

**AD 2 AERODROMES****RJTT AD 2.1 AERODROME LOCATION INDICATOR AND NAME****RJTT - TOKYO International****RJTT AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

|   |  |   |
|---|--|---|
| 1 | ARP coordinates and site at AD   | 353312N/1394652E<br>301° /2.3km from RWY 34R THR  |
| 2 | Direction and distance from (city)   | 14km (7.6nm) S of Tokyo Station (Japan Railway)   |
| 3 | Elevation/ Reference temperature   | 21ft / 31°C (2004-2008)   |
| 4 | Geoid undulation at AD ELEV PSN  | 117.6FT   |
| 5 | MAG VAR/ Annual change   | 8°W (2021) /4.2'W   |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism.<br>Tokyo International Airport,<br>3-1. 3-chome, Haneda-Kuko, Ota-ku, Tokyo, 144-0041 Japan.<br>Tel : 03-5757-3000, Fax : 03-5756-1511<br>Tel(AD) : 03-5756-1531,1532, Tel(AIS) : 050-3198-2863, Fax : 03-5756-1528<br>AFS : RJTTYFYX |
| 7 | Types of traffic permitted (IFR/VFR)   | IFR/VFR   |
| 8 | Remarks  | Nil   |

**RJTT AD 2.3 OPERATIONAL HOURS**

|    |                           |     |
|----|---------------------------|-----|
| 1  | AD Administration         | H24 |
| 2  | Customs and immigration   | H24 |
| 3  | Health and sanitation     | H24 |
| 4  | AIS Briefing Office       | H24 |
| 5  | ATS Reporting Office(ARO) | Nil |
| 6  | MET Briefing Office       | H24 |
| 7  | ATS                       | H24 |
| 8  | Fuelling                  | H24 |
| 9  | Handling                  | H24 |
| 10 | Security                  | H24 |
| 11 | De-icing                  | Nil |
| 12 | Remarks                   | Nil |

**RJTT AD 2.4 HANDLING SERVICES AND FACILITIES**

|   |   |   |
|---|---|---|
| 1 | Cargo-handling facilities               | All the modern institutions that deal with the weight thing to Boeing747-8F type freighter. |
| 2 | Fuel/ oil types                         | Fuel Grades : JET A-1<br>Oil grades : Turbine grades  |
| 3 | Fuelling facilities / capacity          | Hydrant refueling,fuel truck/Not limitation   |
| 4 | De-icing facilities                     | Nil   |
| 5 | Hangar space for visiting aircraft      | Nil   |
| 6 | Repair facilities for visiting aircraft | Nil   |
| 7 | Remarks                                 | Nil   |

**RJTT AD 2.5 PASSENGER FACILITIES**

|   |                      |                                      |
|---|----------------------|--------------------------------------|
| 1 | Hotels               | At Airport                           |
| 2 | Restaurants          | At Airport                           |
| 3 | Transportation       | Monorail, Railways, Busses and Taxis |
| 4 | Medical facilities   | First aid treatment, ambulance       |
| 5 | Bank and Post Office | At Airport                           |
| 6 | Tourist Office       | At Airport                           |
| 7 | Remarks              | Nil                                  |

**RJTT AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

|   |   |  |
|---|---|--|
| 1 | AD category for fire fighting               | CAT 10   |
| 2 | Rescue equipment                            | Chemical fire fighting truck x 6, Water-supply truck, Lighting power supply truck, Emergency medical equipments conveyance truck |
| 3 | Capability for removal of disabled aircraft | To be issued later   |
| 4 | Remarks                                     | Nil  |

**RJTT AD 2.7 SEASONAL AVAILABILITY-CLEARING**

|   |                             |  |
|---|-----------------------------|--|
| 1 | Types of clearing equipment | Snow remove equipments:<br>1) 6 snow sweepers<br>2) 8 snow plows<br>3) 2 rotaries<br>4) 2 motor graders<br>5) 5 loaders                  |
| 2 | Clearance priorities        | 1) RWY16R/34L and 16L/34R, Taxiways attached to the RWY<br>2) RWY04/22 and 05/23, Taxiways attached to the RWY                           |
| 3 | Remarks                     | Seasonal availability : All seasons.<br>Snow removal will be commenced, if the RWY and TWY are covered with a depth of 3cm snow or more. |

## RJTT AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA

|   |                                     |  |
|---|-------------------------------------|--|
| 1 | Apron surface and strength          | Terminal 1, Terminal 2<br>Surface : Concrete<br>Strength : PCN 74/R/B/X/T<br><br>Terminal 3<br>Surface : Concrete<br>Strength : PCN 78/R/B/X/T<br><br>N Area<br>Surface : Concrete<br>Strength : PCN 48/R/B/X/T<br><br>N Area Spot NR951-957, 961-969<br>Surface : Concrete<br>Strength : PCN 91/R/B/X/T<br><br>Compass Area<br>Surface : Concrete<br>Strength : PCN 74/R/B/X/T  |
| 2 | Taxiway width, surface and strength | Surface : Asphalt-concrete, concrete<br>Strength : PCN 75/F/B/X/T, PCN 74/R/B/X/T<br>Width :<br>34m(111FT) :<br>A6, A9, A11, B2, B5, B7, C8, C9,<br>E3(between C and E), E4, E5, E8(between C and E),<br>E9(between C and E), E12(between C and E),<br>G(between C and E), H(between A and W), H(between C and E),<br>J(between A and W), J(between C and E), K(between A and W),<br>L4, L6, L9, L11, M2(between C and E), W6 THRU W10, W11(between A and W),<br>W13<br><br>32m(105FT) :<br>A1, A2, A4, B1, C1, E1, E2, E10(between C and E), G(between A and W),<br>K(between C and E), L3, R(between G and H), R(between K and J), W1<br><br>30m(98FT) :<br>A, A3, A5, A7, A8 THRU A10, A12 THRU A16, B, B3, B4, B6, B8 THRU B14,<br>C, C2 THRU C7, C10 THRU C14, D, D1 THRU D7, E3(between E and R), E,<br>E8(between E and R), E9(between E and R),<br>E10(from spot NR55 to spot NR53), E12(between E and R),<br>G(between E and W), H(between E and W), H1, H2, R1,<br>J(between E and W), J1, J2, K(between E and W), L, L5, L10, L12 THRU L16,<br>M, M1, M2(between E and R), N(between spot NR981 and N7), N1, N7, P,<br>P3 THRU P11, Q, Q1, Q2, R(between A and G), R(between E8 and E9),<br>R(between E10 and J), R(between K and C), R(between A and S),<br>S, S1 THRU S3, T, T1 THRU T9, T11, T12, T14, U2, U4, V, W, W11(between W<br>and R1), Y1<br><br>15m(49FT) :<br>N6(between spot NR961 and N2)<br><br>23m(75FT) : Other |
| 3 | ACL and elevation                   | Not available  |
| 4 | VOR checkpoints                     | Not available  |

|   |                 |   |
|---|-----------------|---|
| 5 | INS checkpoints | <p><b>Spot NR</b></p> <p>1 : 353244.87N/1394715.45E<br/>     2 : 353243.91N/1394713.19E<br/>     3 : 353242.77N/1394710.79E<br/>     4 : 353241.67N/1394708.47E<br/>     5R : 353240.61N/1394706.99E<br/>     5 : 353240.85N/1394707.04E<br/>     5L : 353240.41N/1394705.84E<br/>     6 : 353241.75N/1394705.46E<br/>     7 : 353243.30N/1394705.33E<br/>     8 : 353245.27N/1394705.86E<br/>     9 : 353248.11N/1394704.81E<br/>     10 : 353250.36N/1394703.25E<br/>     11 : 353252.33N/1394700.22E<br/>     12 : 353252.76N/1394658.54E<br/>     13 : 353254.41N/1394657.37E<br/>     14 : 353255.85N/1394657.64E<br/>     15 : 353258.98N/1394657.09E<br/>     16 : 353301.21N/1394655.50E<br/>     17 : 353303.24N/1394652.77E<br/>     18 : 353303.50N/1394650.89E<br/>     19 : 353304.80N/1394648.96E<br/>     20 : 353306.09N/1394648.17E<br/>     21 : 353306.70N/1394649.16E<br/>     22 : 353307.44N/1394651.14E<br/>     23 : 353308.19N/1394653.09E</p> <p>31 : 353313.19N/1394648.39E<br/>     32 : 353314.60N/1394647.42E<br/>     33 : 353316.57N/1394646.03E<br/>     34 : 353318.53N/1394644.64E<br/>     35 : 353320.50N/1394643.24E<br/>     36 : 353322.46N/1394641.85E<br/>     37 : 353324.18N/1394639.92E<br/>     38 : 353326.39N/1394639.06E<br/>     39 : 353328.36N/1394637.66E<br/>     40 : 353330.32N/1394636.27E<br/>     41 : 353332.28N/1394634.87E</p> <p>53 : 353319.25N/1394714.98E<br/>     54 : 353320.22N/1394717.28E<br/>     55 : 353321.20N/1394719.34E<br/>     56 : 353318.42N/1394721.31E<br/>     57 : 353317.26N/1394719.15E<br/>     58 : 353314.90N/1394715.68E<br/>     59 : 353311.22N/1394717.32E<br/>     60 : 353309.26N/1394718.72E<br/>     61 : 353307.29N/1394720.11E<br/>     62 : 353305.33N/1394721.51E<br/>     63 : 353303.36N/1394722.90E<br/>     64 : 353301.40N/1394724.30E<br/>     65 : 353259.43N/1394725.69E<br/>     66 : 353256.29N/1394729.18E<br/>     67R : 353257.40N/1394732.54E<br/>     67 : 353257.49N/1394732.99E<br/>     67L : 353258.73N/1394733.01E<br/>     68 : 353258.54N/1394734.99E<br/>     69 : 353255.82N/1394737.27E<br/>     70 : 353254.33N/1394735.67E<br/>     71 : 353253.92N/1394733.45E<br/>     72 : 353252.85N/1394731.08E<br/>     73 : 353251.67N/1394728.59E<br/>     81 : 353313.04N/1394725.84E<br/>     82 : 353311.01N/1394727.27E<br/>     83 : 353306.60N/1394730.41E<br/>     84 : 353304.57N/1394731.84E</p> <p>101 : 353235.61N/1394632.63E<br/>     102 : 353234.38N/1394630.02E<br/>     103 : 353233.14N/1394627.41E<br/>     104 : 353231.90N/1394624.80E<br/>     105F : 353230.68N/1394622.23E<br/>     105P : 353230.91N/1394620.33E<br/>     106 : 353233.11N/1394618.77E<br/>     106R : 353233.52N/1394618.36E<br/>     106L : 353233.25N/1394620.00E<br/>     107 : 353236.04N/1394617.83E<br/>     107R : 353236.45N/1394617.42E<br/>     107L : 353236.11N/1394619.13E<br/>     108 : 353238.48N/1394616.10E<br/>     108R : 353238.89N/1394615.69E<br/>     108L : 353238.58N/1394617.37E<br/>     109 : 353240.52N/1394614.66E<br/>     110 : 353242.55N/1394613.21E<br/>     111 : 353244.59N/1394611.77E<br/>     112 : 353246.90N/1394610.12E<br/>     113 : 353248.94N/1394608.68E<br/>     114 : 353250.97N/1394607.23E</p> <p>121 : 353240.65N/1394626.06E<br/>     122 : 353242.75N/1394624.57E<br/>     123 : 353247.53N/1394621.33E<br/>     124 : 353249.20N/1394620.14E</p> <p>131 : 353241.47N/1394627.80E<br/>     132 : 353243.58N/1394626.30E<br/>     133 : 353248.25N/1394622.84E<br/>     134 : 353249.91N/1394621.66E</p> <p>140 : 353254.40N/1394614.86E<br/>     141 : 353255.60N/1394617.04E<br/>     142 : 353300.16N/1394613.74E<br/>     143 : 353258.90N/1394611.08E<br/>     144 : 353257.70N/1394608.54E<br/>     145 : 353256.46N/1394605.92E<br/>     146 : 353255.26N/1394603.39E<br/>     147 : 353253.79N/1394600.30E<br/>     148 : 353252.61N/1394557.81E<br/>     149 : 353251.43N/1394555.32E</p> <p>151 : 353306.65N/1394610.75E<br/>     152 : 353305.54N/1394608.40E<br/>     153 : 353304.42N/1394606.05E<br/>     154 : 353303.31N/1394603.69E<br/>     155 : 353302.19N/1394601.34E</p> <p>201 : 353204.82N/1394732.11E<br/>     202 : 353206.22N/1394731.32E<br/>     203 : 353208.26N/1394730.08E<br/>     204 : 353210.22N/1394728.69E<br/>     205 : 353212.18N/1394727.29E<br/>     206 : 353214.15N/1394725.90E<br/>     207 : 353216.11N/1394724.51E<br/>     208 : 353218.08N/1394723.11E<br/>     209 : 353220.04N/1394721.72E<br/>     210 : 353222.10N/1394720.51E<br/>     211 : 353223.98N/1394718.93E<br/>     212 : 353226.39N/1394717.22E<br/>     213 : 353228.44N/1394716.01E<br/>     214 : 353230.32N/1394714.43E</p> |
|---|-----------------|---|

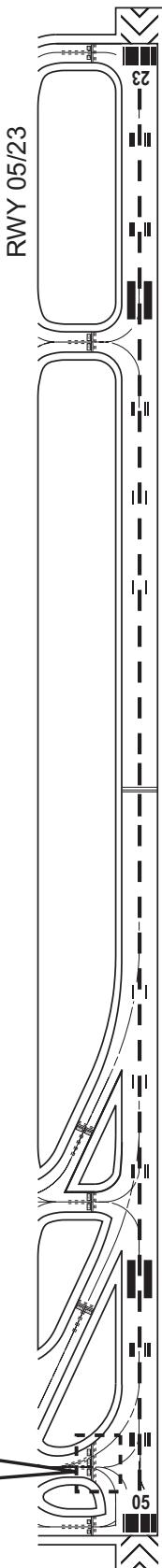
|   |                 |  |
|---|-----------------|--|
| 5 | INS checkpoints | <p><i>Spot NR</i></p> <p>301 : 353346.49N/1394639.93E<br/>     302 : 353347.63N/1394642.33E<br/>     303 : 353348.77N/1394644.73E<br/>     304 : 353349.54N/1394647.40E<br/>     305 : 353350.96N/1394649.27E<br/>     311 : 353345.88N/1394639.02E<br/>     312 : 353346.52N/1394641.55E<br/>     313 : 353347.66N/1394643.96E<br/>     314 : 353349.22N/1394646.06E<br/>     315 : 353349.85N/1394648.59E<br/> <br/>     331 : 353359.72N/1394651.90E<br/>     332 : 353355.35N/1394656.39E<br/>     333 : 353353.78N/1394658.18E<br/>     341 : 353400.48N/1394651.39E<br/>     342 : 353359.07N/1394653.13E<br/>     343 : 353354.96N/1394657.15E<br/>     344 : 353353.92N/1394659.52E<br/> <br/>     351 : 353354.90N/1394614.70E<br/>     352 : 353356.83N/1394616.35E<br/>     353 : 353358.76N/1394618.00E<br/>     354 : 353400.68N/1394619.66E<br/>     355 : 353403.34N/1394622.14E<br/> <br/>     361 : 353355.47N/1394614.66E<br/>     362 : 353357.59N/1394616.49E<br/>     363 : 353359.52N/1394618.15E<br/>     364 : 353359.81N/1394616.36E<br/>     365 : 353402.73N/1394620.54E<br/>     366 : 353403.13N/1394624.24E<br/> <br/>     401R : 353336.59N/1394658.56E<br/>     401 : 353335.21N/1394659.00E<br/>     402 : 353333.22N/1394700.44E<br/>     406 : 353331.04N/1394702.17E<br/>     407 : 353329.08N/1394703.57E<br/>     408 : 353327.11N/1394704.96E<br/>     501 : 353345.29N/1394702.69E<br/>     502 : 353343.54N/1394704.16E<br/>     503 : 353341.52N/1394705.44E<br/>     504 : 353339.55N/1394706.83E<br/>     505 : 353334.60N/1394710.28E<br/>     506 : 353332.80N/1394711.63E<br/>     507 : 353330.89N/1394713.13E<br/>     508 : 353328.92N/1394714.53E<br/>     509 : 353326.96N/1394715.92E<br/> <br/>     601 : 353238.52N/1394736.98E<br/>     602 : 353236.85N/1394738.16E<br/>     603 : 353235.18N/1394739.35E<br/>     604 : 353233.10N/1394740.97E<br/>     605 : 353231.06N/1394742.41E<br/> <br/>     701 : 353244.66N/1394744.06E<br/>     702 : 353242.69N/1394745.45E<br/>     703 : 353240.73N/1394746.85E<br/>     704 : 353238.69N/1394748.09E<br/>     705 : 353236.95N/1394749.96E<br/>     706 : 353234.93N/1394751.24E<br/>     707 : 353232.78N/1394752.46E<br/>     708 : 353227.03N/1394756.76E<br/>     709 : 353224.95N/1394758.47E<br/>     710 : 353223.03N/1394759.83E<br/>     711 : 353220.90N/1394801.11E<br/>     712 : 353218.93N/1394802.74E</p> |
| 6 | Remarks         | <i>Nil</i>   |

**RJTT AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS**

|   |  |  |
|---|--|--|
| 1 | Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands | ACFT stand ID sign : NR1 THRU NR4, NR5, NR6 THRU NR23, NR53 THRU NR66, NR67, NR68 THRU NR73, NR105P, NR106, NR107, NR108, NR109 THRU NR114, NR140 THRU NR149, NR406 THRU NR408<br>ACFT stand taxi lane : E8(BTN E and R), E9(BTN E and R), R(from E8 to E9), N6(from spot NR964 to spot NR969)<br>Visual docking guidance system : See below figure  |
| 2 | RWY and TWY markings and LGT   | <p>RWY: RWY 16L/34R, 16R/34L, 04/22, 05/23<br/>(Marking)<br/>RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY side stripe, RWY middle point, Displaced THR(RWY 16L/34R, 16R)<br/>(LGT)<br/>RCLL, REDL, RTHL, RENL, RTZL(RWY16L/34R, 16R/34L, 22, 23), WBAR(RWY16L/34R, 16R/34L, 22, 23)</p> <p>TWY: C10, D3 and D5<br/>(LGT) Rapid exit taxiway indicator lights</p> <p>TWY: ALL TWY<br/>(Marking)<br/>TWY CL, RWY HLDG PSN, TWY side stripe<br/>(LGT)<br/>TWY edge LGT(except F), TWY CL LGT(except B12, D(between D7 and E), F, N1, N2, N6, N, Y(between SPOT 312 and J2)), Taxiing guidance sign(except B12)<br/>TWY CL LGT on C4, C6, C7, C10, C11, B4, B6, T4, T6, A2, A5, A10, A12, L5 and L12<br/>The intensity of the TWY CL LGT is more increased than that of other TWY CL LGT.</p> <p>TWY: C1 THRU C14<br/>(LGT) Stop bar LGT, RWY guard LGT(90m off the runway center line)</p> <p>TWY: A1 THRU A16, C1, C2, C3, C5, C12, C13, C14, D1 THRU D5, L3 THRU L16<br/>(LGT) RWY guard LGT(75m off the runway center line)</p> <p>TWY: A, E, M, R<br/>(Marking) Intermediate Holding Position<br/>(LGT) Intermediate Holding Position<br/>(see attached chart)</p> <p>TWY: A1, A3, A4, A6, A9, A11, A13, A14, A15, A16, B1, B2, B5, B7, B9, B10, B11, L3, L4, L6, L9, L11, L14, L15, L16, T1, T2, T5, T7, T9, T11<br/>(LGT)Variable Message Signs (RWY status LGT)<br/>(see attached chart)</p> <p>SFC painted direction sign<br/>(See Figure "Type of Surface Painted Markings")</p> |
| 3 | Stop bars  | <p>Stop Bar Lights Operations</p> <ol style="list-style-type: none"> <li>1) Stop Bar Lights are installed at each RWY holding position associated with RWY16L/34R</li> <li>2) Stop Bar Lights will be operated when the visibility or the lowest RVR of the RWY16L/34R is at or less than 600m.</li> <li>3) Stop Bar Lights on TWY C1, C2, C13 and C14 are controlled individually by ATC</li> <li>4) Stop Bar Lights on TWY C3 THRU C12 are not controlled individually by ATC.</li> <li>5) During the period Stop Bar Lights operated, TWY C3 THRU C12 are not available for departure aircraft.</li> </ol>  |
| 4 | Remarks  | <p>(Marking) Overrun area, ACFT PRKG PSN, Apron TWY CL<br/>(LGT) Apron flood LGT</p> <p>Runway Guard Lights Operations:<br/>Either Runway Guard Lights of 75m off runway center line or Runway Guard Lights of 90m off runway center line turn on in the daytime regardless of visibility condition of TWY C1, C2, C3, C5, C12, C13, C14</p>   |

MARKING AIDS



MARKING AIDS

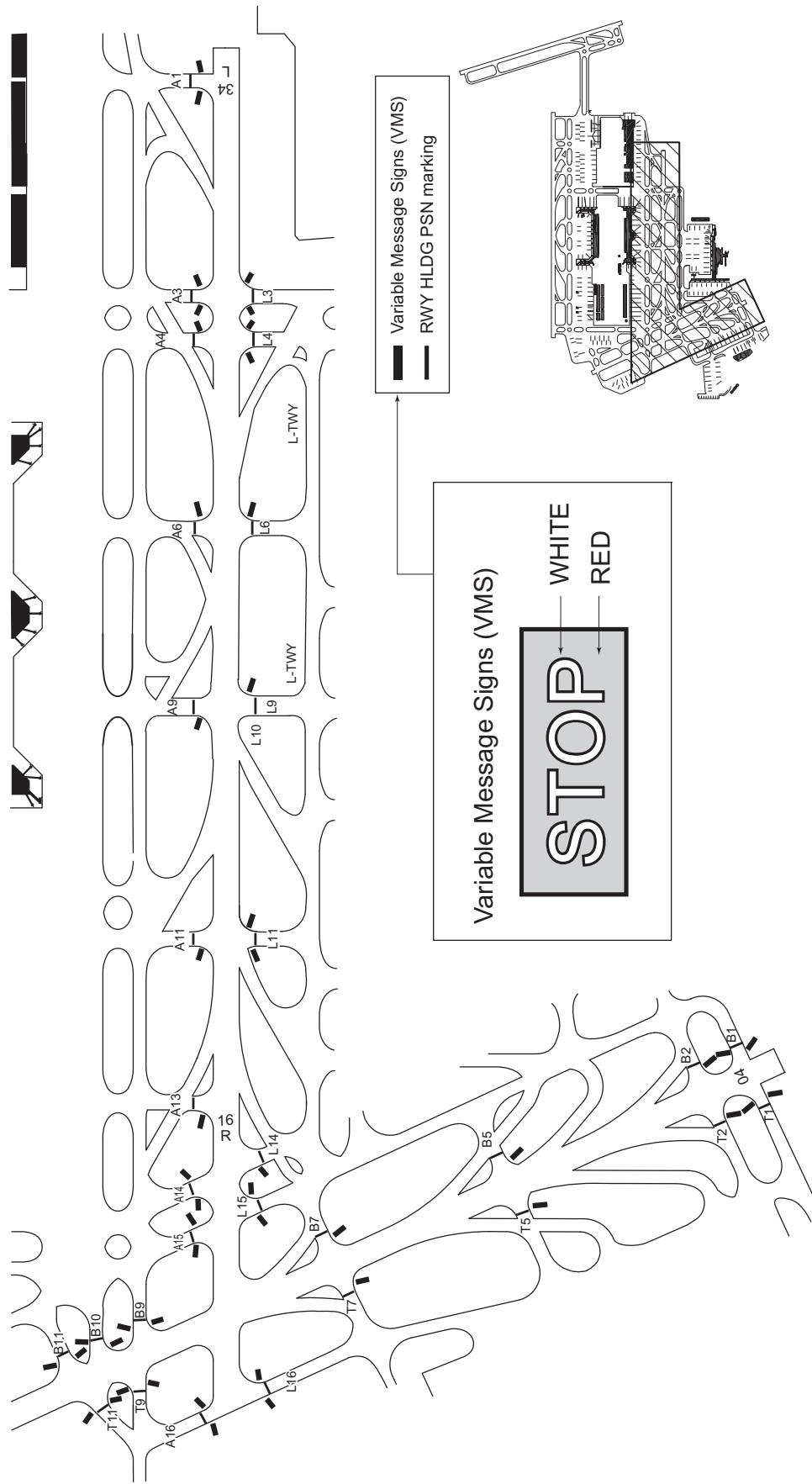
### Intermediate Holding Position Marking and Intermediate Holding Position Lights

1. The Intermediate Holding Position Marking indicates the position where aircraft is to hold to prevent collision with other aircraft on the taxiway. The Intermediate Holding Position Lights are collocated with the Intermediate Holding Position Marking and synchronized with the taxiway center line lights. The Intermediate Holding Position Lights consist of 5 yellow lights and the Intermediate Holding Position Marking is a single broken line as illustrated in the figure below;



2. Operational procedure  
See AD 2.20.6.4.

## Variable Message Signs (VMS)



NOTE : The TWY names and RWY HLDG PSN markings in this ATTACHMENT are depicted only for the TWYs where VMS are installed.

## Type of Surface Painted Markings

### 1. Type of Surface Painted Markings

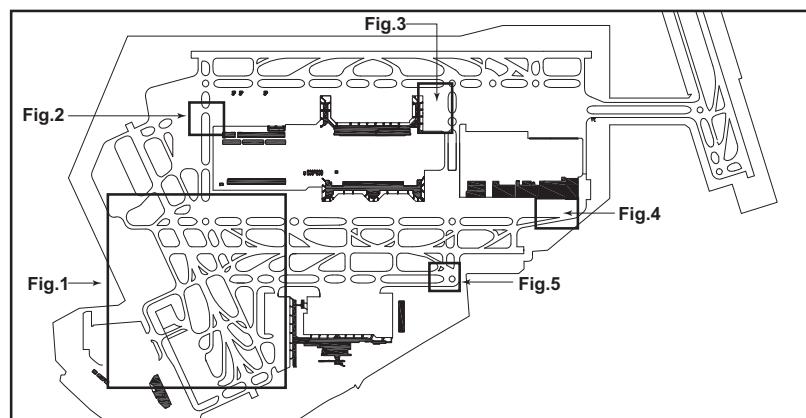
- Surface Painted Direction Sign

This type of marking at a taxiway intersection indicates the designation and direction of the taxiway leading out of an intersection. Black inscriptions with an arrow with a yellow background.

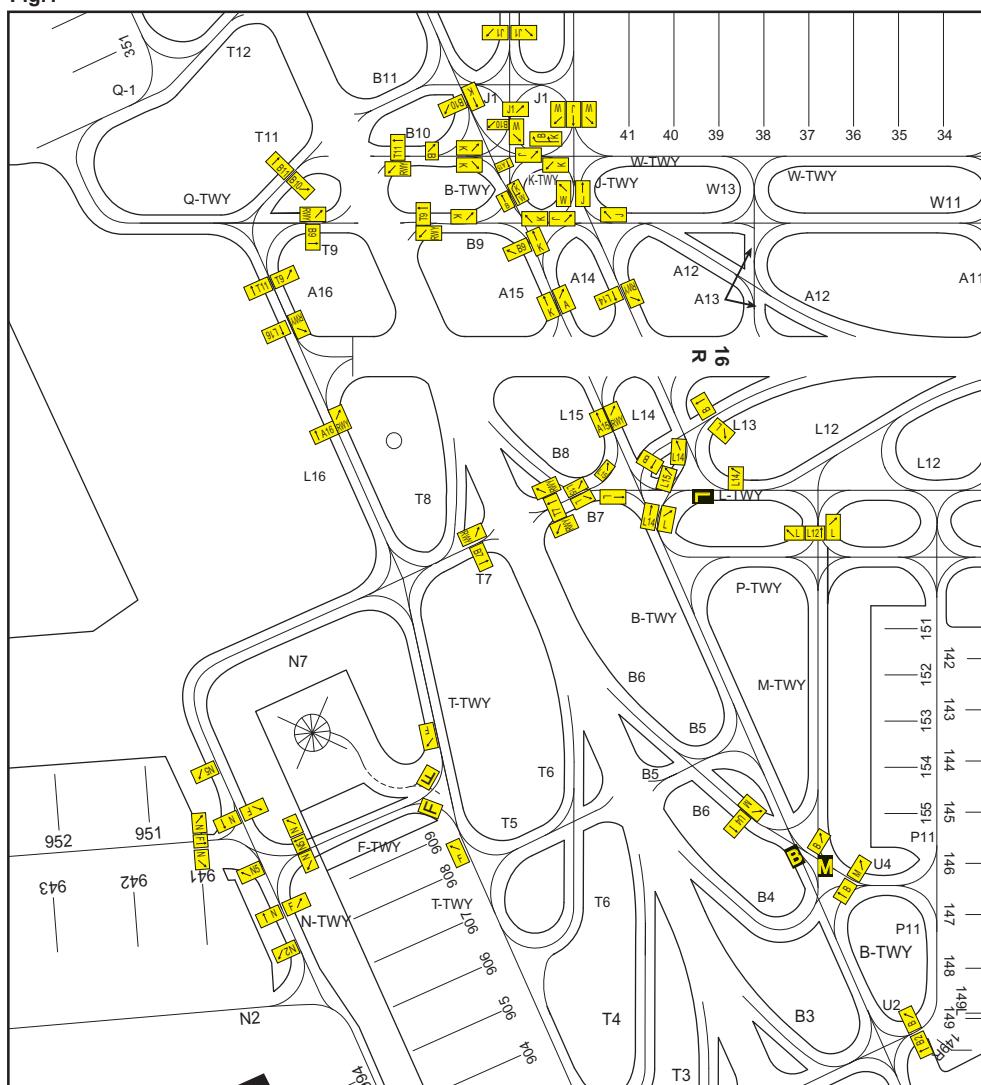
- Surface Painted Location Sign

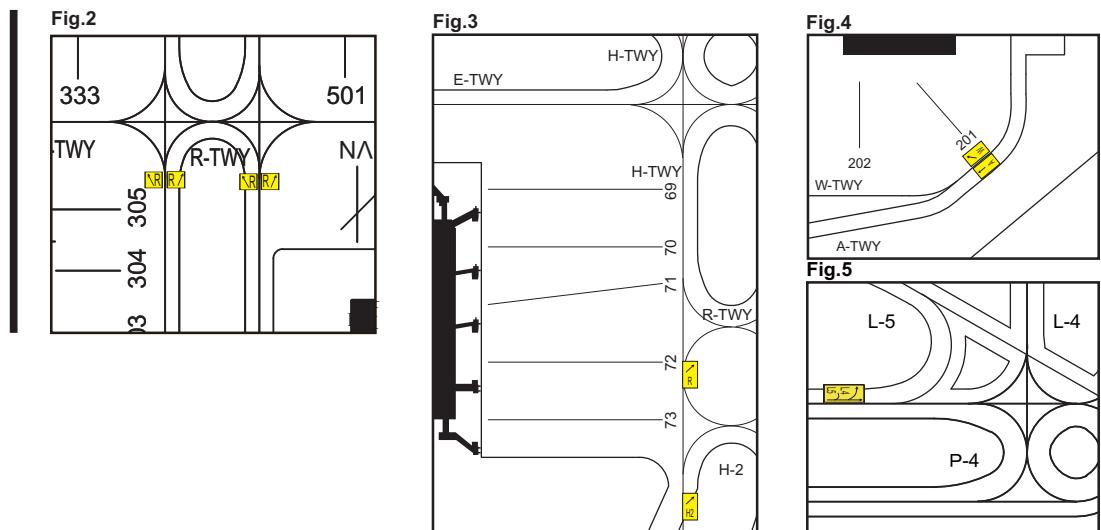
This type of marking indicates the designation of the taxiway on which the aircraft is located. Yellow inscriptions with a black background and yellow frame.

### 2. On each of the taxiways A, A14, A15, A16, B, B6, B7, B9, B10, F, H, J, K, L, L13, L15, L16, M, N, N2, N5, T, T7, T9, T11, U2, U4, W, surface painted markings are provided (refer attached drawing).



**Fig.1**





## VISUAL DOCKING GUIDANCE SYSTEM

### I. SAFEDOCK

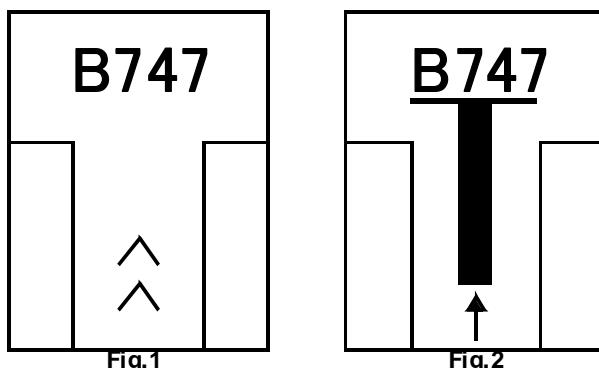
#### 1. General

- (1) Aircraft parking stands NR1 THRU NR4, NR5, NR6 THRU NR23, NR53 THRU NR66, NR67, NR68 THRU NR73, NR105P, NR106, NR107, NR108, NR109 THRU NR114, NR140 THRU NR149, NR406 THRU NR408 are equipped with a SAFEDOCK visual docking guidance system.  
The pilots of an arriving aircraft assigned to park at one of these parking stands can use this system to be guided and stop the aircraft at the correct parking position.
- (2) This system is operational only in the automatic mode and in an event of a system failure, the aircraft shall be manually guided by a marshaller to the stopping position.
- (3) The SAFEDOCK visual docking system consists of a display screen for pilots and a laser scanner.  
The system detects and analyses the aircraft type of an approaching aircraft, tracks it through the laser scanner, and displays these results on the display screen.
- (4) The display screen indicates the following information:
  - a) type of the approaching aircraft
  - b) deviation from the lead-in center line, and
  - c) distance to the stopping position.

The above information is provided equally to the pilots on both left seat and right seat.

#### 2. Aircraft Type Indication

- (1) A message about the aircraft type from Spot Control System shall be confirmed and put into the system by ground operator.  
The system then carries out internal calibration and starts laser scanning simultaneously.  
The system shows the aircraft type on the display screen and then will begin to indicate yellow lead-in arrows scrolling upwards prompting the aircraft to proceed.(Fig.1)



- (2) When the laser scanner detects the approaching aircraft, the display screen will indicate the aircraft type, a "T" bar, and a lead-in upward arrow in yellow.(Fig.2)
- (3) At least until the approaching aircraft arrives at a point 12 meters before the stopping position, the system will identify the aircraft type and will compare with the previously input aircraft type, If these data match, the system will continue its operation. If they do not match, the display screen will repeatedly indicate "STOP", "ID" and "FAIL" in sequence and will indicate 2 illuminated red squares simultaneously.

NOTE:At this moment, the pilots must stop the aircraft immediately.

When the operator re-input the correct aircraft type into the system and the system finds it correct, it resumes normal operations indicating the correct aircraft type on its display screen



### 3.Taxiing and Lateral Center line Guidance

- (1) While taxiing the aircraft using the system, the pilots should maneuver the aircraft at a low speed to the stopping position. In an event when "SLOW" is indicated on the display screen, the pilots should further decelerate the taxiing speed to avoid overshooting.(Fig.6)



Fig.6

- (2) Deviation of an upward yellow arrow from the center line of "T" indicates the deviation of the approaching aircraft relative to the center line of the parking stand either to right or left. Further, an additional flashing red arrow on the either side indicates the required direction for the aircraft to turn.(Fig.7, Fig.8)



### 4.Stop Guidance

- (1) When the approaching aircraft is within 30 meters from the stopping position, display of digital countdown will start. As the aircraft approaches the stopping position, digital countdown is for every 1.0 meter(from 30.0 to 2.0 meters to the stop position) or for every 0.2 meters (from 2.0 to 0.0 meters to the stop position).

- (2) When the approaching aircraft is within 16 meters from the stopping position, the shaft of the illuminated "T" will start to reduce in its length from the bottom to indicate the approaching rate of the aircraft, indicating the remaining distance to the stopping position successively.(Fig.9, Fig.10)

As the aircraft approaches the stopping position, the shaft of the illuminated "T" retract one row for every 0.5 meters.



Fig.9



Fig.10

- (3) When the aircraft reaches the stopping position, a message "STOP" will be displayed on the screen together with two red squares, one each at the either side of the screen at the positions previously used for indication of a direction to turn. (Fig.11)



Fig.11

- (4) When the aircraft is stopped at the correct stopping position, a message "OK" will be displayed on the screen in several seconds.(Fig.12)



Fig.12

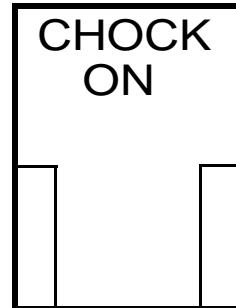


Fig.13

- (5) When the operator applies chocks, and switches on "CHOCK ON" switch, the display screen will display "CHOCK ON".(Fig.13)

- (6) If the aircraft stops at a position beyond the correct stopping position, a message "TOO FAR" will be displayed on the screen.(Fig 14).



Fig.14



Fig.15

#### 5. Cautions and Safety

- (1) When the system displays an incorrect aircraft type, or when such a message as "STOP", "ID", "FAIL", or "WAIT" appears on the display screen, the pilots should stop the aircraft immediately. (Fig.3, Fig.4, Fig.5, Fig.11, Fig.15)
- (2) Bad weather condition, during heavy fog, rain or snow, the visibility for the docking system can be reduced. When the system is activated and in capture mode, the display screen will deactivate the floating arrows and indicate "Aircraft type" and "SLOW".

This message will be superseded by the "T" bar, as soon as the system detects the approaching aircraft.  
The pilot must not proceed beyond the bridge, unless the "SLOW" text has been superseded by the "T" bar.



