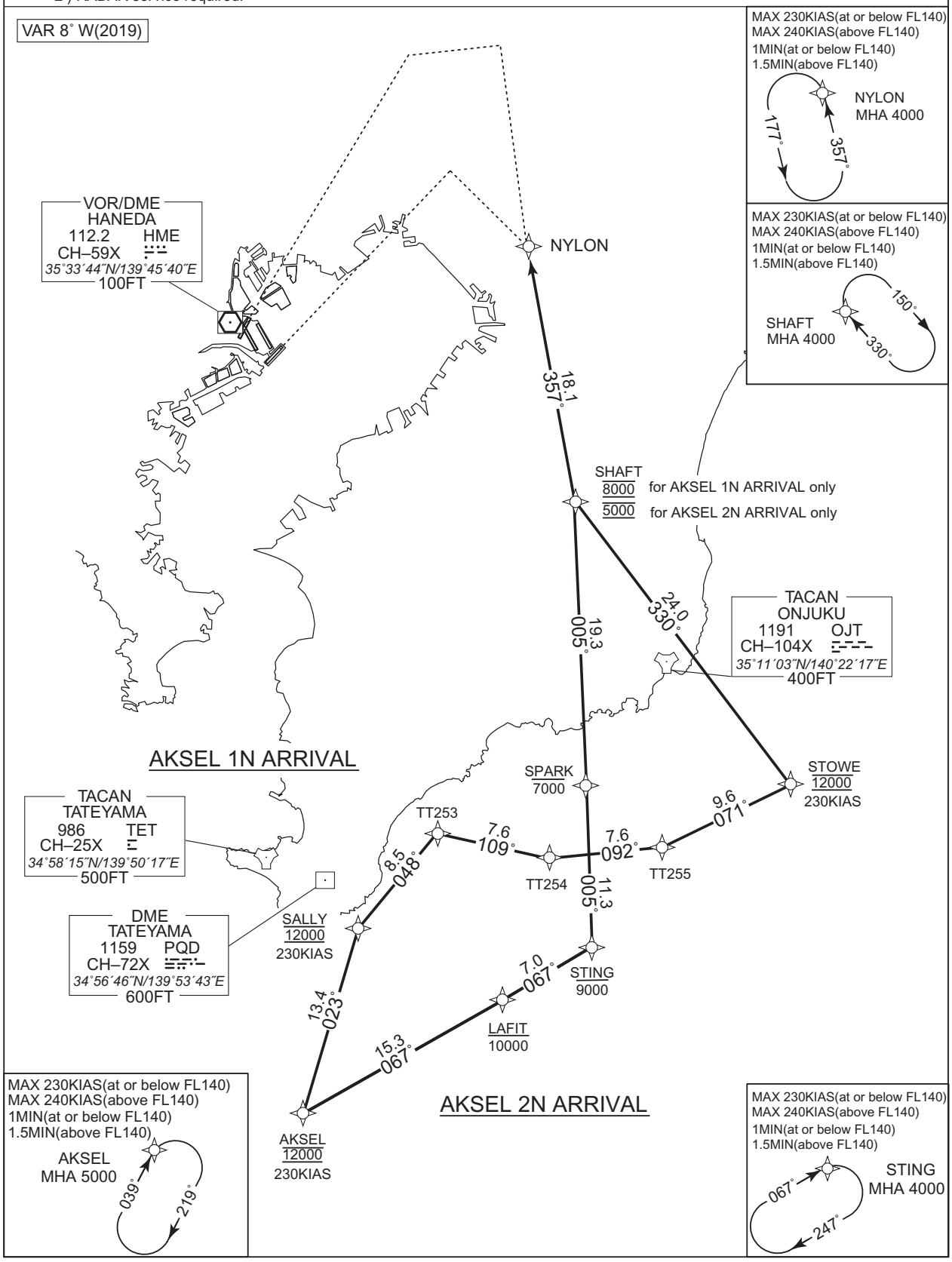
RJTT / TOKYO INTL

RNAV STAR RWY22/23

AKSEL 1N ARRIVAL
AKSEL 2N ARRIVAL

RNAV 1

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




CHANGE : STOWE renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## AKSEL 1N ARRIVAL

From AKSEL at 12000FT, to SALLY at 12000FT, to TT253, to TT254, to TT255, to STOWE at 12000FT, to SHAFT at 8000FT, to NYLON.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | SALLY | – | 023 (015.0) | -7.5 | 13.4 | – | 12000 | 230 | – | RNAV1 |
| 003 | TF | TT253 | – | 048 (040.5) | -7.5 | 8.5 | – | – | – | – | RNAV1 |
| 004 | TF | TT254 | – | 109 (102.0) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | TT255 | – | 092 (084.4) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | STOWE | – | 071 (063.6) | -7.5 | 9.6 | – | 12000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 330 (322.4) | -7.5 | 24.0 | – | 8000 | – | – | RNAV1 |
| 008 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : STOWE renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY22/23

## AKSEL 2N ARRIVAL

From AKSEL at 12000FT, to LAFIT at or below 10000FT, to STING at or below 9000FT, to SPARK at or below 7000FT, to SHAFT at 5000FT, to NYLON.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | LAFIT | – | 067 (059.5) | -7.5 | 15.3 | – | -10000 | – | – | RNAV1 |
| 003 | TF | STING | – | 067 (059.6) | -7.5 | 7.0 | – | -9000 | – | – | RNAV1 |
| 004 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 005 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 006 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | STING | *345157.9N / 1401453.4E* |
| LAFIT | *344826.0N / 1400732.4E* | STOWE | *350325.9N / 1403111.4E* |
| NYLON | *354018.5N / 1400919.9E* | TT253 | *350001.4N / 1400224.6E* |
| SALLY | *345333.9N / 1395540.1E* | TT254 | *345826.5N / 1401129.4E* |
| SHAFT | *352227.4N / 1401313.3E* | TT255 | *345910.9N / 1402041.4E* |
| SPARK | *350312.0N / 1401416.7E* | | |

CHANGE : STOWE renamed

**STANDARD ARRIVAL CHART-INSTRUMENT**

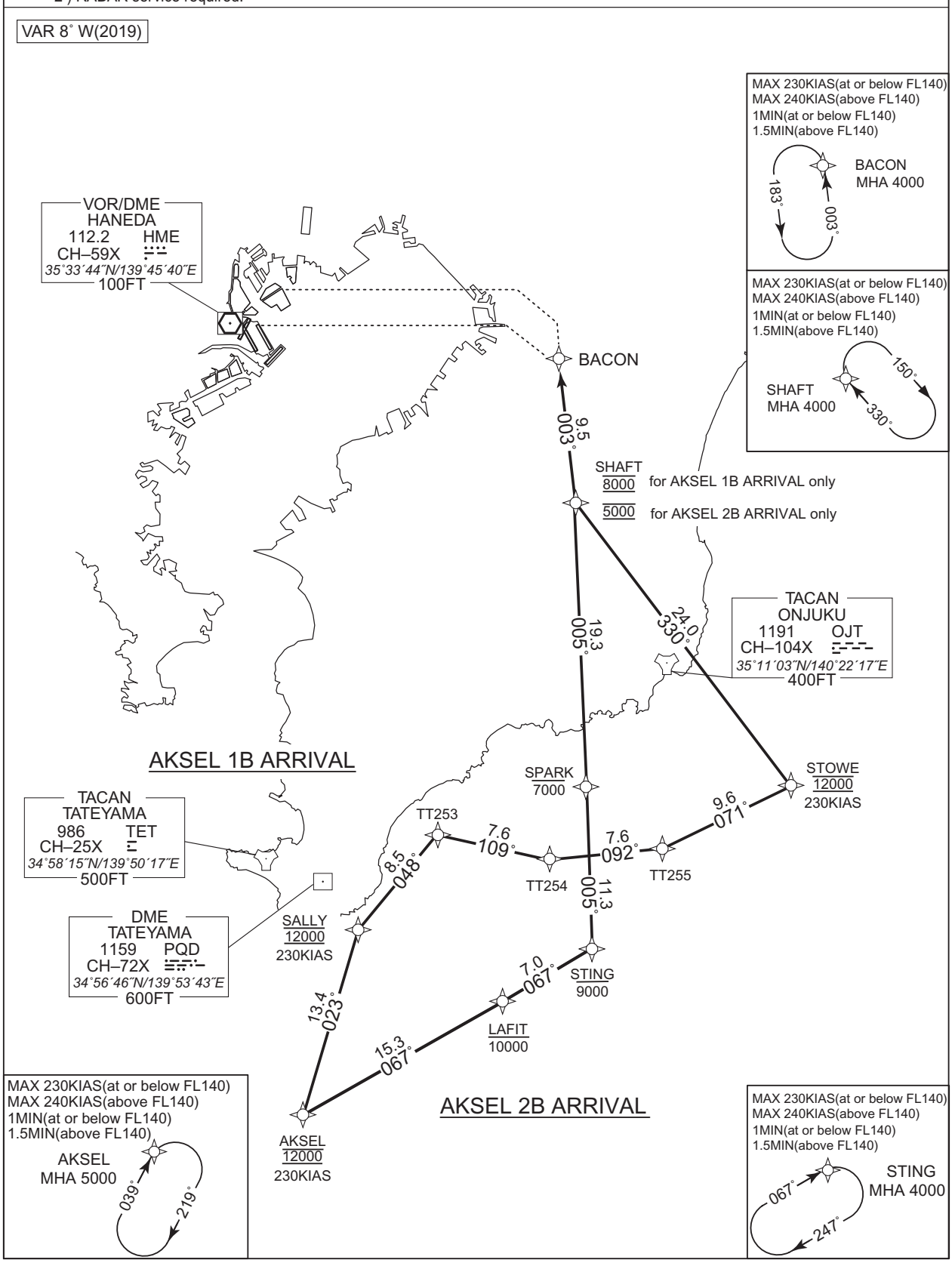
RJTT / TOKYO INTL

RNAV STAR RWY22/23

AKSEL 1B ARRIVAL
AKSEL 2B ARRIVAL

RNAV 1

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




CHANGE : STOWE renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## AKSEL 1B ARRIVAL

From AKSEL at 12000FT, to SALLY at 12000FT, to TT253, to TT254, to TT255, to STOWE at 12000FT, to SHAFT at 8000FT, to BACON.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | SALLY | – | 023 (015.0) | -7.5 | 13.4 | – | 12000 | 230 | – | RNAV1 |
| 003 | TF | TT253 | – | 048 (040.5) | -7.5 | 8.5 | – | – | – | – | RNAV1 |
| 004 | TF | TT254 | – | 109 (102.0) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | TT255 | – | 092 (084.4) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | STOWE | – | 071 (063.6) | -7.5 | 9.6 | – | 12000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 330 (322.4) | -7.5 | 24.0 | – | 8000 | – | – | RNAV1 |
| 008 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : STOWE renamed

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY22/23

## AKSEL 2B ARRIVAL

From AKSEL at 12000FT, to LAFIT at or below 10000FT, to STING at or below 9000FT, to SPARK at or below 7000FT, to SHAFT at 5000FT, to BACON.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | 12000 | 230 | – | RNAV1 |
| 002 | TF | LAFIT | – | 067 (059.5) | -7.5 | 15.3 | – | -10000 | – | – | RNAV1 |
| 003 | TF | STING | – | 067 (059.6) | -7.5 | 7.0 | – | -9000 | – | – | RNAV1 |
| 004 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 005 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 006 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | STING | *345157.9N / 1401453.4E* |
| BACON | *353155.0N / 1401215.1E* | STOWE | *350325.9N / 1403111.4E* |
| LAFIT | *344826.0N / 1400732.4E* | TT253 | *350001.4N / 1400224.6E* |
| SALLY | *345333.9N / 1395540.1E* | TT254 | *345826.5N / 1401129.4E* |
| SHAFT | *352227.4N / 1401313.3E* | TT255 | *345910.9N / 1402041.4E* |
| SPARK | *350312.0N / 1401416.7E* | | |

CHANGE : STOWE renamed

**STANDARD ARRIVAL CHART-INSTRUMENT**

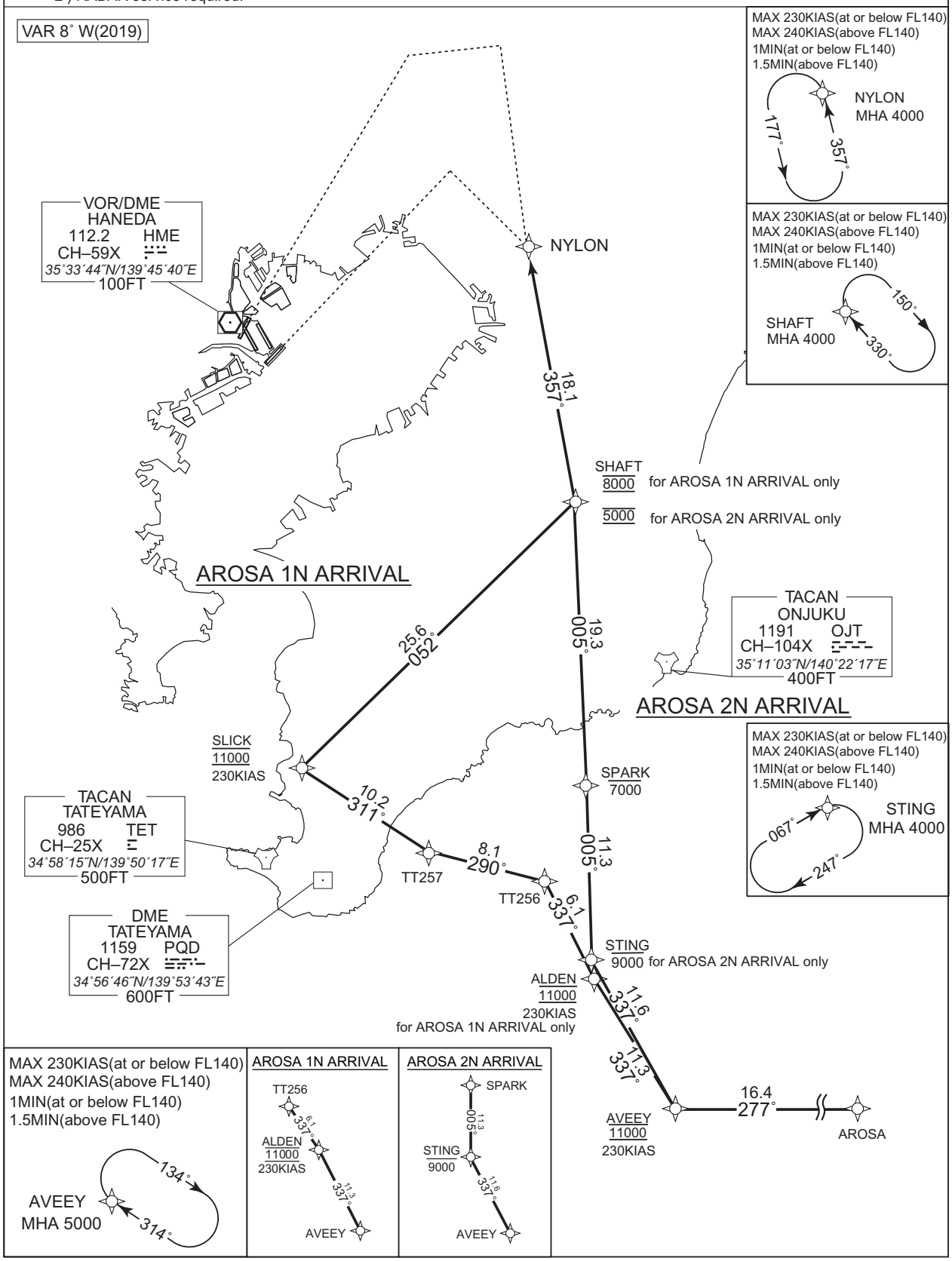
RJTT / TOKYO INTL

RNAV STAR RWY22/23

AROSA 1N ARRIVAL
AROSA 2N ARRIVAL

RNAV 1

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




CHANGE : RTE FM AVEEY to TT256 (ALDEN established)

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY22/23

## AROSA 1N ARRIVAL

From AROSA, to AVEEY at 11000FT, to ALDEN at 11000FT, to TT256, to TT257, to SLICK at 11000FT, to SHAFT at 8000FT, to NYLON.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | ALDEN | – | 337 (330.0) | -7.5 | 11.3 | – | 11000 | 230 | – | RNAV1 |
| 004 | TF | TT256 | – | 337 (329.9) | -7.5 | 6.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT257 | – | 290 (282.4) | -7.5 | 8.1 | – | – | – | – | RNAV1 |
| 006 | TF | SLICK | – | 311 (303.1) | -7.5 | 10.2 | – | 11000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 052 (044.3) | -7.5 | 25.6 | – | 8000 | – | – | RNAV1 |
| 008 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : RTE FM AVEEY to TT256 (ALDEN established). HLDG pattern at STING deleted.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## AROSA 2N ARRIVAL

From AROSA, to AVEEY at 11000FT, to STING at or below 9000FT, to SPARK at or below 7000FT, to SHAFT at 5000FT, to NYLON.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | STING | – | 337 (330.0) | -7.5 | 11.6 | – | -9000 | – | – | RNAV1 |
| 004 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 005 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 006 | TF | NYLON | – | 357 (350.0) | -7.5 | 18.1 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ALDEN | *345141.1N / 1401505.3E* | SLICK | *350412.7N / 1395120.0E* |
| AROSA | *344201.7N / 1404157.3E* | SPARK | *350312.0N / 1401416.7E* |
| AVEEY | *344155.9N / 1402158.0E* | STING | *345157.9N / 1401453.4E* |
| NYLON | *354018.5N / 1400919.9E* | TT256 | *345655.4N / 1401122.9E* |
| SHAFT | *352227.4N / 1401313.3E* | TT257 | *345838.5N / 1400146.6E* |

CHANGE : ALDEN established

**STANDARD ARRIVAL CHART-INSTRUMENT**

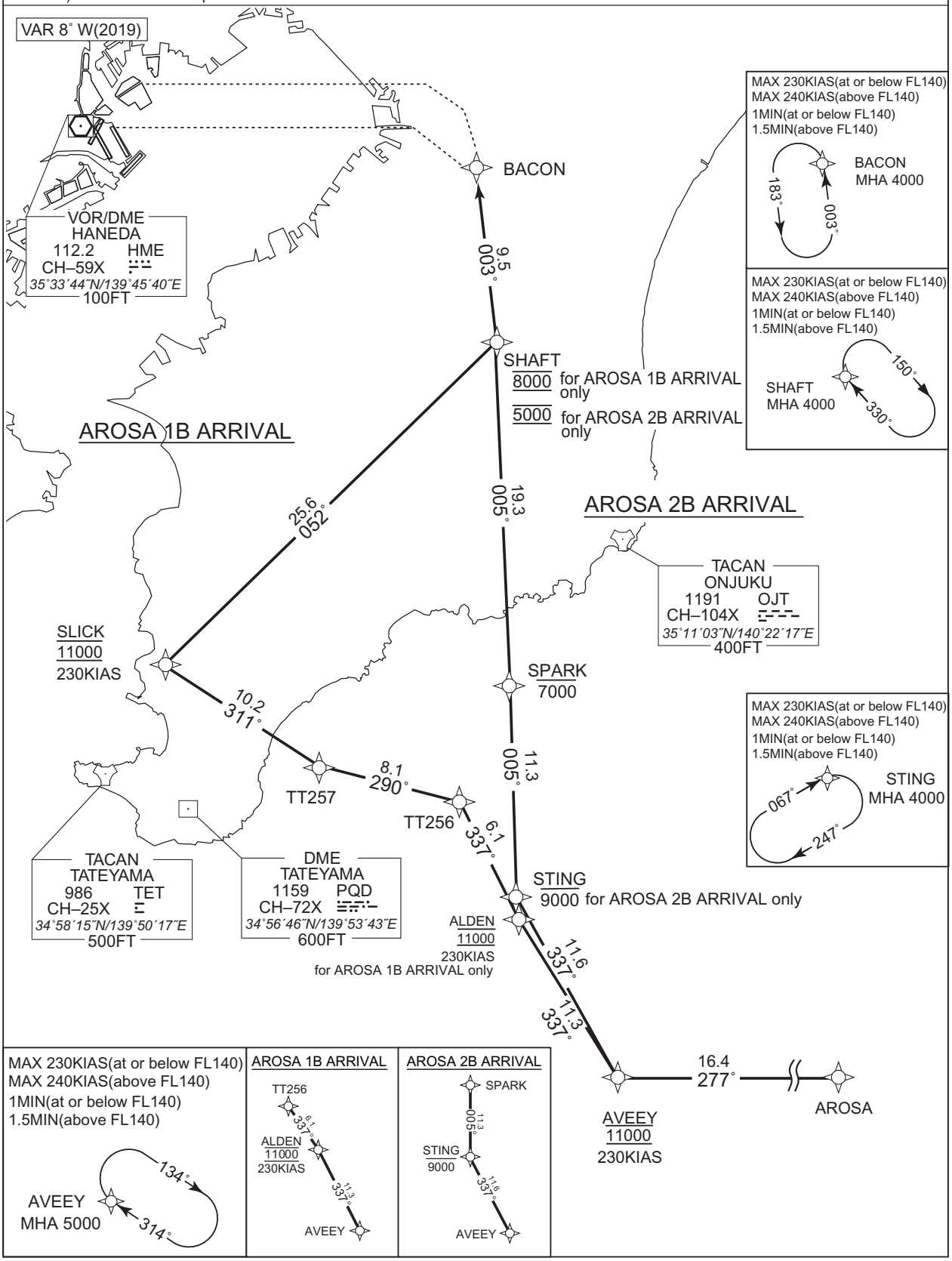
RJTT / TOKYO INTL

RNAV STAR RWY22/23

AROSA 1B ARRIVAL
AROSA 2B ARRIVAL

RNAV 1

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




CHANGE : RTE FM AVEEY to TT256 (ALDEN established)

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## AROSA 1B ARRIVAL

From AROSA, to AVEEY at 11000FT, to ALDEN at 11000FT, to TT256, to TT257, to SLICK at 11000FT, to SHAFT at 8000FT, to BACON.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | ALDEN | – | 337 (330.0) | -7.5 | 11.3 | – | 11000 | 230 | – | RNAV1 |
| 004 | TF | TT256 | – | 337 (329.9) | -7.5 | 6.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT257 | – | 290 (282.4) | -7.5 | 8.1 | – | – | – | – | RNAV1 |
| 006 | TF | SLICK | – | 311 (303.1) | -7.5 | 10.2 | – | 11000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 052 (044.3) | -7.5 | 25.6 | – | 8000 | – | – | RNAV1 |
| 008 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : RTE FM AVEEY to TT256 (ALDEN established), HLDG pattern at STING deleted.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## AROSA 2B ARRIVAL

From AROSA, to AVEEY at 11000FT, to STING at or below 9000FT , to SPARK at or below 7000FT, to SHAFT at 5000FT, to BACON.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | STING | – | 337 (330.0) | -7.5 | 11.6 | – | -9000 | – | – | RNAV1 |
| 004 | TF | SPARK | – | 005 (357.4) | -7.5 | 11.3 | – | -7000 | – | – | RNAV1 |
| 005 | TF | SHAFT | – | 005 (357.4) | -7.5 | 19.3 | – | 5000 | – | – | RNAV1 |
| 006 | TF | BACON | – | 003 (355.2) | -7.5 | 9.5 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ALDEN | *345141.1N / 1401505.3E* | SLICK | *350412.7N / 1395120.0E* |
| AROSA | *344201.7N / 1404157.3E* | SPARK | *350312.0N / 1401416.7E* |
| AVEEY | *344155.9N / 1402158.0E* | STING | *345157.9N / 1401453.4E* |
| BACON | *353155.0N / 1401215.1E* | TT256 | *345655.4N / 1401122.9E* |
| SHAFT | *352227.4N / 1401313.3E* | TT257 | *345838.5N / 1400146.6E* |

CHANGE : ALDEN established

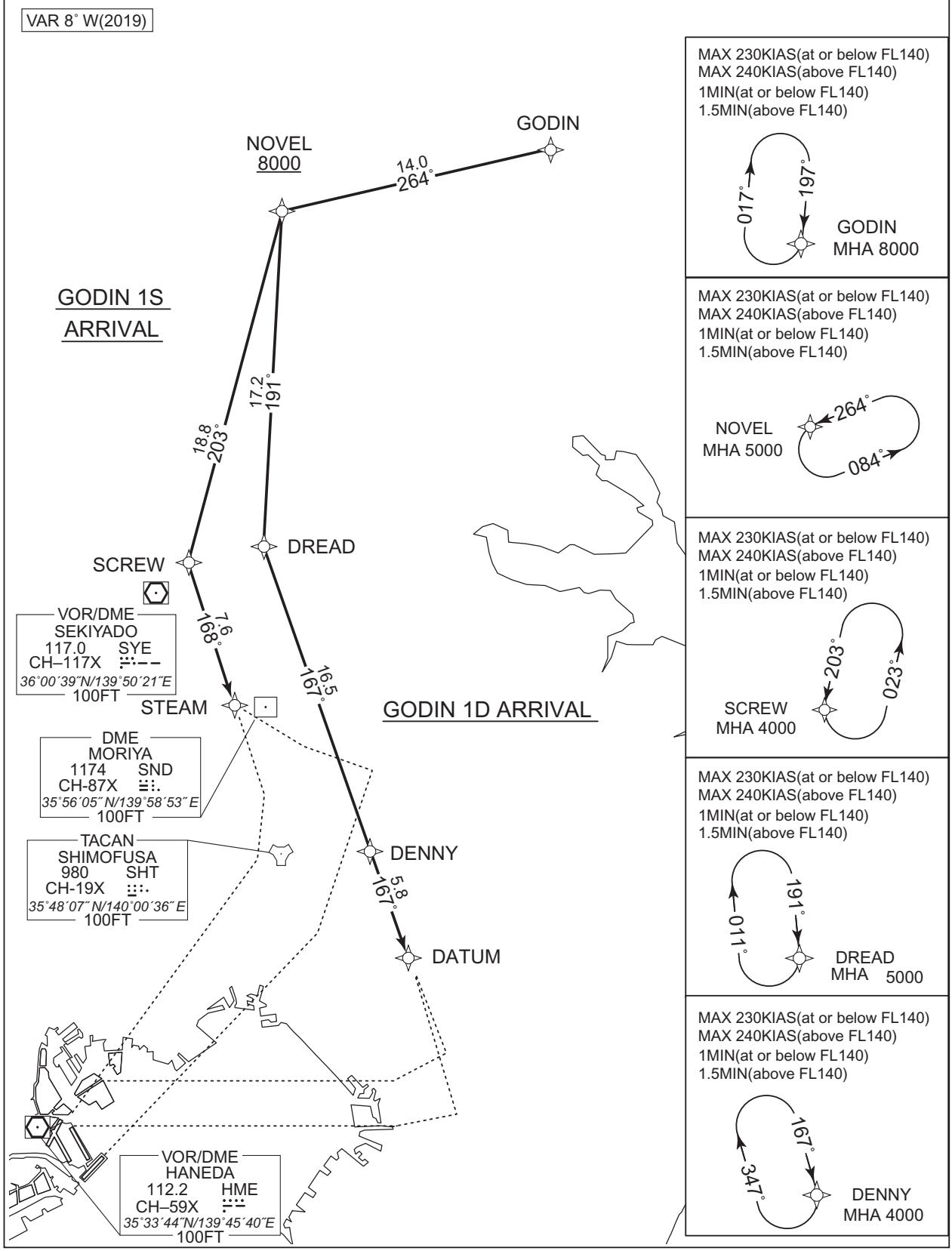
**STANDARD ARRIVAL CHART-INSTRUMENT**

RJTT / TOKYO INTL

RNAV STAR RWY22/23

| GODIN 1S ARRIVAL<br>GODIN 1D ARRIVAL | RNAV 1 |
|---|---|

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



STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY22/23

## GODIN 1S ARRIVAL

From GODIN, to NOVEL at or above 8000FT, to SCREW, to STEAM.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | +8000 | – | – | RNAV1 |
| 003 | TF | SCREW | – | 203 (195.2) | -7.5 | 18.8 | – | – | – | – | RNAV1 |
| 004 | TF | STEAM | – | 168 (160.4) | -7.5 | 7.6 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SCREW | 203 (195.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Restriction on NOVEL

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## GODIN 1D ARRIVAL

From GODIN, to NOVEL at or above 8000FT, to DREAD, to DENNY, to DATUM.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | +8000 | – | – | RNAV1 |
| 003 | TF | DREAD | – | 191 (183.1) | -7.5 | 17.2 | – | – | – | – | RNAV1 |
| 004 | TF | DENNY | – | 167 (159.9) | -7.5 | 16.5 | – | – | – | – | RNAV1 |
| 005 | TF | DATUM | | 167 (160.0) | -7.5 | 5.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | DREAD | 191 (183.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | DENNY | 167 (159.9) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| DATUM | *354259.6N / 1400824.3E* | NOVEL | *362106.9N / 1400004.9E* |
| DENNY | *354828.8N / 1400556.4E* | SCREW | *360301.2N / 1395400.4E* |
| DREAD | *360359.2N / 1395856.9E* | STEAM | *355553.3N / 1395708.4E* |
| GODIN | *362425.3N / 1401655.9E* | | |

CHANGE : Restriction on NOVEL

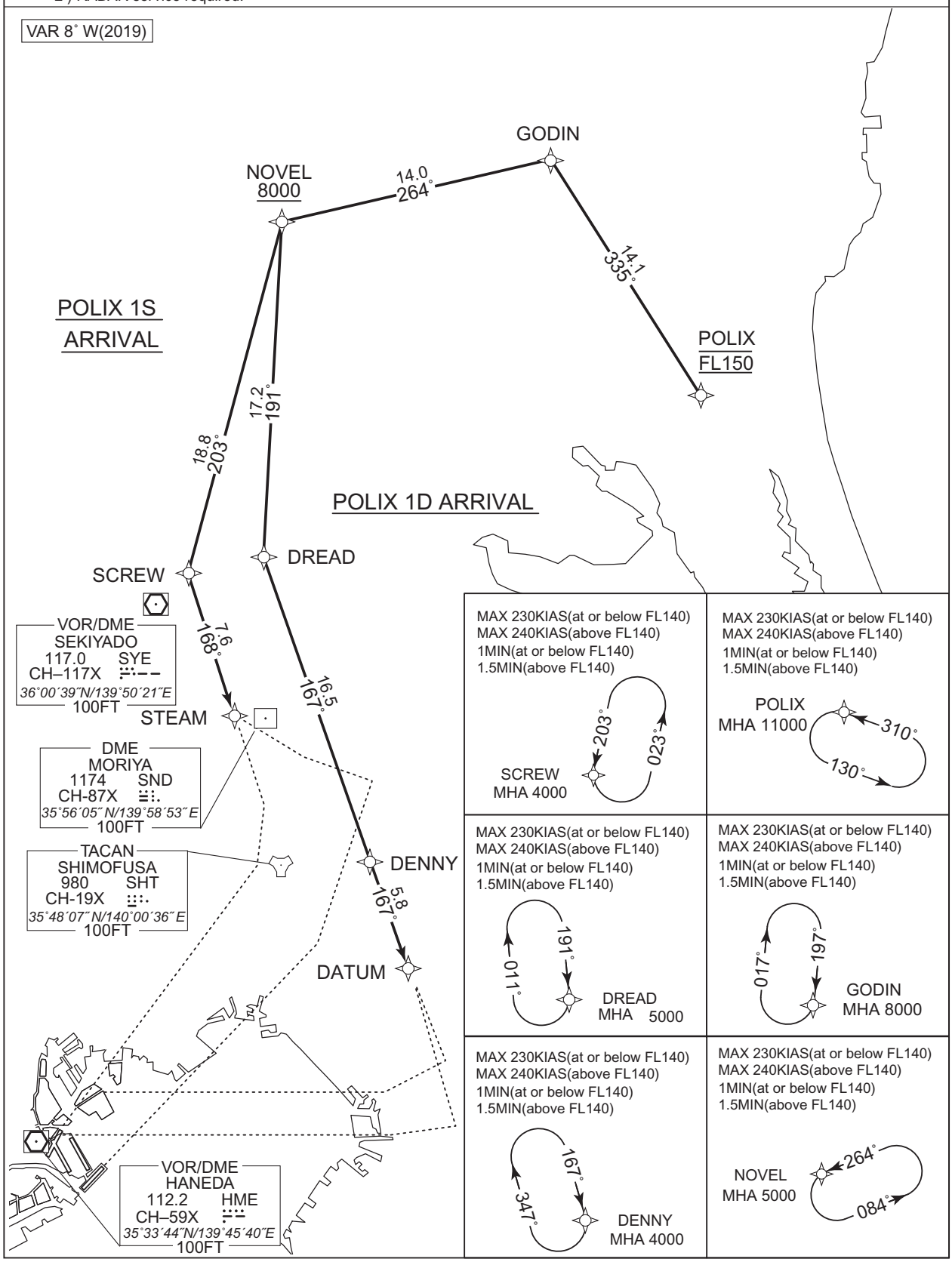
**STANDARD ARRIVAL CHART-INSTRUMENT**

RJTT / TOKYO INTL

RNAV STAR RWY22/23

| POLIX 1S ARRIVAL<br>POLIX 1D ARRIVAL | RNAV 1 |
|---|---|

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



STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## POLIX 1S ARRIVAL

From POLIX at FL150, to GODIN, to NOVEL at or above 8000FT, to SCREW, to STEAM.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | GODIN | – | 335 (327.2) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 003 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | +8000 | – | – | RNAV1 |
| 004 | TF | SCREW | – | 203 (195.2) | -7.5 | 18.8 | – | – | – | – | RNAV1 |
| 005 | TF | STEAM | – | 168 (160.4) | -7.5 | 7.6 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SCREW | 203 (195.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Restriction on NOVEL

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

## POLIX 1D ARRIVAL

From POLIX at FL150, to GODIN, to NOVEL at or above 8000FT, to DREAD, to DENNY, to DATUM.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | GODIN | – | 335 (327.2) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 003 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | +8000 | – | – | RNAV1 |
| 004 | TF | DREAD | – | 191 (183.1) | -7.5 | 17.2 | – | – | – | – | RNAV1 |
| 005 | TF | DENNY | – | 167 (159.9) | -7.5 | 16.5 | – | – | – | – | RNAV1 |
| 006 | TF | DATUM | – | 167 (160.0) | -7.5 | 5.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | DREAD | 191 (183.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | DENNY | 167 (159.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| DATUM | *354259.6N / 1400824.3E* | NOVEL | *362106.9N / 1400004.9E* |
| DENNY | *354828.8N / 1400556.4E* | POLIX | *361237.1N / 1402622.5E* |
| DREAD | *360359.2N / 1395856.9E* | SCREW | *360301.2N / 1395400.4E* |
| GODIN | *362425.3N / 1401655.9E* | STEAM | *355553.3N / 1395708.4E* |

CHANGE : Restriction on NOVEL

**STANDARD ARRIVAL CHART-INSTRUMENT**

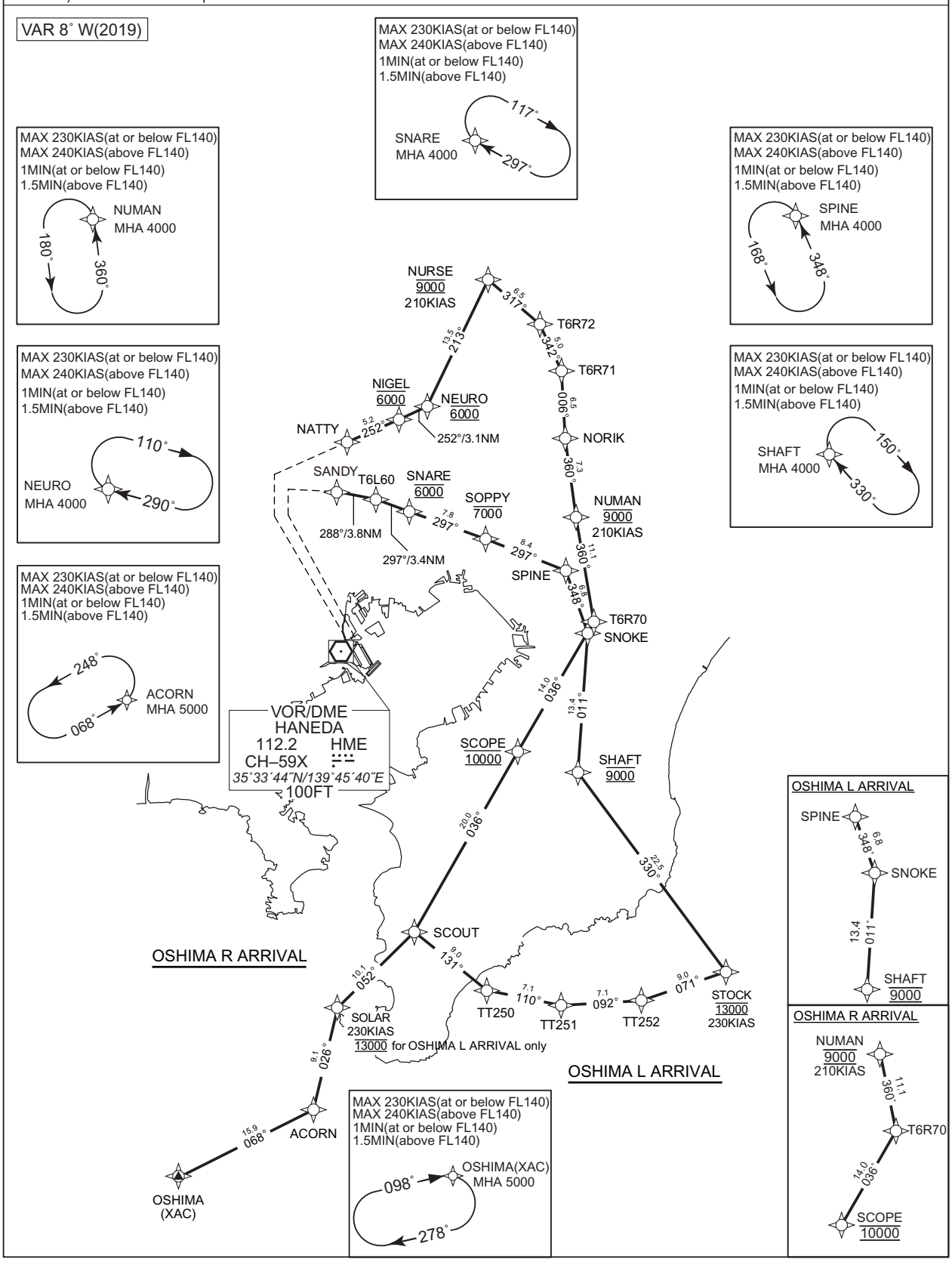
RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

OSHIMA L ARRIVAL
OSHIMA R ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## OSHIMA L ARRIVAL