Fig.16

- (3) System breakdown, in case of a severe system failure, the display screen will go black, except for 2 red squares indicator. A manual backup procedure must be used for docking guidance.(Fig.17)



Fig.17

**RJTT AD 2.10 AERODROME OBSTACLES**

SEE RJTT AD2.24 AERODORME OBSTRUCTION CHART-ICAO

In approach / TKOF Areas

| RWY/Area affected | Obstacle type | Coordinates            | Elevation | Markings/LGT | Remarks                   |
|-------------------|---------------|------------------------|-----------|--------------|---------------------------|
| -                 | Lightning Rod | 353218.52N 1394402.50E | 217ft     | -/-          | above the conical surface |
| -                 | Lightning Rod | 353218.50N 1394404.09E | 220ft     | -/LGTD       | above the conical surface |
| -                 | Lightning Rod | 353218.50N 1394404.56E | 217ft     | -/-          | above the conical surface |
| -                 | Lightning Rod | 353219.07N 1394404.53E | 217ft     | -/-          | above the conical surface |
| -                 | Lightning Rod | 353219.69N 1394404.53E | 217ft     | -/LGTD       | above the conical surface |
| -                 | Lightning Rod | 353220.08N 1394404.55E | 217ft     | -/-          | above the conical surface |
| -                 | Chimney       | 353050.7N 1394547.4E   | 291ft     | -/LGTD       | above the conical surface |
| -                 | Building      | 353958.9N 1394459.0E   | 875ft     | -/LGTD       | above the conical surface |
| -                 | Building      | 353951.2N 1394415.7E   | 893ft     | -/LGTD       | above the conical surface |

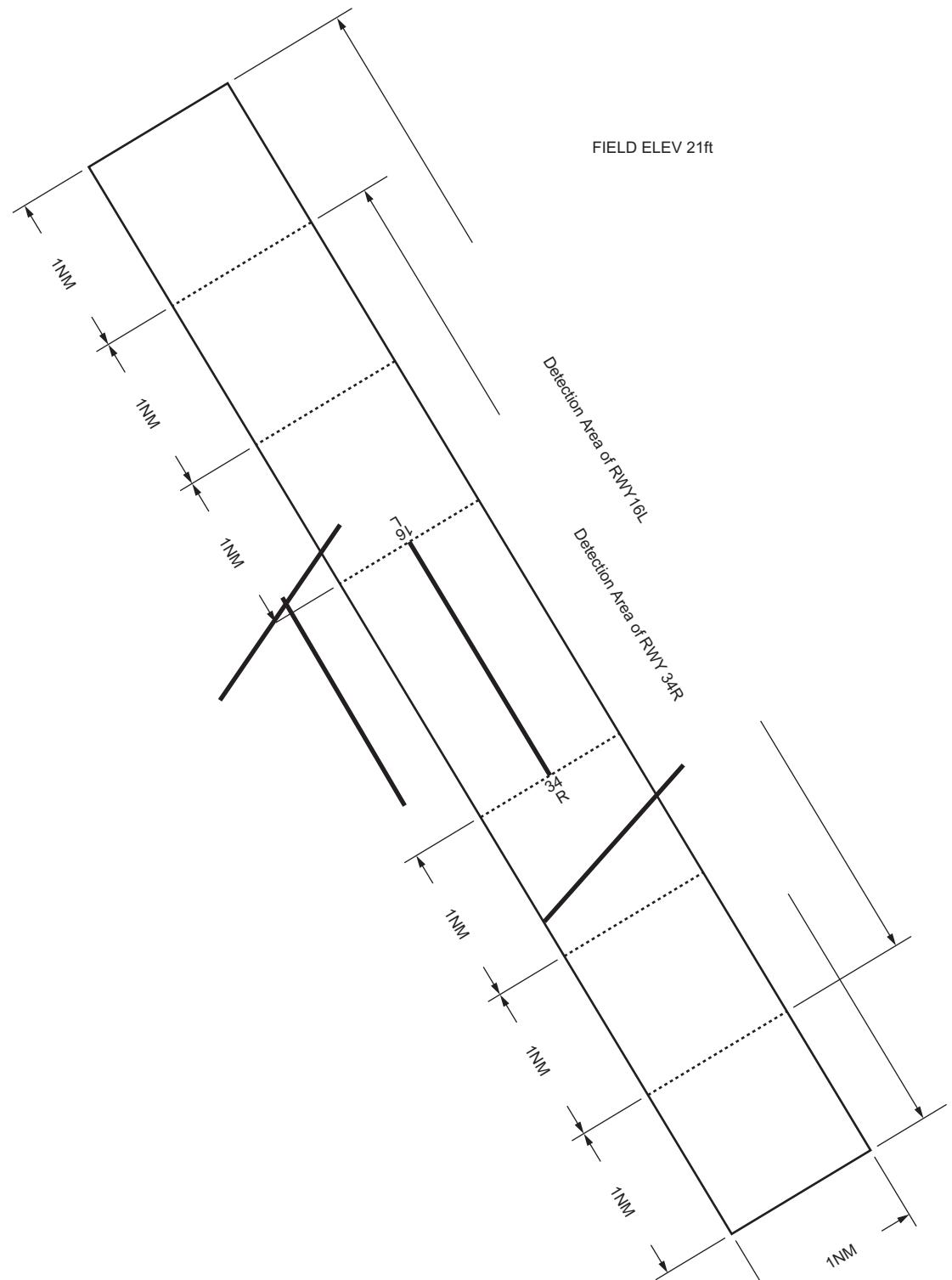
In circling area and at AD

| Obstacle type | Coordinates            | Elevation | Markings/ LGT | Remarks                      |
|---------------|------------------------|-----------|---------------|------------------------------|
| Chimney       | 353107.42N 1394619.09E | 177ft     | -/LGTD        | above the horizontal surface |

**RJTT AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

|    |  |   |
|----|--|---|
| 1  | Associated MET Office  | TOKYO   |
| 2  | Hours of service<br>MET Office outside hours                           | H24   |
| 3  | Office responsible for TAF<br>preparation<br>Periods of validity       | TOKYO<br>30 Hours   |
| 4  | Trend forecast<br>Interval of issuance                                 | TREND<br>30min  |
| 5  | Briefing/ consultation provided  | P, Ja, En   |
| 6  | Flight documentation<br>Language(s) used                               | C<br>En   |
| 7  | Charts and other information<br>available for briefing or consultation | S <sub>6</sub> , U <sub>85</sub> , U <sub>7</sub> , U <sub>5</sub> , U <sub>3</sub> , U <sub>25</sub> , U <sub>2</sub> /T <sub>r</sub> , P <sub>S</sub> , P <sub>5</sub> , P <sub>3</sub> , P <sub>25</sub> , P <sub>SWE</sub> , P <sub>SWF</sub> , P <sub>SWG</sub> , P <sub>SWI</sub> , P <sub>SWM</sub> , P <sub>SW</sub> (domestic), E, C, W <sub>E</sub> , W <sub>F</sub> , W <sub>G</sub> , W <sub>I</sub> , W, N |
| 8  | Supplementary equipment<br>available for providing information         | Doppler Radar and Lidars for Airport Weather(see attached chart)  |
| 9  | ATS units provided with information                                    | TWR, APP, ATIS  |
| 10 | Additional information(limitation of service, etc.)                    | Nil   |

## Airspace for the advisory service concerning low level wind shear (RWY16L/34R)



Airspace for the advisory service concerning low level wind shear (RWY16R/34L)

## Airspace for the advisory service concerning low level wind shear (RWY04/22)



UPPER LIMIT: 1600ft above FIELD ELEV LEVEL  
LOWER LIMIT: FIELD ELEV LEVEL

## Airspace for the advisory service concerning low level wind shear (RWY05/23)



UPPER LIMIT: 1600ft above FIELD ELEV LEVEL  
LOWER LIMIT: FIELD ELEV LEVEL

## RJTT AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations<br>RWY NR | TRUE<br>BRG | Dimensions of<br>RWY(M) | Strength(PCN) and<br>surface of RWY  | THR coordinates<br>THR geoid undulation   | THR elevation and<br>highest elevation of TDZ of<br>precision APP RWY              |
|------------------------|-------------|-------------------------|--------------------------------------|---|--|
| 1                      | 2           | 3                       | 4                                    | 5   | 6  |
| 16L                    | 149.88°     | 3360x60                 | PCN 95/F/B/X/T<br>Asphalt Concrete   | 353357.23N<br>1394711.59E<br>117.7FT<br>(Displaced THR)<br>353346.27N<br>1394719.34E<br>117.8FT | THR ELEV : 21.8FT<br><br>(Displaced THR)<br>THR ELEV : 19.2FT<br>TDZ ELEV : 19.2FT |
| 34R                    | 329.88°     | 3360x60                 | PCN 95/F/B/X/T<br>Asphalt Concrete   | 353222.90N<br>1394818.49E<br>117.1FT<br>(Displaced THR)<br>353233.02N<br>1394811.34E<br>117.2FT | THR ELEV : 27.8FT<br><br>(Displaced THR)<br>THR ELEV : 19.7FT<br>TDZ ELEV : 21.0FT |
| 16R                    | 149.88°     | 3000x60                 | PCN85F/B/X/T<br>Asphalt Concrete     | 353335.95N<br>1394608.64E<br>117.9FT<br>(Displaced THR)<br>353322.47N<br>1394618.19E<br>117.9FT | THR ELEV : 20.5FT<br><br>(Displaced THR)<br>THR ELEV : 16.4FT<br>TDZ ELEV : 16.4FT |
| 34L                    | 329.88°     | 3000x60                 | PCN 85/F/B/X/T<br>Asphalt Concrete   | 353211.76N<br>1394708.41E<br>117.3FT  | THR ELEV : 18.2FT<br>TDZ ELEV : 18.4FT   |
| 04                     | 035.01°     | 2500x60                 | PCN 85/F/B/X/T<br>Asphalt Concrete   | 353256.47N<br>1394540.60E<br>117.8FT  | THR ELEV : 19.0FT<br>TDZ ELEV : 19.3FT   |
| 22                     | 215.01°     | 2500x60                 | PCN 85/F/B/X/T<br>Asphalt Concrete   | 353402.88N<br>1394637.61E<br>117.9FT  | THR ELEV : 35.0FT<br>TDZ ELEV : 35.0FT   |
| 05                     | 042.56°     | 2500x60                 | PCN 102/F/B/X/T*<br>Asphalt Concrete | 353126.41N<br>1394812.47E<br>116.9FT  | THR ELEV : 45.5FT<br>TDZ ELEV : 45.5FT   |
| 23                     | 222.56°     | 2500x60                 | PCN 102/F/B/X/T*<br>Asphalt Concrete | 353226.15N<br>1394919.61E<br>116.9FT  | THR ELEV : 54.7FT<br>TDZ ELEV : 54.7FT   |

| Slope of RWY     | Strip Dimensions(M) | RESA(Overrun) Dimensions(M)                           | Arresting System                        | Remarks   |
|------------------|---------------------|---|---|---|
| 7                | 10                  | 11  | 12                                      | 14  |
| See below figure | 3480x300            | 150x300   |   | RWY grooving:<br>RWY 16L/34R 3360mx40m<br>RWY 16R/34L 3000mx40m<br>RWY 04/22 2500mx40m<br>RWY 05/23 2500mx40m<br>*REF AD2.23.7  |
|                  | 3480x300            | 240x300   |   |   |
|                  | 3120x300            | 40x(MNM:255 MAX:300)**                                | EMAS(84.5mx62.8m)<br>*See RJTT AD2.23.8 | CAUTION :<br>THR of RWY 16L is displaced by 390m inward.<br>In case of landing, the usable length of RWY 16L is 2,970m.<br>In case of take-off, the usable length of RWY 16L is 3,360m.<br>THR of RWY 34R is displaced by 360m inward.<br>In case of landing, the usable length of RWY 34R is 3,000m.<br>In case of take-off, the usable length of RWY 34R is 3,360m. |
|                  | 3120x300            | 240x300   |   |   |
|                  | 2620x300            | 186x(MNM:210 MAX:300)**                               |   | THR of RWY 16R is displaced by 480m inward.<br>In case of landing, the usable length of RWY 16R is 2,520m.<br>In case of take-off, the usable length of RWY 16R is 3,000m.<br>Usable length of RWY 34L is 3,000m for both landing and take-off.   |
|                  | 2620x300            | 240x300   |   |   |
|                  | 2620x300            | 240x300   |   |   |
|                  | 2620x300            | 240x300<br>**For detail,<br>ask airport administrator |   |   |



## RJTT AD 2.13 DECLARED DISTANCES

| RWY Designator | TORA (m) | TODA (m) | ASDA (m) | LDA (m)      | Remarks                   |
|----------------|----------|----------|----------|--------------|---------------------------|
| 1              | 2        | 3        | 4        | 5            | 6                         |
| 16L<br>34R     | 3360     | 3360     | 3360     | 2970<br>3000 | Nil<br>Nil                |
| 16R<br>34L     | 3000     | 3000     | 3000     | 2520<br>3000 | Nil<br>Nil                |
| 04<br>22       | 2500     | 2500     | 2500     | 2500         | Nil<br>Nil                |
| 05<br>23       | 2500     | 2500     | 2500     | -<br>2500    | Not usable for LDG<br>Nil |

## RJTT AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator   | APCH type LEN INTST | LGT RTHL Color WBAR | PAPI (VASIS) Angle DIST FM THR MEHT      | RTZL LEN | RCLL Spacing Color INTST                    | REDL Spacing Color INTST                           | RENL Color WBAR | STWL LEN Color |
|--|---------------------|---------------------|--|----------|---|--|-----------------|----------------|
| 1  | 2                   | 3                   | 4  | 5        | 6   | 7  | 8               | 9              |
| 16L  | PALS                | Green Green         | PAPI 3.0°/LEFT<br>900M 412M<br>LIH 65FT  | 900M     | 3360M 15M<br>Coded color (White/Red)<br>LIH | 3360M 30M<br>Coded color (White/Yellow/Red)<br>LIH | Red             | Nil (*1)       |
|  |                     |                     | PAPI(*3)<br>3.25°/LEFT<br>378M<br>65FT   |          |   |  |                 |                |
| 34R  | PALS (CAT III)      | Green Green         | PAPI 3.0°/RIGHT<br>900M 416M<br>LIH 66FT | 900M     | 3360M 15M<br>Coded color (White/Red)<br>LIH | 3360M 30M<br>Coded color (White/Yellow/Red)<br>LIH | Red             | Nil (*1)       |
| 16R  | PALS                | Green Green         | PAPI 3.0°/LEFT<br>900M 434M<br>LIH 65FT  | 900M     | 3000M 30M<br>Coded color (White/Red)<br>LIH | 3000M 60M<br>Coded color (White/Yellow/Red)<br>LIH | Red             | Nil (*1)       |
|  |                     |                     | PAPI(*3)<br>3.25°/LEFT<br>397M<br>65FT   |          |   |  |                 |                |
| 34L  | PALS (CAT I)        | Green Green         | PAPI 3.0°/LEFT<br>900M 449M<br>LIH 66FT  | 900M     | 3000M 30M<br>Coded color (White/Red)<br>LIH | 3000M 60M<br>Coded color (White/Yellow)<br>LIH     | Red             | Nil (*1)       |
| 04   | -                   | Green -             | PAPI(*2)<br>3.0°/LEFT<br>369M<br>61FT    | -        | 2500M 30M<br>Coded color (White/Red)<br>LIH | 2500M 60M<br>Coded color (White/Yellow)<br>LIH     | Red             | Nil (*1)       |
| 22   | PALS (CAT I)        | Green Green         | PAPI 3.0°/LEFT<br>900M 438M<br>LIH 63FT  | 900M     | 2500M 30M<br>Coded color (White/Red)<br>LIH | 2500M 60M<br>Coded color (White/Yellow)<br>LIH     | Red             | Nil (*1)       |
| 05   | -                   | Green -             | -  | -        | 2500M 30M<br>Coded color (White/Red)<br>LIH | 2500M 30M<br>Coded color (White/Yellow)<br>LIH     | Red             | Nil (*1)       |
| 23   | PALS (CAT I)        | Green Green         | PAPI 3.0°/LEFT<br>870M 452M<br>LIH 66FT  | 900M     | 2500M 30M<br>Coded color (White/Red)<br>LIH | 2500M 30M<br>Coded color (White/Yellow)<br>LIH     | Red             | Nil (*1)       |
| Remarks  |                     |                     |  |          |   |  |                 |                |
| 10   |                     |                     |  |          |   |  |                 |                |
| Overrun area edge LGT(LEN:60M(RWY16L,34R,34L,04,22, 05, 23) 77M(RWY16R), Color:Red) (*1)<br>CGL for RWY 16L APCH guidance LGT for RWY16L,16R<br>RWY THR ID LGT for RWY04, RWY22 and RWY16L THR(Color:White)<br>Rapid exit taxiway indicator lights prior to exit to TWY C10, D3 and D5(Color:Yellow)<br>Usable area of PAPI for RWY04 is within 2.4NM FM RWY04 THR(*2)<br>3.25° PAPI(The angle is 3.25°) turn on and 3.0° PAPI(The angle is 3.0°) turn off only when RNP RWY16R and RNP RWY16L are in operation. See AIP RJTT AD2.20.1.8(*3) |                     |                     |  |          |   |  |                 |                |

**RJTT AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

|   |  |  |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 353238N/1394557E, White/Green EV4.3sec, HO  |
| 2 | LDI location and LGT<br>Anemometer location and LGT      | LDI:Nil<br>Anemometer:<br>RWY16L: 358m from RWY16L THR, LGTD<br>RWY34R: 710m from RWY34R THR, LGTD<br>RWY16R: 226m from RWY16R THR, LGTD<br>RWY34L: 270m from RWY34L THR, LGTD<br>RWY04: 273m from RWY04 THR, LGTD<br>RWY22: 400m from RWY22 THR, LGTD<br>RWY05: 381m from RWY05 THR, LGTD<br>RWY23: 319m from RWY23 THR, LGTD   |
| 3 | TWY edge and center line lighting                        | TWY edge and center line lights installed, see AD2.9   |
| 4 | Secondary power supply / switch-over time                | Within 1 sec:<br>PALS(RWY34R), PAPI(RWY16L/34R), RCLL(RWY16L/34R), RTZL(RWY34R), RENL(RWY16L/34R), RTHL(RWY16L/34R), WBAR(RWY16L/34R), Overrun area edge LGT(RWY16L/34R), Stop Bar LGT<br><br>Within 15 sec :<br>PALS(RWY16L/16R/34L/22/23), CGL(RWY16L), PAPI(RWY16R/34L/04/22/23), REDL(RWY16L/34R/16R/34L/04/22/05/23), RCLL(RWY16R/34L/04/22/05/23), RTZL(RWY16L/16R/34L/22/23), RENL(RWY16R/34L/04/22/05/23), RTHL(RWY16R/34L/04/22/05/23), WBAR(RWY16R/34L/22/23), RWY THR ID LGT(RWY16L/04/22), Overrun area edge LGT(RWY16R/34L/04/22/05/23), RWY guard LGT, ABN, TWY edge LGT, TWY CL LGT, Intermediate Holding Position Light, Rapid exit taxiway indicator lights, Taxiing guidance sign, WDI LGT, Variable Message Signs |
| 5 | Remarks  | WDI LGT  |

**RJTT AD 2.16 HELICOPTER LANDING AREA**

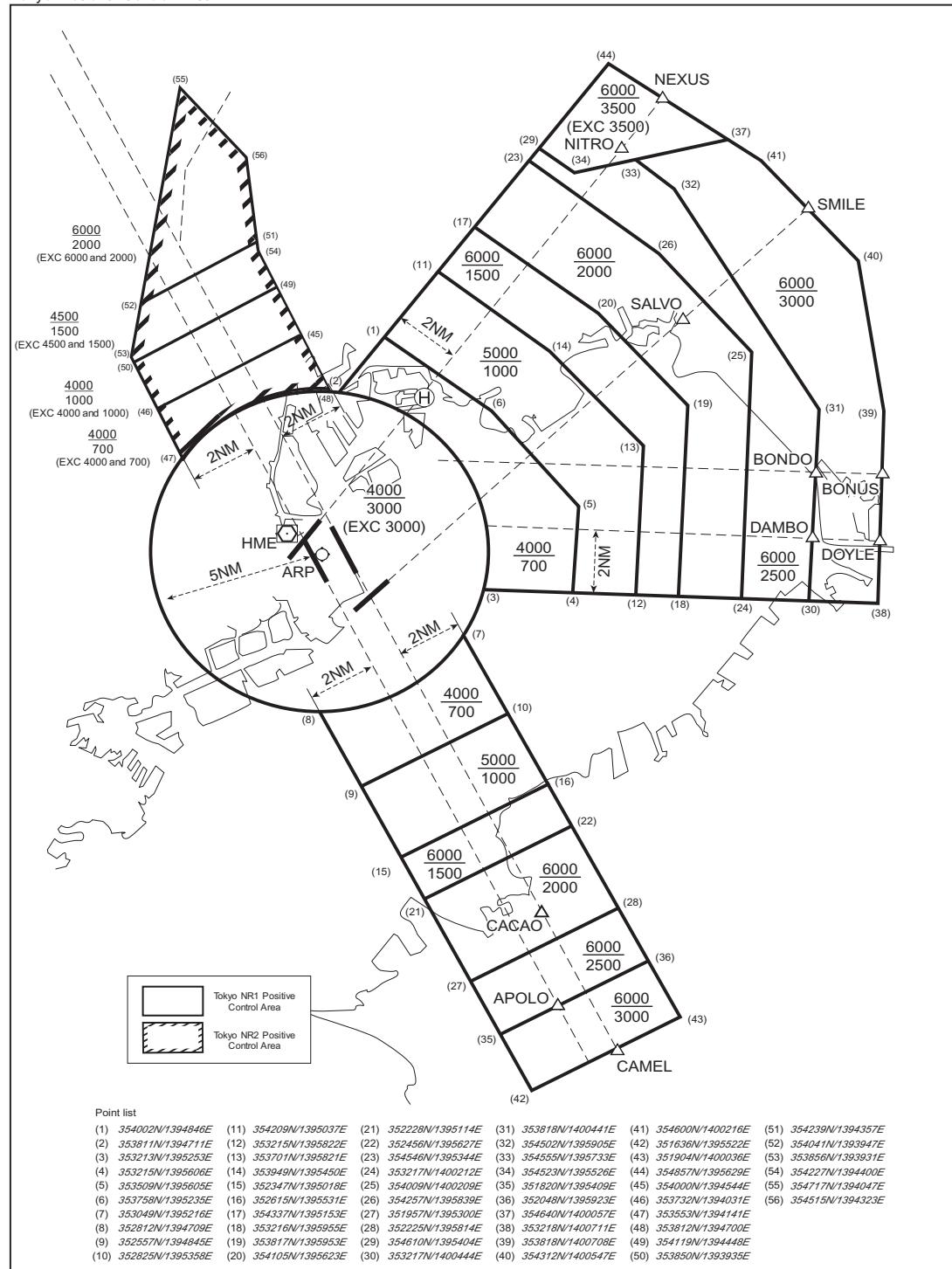
Nil

**RJTT AD 2.17 ATS AIRSPACE**

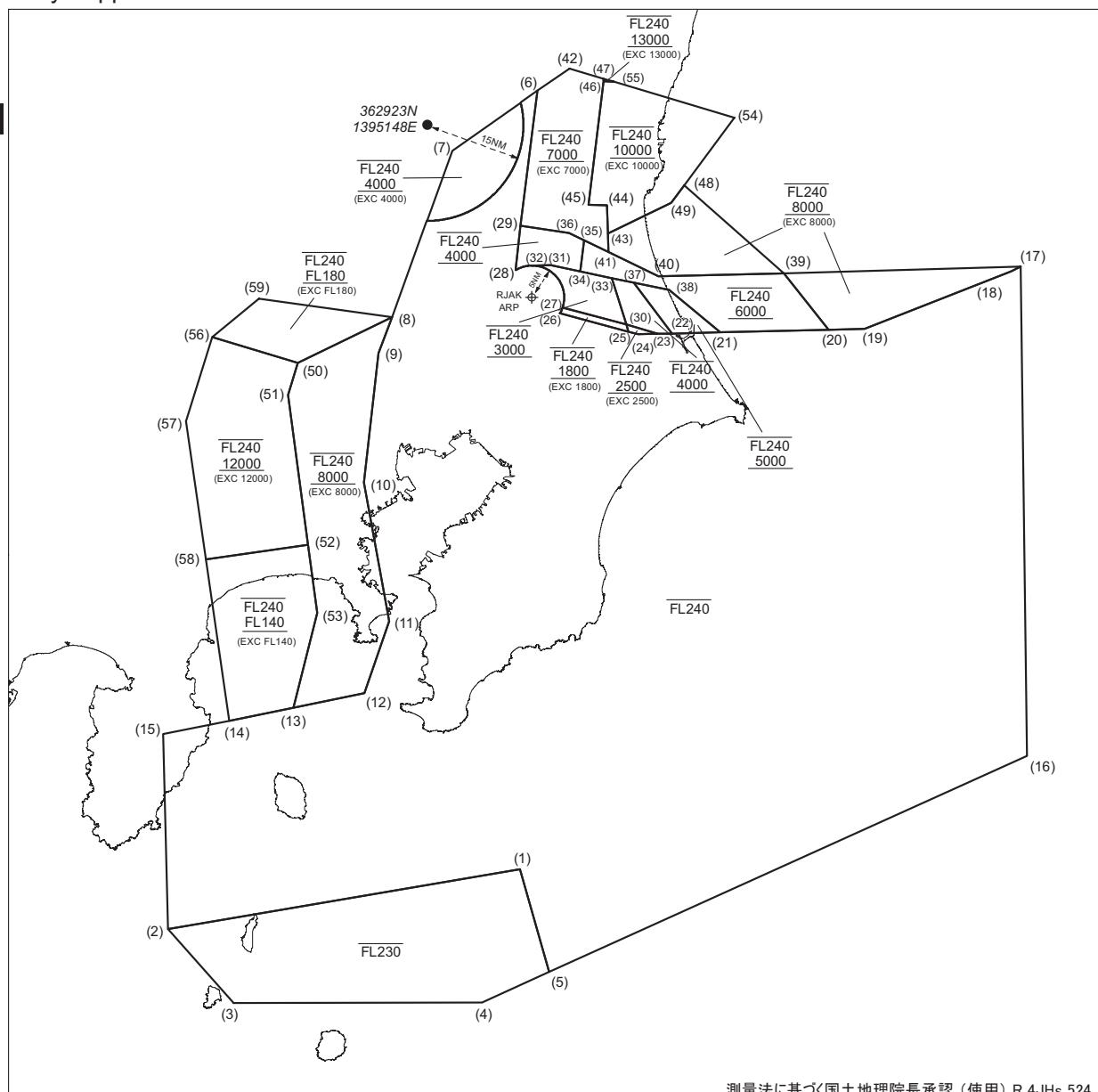
| Designation and lateral limits |  | Vertical limits (ft) | Airspace classification | ATS unit call sign Language | Remarks |
|--------------------------------|--|----------------------|-------------------------|-----------------------------|---------|
|                                | 1  | 2                    | 3                       | 4                           | 6       |
| TOKYO CTR                      | Area defined as follows.<br>Area within a radius of 5nm of TOKYO INTERNATIONAL ARP (35°33'N/139°47'E). | 3 000 or below (900) | D                       | TOKYO TOWER En              |         |
| TOKYO PCA                      | SEE RJTT ATTACHED CHART  |                      | C                       |                             |         |
| TOKYO ACA                      | SEE RJTT ATTACHED CHART  |                      | E                       |                             |         |
| TOKYO TCA                      | SEE RJTT ATTACHED CHART  |                      | E                       |                             |         |

**東京特別管制区**  
**Tokyo Positive Control Area**

| NAME  | LATERAL LIMITS  | UPPER LIMIT (AMSL)<br>-----<br>LOWER LIMIT (AMSL)<br>M(ft) | UNIT<br>PROVIDING<br>SERVICE  | REMARKS   |
|-------|---|--|---|---|
| 1     | 2   | 3  | 4   | 5   |
| Tokyo | 下図に示される区域<br>The area shown below<br>(1) 東京第一特別管制区<br>Tokyo NR1 Positive control Area<br>(2) 東京第二特別管制区<br>Tokyo NR2 Positive control Area |  | Primary<br>Tokyo TCA<br>124.75MHz<br>(2300-1200)<br>119.7MHz<br><br>Secondary<br>Tokyo Tower<br>118.1MHz<br>124.35MHz | 当該空域を飛行しようとする航空機は東京 TCA 又はタワーに連絡し、コールサイン、現在位置、高度及び意図を通報し指示を受けなければならない。なお、東京第一特別管制区にあっては 24 時間、東京第二特別管制区にあっては 0600UTC から 1000UTC の間とする。<br>Pilot requiring transit of Tokyo NR1/NR2 Positive Control Area must call Tokyo TCA or Tower prior to the point of entry to provide aircraft identification, position, altitude and intention. This rule is enforced 24 hours a day for Tokyo NR1 Positive Control Area and between 0600UTC and 1000UTC for Tokyo NR2 Positive Control Area. |

**東京特別管制区**  
**Tokyo Positive Control Area**


東京進入管制区  
Tokyo Approach Control Area

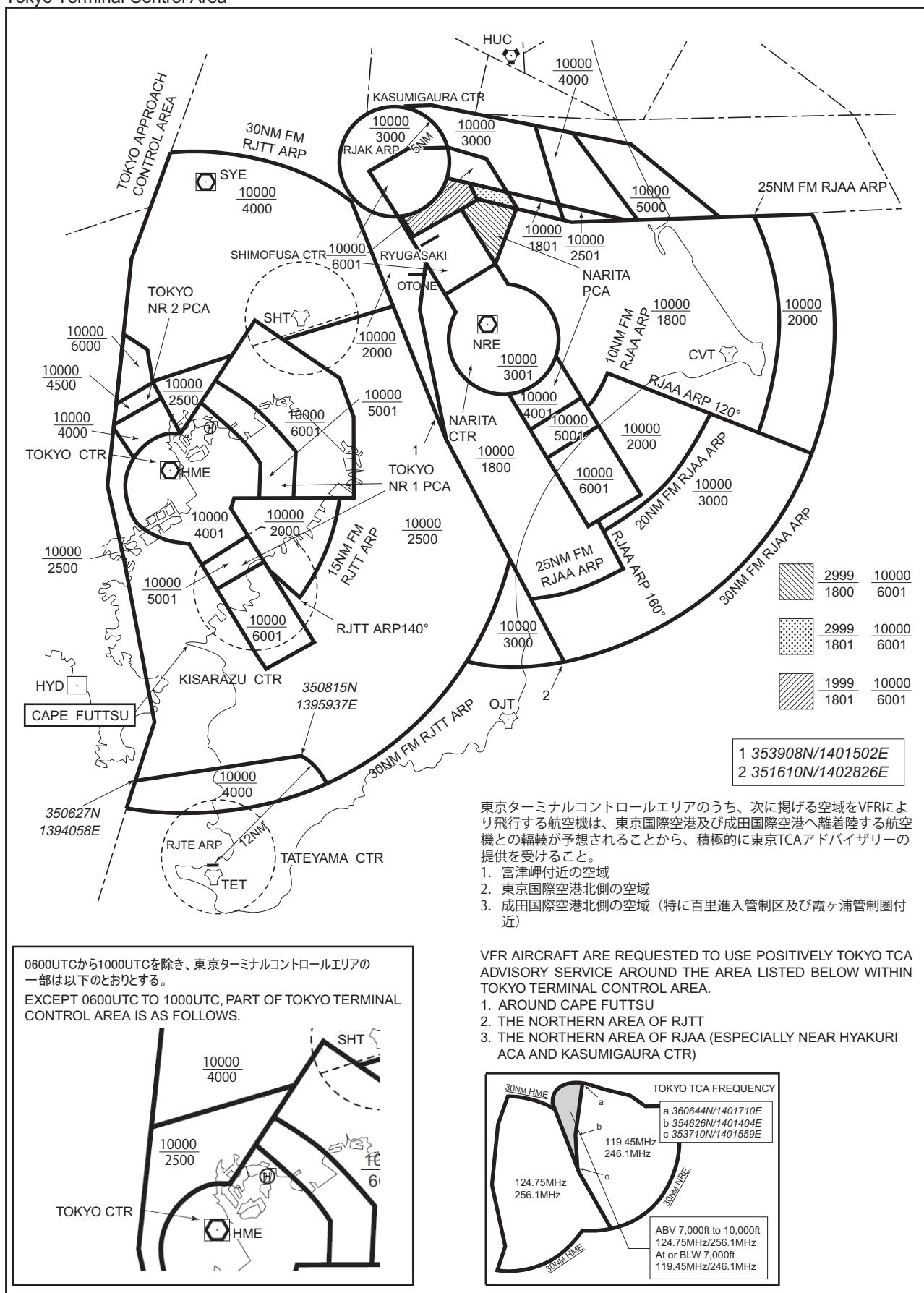


測量法に基づく国土地理院長承認（使用）R 4JHs 524

Point list

- |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|
| (1) 343224N/1400724E  | (18) 360419N/1414409E | (35) 361053N/1402147E | (52) 352343N/1392749E |
| (2) 342337N/1390033E  | (19) 355600N/1411534E | (36) 361204N/1401853E | (53) 351301N/1392926E |
| (3) 341153N/1391255E  | (20) 355600N/140841E  | (37) 360407N/1403112E | (54) 362938N/1405126E |
| (4) 341141N/1395954E  | (21) 355600N/1404746E | (38) 360250N/1403803E | (55) 363540N/1402812E |
| (5) 341614N/1401235E  | (22) 355600N/1403828E | (39) 360503N/1410017E | (56) 355626N/1390939E |
| (6) 363429N/1401317E  | (23) 355600N/1403535E | (40) 360500N/1403600E | (57) 354316N/1390433E |
| (7) 362515N/1395633E  | (24) 355600N/1403154E | (41) 360858N/1402626E | (58) 352134N/1390812E |
| (8) 355918N/1394424E  | (25) 355626N/1403002E | (42) 363752N/1401937E | (59) 360223N/1391842E |
| (9) 355339N/1394146E  | (26) 355930N/1401651E | (43) 361152N/1402623E |                       |
| (10) 353325N/1393840E | (27) 360023N/1401723E | (44) 361619N/1402619E |                       |
| (11) 351136N/1394310E | (28) 360623N/1400824E | (45) 361628N/1402245E |                       |
| (12) 350019N/1393818E | (29) 361321N/1400930E | (46) 363547N/1402606E |                       |
| (13) 345811N/1392443E | (30) 355732N/1402939E | (47) 363611N/1402610E |                       |
| (14) 345614N/1391225E | (31) 360705N/1401514E | (48) 361913N/1404125E |                       |
| (15) 345412N/1385949E | (32) 360705N/1401134E | (49) 361630N/1403849E |                       |
| (16) 344816N/1414417E | (33) 360453N/1402703E | (50) 355218N/1392608E |                       |
| (17) 360500N/1414604E | (34) 360602N/1402056E | (51) 354715N/1392411E |                       |

東京ターミナルコントロールエリア  
Tokyo Terminal Control Area



## RJTT AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign          | Frequency   | Hours of operation  | Remarks   |
|---------------------|--------------------|---|---|---|
| 1                   | 2                  | 3   | 4   | 5   |
| APP                 | Tokyo Approach     | 119.1MHz(1)<br>119.4MHz<br>119.65MHz<br>119.7MHz<br>125.4MHz<br>232.2MHz<br>261.2MHz<br>121.5MHz(E)<br>243.0MHz(E)              | 121.275MHz<br>124.4MHz<br>125.2MHz<br>125.8MHz<br>127.7MHz<br>225.65MHz | H24<br>(1)Primary   |
| ASR                 | Tokyo Radar        | 124.0MHz<br>126.5MHz<br>236.8MHz<br>261.2MHz<br>295.9MHz<br>121.5MHz(E)<br>243.0MHz(E)<br>120.2MHz                              | 119.025MHz<br>120.9MHz<br>123.6MHz<br>125.1MHz<br>283.4MHz              | H24   |
| DEP                 | Tokyo Departure    | 126.0MHz(1)<br>120.8MHz<br>127.5MHz<br>127.6MHz<br>121.5MHz(E)<br>243.0MHz(E)<br>124.2MHz<br>119.6MHz<br>120.6MHz<br>125.525MHz |   | H24   |
| TCA                 | Tokyo TCA          | 124.75MHz(1)<br>119.7MHz<br>256.1MHz<br><br>119.45MHz<br>246.1MHz   |   | 2300 - 1200<br><br>2300 - 1030                                |
| TWR                 | Tokyo Tower        | 118.1MHz(1)<br>118.575MHz<br>118.725MHz<br>124.35MHz<br>118.8MHz<br>126.2MHz<br>236.8MHz<br>121.5MHz(E)<br>243.0MHz(E)          |   | H24   |
| GND                 | Tokyo Ground       | 118.225MHz<br>121.625MHz<br>121.7MHz<br>121.975MHz<br>122.075MHz  |   | H24<br>See RJTT AD2.20.1.2 (14)<br>"GROUND CONTROL Frequency" |
| DLVRY               | Tokyo Delivery     | 121.825MHz(1)<br>121.875MHz   |   | H24   |
| ATIS                | Tokyo INTL Airport | 128.8MHz  |   | H24   |

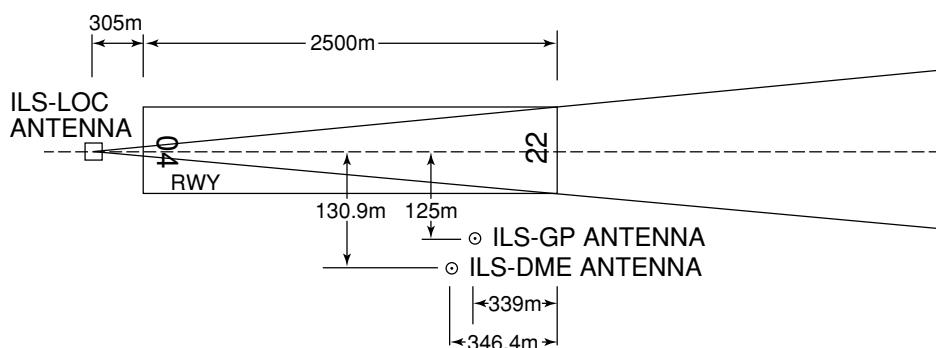
**RJTT AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

| Type of aid | ID  | Frequency           | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks  |
|-------------|-----|---------------------|--------------------|--|---------------------------------------|--|
| 1           | 2   | 3                   | 4                  | 5  | 6                                     | 7  |
| VOR         | HME | 112.2MHz            | H24                | 353344.34N/<br>1394540.14E                   |                                       | VOR Unusable:<br>1) 230° -240° beyond 15nm<br>BLW 8000ft.<br>2) 240° -260° beyond 10nm<br>BLW 8000ft.<br>VOR/DME Unusable:<br>1) 210° -230° beyond 20nm<br>BLW 3000ft.<br>2) 330° -340° beyond 30nm<br>BLW 3000ft.<br>3) 340° -020° beyond 20nm<br>BLW 3000ft. |
| DME         | HME | 1020MHz<br>(CH-59X) | H24                | 353344.34N/<br>1394540.14E                   | 63ft                                  |  |
| ILS-LOC 16L | IOC | 111.95MHz           | H24                | 353217.43N/<br>1394822.37E                   |                                       | LOC: 195m(640ft) away FM<br>RWY34R THR, BRG(MAG)<br>157.41°.   |
| ILS-GP 16L  | -   | 330.95MHz           | H24                | 353335.57N/<br>1394721.45E                   |                                       | GP: 312m(1024ft) inside FM<br>RWY16L Displaced THR,<br>120m(394ft) SW of RCL. HGT<br>of ILS Ref datum 16.3m(53ft).<br>GP angle 3.0°.   |
| ILS-DME 16L | IOC | 1143MHz<br>(CH-56Y) | H24                | 353335.08N/<br>1394721.61E                   | 34ft                                  | DME: 320m(1050ft) inside FM<br>RWY16L Displaced THR,<br>131.5m(431ft) SW of RCL.   |
| ILS-LOC 34R | ITC | 108.9MHz            | H24                | 353403.81N/<br>1394706.89E                   |                                       | LOC: (ITC) 235m(771ft) away<br>FM RWY16L THR, BRG (MAG)<br>337°.   |
| ILS-GP 34R  | -   | 329.3MHz            | H24                | 353243.92N/<br>1394809.36E                   |                                       | GP: 316m(1037ft) inside FM<br>RWY34R Displaced THR,<br>126m(413ft) NE of RCL. HGT<br>of ILS Ref datum 16.5m(54ft).<br>GP angle 3.0°.   |
| ILS-DME 34R | ITC | 987MHz<br>(CH-26X)  | H24                | 353244.02N/<br>1394809.72E                   | 35ft                                  | DME: 314m(1030ft) inside FM<br>RWY34R Displaced THR,<br>135m(443ft) NE of RCL.   |
| IM 34R      | -   | 75MHz               | H24                | 353220.45N/<br>1394820.26E                   |                                       | IM: 446m(1463ft) away FM<br>RWY34R Displaced THR.  |
| ILS-LOC 16R | ITA | 111.55MHz           | H24                | 353206.29N/<br>1394712.30E                   |                                       | LOC: 195m(640ft) away FM<br>RWY34L THR, BRG(MAG)<br>157.41°.   |
| ILS-GP 16R  | -   | 332.75MHz           | H24                | 353315.14N/<br>1394628.93E                   |                                       | GP: 326m(1070ft) inside FM<br>RWY16R Displaced THR,<br>120m(394ft) NE of RCL. HGT<br>of ILS Ref datum 16.3m(53ft).<br>GP angle 3.0°.   |
| ILS-DME 16R | ITA | 1139MHz<br>(CH-52Y) | H24                | 353315.97N/<br>1394629.22E                   | 31ft                                  | DME: 334m(1096ft) inside FM<br>RWY16L Displaced THR,<br>125m(410ft) NE of RCL.   |

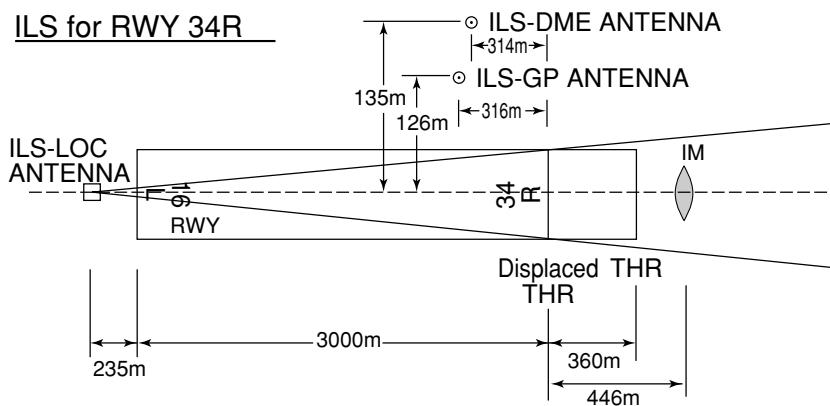
| Type of aid | ID  | Frequency           | Hours of operation | Position of transmitting antenna coordinates | Elevation of DME transmitting antenna | Remarks   |
|-------------|-----|---------------------|--------------------|--|---------------------------------------|---|
| 1           | 2   | 3                   | 4                  | 5  | 6                                     | 7   |
| ILS-LOC 34L | IHA | 111.7MHz            | H24                | 353343.81N/<br>1394603.06E                   |                                       | LOC: (IHA) 280m(919ft)<br>away FM RWY 16R THR,<br>BRG(MAG)337°.   |
| ILS-GP 34L  | -   | 333.5MHz            | H24                | 353223.19N/<br>1394705.78E                   |                                       | GP: 338m(1109ft) inside FM<br>RWY34L THR ,120m(394ft)<br>NE of RCL. HGT of ILS Ref<br>datum 16.5m (54ft).<br>GP angle 3.0°. |
| ILS-DME 34L | IHA | 1015MHz<br>(CH-54X) | H24                | 353223.33N/<br>1394706.14E                   | 43ft                                  | DME: 338m(1109ft) inside<br>FM RWY34L THR, 130m<br>(427ft) NE of RCL.<br>DME Unusable: beyond 15° E<br>side of LOC course.  |
| ILS-LOC 22  | IAD | 108.1MHz            | H24                | 353248.36N/<br>1394533.62E                   |                                       | LOC: (IAD)305m (1001ft) away<br>FM RWY04 THR, BRG(MAG)<br>222°.   |
| ILS-GP 22   | -   | 334.7MHz            | H24                | 353351.52N/<br>1394633.91E                   |                                       | GP: 339m(1112ft) inside FM<br>RWY22 THR, 125m (410ft) S of<br>RCL. HGT of ILS Ref datum<br>16.5m(54ft). GP angle 3.0°.      |
| ILS-DME 22  | IAD | 979MHz<br>(CH-18X)  | H24                | 353351.23N/<br>1394633.96E                   | 44ft                                  | DME: 346.4m(1137ft) inside FM<br>RWY22 THR, 130.9m(429ft) S<br>of RCL.  |
| LDA-LOC 22  | IKL | 110.1MHz            | H24                | 353613.77N/<br>1394908.33E                   |                                       | LOC: (IKL) 5481m(17983ft)<br>outside FM RWY22,<br>788m(2585ft) S of RCL,<br>BRG(MAG) 277°.                                  |
| LDA-DME 22  | IKL | 999MHz<br>(CH-38X)  | H24                | 353612.96N/<br>1394908.33E                   | 122ft                                 | DME: 5460m(17914ft) outside<br>FM RWY22, 803m(2635ft) S of<br>RCL.  |
| ILS-LOC 23  | ITD | 110.5MHz            | H24                | 353151.24N/<br>1394835.14E                   |                                       | LOC: (ITD) 950m(3117ft)<br>inside FM RWY05 THR,<br>97m(318ft) N of RCL.<br>LOC off-set angle 2.0°,<br>BRG(MAG)232°.         |
| ILS-GP 23   | -   | 329.6MHz            | H24                | 353220.86N/<br>1394906.93E                   |                                       | GP: 336m(1102ft) inside FM<br>RWY23 THR ,125m(410ft)<br>N of RCL. HGT of ILS Ref<br>datum 16.5m (54ft).<br>GP angle 3.0°.   |
| ILS-DME 23  | ITD | 1003MHz<br>(CH-42X) | H24                | 353221.08N/<br>1394906.64E                   | 67ft                                  | DME: 336m(1102ft) inside<br>FM RWY23 THR, 135m<br>(443ft) NE of RCL.  |
| LDA-LOC 23  | ITL | 108.5MHz            | H24                | 353410.37N/<br>1394656.13E                   |                                       | LOC: (ITL) 79m(259ft) inside<br>FM RWY23, 4834m(15860ft) N<br>of RCL, BRG(MAG) 277°.  |
| LDA-DME 23  | ITL | 983MHz<br>(CH-22X)  | H24                | 353411.11N/<br>1394656.12E                   | 34ft                                  | DME: 62m(203ft) inside FM<br>RWY23, 4849m(15910ft) N of<br>RCL.   |
| MSAS        |     | 1575.42MHz          | H24                |  |                                       | Transmitting antennas are<br>satellite based.   |

ILS for RWY 34L

REMARKS : 1. LOC beam BRG (MAG)                    337°  
                   2. HGT of ILS REF datum                16.5m(54ft)  
                   3. GP Angle                                3.0°  
                   4. ELEV of ILS-DME                      13.0m(43ft)

ILS for RWY 22

REMARKS : 1.LOC beam BRG(MAG)                    222°  
                   2.HGT of ILS REF datum                16.5m(54ft)  
                   3.GP Angle                                3.0°  
                   4.ELEV of ILS-DME                      13.5m(44ft)

ILS for RWY 34R

REMARKS : 1.LOC BEAM BRG(MAG)                    337°  
                   2.HGT of ILS REF datum                16.5m(54ft)  
                   3.GP Angle                                3.0°  
                   4.ELEV of ILS-DME                      10.6m(35ft)

### LDA for RWY 22



### ILS for RWY 23

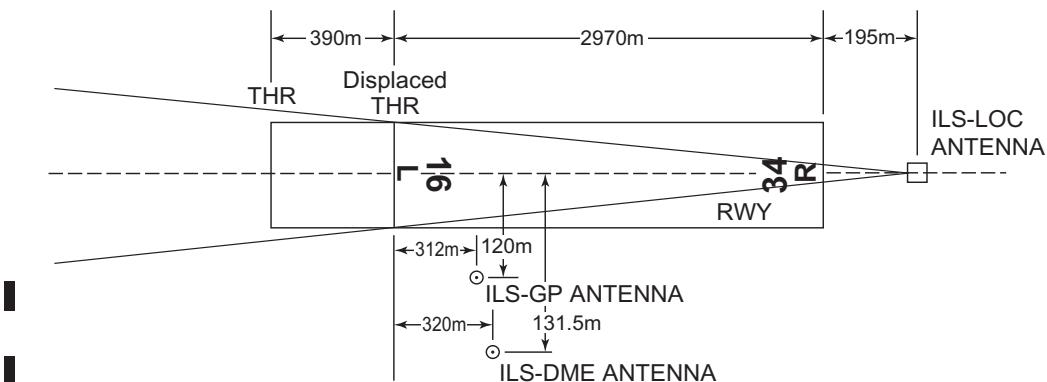


### LDA for RWY 23



ILS for RWY 16R

REMARKS : 1. LOC beam BRG (MAG)  $157.41^\circ$   
 2. HGT of ILS REF datum 16.3m(53ft)  
 3. GP Angle  $3.0^\circ$   
 4. ELEV of ILS-DME 9.4m(31ft)

ILS for RWY 16L

REMARKS : 1. LOC beam BRG (MAG)  $157.41^\circ$   
 2. HGT of ILS REF datum 16.3m(53ft)  
 3. GP Angle  $3.0^\circ$   
 4. ELEV of ILS-DME 10.1m(34ft)

**RJTT AD 2.20 LOCAL TRAFFIC REGULATIONS**

## 1. Airport regulations

## 1.1 Procedural Speed and Speedy Turn Off Procedure

In order to reduce runway occupancy time with the smooth traffic flow based on safety, arriving aircraft should operate as follows.

## (1)Procedural Speed (for IFR)

(a)Unless otherwise instructed by ATC, arriving aircraft should cross each points at the speed listed below.

| Approach                                  | Point           | Procedural Speed |
|---|-----------------|------------------|
| ILS Z RWY34L<br>LOC Z RWY34L              | IHA 10.0DME     | 180 kt (IAS)     |
|   | IHA 5.0DME      | 160 kt (IAS)     |
| ILS X RWY34L                              | KAIHO           | 180 kt (IAS)     |
|   | ALLIE           | 160 kt (IAS)     |
| ILS Z RWY34R<br>LOC Z RWY34R              | ITC 10.0DME     | 180 kt (IAS)     |
|   | ITC 5.0DME      | 160 kt (IAS)     |
| ILS RWY22<br>LOC RWY22                    | IAD 10.0DME     | 180 kt (IAS)     |
|   | IAD 5.0DME      | 160 kt (IAS)     |
| LDA Z RWY22<br>LDA X RWY22<br>LDA W RWY22 | IKL 8.0DME      | 180 kt (IAS)     |
|   | IKL 3.0DME      | 160 kt (IAS)     |
| ILS Z RWY23<br>LOC Z RWY23                | ITD 10.0DME     | 180 kt (IAS)     |
|   | ITD 5.0DME      | 160 kt (IAS)     |
| LDA Z RWY23<br>LDA X RWY23<br>LDA W RWY23 | ITL 12.0DME     | 180 kt (IAS)     |
|   | ITL 7.0DME      | 160 kt (IAS)     |
| ILS RWY16R                                | ITA 10.0DME     | 180 kt (IAS)     |
|   | ITA 5.0DME      | 160 kt (IAS)     |
| RNP RWY16R                                | 10.2NM from THR | 170 kt (IAS)     |
| ILS RWY16L                                | IOC 10.0DME     | 180 kt (IAS)     |
|   | IOC 5.0DME      | 160 kt (IAS)     |
| RNP RWY16L                                | 9.2NM from THR  | 170 kt (IAS)     |

## (b)

1)When speed adjustment is made after approach clearance issued, ATC will instruct to comply with Procedural Speed by the phrase as below instead of "RESUME PUBLISHED SPEED (ref. ENR1.6.1.8.7)".

(e.g.) COMPLY WITH PROCEDURAL SPEED.

2)Pilots should advise ATC when unable to comply with Procedural Speed due to an operational or a performance reason.

(e.g.) UNABLE TO COMPLY WITH PROCEDURAL SPEED ([number]KNOTS).

3)Pilots will be informed by ATC when there is no need to comply with Procedural Speed.

(e.g.) PROCEDURAL SPEED ([number]KNOTS) IS NOT REQUIRED.

(e.g.) MAINTAIN PROCEDURAL SPEED OR GREATER.

## (2) Speedy Turn Off Procedure

(a)The exit taxiways, as a rule, from which arriving aircraft should plan to vacate the runway are listed below.

(b)Pilot should vacate the runway for which the nearest side of the arriving spot.

| RWY | EXIT TAXIWAY | DISTANCE FROM THRESHOLD (m/ft) | REMARKS                        |
|-----|--------------|--------------------------------|--------------------------------|
| 34L | A10          | 1,500/4,920                    | for Terminal 1 and Terminal 2* |
|     | A12          | 2,000/6,560                    |                                |
|     | L10          | 1,320/4,330                    | for Terminal 3 and "N" Area*   |
|     | L12          | 1,800/5,900                    |                                |
|     | L13          | 2,080/6,820                    |                                |
| 16R | A5           | 1,530/5,020                    | for Terminal 1 and Terminal 2* |
|     | A2           | 2,040/6,690                    |                                |
|     | L5           | 1,500/4,920                    | for Terminal 3 and "N" Area*   |
| 34R | C9           | 1,290/4,230                    |                                |
|     | C10          | 1,670/5,470                    |                                |
|     | C11          | 2,120/6,950                    |                                |
| 16L | C7           | 1,390/4,570                    |                                |
|     | C6           | 1,710/5,640                    |                                |
|     | C4           | 2,000/6,560                    |                                |
| 22  | B8           | 1,050/3,440                    | Except for "N" Area*           |
|     | B6           | 1,530/5,010                    |                                |
|     | B4           | 1,800/5,900                    |                                |
|     | B3           | 2,030/6,660                    |                                |
|     | T8           | 1,050/3,440                    | for "N" Area*                  |
|     | T6           | 1,530/5,010                    |                                |
|     | T4           | 1,800/5,900                    |                                |
|     | T3           | 2,030/6,660                    |                                |
| 23  | D5           | 1,500/4,920                    |                                |
|     | D3           | 1,800/5,900                    |                                |

\*Except for Instructed by ATC when the Aircraft is on the air or on the ground

(c) Pilots should plan which exit taxiway to be used to vacate the runway in approach/landing briefing. Upon landing, pilots should vacate the runway without delay and pass the runway holding position marking on the exit taxiway. It is better, in terms of runway occupancy time, to aim for an exit which can be made, rather than to aim for an earlier one, just to miss it and then to roll slowly to the next.

Note ; The intensity of the taxiway center line lights listed below will be more increased than that of other taxiways to improve the recognition of these exit taxiways.

| RWY | TAXIWAY    |
|-----|------------|
| 16L | C4, C6, C7 |
| 34R | C10, C11   |
| 22  | B4         |
|     | B6         |
|     | T4         |
|     | T6         |
| 16R | A2, A5, L5 |
| 34L | A10, A12   |
|     | L12        |

## 1.2 Procedures other than 1.1 above and information

- (1) Aircraft operations other than scheduled or in emergency  
On use of this airport, aircraft operator is required to obtain the prior permission of the airport administrator.
- (2) A380-800 is prohibited from operating between 2100UTC and 1400UTC.
- (3) When operating A380-800 between 1400UTC and 2100UTC, the aircraft weight restriction is imposed.  
(see RJTT AD2.23.7)
- (4) A380-800 and B747-8 shall equip digital avionics that provide steering commands to maintain an established track during the go-around manoeuvre and they shall be utilized when landing to runway.
- (5) Aircraft without approvals of RNAV1 and RNAV5 is prohibited from operating.
- (6) RNP RWY16R/RWY16L are set for the purpose of noise reduction, and applied between 0600UTC and 1000UTC in southerly wind condition with good weather.  
All landing aircraft are required to be ready to conduct RNP RWY16R/RWY16L during that period.  
In case of aircraft which is not possible to conduct RNP RWY16R/RWY16L for inevitable reasons, it will be assigned another runway or type of approach with reasonable delay which depends on traffic flow at the time.  
So, the pilot should notify at initial contact with Tokyo Approach.
- (7) Preflight call to control tower  
IFR departing aircraft should notify TOKYO DELIVERY of their readiness five minutes prior to starting engines with following items for facilitating ATC service.
  - a. call sign
  - b. spot number
  - c. proposed flight level/altitude and route (only when changed from original Flight Plan)
- (8) Pilot should ensure that they are able to follow the clearance to the take-off position or the take-off clearance without delay to reduce runway occupancy time. Cockpit check should be completed prior to line-up and checks requiring completion on the runway should be kept to a minimum. If unable to do so, notify to Tokyo Tower.
- (9) Pilot should ensure that they are able to follow the instruction for runway crossing without delay. Upon runway crossing, pilot should vacate the runway as soon as possible and pass through the runway holding position marking on the exit taxiway.
- (10) Departure aircraft is required to take off with runway length 2500m except following (a) and (b).
  - (a) Between 2100UTC and 1400UTC : Departure aircraft(\*) for North America, Europe and Turkey.
  - (b) Between 1400UTC and 2100 UTC : Departure specified and allowed in advance(see RJTT AD2.21 NOISE ABATEMENT PROCEDURES 2.Noise Preferential Runways)

(Note)\*Between 0600UTC and 1000UTC, non-scheduled flight is required to take off with runway length 2500m,even though bound for North America, Europe and Turkey.
- (11) Predetermined Runway depend on the flight direction  
During 2100UTC and 1400UTC, the aircraft will be assigned departure runway depending on the flight direction.

| The Airway or Fix filed in Flight Plan<br>(Reference AIC) | Departure Runway     |   |   |
|---|----------------------|---|---|
|   | North wind operation | South wind operation 1<br>(RWY22/23 approaches in progress) | South wind operation 2<br>(RWY16L/R approaches in progress between 0600UTC and 1000UTC) |
| ROVER, Y884, Y885   | RWY34R               | RWY16L  | RWY16R <sup>(*1)</sup>  |
| Y18 <sup>(*2)</sup>                                       | RWY34R               | RWY16L  | RWY16R  |
|   | RWY05                | RWY16R  | RWY22   |
| Y20 <sup>(*2)</sup>                                       | RWY34R               | RWY16L  | RWY16R  |
|   | RWY05                | RWY16R  | RWY22   |
| Y28, Y56, XAC   | RWY05                | RWY16R  | RWY22   |

(Note1) \*1 Scheduled flight only for North America, Europe and Turkey will be assigned RWY16L.

(Note2) \*2 Departure runway will be assigned when Flight schedule is fixed.

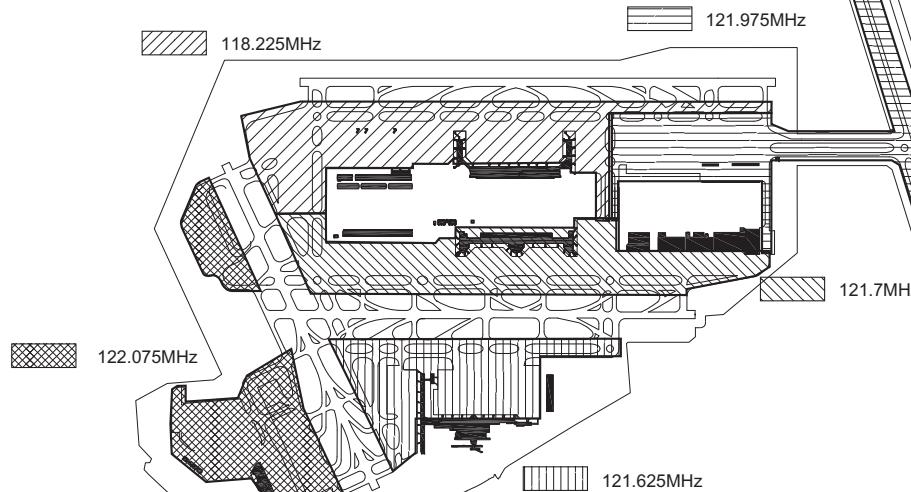
(Note3) ATC may assign other runway that listed above, if required.

- (12) Runway is predetermined by flight direction.  
Aircraft which uses RWY05 for take off shall comply with the aircraft weight restriction. Even though aircraft weight exceeds the restriction, the other runway shall not be used.(see RJTT AD2.23.7)
- (13) Prior notice of spot number before landing  
All arriving aircraft should notify control tower of the parking spot number at initial contact.

## (14) GROUND CONTROL Frequency

See attached chart

## GROUND CONTROL Frequency



## 1.3 Intersection departure

- (1) When RWY 34R/16L, 05, 16R, 04/22 is in use, departing aircraft may be instructed intersection departure from C2, C3, C13, D2, A15/L15, A14/L14, B2/T2 or B13 without pilot's consent. Aircraft unable to depart from C2, C3, C13, D2, A15/L15, A14/L14, B2/T2 or B13 intersection shall advise "TOKYO GROUND/TOWER" accordingly.
- (2) Separation for departure as in AD1.1.6.3.2.2(2) will not be applied to aircraft departing from TWY C13, D2, B2/T2, B13, TWY C3 behind departing aircraft from C2 or A14/L14 behind departing aircraft from A15/L15. Aircraft requiring separation in AD1.1.6.3.2.2(2) shall advise "TOKYO GROUND/TOWER" accordingly.
- (3) The remaining runway length for intersection departures are as follows.

| RWY | TWY       | Remaining RWY length * |
|-----|-----------|------------------------|
| 34R | C2        | 2,920m (9,590ft)       |
|     | C3        | 2,820m (9,250ft)       |
|     | C5        | 2,420m (7,930ft)       |
|     | C6        | 2,100m (6,880ft)       |
|     | C7        | 1,780m (5,830ft)       |
|     | C8        | 1,330m (4,360ft)       |
|     | C13       | 3,180m (10,440ft)      |
|     | C12       | 2,800m (9,190ft)       |
| 16L | C11       | 2,480m (8,160ft)       |
|     | C10       | 2,030m (6,680ft)       |
|     | C9        | 1,650m (5,430ft)       |
|     | A2        | 2,520m (8,260ft)       |
|     | A3/L3     | 2,420m (7,960ft)       |
|     | A4/L4     | 2,320m (7,630ft)       |
|     | A5        | 2,010m (6,590ft)       |
|     | L5        | 1,980m (6,490ft)       |
| 34L | A6/L6     | 1,890m (6,200ft)       |
|     | A7        | 1,570m (5,150ft)       |
|     | A9/L9     | 1,470m (4,820ft)       |
|     | RWY 04/22 | 2,770m (9,080ft)       |
|     | A15       | 2,600m (8,550ft)       |
|     | L15       | 2,550m (8,370ft)       |
|     | A14       | 2,490m (8,190ft)       |
|     | L14       | 2,440m (8,010ft)       |
| 16R | A13       | 2,310m (7,570ft)       |
|     | A12       | 2,000m (6,560ft)       |
|     | L13       | 2,080m (6,850ft)       |
|     | L12       | 1,800m (5,910ft)       |
|     | A11/L11   | 1,930m (6,350ft)       |
|     | A10       | 1,500m (4,920ft)       |
|     | B2/T2     | 2,310m (7,570ft)       |
|     | B3/T3     | 2,030m (6,670ft)       |
| 04  | B4/T4     | 1,800m (5,900ft)       |
|     | B5/T5     | 1,810m (5,950ft)       |
|     | B6/T6     | 1,530m (5,030ft)       |
|     | B13       | 2,320m (7,620ft)       |
|     | B12       | 1,930m (6,340ft)       |
|     | T12       | 1,880m (6,170ft)       |
|     | B11       | 1,660m (5,460ft)       |
|     | T11       | 1,630m (5,370ft)       |
| 22  | B10       | 1,580m (5,190ft)       |
|     | B9        | 1,470m (4,830ft)       |
|     | T9        | 1,520m (5,010ft)       |
|     | D2        | 2,320m (7,620ft)       |
|     | D3        | 1,800m (5,900ft)       |
| 05  | D4        | 1,880m (6,170ft)       |
|     | D5        | 1,500m (4,920ft)       |

\*Rounded down to the nearest 10m(10ft) from the measurement between the point where TWY CL meets RWY CL and RWY THR.

- 1.4 Pilot should hold at RWY-holding position markings beside RWY guard lights are turned on at the TWY C1, C2, C3, C5, C12, C13 and C14.

Remarks; RWY-holding position markings and RWY guard lights are located at 75m and 90m off the runway center line on those TWY.(see RJTT AD2.24-ADC-1)

1.5 機材制限

B747-100/100SR, -200/200SR, -300/300SR 及び -SP(いわゆる、「クラシックジャンボ」)については、緊急機または国の航空機を除き運航は許可されない。

1.6 補助動力装置 (APU) の使用制限

航空機が対象スポットを使用する場合は、管理者が特に認める場合を除き、次に掲げる時間を超えて補助動力装置を使用してはならない。

(1) 出発予定時刻前の 15 分間

(2) 到着後、地上からの動力設備が使用可能となるまでに必要とする最小限度の時間

(3) 航空機が点検整備のため補助動力装置を必要とする場合は最小限度の時間

注) 対象スポットは、1 ~ 5R、5、6 ~ 23、53 ~ 73、105P、106 ~ 114、142 ~ 149 とする。

1.5 Aircraft type restrictions

B747-100/100SR, -200/200SR, -300/300SR and -SP(so-called "B747 Classics") are not allowed to operate all day except in emergency or state aircraft.

1.6 Restrictions about the use of auxiliary power units(APU)

When an aircraft is using following aircraft parking stand, APU shall not be used outside the time periods specified below except when specifically acknowledged by the authority as necessary.

(1) Less than 15 minutes prior to the estimated time of departure.

(2) The minimum time required for switching over to the fixed power facilities, after arrival at the parking stand.

(3) For the minimum time required for aircraft maintenance purposes if needed.

NOTE) Aircraft parking stand: Spot NR1-5R, 5, 6-23, 53-73, 105P, 106-114, 142-149.

1.7 PDA (parts departing aircraft) reporting to Airport Administration

In order to secure the safety of aircraft operations and to rectify the issue of falling objects from aircraft operating in the vicinity of Tokyo International Airport, aircraft operators are required to notify Airport Administration (Tel 03-5756-1531) of any "Parts Departing Aircraft" from flights operating to/from Tokyo International Airport, without delay. This information shall be shared by relevant parties in order to prevent recurrence of such.

1.8 RWY16R/RWY16L における PAPI の運用

(1) RNP RWY16R 及び RNP RWY16L 運用時ののみ設定角 3.25° の PAPI(以下「3.25° PAPI」という。)が点灯し、設定角 3.0° の PAPI(以下「3.0° PAPI」という。)が消灯する。(図 1)

(2) 3.25° PAPI のオンコースは、3.0° から 3.5° となる。(図 2)

(3) 3.0° PAPI と 3.25° PAPI の同時点灯は行わない。

(4) PAPI の切替えは、原則として、航空機が滑走路進入端から 5NM の地点に到達するまでに行われる。

(5) 点灯している PAPI の角度に疑義がある場合は管制機関に確認すること。

(例) Pilot: Confirm PAPI angle.  
ATC: PAPI angle 3.0/3.25.

(6) 進入方式の変更に伴い PAPI が切り替わる場合は必要に応じ管制機関から通報される。

(例) PAPI angle change to 3.0.

(7) 障害等により 3.25° PAPI が不点灯となっている場合、その代替措置として 3.0° PAPI が点灯される。その場合には必要に応じ管制機関から通報される。

(例) 3.25° PAPI unserviceable(due to trouble).  
(例) Alternate PAPI angle 3.0 available.

注 RNP RWY16R/RWY16L 運用時以外において、3.0° PAPI が障害等により不点灯になった場合であっても、3.25° PAPI は点灯されない。

1.8 Operation of PAPI on RWY16R/RWY16L

(1) PAPI(The angle is 3.25°)(The PAPI is called "3.25° PAPI" hereafter.) is turned on and PAPI(The angle is 3.0°)(The PAPI is called "3.0° PAPI" hereafter.) turned off only when RNP RWY16R and RNP RWY16L are in operation.(Fig.1)

(2) The setting angles for a 3.25° PAPI on-course sector is between 3.0° and 3.5°.(Fig.2)

(3) 3.0° PAPI and 3.25° PAPI are not turned on simultaneously.

(4) A changeover between 3.0° PAPI and 3.25° PAPI will be accomplished before the aircraft reaches 5NM from runway threshold.

(5) When pilot is uncertain of an angle of the PAPI in operation, that pilot should contact ATC for confirmation.

(e.g.) Pilot: CONFIRM PAPI ANGLE.  
ATC: PAPI ANGLE 3.0/3.25.

(6) When ATC intend to carry out a changeover between 3.0° PAPI and 3.25° PAPI in response to a change in approach procedure, ATC will inform pilots as necessary.

(e.g.) PAPI ANGLE CHANGE TO 3.0.

(7) When the outages of 3.25° PAPI occur due to the system failure, 3.0° PAPI will be turned on as an alternative guidance.

ATC will inform pilots about PAPI conditions as necessary.

(e.g.) 3.25° PAPI UNSERVICEABLE(DUE TO TROUBLE).

(e.g.) ALTERNATE PAPI ANGLE 3.0 AVAILABLE.

Note: When approach procedures except RNP RWY16R/RWY16L are in operation, 3.25° PAPI will not be turned on as an alternative guidance even if 3.0° PAPI becomes unserviceable due to system failure.

Fig.1



Fig.2



## 2. Taxiing to and from stands

## 2.1 TSAT Operation

## 1. 定義

用語の定義は次のとおりとする。

1-1 TSAT (Target Start Up Approval Time)

航空機が移動開始の許可を受領する目標時刻

1-2 TOBT (Target Off-Block Time)

航空機が管制機関からの許可があれば直ちに移動開始できる状況となる目標時刻

1-3 TSAT 運用

滑走路処理能力及び出発機の地上走行時間の最適化を目的とし、TSAT を用いて移動開始時刻を指定する運用

## 1. Definition

Words are defined as follows;

1-1 TSAT(Target Start Up Approval Time)

A target time at which an aircraft can expect to receive the off-block (including pushback and self-taxi-out) approval

1-2 TOBT(Target Off-Block Time)

A target time at which an aircraft is ready for off-block immediately upon reception of clearance from ATC

1-3 TSAT Operation

The operation designates the off-block time using TSAT, which aims to improve the capacity of runway and optimize taxi times on the ground

## 2. 対象航空機

飛行計画上の EOBT が 2120UTC から 1359UTC までの全ての IFR 出発機。ただし、以下の航空機を除く。

- (1) 航空交通流制御により、EOBT から 60 分以降の EDCT が指定された航空機。当該 EDCT 指定後に、EDCT が変更又は取り消された場合も含む。
- (2) 航空交通流制御により、出発の停止を指示された航空機。

## 2. Subject Aircraft

All IFR departures whose EOBT stated in flight plan between 2120UTC and 1359UTC except for a following aircraft.

- (1) An aircraft whose EDCT is 60 minutes or more after EOBT due to flow control, including when this EDCT is changed or cancelled.
- (2) An aircraft that is assigned to hold on the ground due to flow control.

## 3. 運用方式

## 3-1 TOBT の通報

3-1-1 運航者は、EOBT から 5 分以上の遅延が見込まれる場合は管制機間に TOBT を通報する。なお、TOBT の通報がない場合は、飛行計画上の EOBT が通報された TOBT として取り扱われる。

3-1-2 航空機は、通報した TOBT から 5 分以内に移動開始ができるよう準備し、移動開始ができない場合、その都度、運航者は TOBT を通報すること。

3-1-3 TOBT による遅延通報は、AIP ENR 1.11.2.2 に記載の遅延通報の代替にはならない。

## 3-2 TSAT の通知

3-2-1 TSAT は、管制承認発出時に、音声通信又はデータリンクにより通知される。

## 〔例〕

音声通信の場合 「TSAT 0930」

データリンクの場合 「TSAT 0930」

3-2-2 Visual Docking Guidance System (VDGS) が設置されている場合は、3-2-1 項に加えて、原則として TSAT の 20 分前から VDGS 表示により通知される。

## 〔表示例〕

1 行目に “TSAT” 表示、2 行目に TSAT、3 行目に TSAT から現在時刻のカウントダウン（分）が表示される (Figure 1)。カウントダウンが 0 分を過ぎた場合には、30 分間 DLA 表示となる (Figure 2)。

3-2-2-1 TSAT に変更がある場合には、VDGS 表示により通知される。

## 〔表示例〕

TSAT が変更された場合には、3 行目が 3 分間 CHG 表示となり、その後カウントダウン表示となる (Figure 3)。

## 3. Operation procedures

## 3-1 TOBT

3-1-1 When the flight is expected delay more than 5 minutes, the Aircraft Operator(AO)/Ground Handler(GH) must provide suitable TOBT to ATC facility. In case there is no input of TOBT, the EOBT stated in flight plan is processed as TOBT.

3-1-2 An aircraft should be ready within TOBT + 5 minutes. If the aircraft is not ready within TOBT + 5 minutes, the AO/GH should update predictable TOBT accordingly.

3-1-3 Delay message described in AIP ENR 1.11.2.2 may not be substituted by TOBT.

## 3-2 Issue of TSAT

3-2-1 TSAT is issued by voice communication or data link at Clearance Delivery.

## [Example]

Voice “TSAT 0930”

Data link “TSAT 0930”

3-2-2 TSAT is displayed on Visual Docking Guidance System (VDGS) 20 minutes prior to the TSAT.

## [Example]

First row: “TSAT”, Second row: TSAT (in time),

Third row: Countdown to TSAT in minutes (Figure 1)

After countdown of “0”, it is displayed as “DLA” for 30 minutes. (Figure 2)

3-2-2-1 When TSAT is revised, it is informed by the message on VDGS.

## [Example]

When TSAT on the second row is changed, the third row becomes “CHG” for 3 minutes and starts countdown. (Figure 3)

3-2-2-2 TSAT が失効する場合には、VDGS 表示により通知される (Figure 4)。

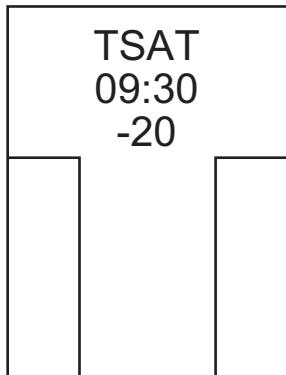


Figure 1

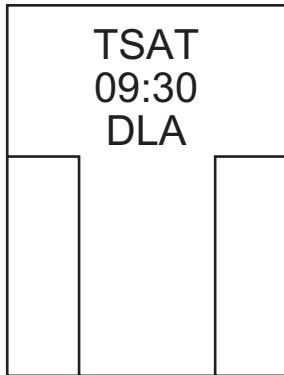


Figure 2

3-2-2-2 When TSAT is voided, it is displayed on VDGS. (Figure 4)

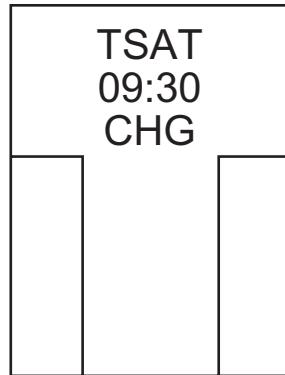


Figure 3

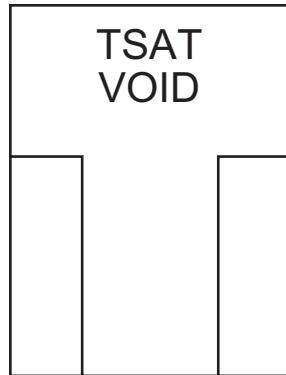


Figure 4

3-2-3 VDGS が設置されていない場合又は VDGS が使用できないことが周知されている場合には、3-2-1 項に加えて次のとおり TSAT が通知される。

3-2-3-1 管制承認発出後に運航者が TOBT 変更入力を実施した場合は、入力を実施した運航者が航空機へ新しい TSAT を通知する。

3-2-3-2 管制承認発出後に EDCT が指定または変更された場合は、管制機関から航空機へ新しい TSAT が通知される。

### 3-3 TSAT の取消し

TSAT が取り消される場合には、管制機関から音声通信又はデータリンクにより、航空機へその旨通知される。

#### [例]

音声通信の場合 「TSAT CANCELLED.」  
データリンクの場合 「TSAT CNL」

### 3-4 移動開始

3-4-1 航空機は、TSAT に移動開始を要求すること。ただし、TSAT よりも早く移動開始準備が完了した場合には、TSAT の 3 分前から移動開始を要求することができる。

3-4-2 VDGS が設置されている場合は、TSAT は VDGS に表示されているものを有効な TSAT として取り扱うこと。

3-4-3 VDGS が設置されていない場合又は VDGS が使用できないことが周知されている場合には、管制機関または運航者より通知された TSAT のうち直近に通知されたものを有効な TSAT として取り扱うこと。

3-4-4 TSAT に移動開始できない場合には、移動開始準備完了次第、速やかに移動開始を要求すること。

3-4-5 航空機は、管制機関より TSAT の取り消しを通報された場合は、VDGS における TSAT の表示内容及び運航者から通知された TSAT によらず、任意の時機に移動開始を要求することができる。

3-4-6 TSAT よりも前の時刻であっても必要に応じ、管制機関から航空機に対し移動開始を指示することがある。

### 4.TSAT 運用の中止

TSAT 運用が中断される場合には、ノータム RJTT により周知される。

3-2-3 If VDGS is not installed or unserviceable in a parking stand, TSAT is issued as Paragraph 3-2-1 and follows.

3-2-3-1 When the AO/GH modifies the TOBT after ATC clearance has been issued, the AO/GH is responsible for notifying the new TSAT to the pilot.

3-2-3-2 When EDCT is assigned or changed after ATC clearance has been issued, ATC informs a new TSAT to the pilot.

### 3-3 Cancellation

ATC notifies the pilot by voice communication or data link when TSAT is cancelled.

#### [Example]

Voice: "TSAT CANCELLED"  
Data link "TSAT CNL"

### 3-4 Pushback / Taxi Request

3-4-1 Pilots should ensure the aircraft is ready for Pushback/Taxi at TSAT.  
Regardless of above, pilots are able to request Pushback/Taxi from 3 minutes earlier than TSAT when the aircraft is ready earlier than TSAT.

3-4-2 The pilot should recognize the TSAT displayed in VDGS as the valid TSAT.

3-4-3 If the VDGS is not installed or unserviceable, pilots should recognize the last TSAT notified by ATC or the AO/GH as the valid TSAT.

3-4-4 If the flight cannot achieve TSAT, pilots should request Pushback/Taxi as soon as the aircraft being ready.

3-4-5 Pilots are able to request Pushback/Taxi when the aircraft being ready to start-up if ATC inform the TSAT has been cancelled regardless of displayed on VDGS or notified by the AO/GH.

3-4-6 ATC may give an instruction of Pushback/Taxi if the aircraft is ready even before the TSAT depending on capacity of ground traffic.

### 4. Suspension of TSAT Operation

In case of suspension of TSAT Operation, it is announced by NOTAM RJTT.

## 2.2 スポット 33 ~ 41 からのスポットアウト手順

プッシュバック後に、プッシュバックレーンから誘導路 W へ自走を行う場合は、使用スポット導入線とプッシュバックレーンの交点付近から、隣接スポット導入線と誘導路 W の誘導路中心線との交点付近を会合点として実施すること。ただし、管制官からプッシュバックレーンの走行を指示された場合<sup>\*1\*2</sup>は、プッシュバックレーンを走行した後、地上走行補助線を経由して誘導路 W へ自走すること。

プッシュバック後にプッシュバックレーンから誘導路 J 又は誘導路 J1 へ自走を行う場合は、プッシュバックレーンを走行した後、地上走行補助線を経由して誘導路 J 又は誘導路 J1 へ自走すること。

<sup>\*1</sup> 例：“TAXI VIA PUSHBACK-LANE TO W TWY”

<sup>\*2</sup> 例：“TAXI VIA PUSHBACK-LANE TO J TWY”

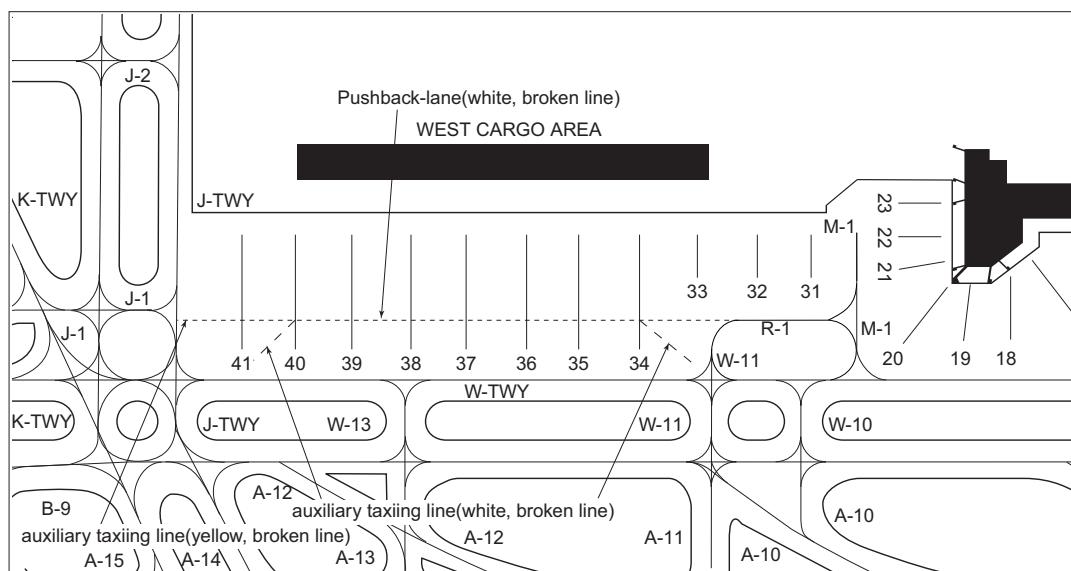
## 2.2 Spot OUT procedure from spot 33-41

After pushing back, ACFT taxiing from the Pushback-lane to TWY W, shall proceed to TWY W from the intersection of the Pushback-lane and the guide lane for the used spot, so as to intercept TWY W center line near the point crossing the guide lane for the next spot. However, when instructed to taxi via the Pushback-lane by ATC<sup>\*1\*2</sup>, ACFT shall taxi on the Pushback-lane and then proceed via the auxiliary taxiing line to TWY W.