From XAC, to ACORN, to SOLAR at 13000FT, to SCOUT, to TT250, to TT251, to TT252, to STOCK at 13000FT, to SHAFT at 9000FT, to SNOKE, to SPINE, to SOPPY at or below 7000FT, to SNARE at 6000FT, to T6L60, to SANDY.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | – | – | – | RNAV1 |
| 003 | TF | SOLAR | – | 026 (018.4) | -7.5 | 9.1 | – | 13000 | 230 | – | RNAV1 |
| 004 | TF | SCOUT | – | 052 (044.3) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT250 | – | 131 (123.1) | -7.5 | 9.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT251 | – | 110 (102.5) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 007 | TF | TT252 | – | 092 (084.3) | -7.5 | 7.1 | – | – | – | – | RNAV1 |
| 008 | TF | STOCK | – | 071 (063.6) | -7.5 | 9.0 | – | 13000 | 230 | – | RNAV1 |
| 009 | TF | SHAFT | – | 330 (322.4) | -7.5 | 22.5 | – | 9000 | | – | RNAV1 |
| 010 | TF | SNOKE | – | 011 (003.4) | -7.5 | 13.4 | – | – | – | – | RNAV1 |
| 011 | TF | SPINE | – | 348 (340.6) | -7.5 | 6.8 | – | – | – | – | RNAV1 |
| 012 | TF | SOPPY | – | 297 (289.2) | -7.5 | 8.4 | – | -7000 | – | – | RNAV1 |
| 013 | TF | SNARE | – | 297 (289.1) | -7.5 | 7.8 | – | 6000 | – | – | RNAV1 |
| 014 | TF | T6L60 | – | 297 (289.0) | -7.5 | 3.4 | – | – | – | – | RNAV1 |
| 015 | TF | SANDY | – | 288 (280.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SPINE | 348 (340.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

## OSHIMA R ARRIVAL

From XAC, to ACORN, to SOLAR, to SCOUT, to SCOPE at 10000FT, to T6R70, to NUMAN at 9000FT, to NORIK, to T6R71, to T6R72, to NURSE at 9000FT, to NEURO at 6000FT, to NIGEL at 6000FT, to NATTY.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | ACORN | – | 068 (060.8) | -7.5 | 15.9 | – | – | – | – | RNAV1 |
| 003 | TF | SOLAR | – | 026 (018.4) | -7.5 | 9.1 | – | – | 230 | – | RNAV1 |
| 004 | TF | SCOUT | – | 052 (044.3) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 005 | TF | SCOPE | – | 036 (028.5) | -7.5 | 20.0 | – | 10000 | – | – | RNAV1 |
| 006 | TF | T6R70 | – | 036 (028.6) | -7.5 | 14.0 | – | – | – | – | RNAV1 |
| 007 | TF | NUMAN | – | 360 (352.5) | -7.5 | 11.1 | – | 9000 | 210 | – | RNAV1 |
| 008 | TF | NORIK | – | 360 (352.5) | -7.5 | 7.3 | – | – | – | – | RNAV1 |
| 009 | TF | T6R71 | – | 006 (358.9) | -7.5 | 6.5 | – | – | – | – | RNAV1 |
| 010 | TF | T6R72 | – | 342 (334.4) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 011 | TF | NURSE | – | 317 (309.8) | -7.5 | 6.5 | – | 9000 | 210 | – | RNAV1 |
| 012 | TF | NEURO | – | 213 (205.5) | -7.5 | 13.5 | – | 6000 | – | – | RNAV1 |
| 013 | TF | NIGEL | – | 252 (244.1) | -7.5 | 3.1 | – | 6000 | – | – | RNAV1 |
| 014 | TF | NATTY | – | 252 (244.1) | -7.5 | 5.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NUMAN | 360 (352.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : Correction of misdescription (Waypoint Identifier of the row with Serial Number 006)

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ACORN | *345028.8N / 1394146.7E* | SOLAR | *345909.2N / 1394518.5E* |
| NATTY | *355350.9N / 1394531.3E* | SOPPY | *354458.8N / 1400140.3E* |
| NEURO | *355727.6N / 1395441.3E* | SPINE | *354213.5N / 1401125.8E* |
| NIGEL | *355607.5N / 1395117.8E* | STOCK | *350438.7N / 1403002.9E* |
| NORIK | *355428.9N / 1401054.5E* | T6L60 | *354838.2N / 1394838.4E* |
| NUMAN | *354714.4N / 1401204.9E* | T6R70 | *353614.4N / 1401351.4E* |
| NURSE | *360939.3N / 1400153.3E* | T6R71 | *360059.5N / 1401045.1E* |
| SANDY | *354917.5N / 1394402.8E* | T6R72 | *360530.2N / 1400804.3E* |
| SCOPE | *352358.4N / 1400538.3E* | TT250 | *350129.7N / 1400308.5E* |
| SCOUT | *350624.1N / 1395356.8E* | TT251 | *345957.7N /1401136.0E* |
| SHAFT | *352227.4N / 1401313.3E* | TT252 | *350039.9N / 1402013.0E* |
| SNARE | *354731.1N / 1395238.1E* | XAC | *344244.1N / 1392450.5E* |
| SNOKE | *353551.6N / 1401411.7E* | | |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

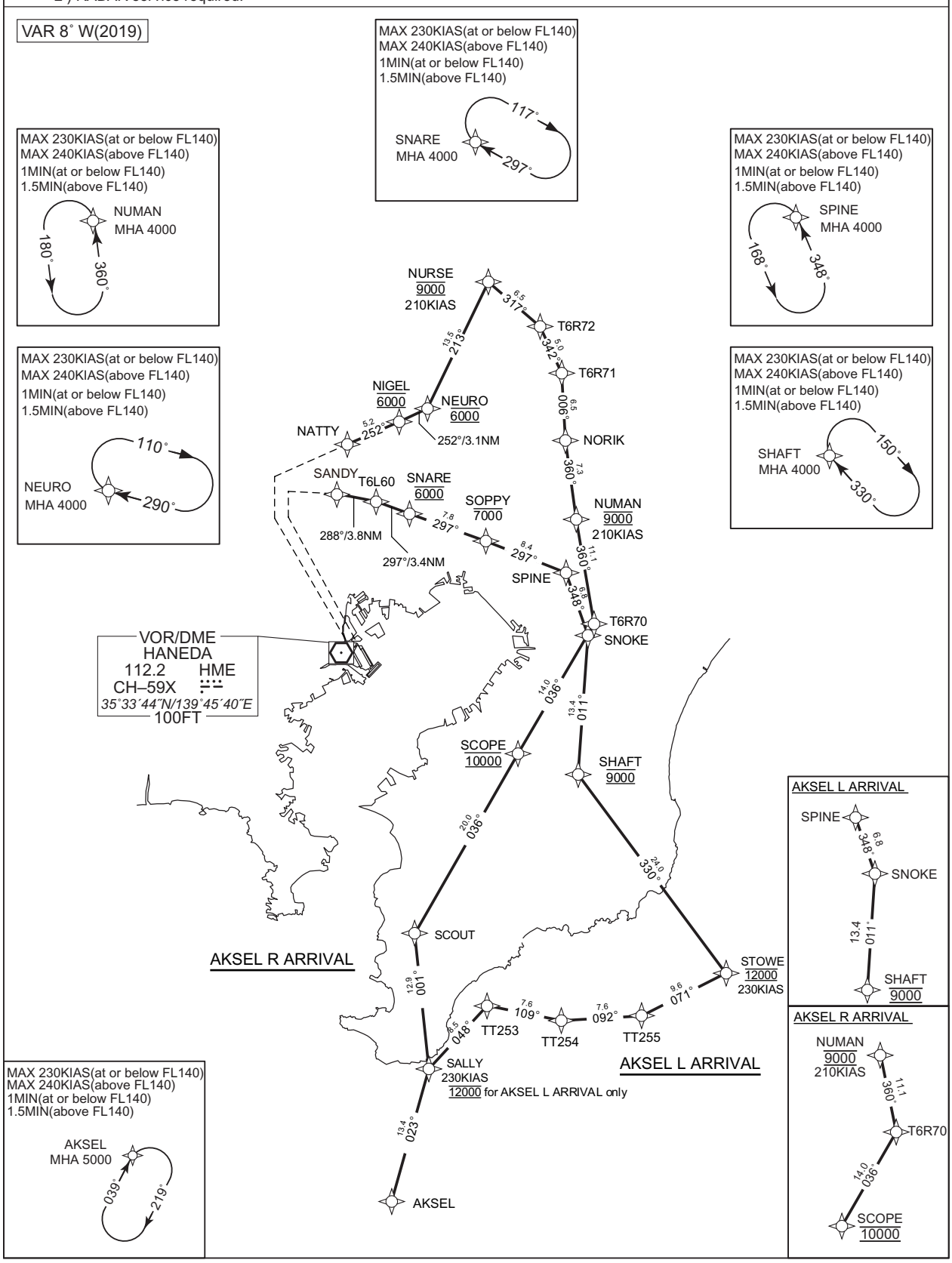
RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

AKSEL L ARRIVAL
AKSEL R ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## AKSEL L ARRIVAL

From AKSEL, to SALLY at 12000FT, to TT253, to TT254, to TT255, to STOWE at 12000FT, to SHAFT at 9000FT, to SNOKE, to SPINE, to SOPPY at or below 7000FT, to SNARE at 6000FT, to T6L60, to SANDY.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | SALLY | – | 023 (015.0) | -7.5 | 13.4 | – | 12000 | 230 | – | RNAV1 |
| 003 | TF | TT253 | – | 048 (040.5) | -7.5 | 8.5 | – | – | – | – | RNAV1 |
| 004 | TF | TT254 | – | 109 (102.0) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 005 | TF | TT255 | – | 092 (084.4) | -7.5 | 7.6 | – | – | – | – | RNAV1 |
| 006 | TF | STOWE | – | 071 (063.6) | -7.5 | 9.6 | – | 12000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 330 (322.4) | -7.5 | 24.0 | – | 9000 | – | – | RNAV1 |
| 008 | TF | SNOKE | – | 011 (003.4) | -7.5 | 13.4 | – | – | – | – | RNAV1 |
| 009 | TF | SPINE | – | 348 (340.6) | -7.5 | 6.8 | – | – | – | – | RNAV1 |
| 010 | TF | SOPPY | – | 297 (289.2) | -7.5 | 8.4 | – | -7000 | – | – | RNAV1 |
| 011 | TF | SNARE | – | 297 (289.1) | -7.5 | 7.8 | – | 6000 | – | – | RNAV1 |
| 012 | TF | T6L60 | – | 297 (289.0) | -7.5 | 3.4 | – | – | – | – | RNAV1 |
| 013 | TF | SANDY | – | 288 (280.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SPINE | 348 (340.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

## AKSEL R ARRIVAL

From AKSEL, to SALLY, to SCOUT, to SCOPE at 10000FT, to T6R70, to NUMAN at 9000FT, to NORIK, to T6R71, to T6R72, to NURSE at 9000FT, to NEURO at 6000FT, to NIGEL at 6000FT, to NATTY.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | SALLY | – | 023 (015.0) | -7.5 | 13.4 | – | – | 230 | – | RNAV1 |
| 003 | TF | SCOUT | – | 001 (353.7) | -7.5 | 12.9 | – | – | – | – | RNAV1 |
| 004 | TF | SCOPE | – | 036 (028.5) | -7.5 | 20.0 | – | 10000 | – | – | RNAV1 |
| 005 | TF | T6R70 | – | 036 (028.6) | -7.5 | 14.0 | – | – | – | – | RNAV1 |
| 006 | TF | NUMAN | – | 360 (352.5) | -7.5 | 11.1 | – | 9000 | 210 | – | RNAV1 |
| 007 | TF | NORIK | – | 360 (352.5) | -7.5 | 7.3 | – | – | – | – | RNAV1 |
| 008 | TF | T6R71 | – | 006 (358.9) | -7.5 | 6.5 | – | – | – | – | RNAV1 |
| 009 | TF | T6R72 | – | 342 (334.4) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 010 | TF | NURSE | – | 317 (309.8) | -7.5 | 6.5 | – | 9000 | 210 | – | RNAV1 |
| 011 | TF | NEURO | – | 213 (205.5) | -7.5 | 13.5 | – | 6000 | – | – | RNAV1 |
| 012 | TF | NIGEL | – | 252 (244.1) | -7.5 | 3.1 | – | 6000 | – | – | RNAV1 |
| 013 | TF | NATTY | – | 252 (244.1) | -7.5 | 5.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NUMAN | 360 (352.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | SNARE | *354731.1N / 1395238.1E* |
| NATTY | *355350.9N / 1394531.3E* | SNOKE | *353551.6N / 1401411.7E* |
| NEURO | *355727.6N / 1395441.3E* | SOPPY | *354458.8N / 1400140.3E* |
| NIGEL | *355607.5N / 1395117.8E* | SPINE | *354213.5N / 1401125.8E* |
| NORIK | *355428.9N / 1401054.5E* | STOWE | *350325.9N / 1403111.4E* |
| NUMAN | *354714.4N / 1401204.9E* | T6L60 | *354838.2N / 1394838.4E* |
| NURSE | *360939.3N / 1400153.3E* | T6R70 | *353614.4N / 1401351.4E* |
| SALLY | *345333.9N / 1395540.1E* | T6R71 | *360059.5N / 1401045.1E* |
| SANDY | *354917.5N / 1394402.8E* | T6R72 | *360530.2N / 1400804.3E* |
| SCOPE | *352358.4N / 1400538.3E* | TT253 | *350001.4N / 1400224.6E* |
| SCOUT | *350624.1N / 1395356.8E* | TT254 | *345826.5N / 1401129.4E* |
| SHAFT | *352227.4N / 1401313.3E* | TT255 | *345910.9N / 1402041.4E* |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

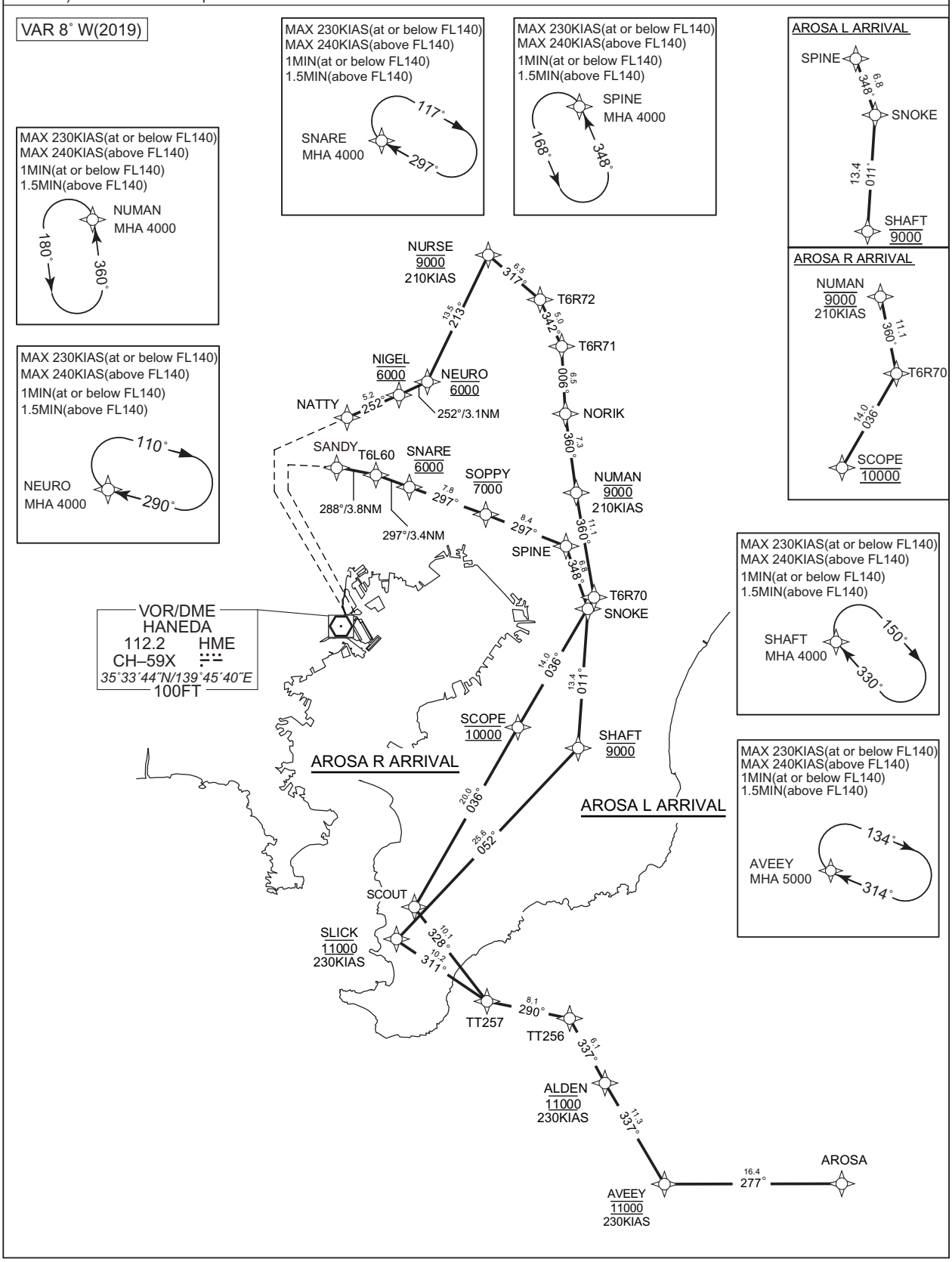
RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

AROSA L ARRIVAL
AROSA R ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## AROSA L ARRIVAL

From AROSA, to AVEEY at 11000FT, to ALDEN at 11000FT, to TT256, to TT257, to SLICK at 11000FT, to SHAFT at 9000FT, to SNOKE, to SPINE, to SOPPY at or below 7000FT, to SNARE at 6000FT, to T6L60, to SANDY.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | ALDEN | – | 337 (330.0) | -7.5 | 11.3 | – | 11000 | 230 | – | RNAV1 |
| 004 | TF | TT256 | – | 337 (329.9) | -7.5 | 6.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT257 | – | 290 (282.4) | -7.5 | 8.1 | – | – | – | – | RNAV1 |
| 006 | TF | SLICK | – | 311 (303.1) | -7.5 | 10.2 | – | 11000 | 230 | – | RNAV1 |
| 007 | TF | SHAFT | – | 052 (044.3) | -7.5 | 25.6 | – | 9000 | – | – | RNAV1 |
| 008 | TF | SNOKE | – | 011 (003.4) | -7.5 | 13.4 | – | – | – | – | RNAV1 |
| 009 | TF | SPINE | – | 348 (340.6) | -7.5 | 6.8 | – | – | – | – | RNAV1 |
| 010 | TF | SOPPY | – | 297 (289.2) | -7.5 | 8.4 | – | -7000 | – | – | RNAV1 |
| 011 | TF | SNARE | – | 297 (289.1) | -7.5 | 7.8 | – | 6000 | – | – | RNAV1 |
| 012 | TF | T6L60 | – | 297 (289.0) | -7.5 | 3.4 | – | – | – | – | RNAV1 |
| 013 | TF | SANDY | – | 288 (280.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SPINE | 348 (340.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## AROSA R ARRIVAL

From AROSA, to AVEEY at 11000FT, to ALDEN at 11000FT, to TT256, to TT257, to SCOUT, to SCOPE at 10000FT, to T6R70, to NUMAN at 9000FT, to NORIK, to T6R71, to T6R72, to NURSE at 9000FT, to NEURO at 6000FT, to NIGEL at 6000FT, to NATTY.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | 11000 | 230 | – | RNAV1 |
| 003 | TF | ALDEN | – | 337 (330.0) | -7.5 | 11.3 | – | 11000 | 230 | – | RNAV1 |
| 004 | TF | TT256 | – | 337 (329.9) | -7.5 | 6.1 | – | – | – | – | RNAV1 |
| 005 | TF | TT257 | – | 290 (282.4) | -7.5 | 8.1 | – | – | – | – | RNAV1 |
| 006 | TF | SCOUT | – | 328 (320.5) | -7.5 | 10.1 | – | – | – | – | RNAV1 |
| 007 | TF | SCOPE | – | 036 (028.5) | -7.5 | 20.0 | – | 10000 | – | – | RNAV1 |
| 008 | TF | T6R70 | – | 036 (028.6) | -7.5 | 14.0 | – | – | – | – | RNAV1 |
| 009 | TF | NUMAN | – | 360 (352.5) | -7.5 | 11.1 | – | 9000 | 210 | – | RNAV1 |
| 010 | TF | NORIK | – | 360 (352.5) | -7.5 | 7.3 | – | – | | – | RNAV1 |
| 011 | TF | T6R71 | – | 006 (358.9) | -7.5 | 6.5 | – | – | – | – | RNAV1 |
| 012 | TF | T6R72 | – | 342 (334.4) | -7.5 | 5.0 | – | – | – | – | RNAV1 |
| 013 | TF | NURSE | – | 317 (309.8) | -7.5 | 6.5 | – | 9000 | 210 | – | RNAV1 |
| 014 | TF | NEURO | – | 213 (205.5) | -7.5 | 13.5 | – | 6000 | – | – | RNAV1 |
| 015 | TF | NIGEL | – | 252 (244.1) | -7.5 | 3.1 | – | 6000 | – | – | RNAV1 |
| 016 | TF | NATTY | – | 252 (244.1) | -7.5 | 5.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NUMAN | 360 (352.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ALDEN | *345141.1N / 1401505.3E* | SHAFT | *352227.4N / 1401313.3E* |
| AROSA | *344201.7N / 1404157.3E* | SLICK | *350412.7N / 1395120.0E* |
| AVEEY | *344155.9N / 1402158.0E* | SNARE | *354731.1N / 1395238.1E* |
| NATTY | *355350.9N / 1394531.3E* | SNOKE | *353551.6N / 1401411.7E* |
| NEURO | *355727.6N / 1395441.3E* | SOPPY | *354458.8N / 1400140.3E* |
| NIGEL | *355607.5N / 1395117.8E* | SPINE | *354213.5N / 1401125.8E* |
| NORIK | *355428.9N / 1401054.5E* | T6L60 | *354838.2N / 1394838.4E* |
| NUMAN | *354714.4N / 1401204.9E* | T6R70 | *353614.4N / 1401351.4E* |
| NURSE | *360939.3N / 1400153.3E* | T6R71 | *360059.5N / 1401045.1E* |
| SANDY | *354917.5N / 1394402.8E* | T6R72 | *360530.2N / 1400804.3E* |
| SCOPE | *352358.4N / 1400538.3E* | TT256 | *345655.4N / 1401122.9E* |
| SCOUT | *350624.1N / 1395356.8E* | TT257 | *345838.5N / 1400146.6E* |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

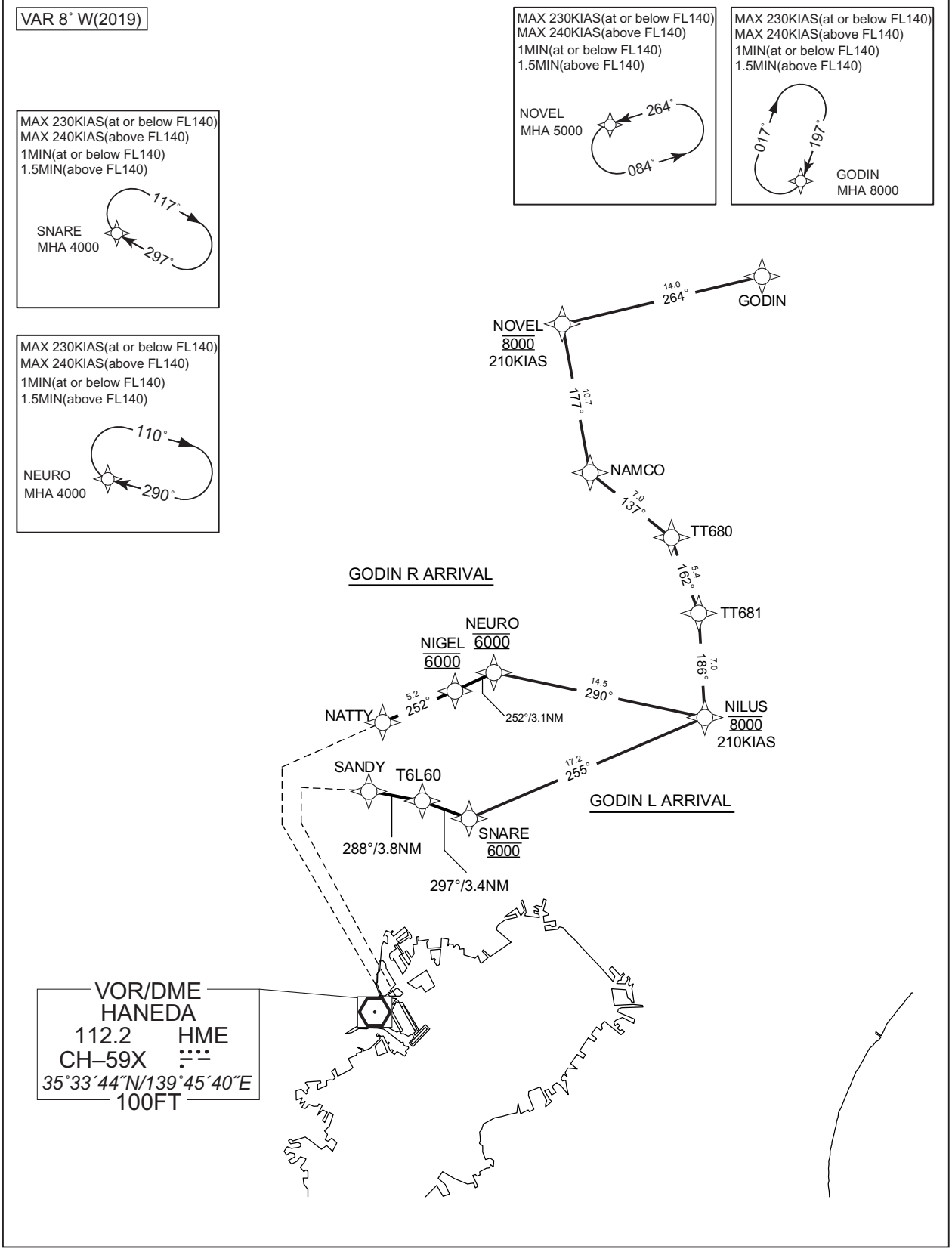
RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

GODIN L ARRIVAL
GODIN R ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## GODIN L ARRIVAL

From GODIN, to NOVEL at 8000FT, to NAMCO, to TT680, to TT681, to NILUS at 8000FT, to SNARE at 6000FT, to T6L60, to SANDY.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | 8000 | 210 | – | RNAV1 |
| 003 | TF | NAMCO | – | 177 (169.8) | -7.5 | 10.7 | – | – | – | – | RNAV1 |
| 004 | TF | TT680 | – | 137 (129.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 005 | TF | TT681 | – | 162 (154.3) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 006 | TF | NILUS | – | 186 (178.9) | -7.5 | 7.0 | – | 8000 | 210 | – | RNAV1 |
| 007 | TF | SNARE | – | 255 (247.0) | -7.5 | 17.2 | – | 6000 | – | – | RNAV1 |
| 008 | TF | T6L60 | – | 297 (289.0) | -7.5 | 3.4 | – | – | – | – | RNAV1 |
| 009 | TF | SANDY | – | 288 (280.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

## GODIN R ARRIVAL

From GODIN, to NOVEL at 8000FT, to NAMCO, to TT680, to TT681, to NILUS at 8000FT, to NEURO at 6000FT, to NIGEL at 6000FT, to NATTY.

| | |
|---|---|
| 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 | GODIN | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | 8000 | 210 | – | RNAV1 |
| 003 | TF | NAMCO | – | 177 (169.8) | -7.5 | 10.7 | – | – | – | – | RNAV1 |
| 004 | TF | TT680 | – | 137 (129.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 005 | TF | TT681 | – | 162 (154.3) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 006 | TF | NILUS | – | 186 (178.9) | -7.5 | 7.0 | – | 8000 | 210 | – | RNAV1 |
| 007 | TF | NEURO | – | 290 (282.9) | -7.5 | 14.5 | – | 6000 | – | – | RNAV1 |
| 008 | TF | NIGEL | – | 252 (244.1) | -7.5 | 3.1 | – | 6000 | – | – | RNAV1 |
| 009 | TF | NATTY | – | 252 (244.1) | -7.5 | 5.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 8000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | L | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| GODIN | *362425.3N / 1401655.9E* | NOVEL | *362106.9N / 1400004.9E* |
| NAMCO | *361035.1N / 1400226.3E* | SANDY | *354917.5N / 1394402.8E* |
| NATTY | *355350.9N / 1394531.3E* | SNARE | *354731.1N / 1395238.1E* |
| NEURO | *355727.6N / 1395441.3E* | T6L60 | *354838.2N / 1394838.4E* |
| NIGEL | *355607.5N / 1395117.8E* | TT680 | *360608.2N / 1400904.0E* |
| NILUS | *355415.2N / 1401208.8E* | TT681 | *360113.8N / 1401158.7E* |

CHANGE : New PROC

**STANDARD ARRIVAL CHART-INSTRUMENT**

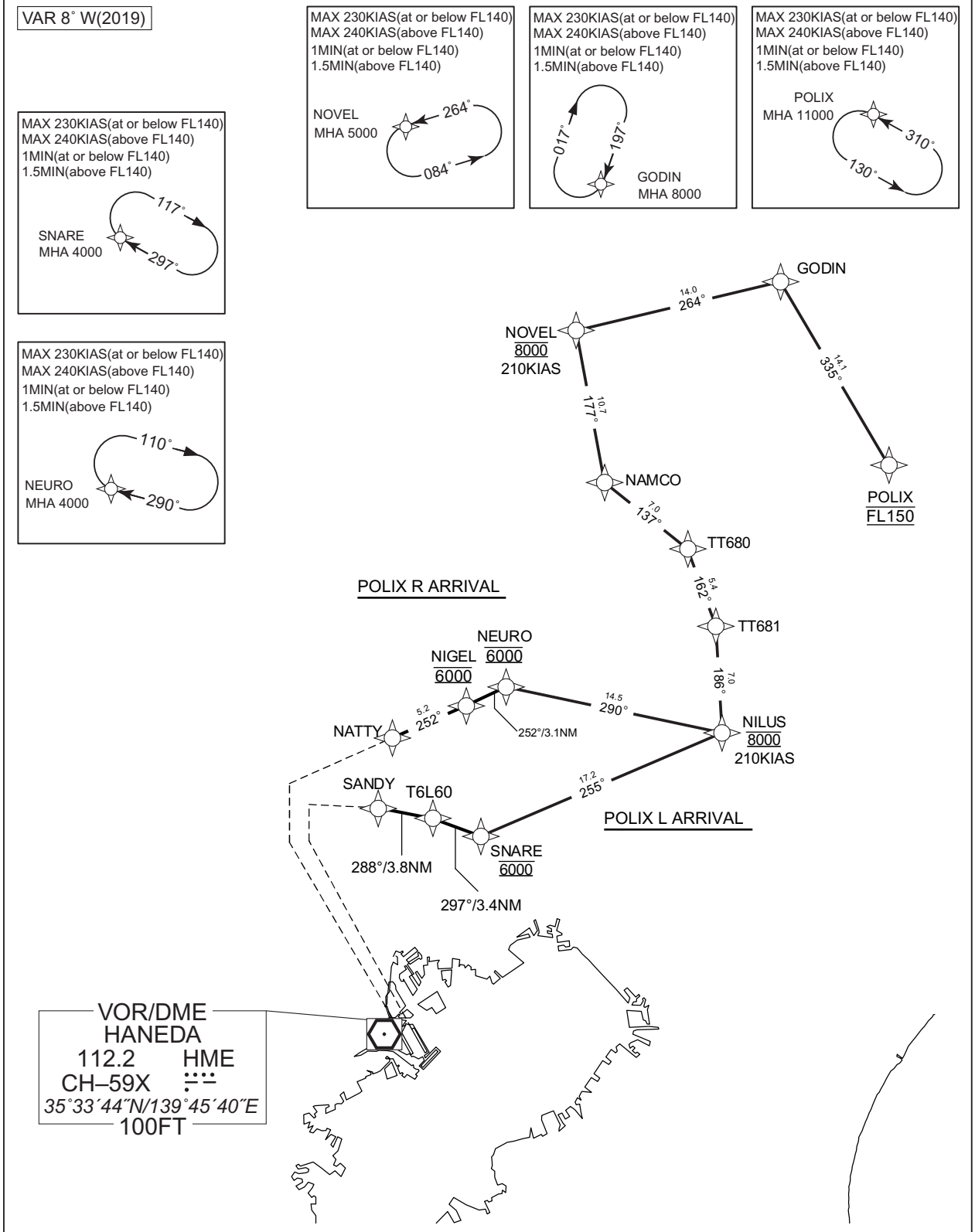
RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

POLIX L ARRIVAL
POLIX R ARRIVAL

RNAV 1

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




CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR RWY16L/16R

## POLIX L ARRIVAL

From POLIX at FL150, to GODIN, to NOVEL at 8000FT, to NAMCO, to TT680, to TT681, to NILUS at 8000FT, to SNARE at 6000FT, to T6L60, to SANDY.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | GODIN | – | 335 (327.2) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 003 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | 8000 | 210 | – | RNAV1 |
| 004 | TF | NAMCO | – | 177 (169.8) | -7.5 | 10.7 | – | – | – | – | RNAV1 |
| 005 | TF | TT680 | – | 137 (129.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT681 | – | 162 (154.3) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 007 | TF | NILUS | – | 186 (178.9) | -7.5 | 7.0 | – | 8000 | 210 | – | RNAV1 |
| 008 | TF | SNARE | – | 255 (247.0) | -7.5 | 17.2 | – | 6000 | – | – | RNAV1 |
| 009 | TF | T6L60 | – | 297 (289.0) | -7.5 | 3.4 | – | – | – | – | RNAV1 |
| 010 | TF | SANDY | – | 288 (280.0) | -7.5 | 3.8 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

## POLIX R ARRIVAL

From POLIX at FL150, to GODIN, to NOVEL at 8000FT, to NAMCO, to TT680, to TT681, to NILUS at 8000FT, to NEURO at 6000FT, to NIGEL at 6000FT, to NATTY.

| | |
|---|---|
| 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 | POLIX | – | – | -7.5 | – | – | FL150 | – | – | RNAV1 |
| 002 | TF | GODIN | – | 335 (327.2) | -7.5 | 14.1 | – | – | – | – | RNAV1 |
| 003 | TF | NOVEL | – | 264 (256.4) | -7.5 | 14.0 | – | 8000 | 210 | – | RNAV1 |
| 004 | TF | NAMCO | – | 177 (169.8) | -7.5 | 10.7 | – | – | – | – | RNAV1 |
| 005 | TF | TT680 | – | 137 (129.7) | -7.5 | 7.0 | – | – | – | – | RNAV1 |
| 006 | TF | TT681 | – | 162 (154.3) | -7.5 | 5.4 | – | – | – | – | RNAV1 |
| 007 | TF | NILUS | – | 186 (178.9) | -7.5 | 7.0 | – | 8000 | 210 | – | RNAV1 |
| 008 | TF | NEURO | – | 290 (282.9) | -7.5 | 14.5 | – | 6000 | – | – | RNAV1 |
| 009 | TF | NIGEL | – | 252 (244.1) | -7.5 | 3.1 | – | 6000 | – | – | RNAV1 |
| 010 | TF | NATTY | – | 252 (244.1) | -7.5 | 5.2 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9 | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : New PROC

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| GODIN | *362425.3N / 1401655.9E* | POLIX | *361237.1N / 1402622.5E* |
| NAMCO | *361035.1N / 1400226.3E* | SANDY | *354917.5N / 1394402.8E* |
| NATTY | *355350.9N / 1394531.3E* | SNARE | *354731.1N / 1395238.1E* |
| NEURO | *355727.6N / 1395441.3E* | T6L60 | *354838.2N / 1394838.4E* |
| NIGEL | *355607.5N / 1395117.8E* | TT680 | *360608.2N / 1400904.0E* |
| NILUS | *355415.2N / 1401208.8E* | TT681 | *360113.8N / 1401158.7E* |
| NOVEL | *362106.9N / 1400004.9E* | | |

CHANGE : New PROC

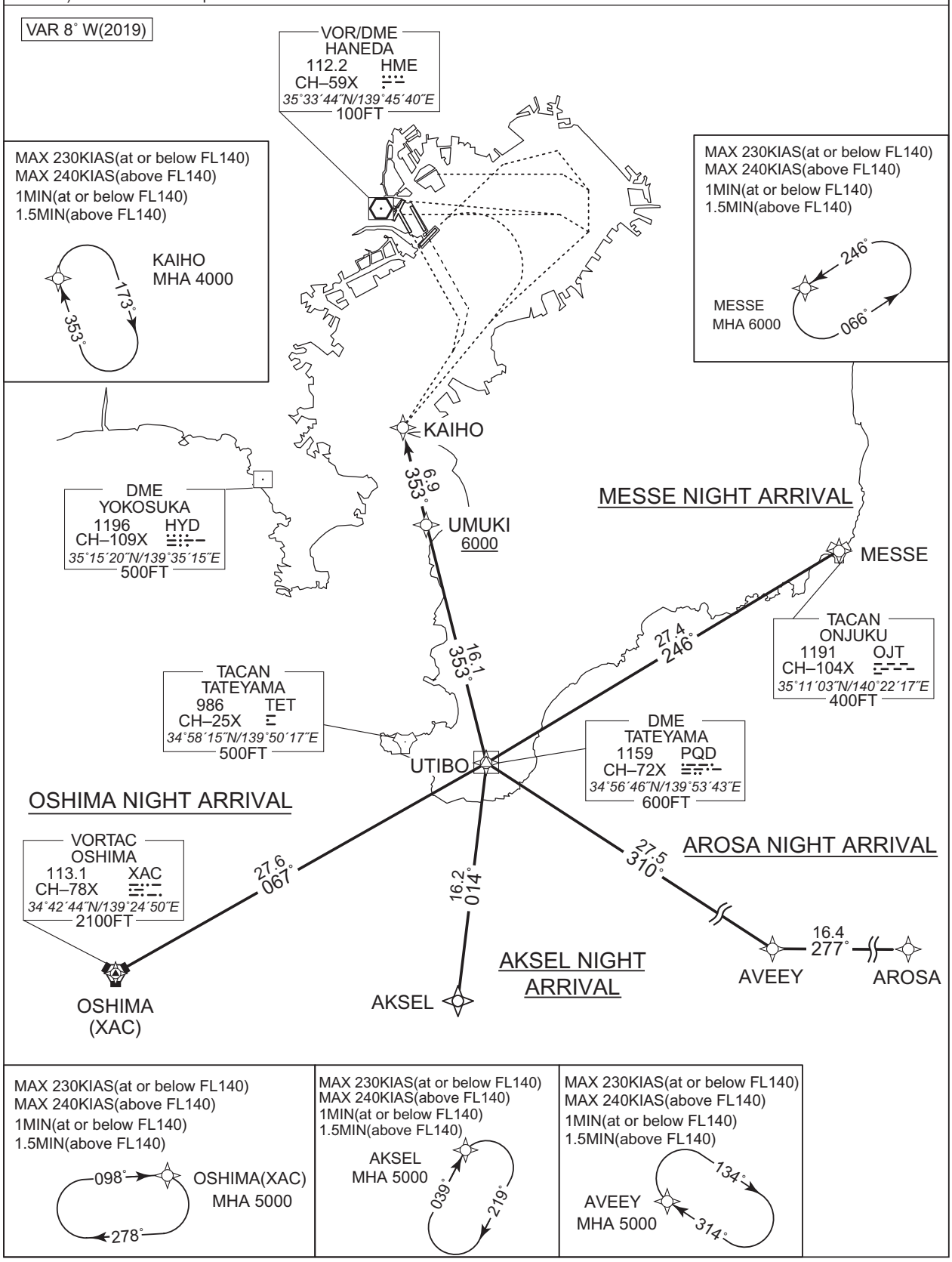
**STANDARD ARRIVAL CHART-INSTRUMENT**

RJTT / TOKYO INTL — RNAV STAR

OSHIMA NIGHT ARRIVAL / AKSEL NIGHT ARRIVAL
AROSA NIGHT ARRIVAL / MESSE NIGHT ARRIVAL

RNAV 1

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



STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## OSHIMA NIGHT ARRIVAL

From XAC, to UTIBO, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 067 (059.2) | -7.5 | 27.6 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## AKSEL NIGHT ARRIVAL

From AKSEL, to UTIBO, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 014 (006.6) | -7.5 | 16.2 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR

## AROSA NIGHT ARRIVAL

From AROSA, to AVEEY, to UTIBO, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | – | – | – | RNAV1 |
| 003 | TF | UTIBO | – | 310 (302.8) | -7.5 | 27.5 | – | – | – | – | RNAV1 |
| 004 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 005 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 5000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000)<br>1.5(+14001) | – | R | 4000 | – | -230(-14000)<br>-240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## MESSE NIGHT ARRIVAL

From MESSE, to UTIBO, to UMUKI at or above 6000FT, to KAIHO.

| | |
|---|---|
| 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 | MESSE | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 246 (238.8) | -7.5 | 27.4 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | – | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | MESSE | 246 (238.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 6000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | MESSE | *351100.8N / 1402214.7E* |
| AROSA | *344201.7N / 1404157.3E* | UMUKI | *351219.1N / 1394849.2E* |
| AVEEY | *344155.9N / 1402158.0E* | UTIBO | *345647.0N / 1395343.9E* |
| KAIHO | *351857.8N / 1394642.4E* | XAC | *344244.1N / 1392450.5E* |

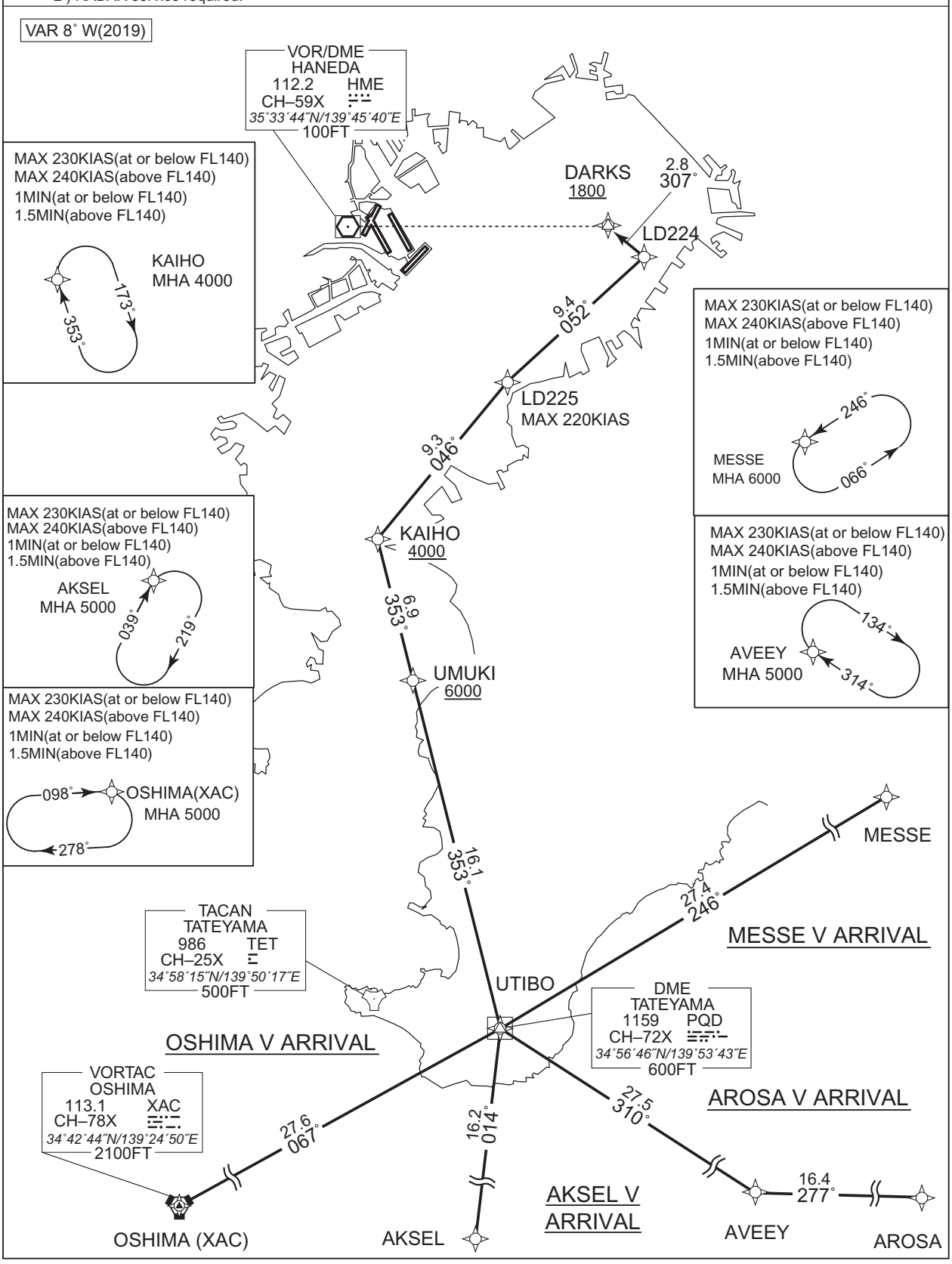
**STANDARD ARRIVAL CHART-INSTRUMENT**

RJTT / TOKYO INTL

RNAV STAR

| OSHIMA V ARRIVAL / AKSEL V ARRIVAL<br>AROSA V ARRIVAL / MESSE V ARRIVAL | RNAV 1 |
|---|---|

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



STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## OSHIMA V ARRIVAL

From XAC, to UTIBO, to UMUKI at or above 6000FT, to KAIHO at or above 4000FT, to LD225, to LD224, to DARKS at or above 1800FT.

| | |
|---|---|
| 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 | XAC | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 067 (059.2) | -7.5 | 27.6 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | +4000 | – | – | RNAV1 |
| 005 | TF | LD225 | – | 046 (038.9) | -7.5 | 9.3 | – | – | -220 | – | RNAV1 |
| 006 | TF | LD224 | – | 052 (044.9) | -7.5 | 9.4 | – | – | – | – | RNAV1 |
| 007 | TF | DARKS | – | 307 (299.7) | -7.5 | 2.8 | – | +1800 | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## AKSEL V ARRIVAL

From AKSEL, to UTIBO, to UMUKI at or above 6000FT, to KAIHO at or above 4000FT, to LD225, to LD224, to DARKS at or above 1800FT.

| | |
|---|---|
| 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 | AKSEL | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 014 (006.6) | -7.5 | 16.2 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | +4000 | – | – | RNAV1 |
| 005 | TF | LD225 | – | 046 (038.9) | -7.5 | 9.3 | – | – | -220 | – | RNAV1 |
| 006 | TF | LD224 | – | 052 (044.9) | -7.5 | 9.4 | – | – | – | – | RNAV1 |
| 007 | TF | DARKS | – | 307 (299.7) | -7.5 | 2.8 | – | +1800 | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## AROSA V ARRIVAL

From AROSA, to AVEEY, to UTIBO, to UMUKI at or above 6000FT, to KAIHO at or above 4000FT, to LD225, to LD224, to DARKS at or above1800FT.

| | |
|---|---|
| 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 | AROSA | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | AVEEY | – | 277 (269.8) | -7.5 | 16.4 | – | – | – | – | RNAV1 |
| 003 | TF | UTIBO | – | 310 (302.8) | -7.5 | 27.5 | – | – | – | – | RNAV1 |
| 004 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 005 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | +4000 | – | – | RNAV1 |
| 006 | TF | LD225 | – | 046 (038.9) | -7.5 | 9.3 | – | – | -220 | – | RNAV1 |
| 007 | TF | LD224 | – | 052 (044.9) | -7.5 | 9.4 | – | – | – | – | RNAV1 |
| 008 | TF | DARKS | – | 307 (299.7) | -7.5 | 2.8 | – | +1800 | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL RNAV STAR

## MESSE V ARRIVAL

From MESSE, to UTIBO, to UMUKI at or above 6000FT, to KAIHO at or above 4000FT, to LD225, to LD224, to DARKS at or above 1800FT.

| | |
|---|---|
| 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 | MESSE | – | – | -7.5 | – | – | – | – | – | RNAV1 |
| 002 | TF | UTIBO | – | 246 (238.8) | -7.5 | 27.4 | – | – | – | – | RNAV1 |
| 003 | TF | UMUKI | – | 353 (345.5) | -7.5 | 16.1 | – | +6000 | – | – | RNAV1 |
| 004 | TF | KAIHO | – | 353 (345.5) | -7.5 | 6.9 | – | +4000 | – | – | RNAV1 |
| 005 | TF | LD225 | – | 046 (038.9) | -7.5 | 9.3 | – | – | -220 | – | RNAV1 |
| 006 | TF | LD224 | – | 052 (044.9) | -7.5 | 9.4 | – | – | – | – | RNAV1 |
| 007 | TF | DARKS | – | 307 (299.7) | -7.5 | 2.8 | – | +1800 | – | – | RNAV1 |

| Path | Waypoint Identifier | Inbound Course ˚M(˚T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | MESSE | 246 (238.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 6000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |

### Waypoint Coordinates

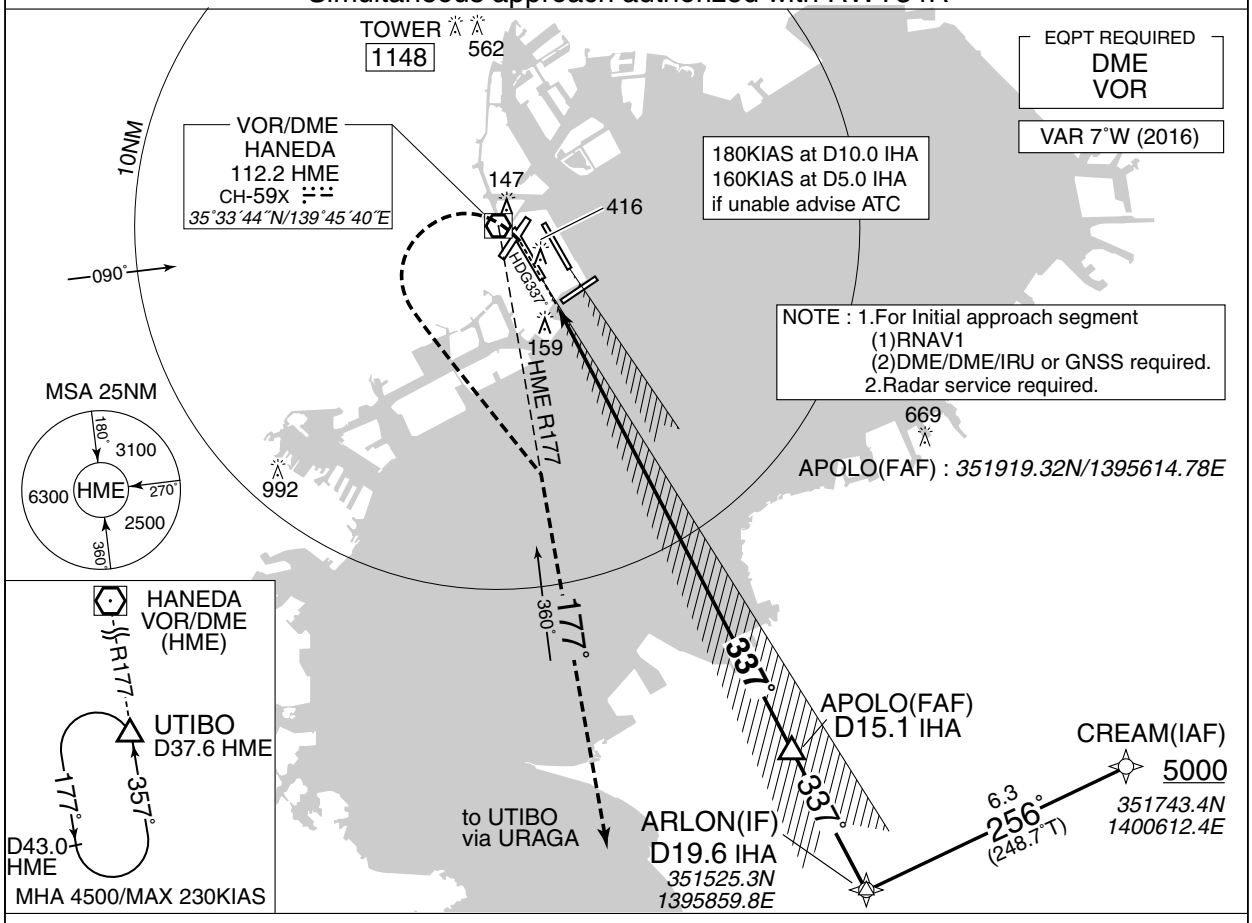
| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| AKSEL | *344039.5N / 1395126.9E* | LD225 | *352614.1N / 1395353.4E* |
| AROSA | *344201.7N / 1404157.3E* | MESSE | *351100.8N / 1402214.7E* |
| AVEEY | *344155.9N / 1402158.0E* | UMUKI | *351219.1N / 1394849.2E* |
| DARKS | *353414.8N / 1395902.9E* | UTIBO | *345647.0N / 1395343.9E* |
| KAIHO | *351857.8N / 1394642.4E* | XAC | *344244.1N / 1392450.5E* |
| LD224 | *353252.5N / 1400200.0E* | | |

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — ILS Z RWY34L

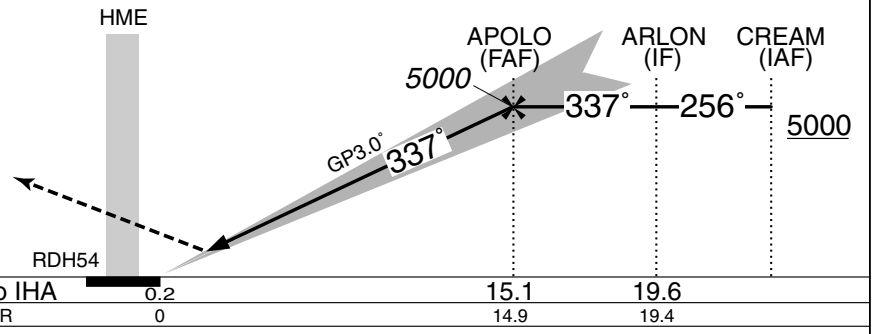
| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–GP 333.5<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY34R




MISSED APPROACH

Climb on HDG 337° to 500FT, turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.




Missed APCH climb gradient MNM 5.0%

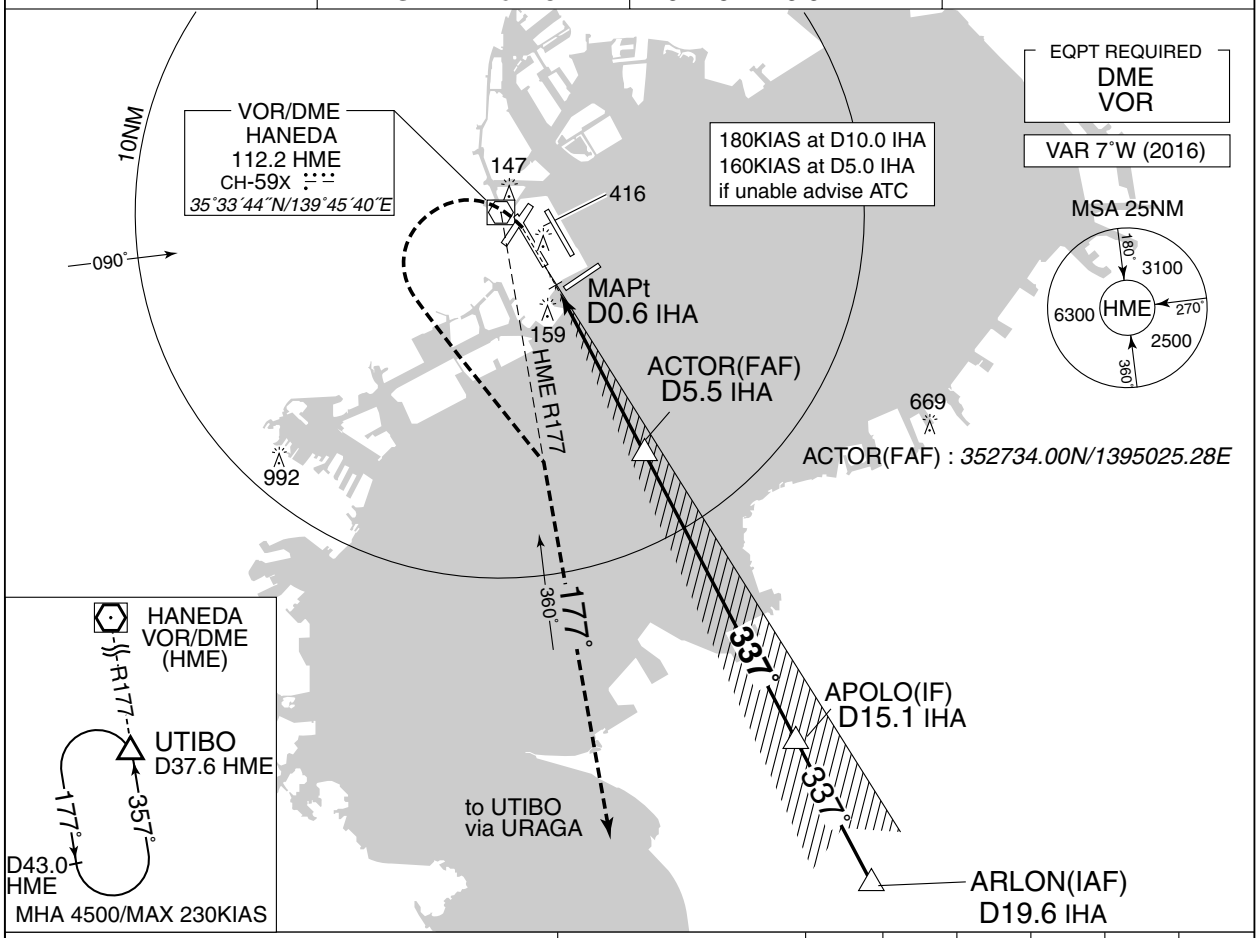
| MINIMA | THR elev. 18 | | AD elev. 21 | |
|---|---|---|---|---|
| CAT | CAT Ⅰ | | CIRCLING | |
| | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 218 (200) | 550 | 730 (709) | 1600 |
| B | | | | |
| C | | | | 2400 |
| D | | | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC Z RWY34L

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

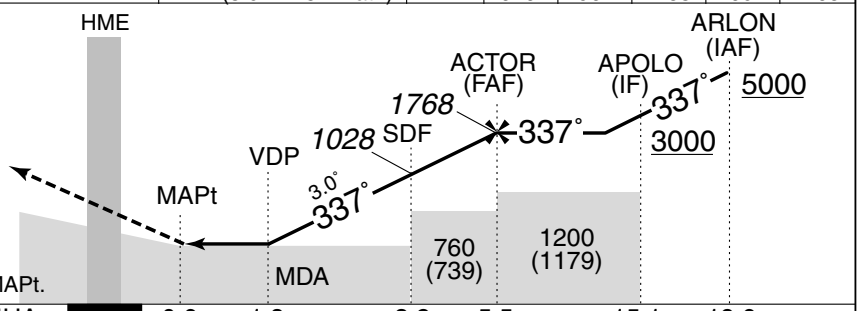



| NM to IHA | MAPt | 2 | 3 | 4 | 5 | FAF |
|---|---|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 646 | 964 | 1283 | 1601 | 1768 |

MISSED APPROACH

Turn left, climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to IHA | 0.2 | 0.6 | 1.8 | 3.2 | 5.5 | 15.1 | 19.6 |
|---|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.6 | 3.0 | 5.3 | 14.9 | 19.4 |

MINIMA THR elev. 18 AD elev. 21

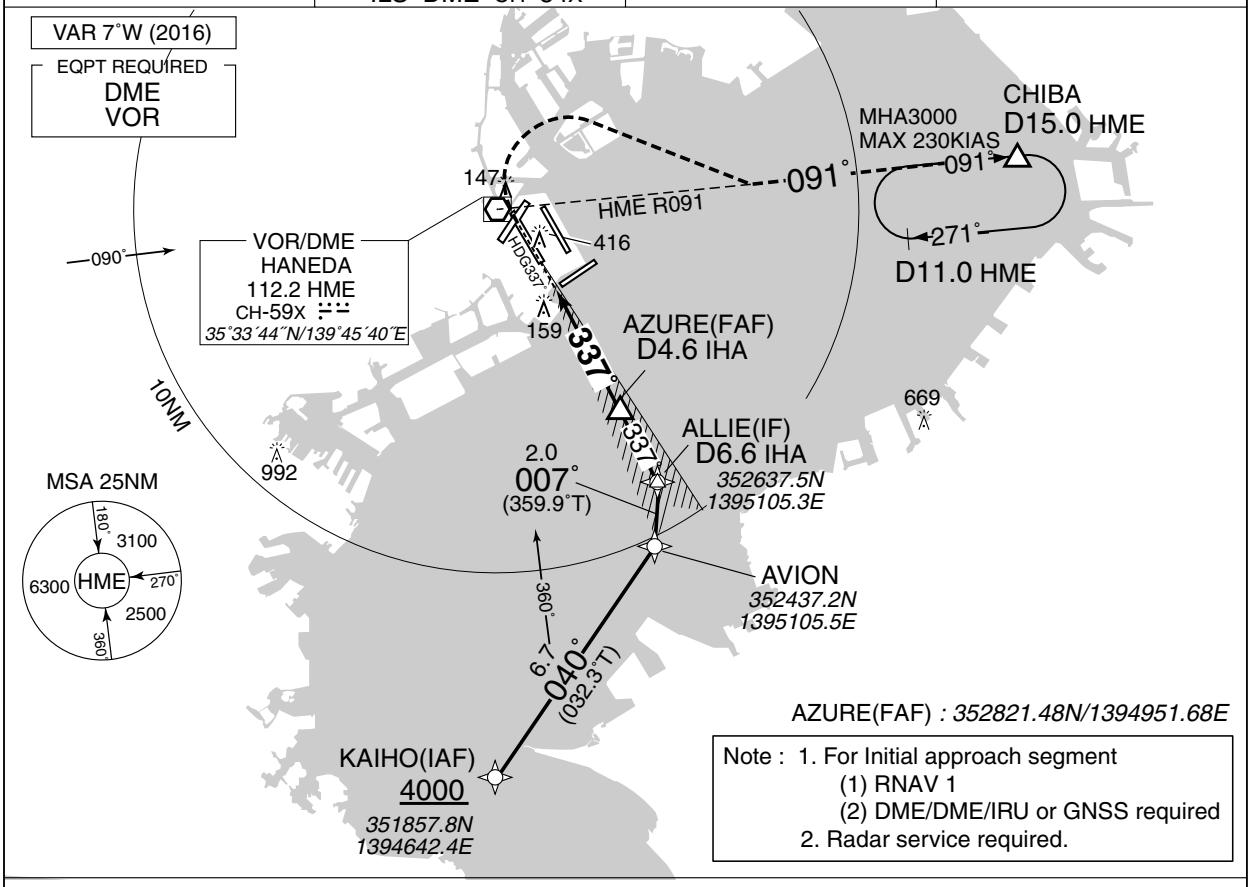
| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 560 (539) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | |
| C | | | | 2400 |
| D | | 1600 | | 3200 |

Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — ILS Y RWY34L

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–GP 333.5<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

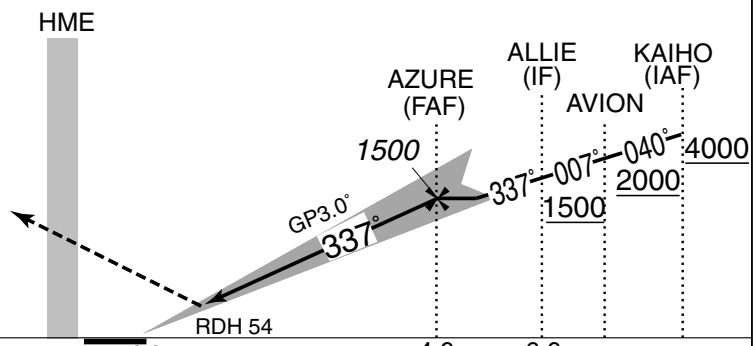



AZURE(FAF) : *352821.48N/1394951.68E*

Note : 1. For Initial approach segment
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

MISSED APPROACH

Climb on HDG 337˚ to 800FT, turn right climb to 3000FT via HME R091 to CHIBA and hold. Contact TOKYO APP.




| DME to IHA | 0.2 | 4.6 | 6.6 |
|---|---|---|---|
| NM to THR | 0 | 4.4 | 6.4 |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 18 AD elev. 21

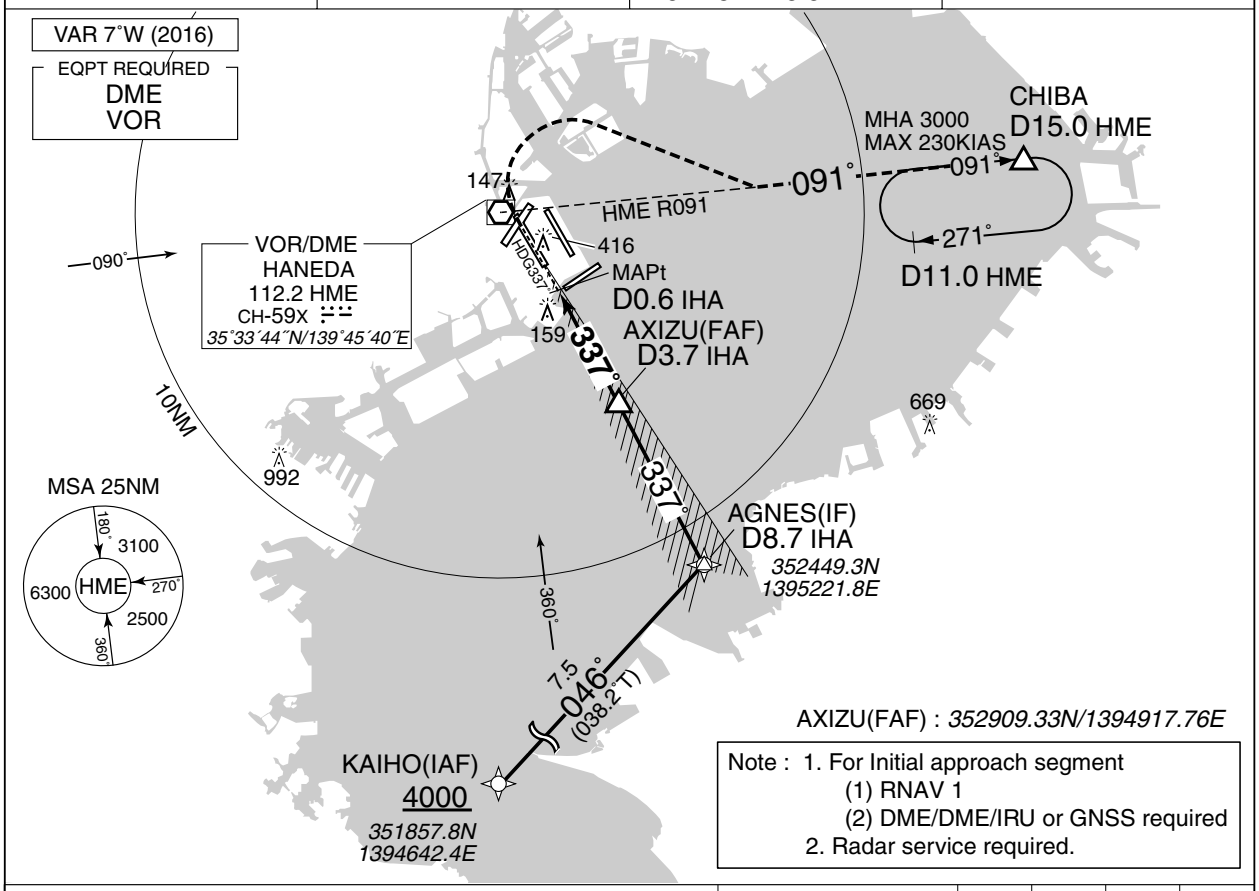
| CAT | CAT I | | CIRCLING | |
|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 218 (200) | 550 | 730 (709) | 1600 |
| B | | | | |
| C | | | | 2400 |
| D | | | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC Y RWY34L

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




AXIZU(FAF) : *352909.33N/1394917.76E*

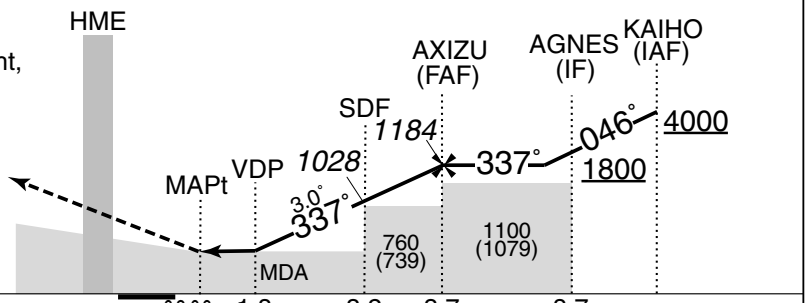
Note : 1. For Initial approach segment
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

| NM to IHA | MAPt | 2 | 3 | FAF |
|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 646 | 964 | 1184 |

MISSED APPROACH

Climb on HDG 337˚ to 800FT, turn right, climb to 3000FT via HME R091 to CHIBA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to IHA | 0.2 | 0.6 | 1.8 | 3.2 | 3.7 | 8.7 |
|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.6 | 3.0 | 3.5 | 8.5 |

MINIMA THR elev. 18 AD elev. 21

| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 560 (539) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | |
| C | | | | 2400 |
| D | | 1600 | | 3200 |

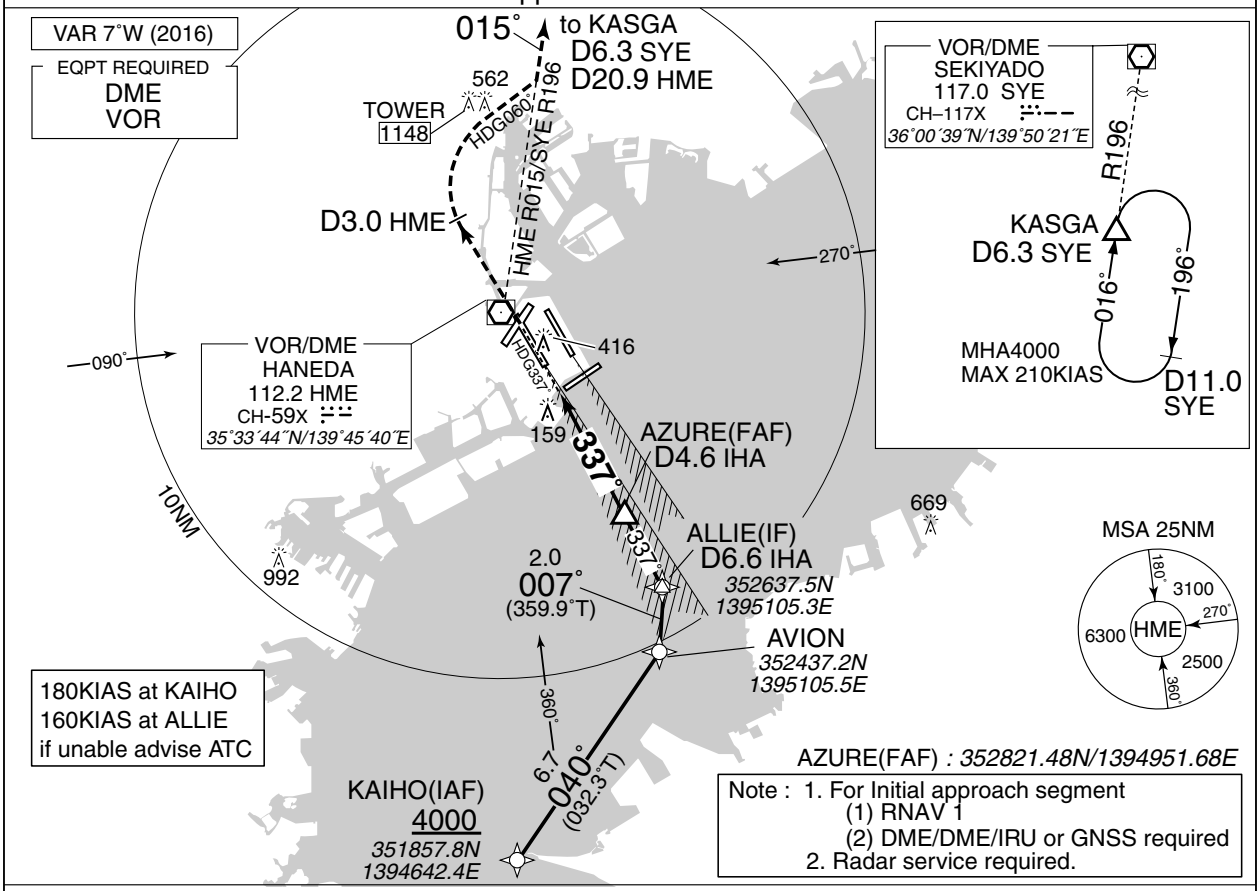
Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — ILS X RWY34L

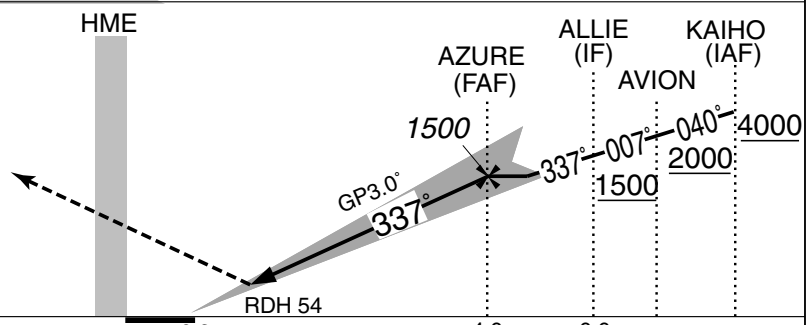
| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–GP 333.5<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY34R




MISSED APPROACH

Climb on HDG 337˚ to HME 3.0DME, turn right HDG 060˚ to intercept and proceed via HME R015/SYE R196 to KASGA and hold at 4000FT.
Contact TOKYO APP.




| | | | |
|---|---|---|---|
| DME to IHA | 0.2 | 4.6 | 6.6 |
| NM to THR | 0 | 4.4 | 6.4 |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 18 AD elev. 21

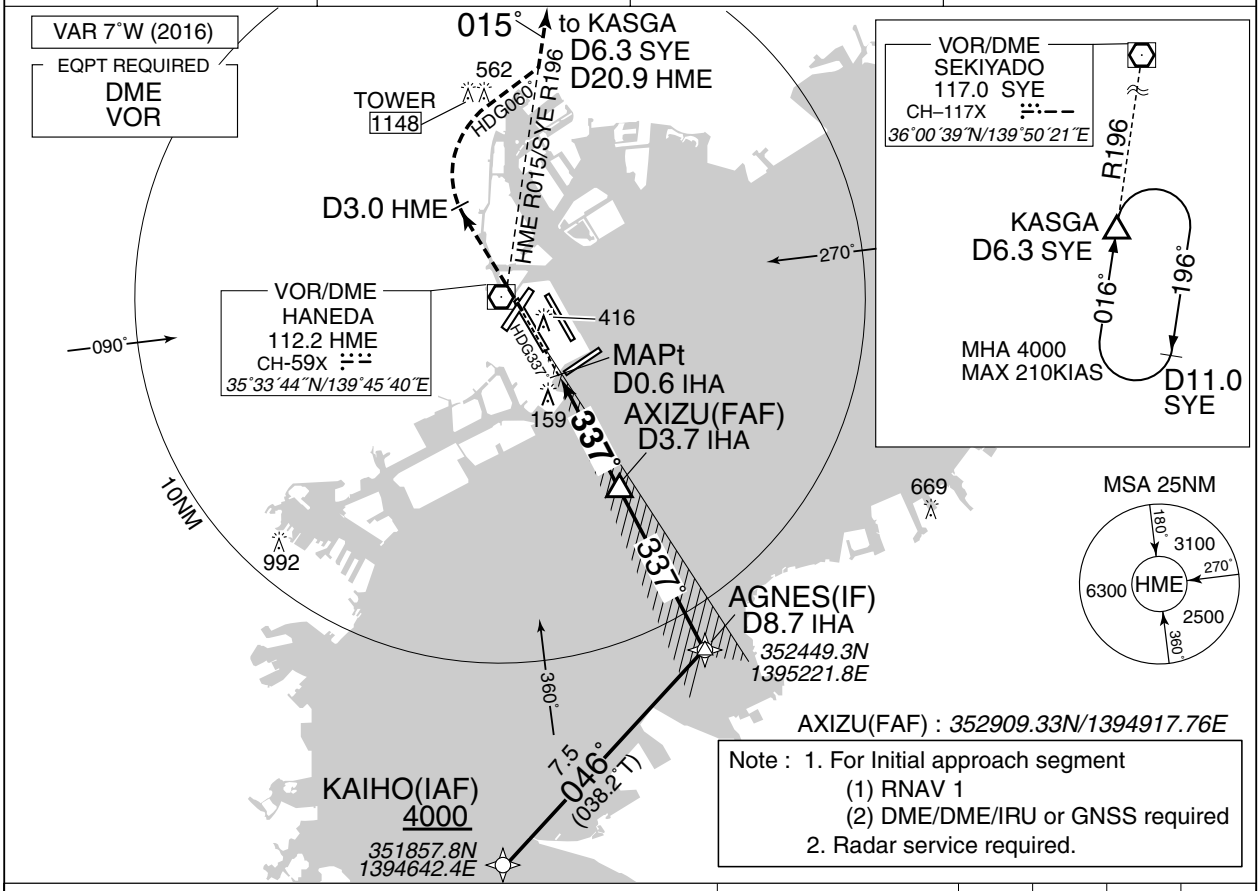
| CAT | CAT I | | CIRCLING | |
|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 218 (200) | 550 | 730 (709) | 1600 |
| B | | | | |
| C | | | | 2400 |
| D | | | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC X RWY34L

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.7 IHA<br>ILS–DME CH–54X | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