After pushing back, ACFT taxiing from the Pushback-lane to TWY J or TWY J1, shall taxi on the Pushback-lane and then proceed via the auxiliary taxiing line to TWY J or TWY J1.

<sup>\*1</sup> example: "TAXI VIA PUSHBACK-LANE TO W TWY"

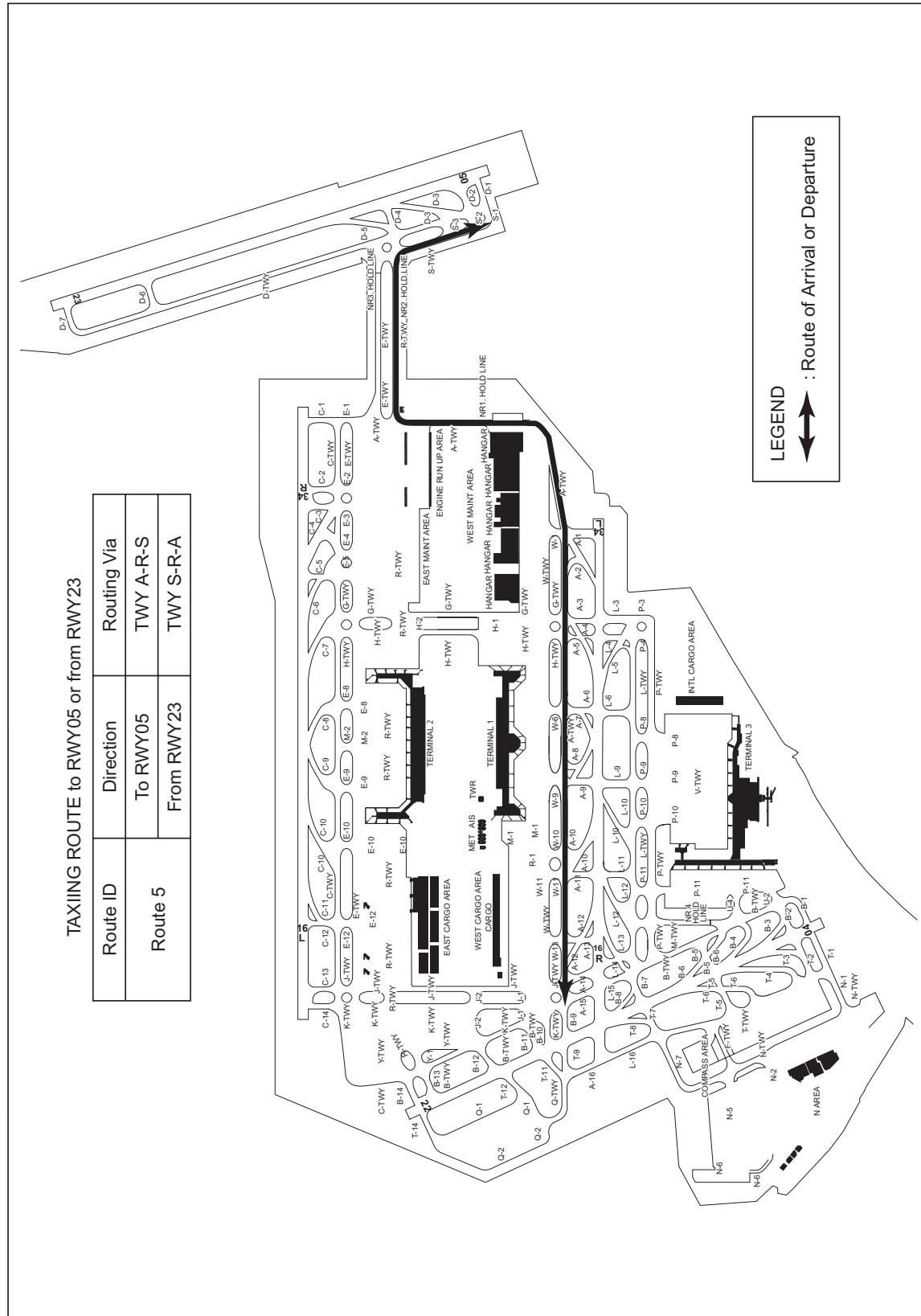
<sup>\*2</sup> example: "TAXI VIA PUSHBACK-LANE TO J TWY"



2.3 Standard taxiing route(See attached chart RJTT AD2.20)

The standard taxiing routes for departure and arrival may be instructed by ATC, using route ID in the table below.

|           | Direction  | Route ID | Routing Via |
|-----------|------------|----------|-------------|
| Departure | To RWY05   | ROUTE 5  | TWY A-R-S   |
| Arrival   | From RWY23 |          | TWY S-R-A   |



3. Parking area for small aircraft(General aviation)

Nil

4. Parking area for helicopters

Nil

5. Apron - taxiing during winter conditions

Nil

6. Taxiing - limitations

6.1 Restricted taxiways

(a) The aircraft of which wing span (WS) listed below table shall not pass following TWY or ACFT stand taxilane.

| Restricted TWY or ACFT stand taxilane   | WS         | REMARKS  |
|---|------------|--|
| A(BTN A1 and A3), A(BTN A1 and W)   | WS >= 74m  |  |
| A2, A5(BTN RWY16R/34L and A4), A5(BTN A3 and A4), A7, A8, A10, A13(BTN A and A12), A13(BTN RWY16R/34L and A12), B8, B9, B10, B11, J1(BTN B and K), J1(BTN K and J), C(BTN K and R), C4, C8, C9, C10, C13, E(BTN J and K), E3(BTN E and R), E4, E8(BTN C and E), E9(BTN C and E), E10(BTN C and E), E12, L10, M2(BTN C and E), Y(BTN C and R), R(BTN A and G), R(BTN E10 and J), T8, T9, T11, A16, W10, W11(BTN A and W), W(BTN K and B), E(BTN H and J), W13, W(BTN K and J), W(BTN J and M1) | WS >= 69m  |  |
| E10(BTN E and spot NR53), R1, J2(BTN K and Y), F, N(BTN spot NR981 and N5), N1, P11(BTN P and U2), U2, U4, W6, W9, W(BTN H and M1), W11(BTN W and R1), M1(BTN R1 and W)   | WS >= 65m  |  |
| E8(BTN E and R)*, E9(BTN E and R)*, R(from E8 to E9)*, M2(BTN E and R)  | WS >= 61m  | *The restrictions are excepted for B77W.<br>REF AD2.20. 6.1(e) |
| Q   | WS >= 52m  | *REF AD2.23. 7   |
| M1(from spot NR21 to NR23), N6(from spot NR961 to NR969)*   | WS >= 36m  | *Except towed aircraft of which WS below 48m                   |
| N2  | WS >= 33m  |  |
| N6(BTN spot NR961 and N2)   | WS > 28.5m |  |

(b) In order to keep clearance between other aircraft or obstacle, the aircraft of which wing span (WS) listed below table shall reduce taxi speed and shall strictly follow the taxiway center line as following TWY.

| Restricted TWY  | WS              |
|---|-----------------|
| A(from RU6 to RU7)  | 78m =< WS < 80m |
| A(from W to Hangar)   | 76m =< WS < 80m |
| E(from spot NR801 to NR807), E(from spot NR808 to NR811)  | 72m =< WS < 80m |
| W(from spot NR201 to NR214), P8(BTN P and V), P9(BTN P and V),<br>P10(BTN P and V) and V  | 71m =< WS < 80m |
| C(BTN K and R), E3(BTN E and R), E12(BTN E and R), E(BTN H and J), Y(BTN C and R),<br>R(BTN A and G), R(BTN E10 and J), W(BTN J and M1) | 63m =< WS < 69m |
| W(from spot NR5 to NR20),<br>E10(from spot NR55 to spot NR53), J2(BTN K and Y), P11(BTN P and U2) and F                                 | 55m =< WS < 65m |
| M2(BTN E and R)   | 55m =< WS < 61m |
|   |                 |

(c) All aircraft shall taxi with minimum power when taxiing on apron taxiways in order to avoid blast damage to vehicles running along apron taxiways.

(d) In order to keep clearance between aircrafts and the fence etc, (31.5m from taxiway center line, 1.1m/AGL) which is installed on the bridge of E, P and R taxiway, all aircrafts shall reduce taxiing speed and follow the taxiway center line strictly.(see below chart)

E, P 及び R 誘導路橋梁部に設置されるフェンス等(誘導路中心線から 31.5m, 地上高 1.1m)と機体との間のクリアランスを確保するために、すべての航空機は速度を減じて且つ誘導路中心線を走行することを厳守すること。(下図参照)

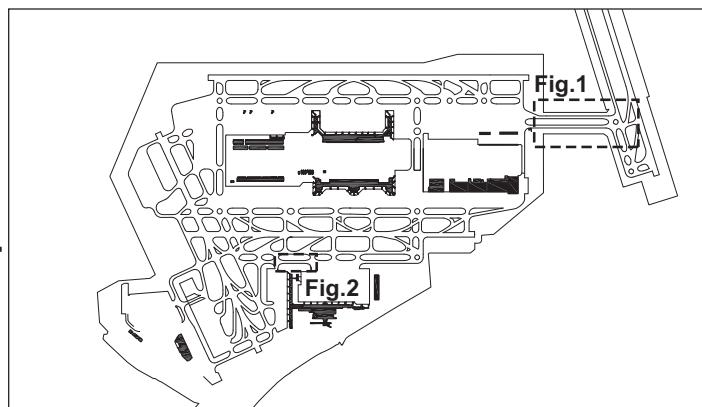


Fig.1

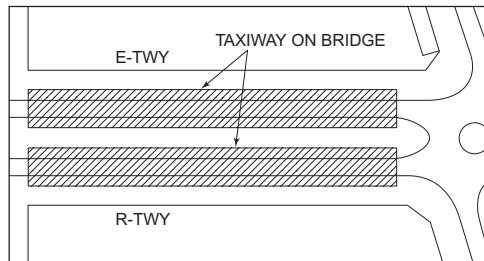
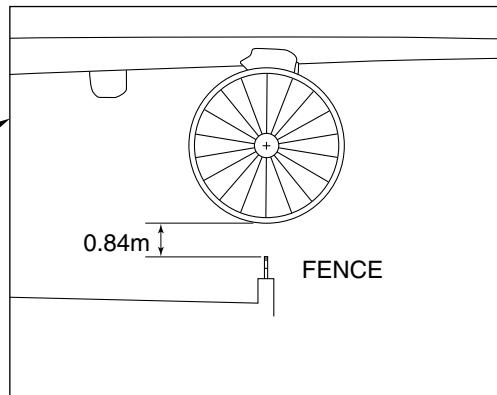
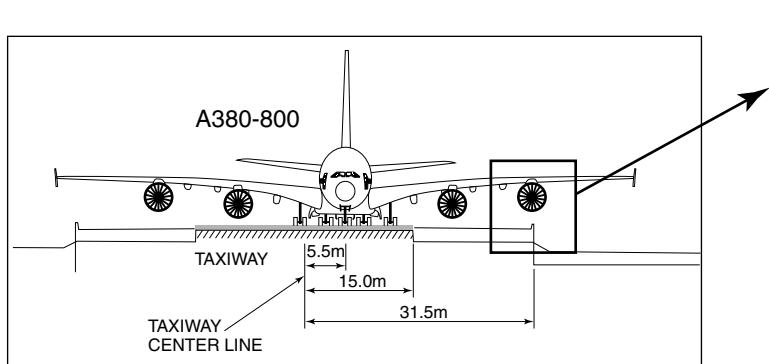
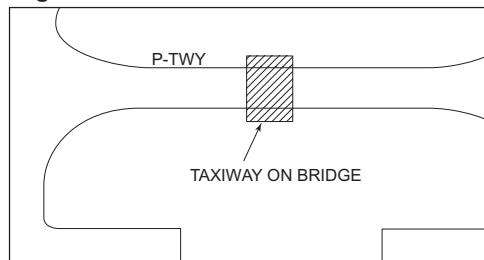


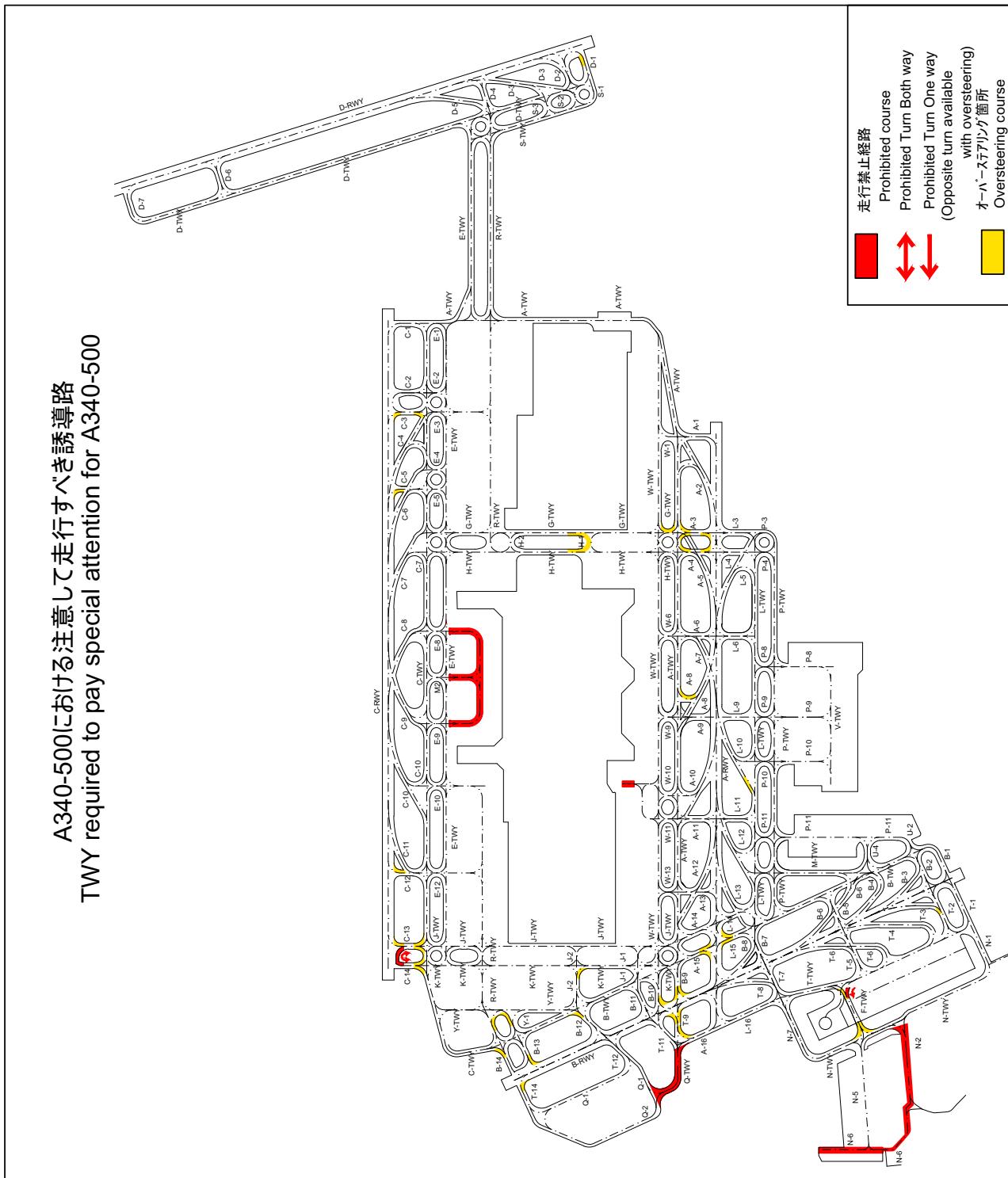
Fig.2



(e) Taxiway required to pay special attention are shown on attached chart.  
(See RJTT AD2.20.6.1(a) and (b))

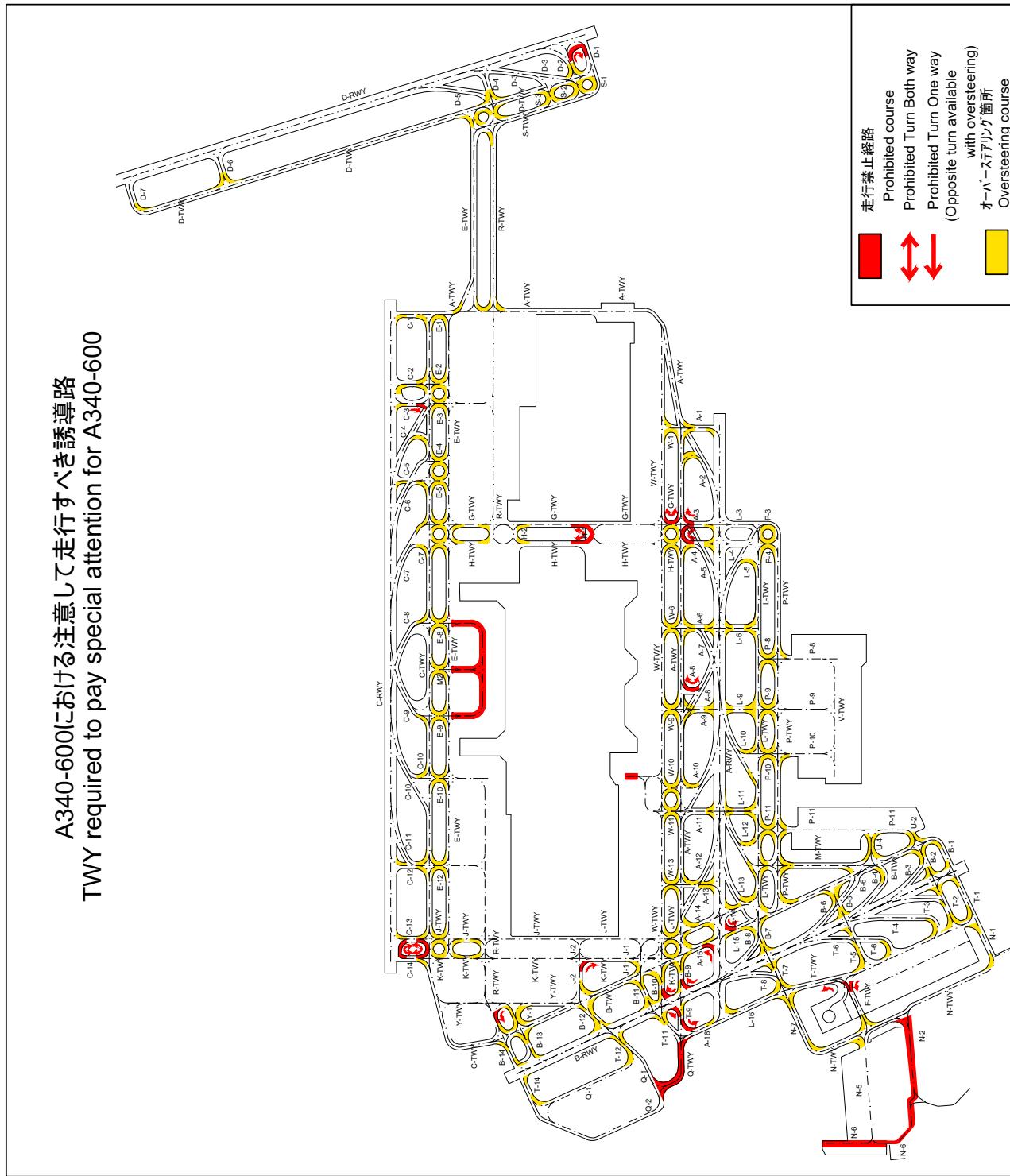
1) A340-500における注意して走行すべき誘導路

1) TWY required to pay special attention for A340-500



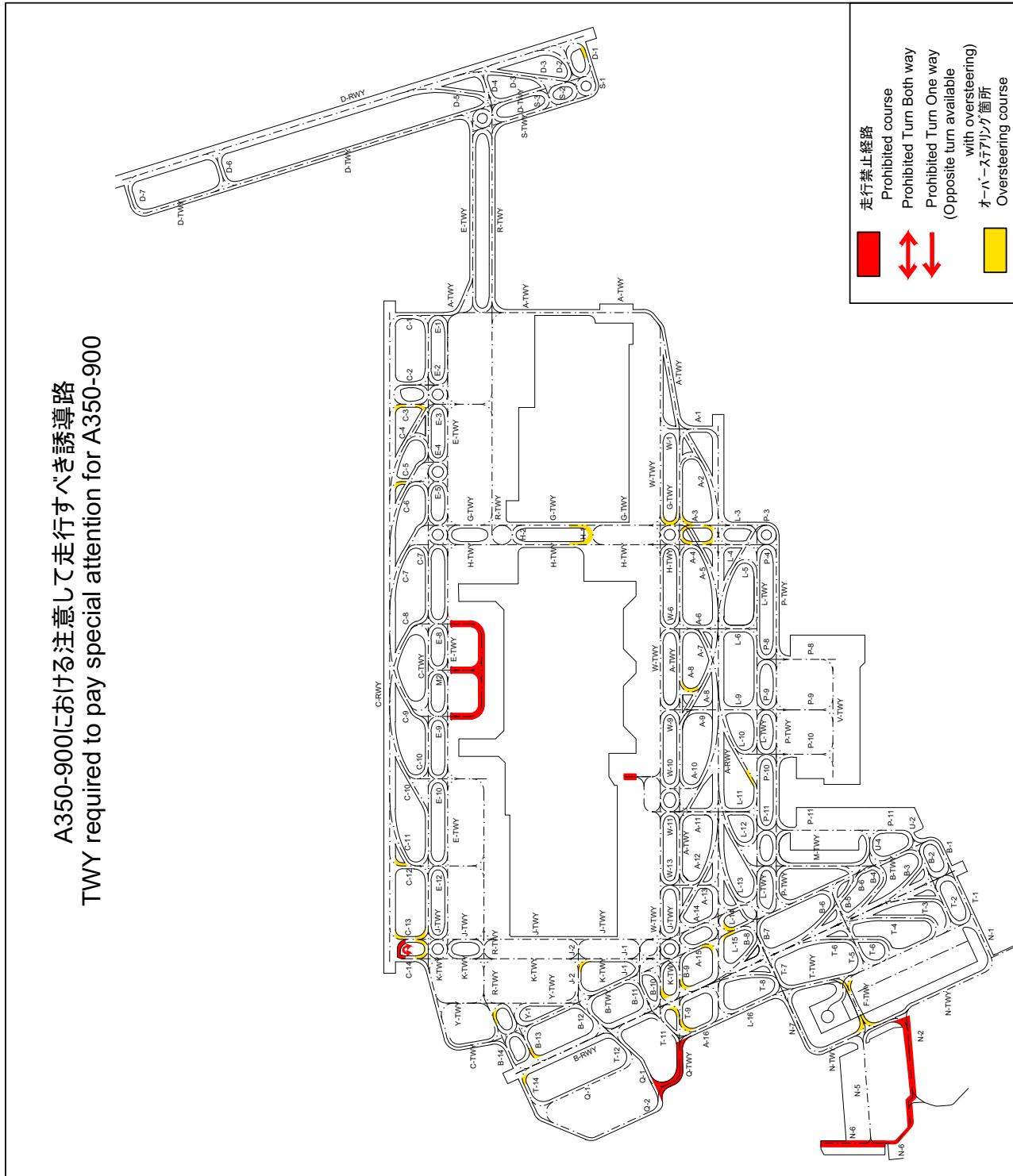
## 2) A340-600における注意して走行すべき誘導路

## 2) TWY required to pay special attention for A340-600



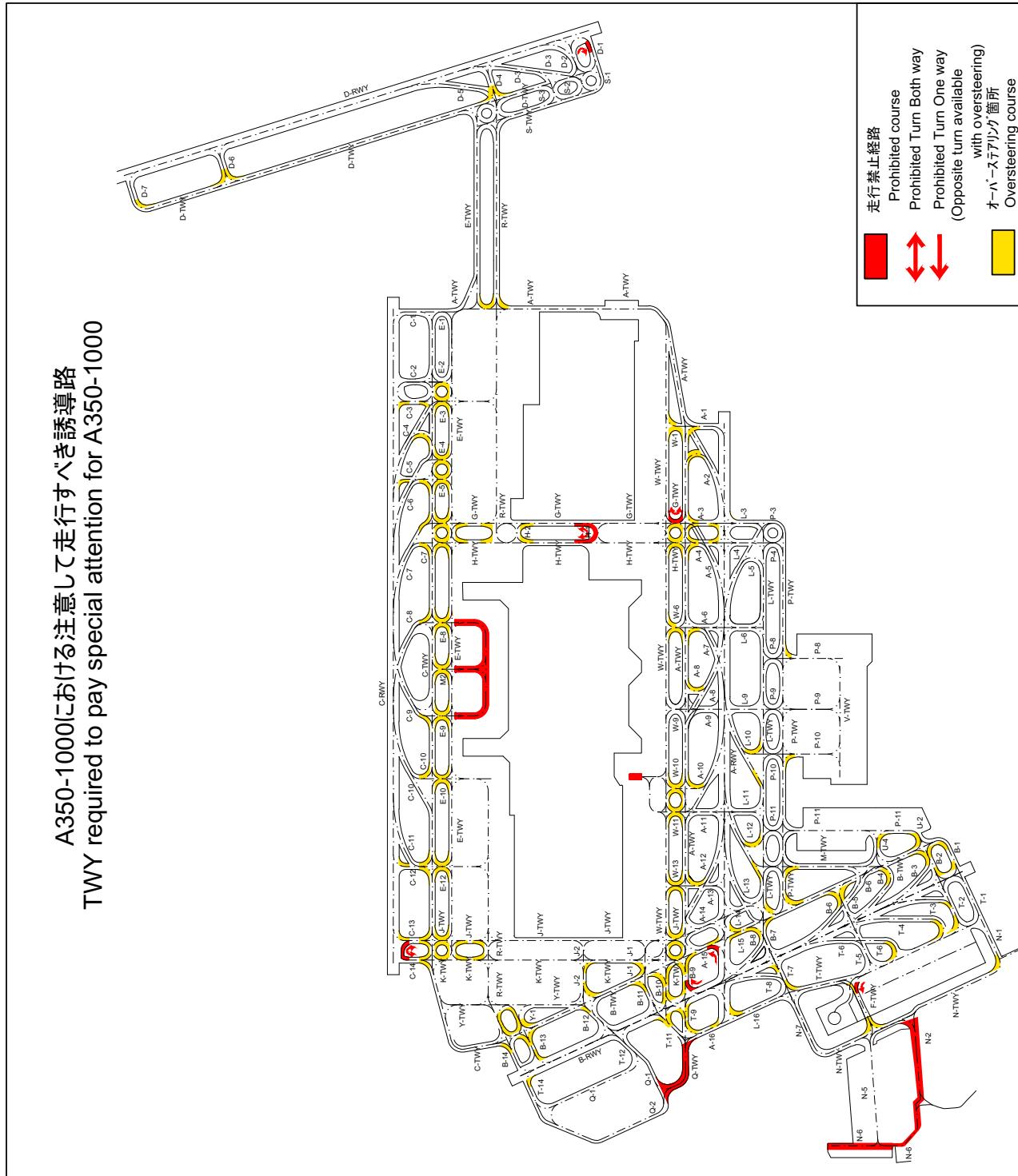
3) A350-900における注意して走行すべき誘導路

3) TWY required to pay special attention for A350-900



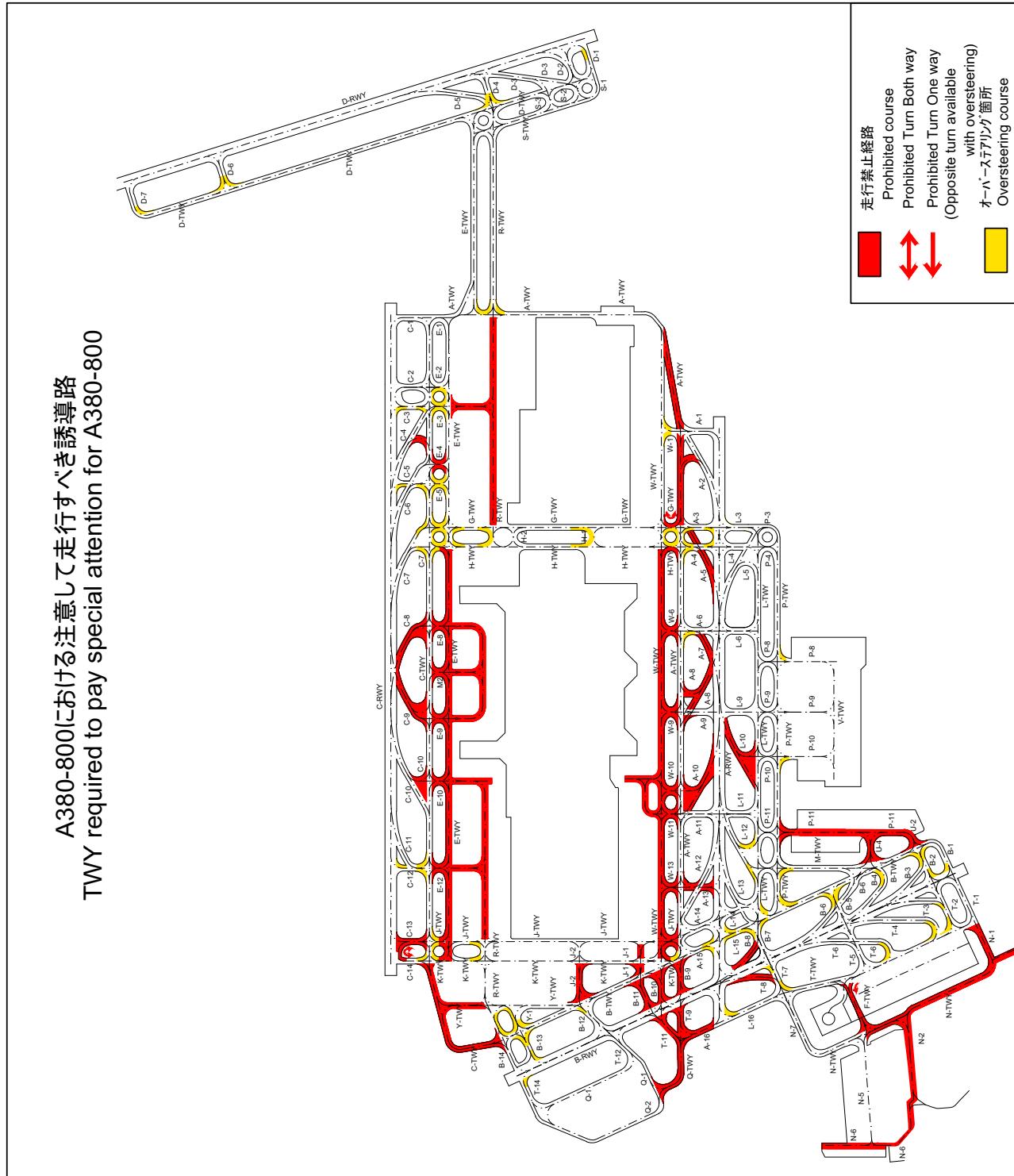
4) A350-1000における注意して走行すべき誘導路

4) TWY required to pay special attention for A350-1000



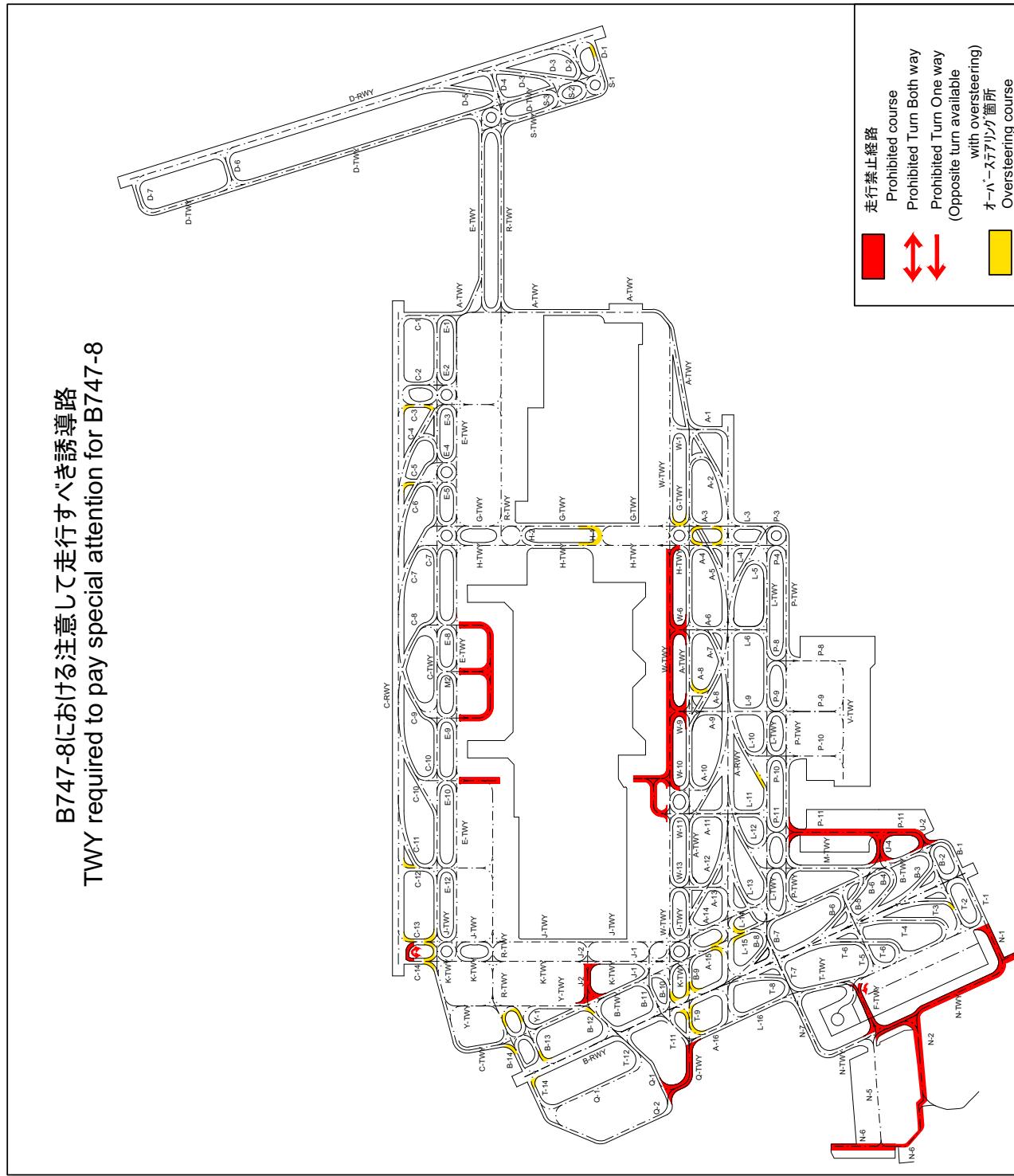
5) A380-800における注意して走行すべき誘導路

5) TWY required to pay special attention for A380-800



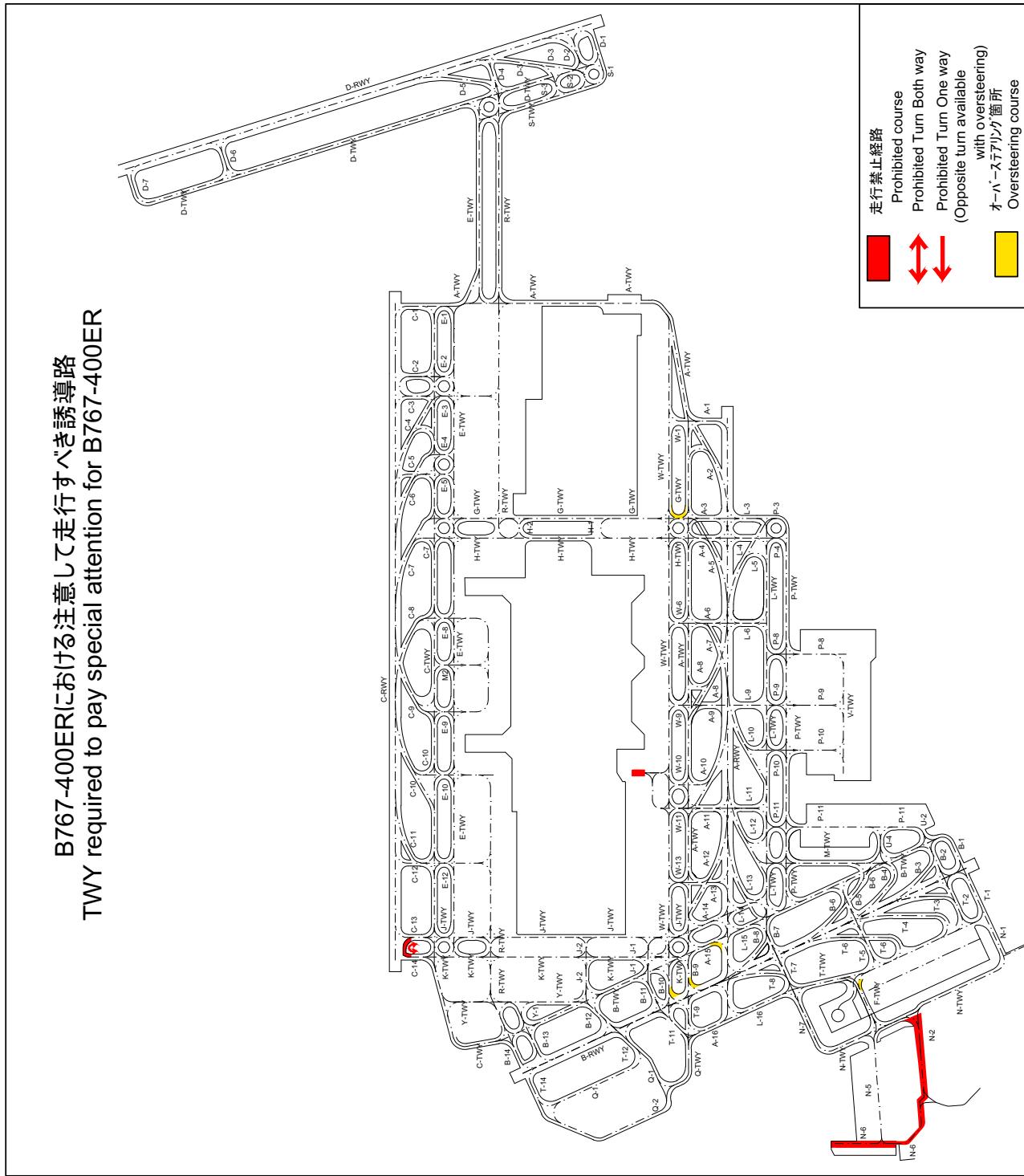
## 6) B747-8における注意して走行すべき誘導路

## 6) TWY required to pay special attention for B747-8



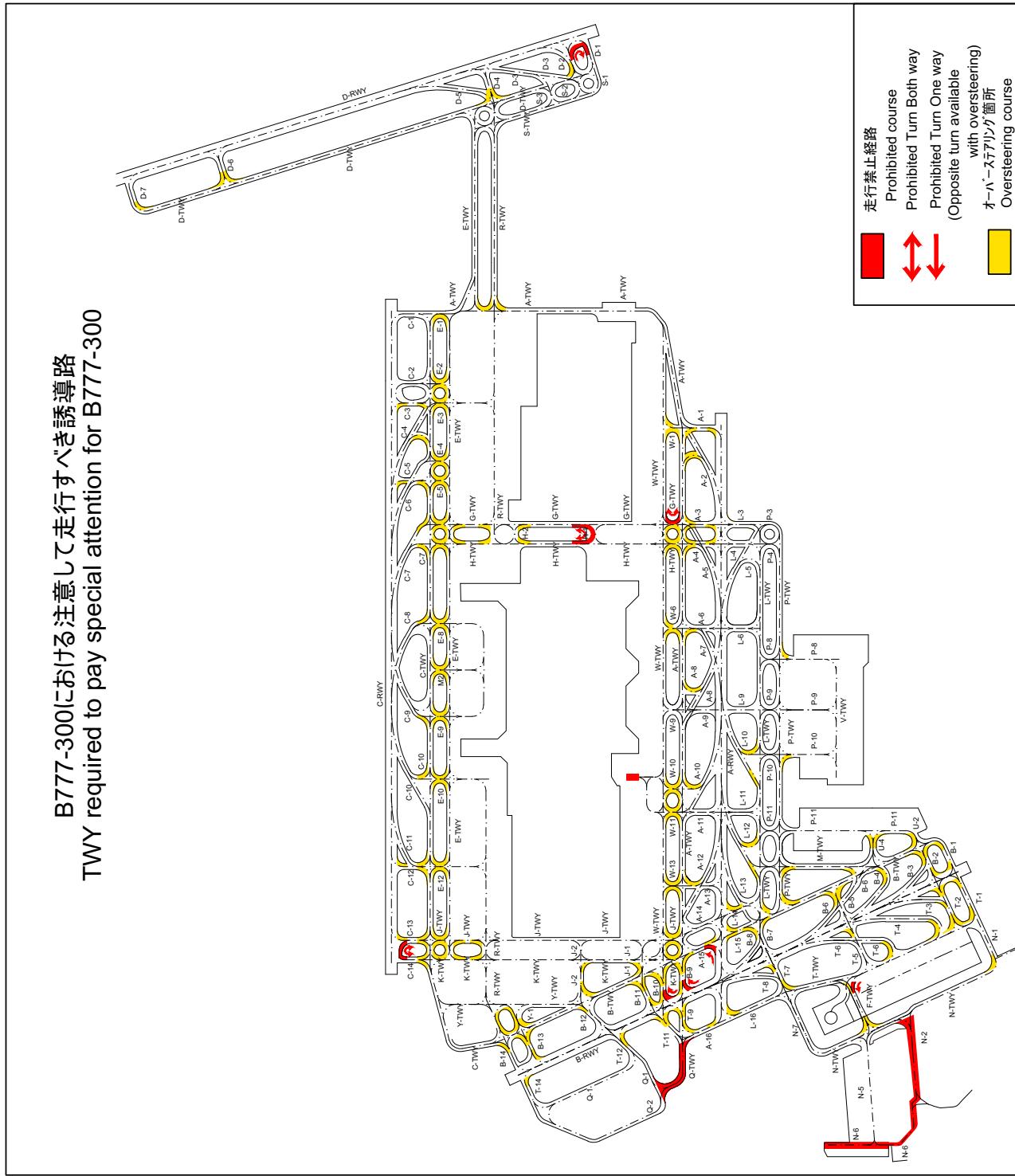
7) B767-400ERにおける注意して走行すべき誘導路

7) TWY required to pay special attention for B767-400ER



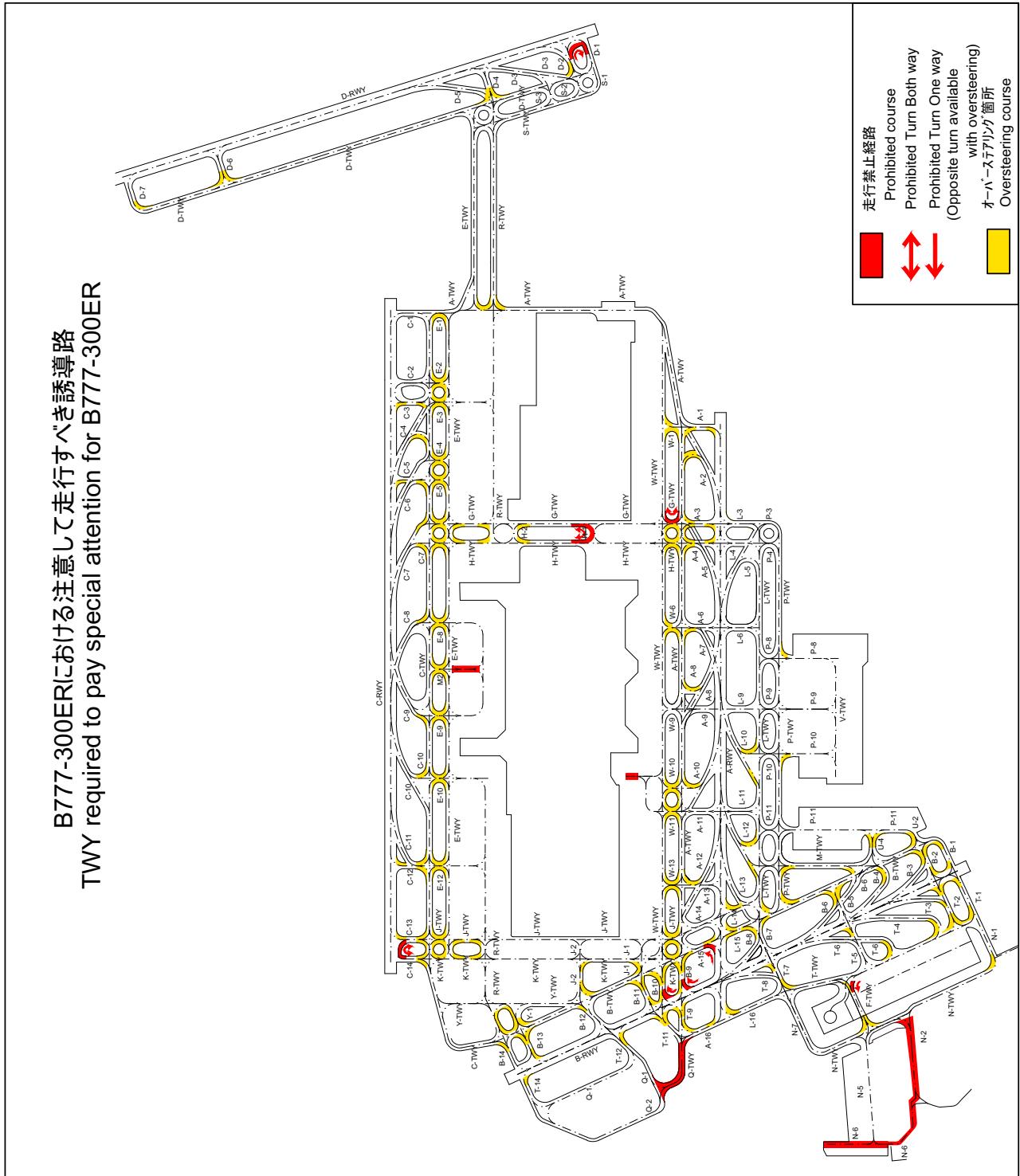
8) B777-300 における注意して走行すべき誘導路

8) TWY required to pay special attention for B777-300



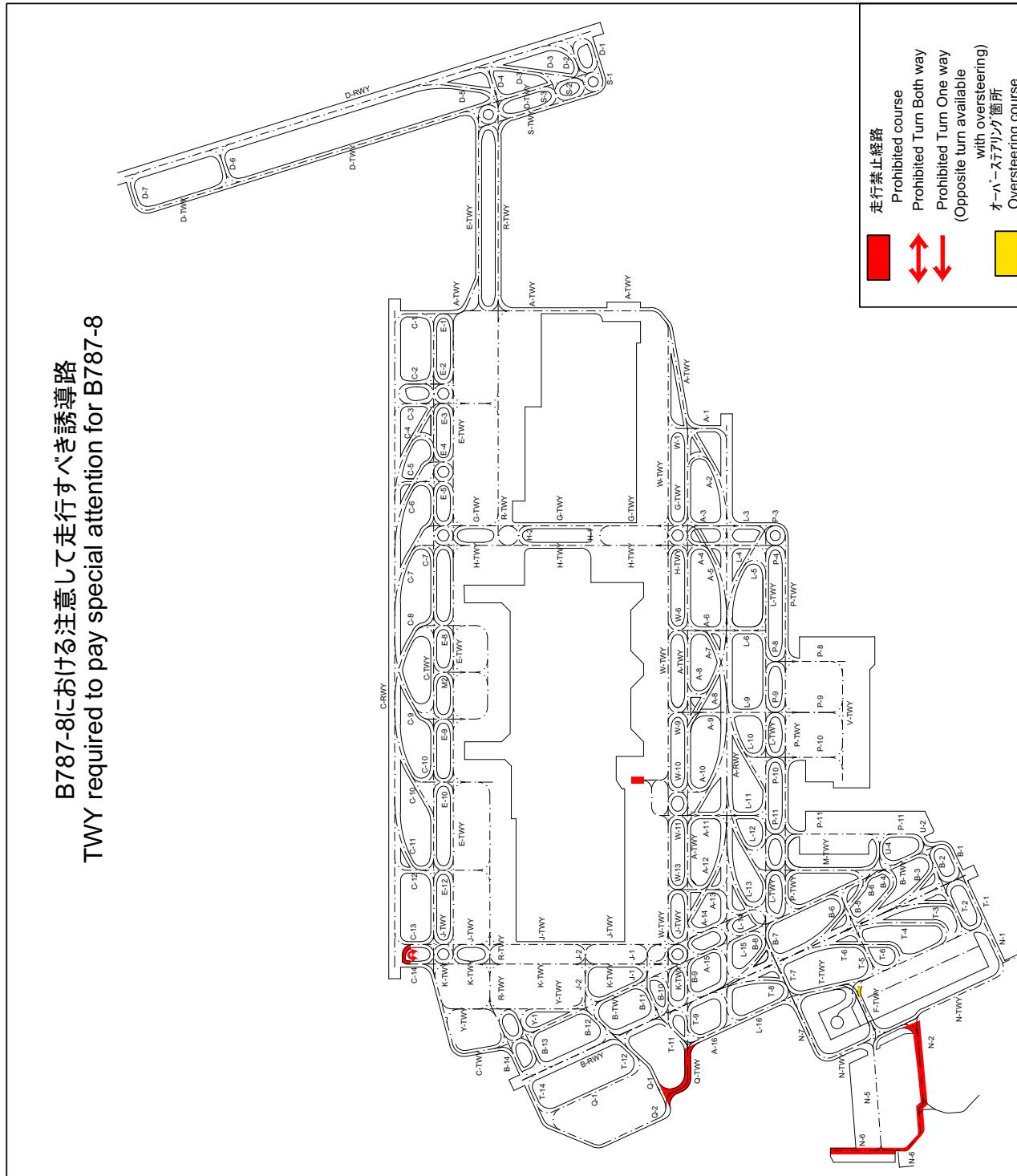
9) B777-300ERにおける注意して走行すべき誘導路

9) TWY required to pay special attention for B777-300ER



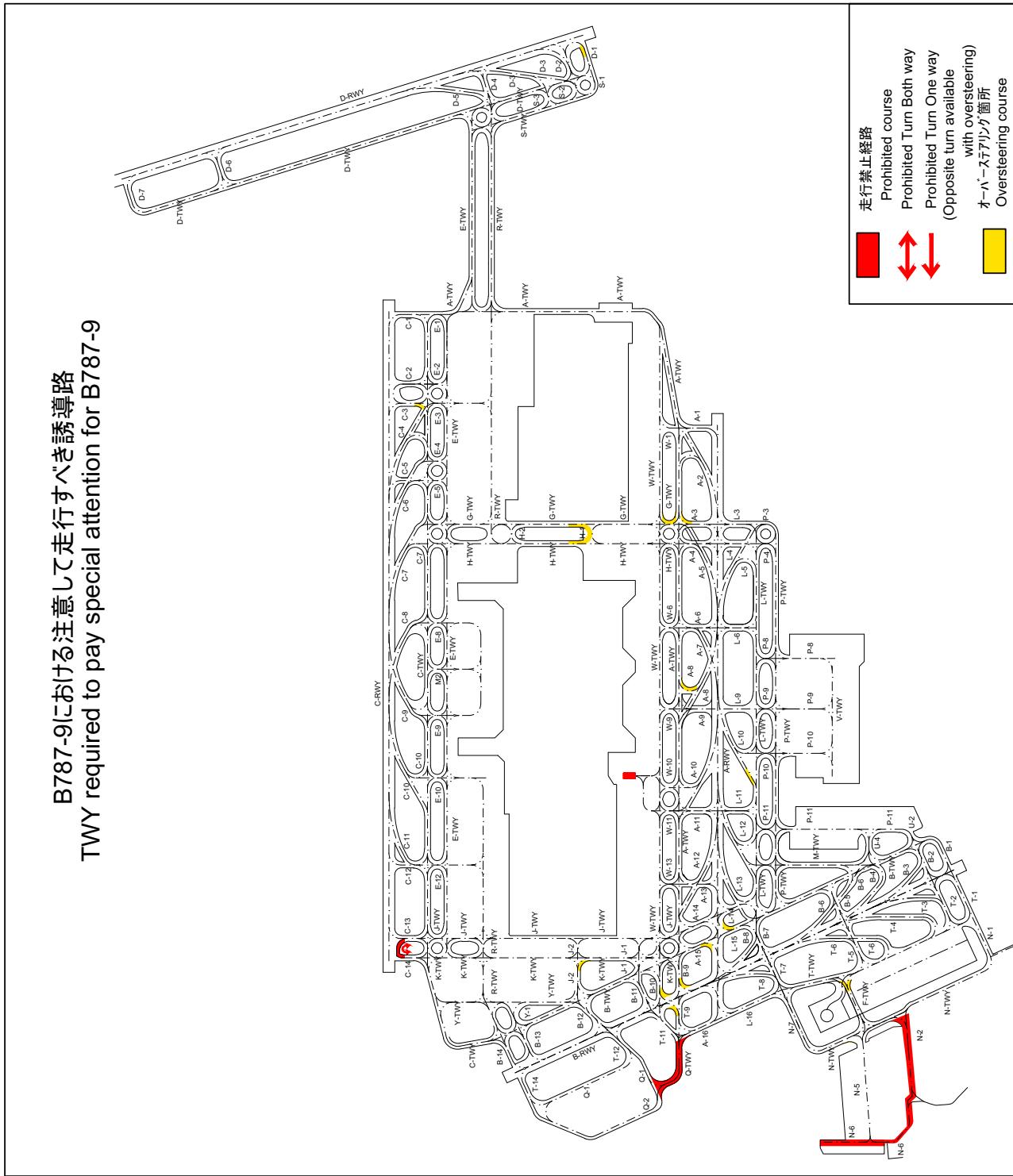
10) B787-8における注意して走行すべき誘導路

10) TWY required to pay special attention for B787-8



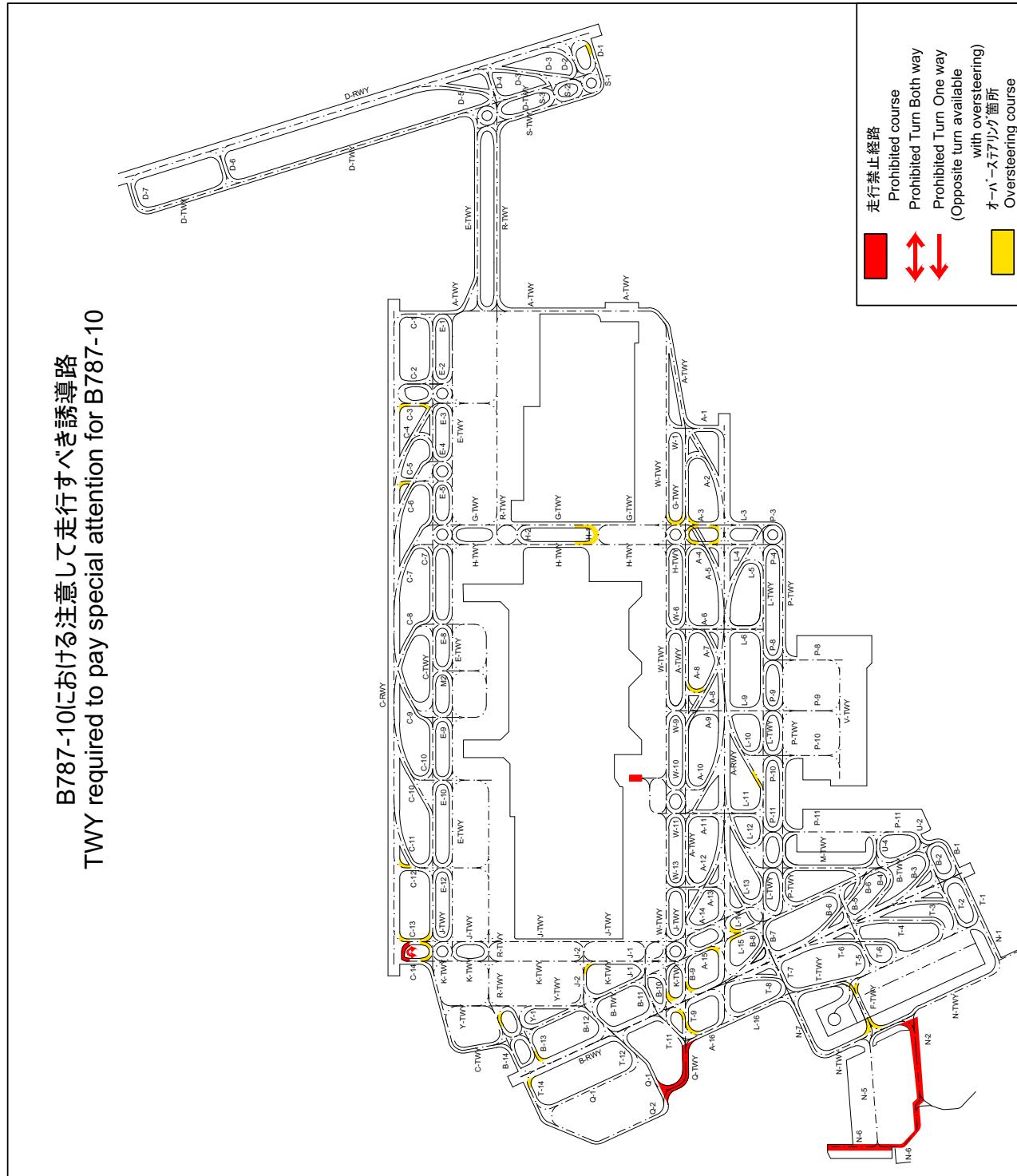
11) B787-9における注意して走行すべき誘導路

11) TWY required to pay special attention for B787-9



12) B787-10における注意して走行すべき誘導路

12) TWY required to pay special attention for B787-10



- 6.2 All aircraft shall hold at "GP HOLD LINE" on TWY A1, A12, A13, C12, B13, B14 until receiving further taxi clearance in order to protect ILS glide slope signal. (See RJTT AD2.24-APDC-1)

- 6.3 Wing tip clearance at the TWY intersection (REF. AD1.1.6.8)

Wing tip clearance at the TWY intersection between the ACFT holding at the stop marking on the TWY and the other ACFT taxiing behind it are as follows.

1) When B748 holding at the stop marking on TWY C1, C2, C3, C5, C12, C13, or C14

|   |             |                     |            |
|---|-------------|---------------------|------------|
| wing span (WS) of ACFT taxiing on TWY C <sup>*1</sup> | WS =< 28.8m | 28.8m < WS =< 45.8m | WS > 45.8m |
| wing tip clearance                                    | A           | B                   | ×          |
| wing span (WS) of ACFT taxiing on TWY C <sup>*2</sup> |             | WS =< 15.8m         | WS > 15.8m |
| wing tip clearance                                    |             | B                   | ×          |

<sup>\*1</sup> When B748 holding at the stop markings located at 75m off the RWY center line.  
<sup>\*2</sup> When B748 holding at the stop markings located at 90m off the RWY center line.

2) When B748 holding at the stop marking on TWY T9

|   |            |           |
|---|------------|-----------|
| wing span (WS) of ACFT taxiing on TWY A16 | WS =< 5.8m | WS > 5.8m |
| wing tip clearance                        | *B         | *×        |

3) When B748 holding at the stop marking on TWY T7

|   |             |            |
|---|-------------|------------|
| wing span (WS) of ACFT taxiing on TWY T | WS =< 25.8m | WS > 25.8m |
| wing tip clearance                      | B           | ×          |

4) When B748 holding at the stop marking on TWY A14, A15, B9, B10, L14 or L15

|   |             |                     |            |
|---|-------------|---------------------|------------|
| wing span (WS) of ACFT taxiing on TWY B, L or TWY A | WS =< 21.3m | 21.3m < WS =< 38.3m | WS > 38.3m |
| wing tip clearance                                  | A           | B                   | ×          |

5) When B748 holding at the stop marking on TWY A3, A4, A6, A9, A11, A13, B2, B5, B7, B11, B13, B14, D1, D2, D4, D6, L3, L4, L6, L9 or L11

|  |             |                     |            |
|--|-------------|---------------------|------------|
| wing span (WS) of ACFT taxiing on TWY A, B, D or TWY L | WS =< 28.8m | 28.8m < WS =< 45.8m | WS > 45.8m |
| wing tip clearance                                     | A           | B                   | ×          |

6) When B748 holding at the stop marking on TWY B12

|   |             |                     |            |
|---|-------------|---------------------|------------|
| wing span (WS) of ACFT taxiing on TWY B | WS =< 17.9m | 17.9m < WS =< 34.9m | WS > 34.9m |
| wing tip clearance                      | A           | B                   | ×          |

7) When B748 holding at the GP HOLD LINE on TWY A1

|   |             |            |
|---|-------------|------------|
| wing span (WS) of ACFT taxiing on TWY W | WS =< 24.6m | WS > 24.6m |
| wing tip clearance                      | B           | ×          |

|                                       |
|---------------------------------------|
| Legend                                |
| A: wing tip clearance >= 15m          |
| B: 6.5m =< wing tip clearance < 15m   |
| ×: wing tip clearance < 6.5m          |
| *B: 10.5m =< wing tip clearance < 15m |
| *×: wing tip clearance < 10.5m        |

6.4 A 誘導路又は M 誘導路を西に向けて走行する航空機及び、R(AとSの間)誘導路又はE誘導路を南に向けて走行する航空機は、管制機関に指示された場合に限り、中間待機位置標識または中間待機位置灯で停止し待機する。(RJTT AD2.9.2 及び AD2.24 を参照)

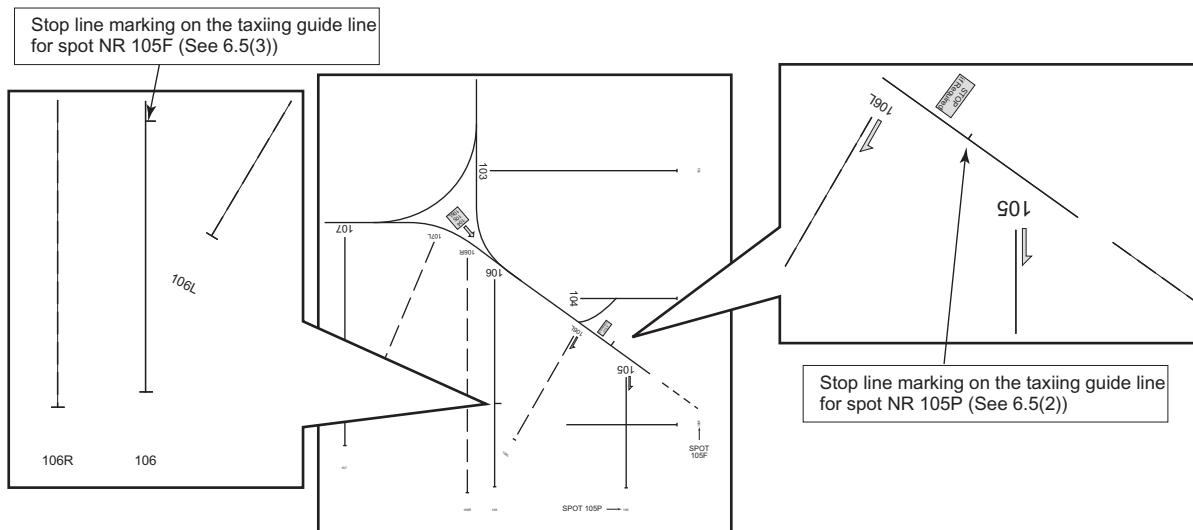
6.5 (a) Spot NR104, NR105P, NR105F 及び NR106 へのスポットインの方法(添付図参照)

- (1) Spot NR104 及び spot NR106  
各スポットの航空機導入線に沿ってスポットインすること。
- (2) Spot NR105P  
Spot NR105P の航空機導入線に沿ってスポットインする。ただし、NR103 に航空機が駐機している場合は、航空機ブラストの影響を避けるため、コード D 以上の航空機(翼幅が 36m 以上)は航空機導入線上の停止位置で停止し、エンジンカットした後、トeingによりスポットインする。
- (3) Spot NR105F  
Spot NR106 の航空機導入線に沿って走行し、spot NR106 の航空機導入線上の停止位置で停止し、エンジンカットした後、spot NR105F にトeingによりスポットインする。

6.4 The aircraft taxiing to the west on TWY A or TWY M and taxiing to the south on TWY R(between A and S) or TWY E shall hold at Intermediate Holding Position Marking or Intermediate Holding Position Lights only when instructed by ATC.  
(see RJTT AD2.9.2 and AD2.24)

6.5 (a) Procedures of taxiing to spot NR104, NR105P, NR105F and NR106(see attached chart)

- (1) Spot NR104 and NR106  
The aircraft should strictly follow the taxiing guide line.
- (2) Spot NR105P  
The aircraft should strictly follow the taxiing guide line of the spot NR105P.  
When there is an aircraft at the spot NR103 in order to avoid the blast damage, the aircraft with wing-span 36m or longer should shut down their engines at the stop line installed on the taxiing guide line and then should be pulled into the spot NR105P by the aircraft tug.
- (3) Spot NR105F  
The aircraft should strictly follow the taxiing guide line of spot NR106, and should shut down engines at the stop line installed on the taxiing guide line, and then should be pulled into the spot NR105F by the aircraft tug.

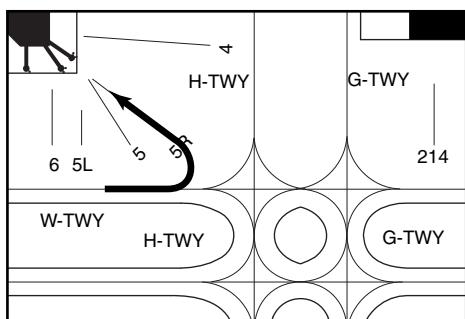


(b) Spot NR5R のスポットインの方法(添付図参照)

W 誘導路を経由してスポット NR5R に入る航空機は、十分に減速して航空機導入線に沿ってスポットインすること。

(b) Procedure of taxiing to spot NR5R(see attached chart)

The aircraft should reduce taxi speed and should strictly follow the taxiing guide line of the spot NR5R via W-TWY.



7. School and training flights - technical test flights - use of runways

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

Nil

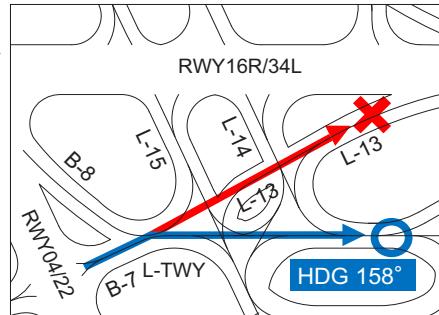
10. Hot spots

A "HOT SPOT" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

**HS1**

Intersection of taxiways of B7, L-TWY and L13

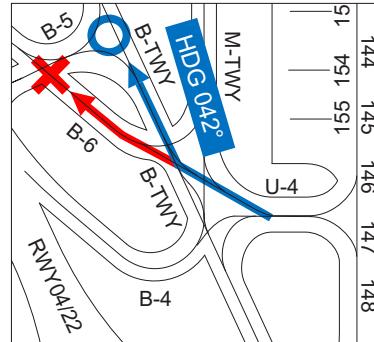
Pilots sometimes confuse L-TWY with L13, while taxiing from B7 to L-TWY.  
Do not enter L13.



**HS2**

Intersection of taxiways of U4, B-TWY and B6

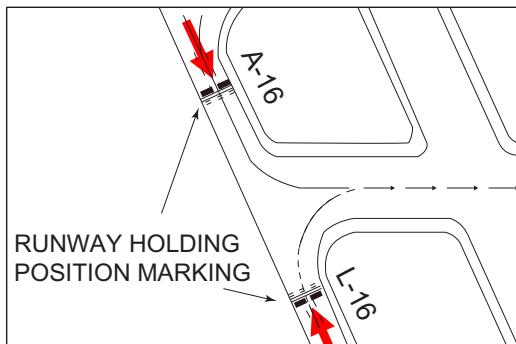
Pilots sometimes confuse B-TWY with B6, while taxiing from U4 to B-TWY.  
Do not enter B6.



**HS3**

Runway crossing area of A16 and L16

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



**RJTT AD 2.21 NOISE ABATEMENT PROCEDURES****1. 騒音制限**

- 東京国際空港においては、以下の騒音軽減運航方式が適用される。
- ・優先滑走路方式
  - ・優先飛行経路及び騒音軽減運航方式
  - ・騒音軽減進入方式 (NAAP)

**1. Noise restrictions**

- Following noise abatement procedures on Tokyo INTL Airport are in force.
- Noise Preferential Runways
  - Preferential Routes and Aircraft Operating Procedures for Noise Abatement
  - Noise Abatement Approach Procedure(NAAP)

**2. 優先滑走路方式**

使用される滑走路は以下の通り。(滑走路閉鎖時又は緊急事態発生時を除く。)

**2. Noise Preferential Runways**

Runways described below are used except when those runways are not available or urgent situation exists.

(離陸)

(For Take off)

|                                  |  |   |
|----------------------------------|--|---|
| From<br>2100UTC<br>to<br>1400UTC | <ol style="list-style-type: none"> <li>1. 滑走路 05 及び 34R (北風運用時) 又は滑走路 16L 及び 16R (南風運用時) を優先的に使用する。ただし、0600UTC から 1000UTC の南風運用時は除く。(*1)</li> <li>2. 滑走路 04 は、概ね 20 ノット以上の北東強風時又は滑走路 05 もしくは 34R の閉鎖時に使用する。</li> </ol> | <ol style="list-style-type: none"> <li>1. RWY05 and 34R(north wind operation applied) or, RWY16L and 16R(south wind operation applied) are preferentially used. Except during south wind operation from 0600UTC to 1000UTC.(*1)</li> <li>2. RWY04 is used when northeast wind is about 20 knots or more, or, when RWY05 or RWY34R is closed.</li> </ol> |
|----------------------------------|--|---|

|  |  |   |
|--|--|---|
| <p>From<br/>1400UTC<br/>to<br/>2100UTC</p> | <p>1. 滑走路 05（北風運用時）又は 16L（南風運用時）を優先的に使用する。</p> <p>2. 滑走路 05 及び 16L が使用できない場合は滑走路 16R を使用する。</p> <p>3. 滑走路 34R は、北風運用時、以下の a. 又は b. のいずれかの場合であって、加えて 16L 及び 16R のいずれの滑走路からも安全な離陸が不可能となつた場合に限り使用できるものとする。なお、滑走路 34R は、滑走路 05 の使用を前提に計画したものが、本条項に該当した場合に、使用するものであるから、滑走路 05/23 の航空機荷重制限 (RJTT AD2.23.7) を満たすとともに、滑走路 34R の南端から滑走路長 2500m での離陸を行うこと。ただし、機材性能及び路線距離等を考慮して、滑走路 34R の使用があらかじめ認められた便（以下「指定便」という。）はこの限りではない。この場合、滑走路 34R の南端から滑走路長 3000m での離陸を行うこと。</p> <ul style="list-style-type: none"> <li>a. 滑走路 05 が閉鎖中である場合</li> <li>b. 出発時において滑走路 05 では背風又は横風制限を超過する場合であって、安全な離陸が不可能な場合</li> </ul> <p>* 滑走路 05 からの離陸機又は滑走路 34R への着陸機と、上記 3.b. による滑走路 34R からの離陸機が競合する場合、前者が優先される。</p> <p>* 滑走路 05/23 の航空機荷重制限 (AIP RJTT AD2.23.7) の超過は、上記 3.b. による滑走路 34R の使用理由とはならない。</p> <p>* 上記 3.b. による滑走路 34R からの離陸について、やむを得ないと考えられる範囲を超えた運用がなされた場合、当該号については適用休止又は削除等の措置を執る場合がある。</p> <p>* 指定便以外により滑走路 34R からの離陸を行つた運航者は、以下の事項を東京空港事務所環境・地域振興課あてにFAX 又は E メールにより報告するものとする。</p> <ul style="list-style-type: none"> <li>a) 当該離陸の日時</li> <li>b) 航空機呼出符号及び航空機型式</li> <li>c) 当該離陸時のウエイト・アンド・バランスのデータ</li> <li>d) 当該離陸を行つた理由（滑走路 05 の閉鎖／背風／横風）</li> <li>e) 風向、風速</li> <li>f) 滑走路の状態（wet/dry 等）</li> <li>g) その他の関連情報</li> </ul> <p>当該離陸が上記 3.b. によるものである場合は、併せて以下の情報を報告すること。</p> <p>h) 出発時における風速の背風又は横風成分のうち、制限を超過しているものの当該制限値及び実際値</p> <p>東京空港事務所環境・地域振興課<br/>FAX : 03-5756-1511(+81-3-5756-1511)<br/>E メール : hnd-kantika1596@mlit.go.jp</p> <p>4. 滑走路 04 は滑走路 05、滑走路 16L/16R 及び滑走路 34R が使用できない場合に使用する。</p> | <p>1. RWY05(north wind operation applied) or RWY16L(south wind operation applied) is preferentially used.</p> <p>2. When RWY05 and RWY16L are not available, RWY16R is used.</p> <p>3. RWY34R is available only when north wind operation applied, under following a. or b.circumstance, and RWY16L/R does not suit for safe take-off. However, in each case, all aircraft should take off with 2,500m RWY length from RWY34R threshold and keep its weight, main gear load and wheel load, on departure, at or below the limitations for RWY05/23(see RJTT AD2.23.7). (Because RWY34R is used as a substitute for RWY05.) However this does not apply to flights that is specified and allowed in advance in consideration of the performance and route distance, etc. "Specified flights". In this case, all specified aircraft should take off with 3,000m RWY length from RWY34R threshold.</p> <ul style="list-style-type: none"> <li>a. RWY05 is closed.</li> <li>b. The wind condition on departure exceeds crosswind or tailwind take-off limitations of RWY05.</li> </ul> <p>*Aircraft departing from RWY05 or landing to RWY34R have priority over the aircraft which departs from RWY34R due to 3.b. above.</p> <p>*No aircraft shall depart from RWY34R only because of being over the aircraft weight restriction of RWY05/23 (RJTT AD2.23.7).</p> <p>*As for 3.b. above, when take off from RWY34R beyond reasonable level is made, suspending/deleting the item(3.b.) , or other appropriate measures will be implemented.</p> <p>*Except specified flight, the operator of the aircraft which has made take-off from RWY34R, shall report following information to Environment and Regional Development Division Tokyo international airport office.</p> <ul style="list-style-type: none"> <li>a) date and time of the take-off</li> <li>b) call-sign and type of the aircraft</li> <li>c) weight and balance data of the aircraft on the departure</li> <li>d) reason for using RWY34R (RWY05 closed/tailwind limitation/crosswind limitation)</li> <li>e) wind direction and wind velocity</li> <li>f) runway conditions (wet/dry, etc.)</li> <li>g) other informations concerning</li> </ul> <p>if the take-off is made due to 3.b. above, following item h) shall be added,</p> <ul style="list-style-type: none"> <li>h) limitation and actual value of crosswind and/or tailwind on the departure which conflicts take-off limit</li> </ul> <p>Environment and Regional Development Division<br/>Tokyo International Airport Office<br/>FAX: 03-5756-1511(+81-3-5756-1511)<br/>e-mail: hnd-kantika1596@mlit.go.jp</p> <p>4. RWY04 is used when RWY05, RWY16L/R and RWY34R are not available.</p> |
|--|--|---|

(着陸)

(For Landing)

|                                  |  |  |
|----------------------------------|--|--|
| From<br>2100UTC<br>to<br>1400UTC | <ol style="list-style-type: none"> <li>滑走路 34L 及び 34R (北風運用時)、又は、滑走路 22 及び 23 (南風運用時) を優先的に使用する。ただし、0600UTC から 1000UTC の南風運用時は除く。(※1)</li> <li>2100UTC から 0600UTC まで、及び 1000UTC から 1400UTC までは、滑走路 16L は、概ね 20 ノット以上の南東強風時、又は、滑走路 22 が使用できない場合 (滑走路 23 が使用できない場合であって、滑走路 22 では対応が不可能な場合を含む。) に使用する。</li> </ol> | <ol style="list-style-type: none"> <li>RWY34L and 34R (north wind operation applied) or, RWY22 and 23 (south wind operation applied) are preferentially used. Except during south wind operation from 0600UTC to 1000UTC.(※1)</li> <li>From 2100UTC to 0600UTC and from 1000UTC to 1400UTC, RWY16L is used when southeast wind is about 20knots or more, or, when RWY22 is not available (including the case that RWY23 is not available and RWY22 is unsuitable.).</li> </ol> |
| From<br>1400UTC<br>to<br>2100UTC | <ol style="list-style-type: none"> <li>滑走路 34R (北風運用時) 又は滑走路 23 (南風運用時) を優先的に使用する</li> <li>北風運用時において滑走路 34R が使用できない場合、滑走路 34L を使用する。</li> <li>南風運用時において滑走路 23 が使用できない場合は、滑走路 16L、滑走路 22 の優先順位により滑走路を使用する。</li> </ol>   | <ol style="list-style-type: none"> <li>RWY34R(north wind operation applied) or RWY23(south wind operation applied) is preferentially used.</li> <li>When north wind operation is applied, and RWY34R is not available, RWY34L is used.</li> <li>When south wind operation is applied, and RWY23 is not available, RWY16L and RWY22 is used in this order.</li> </ol>   |

## 3. 優先飛行経路及び騒音軽減運航方式

航空機が緊急状態又は避けがたい事態にある場合及び NOTAM に別段の定めがある場合を除き、次の運航方式がすべての航空機に適用される。ただし、航空機の安全な運航を確保するために必要な操縦者の職務権限と責任の遂行を妨げるものではない。

## 3. Preferential Routes and Aircraft Operating Procedures for Noise Abatement

Except in the event an aircraft is in an emergency, an unavoidable situation or unless otherwise specified by NOTAMs, the following procedures shall be adhered to by all aircraft. However, none of the procedures herein is intended, in any manner, to abrogate the responsibility of the pilot in command to assure the safe operations of the aircraft.