AXIZU(FAF) : *352909.33N/1394917.76E*

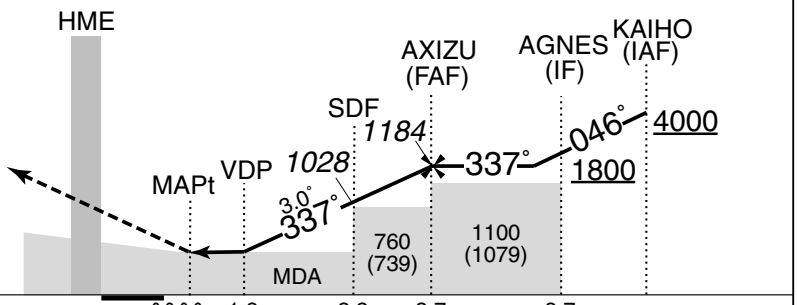
Note : 1. For Initial approach segment
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

| NM to IHA | MAPt | 2 | 3 | FAF |
|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 646 | 964 | 1184 |

MISSED APPROACH

Climb on HDG 337˚ to HME 3.0DME, turn right HDG 060˚ to intercept and proceed via HME R015/SYE R196 to KASGA and hold at 4000FT.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| | | | | | | |
|---|---|---|---|---|---|---|
| DME to IHA | 0.2 0.6 | 1.8 | 3.2 | 3.7 | 8.7 |
| NM to THR | 0 0.5 | 1.6 | 3.0 | 3.5 | 8.5 |

Missed APCH climb gradient MNM 3.0%

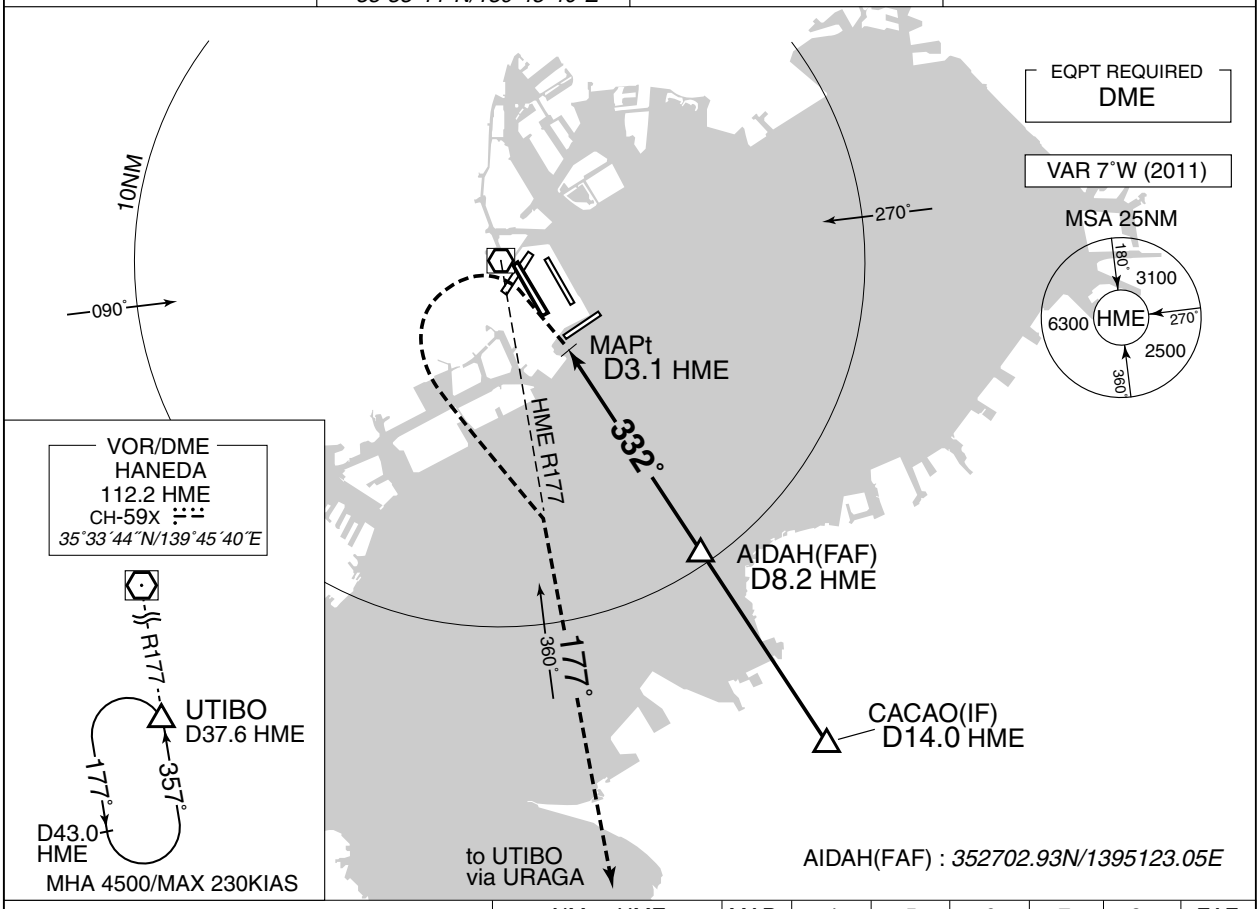
| MINIMA | THR elev. 18 | | AD elev. 21 | |
|---|---|---|---|---|
| CAT | LOC | | CIRCLING | |
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 560 (539) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | |
| C | | | | 2400 |
| D | | 1600 | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R/16L/34R.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — VOR RWY34L

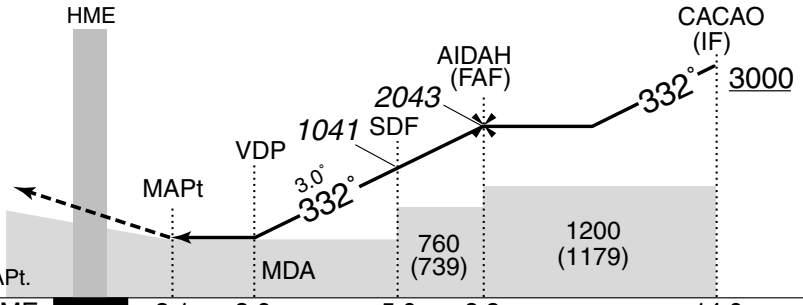
| TOKYO APP | HANEDA VOR/DME | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 112.2 HME<br>CH-59X<br>*35°33´44˝N/139°45´40˝E* | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




| NM to HME | MAPt | 4 | 5 | 6 | 7 | 8 | FAF |
|---|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 722 | 1041 | 1359 | 1678 | 1996 | 2043 |

MISSED APPROACH
Turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to HME | 1.9 | 3.1 | 3.6 | 5.0 | 8.2 | 14.0 |
|---|---|---|---|---|---|---|
| NM to THR | 0 | 1.2 | 1.7 | 3.1 | 6.3 | 12.1 |

MINIMA — THR elev. 18 — AD elev. 21

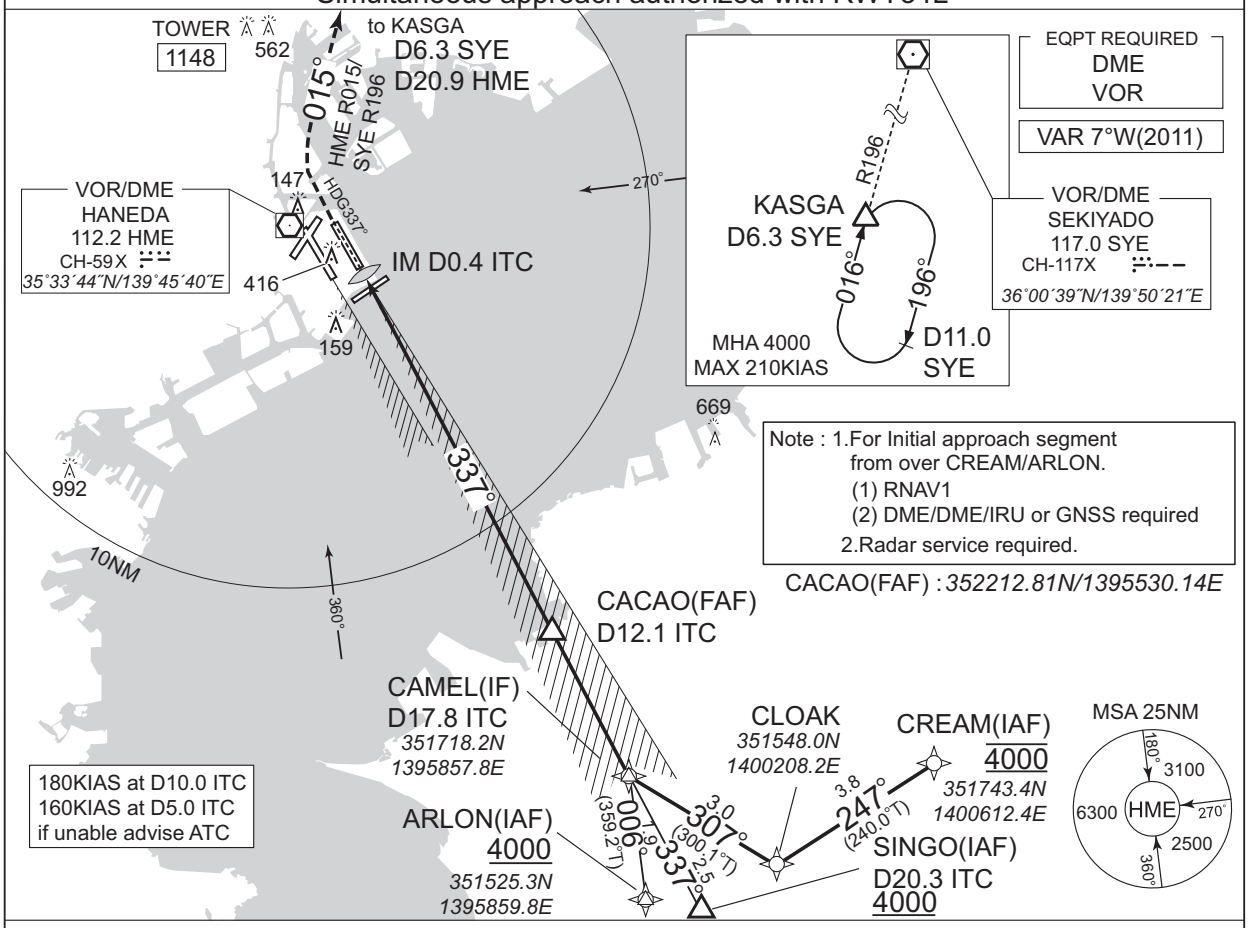
| CAT | | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 580 (559) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | |
| C | | | | 2400 |
| D | | 1600 | | 3200 |

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — ILS Z RWY34R (CAT Ⅱ & Ⅲ)

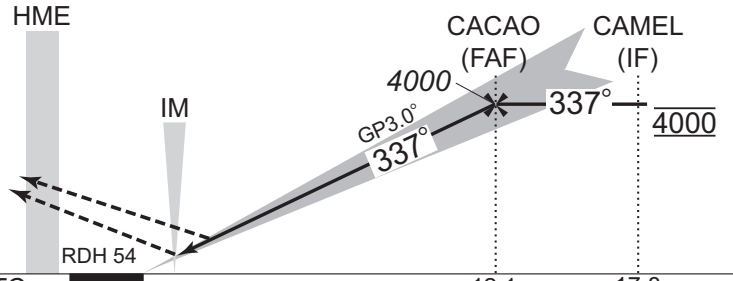
| TOKYO APP | ILS −LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.9 ITC<br>ILS−GP 329.3<br>ILS−DME CH−26X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY34L




MISSED APPROACH

Climb on HDG337° to 800FT, turn right climb to 4000FT via HME R015/SYE R196 to KASGA and hold.
Contact TOKYO APP.




| | | | | |
|---|---|---|---|---|
| DME to ITC | 0.2 0.4 | 12.1 | 17.8 |
| NM to THR | 0 0.2 | 11.9 | 17.6 |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 20 AD elev. 21

| CAT | CAT ⅢB | CAT ⅢA | CAT Ⅱ | | | CAT Ⅰ | | CIRCLING | |
|---|---|---|---|---|---|---|---|---|---|
| | RVR | RVR | DA(H) | RA | RVR | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 100 | 175 | 120(100) | 100 | 300 | 220(200) | 550 | 730(709) | 1600 |
| B | | | | | | | | | |
| C | | | | | | | | | 2400 |
| D | | | | | | | | | 3200 |

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

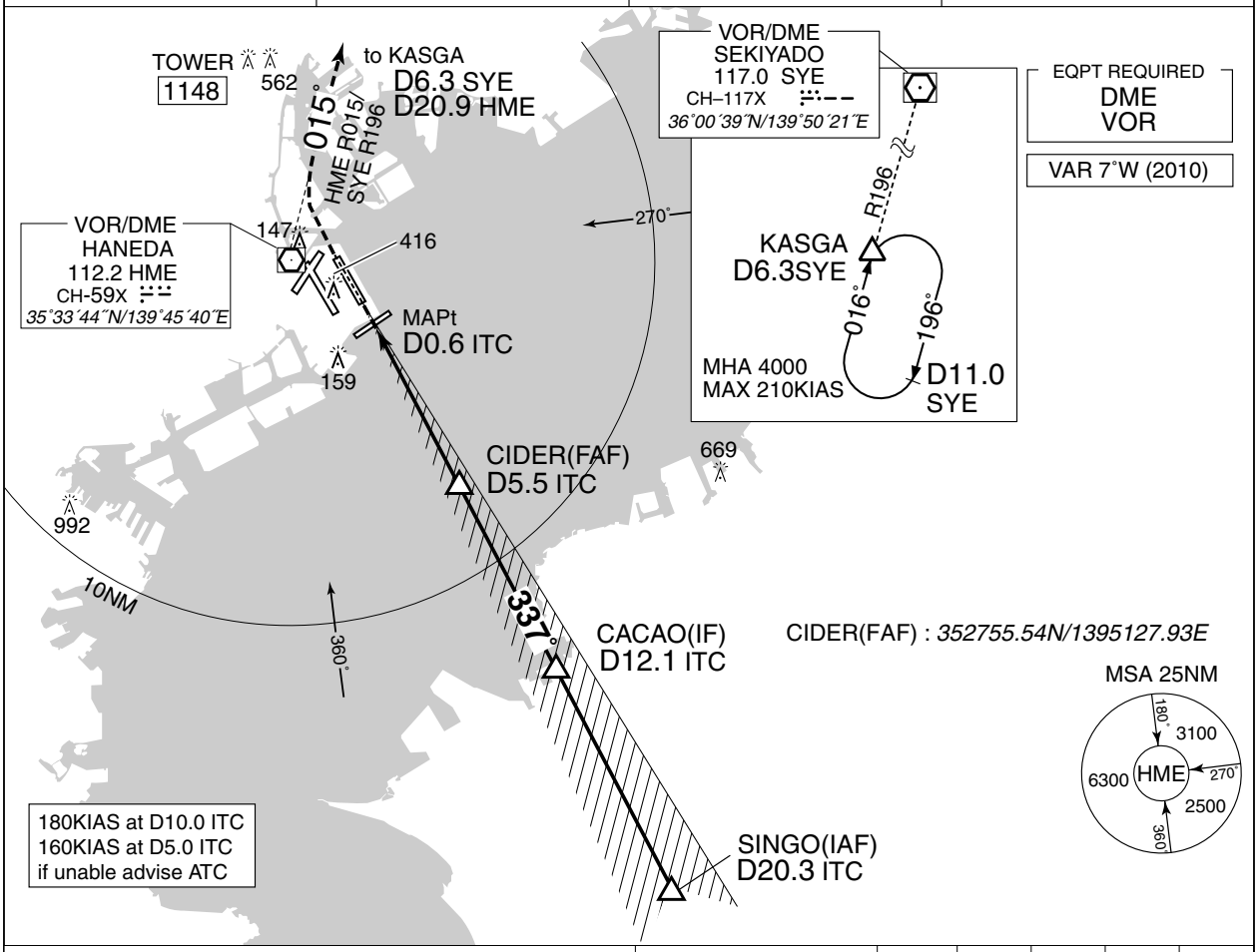
Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L and clockwise circling to RWY34L.

CHANGE: Description of GP angle.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC Z RWY34R

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.9 ITC<br>ILS–DME CH–26X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |



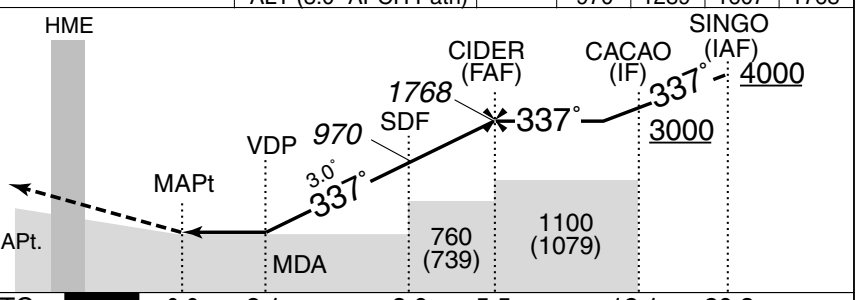

| NM to ITC | MAPt | 3 | 4 | 5 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 970 | 1289 | 1607 | 1768 |

MISSED APPROACH

Turn right, climb to 4000FT via HME R015/SYE R196 to KASGA and hold.

Contact TOKYO APP.

Timing not authorized for defining the MAPt.
No turn before MAPt.




| DME to ITC | 0.2 | 0.6 | 2.1 | 3.0 | 5.5 | 12.1 | 20.3 |
|---|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.9 | 2.8 | 5.3 | 11.9 | 20.1 |

Missed APCH climb gradient MNM 3.0%

MINIMA — THR elev. 20 — AD elev. 21

| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 700 (679) | 1200 | 730 (709) | 1600 |
| B | | 1400 | | |
| C | | | | 2400 |
| D | | 1800 | | 3200 |

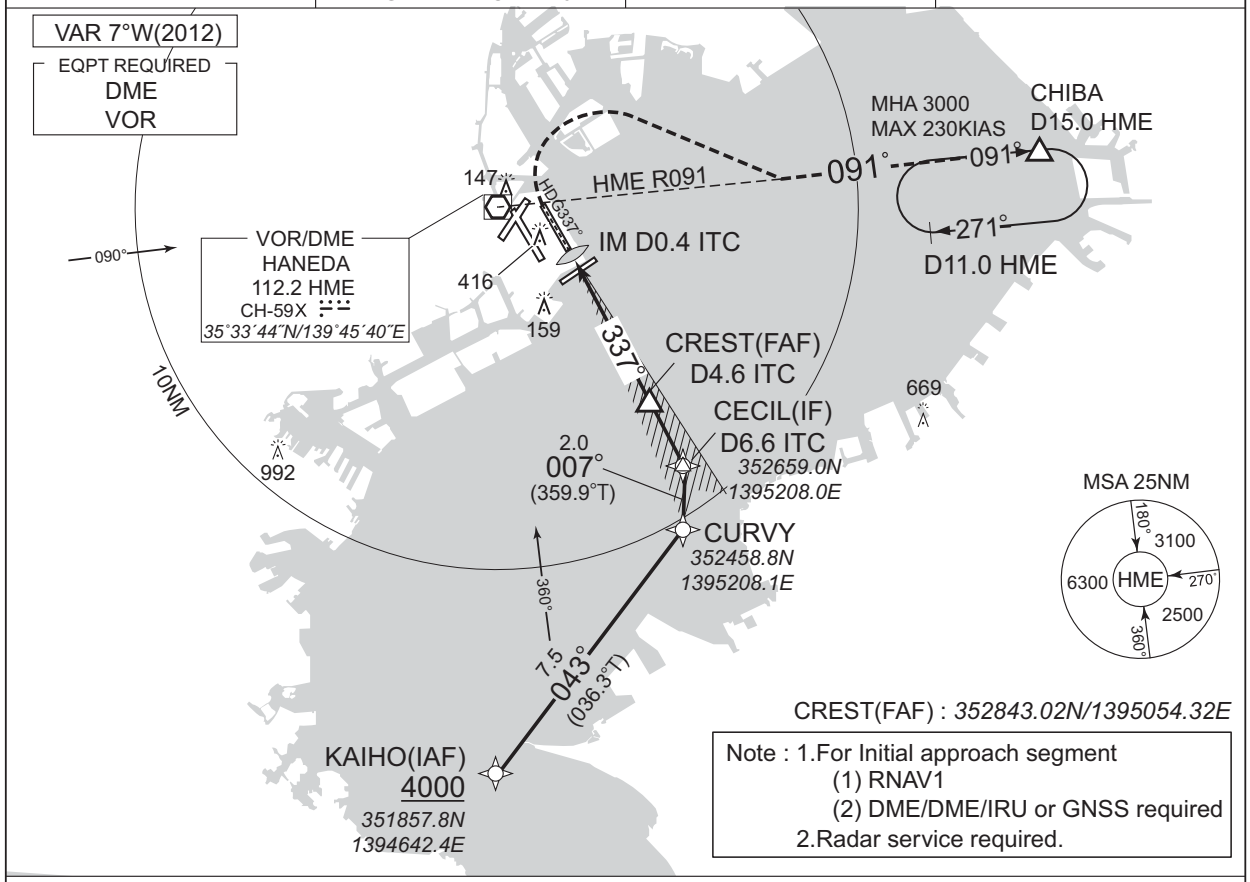
MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L and clockwise circling to RWY 34L.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL

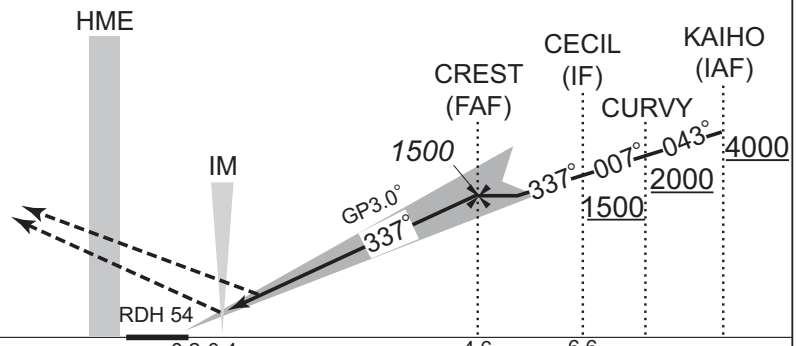
ILS Y RWY34R (CAT Ⅱ & Ⅲ)

| TOKYO APP | ILS −LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.9 ITC<br>ILS−GP 329.3<br>ILS−DME CH−26X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




MISSED APPROACH

Climb on HDG337° to 800FT, turn right climb to 3000FT via HME R091 to CHIBA and hold. Contact TOKYO APP.




| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DME to ITC | | | | 0.2 | 0.4 | | 4.6 | 6.6 | |
| NM to THR | | | | 0 | 0.2 | | 4.4 | 6.4 | |

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 20 AD elev. 21

| CAT | CAT ⅢB | CAT ⅢA | CAT Ⅱ | | | CAT Ⅰ | | CIRCLING | |
|---|---|---|---|---|---|---|---|---|---|
| | RVR | RVR | DA(H) | RA | RVR | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 100 | 175 | 120(100) | 100 | 300 | 220(200) | 550 | 730(709) | 1600 |
| B | | | | | | | | | |
| C | | | | | | | | | 2400 |
| D | | | | | | | | | 3200 |

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

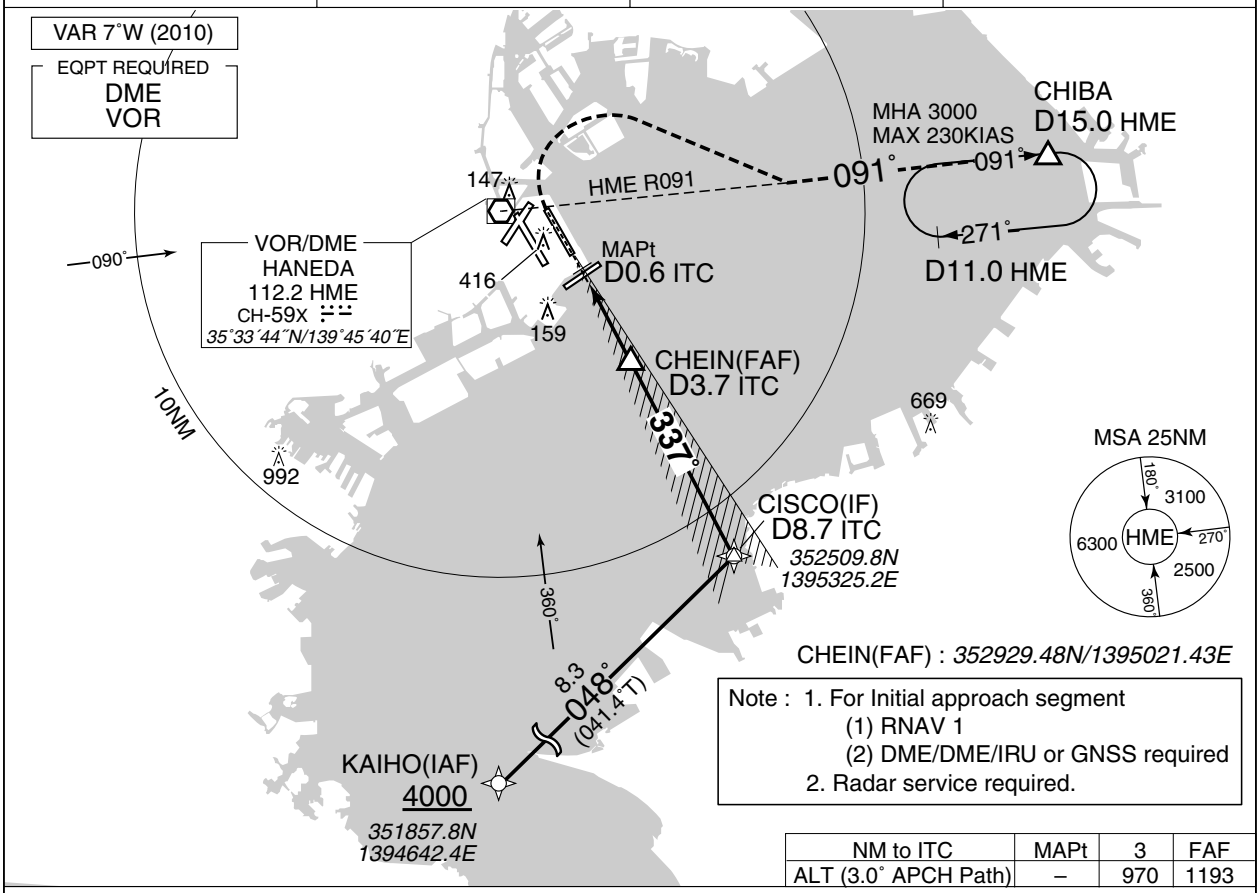
Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L and clockwise circling to RWY34L.

CHANGE: Correction of misdescription(Note:2.).

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC Y RWY34R

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.9 ITC ⠊.⠤.<br>ILS–DME CH–26X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

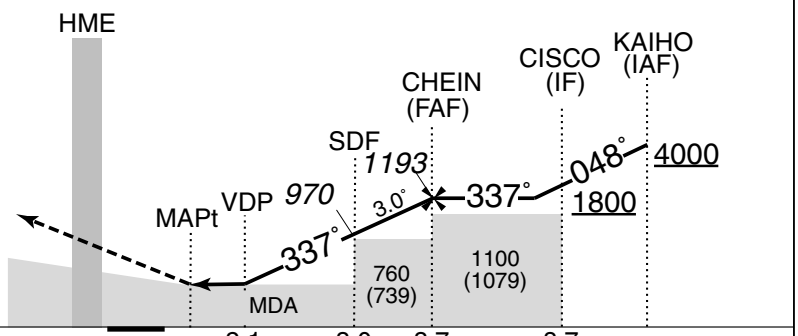



Note : 1. For Initial approach segment
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

| NM to ITC | MAPt | 3 | FAF |
|---|---|---|---|
| ALT (3.0° APCH Path) | – | 970 | 1193 |

MISSED APPROACH
Turn right, climb to 3000FT via HME R091 to CHIBA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.
No turn before MAPt.




| DME to ITC | 0.2 | 0.6 | 2.1 | 3.0 | 3.7 | 8.7 |
|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.9 | 2.8 | 3.5 | 8.5 |

MINIMA THR elev. 20 AD elev. 21

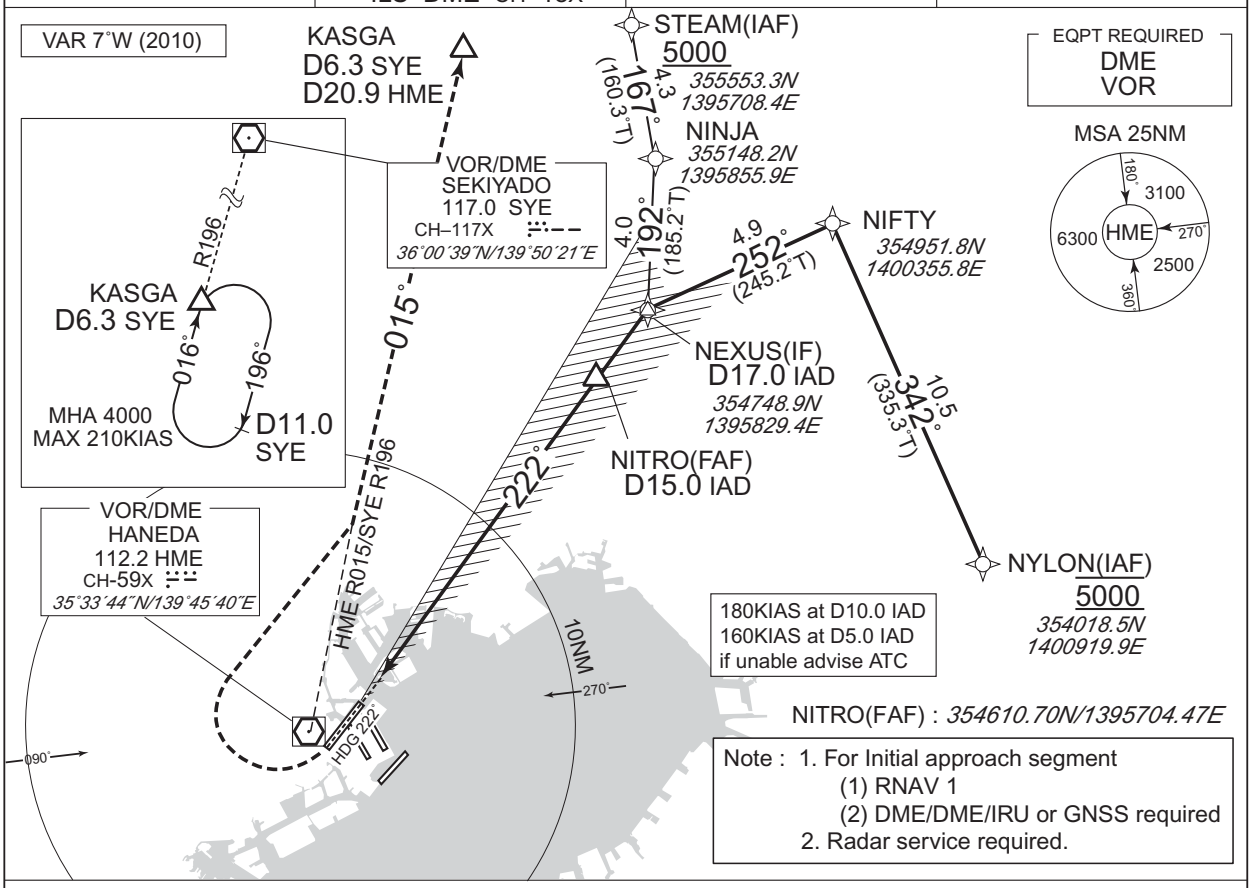
| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 700 (679) | 1200 | 730 (709) | 1600 |
| B | | 1400 | | |
| C | | | | 2400 |
| D | | 1800 | | 3200 |

Circling is not authorized during the night time, except counterclockwise circling to RWY 16R/16L and clockwise circling to RWY 34L.

**INSTRUMENT APPROACH CHART**

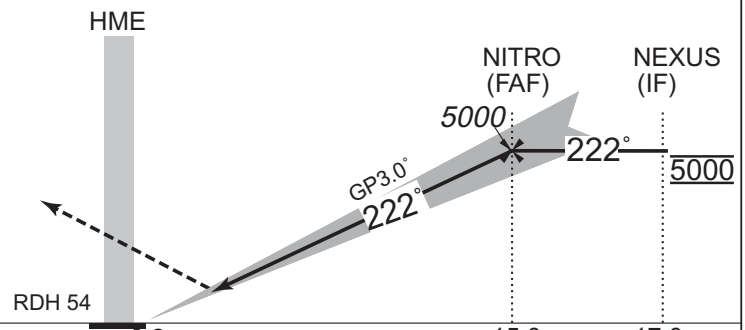
RJTT / TOKYO INTL — ILS RWY22

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.1 IAD<br>ILS–GP 334.7<br>ILS–DME CH–18X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |




Note : 1. For Initial approach segment
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

MISSED APPROACH
Climb on HDG222˚ to 500FT, turn right climb to 4000FT via HME R015/SYE R196 to KASGA and hold.
Contact TOKYO APP.




| DME to IAD | 0.2 | 15.0 | 17.0 |
|---|---|---|---|
| NM to THR | 0 | 14.8 | 16.8 |

Missed APCH climb gradient MNM 6.0% due to airspace restrictions.

MINIMA THR elev. 35 AD elev. 21

| CAT | CAT I | | CIRCLING | |
|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 235 (200) | 550 | 730 (709) | 1600 |
| B | | | | |
| C | | | | 2400 |
| D | | | | 3200 |

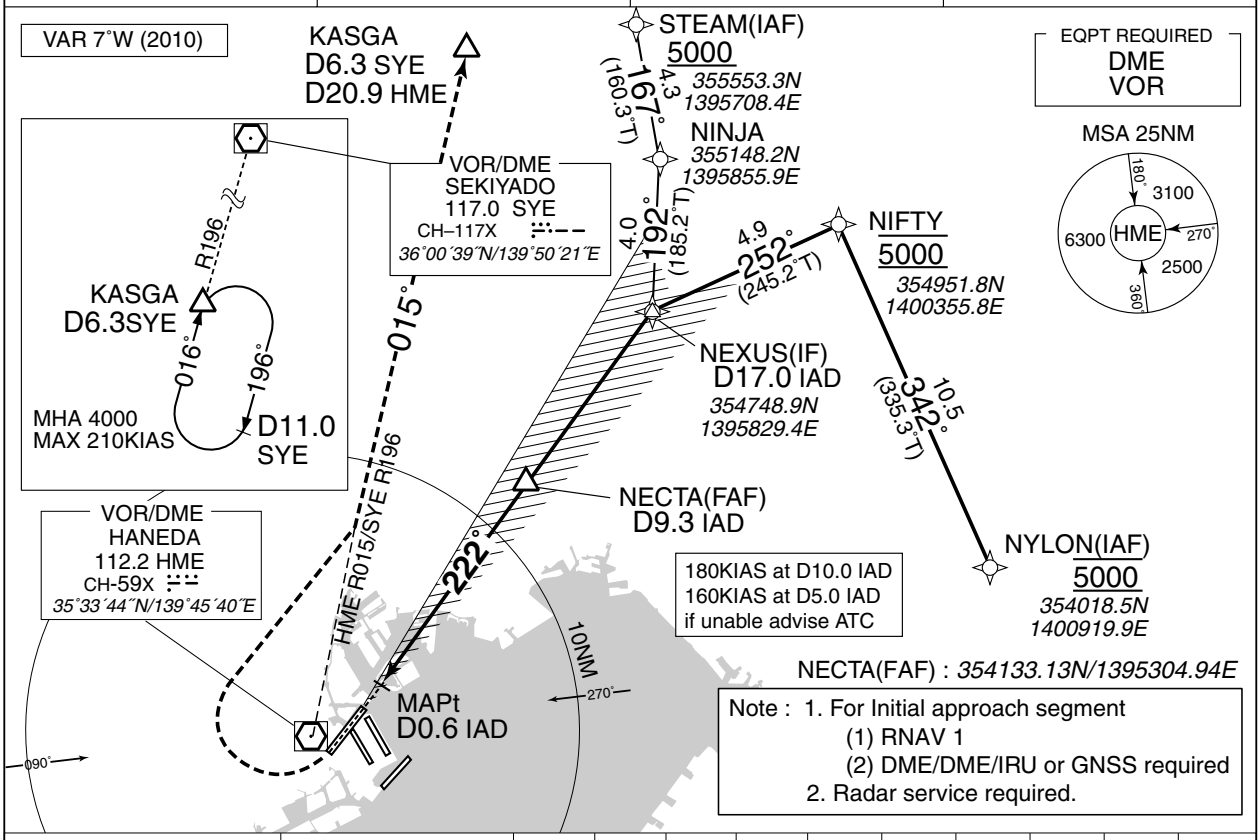
MINIMA with Missed APCH climb gradient below 6.0% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R/16L and clockwise circling to RWY23, RWY34R/34L.