(離陸)

(For Take off)

|                                  |            |  |  |
|----------------------------------|------------|--|--|
| From<br>2100UTC<br>to<br>1400UTC | RWY<br>34R | <p>(右旋回離陸)<br/>空港の北部、北西部及び北東部にある居住地域における航空機騒音を軽減するため、航空機は次のように従わなければならない。</p> <ol style="list-style-type: none"> <li>航空機は各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始しなければならない。</li> <li>2200UTC から 0230UTC 及び 0600UTC から 1000UTC において、TIARA/BEKLA/ROVER [number] B/C Departure が承認された場合、急上昇方式もしくは NADP2 が適用される。</li> </ol> | <p>(For right turn departure)</p> <p>In order to minimize public annoyance for aircraft noise in the residential areas located north, northwest and northeast of the airport, the aircraft should comply with following procedures.</p> <ol style="list-style-type: none"> <li>Aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.</li> <li>From 2200UTC to 0230UTC and From 0600UTC to 1000UTC, when TIARA/BEKLA/ROVER [number] B/C Departure is cleared, Steepest Climb Procedure or NADP2 shall be applied.</li> </ol> |
|                                  | RWY<br>34L | <p>(左旋回離陸)<br/>空港の北部、北西部及び西部にある居住地域における航空機騒音を軽減するため、航空機は次のように従わなければならない。</p> <ol style="list-style-type: none"> <li>航空機は各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始しなければならない。</li> <li>インターフェクションからの離陸は認められない。</li> </ol>  | <p>(For left turn departure)</p> <p>In order to minimize public annoyance for aircraft noise in the residential areas located north, northwest and west of the airport, the aircraft should comply with following procedures.</p> <ol style="list-style-type: none"> <li>Aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.</li> <li>Intersection departure is not permitted.</li> </ol>   |
|                                  | RWY<br>05  | なし   | Nil  |
|                                  | RWY<br>16L | なし   | Nil  |
|                                  | RWY<br>16R | なし   | Nil  |

|                         |                                      |   |   |
|-------------------------|--------------------------------------|---|---|
|                         | RWY 04                               | (右旋回離陸)<br>空港の北部、北西部及び北東部にある居住地域における航空機騒音を軽減するため、各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始するものとする。  | (For right turn departure)<br>In order to minimize public annoyance for aircraft noise in the residential areas located north, northwest and northeast of the airport, the aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.   |
| From 2100UTC to 1400UTC | RWY 22                               | <p>空港の西部にある居住地域における航空機騒音を軽減するため、航空機は次のように従わなければならない。</p> <ol style="list-style-type: none"> <li>1. 航空機は各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始しなければならない。</li> <li>2. 急上昇方式が適用される。</li> <li>3. 原則として主発動機が4発以上の航空機は運航が認められない。ただし、捜索救難及びVIP機を除く。</li> <li>4. 以下の機種においては、可能な限り最大離陸推力を使用する。<br/>B777, A330, MD11</li> <li>5. B777, A330は、原則としてB14/T14からの離陸とする。</li> <li>6. 使用する機材は、耐空証明における離陸測定点における離陸中の騒音値が89未満であること。(定期便を除く。)</li> </ol> | <p>In order to minimize public annoyance for aircraft noise in the residential areas located west of the airport, the aircraft should comply with following procedures.</p> <ol style="list-style-type: none"> <li>1. Aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manual.</li> <li>2. Steepest Climb Procedure shall be applied.</li> <li>3. In principle, aircraft with 4 or more main engines are not allowed to operate. Excluding search and rescue and VIP aircraft.</li> <li>4. In the following models, using the maximum takeoff thrust as much as possible.<br/>B777, A330, MD11</li> <li>5. In principle, B777, A330 should use intersection B14/T14 for takeoff.</li> <li>6. The noise level (EPNdB) during takeoff at flyover reference noise measurement point in the airworthiness certification shall be less than 89.<br/>(Excluding Scheduled flights.)</li> </ol> |
|                         | RWY 05                               | 空港の北部及び北東部にある居住地域における航空機騒音を軽減するため、各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始するものとする。   | In order to minimize public annoyance for aircraft noise in the residential areas located north and northeast of the airport, the aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.  |
|                         | RWY 16L                              | なし  | Nil   |
|                         | RWY 16R                              | なし  | Nil   |
| From 1400UTC to 2100UTC | 「OPPAR DEPARTURE」(代替方式無し)<br>RWY 34R | 空港の北部、北西部及び北東部にある居住地域における航空機騒音を軽減するため、各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始するものとする。   | [OPPAR DEPARTURE]<br>(Not alternate procedures)<br>In order to minimize public annoyance for aircraft noise in the residential areas located north, northwest and northeast of the airport, the aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.  |
|                         | RWY 04                               | 空港の北部、北西部及び北東部にある居住地域における航空機騒音を軽減するため、各航空会社のフライトマニュアルに規定されているバンク角及び速度により、できるだけ早く旋回を開始するものとする。   | In order to minimize public annoyance for aircraft noise in the residential areas located north, northwest and northeast of the airport, the aircraft should commence turns as soon as practicable with bank angles and speeds as prescribed in each operator's flight manuals.   |

(着陸)

1. 住居地域における航空機騒音を軽減するため、脚下げは運航上可能な限り遅く操作するものとする。特に、滑走路 22ILS 進入を使用する場合は IAD から 6.3 海里の地点まで住居が密集していることに留意すること。

2. 1300UTC から 2200UTC まではディレイド・フラップ進入方式によるものとする。

(For Landing)

1. In order to reduce aircraft noise in the residential area, gear-down should be delayed as far as operationally practicable. Especially, when using RWY22 ILS approach, pay attention that residences are dense until 6.3NM from IAD.
2. Between the hours of 1300UTC and 2200UTC, aircraft should perform Delayed Flap Approach Procedure.

|                         |         |  |   |
|-------------------------|---------|--|---|
| From 2100UTC to 1400UTC | RWY 34R | 「HIGHWAY VISUAL RWY34R」が優先的に使用される。<br>「ILS Z or LOC Z RWY34R」は「HIGHWAY VISUAL RWY34R」が使用できない場合に限り使用される。  | [HIGHWAY VISUAL RWY34R] is primarily applied.<br>[ILS Z or LOC Z RWY34R] is applied only when [HIGHWAY VISUAL RWY34R] is not applicable.  |
|                         | RWY 34L | 「ILS X or LOC X RWY34L」が優先的に使用される。<br>「ILS Z or LOC Z RWY34L」は「ILS X or LOC X RWY34L」が使用できない場合に限り使用される。  | [ILS X or LOC X RWY34L] is primarily applied.<br>[ILS Z or LOC Z RWY34L] is applied only when [ILS X or LOC X RWY34L] is not applicable.  |
| From 2100UTC to 1400UTC | RWY 22  | 「LDA W RWY22」が優先的に使用される。<br>(4. 騒音軽減進入方式を参照)<br>「LDA W RWY22」が使用できないときには、「LDA Z(X) RWY22」、「ILS RWY22」、「LOC RWY22」の順に使用される。   | [LDA W RWY22] is primarily applied.<br>(See 4.Noise Abatement Approach Procedure)<br>When [LDA W RWY22] is not available, [LDA Z(X) RWY22], [ILS RWY22] and [LOC RWY22] is used in this order.  |
|                         | RWY 23  | 「LDA W RWY23」が優先的に使用される。<br>(4. 騒音軽減進入方式を参照)<br>「LDA W RWY23」が使用できないときには、「LDA Z(X) RWY23」、「ILS Z RWY23」、「LOC Z RWY23」の順に使用される。   | [LDA W RWY23] is primarily applied.<br>(See 4.Noise Abatement Approach Procedure)<br>When [LDA W RWY23] is not available, [LDA Z(X) RWY23], [ILS Z RWY23] and [LOC Z RWY23] is used in this order.  |
|                         | RWY 16L | 2100UTC から 0600UTC まで、及び 1000UTC から 1400UTC までは、空港の北部にある居住地域における航空機騒音を軽減するため、航空機は最終進入への旋回の間、付図に示すコースに沿って又はその内側を飛行しなければならない。<br>0600UTC から 1000UTC まで、「RNP RWY16L」が優先的に使用される。(*)<br>「ILS RWY16L」は「RNP RWY16L」が使用できない場合に限り使用される。 | From 2100UTC to 0600UTC and From 1000UTC to 1400UTC, in order to minimize public annoyance for aircraft noise in the residential areas located north of the airport, aircraft should fly along or inside of the course shown in attached chart during the circling to final.<br><br>From 0600UTC to 1000UTC, [RNP RWY16L] is primarily applied.(*)<br>[ILS RWY16L] is applied only when [RNP RWY16L] is not applicable. |
|                         | RWY 16R | 0600UTC から 1000UTC まで、「RNP RWY16R」が優先的に使用される。(*)<br>「ILS RWY16R」は「RNP RWY16R」が使用できない場合に限り使用される。  | From 0600UTC to 1000UTC, [RNP RWY16R] is primarily applied.(*)<br>[ILS RWY16R] is applied only when [RNP RWY16R] is not applicable.   |
| From 1400UTC to 2100UTC | RWY 34R | 「ILS Y or LOC Y RWY34R」(via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)   | [ILS Y or LOC Y RWY34R] (via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)   |
|                         | RWY 34L | 「ILS Y or LOC Y RWY34L」(via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)<br>リバーススラスト<br>空港周辺の航空機騒音を軽減するため、滑走路 34L 着陸後のリバーススラスト使用についてはアイドルパワーまでとする。                                   | [ILS Y or LOC Y RWY34L] (via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)<br><br>Reverse Thrust<br>In order to reduce aircraft noise in the vicinity of the airport, pilots are requested to limit the use of reverse thrust to idle power after landing at RWY34L.   |
|                         | RWY 22  | 「LDA Y RWY22」(via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)<br>リバーススラスト<br>空港周辺の航空機騒音を軽減するため、滑走路 22 着陸後のリバーススラスト使用についてはアイドルパワーまでとする。  | [LDA Y RWY22] (via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)<br><br>Reverse Thrust<br>In order to reduce aircraft noise in the vicinity of the airport, pilots are requested to limit the use of reverse thrust to idle power after landing at RWY22.  |

|                                  |            |  |  |
|----------------------------------|------------|--|--|
| From<br>1400UTC<br>to<br>2100UTC | RWY<br>23  | 「LDA Y RWY23」(via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)が優先的に使用される。<br>「ILS Y or LOC Y RWY23」(via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL)は「LDA Y RWY23」が使用できない場合に限り使用される。 | [LDA Y RWY23] (via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL) is primarily applied.<br>[ILS Y or LOC Y RWY23] (via OSHIMA NIGHT ARRIVAL, AKSEL NIGHT ARRIVAL, AROSA NIGHT ARRIVAL or MESSE NIGHT ARRIVAL) is applied only when [LDA Y RWY23] is not applicable.    |
|                                  | RWY<br>16L | 「VOR A」(via OSHIMA V ARRIVAL, AKSEL V ARRIVAL, AROSA V ARRIVAL or MESSE V ARRIVAL)<br>空港の北部にある居住地域における航空機騒音を軽減するため、航空機は最終進入への旋回の間、付図に示すコースに沿って又はその内側を飛行しなければならない。  | [VOR A] (via OSHIMA V ARRIVAL, AKSEL V ARRIVAL, AROSA V ARRIVAL or MESSE V ARRIVAL)<br>In order to minimize public annoyance for aircraft noise in the residential areas located north of the airport, aircraft should fly along or inside of the course shown in attached chart during the circling to final. |

(\*)1) 0600UTC から 1000UTC のうちの 3 時間程度にあっては、南風運用時において以下の滑走路が使用される。

(離陸) RWY16R, RWY16L, RWY22  
(着陸) RWY16R, RWY16L

(\*)2) 0600UTC から 1000UTC のうちの 3 時間程度であって、上記 (\*)1) の滑走路が使用される場合に適用される。

(\*)1) For about 3 hours from 0600UTC to 1000UTC, the following runway is used during the south wind operation.

(For Take off) RWY16R, RWY16L, RWY22  
(For Landing) RWY16R, RWY16L

(\*)2) Applicable when the runway (\*)1) is used in about 3 hours from 0600UTC to 1000UTC.

#### 4. 騒音軽減進入方式 (NAAP)

##### (1) 適用時間帯

2100UTC から 1400UTC の間

##### (2) 対象航空機

BACON 経由滑走路 22 及び DATUM 経由滑走路 23 に着陸する航空機  
(レーダー誘導により LDA22 又は LDA23 ローカライザーコースへ会合するものを除く。)

##### (3) 対象経路

LDA W RWY22 及び LDA W RWY23

##### (4) 実施条件

台風等の悪天候、レーダー施設の障害等の重大な事象がないこと。

##### (5) NAAP の承認

管制機関は LDA W RWY22 又は LDA W RWY23 による進入を許可することにより、NAAP を承認する。

##### (6) 繙続的な降下 (LDA W RWY22 のみ)

NAAP 実施中は、不必要な TCAS-RA の発生を避けるとともに、騒音軽減のため、航空機は BACON と BEAST の間を 1500FT/min を超えない降下率で継続的に降下しなければならない。

##### (7) NAAP が実施できない場合

悪天候などの理由により NAAP が実施できない場合には、航空機は東京アプローチとの通信設定時に、その理由とともに LDA Z RWY22 又は LDA Z RWY23 若しくはその他の進入方式を要求しなければならない。

##### (8) NAAP の中止

交通状況等により、管制機関は承認した NAAP を中止することがある。その場合、代替指示が発出される。

##### (9) その他

交通状況もしくは気象状態等によって、管制機関は進入方式上の速度と異なる速度を指示することがある。

#### 4. Noise Abatement Approach Procedure(NAAP)

##### 1) Applicable time

Between 2100UTC and 1400UTC

##### 2) Aircrafts NAAP is applied

All aircraft which land to RWY22 via BACON/RWY23 via DATUM of Tokyo INTL Airport. (except aircraft intercepting LDA22/LDA23 LOC course by RADAR vector)

##### 3) Routes used for NAAP

LDA W RWY22 and LDA W RWY23

##### 4) Conditions

No significant condition such as Typhoon, Severe WX conditions, or Malfunction of radar system etc. is observed.

##### 5) Clearance for NAAP

ATC clears NAAP by assigning approach procedure of "LDA W RWY22" or "LDA W RWY23".

##### 6) Continuous descent(only LDA W RWY22)

To avoid nuisance TCAS-RA and reduce noise, while conducting NAAP, pilot should make descent continuously with 1500FT/min or less descending rate between BACON and BEAST.

##### 7) In case NAAP is not available

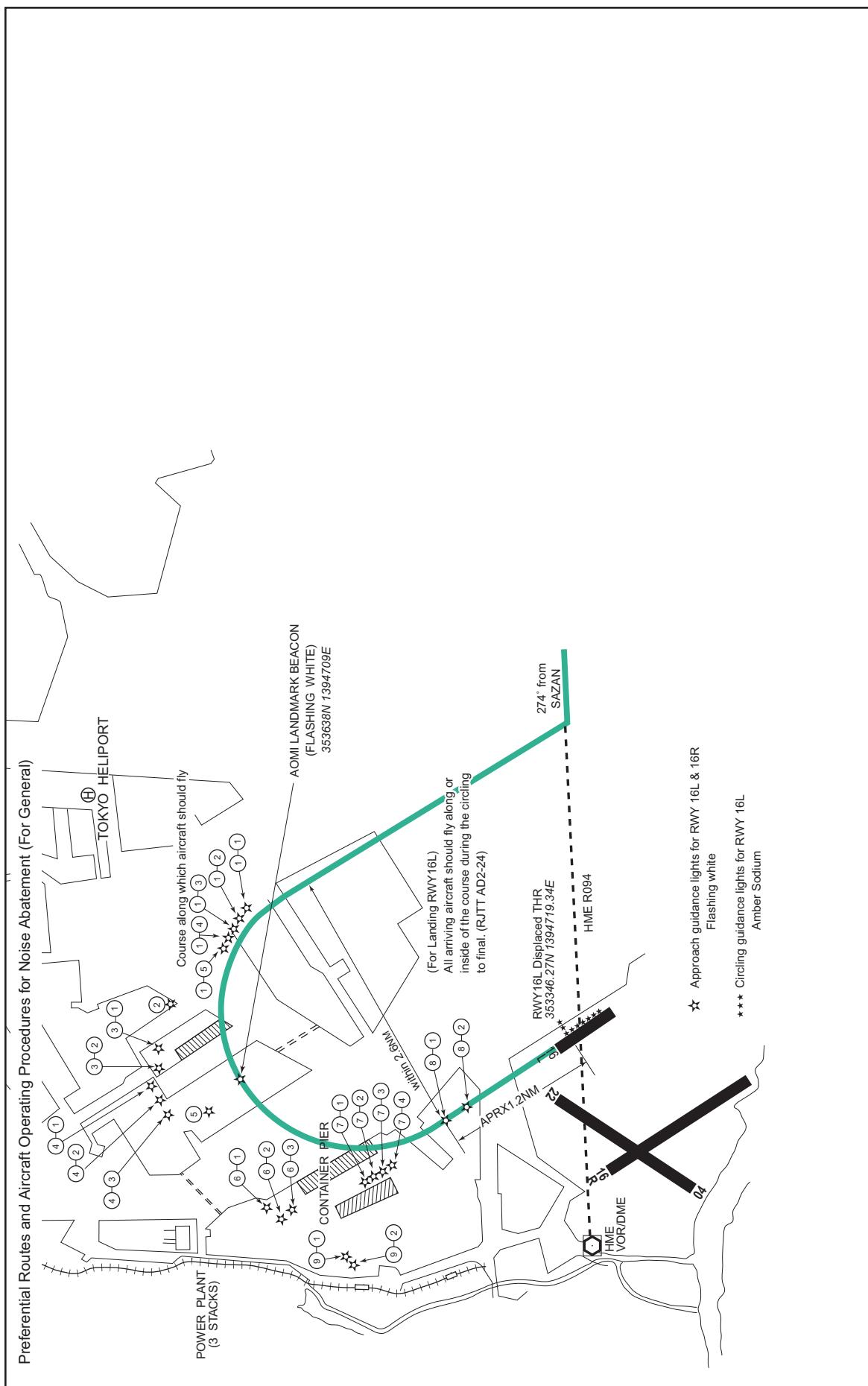
If NAAP is not available because of WX conditions etc, pilot should request LDA Z RWY22/LDA Z RWY23 or other approach with the reason at initial contact with Tokyo Approach.

##### 8) Cancellation of NAAP

ATC may cancel NAAP due to traffic conditions even after NAAP is cleared. In this case, alternate instructions will be issued.

##### 9) Remarks

Due to traffic or WX conditions, ATC may assign IAS differing from on attached.



**RJTT AD 2.22 FLIGHT PROCEDURES****1. TAKE OFF MINIMA**

|   | RWY  | ACFT CAT | REDL & RCLL             |               | REDL or RCLL or RCL Marking |               | NIL (DAYTIME ONLY) |      |
|---|--|----------|-------------------------|---------------|-----------------------------|---------------|--------------------|------|
|   |  |          | RVR                     | VIS           | RVR                         | VIS           | RVR                | VIS  |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 04   | A,B,C,D  | -                       | 400m          | -                           | 400m          | -                  | 500m |
|   | 22   | A,B,C,D  | 400m                    | 400m          | 400m                        | 400m          |                    |      |
|   | 05   | A,B,C,D  | 400m                    | 400m          | 400m                        | 400m          |                    |      |
|   | 16R  | A,B,C,D  | 400m                    | 400m          | 400m                        | 400m          |                    |      |
|   | 34L  | A,B,C,D  | 400m                    | 400m          | 400m                        | 400m          |                    |      |
|   | 16L  | A,B,C    | 400m<br>*200m<br>**150m | 400m<br>*200m | 400m<br>*250m               | 400m<br>*250m |                    |      |
|   |  | D        | 400m<br>*250m<br>**200m | 400m<br>*250m | 400m<br>*300m               | 400m<br>*300m |                    |      |
|   | 34R  | A,B,C    | 400m<br>*200m<br>**150m | 400m<br>*200m | 400m<br>*250m               | 400m<br>*250m |                    |      |
|   |  | D        | 400m<br>*250m<br>**200m | 400m<br>*250m | 400m<br>*300m               | 400m<br>*300m |                    |      |
| OTHER                                     | 04<br>22<br>05<br>16R<br>34L<br>16L<br>34R | A,B,C,D  | AVBL LDG MINIMA         |               |                             |               |                    |      |

\*APPLICABLE WHEN LVP/LVPD IN FORCE

\*\*APPLICABLE WHEN LVP/LVPD INFORCE and MULTIPLE RVRs AVAILABLE

**2. Trajectoryd Airport Traffic Data Processing System (TAPS)**

東京アプローチの指示のもとに、当該進入管制区を飛行する航空機は、モード A/3 の二次レーダー個別コード及びモード C による応答を指示される。

二次レーダー個別コードを搭載していない航空機が当該コードによる応答を指示された場合は、管制官に対し、その旨通報すること。

Aircraft flying under control of Tokyo approach control in the approach control area will be instructed to reply with discrete code on Mode A/3 and Mode C.

If an aircraft with non-discrete code capability be instructed to reply with the discrete code, it shall report a controller accordingly.

**3. Lost communication procedures for arrival aircraft under radar navigational guidance**

If radio communications with Tokyo Approach/Radar are lost for 1 minute, squawk Mode A/3 Code 7600 and;

- (I)
  - 1) Contact TOKYO Tower.
  - 2) If unable, proceed in accordance with visual flight rules.
  - 3) If unable,
    - a) When RWY34L or RWY34R in use, proceed to SINGO at last assigned altitude or 4,000feet whichever is higher, and execute instrument approach for RWY34R.
    - b) When RWY22, RWY23, RWY16L or RWY16R in use, proceed to SMILE at last assigned altitude or 4,000feet whichever is higher, and execute instrument approach for RWY23.
- (II) Procedures other than above will be issued when situation required.

**4. Flight restrictions**

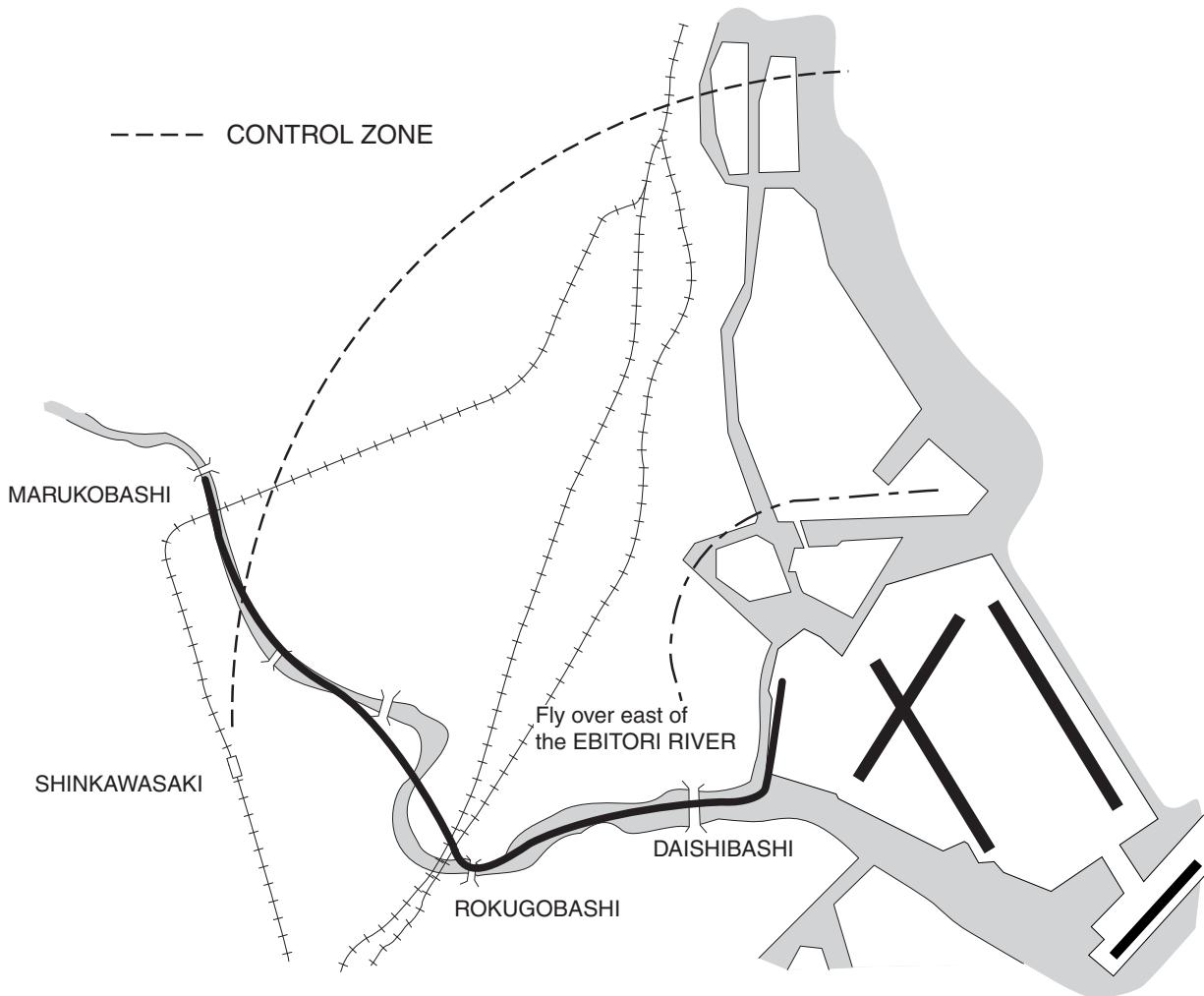
Unless otherwise authorized by ATC.

Aircraft other than the arriving at and/or departing from Tokyo International Airport are required not to fly over the Kawasaki Petrochemical Complex area, and even in case of flying over the area, not to fly below an altitude of 3,000feet.  
(See AD2.24 OTHER CHART ATTACHMENT 1)

**5. Special VFR flight route for helicopter (See below chart)****SPECIAL VFR FLIGHT ROUTE FOR HELICOPTER**

Special VFR flight route for helicopter in  
the TOKYO Control ZONE

Daishibashi - (along the Tama River) - Marukobashi



## 6. SIMULTANEOUS INDEPENDENT LDA APPROACHES (SILA)

### 1) Applicable instrument approach procedures for SILA

LDA W RWY22(with VPT), LDA W RWY23(with VPT), LDA Z RWY22(with VPT), LDA Z RWY23(with VPT), LDA X RWY22(with VPT) and LDA X RWY23(with VPT)

Note: "VPT" stands for Visual maneuver with Prescribed Track that meets the criteria of ICAO PANS-OPS (Doc.8168). A specific track for visual maneuvering after the MAPt is prescribed in these procedures.

### 2) Conditions

SILA, where radar separation minima between aircrafts on adjacent localizer courses and VPTs are not prescribed, will be conducted when the following conditions are met. However, SILA shall not be applied under certain adverse weather conditions which might affect safe operations (e.g. windshear on the final approach course, etc.).

A. No Transgression Zone (NTZ) 610m wide is established equidistant between localizer courses and is depicted on the radar display.

B. LOC, radar, and appropriate frequencies are operating normally.

Note: Visual aids associated with the runway used for the prescribed track (i.e. ALS, PAPI) are shown on the chart with their main characteristics (i.e. slope of the PAPI).

### 3) Information of SILA

Aircraft shall be advised that SILA are in force. This information may be provided through the ATIS broadcasts.

"Simultaneous LDA approaches to RWY22 and RWY23 are in progress."

### 4) Radar monitoring

Radar monitoring is provided for each simultaneous LDA approach to ensure aircraft do not deviate from the localizer course as follows:

A. Aircraft shall be provided a minimum of 1,000ft vertical separation or a minimum of 3NM radar separation until intercepting localizer course.

The assigned altitude shall be maintained until final approach fix (FAF).

B. Radar monitoring is continued even after instructed to contact Tower frequency and instructions prescribed in C are provided on the frequency when necessary.

C. Aircraft observed to overshoot the turn-on or continue on a track which will penetrate the NTZ will be instructed to return to the correct localizer course. If a deviating aircraft fails to respond to such instructions or is observed penetrating the NTZ, the aircraft on the adjacent localizer course shall be instructed to avoid the deviating aircraft.

D. Radar monitoring will automatically be terminated when the aircraft has passed the coverage of NTZ (RWY22: IKL 2.7DME / RWY23: MAPt).

Note: ATC will not inform pilots when radar monitoring is terminated.

### 5) Go around procedure

When going around, pilot should report ATC as soon as practicable, and proceed in accordance with the go around procedure described on the chart until receiving ATC instructions.

### 6) Response to "TRAFFIC ALERT"

All breakouts in response to ATC's instructions shall be accomplished quickly. These instructions will be issued on TOWER FREQUENCY when situation required.

**7. SIMULTANEOUS INDEPENDENT RNP APPROACHES (SIRA)**

## 1) Applicable instrument approach procedures for SIRA

RNP RWY16L, RNP RWY16R

## 2) Conditions

SIRA, where radar separation minima between aircrafts on adjacent approach courses are not prescribed, will be conducted when the following conditions are met. However, SIRA shall not be applied under certain adverse weather conditions which might affect safe operations (e.g. windshear on the final approach course, etc.).

- A. No Transgression Zone (NTZ) 610m wide is established equidistant between 16R final approach course and 16L final approach course is depicted on the radar display.
- B. Wide Area Multilateration (WAM), radar and appropriate frequencies are operating normally.
- C. Mode S transponder is activating normally. In case of Mode S transponder which has failed or be not equipped, the pilot should inform the ATC facility.

## 3) Information of SIRA

Aircraft shall be advised that SIRA are in force. This information may be provided through the ATIS broadcasts.

"Simultaneous RNP approaches to RWY16L and RWY16R are in progress."

## 4) Radar monitoring

Radar monitoring is provided for each simultaneous RNP approach to ensure aircraft do not deviate from the approach course as follows;

- A. Aircraft shall be provided a minimum of 1,000ft vertical separation or a minimum of 3NM radar separation until the following point;  
: Intersection of an extension line of the north short side of NTZ with RWY 16L/R RNP approach courses.
- B. Radar monitoring is continued even after instructed to contact Tower frequency and instructions prescribed in C are provided on the frequency when necessary.
- C. Aircraft observed to deviate from the approach course or continue on a track which will penetrate the NTZ will be advised by ATC. If a deviating aircraft is observed penetrating the NTZ, the aircraft on the adjacent approach course shall be instructed to avoid the deviating aircraft.
- D. Radar monitoring will automatically be terminated when visual separation is applied by ATC.

Note: ATC will not inform pilots when radar monitoring is terminated.

## 5) Response to "TRAFFIC ALERT"

All breakouts in response to ATC's instructions shall be accomplished quickly. These instructions will be issued on TOWER FREQUENCY when situation required.

**8. Category II / III Operations at Tokyo International Airport****1) Facilities**

The following facilities are available:

| Runway 34R   |
|--|
| (1) ILS Runway 34R-CAT III   |
| (2) Lighting system Runway 34R-CAT III   |
| (3) RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway) |

**2) Conditions**

A. The following systems must be operative:

| For ILS Z RWY34R approach (CAT II)<br>For ILS Y RWY34R approach (CAT II)  | For ILS Z RWY34R approach (CAT III)<br>For ILS Y RWY34R approach (CAT III)  |
|---|---|
| (1) ILS comprising: <ul style="list-style-type: none"><li>• ILS-LOC 34R with standby transmitter</li><li>• ILS-GP 34R with standby transmitter<br/>(When any standby transmitters unserviceable, downgrade ILS-CAT I.)</li><li>• IM 34R (When IM unserviceable, RA could be used as an alternate method.)</li><li>• ILS-DME 34R</li></ul> | (1) ILS comprising: <ul style="list-style-type: none"><li>• ILS-LOC 34R with standby transmitter (including far field monitor)</li><li>• ILS-GP 34R with standby transmitter<br/>(When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.)</li><li>• ILS-DME 34R</li></ul> |
| (2) Lighting systems comprising: <ul style="list-style-type: none"><li>• PALS 34R (including side row barrettes)</li><li>• High INTST REDL</li><li>• High INTST RTHL</li><li>• RCLL and RTZL</li></ul>  | (2) Lighting systems comprising: <ul style="list-style-type: none"><li>• PALS 34R (including side row barrettes)</li><li>• High INTST REDL</li><li>• High INTST RTHL</li><li>• RCLL and RTZL</li></ul>  |
| (3) Secondary power supply  | (3) Secondary power supply  |
| (4) RVR by forward-scatter meters at the touchdown zone and either (the mid-point or stop-end of the runway).   | (4) RVR by forward-scatter meters at the touchdown zone, mid-point and stop-end of the runway.  |

B. The following information must be currently available:

- 1) Surface wind speed and direction
- 2) RVR

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

**3) Operating Minimum**

Approach minima stated AD2.24 (Instrument Approach Chart) are observed.

**4) LVP**

LVP will be available when the following conditions are met:

- 1) Ceiling is at or less than 200ft and/or RVR is at or less than 600m.
- 2) Facilities listed 1) above are operational.
- 3) ILS Critical Area is protected.

In order to protect Critical Area for the succeeding arrival aircraft, an arrival aircraft may be given the following instruction by ATC:

**"REPORT OUT OF ILS CRITICAL AREA"**

The exit taxiway center line lights are fixed alternate green and yellow inside the ILS Critical Area. If an aircraft is given the above instruction, she is expected to advise the ATC when the taxiway center line lights change from alternate green and yellow to steady green.

**5) Approval for CAT II / III Operations**

Operators must obtain operational approval from the State of Registry or the State of Operator, as appropriate, to conduct CAT II / III Operations. (See GEN1.5)

**9. LVTO at Tokyo International Airport****1) Facilities**

The following facilities are available:

| RWY 16L  | RWY 34R  |
|--|--|
| <ul style="list-style-type: none"> <li>• Lighting system RWY 16L for LVTO</li> <li>• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)</li> </ul> | <ul style="list-style-type: none"> <li>• Lighting system RWY 34R for LVTO</li> <li>• RVR by forward-scatter meters (the touchdown zone, the mid-point and stop-end of the runway)</li> </ul> |

**2) Conditions**

A. The following systems must be operative:

| For LVTO   |
|--|
| (1) Lighting system comprising; <ul style="list-style-type: none"> <li>• High INTST REDL</li> <li>• High INTST RENL</li> <li>• RCLL</li> </ul> |
| (2) Secondary power supply   |

B. The following information must be currently available:

- a) Surface wind speed and direction
- b) RVR or VIS

C. ITEM A and/or B are not met, the relevant information will be notified to the pilots as soon as practicable.

**3) Operating Minima**

Take-off minima stated in AD2.22 (TAKE-OFF MINIMA) are observed.

**4) LVP/LVPD**

LVP/LVPD will be available when the following conditions are met:

- a) RVR is at or less than 600m.
- b) Facilities listed 1) above are operational.

**RJTT AD 2.23 ADDITIONAL INFORMATION**

1. TV tower  
TV tower 1,148 feet MSL located 6NM NNW of HANEDA VOR/DME (HME)
2. Vehicle traffic line  
White line markings on apron area.
3. Schedule maintenance on the runway  
All RWY are subject to closing for maintenance purpose as follows. See NOTAM RJTT for further detailed information.

| FACILITY    | PLANNING PERIOD                   | REMARKS  |
|-------------|-----------------------------------|--|
| RWY 16R/34L | MON, WED, THU, SAT, SUN 1400-2130 | AVBL CROSS RWY 16R/34L VIA TWY OTHER THAN CLSD TWY |
| RWY 04/22   | MON, TUE, THU, FRI, SUN 1430-2100 | AVBL CROSS RWY 04/22 VIA TWY OTHER THAN CLSD TWY   |
| RWY 16L/34R | TUE, FRI 1530-2130                |  |
| RWY 05/23   | WED, SAT 1430-2100                |  |

4. Bird-patrollers will patrol on perimeter and/or maintenance road around RWYs and occasionally use shotgun and shell crackers to get rid of birds harmful to air safety. Bird-patrollers may enter LDG strips not nearer than 50M FM RWY edges and 20M FM TWY edges to pick up birds being shot down HJ.
5. Positions not visible from control tower.
  - a) Aircraft stand  
From NR201 to NR205.
  - b) Taxiway  
A part of TWY A(from spot NR201 to spot RU6) and a part of TWY W(from spot NR201 to NR203).
6. 空港付近の船舶の航行
  - 6.1 RWY04/22 及び RWY05/23 の北東側に船舶高基準面と許容高が設定される。
  - 6.2 航空機の運航に影響がある高さの船舶が、RWY22 または RWY23 の進入表面下を航行することがあり、これらの船舶は空港当局により監視されている。必要に応じて以下の対応が取られる。  
(添付図参照)
6. Passage of vessel in the vicinity of the airport
  - 6.1 Base level of Vessel height and Admissible height is set at Northeast side of RWY 04/22 or RWY 05/23.
  - 6.2 The Vessel with height which affects aircraft operations may pass across beneath the approach surface of RWY22 or RWY23, and those vessels are monitored by Airport authority. The following action will be taken when necessary.  
(see attached chart)

**東京西航路**

- 1) 当該進入表面下に設定された東京西航路を航行する船舶の情報は、RJTT NOTAM または ATC により提供される。
- 2) 船舶が A 点と B 点または C 点と D 点の間を通過する間、下記の制限がかかる。
  - a) RWY04 及び RWY05 からの離陸は許可されない。
  - b) RWY22 及び RWY23 への到着機に対して空中待機または復行が指示されることがある。

**側傍海域**

- 船舶が、東京西航路と進入灯の間の進入表面下を通過する場合には、船舶の高さ及び位置により、以下の制限がかかる。
- a) RWY04 及び RWY05 からの離陸は許可されない。
  - b) RWY22 及び RWY23 への到着機に対して復行が指示されることがある。

**Tokyo West Passage Route**

- (1) The information of the vessel passing along the Tokyo West Passage Route, which is laid down beneath the approach surfaces, will be provided by NOTAM RJTT or ATC.
- (2) While the vessel is between point A and B or between point C and D, following restrictions are taken;
  - a) Take-off clearance is not issued for RWY04 or RWY05.
  - b) Holding or Go-around instruction may be issued for arrival aircraft for RWY22 or RWY23.

**Adjacent sea area**

When a vessel passes across beneath approach surface between approach lights and Tokyo West Passage Route, depending on height and position of the vessel, following restrictions are taken;

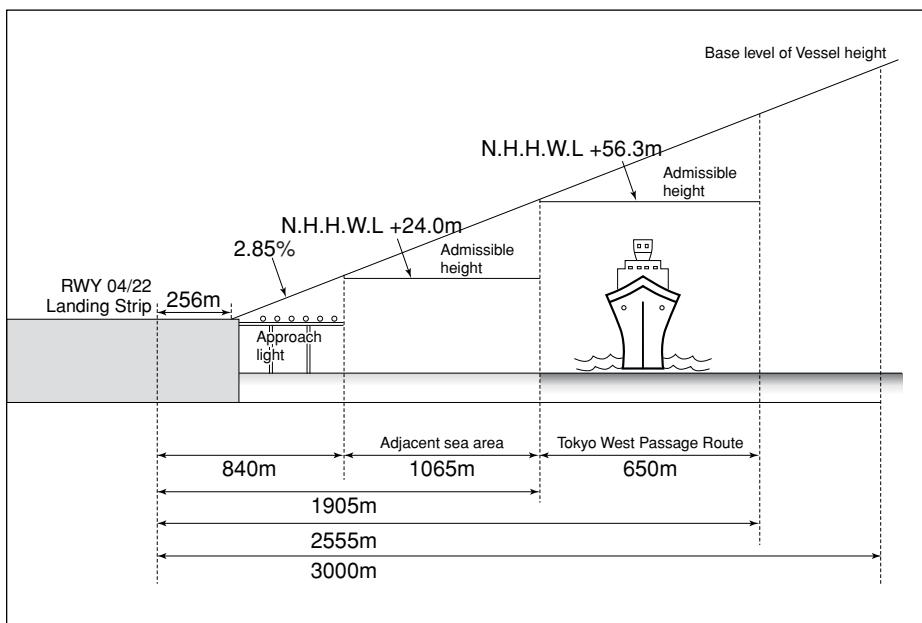
- a) Take-off clearance is not issued for RWY04 or RWY05.
- b) Go-around instruction may be issued for RWY22 or RWY23.

## (断面図)

- 航空機の運航に影響がある高さの船舶：  
側傍海域にあっては、N.H.H.W.L + 24.0m以上の船舶  
東京西航路にあっては、N.H.H.W.L + 56.3m以上の船舶
- N.H.H.W.L：満潮時でこれより高くなないと想定される潮位

## (profile view)

- The Vessel height which affects aircraft operations adjacent sea area:  
Vessel height is at or above N.H.H.W.L + 24.0m  
Tokyo West Passage Route:  
Vessel height is at or above N.H.H.W.L + 56.3m
- N.H.H.W.L: Nearly Highest High Water Level

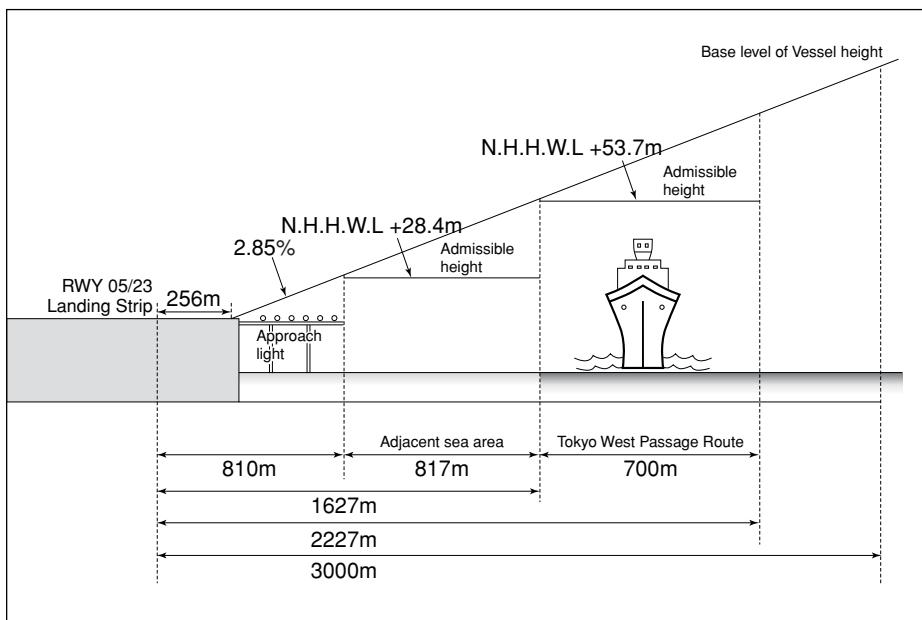


## (断面図)

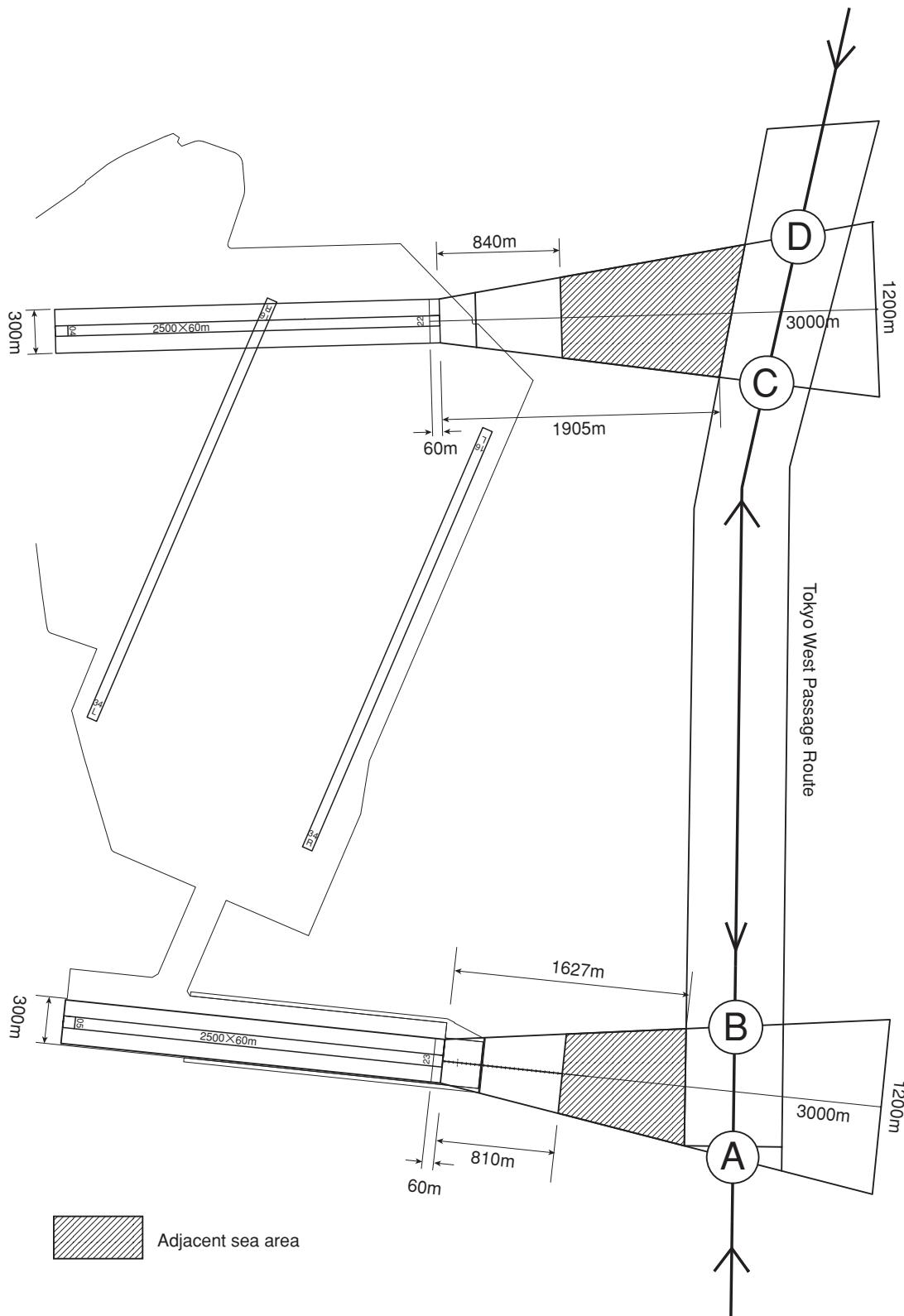
- 航空機の運航に影響がある高さの船舶：  
側傍海域にあっては、N.H.H.W.L + 28.4m以上の船舶  
東京西航路にあっては、N.H.H.W.L + 53.7m以上の船舶
- N.H.H.W.L：満潮時でこれより高くなないと想定される潮位

## (profile view)

- The Vessel height which affects aircraft operations adjacent sea area:  
Vessel height is at or above N.H.H.W.L + 28.4m  
Tokyo West Passage Route:  
Vessel height is at or above N.H.H.W.L + 53.7m
- N.H.H.W.L: Nearly Highest High Water Level



### Tokyo West passage Route and Adjacent sea area



## 7. 航空機重量制限

滑走路 05/23 を使用する航空機においては、航空機重量、主脚荷重及び輪荷重の全てが下表の値を超えてはならない。

| 航空機重量   |         | 主脚荷重    |         | 輪荷重    |        |
|---------|---------|---------|---------|--------|--------|
| (lb)    | (kg)    | (lb/脚)  | (kg/脚)  | (lb/輪) | (kg/輪) |
| 881,800 | 400,000 | 307,500 | 139,500 | 57,700 | 26,200 |

注) RJTT AD2.20.1.2 LOCAL TRAFFIC REGULATIONS (3), (12) 及び AD2.21.2 Noise Preferential Runways を参照

## 7. Aircraft weight restriction

When using RWY 05/23, all of the values of aircraft (aircraft weight, main gear load AND wheel load) shall not exceed the values listed in the table below.

| Aircraft weight |         | Main gear load |           | Wheel load |            |
|-----------------|---------|----------------|-----------|------------|------------|
| (lb)            | (kg)    | (lb/gear)      | (kg/gear) | (lb/wheel) | (kg/wheel) |
| 881,800         | 400,000 | 307,500        | 139,500   | 57,700     | 26,200     |

There are other restrictions for using runway(see RJTT AD2.20.1.2 LOCAL TRAFFIC REGULATIONS (3), (12) and RJTT AD2.21.2 Noise Preferential Runways.).

誘導路 Q を使用する航空機においては、コード Dまでの航空機（翼幅が 52m 未満）の使用に限ることとし、航空機重量、主脚荷重及び輪荷重の全てが下表の値を超えてはならない。

| 航空機重量   |         | 主脚荷重    |        | 輪荷重    |        |
|---------|---------|---------|--------|--------|--------|
| (lb)    | (kg)    | (lb/脚)  | (kg/脚) | (lb/輪) | (kg/輪) |
| 570,900 | 259,000 | 215,300 | 97,700 | 49,100 | 22,300 |

When passing TWY Q, the wing span of aircraft shall be less than 52m and all of the values of aircraft (aircraft weight, main gear load AND wheel load) shall not exceed the values listed in the table below.

| Aircraft weight |         | Main gear load |           | Wheel load |            |
|-----------------|---------|----------------|-----------|------------|------------|
| (lb)            | (kg)    | (lb/gear)      | (kg/gear) | (lb/wheel) | (kg/wheel) |
| 570,900         | 259,000 | 215,300        | 97,700    | 49,100     | 22,300     |

## 8. EMAS (Engineered Materials Arresting Systems)

EMAS, which has high energy-absorbing performance, is located in the overrun area and RESA of the runway. EMAS will exert deceleration force on the landing gear to reduce the damage in case of overrun of an airplane. EMAS is installed with overrun area marking. These systems do not affect the normal landing and takeoff of airplanes.

## 9. 双方向に設置されている ILS の輻射について

## 1) ILS 16L / 34R

LVP 適用時を除き、RWY16L および 34R ILS は同時に輻射する。  
(RJTT AD2.22 8.Category II /III Operations at Tokyo International Airport を参照)

## 2) ILS 16R / 34L

RWY16R 運用時を除き、RWY16R および 34L ILS は同時に輻射する。

## 9. Two separate ILS radiate at opposite ends of a single runway

## 1) ILS 16L / 34R

RWY16L and 34R ILS radiate simultaneously except when LVP are applied.  
(See RJTT AD2.22 8.Category II /III Operations at Tokyo International Airport)

## 2) ILS 16R / 34L

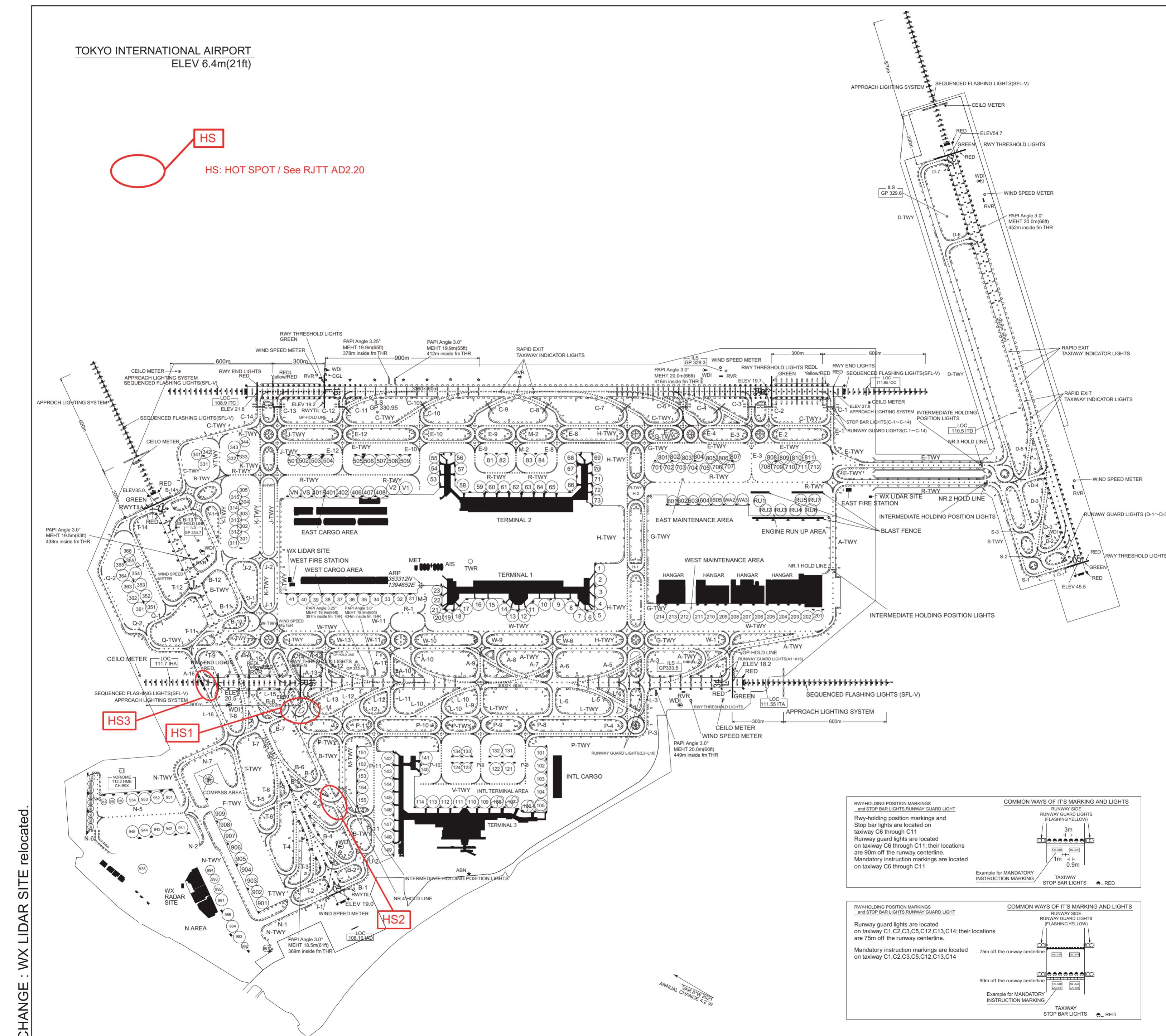
RWY16R and 34L ILS radiate simultaneously except when operating RWY16R.

## RJTT AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome Chart-1  
Aerodrome Chart-2  
Aircraft Parking/Docking Chart  
Aerodrome Obstacle Chart-ICAO type A (RWY16R/34L)  
Aerodrome Obstacle Chart-ICAO type A (RWY22)  
Aerodrome Obstacle Chart-ICAO type A (RWY04)  
Aerodrome Obstacle Chart-ICAO type A (RWY34R)  
Aerodrome Obstacle Chart-ICAO type A (RWY16L)  
Aerodrome Obstacle Chart-ICAO type A (RWY05/23)  
Aerodrome Obstacle Chart-ICAO type B  
Precision Approach Terrain Chart (RWY34R)  
Standard Departure Chart - Instrument (SEKIYADO)  
Standard Departure Chart - Instrument (VADAR)  
Standard Departure Chart - Instrument (OPPAR)  
Standard Departure Chart - Instrument (ISOGO)  
Standard Departure Chart - Instrument (VAMOS-RNAV)  
Standard Departure Chart - Instrument (LAXAS-RNAV)  
Standard Departure Chart - Instrument (NINOX-RNAV)  
Standard Departure Chart - Instrument (TIARA-A/B/C-RNAV)  
Standard Departure Chart - Instrument (BEKLA-A/B/C-RNAV)  
Standard Departure Chart - Instrument (ROVER-A/B/C-RNAV)  
Standard Departure Chart - Instrument (RUTAS-RNAV)  
Standard Departure Chart - Instrument (GUSRO-RNAV)  
Standard Arrival Chart - Instrument (SINGO, DOYLE, ADDUM, BONUS)  
Standard Arrival Chart - Instrument (OSHIMA-1A/1K/2C-RNAV)  
Standard Arrival Chart - Instrument (AKSEL-1A/1K/2C-RNAV)  
Standard Arrival Chart - Instrument (AROSA-1A/1K/2C-RNAV)  
Standard Arrival Chart - Instrument (GODIN -2A/2K/1C-RNAV)  
Standard Arrival Chart - Instrument (POLIX-2A/2K/1C-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA, AKSEL, AROSA-2H-RNAV)  
Standard Arrival Chart - Instrument (GODIN, POLIX-1H-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA-1N/2N-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA-1B/2B-RNAV)  
Standard Arrival Chart - Instrument (AKSEL-1N/2N-RNAV)  
Standard Arrival Chart - Instrument (AKSEL-1B/2B-RNAV)  
Standard Arrival Chart - Instrument (AROSA-1N/2N-RNAV)  
Standard Arrival Chart - Instrument (AROSA-1B/2B-RNAV)  
Standard Arrival Chart - Instrument (GODIN-1S/1D-RNAV)  
Standard Arrival Chart - Instrument (POLIX-1S/1D-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA-L/R-RNAV)  
Standard Arrival Chart - Instrument (AKSEL-L/R-RNAV)  
Standard Arrival Chart - Instrument (AROSA-L/R-RNAV)  
Standard Arrival Chart - Instrument (GODIN-L/R-RNAV)  
Standard Arrival Chart - Instrument (POLIX-L/R-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA, AKSEL, AROSA, MESSE-NIGHT-RNAV)  
Standard Arrival Chart - Instrument (OSHIMA, AKSEL, AROSA, MESSE-V-RNAV)  
Instrument Approach Chart (ILS Z RWY34L)  
Instrument Approach Chart (LOC Z RWY34L)  
Instrument Approach Chart (ILS Y RWY34L)  
Instrument Approach Chart (LOC Y RWY34L)  
Instrument Approach Chart (ILS X RWY34L)  
Instrument Approach Chart (LOC X RWY34L)  
Instrument Approach Chart (VOR RWY34L)  
Instrument Approach Chart (ILS Z RWY34R(CAT II & III))  
Instrument Approach Chart (LOC Z RWY34R)  
Instrument Approach Chart (ILS Y RWY34R(CAT II & III))  
Instrument Approach Chart (LOC Y RWY34R)  
Instrument Approach Chart (ILS RWY22)  
Instrument Approach Chart (LOC RWY22)  
Instrument Approach Chart (LDA Z RWY22)  
Instrument Approach Chart (LDA Y RWY22)  
Instrument Approach Chart (LDA X RWY22)  
Instrument Approach Chart (LDA W RWY22)  
Instrument Approach Chart (ILS Z RWY23)  
Instrument Approach Chart (LOC Z RWY23)  
Instrument Approach Chart (ILS Y or LOC Y RWY23)  
Instrument Approach Chart (LDA Z RWY23)  
Instrument Approach Chart (LDA Y RWY23)  
Instrument Approach Chart (LDA X RWY23)

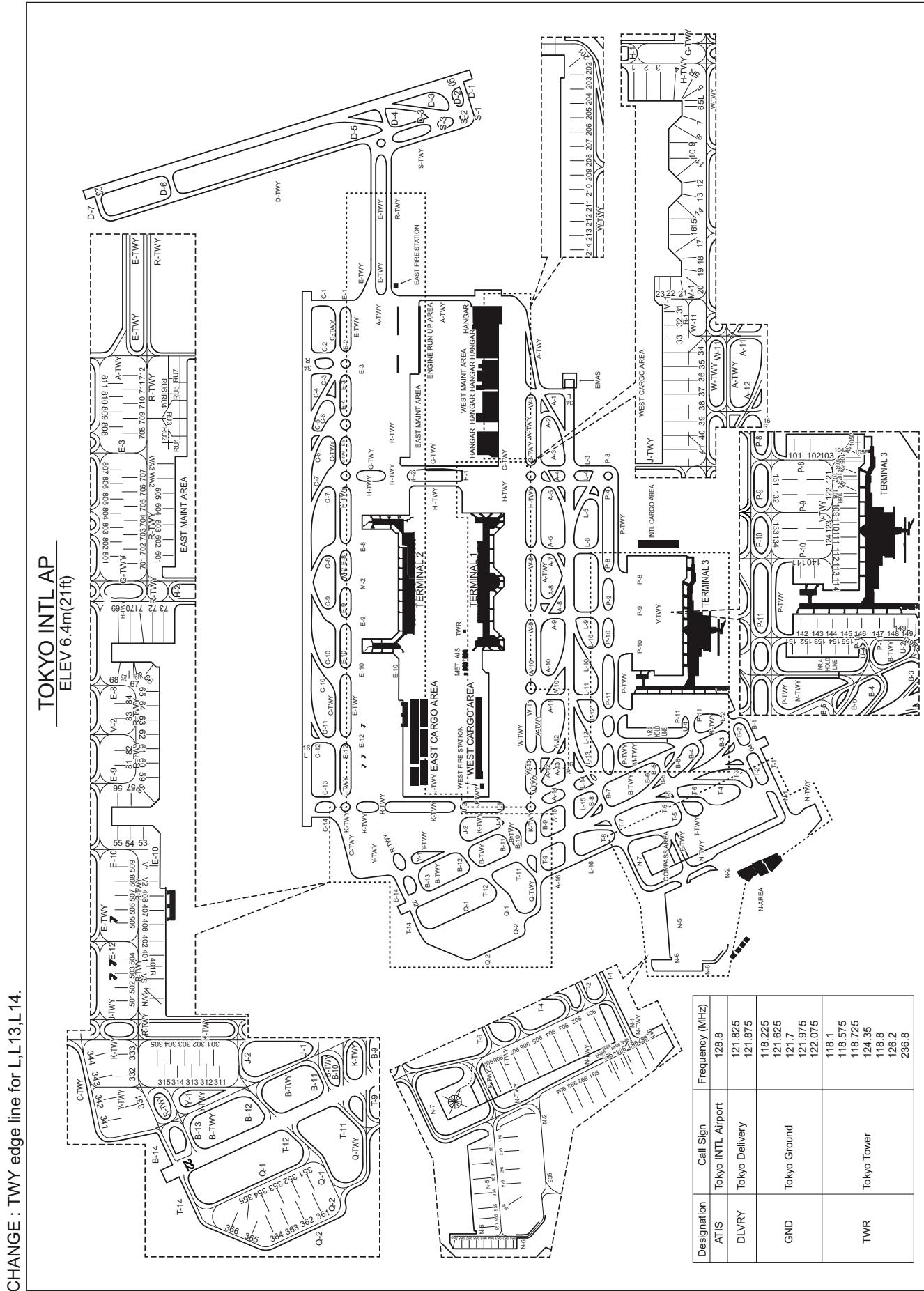
Instrument Approach Chart (LDA W RWY23)  
Instrument Approach Chart (RNP RWY23 (AR))  
Instrument Approach Chart (ILS or LOC RWY16R)  
Instrument Approach Chart (RNP RWY16R)  
Instrument Approach Chart (ILS or LOC RWY16L)  
Instrument Approach Chart (RNP RWY16L)  
Instrument Approach Chart (VOR A)  
Other Chart (HIGHWAY VISUAL RWY34R)  
Other Chart (HOLDING PATTERN)  
Other Chart (HOLDING PATTERN-RNAV)  
Other Chart (Visual REP)  
Other Chart (MVA CHART)  
Other Chart (LDG CHART)  
Other Chart (Kawasaki Petrochemical Complex(ATTACHMENT-1))

## AERODROME CHART

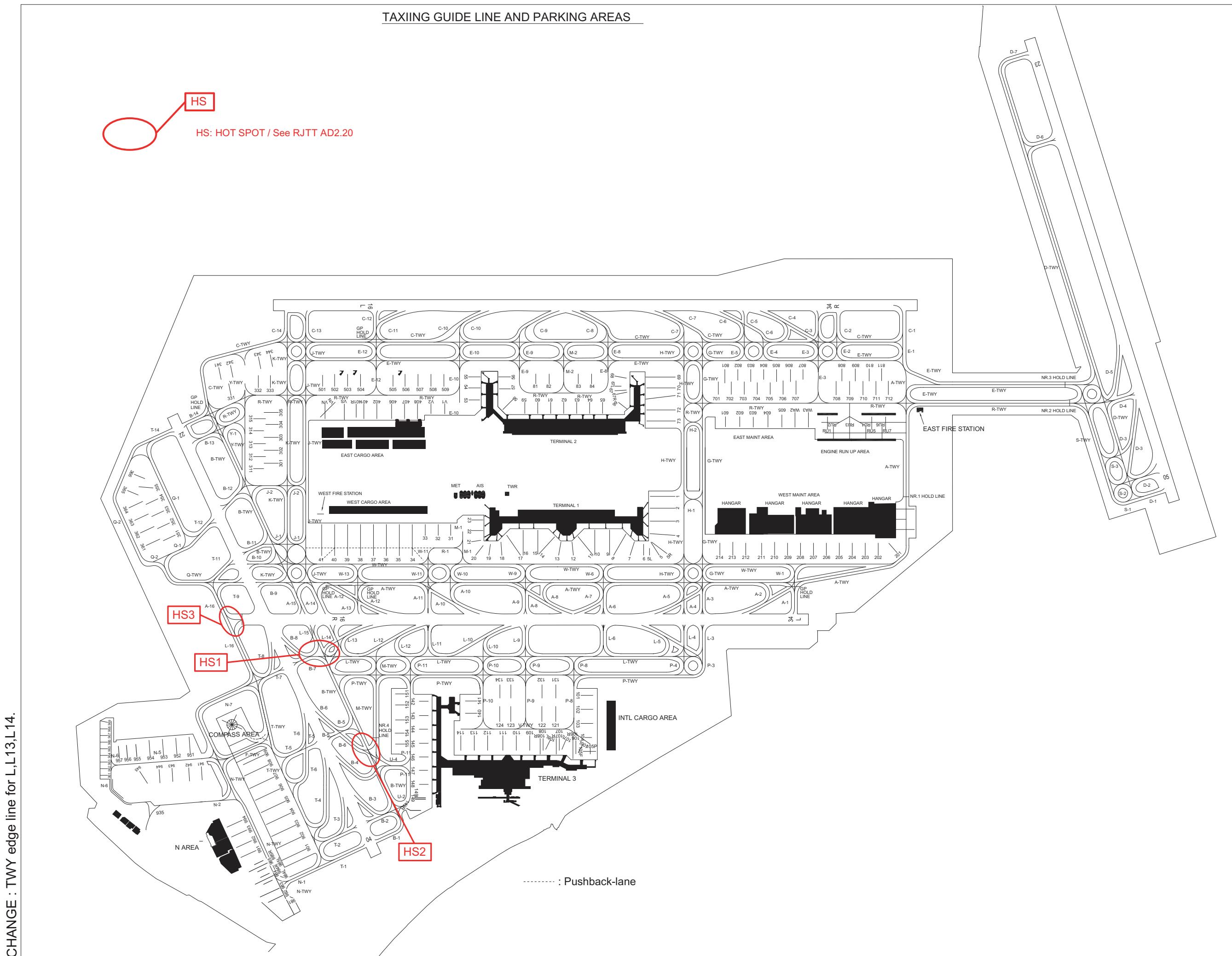


RJTT / TOKYO INTL

AD CHART

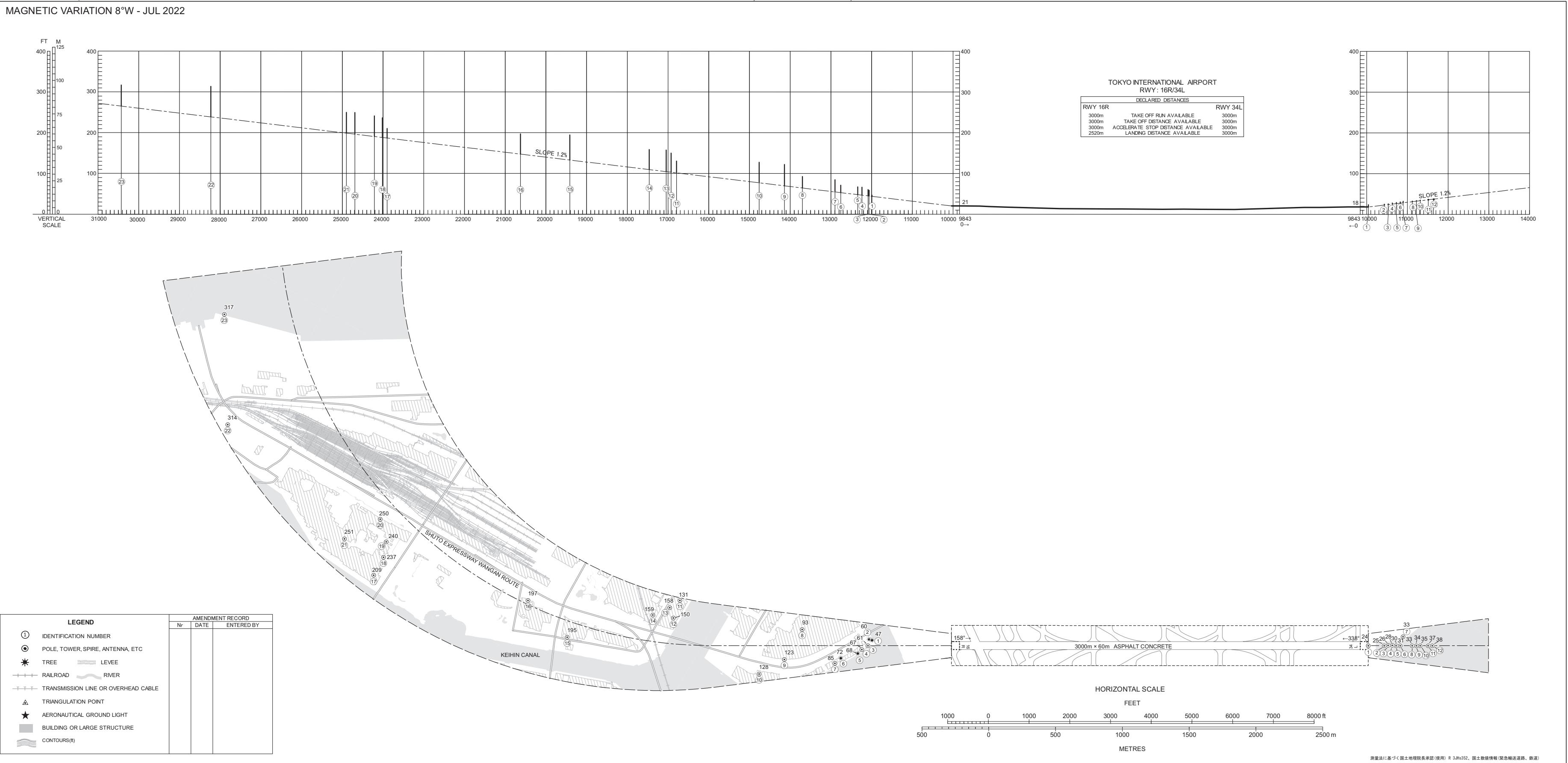


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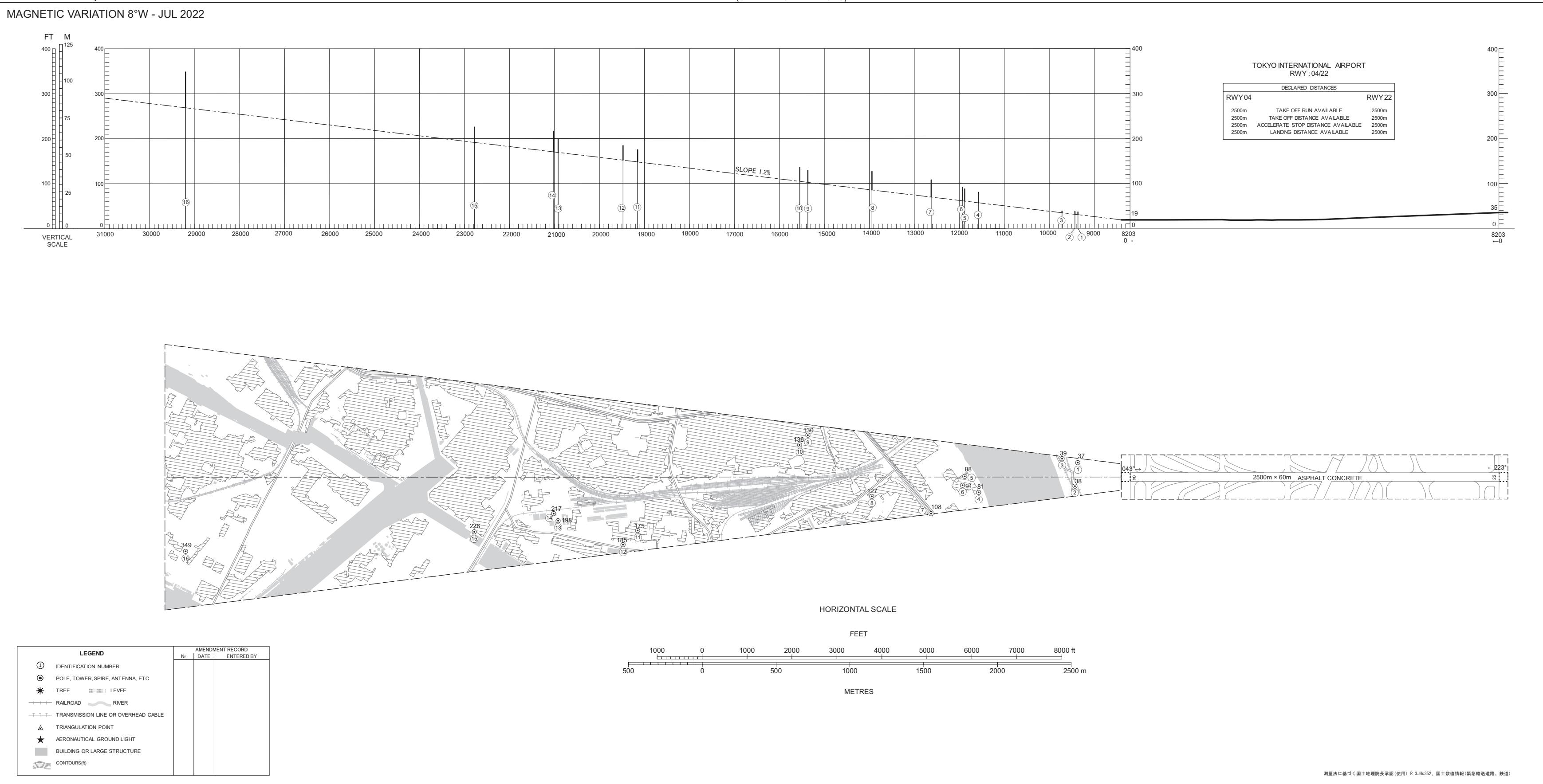
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



CHANGE : Update.

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

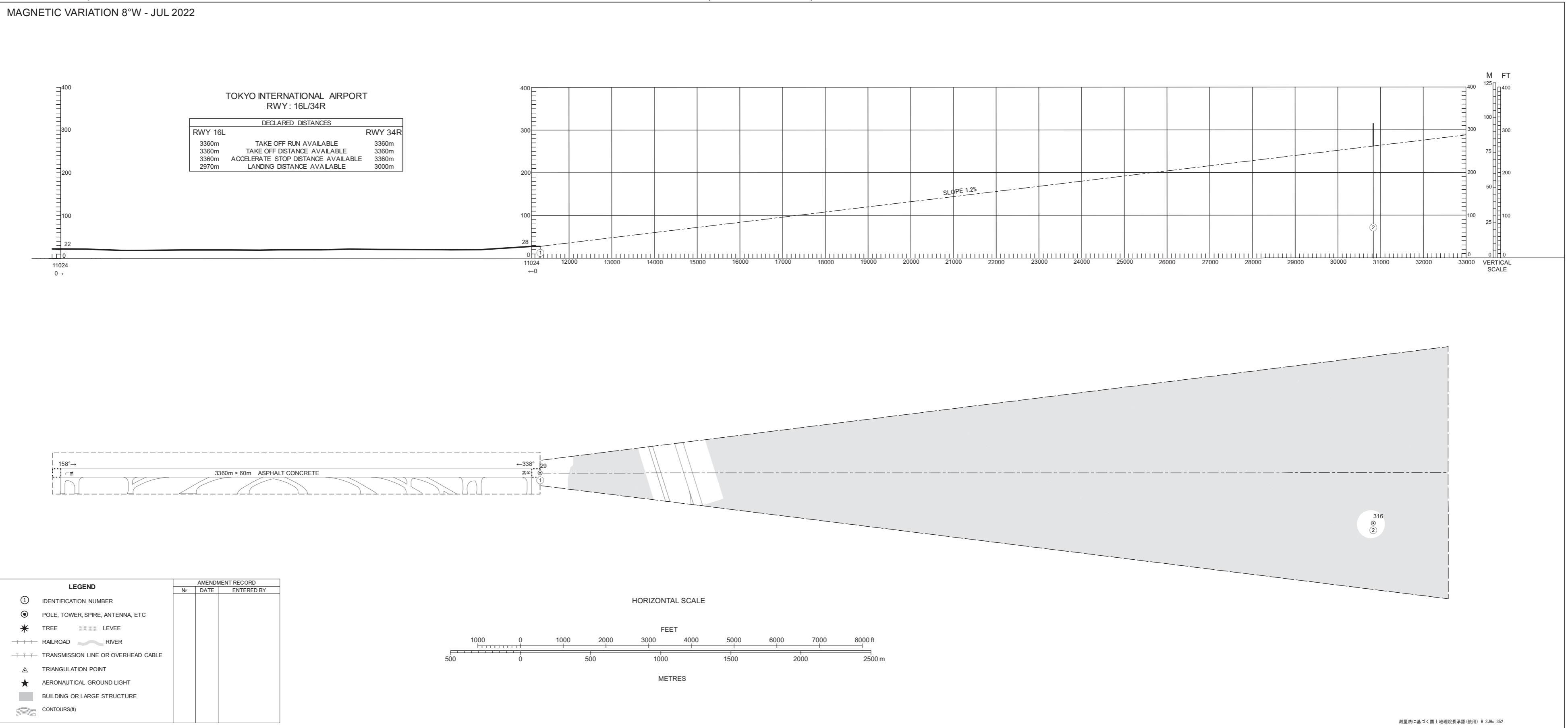
AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



CHANGE : Update.

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



CHANGE : Update.

DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
Transverse Mercator Projection

AERODROME OBSTACLE CHART-ICAO  
TYPE B



CHANGE : Obstruction added.