CHANGE: Description of GP angle.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC RWY22

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.1 IAD<br>ILS–DME CH–18X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |

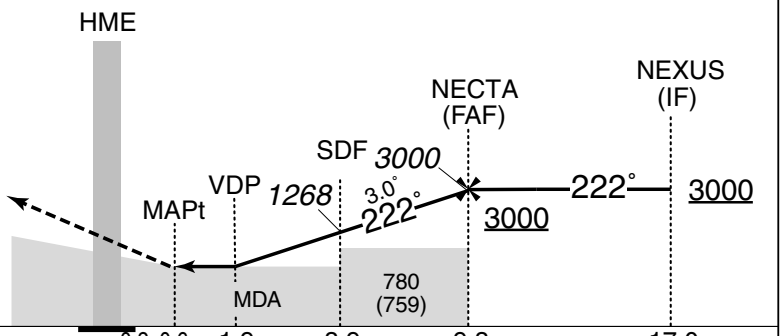



| NM to IAD | MAPt | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | FAF |
|---|---|---|---|---|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 662 | 986 | 1299 | 1618 | 1936 | 2255 | 2573 | 2891 | 3000 |

MISSED APPROACH

Turn right, climb to 4000FT via HME
R015 /SYE R196 to KASGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.
No turn before MAPt.




| DME to IAD | 0.2 | 0.6 | 1.9 | 3.9 | 9.3 | 17.0 |
|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.5 | 1.7 | 3.7 | 9.1 | 16.8 |

Missed APCH climb gradient MNM 4.0%

MINIMA THR elev. 35 AD elev. 21

| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 600 (579) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | |
| C | | | | 2400 |
| D | | 1600 | | 3200 |

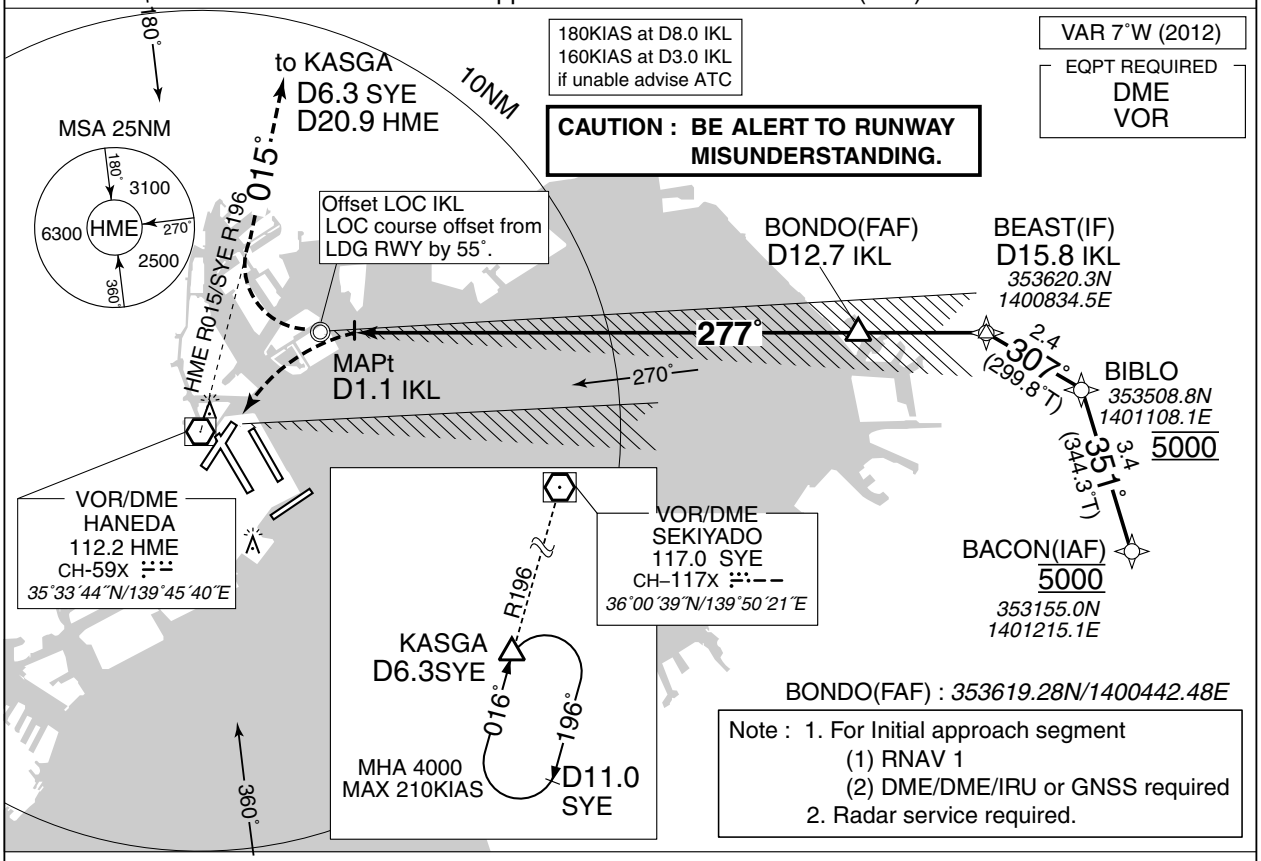
MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R/16L and clockwise circling to RWY23,RWY34R/34L.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA Z RWY22

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.1 IKL<br>LDA–DME CH–38X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |

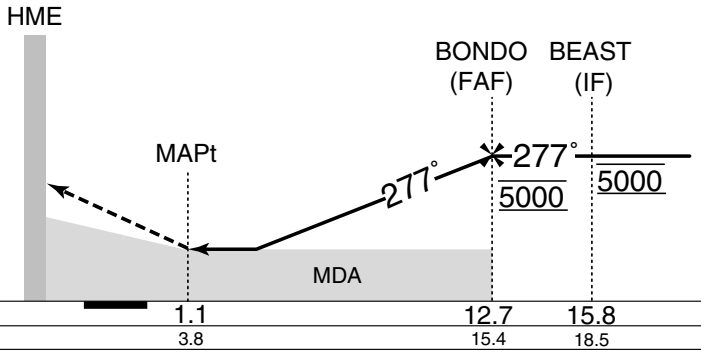
Simultaneous approach authorized with RWY23(LDA)




MISSED APPROACH

At MAPt, turn right climb to 4000FT via HME R015 /SYE R196 to KASGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




Missed APCH climb gradient MNM 4.0%

| MINIMA | THR elev. 35 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

**Do Not turn left until D1.1 IKL**

**SO AS NOT TO MISUNDERSTAND THE RUNWAY**

MINIMA with Missed APCH climb gradient of 2.5% are not established.
MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

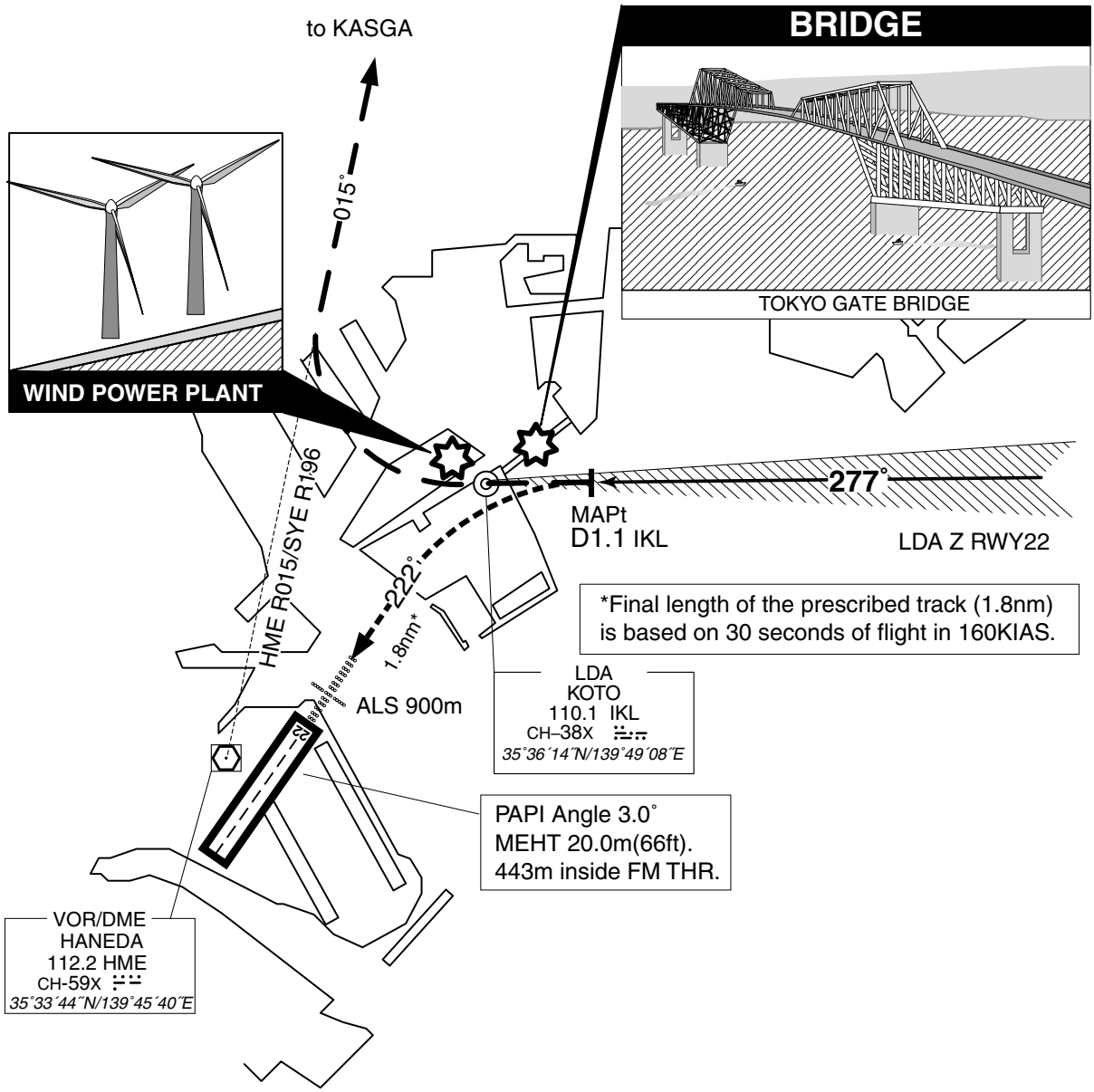
**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL LDA Z RWY22

## Visual Prescribed Track for LDA Z RWY22

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.

Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



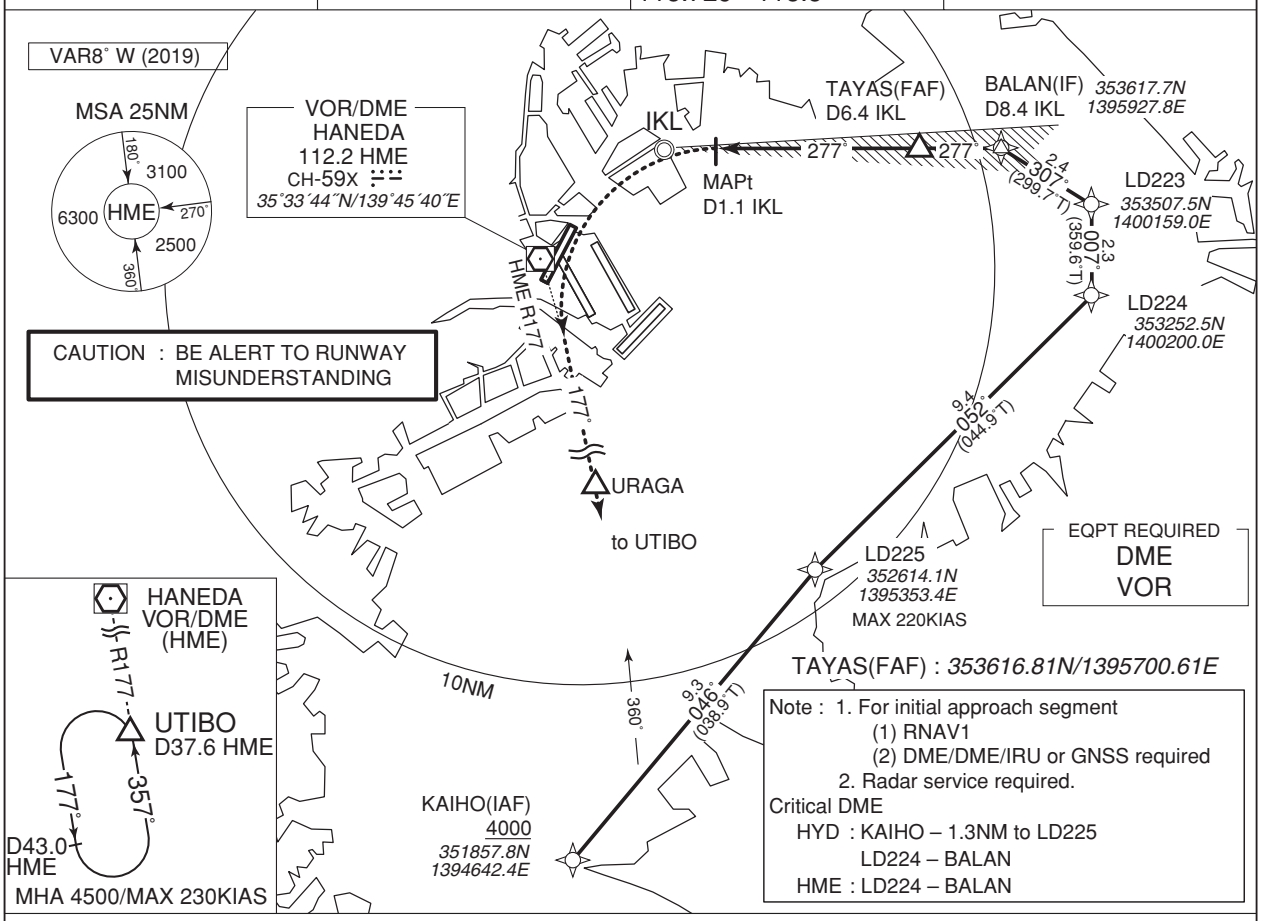

In case of GO AROUND, pilot should report ATC as soon as practicable.

Until receiving ATC instructions, aircraft turn right for joining HME R015/SYE R196 and missed approach procedure.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA Y RWY22

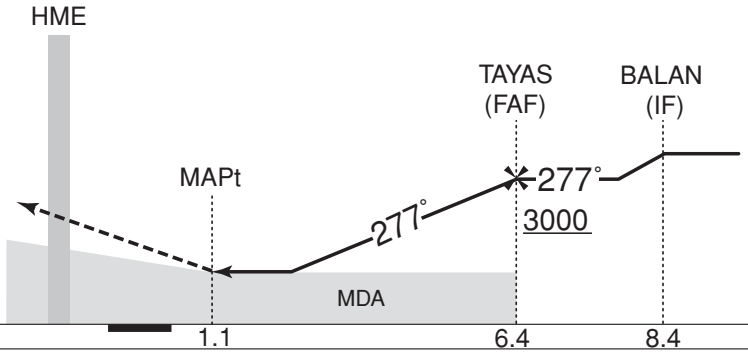
| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.1 IKL<br>LDA–DME CH–38X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |




MISSED APPROACH

At MAPt, turn left, climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to IKL | 1.1 | 6.4 | 8.4 |
|---|---|---|---|
| NM to THR | 3.8 | 9.1 | 11.1 |

| MINIMA | THR elev. 35 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

**Do Not turn left until D1.1 IKL**

**SO AS NOT TO MISUNDERSTAND THE RUNWAY**

CHANGE : Update

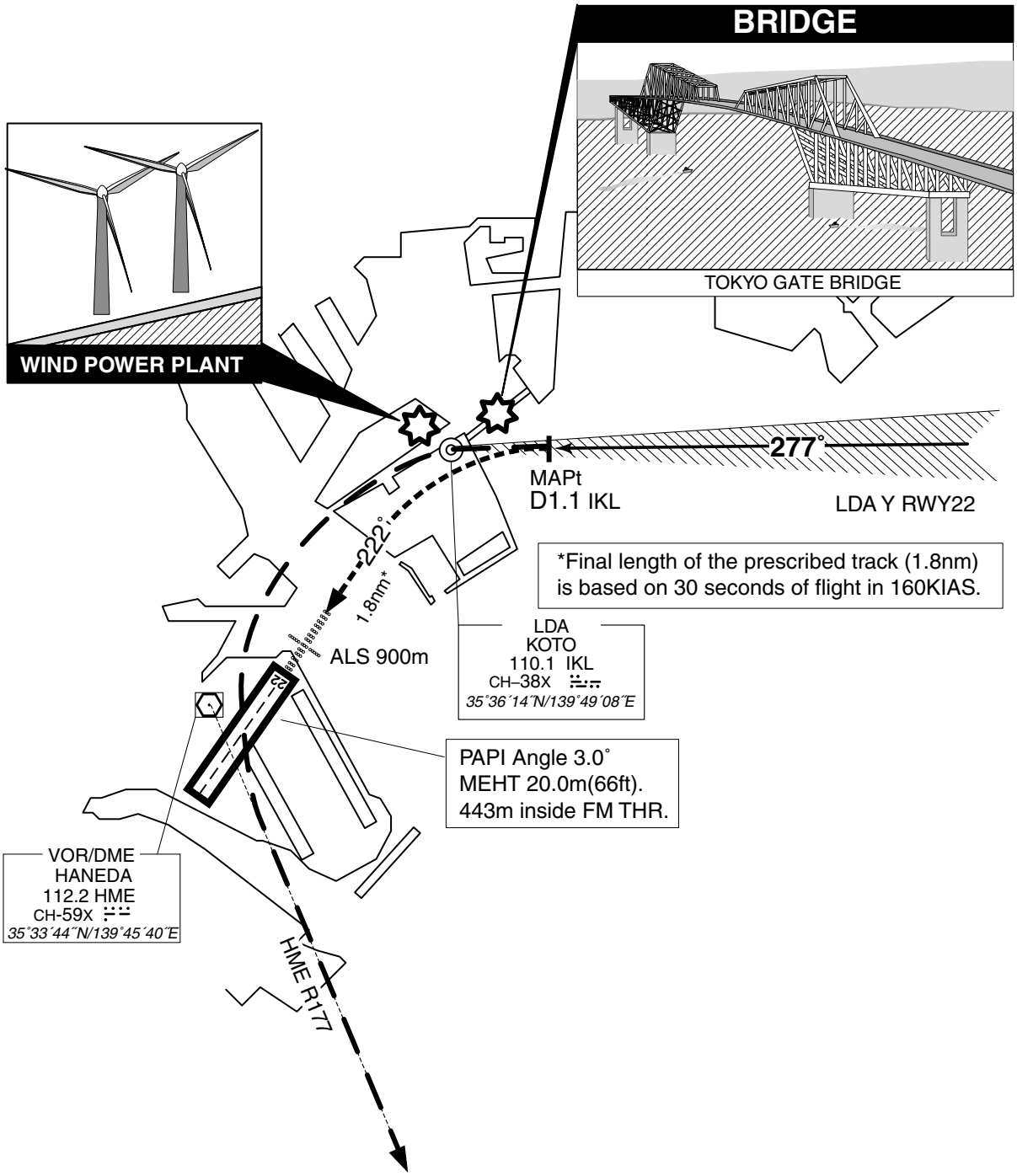
**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL LDA Y RWY22

## Visual Prescribed Track for LDA Y RWY22

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.

Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



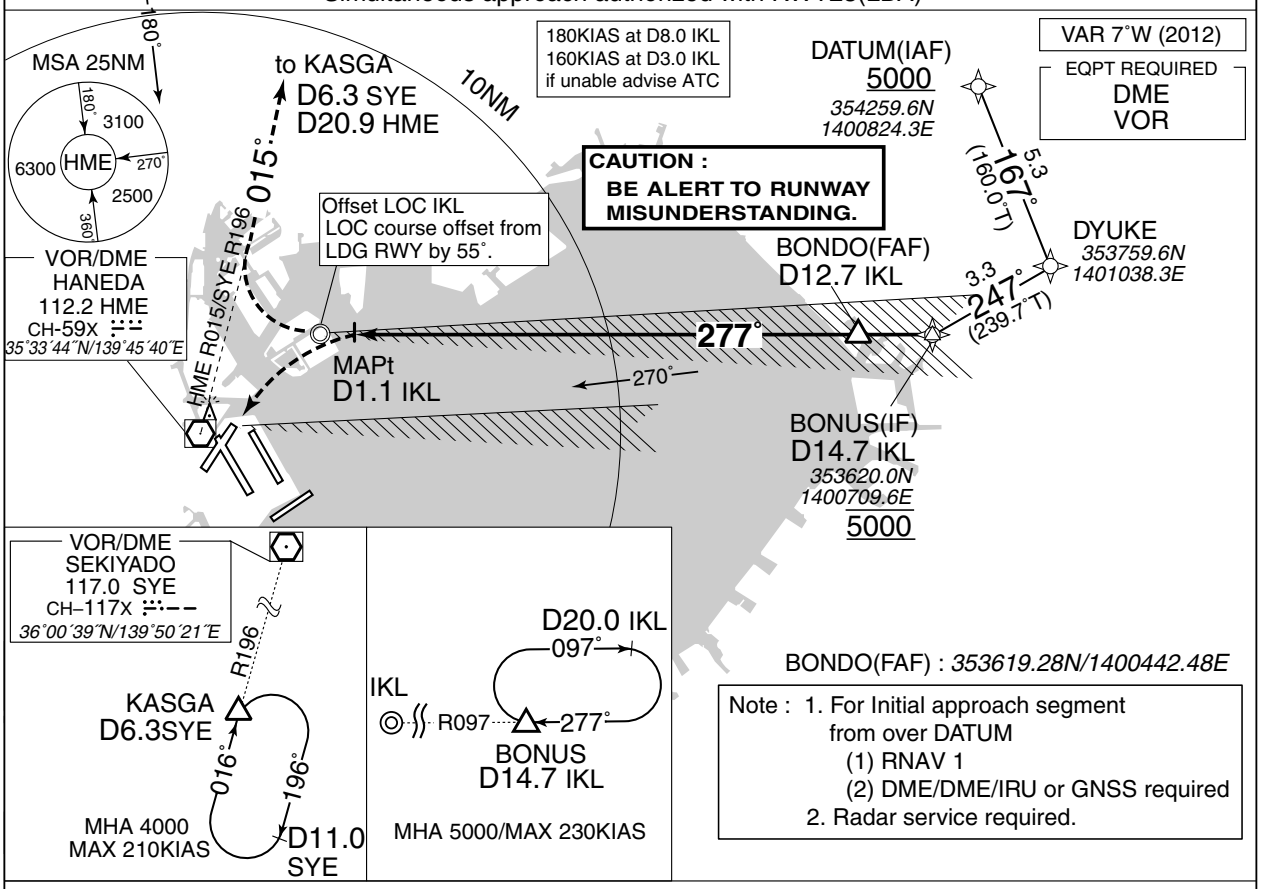

In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn left for joining HME R177 and missed approach procedure.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA X RWY22

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.1 IKL<br>LDA–DME CH–38X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY23(LDA)







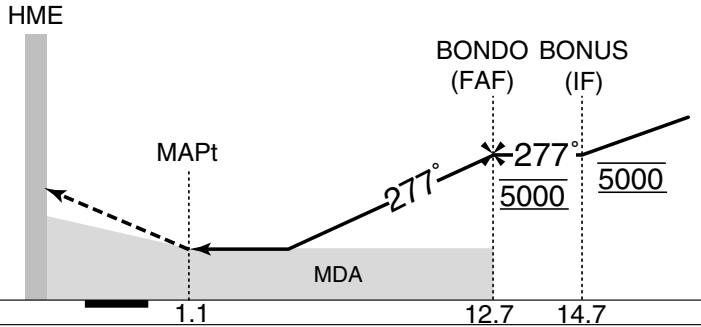
BONDO(FAF) : *353619.28N/1400442.48E*

Note : 1. For Initial approach segment from over DATUM
(1) RNAV 1
(2) DME/DME/IRU or GNSS required
2. Radar service required.

MISSED APPROACH

At MAPt, turn right climb to 4000FT via HME R015 /SYE R196 to KASGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to IKL | 1.1 | 12.7 | 14.7 |
|---|---|---|---|
| NM to THR | 3.8 | 15.4 | 17.4 |

Missed APCH climb gradient MNM 4.0%

| MINIMA | THR elev. 35 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

**Do Not turn left until D1.1 IKL**

**SO AS NOT TO MISUNDERSTAND THE RUNWAY**

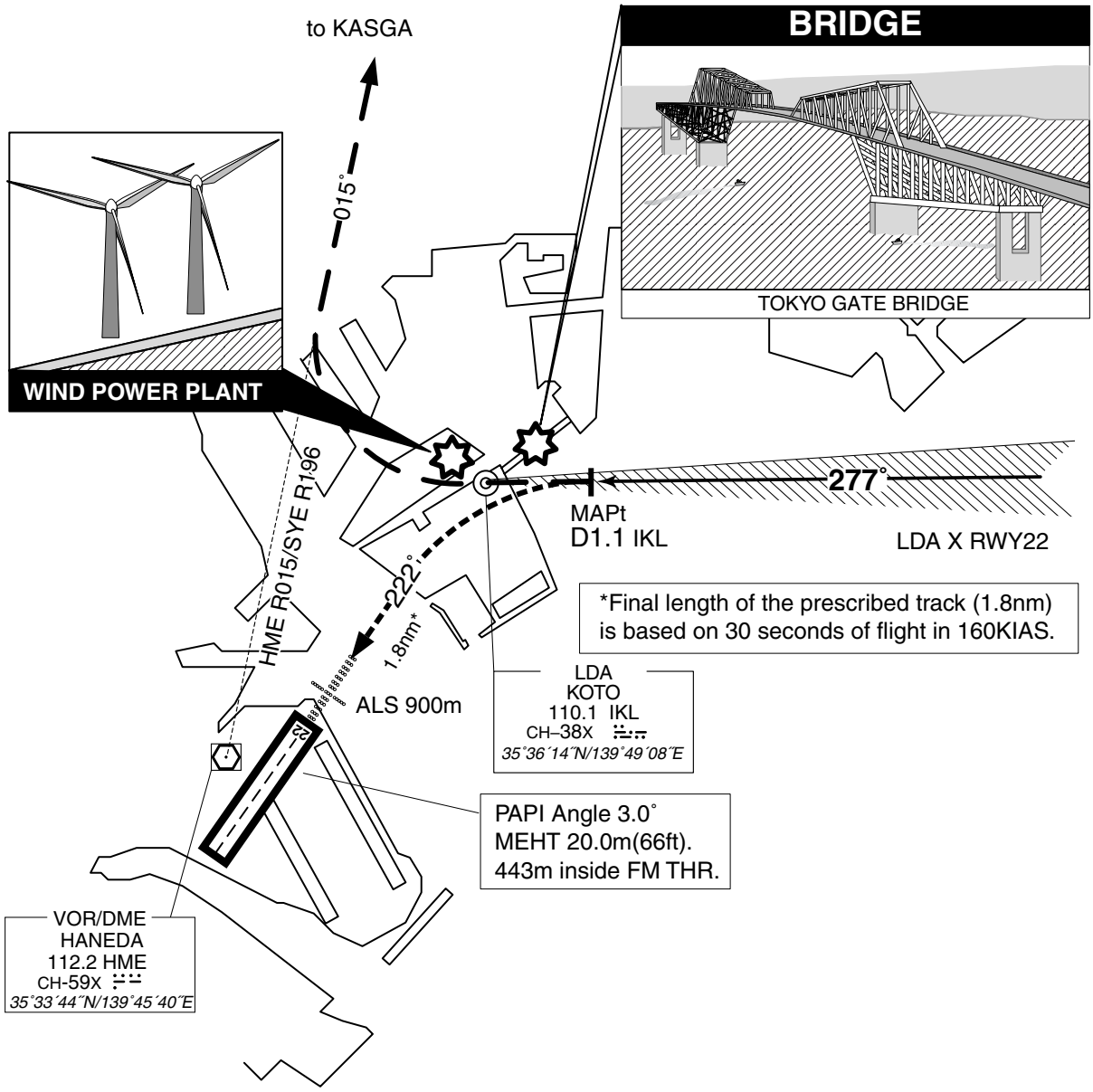
MINIMA with Missed APCH climb gradient of 2.5% are not established.
MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL LDA X RWY22

## Visual Prescribed Track for LDA X RWY22

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.
Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



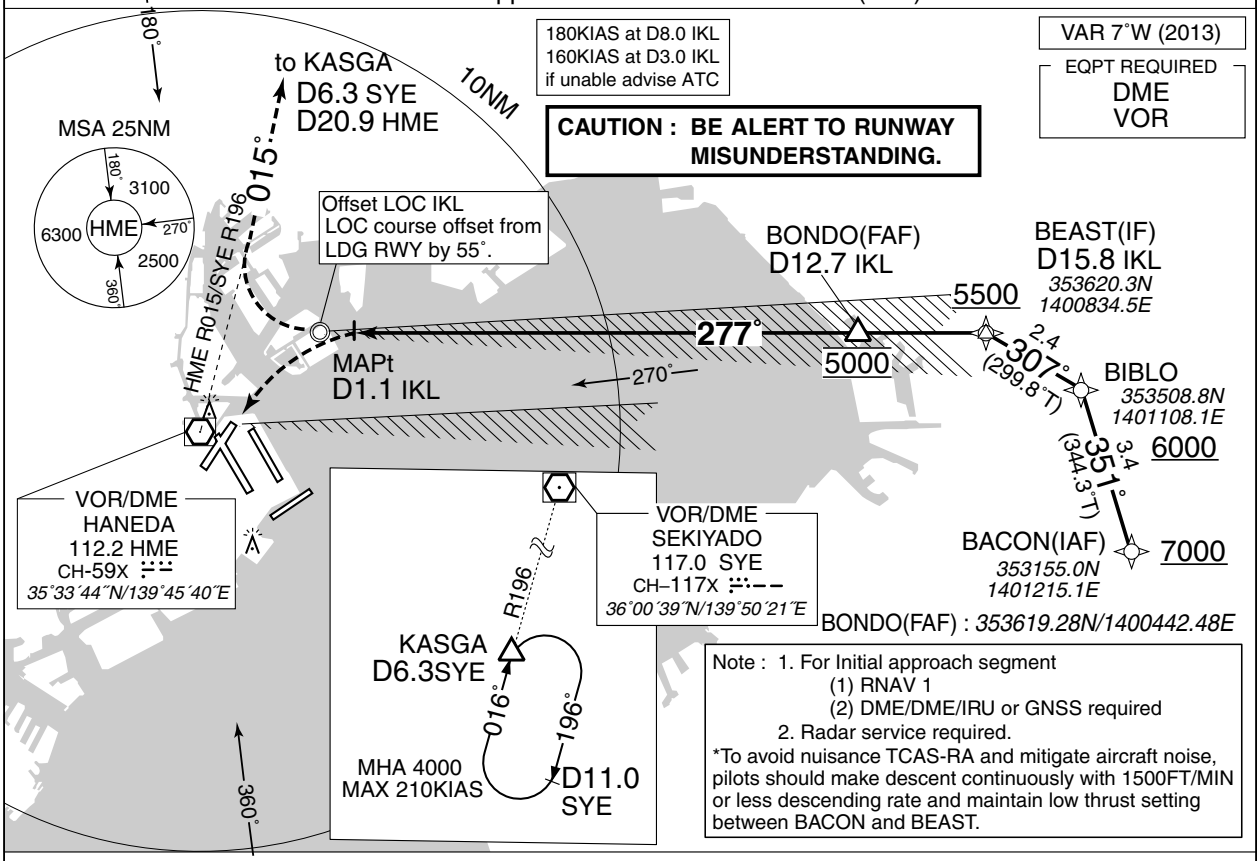

In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn right for joining HME R015/SYE R196 and missed approach procedure.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA W RWY22

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.1 IKL<br>LDA–DME CH–38X | 118.575 - 118.1 - 124.35<br>118.725 - 118.8 | ATIS 128.8 |

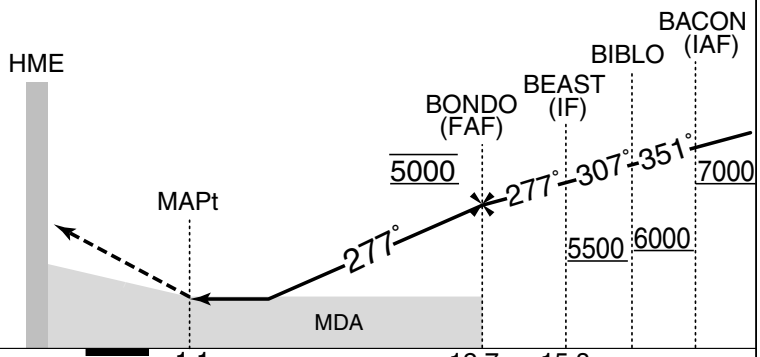
Simultaneous approach authorized with RWY23(LDA)




MISSED APPROACH

At MAPt, turn right climb to 4000FT via HME R015 /SYE R196 to KASGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to IKL | 1.1 | 12.7 | 15.8 | | |
|---|---|---|---|---|---|
| NM to THR | 3.8 | 15.4 | 18.5 | 20.9 | 24.3 |

Missed APCH climb gradient MNM 4.0%

| MINIMA | THR elev. 35 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

**Do Not turn left until D1.1 IKL**

**SO AS NOT TO MISUNDERSTAND THE RUNWAY**

MINIMA with Missed APCH climb gradient of 2.5% are not established.
MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

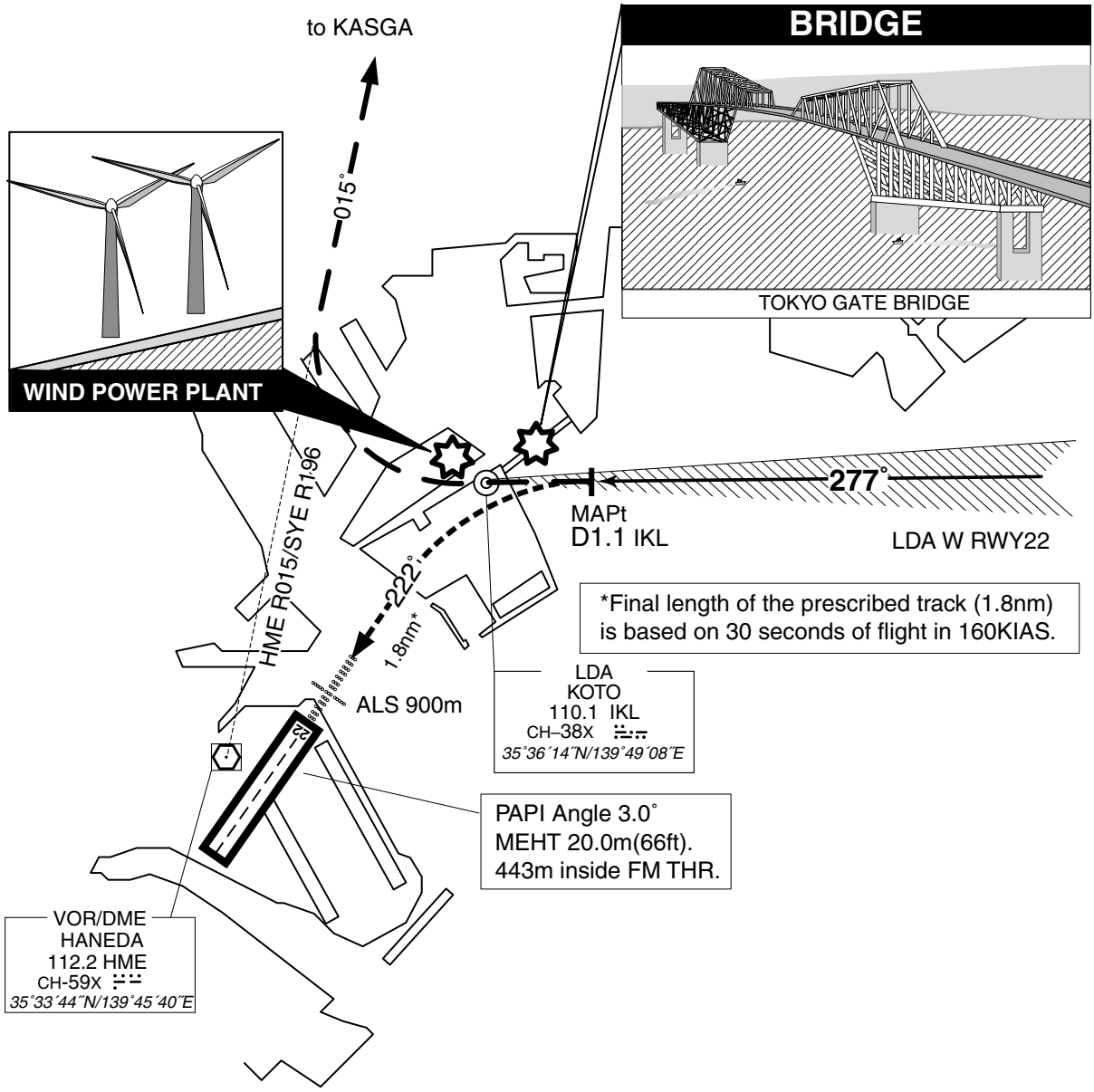
INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL LDA W RWY22

## Visual Prescribed Track for LDA W RWY22

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.

Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



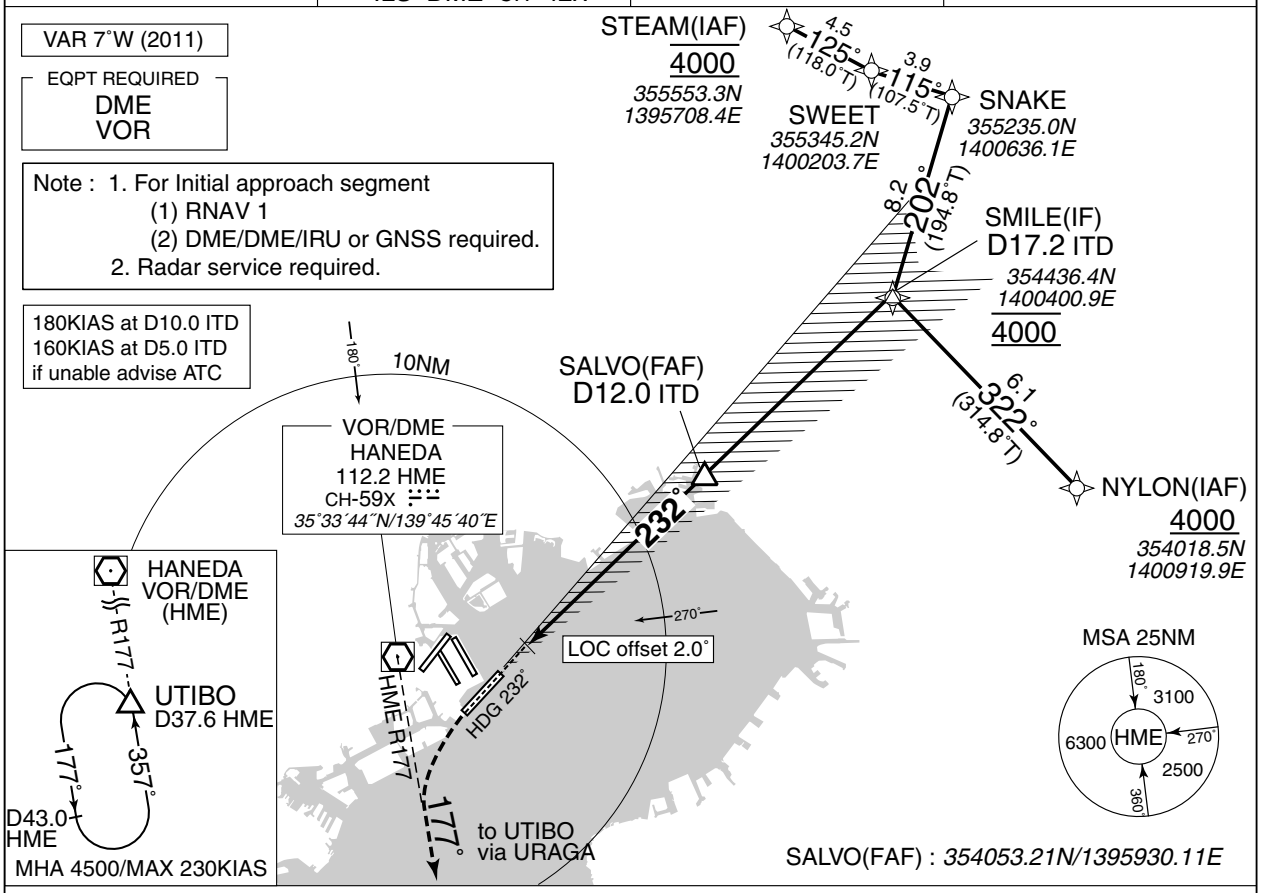

In case of GO AROUND, pilot should report ATC as soon as practicable.

Until receiving ATC instructions, aircraft turn right for joining HME R015/SYE R196 and missed approach procedure.

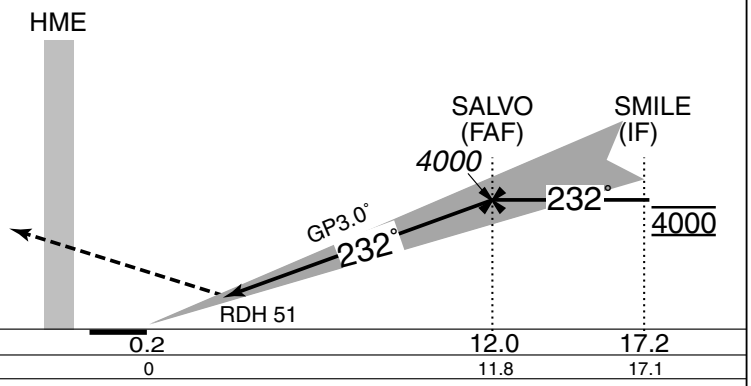
**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — ILS Z RWY23

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.5 ITD<br>ILS–GP 329.6<br>ILS–DME CH–42X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




MISSED APPROACH
Climb on HDG232˚ to 500FT,
turn left climb to 4500FT via
HME R177 to UTIBO via URAGA
and hold.
Contact TOKYO APP.



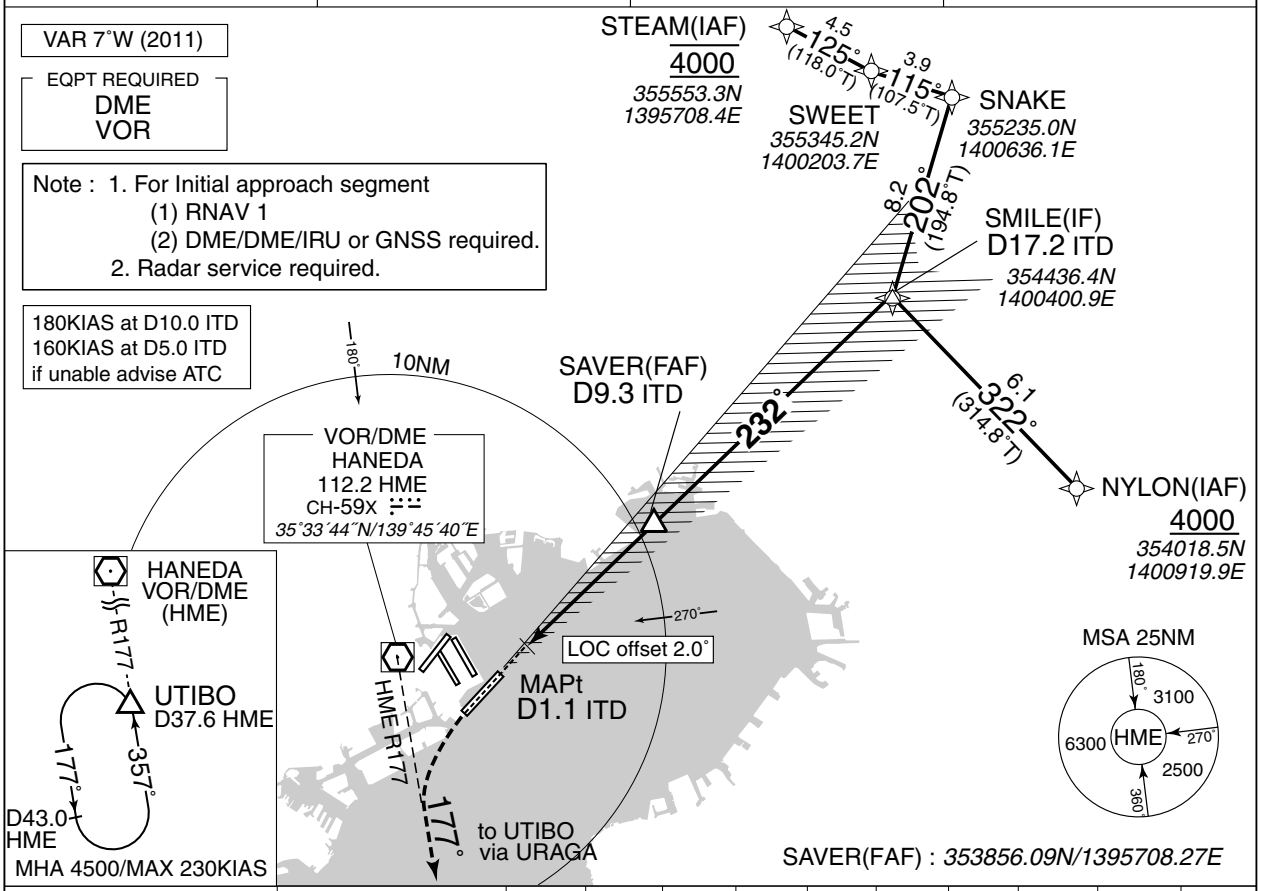

| MINIMA | THR elev. 55 | | AD elev. 21 | |
|---|---|---|---|---|
| CAT | CAT Ⅰ | | CIRCLING | |
| | DA(H) | RVR/CMV | MDA(H) | VIS |
| A | 383 (328) | 800 | 730 (709) | 1600 |
| B | | | | |
| C | | | | 2400 |
| D | | | | 3200 |

Circling is not authorized during the night time, except counterclockwise circling to RWY22, RWY16R/16L and clockwise circling to RWY34R/34L.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LOC Z RWY23

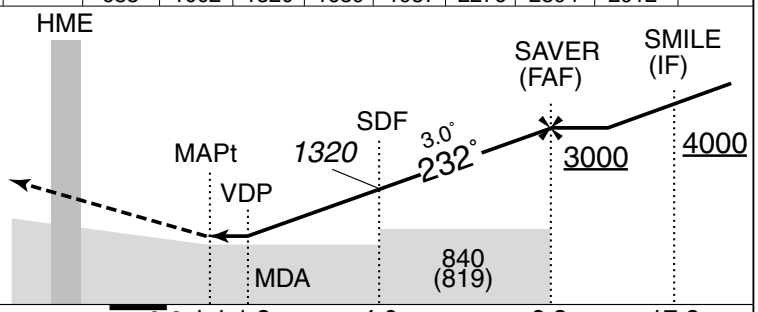
| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.5 ITD<br>ILS–DME CH–42X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




| NM to ITD | MAPt | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | FAF |
|---|---|---|---|---|---|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | – | 683 | 1002 | 1320 | 1639 | 1957 | 2276 | 2594 | 2912 | – |

MISSED APPROACH
Climb on HDG 232˚ to 500FT, turn left, climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

No turn before MAPt.




| DME to ITD | 0.2 | 1.1 | 1.3 | 4.0 | 9.3 | 17.2 |
|---|---|---|---|---|---|---|
| NM to THR | 0 | 0.9 | 1.1 | 3.8 | 9.1 | 17.1 |

MINIMA THR elev. 55 AD elev. 21

| CAT | LOC | | CIRCLING | |
|---|---|---|---|---|
| | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 440 (419) | 900 | 730 (709) | 1600 |
| B | | 1000 | | |
| C | | | | 2400 |
| D | | 1400 | | 3200 |

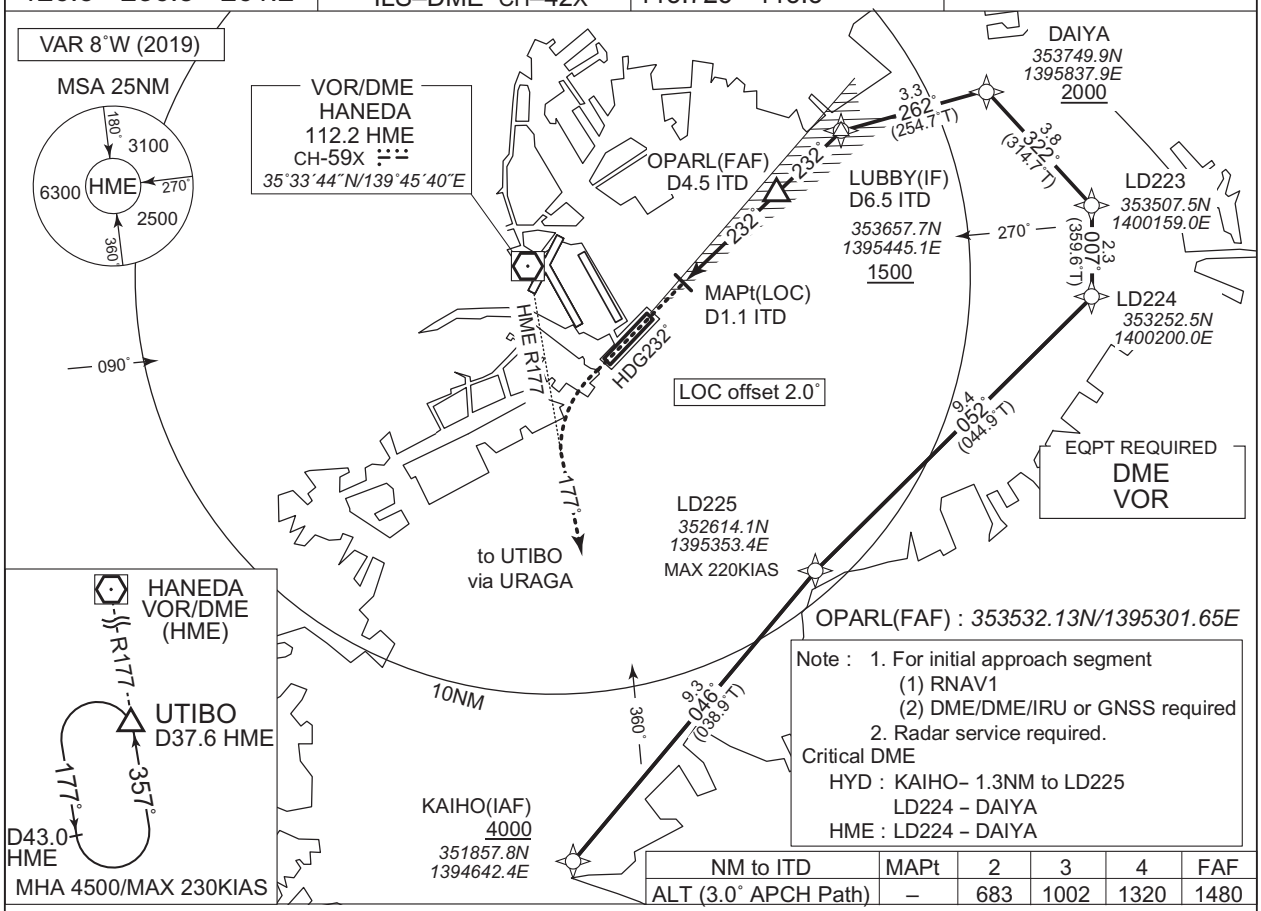
Circling is not authorized during the night time, except counterclockwise circling to RWY22, RWY16R/16L and clockwise circling to RWY34R/34L.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL

ILS Y or LOC Y RWY23

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 110.5 ITD<br>ILS–GP 329.6<br>ILS–DME CH–42X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




Note : 1. For initial approach segment
(1) RNAV1
(2) DME/DME/IRU or GNSS required
2. Radar service required.
Critical DME
HYD : KAIHO– 1.3NM to LD225
LD224 – DAIYA
HME : LD224 – DAIYA

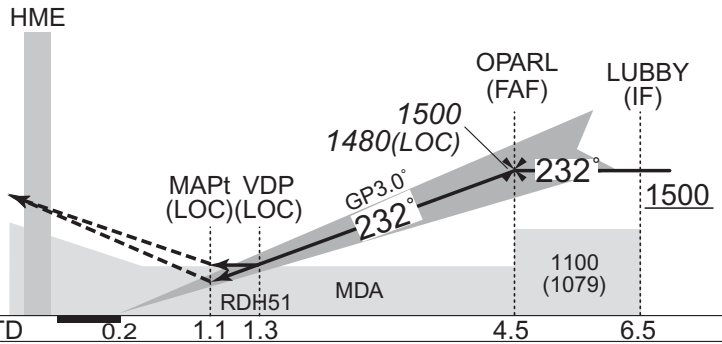
| NM to ITD | MAPt | 2 | 3 | 4 | FAF |
|---|---|---|---|---|---|
| ALT (3.0° APCH Path) | – | 683 | 1002 | 1320 | 1480 |

MISSED APPROACH

Climb on HDG232° to 500FT, turn left, climb to 4500FT via HME R177 to UTIBO via URAGA and hold.

Contact TOKYO APP.

Timing not authorized for defining the MAPt.
No turn before MAPt.




| DME to ITD | 0.2 | 1.1 | 1.3 | 4.5 | 6.5 |
|---|---|---|---|---|---|
| NM to THR | 0 | 0.9 | 1.1 | 4.3 | 6.3 |

MINIMA — THR elev. 55 — AD elev. 21

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 383 (328) | 800 | 440 (419) | 900 | 730 (709) | 1600 |
| B | | | | 1000 | | |
| C | | | | | | 2400 |
| D | | | | 1400 | | 3200 |

Circling is not authorized during the night time, except counterclockwise circling to RWY22, RWY16R/16L and clockwise circling to RWY34R/34L.

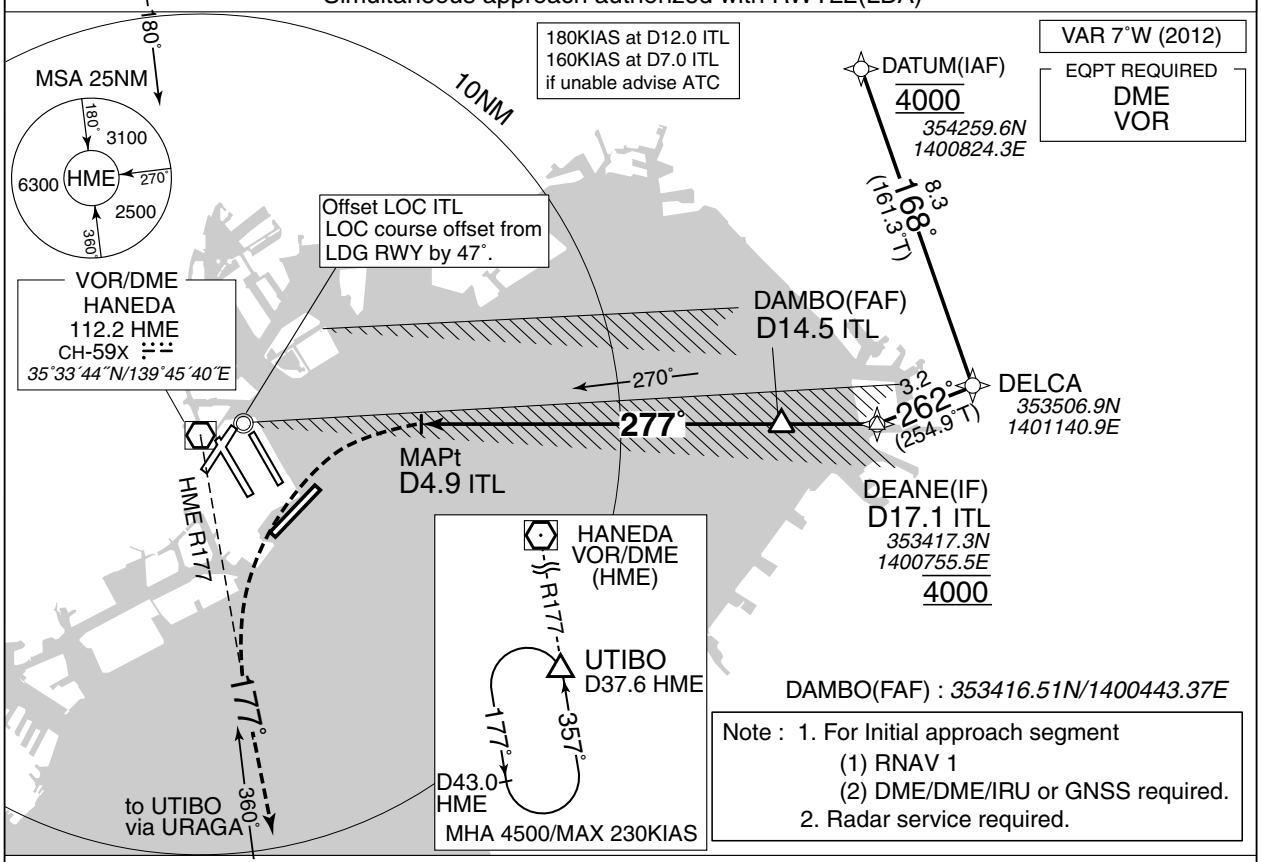
CHANGE: Description of GP angle.

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA Z RWY23

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.5 ITL<br>LDA–DME CH–22X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

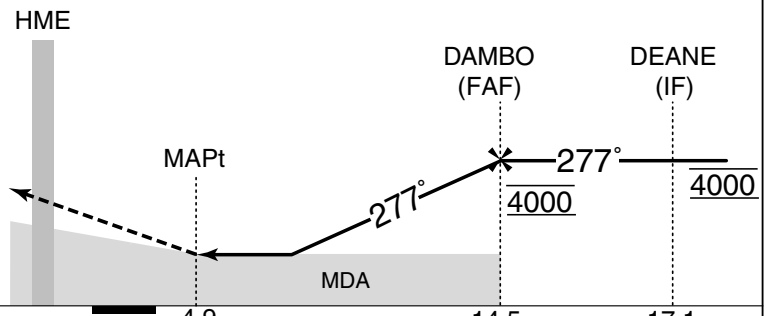
Simultaneous approach authorized with RWY22(LDA)




MISSED APPROACH

At MAPt, turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to ITL | 4.9 | 14.5 | 17.1 |
|---|---|---|---|
| NM to THR | 3.4 | 13.0 | 15.6 |

| MINIMA | THR elev. 55 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

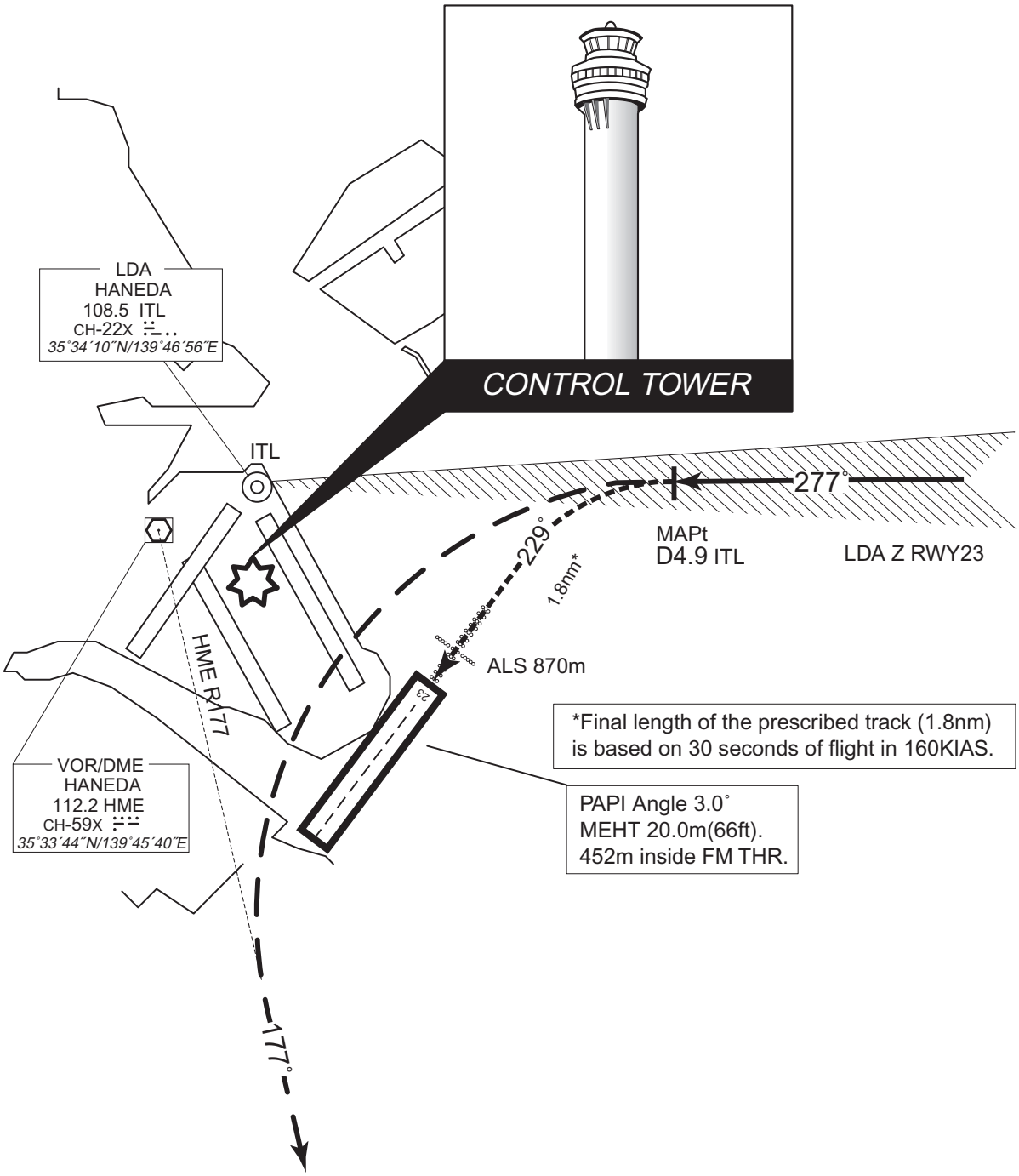
MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL LDA Z RWY23

## Visual Prescribed Track for LDA Z RWY23

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.




In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn left HDG 229˚ for joining HME R177 and missed approach procedure.

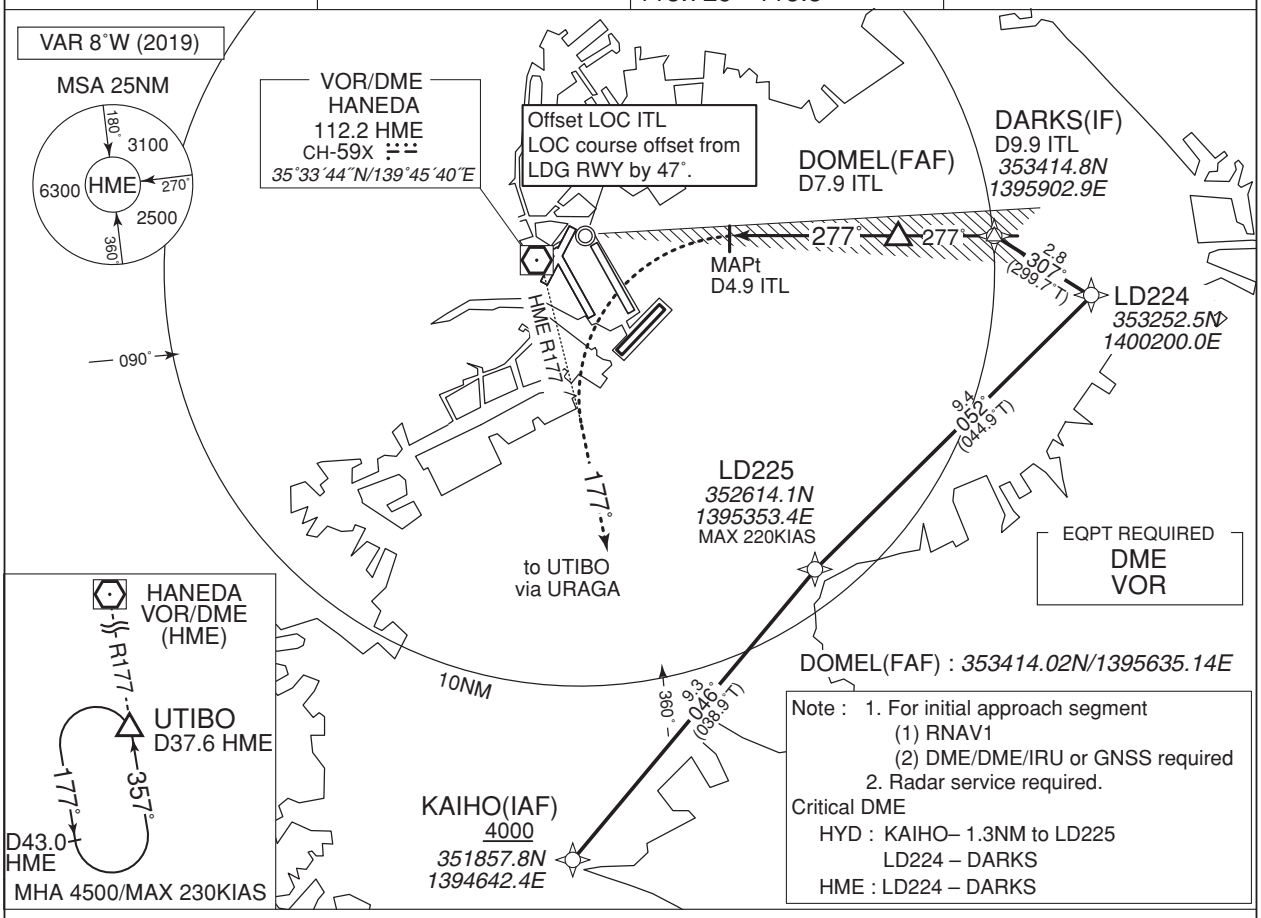
CHANGE : Correction of misdescription (ITL COORD).

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL

LDA Y RWY23

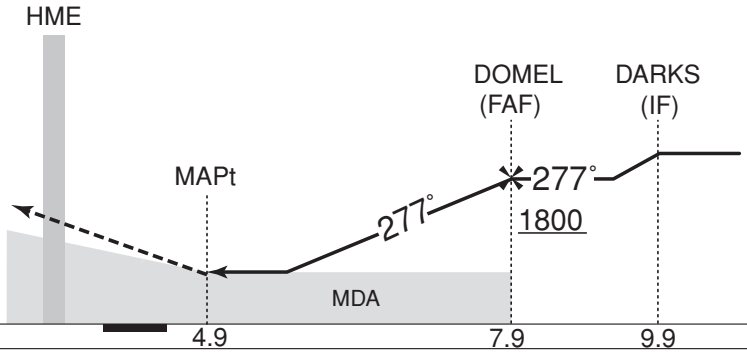
| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.5 ITL<br>LDA–DME CH–22X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




MISSED APPROACH

At MAPt, turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to ITL | | 4.9 | 7.9 | 9.9 |
|---|---|---|---|---|
| NM to THR | | 3.4 | 6.4 | 8.4 |

| MINIMA | THR elev. 55 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

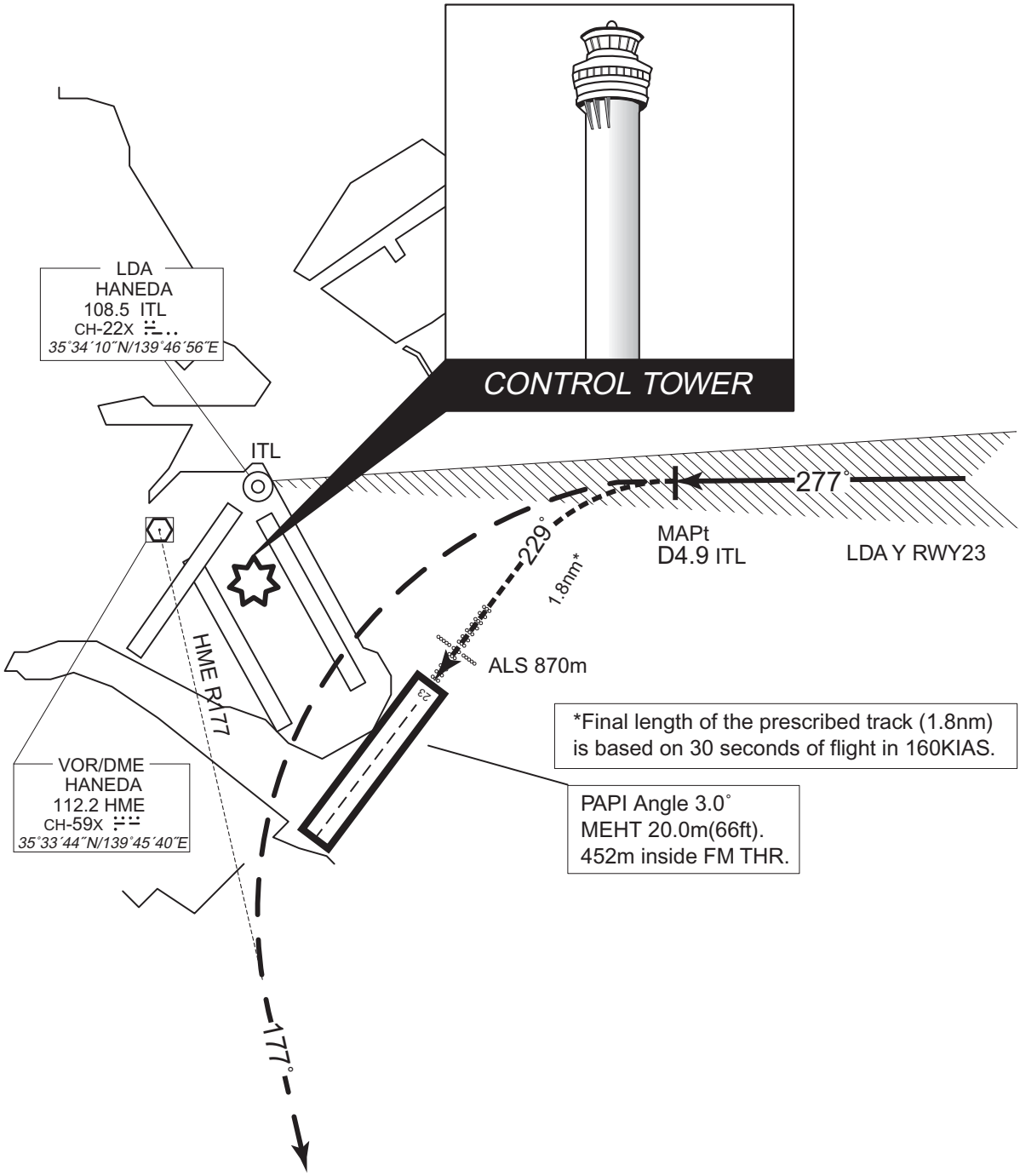
CHANGE : Update

INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL LDA Y RWY23

## Visual Prescribed Track for LDA Y RWY23

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.




In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn left HDG 229˚ for joining HME R177 and missed approach procedure.

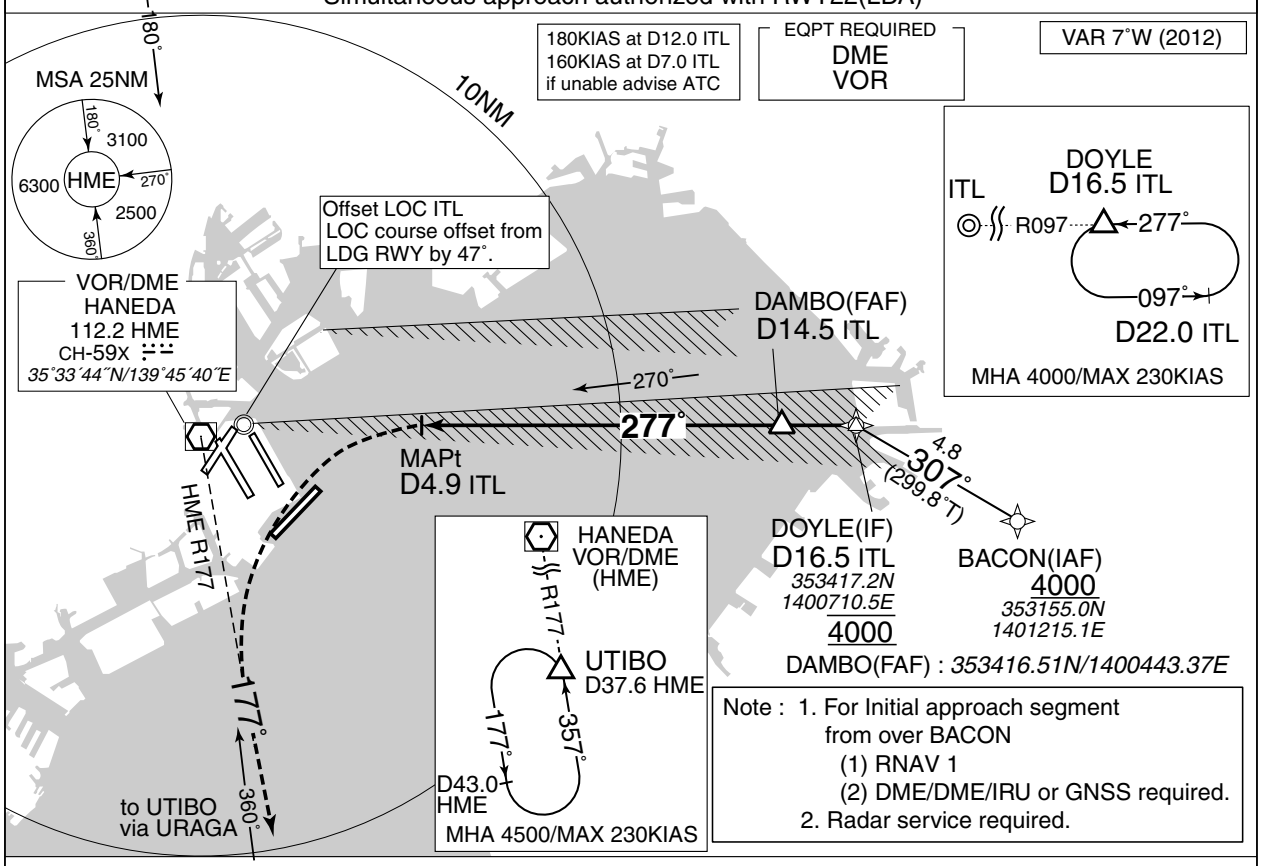
CHANGE : Correction of misdescription (ITL COORD).

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA X RWY23

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.5 ITL<br>LDA–DME CH–22X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

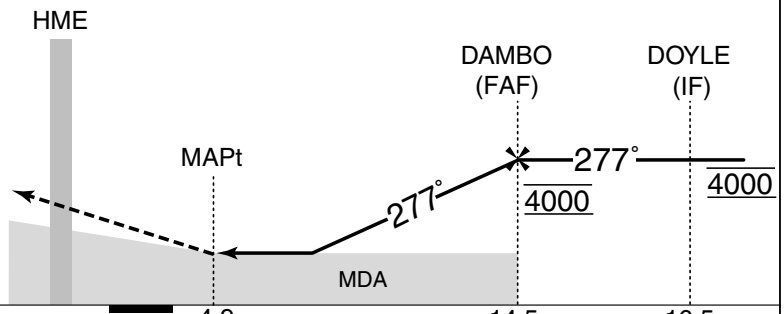
Simultaneous approach authorized with RWY22(LDA)




MISSED APPROACH

At MAPt, turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to ITL | 4.9 | 14.5 | 16.5 |
|---|---|---|---|
| NM to THR | 3.4 | 13.0 | 15.0 |

| MINIMA | THR elev. 55 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

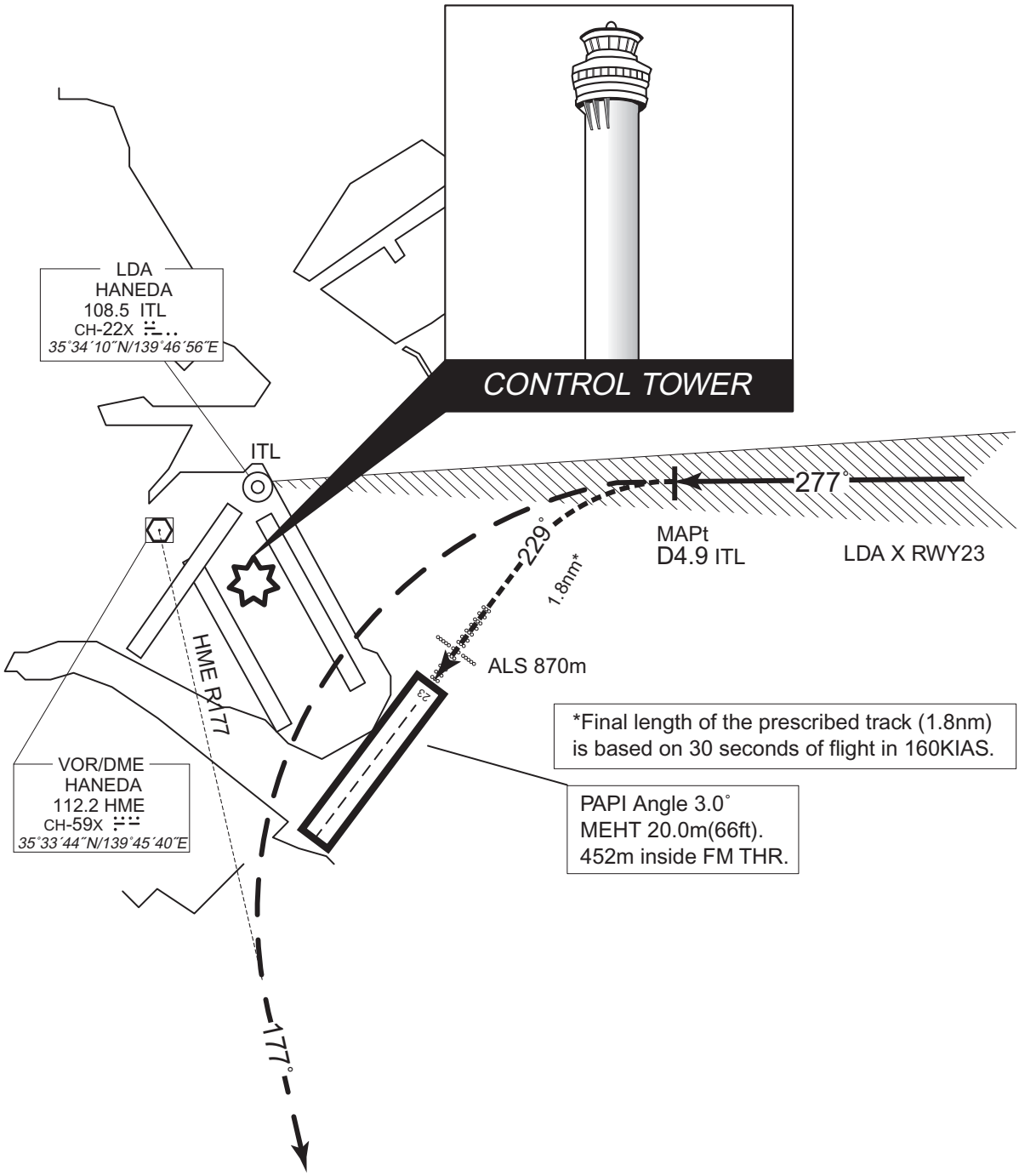
MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL LDA X RWY23

Visual Prescribed Track for LDA X RWY23

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.




In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn left HDG 229˚ for joining HME R177 and missed approach procedure.

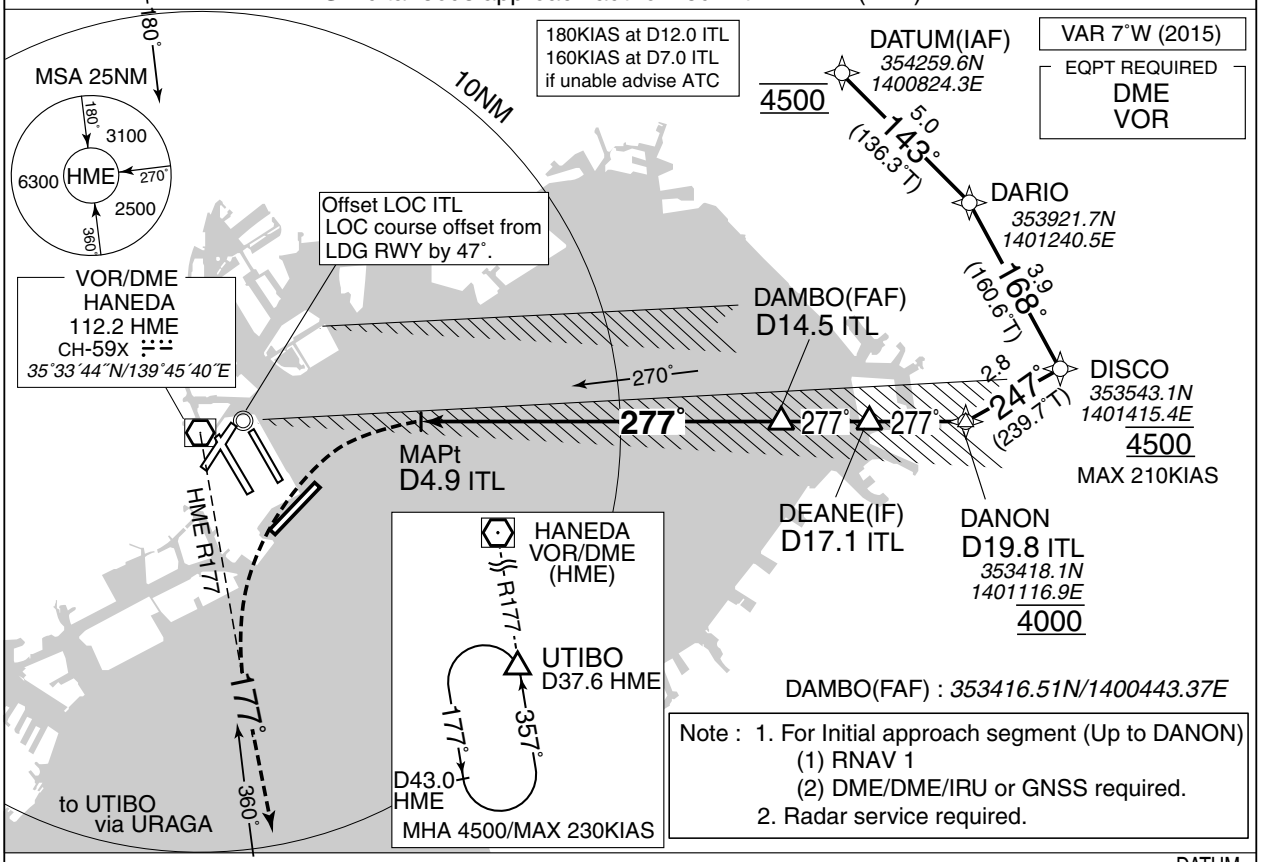
CHANGE : Correction of misdescription (ITL COORD).

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — LDA W RWY23

| TOKYO APP | LDA – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 108.5 ITL<br>LDA–DME CH–22X | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

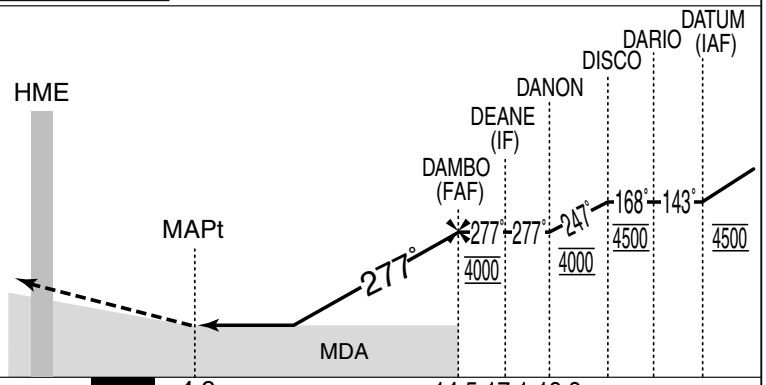
Simultaneous approach authorized with RWY22(LDA)




MISSED APPROACH

At MAPt, turn left climb to 4500FT via HME R177 to UTIBO via URAGA and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.




| DME to ITL | 4.9 | 14.5 | 17.1 | 19.8 |
|---|---|---|---|---|
| NM to THR | 3.4 | 13.0 | 15.6 | 18.3 |

| MINIMA | THR elev. 55 | AD elev. 21 |
|---|---|---|
| CAT | MDA(H) | VIS |
| A | 1000 (979) | 6000 |
| B | | |
| C | | |
| D | | |

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

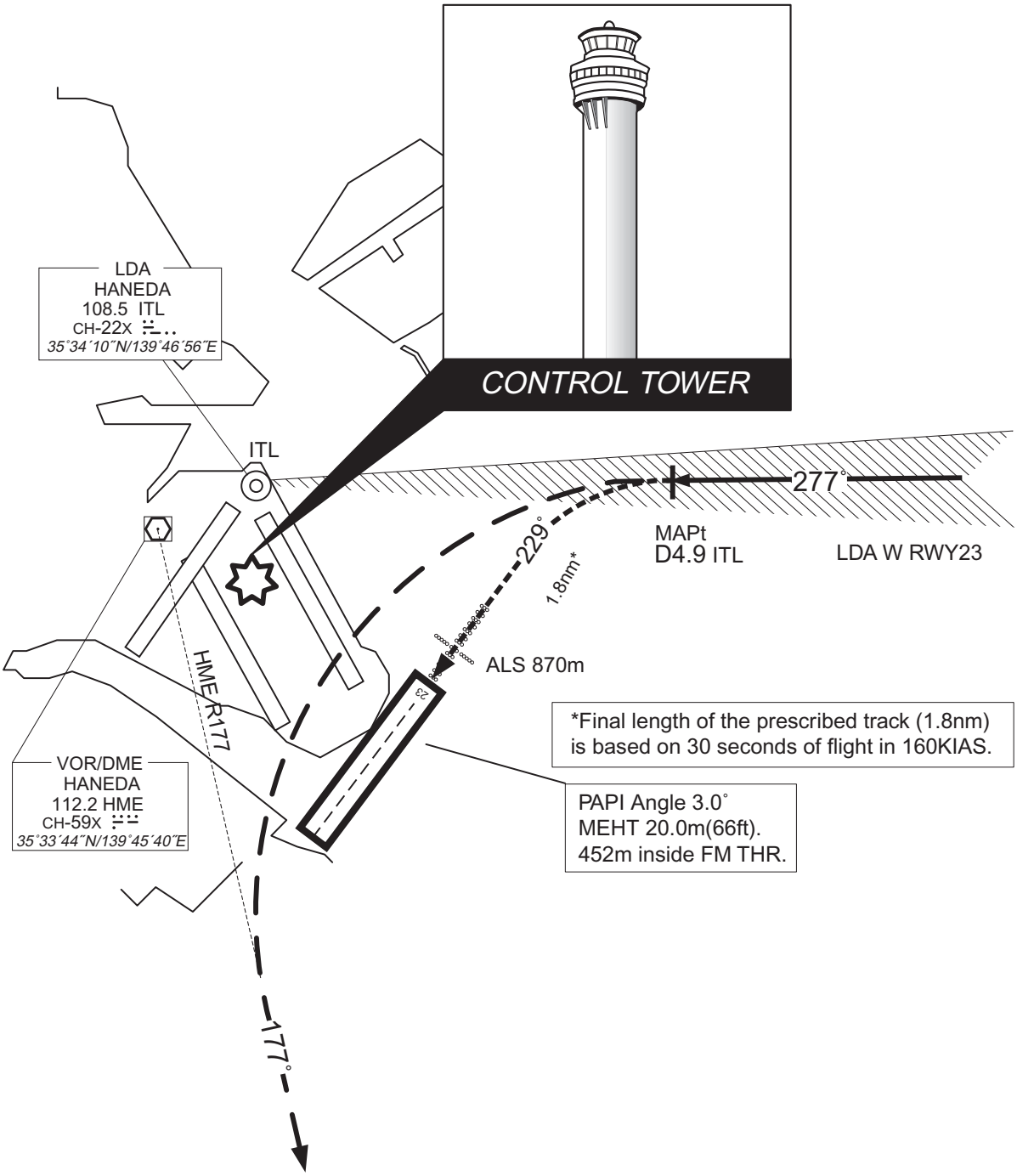
INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA W RWY23

## Visual Prescribed Track for LDA W RWY23

Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.




In case of GO AROUND, pilot should report ATC as soon as practicable.
Until receiving ATC instructions, aircraft turn left HDG 229˚ for joining HME R177 and missed approach procedure.

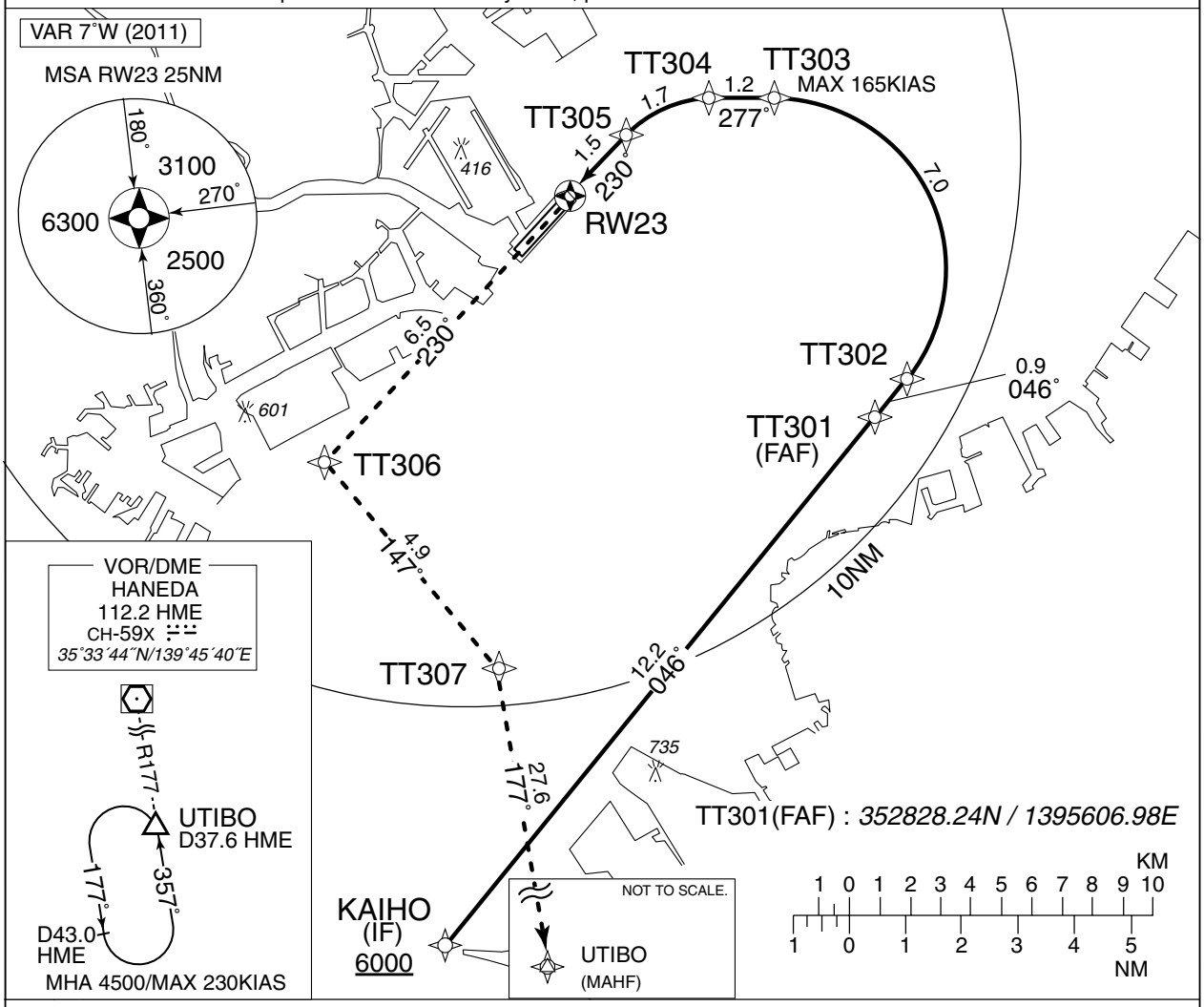
CHANGE : Correction of misdescription (ITL COORD).

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — RNAV (RNP) RWY23

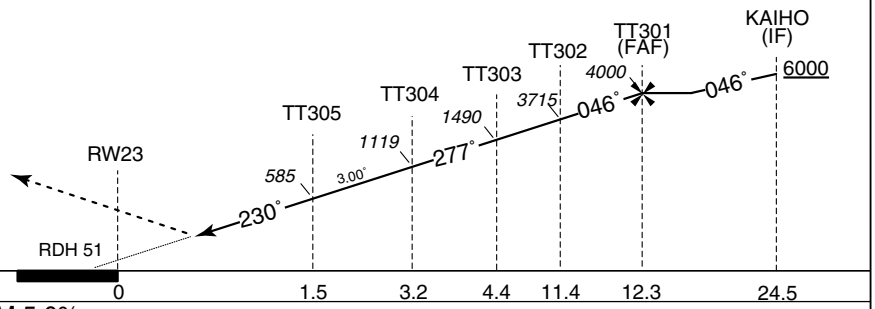
| TOKYO APP | GNSS and RF required. | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

For uncompensated Baro-VNAV systems, procedure not authorized below 0℃／above 45℃.




MISSED APPROACH

Climb to 4500FT, to TT306, to TT307, to UTIBO and hold. Contact TOKYO APP.




Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 55 AD elev. 21

| CAT | RNP 0.30 | |
|---|---|---|
| | DA(H) | RVR/CMV |
| A | — | — |
| B | | |
| C | 330(275) | 800 |
| D | | 1200 |

# RNP AR

## Special Authorization Required

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

# RNAV (RNP) RWY23

## Coding Table

| Serial Number | Path Descriptor | Waypoint Identifier | Fly over | Course [°M(°T)] | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KT) | VPA/ RDH (°/FT) | RNP Value |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 001 | IF | KAIHO | — | — | -7.2 | — | — | +6000 | — | — | — |
| 002 | TF | TT301 | — | 046 (038.8) | -7.2 | 12.2 | — | 4000 | — | — | 1.0 |
| 003 | TF | TT302 | — | 046 (038.8) | -7.2 | 0.9 | — | 3715 | — | -3.00 | 0.3 |
| 004 | RF Center: TTRF1 r=3.10NM | TT303 | — | — | -7.2 | 7.0 | L | 1490 | -165 | -3.00 | 0.3 |
| 005 | TF | TT304 | — | 277 (269.6) | -7.2 | 1.2 | — | 1119 | — | -3.00 | 0.3 |
| 006 | RF Center: TTRF2 r=2.00NM | TT305 | — | — | -7.2 | 1.7 | L | 585 | — | -3.00 | 0.3 |
| 007 | TF | RW23 | Y | 230 (222.5) | -7.2 | 1.5 | — | 106 | — | -3.00/51 | 0.3 |
| 008 | TF | TT306 | — | 230 (222.5) | -7.2 | 6.5 | — | — | — | — | 1.0 |
| 009 | TF | TT307 | — | 147 (139.9) | -7.2 | 4.9 | — | — | — | — | 1.0 |
| 010 | TF | UTIBO | — | 177 (169.9) | -7.2 | 27.6 | — | 4500 | — | — | 1.0 |

## Waypoint Coordinates

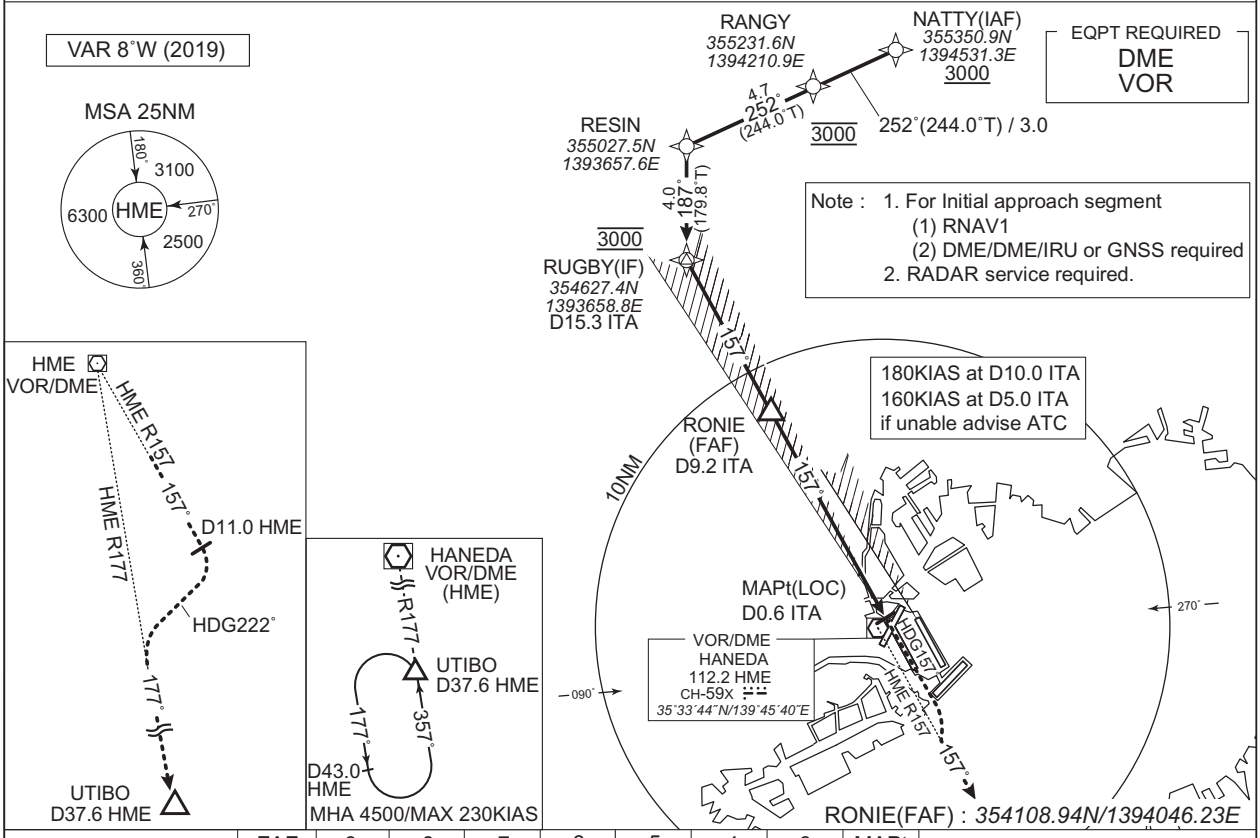
| Waypoint Identifier | Coordinates | RF Arc Center Identifier | Coordinates |
|---|---|---|---|
| KAIHO | *351857.83N / 1394642.43E* | TTRF1 | *353106.44N / 1395349.88E* |
| TT301 | *352828.24N / 1395606.98E* | TTRF2 | *353212.62N / 1395225.48E* |
| TT302 | *352909.99N / 1395647.99E* | | |
| TT303 | *353413.28N / 1395350.00E* | | |
| TT304 | *353412.77N / 1395224.45E* | | |
| TT305 | *353332.98N / 1395034.74E* | | |
| RW23 | *353226.15N / 1394919.61E* | | |
| TT306 | *352740.05N / 1394357.98E* | | |
| TT307 | *352356.01N / 1394749.03E* | | |
| UTIBO | *345647.02N / 1395343.90E* | | |

**INSTRUMENT APPROACH CHART**

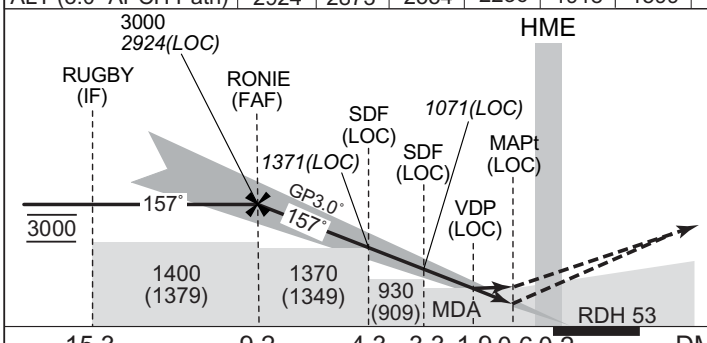
RJTT / TOKYO INTL — ILS or LOC RWY16R

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.55 ITA<br>ILS–GP 332.75<br>ILS–DME CH–52Y | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY 16L(ILS)




| NM to Next ITA | FAF | 9 | 8 | 7 | 6 | 5 | 4 | 3 | MAPt |
|---|---|---|---|---|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | 2924 | 2873 | 2554 | 2236 | 1918 | 1599 | 1281 | 962 | – |




MISSED APPROACH

Climb on HDG157˚ to 700FT, via HME R157 to 11.0DME, turn right HDG222˚ to intercept and proceed via HME R177 to UTIBO and hold at 4500FT.

Contact TOKYO APP.

Timing not authorized for defining the MAPt.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15.3 | 9.2 | 4.3 | 3.3 | 1.9 | 0.6 | 0.2 | DME to ITA |
| 15.1 | 9.0 | 4.1 | 3.2 | 1.7 | 0.5 | 0 | NM to THR |

Missed APCH climb gradient MNM 5.0%

MINIMA — THR elev. 16 — AD elev. 21

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 216 (200) | 550 | 570 (549) | 1000 | 730 (709) | 1600 |
| B | | | | 1200 | | |
| C | | | | | | 2400 |
| D | | | | 1600 | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except clockwise circling to RWY16L/22/23/34R/34L.

CHANGE : New PROC

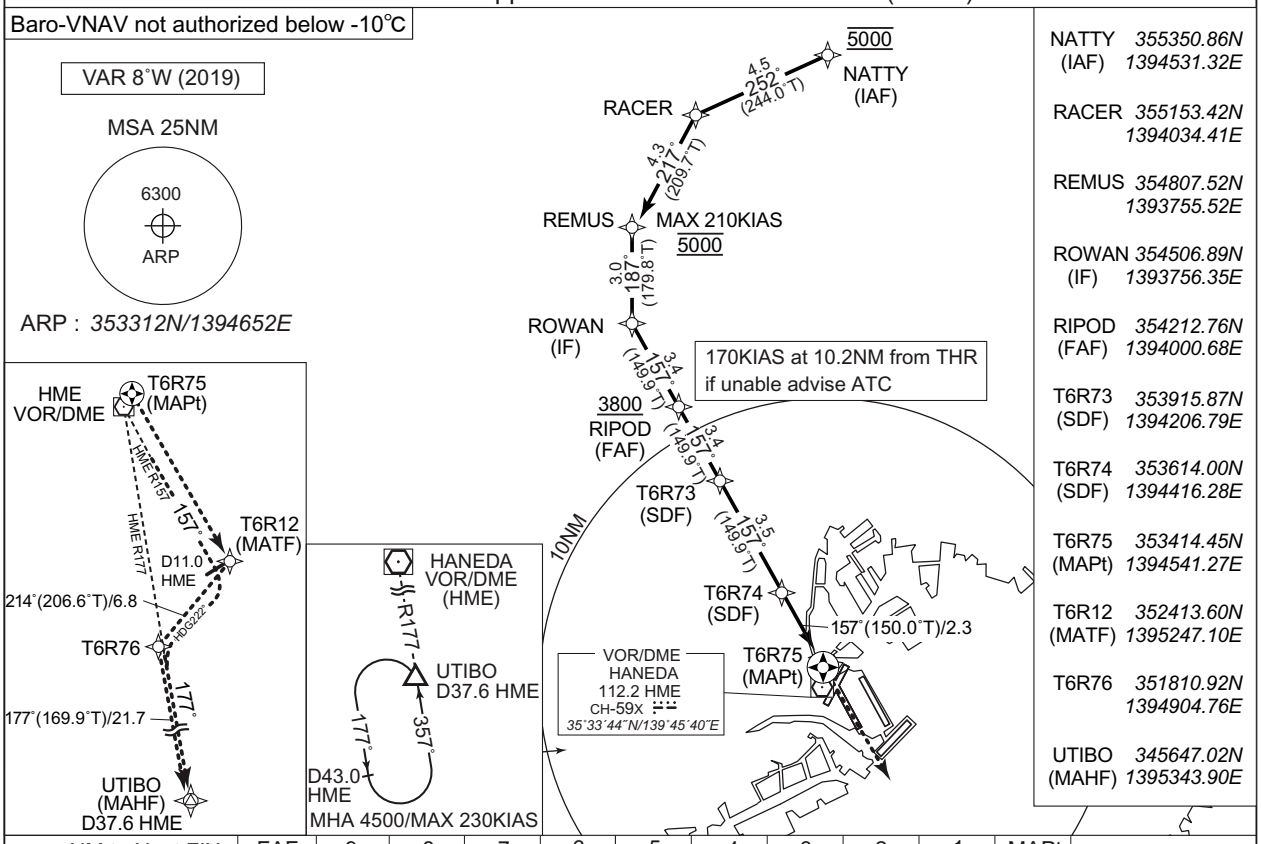
**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — RNAV (GNSS) RWY16R

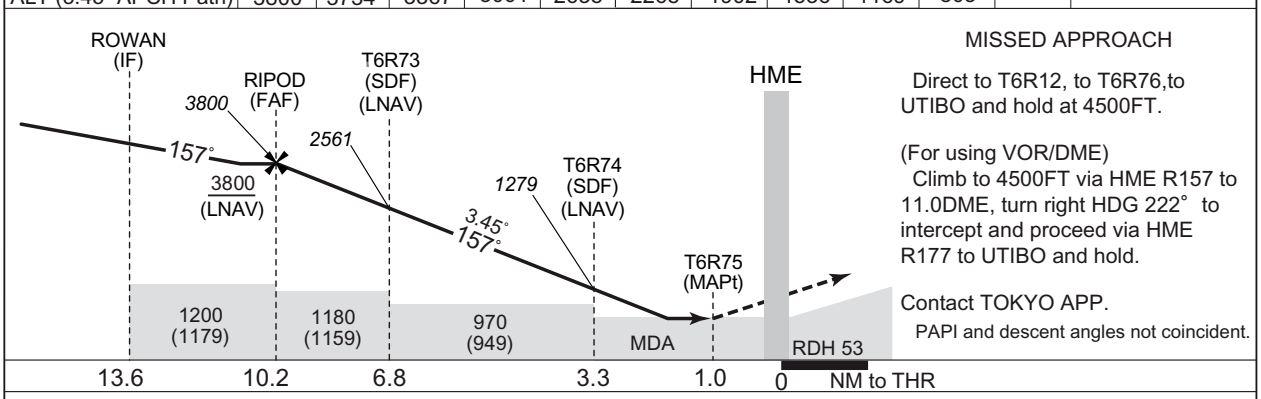
| TOKYO APP | | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 1 DME/DME not authorized.<br>2 RADAR service required.<br>3 GNSS required. | 118.1 - 124.35 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY 16L(RNAV)

Baro-VNAV not authorized below -10℃




| NM to Next FIX | FAF | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | MAPt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ALT (3.45˚ APCH Path) | 3800 | 3734 | 3367 | 3001 | 2635 | 2268 | 1902 | 1536 | 1169 | 803 | – |




MISSED APPROACH

Direct to T6R12, to T6R76,to UTIBO and hold at 4500FT.

(For using VOR/DME)
Climb to 4500FT via HME R157 to 11.0DME, turn right HDG 222˚ to intercept and proceed via HME R177 to UTIBO and hold.

Contact TOKYO APP.

PAPI and descent angles not coincident.

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 16 AD elev. 21

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 570 (554) | 1000 | 570 (549) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | 1200 | | |
| C | | | | | | 2400 |
| D | | 1600 | | 1600 | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except clockwise circling to RWY16L/22/23/34R/34L.

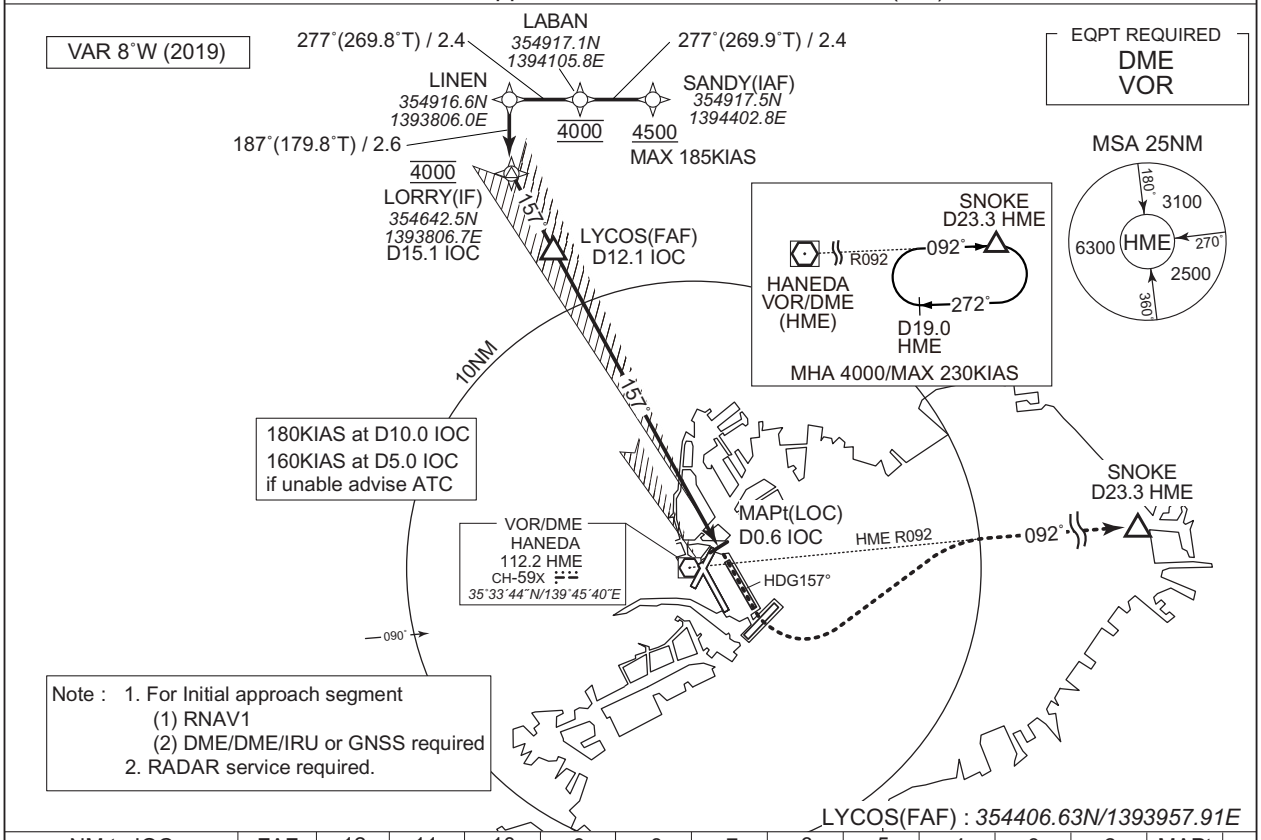
CHANGE : New PROC

**INSTRUMENT APPROACH CHART**

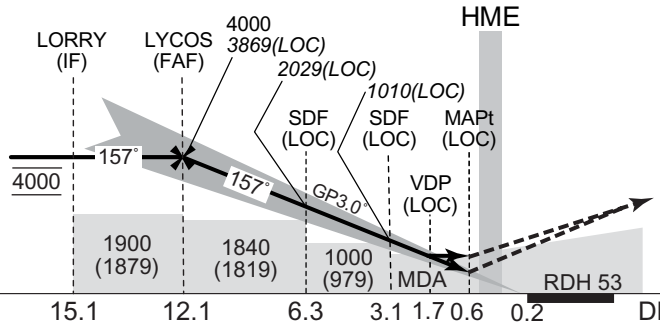
RJTT / TOKYO INTL — ILS or LOC RWY16L

| TOKYO APP | ILS – LOC | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 111.95 IOC<br>ILS–GP 330.95<br>ILS–DME CH–56Y | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY 16R(ILS)




| NM to IOC | FAF | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | MAPt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALT (3.0˚ APCH Path) | 3869 | 3833 | 3515 | 3197 | 2878 | 2560 | 2241 | 1923 | 1604 | 1286 | 967 | 649 | – |




MISSED APPROACH

Climb on HDG157˚ to 700FT,turn left to intercept and proceed via HME R092 to SNOKE and hold at 4000FT.

Contact TOKYO APP.

No turn before IOC 0.6DME.
Timing not authorized for defining the MAPt.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15.1 | 12.1 | 6.3 | 3.1 | 1.7 | 0.6 | 0.2 | DME to IOC |
| 15.0 | 12.0 | 6.2 | 3.0 | 1.5 | 0.5 | 0 | NM to THR |

Missed APCH climb gradient MNM 5.0%

MINIMA — THR elev. 19 — AD elev. 21

| CAT | CAT I | | LOC | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 219 (200) | 550 | 530 (509) | 1000 | 730 (709) | 1600 |
| B | | | | 1200 | | |
| C | | | | | | 2400 |
| D | | | | 1600 | | 3200 |

MINIMA with Missed APCH climb gradient of 2.5% are not established.
Circling is not authorized during the night time, except counterclockwise circling to RWY16R, clockwise circling to 22/23/34R/34L.

CHANGE : New PROC

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — RNAV (GNSS) RWY16L

| TOKYO APP | | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 1 DME/DME not authorized.<br>2 RADAR service required.<br>3 GNSS required. | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |

Simultaneous approach authorized with RWY16R(RNAV)

Baro-VNAV not authorized below -10℃

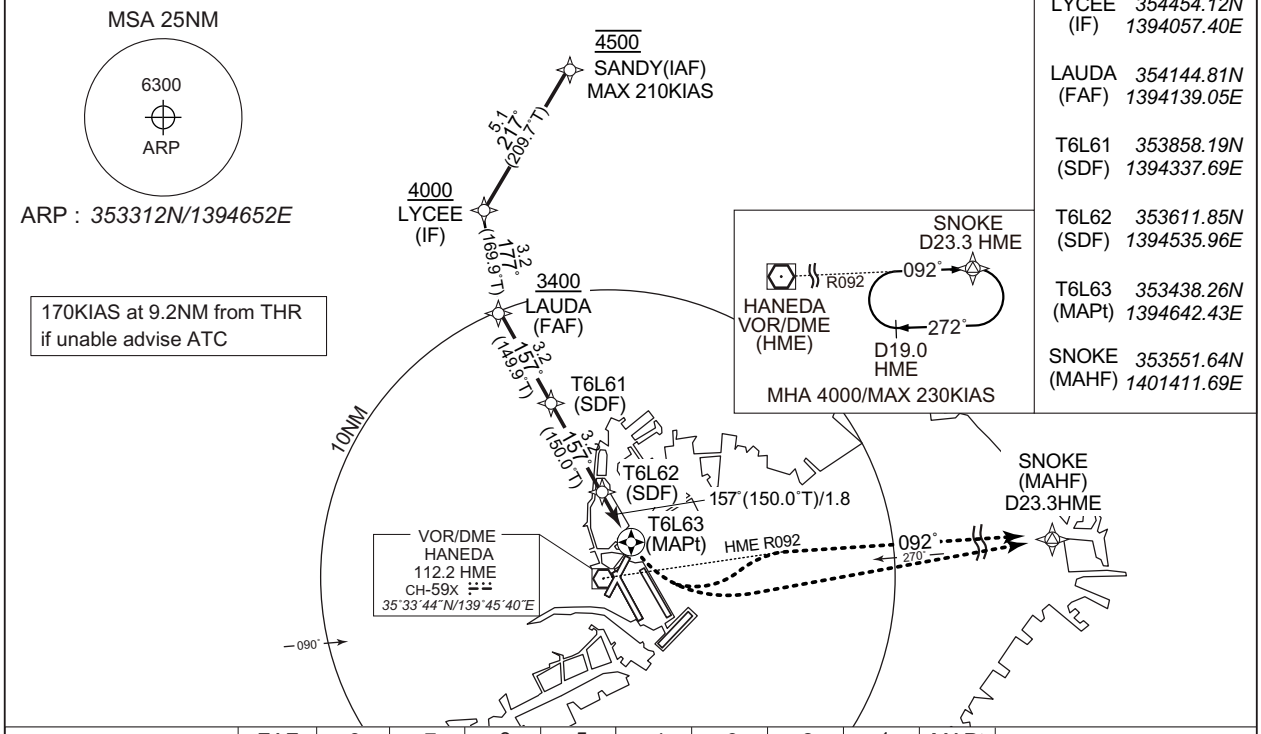
VAR 8˚W (2019)

MSA 25NM

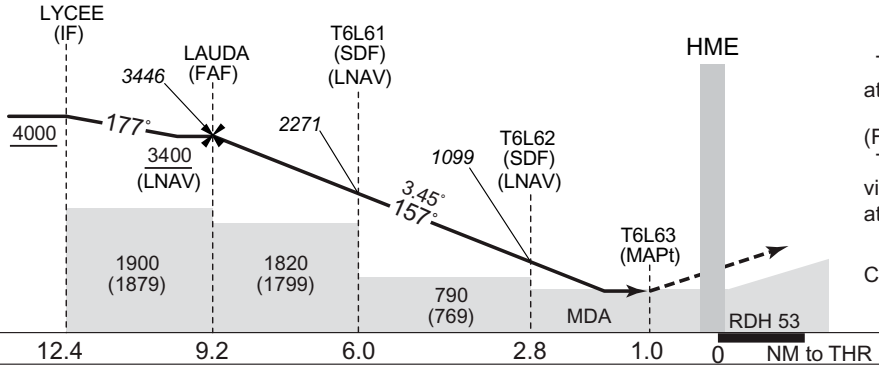
ARP : *353312N/1394652E*

170KIAS at 9.2NM from THR
if unable advise ATC

| | |
|---|---|
| SANDY (IAF) | *354917.53N 1394402.84E* |
| LYCEE (IF) | *354454.12N 1394057.40E* |
| LAUDA (FAF) | *354144.81N 1394139.05E* |
| T6L61 (SDF) | *353858.19N 1394337.69E* |
| T6L62 (SDF) | *353611.85N 1394535.96E* |
| T6L63 (MAPt) | *353438.26N 1394642.43E* |
| SNOKE (MAHF) | *353551.64N 1401411.69E* |




| NM to Next FIX | FAF | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | MAPt |
|---|---|---|---|---|---|---|---|---|---|---|
| ALT (3.45˚ APCH Path) | 3446 | 3370 | 3004 | 2637 | 2271 | 1905 | 1539 | 1172 | 806 | – |




MISSED APPROACH

Turn left, direct SNOKE and hold at 4000FT.

(For using VOR/DME)
Turn left to intercept and proceed via HME R092 to SNOKE and hold. at 4000FT.

Contact TOKYO APP.

PAPI and descent angles not coincident.

Missed APCH climb gradient MNM 5.0%

MINIMA — THR elev. 19 — AD elev. 21

| CAT | LNAV/VNAV | | LNAV | | CIRCLING | |
|---|---|---|---|---|---|---|
| | DA(H) | RVR/CMV | MDA(H) | RVR/CMV | MDA(H) | VIS |
| A | 530 (511) | 1000 | 530 (509) | 1000 | 730 (709) | 1600 |
| B | | 1200 | | 1200 | | |
| C | | | | | | 2400 |
| D | | 1600 | | 1600 | | 3200 |

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

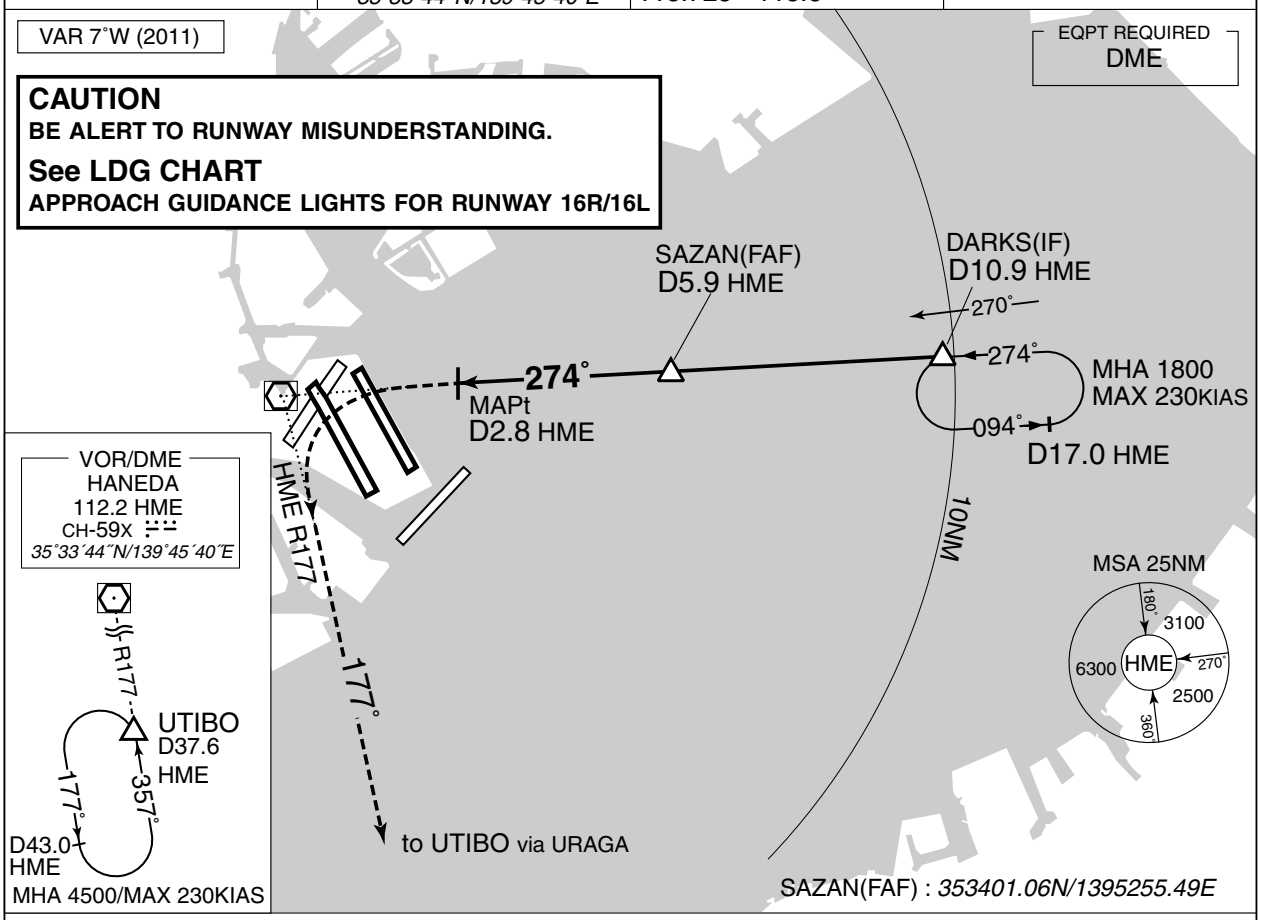
Circling is not authorized during the night time, except counterclockwise circling to RWY16R, clockwise circling to RWY22/23/34R/34L.

CHANGE : New PROC

**INSTRUMENT APPROACH CHART**

RJTT / TOKYO INTL — VOR A (for RWY16R/RWY16L)

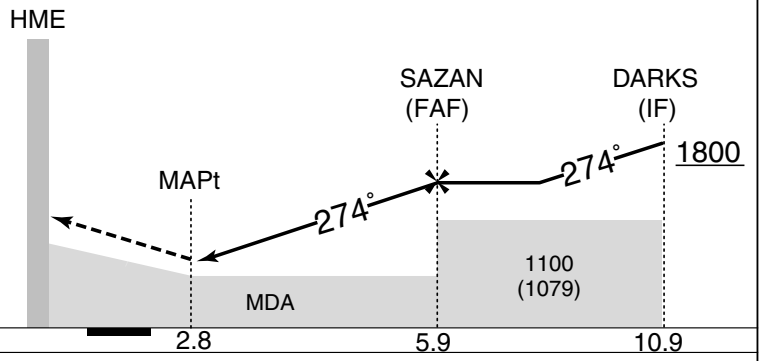
| TOKYO APP | HANEDA VOR/DME | TOKYO TOWER | RADAR AVBL |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | 112.2 HME<br>CH-59X<br>*35°33´44˝N/139°45´40˝E* | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | ATIS 128.8 |




MISSED APPROACH

Turn left, climb to 4500FT via HME
R177 to UTIBO via URAGA
and hold.
Contact TOKYO APP.

Timing not authorized for defining the MAPt.
No turn before MAPt.




| MINIMA | | AD elev. 21 |
|---|---|---|
| CAT | CIRCLING | |
| | MDA(H) | VIS |
| A | 760 (739) | 1600 |
| B | | |
| C | | 2400 |
| D | | 3200 |

INTENTIONALLY LEFT BLANK

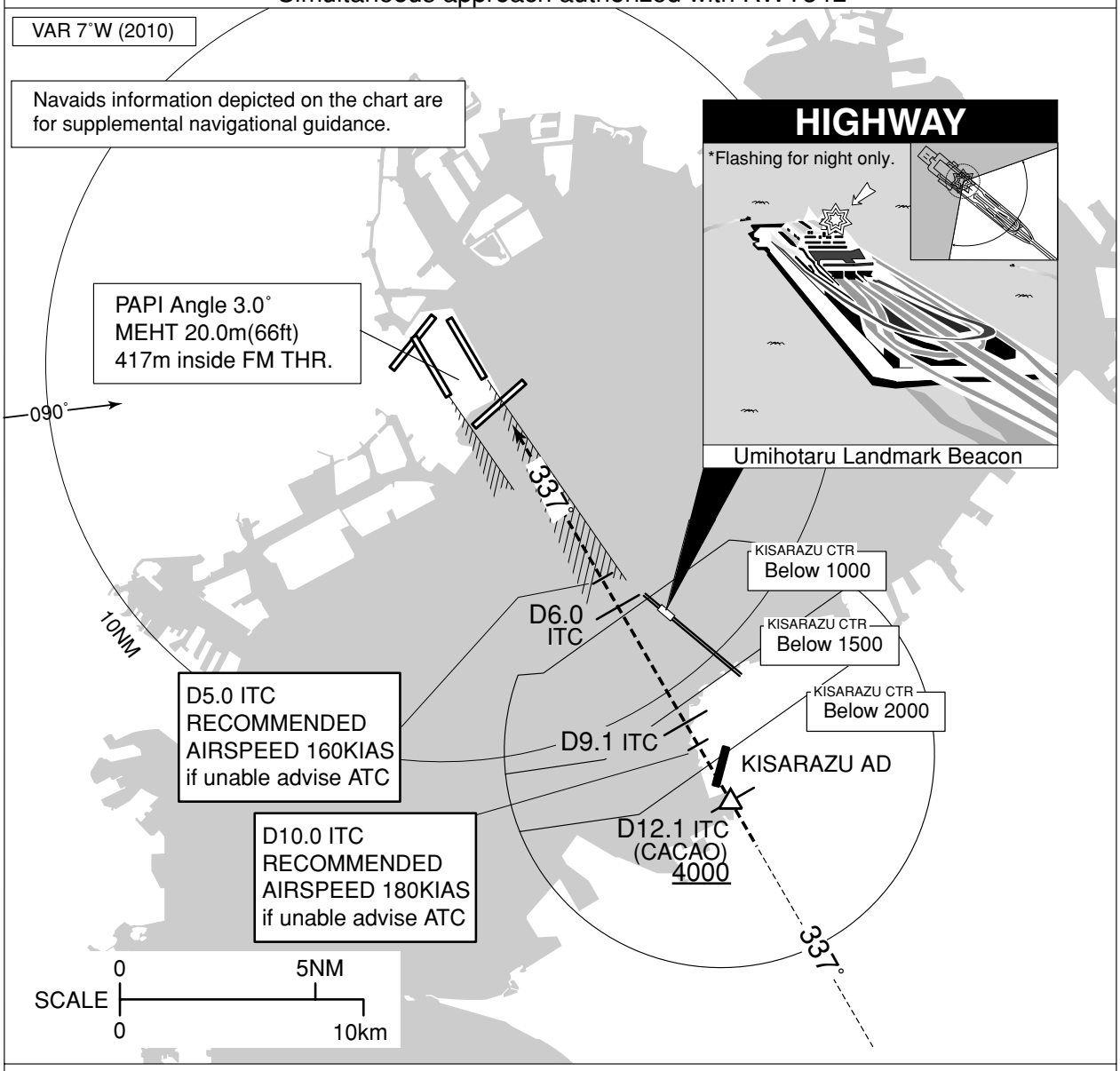
**VISUAL APPROACH**

RJTT / TOKYO INTL

HIGHWAY VISUAL RWY34R

| TOKYO APP | ILS – LOC | TOKYO TOWER | ATIS 128.8 |
|---|---|---|---|
| 119.1 - 119.4 - 119.7<br>126.5 - 236.8 - 261.2 | ITC 108.9<br>ILS–GP 329.3 | 124.35 - 118.1 - 118.575<br>118.725 - 118.8 | |

Simultaneous approach authorized with RWY34L




When visual approaches to RWY34R are in progress, arriving aircraft may be vectored to CACAO for HIGHWAY VISUAL RWY34R APPROACH.

In the event of a go-around, climb via ITC LOC and after THR HDG030˚ to 3000FT until receiving ATC instructions.

<HIGHWAY VISUAL RWY34R APPROACH>

After CACAO, aircraft proceed to RWY34R (ITC LOC course).

For avoid entering KISARAZU CTR, aircraft is recommended ITC 9.1DME at or above 2500FT, ITC 6.0DME at or above 1500FT.

Note1: Pilot is urged to report promptly to ATC when lose sight of landmark(HIGHWAY) and the preceding aircraft concerned.

Note2: Reference NAVAIDS(ITC LOC) must be operating.

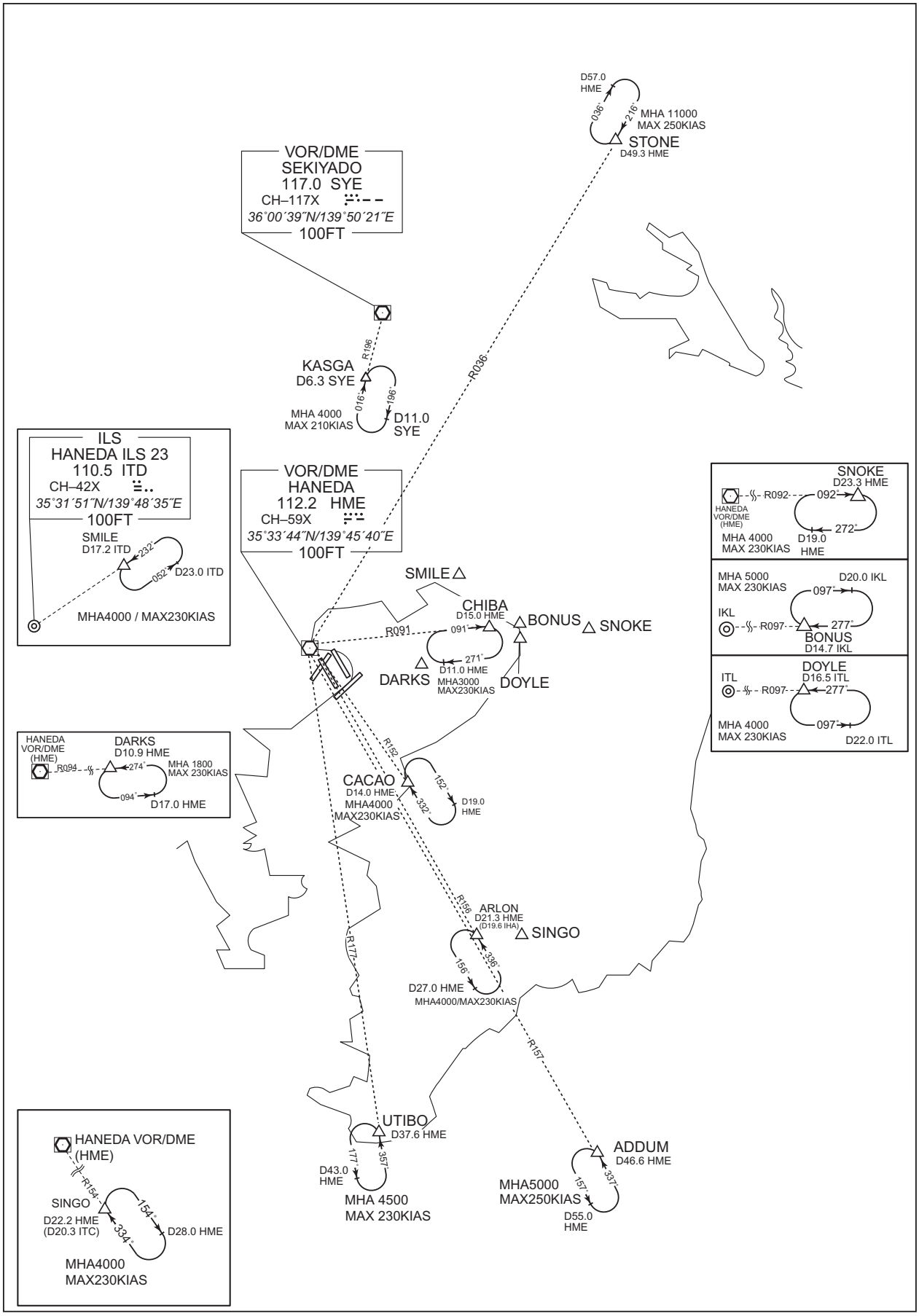
Note3: RADAR service required.

Note4: Procedure not authorized at night in case of Umihotaru Landmark Beacon not operated.

Note5: When cleared HIGHWAY VISUAL RWY34R APPROACH, aircraft should fly via last routing cleared until CACAO.

RJTT / TOKYO INTL

HLDG PATTERN




CHANGE : SNOKE established

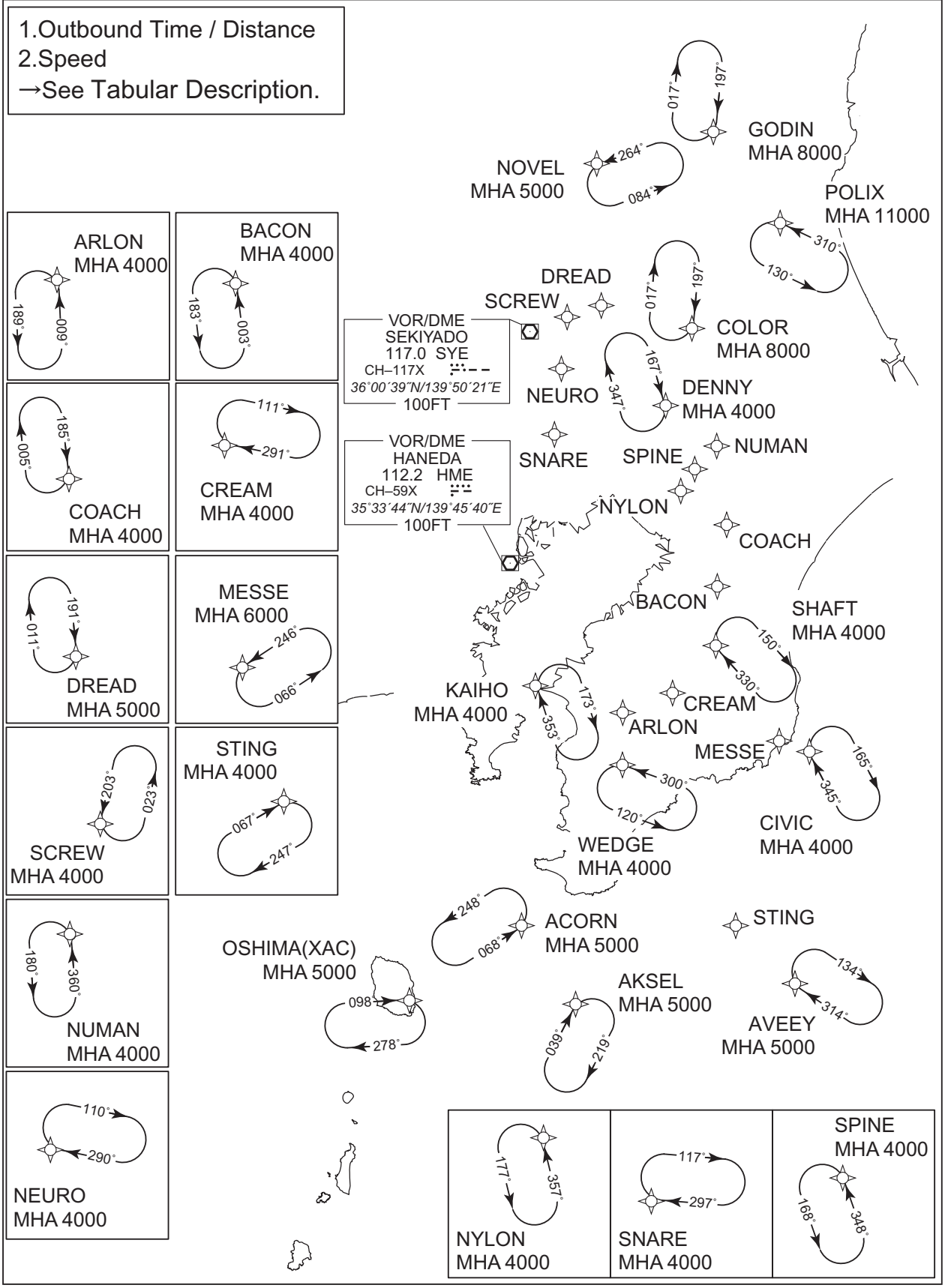
RJTT / TOKYO INTL

RNAV HLDG PATTERN

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

RNAV 1

1.Outbound Time / Distance
2.Speed
→See Tabular Description.




CHANGE : NEURO, NUMAN, SNARE, SPINE established

RJTT / TOKYO INTL

RNAV HLDG PATTERN

| Path | Waypoint Identifier | Inbound Course °M(°T) | Magnetic Variation | Outbound Time (MIN) | Outbound Distance (NM) | Turn Direction | Minimum Altitude (FT) | Maximum Altitude (FT) | Speed (KIAS) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|
| Hold | ACORN | 068 (060.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | AKSEL | 039 (031.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | ARLON | 009 (001.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | AVEEY | 314 (306.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | BACON | 003 (355.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CIVIC | 345 (337.7) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COACH | 185 (177.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | COLOR | 197 (189.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | CREAM | 291 (283.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | DENNY | 167 (159.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | DREAD | 191 (183.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | GODIN | 197 (189.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 8000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | KAIHO | 353 (345.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | MESSE | 246 (238.8) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 6000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NEURO | 290 (282.9) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NOVEL | 264 (256.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NUMAN | 360 (352.5) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | NYLON | 357 (350.0) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | POLIX | 310 (302.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 11000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SCREW | 203 (195.2) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SHAFT | 330 (322.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SNARE | 297 (289.1) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | SPINE | 348 (340.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | STING | 067 (059.6) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | WEDGE | 300 (292.4) | -7.5 | 1.0(-14000) 1.5(+14001) | – | L | 4000 | – | -230(-14000) -240(+14001) | RNAV1 |
| Hold | XAC | 098 (090.3) | -7.5 | 1.0(-14000) 1.5(+14001) | – | R | 5000 | – | -230(-14000) -240(+14001) | RNAV1 |

CHANGE : NEURO, NUMAN, SNARE, SPINE established

RJTT / TOKYO INTL

RNAV HLDG PATTERN

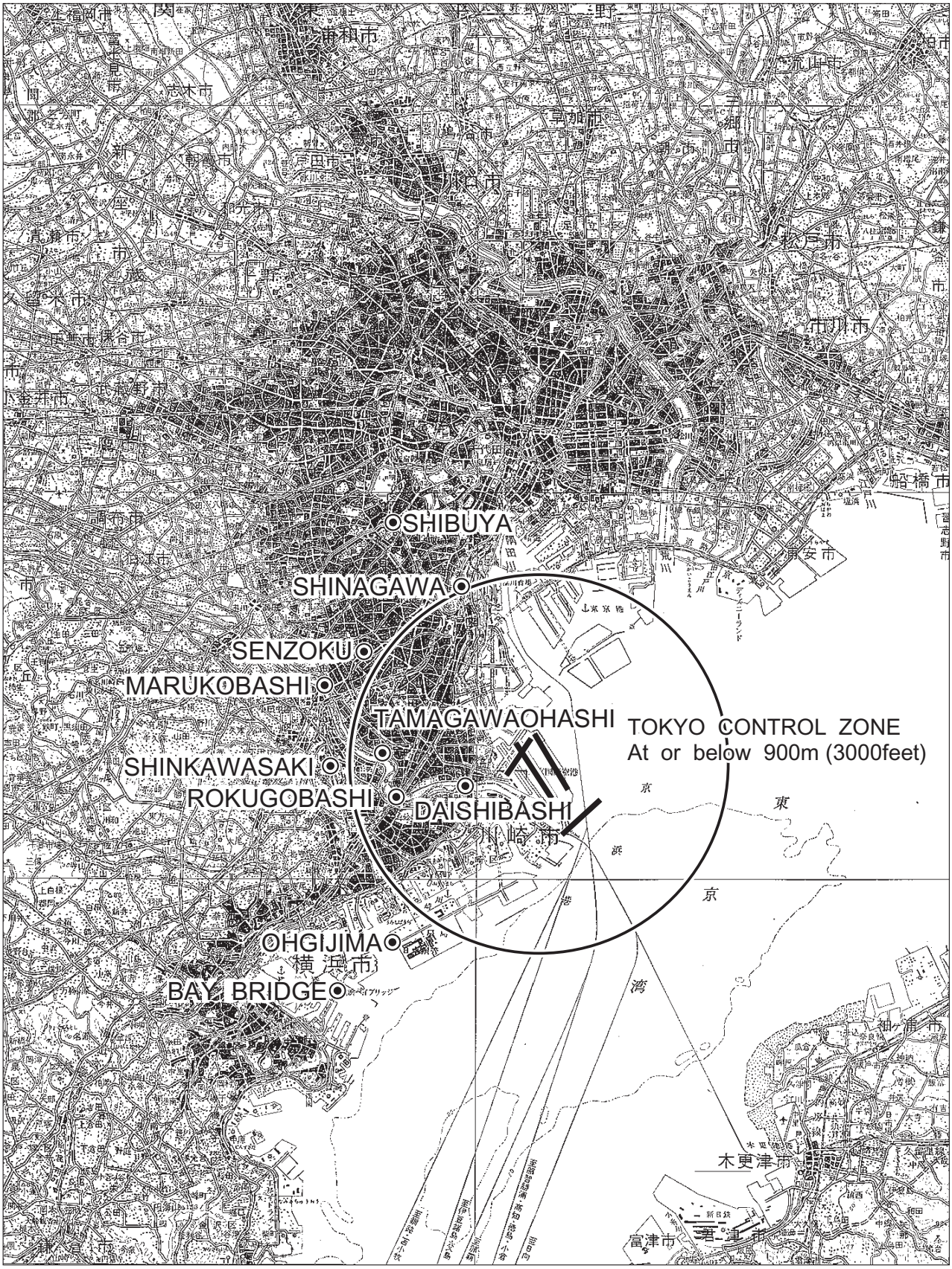
## Waypoint Coordinates

| Waypoint Identifier | Coordinates | Waypoint Identifier | Coordinates |
|---|---|---|---|
| ACORN | *345028.8N / 1394146.7E* | MESSE | *351100.8N / 1402214.7E* |
| AKSEL | *344039.5N / 1395126.9E* | NEURO | *355727.6N / 1395441.3E* |
| ARLON | *351525.3N / 1395859.8E* | NOVEL | *362106.9N / 1400004.9E* |
| AVEEY | *344155.9N / 1402158.0E* | NUMAN | *354714.4N / 1401204.9E* |
| BACON | *353155.0N / 1401215.1E* | NYLON | *354018.5N / 1400919.9E* |
| CIVIC | *350840.6N / 1402552.1E* | POLIX | *361237.1N / 1402622.5E* |
| COACH | *353736.0N / 1401231.5E* | SCREW | *360301.2N / 1395400.4E* |
| COLOR | *360116.3N / 1401219.8E* | SHAFT | *352227.4N / 1401313.3E* |
| CREAM | *351743.4N / 1400612.4E* | SNARE | *354731.1N / 1395238.1E* |
| DENNY | *354828.8N / 1400556.4E* | SPINE | *354213.5N / 1401125.8E* |
| DREAD | *360359.2N / 1395856.9E* | STING | *345157.9N / 1401453.4E* |
| GODIN | *362425.3N / 1401655.9E* | WEDGE | *350900.4N / 1395846.5E* |
| KAIHO | *351857.8N / 1394642.4E* | XAC | *344244.1N / 1392450.5E* |

CHANGE : NEURO, NUMAN, SNARE, SPINE established

RJTT / TOKYO INTL

Visual REP




CHANGE : MATSUDO abolished. TAMAGAWAOHASHI established.

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Visual REP

| Call sign | BRG/DIST from ARP | Remarks |
|---|---|---|
| 品 川<br>Shinagawa | 353°/5.0NM | JR駅<br>JR Station |
| 洗 足<br>Senzoku | 311°/5.2NM | 池<br>Pond |
| 扇 島<br>Ohgijima | 225°/5.9NM | 扇島の西端<br>West edge of the island |
| 大師橋<br>Daishibashi | 257°/1.9NM | 橋<br>Bridge |
| 六郷橋<br>Rokugobashi | 261°/3.6NM | 橋<br>Bridge |
| 新川崎<br>Shinkawasaki | 276°/5.3NM | JR駅<br>JR Station |
| 丸子橋<br>Marukobashi | 296°/5.7NM | 橋<br>Bridge |
| 渋 谷<br>Shibuya | 336°/7.3NM | JR駅<br>JR Station |
| ﾍﾞｲﾌﾞﾘｯｼﾞ<br>Bay Bridge | 227°/8.0NM | （首都高速湾岸線）橋<br>Bridge |
| 多摩川大橋<br>Tamagawaohashi | 280°/4.2NM | 橋<br>Bridge |

CHANGE: MATSUDO abolished. TAMAGAWAOHASHI established.

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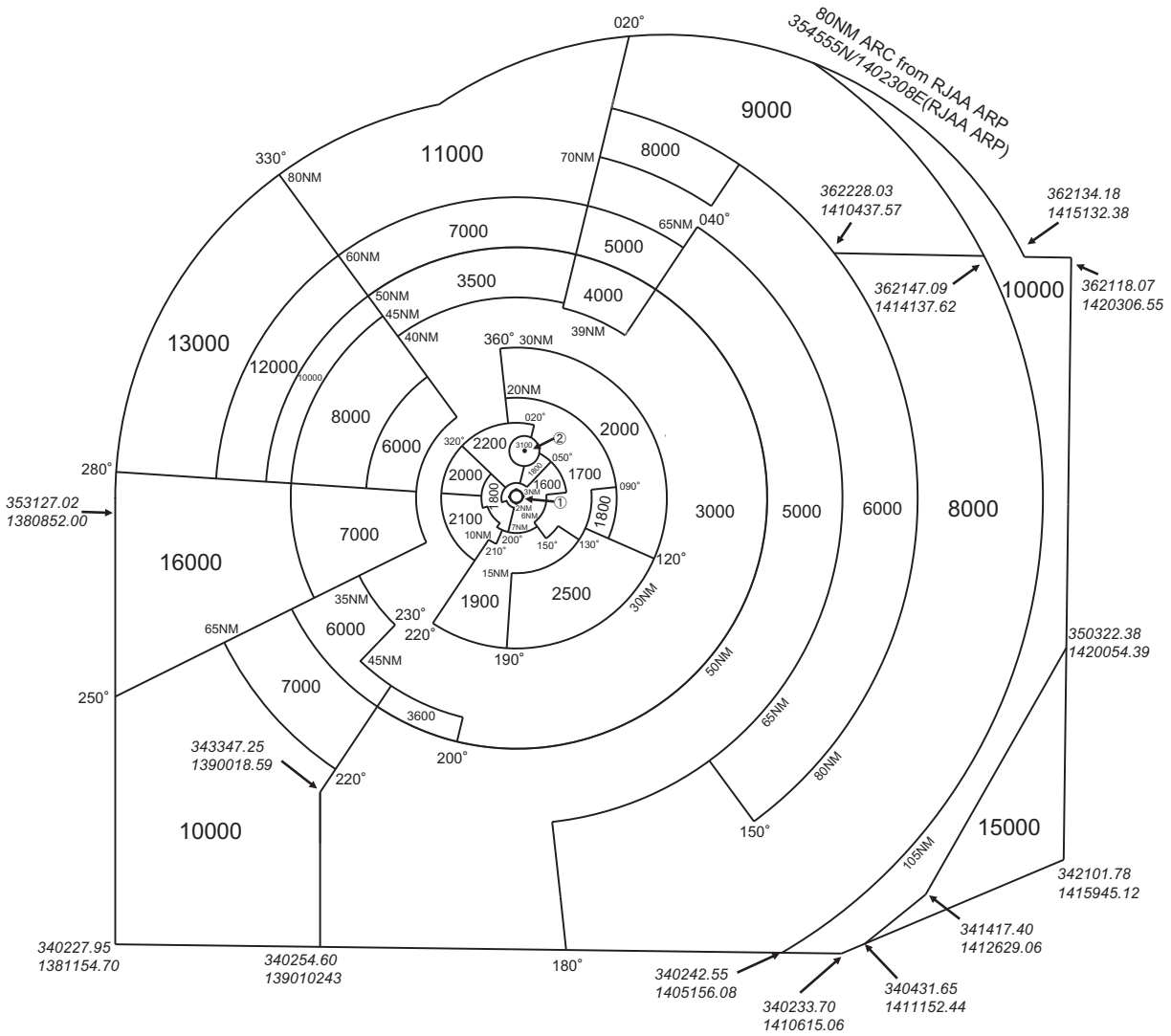
Minimum Vectoring Altitude CHART

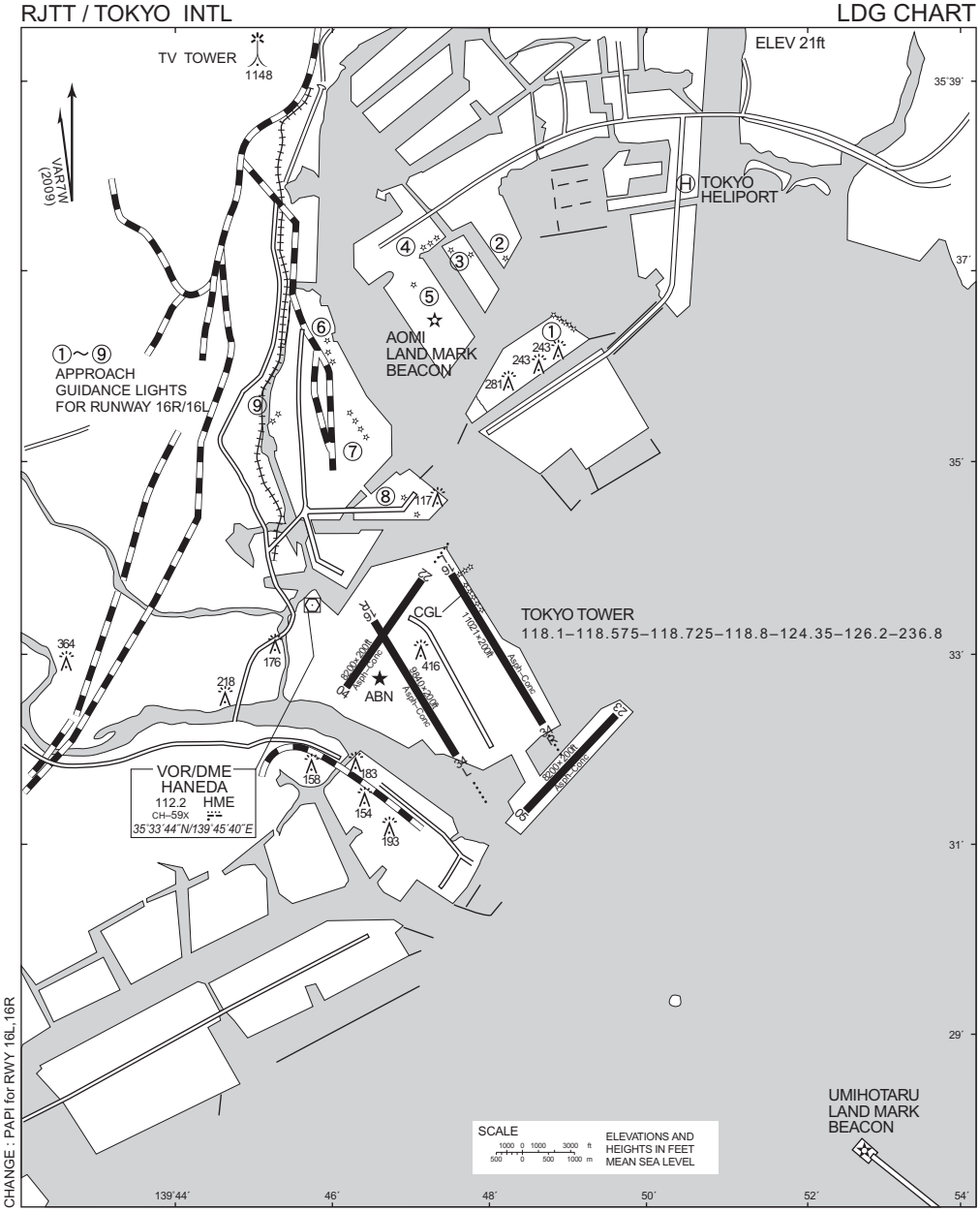
VAR 8˚W (2019)




①CENTER : *353312N/1394652E*(RJTT ARP)
②*354236N/1394839E* RADIUS : 3NM

CHANGE : Update

RJTT / TOKYO INTL LDG CHART




PAPI:

RWY 16L–3.0˚,MEHT 19.9m (65ft)
412m inside from THR.

RWY34R–3.0˚, MEHT 20.0m (66ft)
416m inside from THR.

RWY16R–3.0˚, MEHT 19.9m (65ft)
432m inside from THR.

RWY34L–3.0˚, MEHT 20.0m (66ft)
449m inside from THR.

RWY04–3.0˚, MEHT 18.5m (61ft)
369m inside from THR.

RWY 22–3.0˚, MEHT 19.5m (63ft)
438m inside from THR.

RWY 23–3.0˚, MEHT 20.0m (66ft)
452m inside from THR.

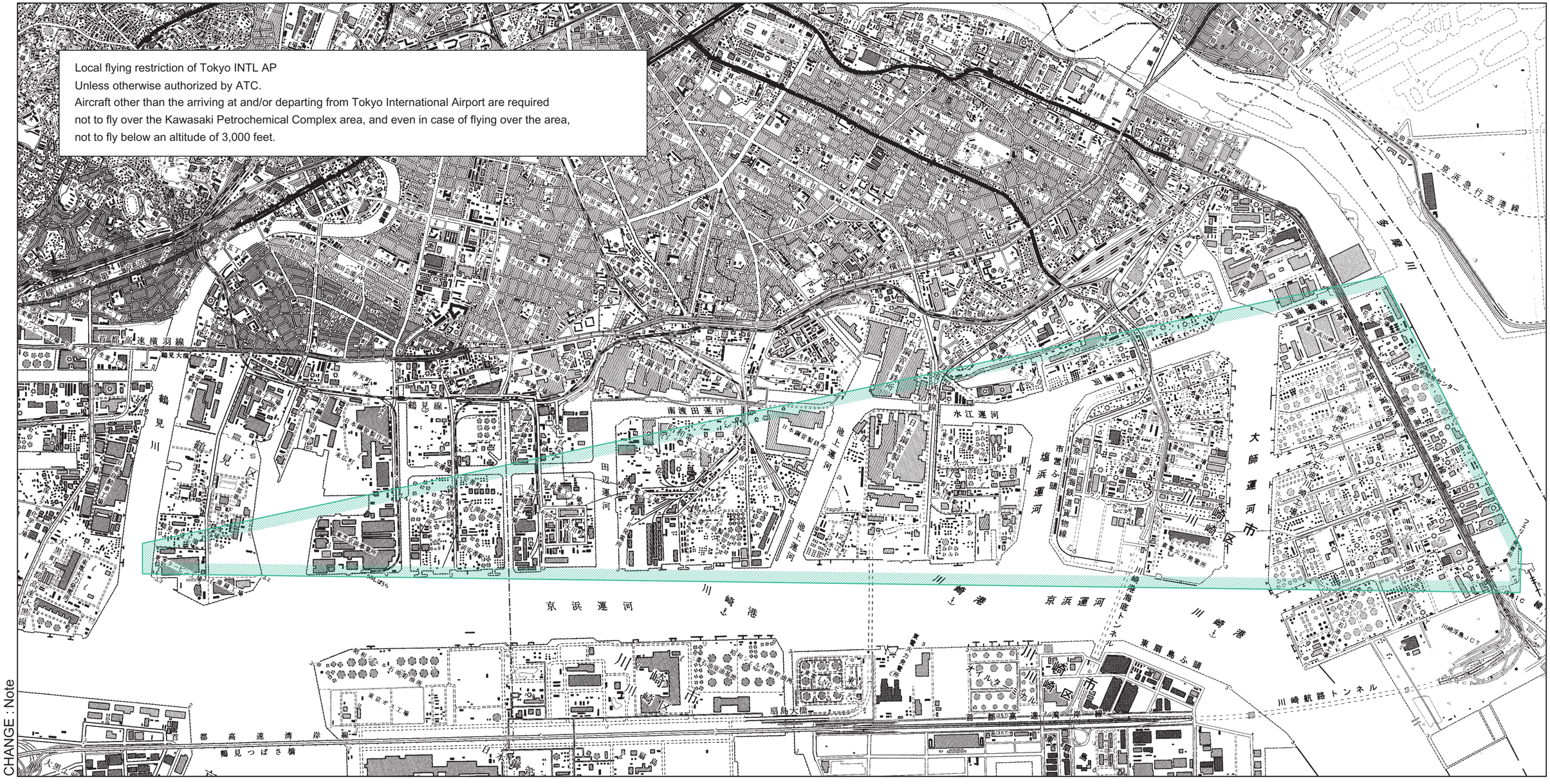
RWY Grooving :

RWY 16L/34R 3360m X 40m

RWY 16R/34L 3000m X 40m

RWY 04/22 2500m X 40m

RWY 05/23 2500m X 40m

**INTENTIONALLY LEFT BLANK**

Attachment-1