## PRECISION APPROACH TERRAIN CHART



STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL

SID

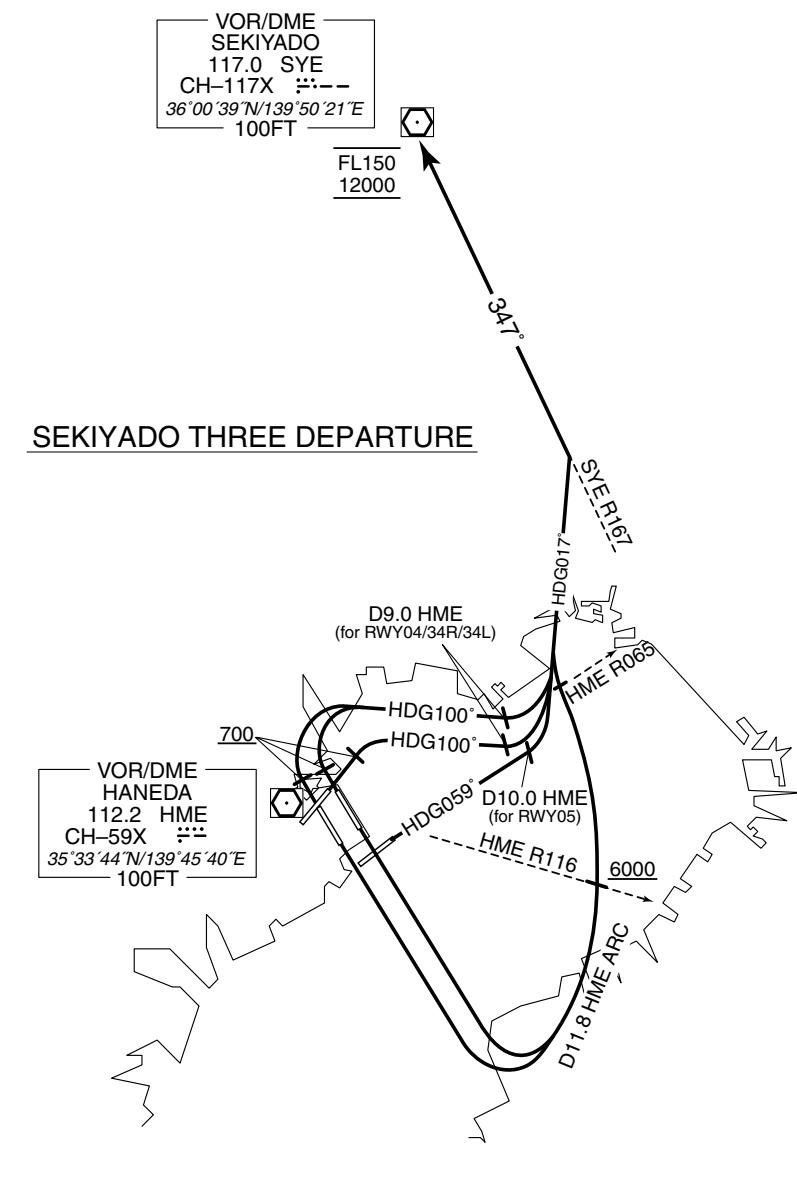
SEKIYADO THREE DEPARTURE

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

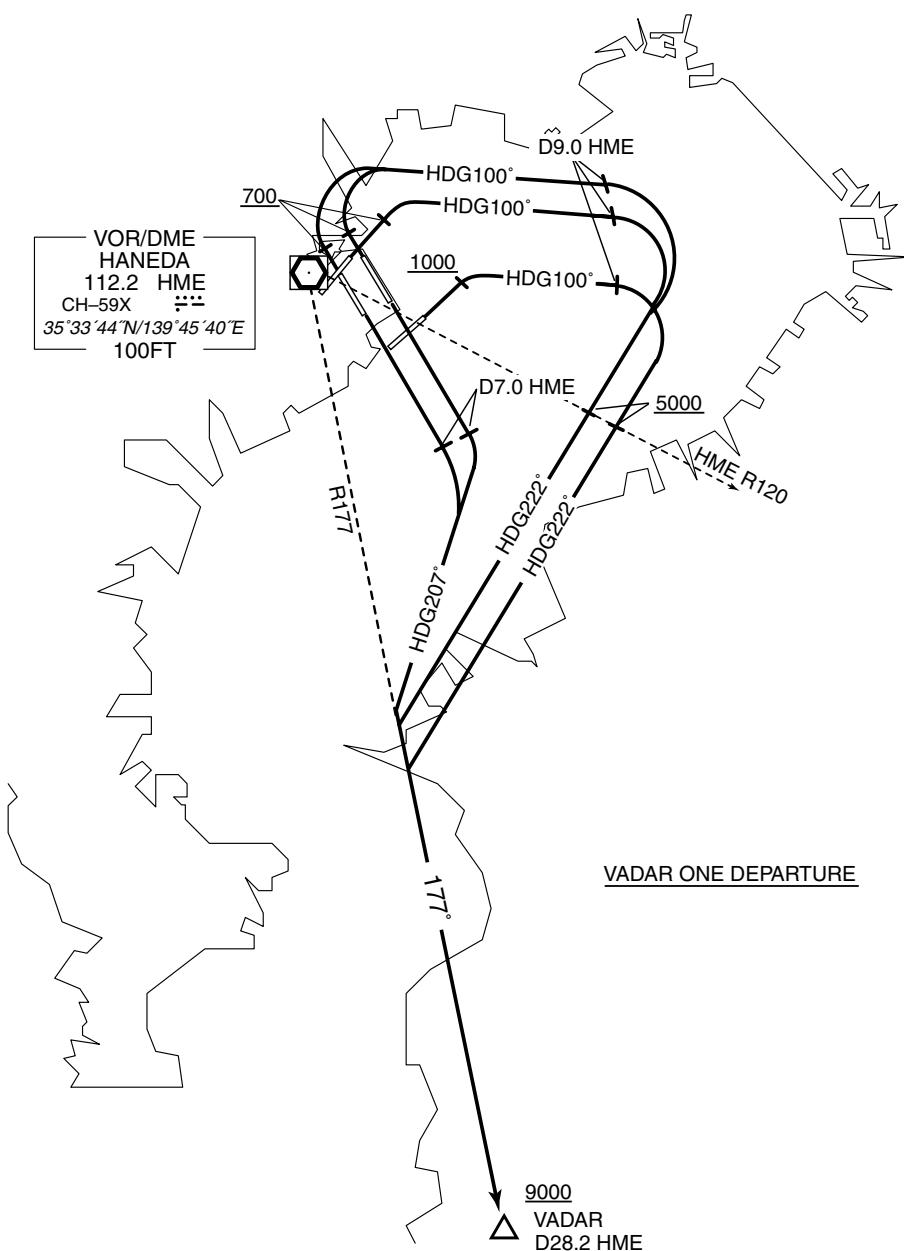
RWY04/34R/34L: Climb RWY HDG to 700FT, turn right HDG100° to HME 9.0DME, turn right HDG222° to intercept and proceed via HME R177 to VADAR.  
Cross HME R120 at or above 5000FT, cross VADAR at or above 9000FT.

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.

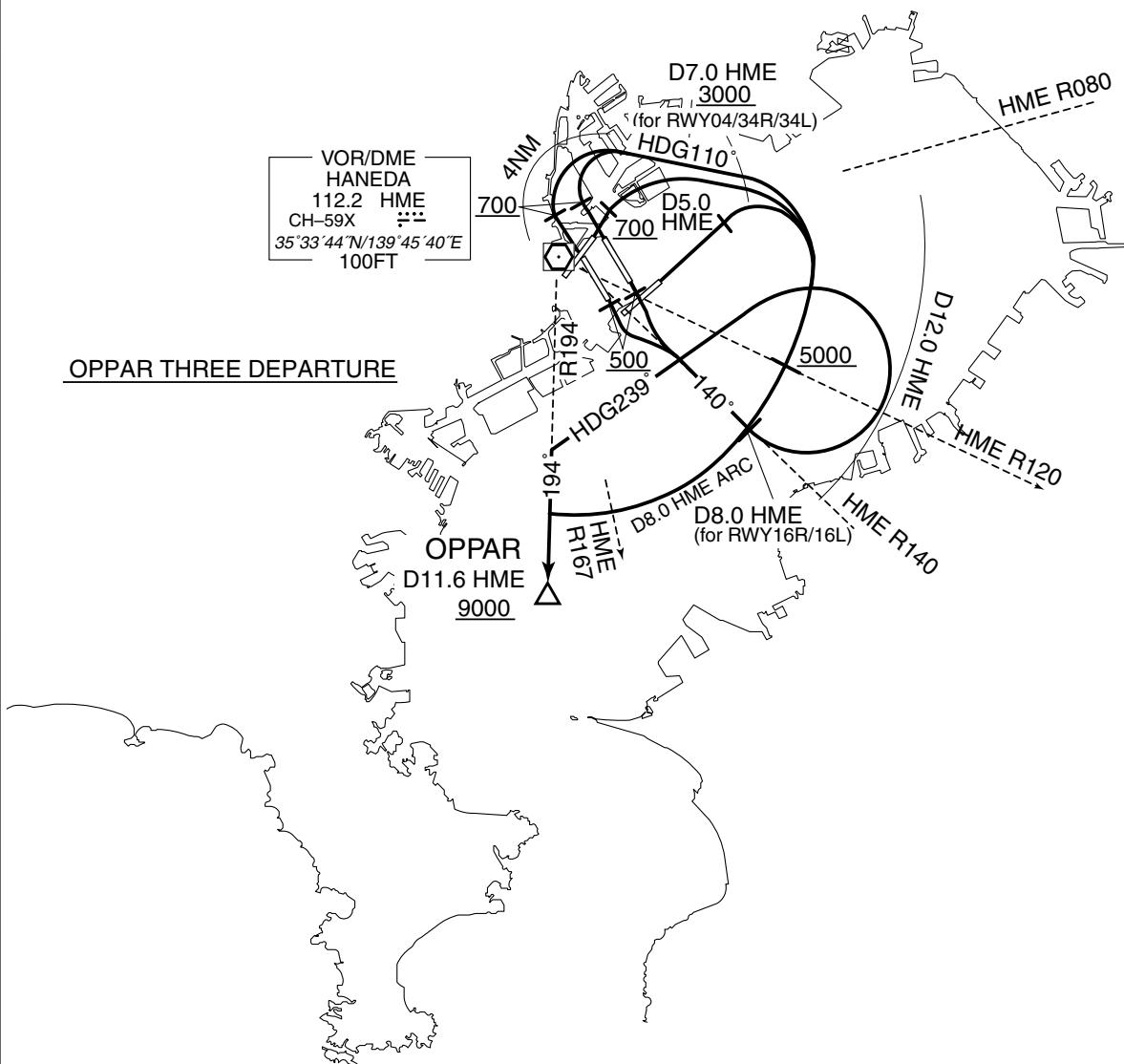
Cross OPPAR at or above 9000FT.

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.



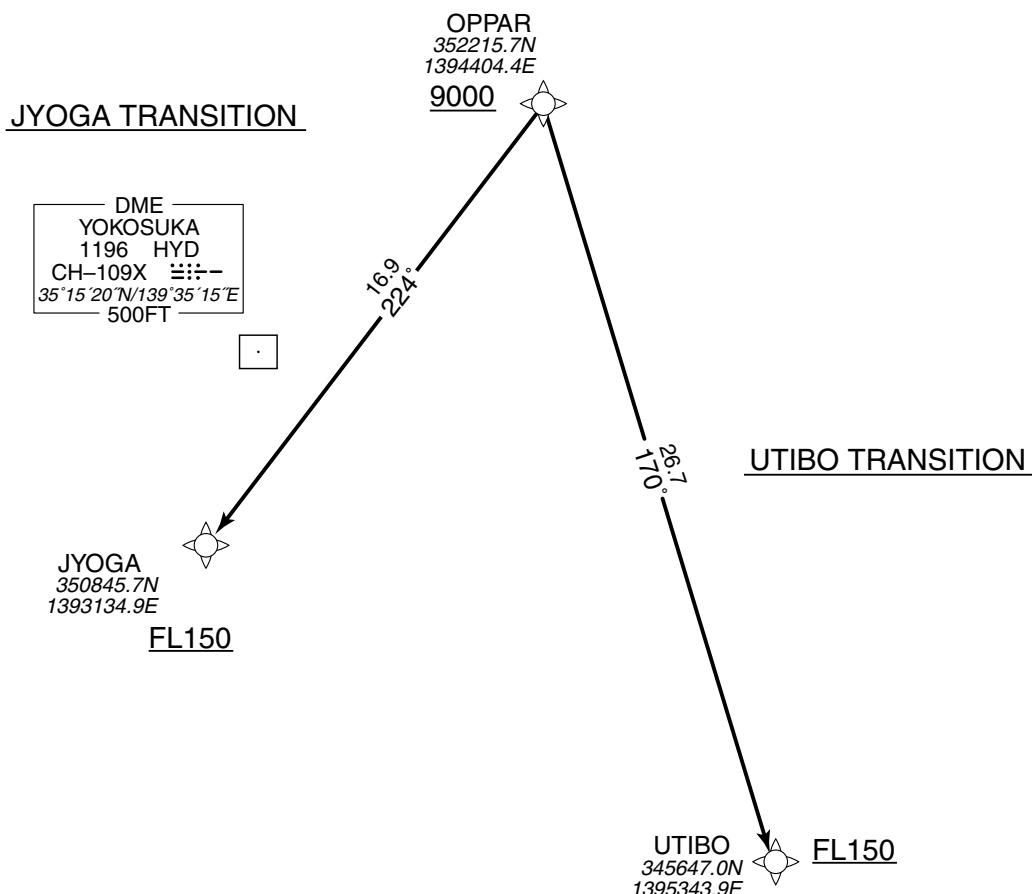
## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV TRANSITION

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

VAR 7° W(2016)

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<br>(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<br>(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)

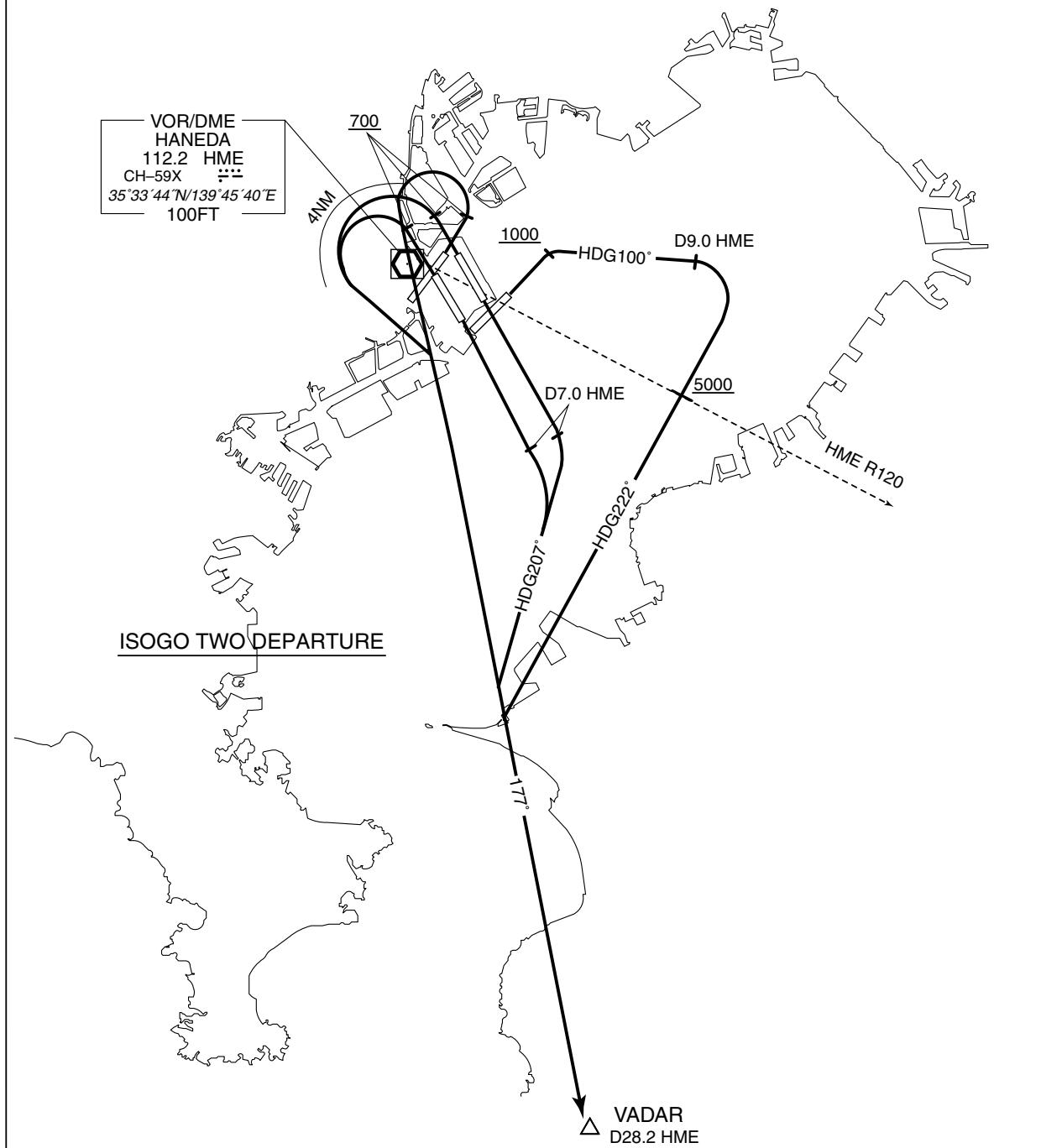
RWY04/34R/34L: Climb RWY HDG to 700FT or above, turn left within 4NM, climb via HME R177 to VADAR.

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

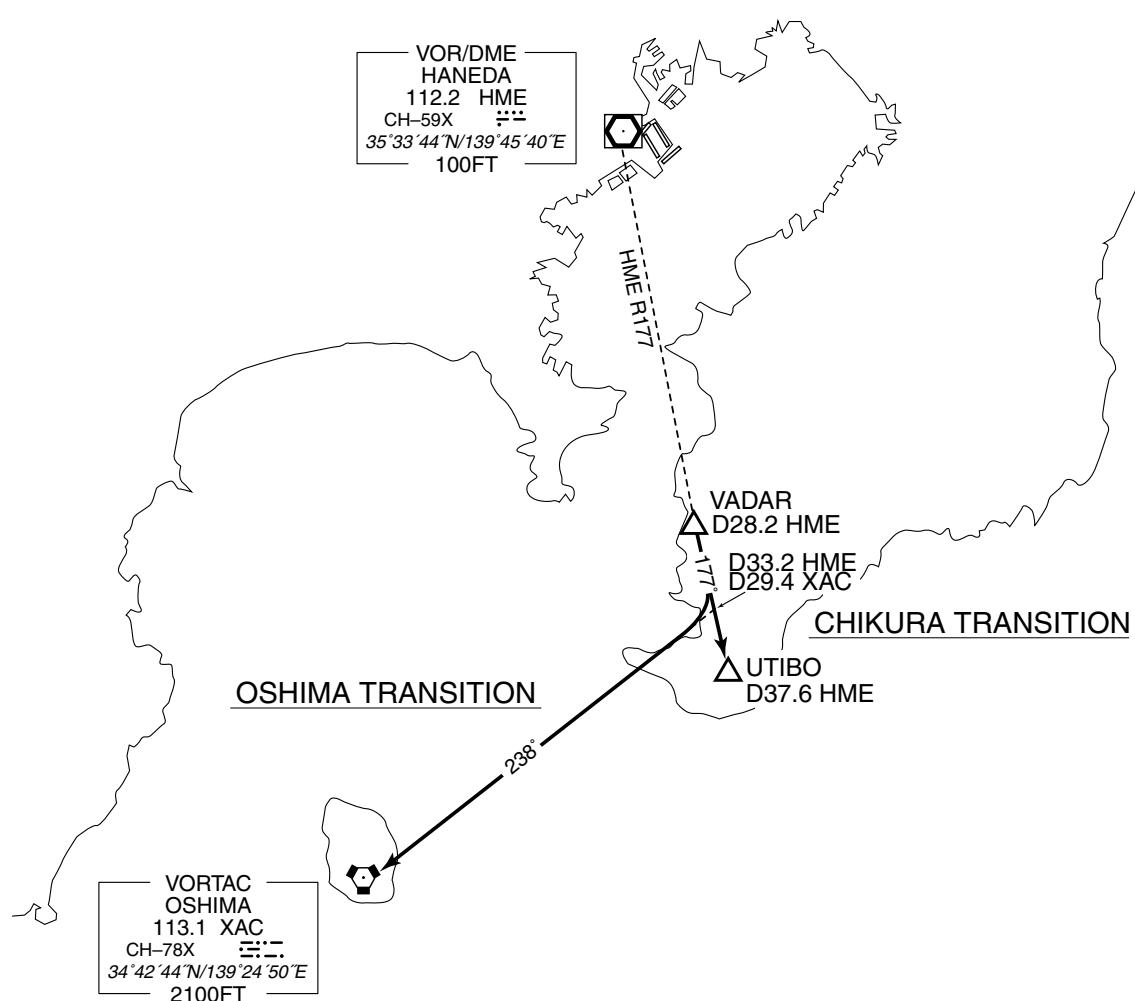
TRANSITION

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

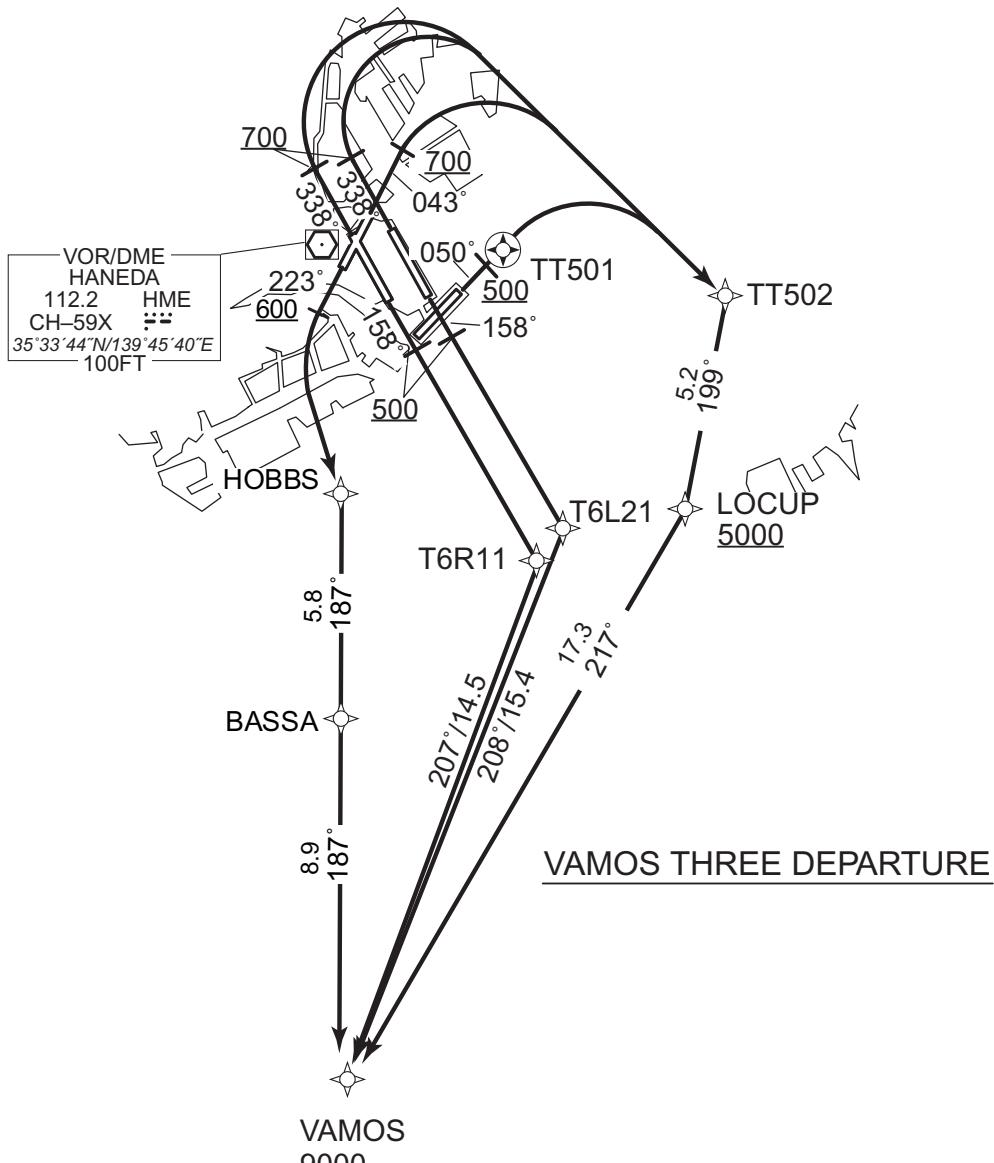
RJTT/TOKYO INTL

RNAV SID

| VAMOS THREE DEPARTURE  |              | RNAV SID  |
|--|--------------|---|
| 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 | RNAV1   |
| DME GAP<br>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                              |              | 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 |
| Inappropriate Navaids<br>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.

## 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                    |

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><br>2) RADAR service required.  | Critical DME                                     | —               |
| DME GAP  | —  | —               |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | —               |
| VAR8°W(2019)   |  |                 |
| <p>The chart shows the departure routes from OSHIMA (XAC). The DRAKY TRANSITION route goes from OSHIMA (XAC) to DRAKY via a bearing of 218°, then to VAMOS (9000ft) via a bearing of 222°. The TATEYAMA TRANSITION route goes from OSHIMA (XAC) to TATEYAMA via a bearing of 218°, then to UTIBO via a bearing of 068°. The RNAV1 route goes directly from OSHIMA (XAC) to VAMOS (9000ft) via a bearing of 222°. The chart also includes information for VORTAC OSHIMA (113.1, CH-78X, 34°42'44"N/139°24'50"E, 2100FT), TACAN TATEYAMA (986, CH-25X, 34°58'15"N/139°50'17"E, 500FT), and DME TATEYAMA (1159, CH-72X, 34°56'46"N/139°53'43"E, 600FT).</p> |  |                 |

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<br>(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<br>(210.2) | -7.5               | 22.2          | –              | –             | –            | –              | RNAV1                    |
| 003           | TF              | XAC                 | –        | 218<br>(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 |

STANDARD DEPARTURE CHART-INSTRUMENT

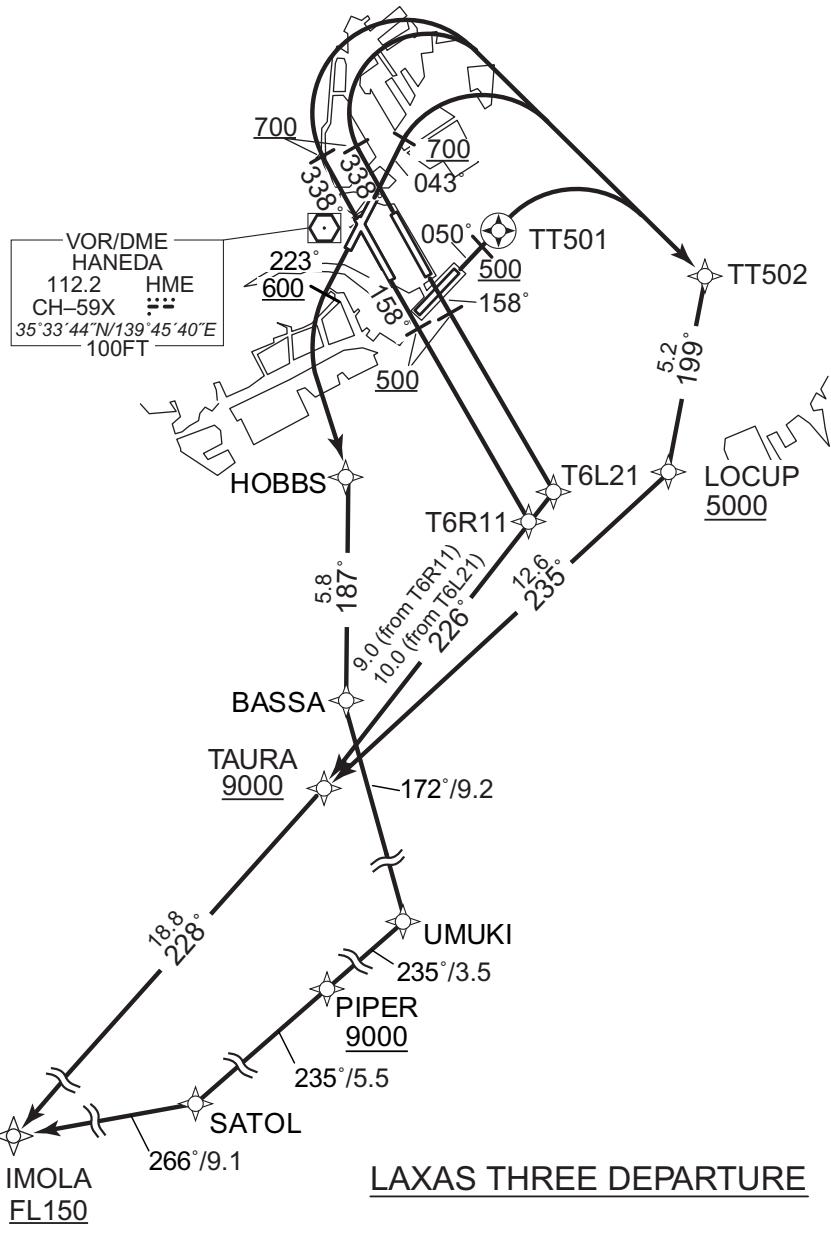
RJTT/TOKYO INTL

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>RWY05: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.

## 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                    |

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

## 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 |                     |                        |

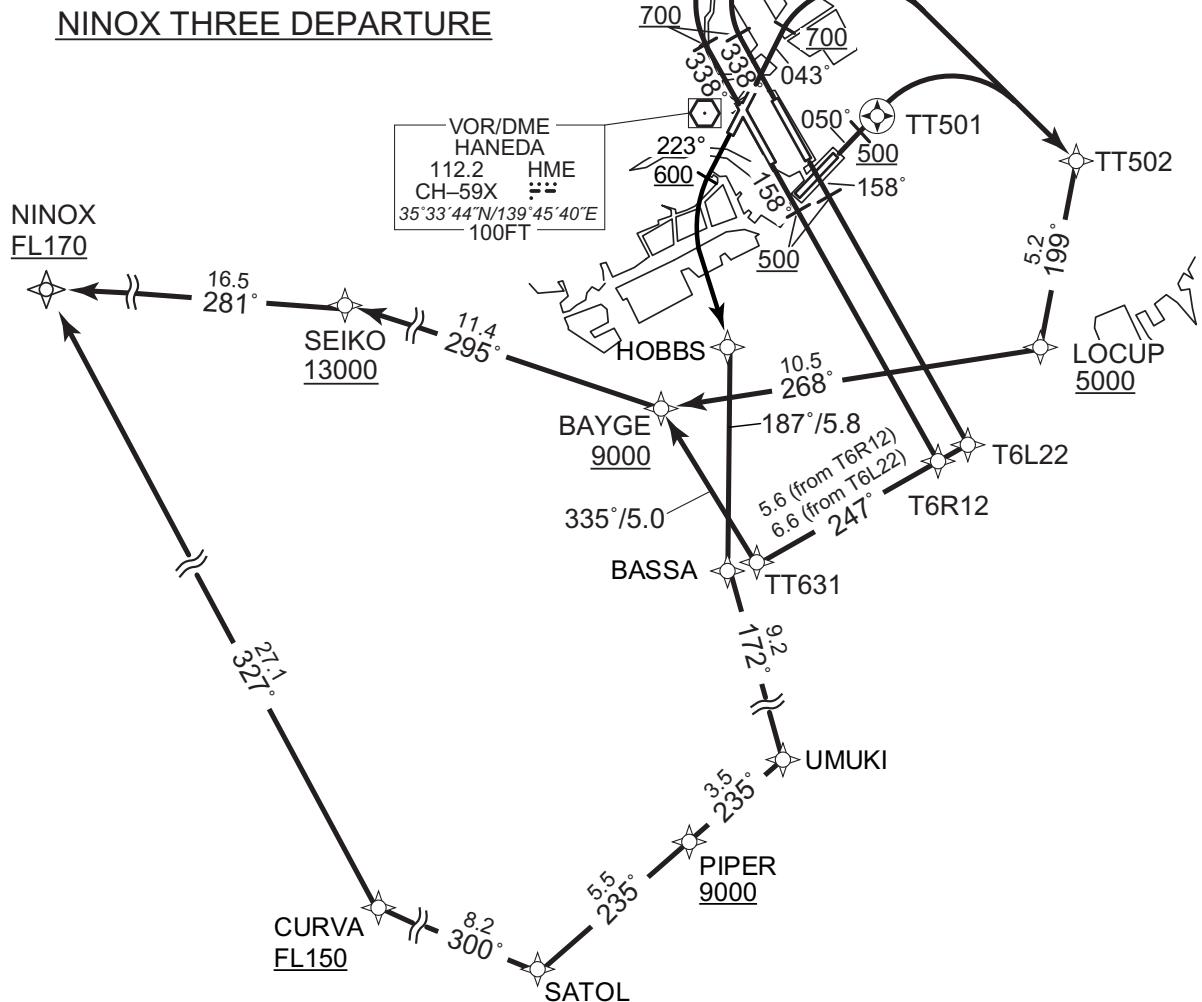
## STANDARD DEPARTURE CHART-INSTRUMENT

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. |  | 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 | Critical DME   |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1   |  |

VAR8°W(2020)



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.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

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

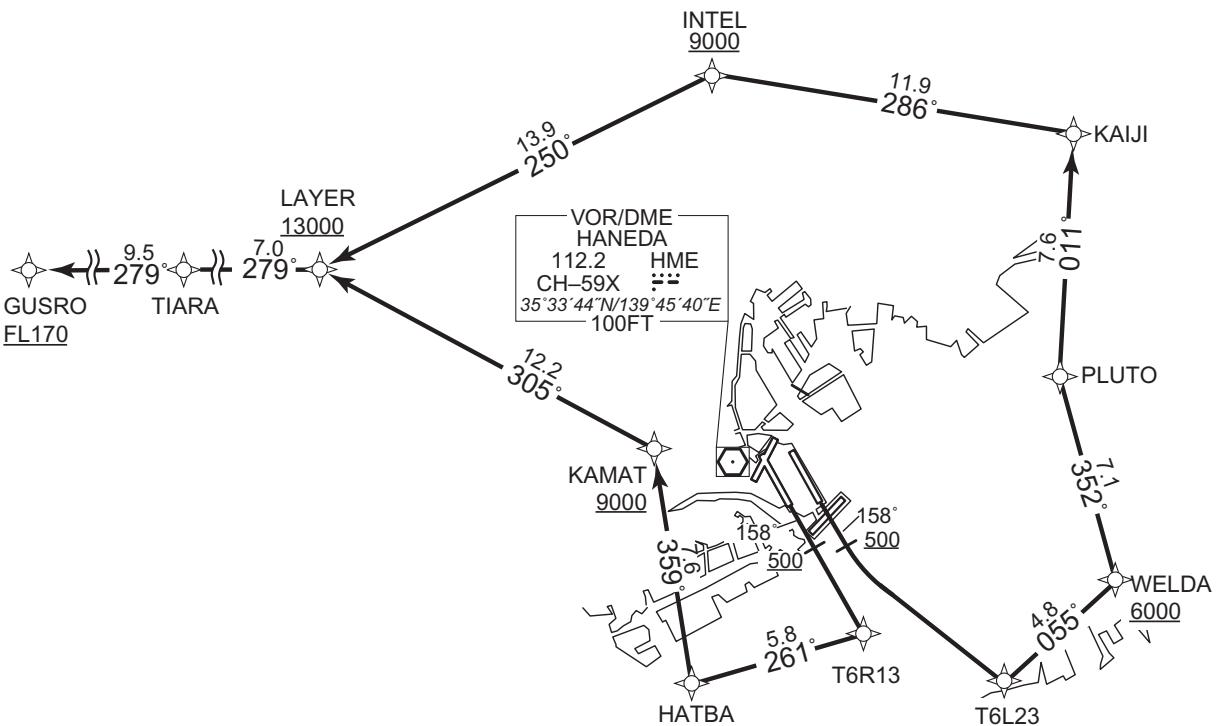
RNAV SID

| TIARA ONE A DEPARTURE  |  | RNAV SID   |
|--|--|--|
| 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. |  | RNAV1  |
| DME GAP  | RNAV1<br>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 | Critical DME<br>RWY16R : HME 1.2NM FM DER - HATBA HYD 2.8NM to HATBA - 1.6NM to HATBA PQD HATBA - 1.6NM to KAMAT<br>RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23 PQD 6.6NM to KAIJI - KAIJI NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY34R : HME 1.0NM FM DER - 1.1NM to PLUTO SND TORAM - 3.1NM to PLUTO PQD 6.6NM to KAIJI - KAIJI NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY34L : HME 0.5NM FM DER - 1.1NM to PLUTO SND TORAM - 3.1NM to PLUTO PQD 6.6NM to KAIJI - KAIJI NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY04 : HME 1.7NM FM DER - 1.1NM to PLUTO SND 2.2NM to TORAM - 3.1NM to PLUTO PQD 6.6NM to KAIJI - KAIJI NRE 6.9NM to INTEL - 6.9NM to LAYER<br>RWY05 : HME DER - 2.7NM to TT502 TT503 - 3.8NM to KAMAT 1.8NM to KAMAT - KAMAT HYD 1.2NM to TT503 - TT503 4.8NM to KAMAT - 3.8NM to KAMAT |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1   |  |

VAR8°W

TIARA ONE A DEPARTURE RWY16R/16L

CHANGE : New PROC.

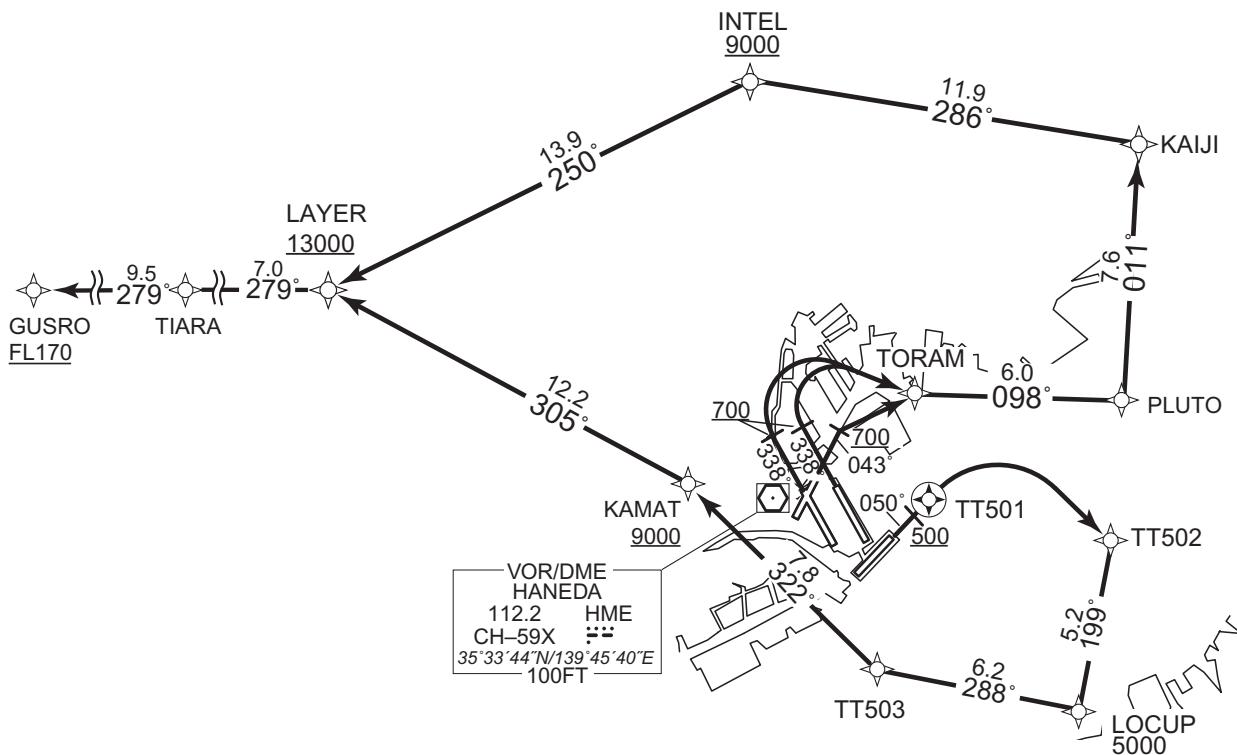


## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

VAR8°W

TIARA ONE A DEPARTURE      RWY 34L/34R/04/05

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

TIARA ONE 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 GUSRO 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 GUSRO 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 GUSRO 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 GUSRO 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 GUSRO 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

TIARA ONE 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              | GUSRO               | —        | 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              | GUSRO               | —        | 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              | GUSRO               | —        | 279 (271.1)   | -7.6               | 9.5           | —              | +FL170        | —            | —              | RNAV1                    |

CHANGE : New PROC.

## 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              | 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              | GUSRO               | —        | 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              | GUSRO               | —        | 279 (271.1)   | -7.6               | 9.5           | —              | +FL170        | —            | —              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| GUSRO               | 353944.8N / 1390813.1E | T6L23               | 352627.6N / 1395539.1E |
| HATBA               | 352623.4N / 1394315.9E | T6R13               | 352800.8N / 1395006.4E |
| INTEL               | 354553.0N / 1394340.2E | TIARA               | 353934.0N / 1391954.2E |
| 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 |

CHANGE : New PROC.

## STANDARD DEPARTURE CHART-INSTRUMENT

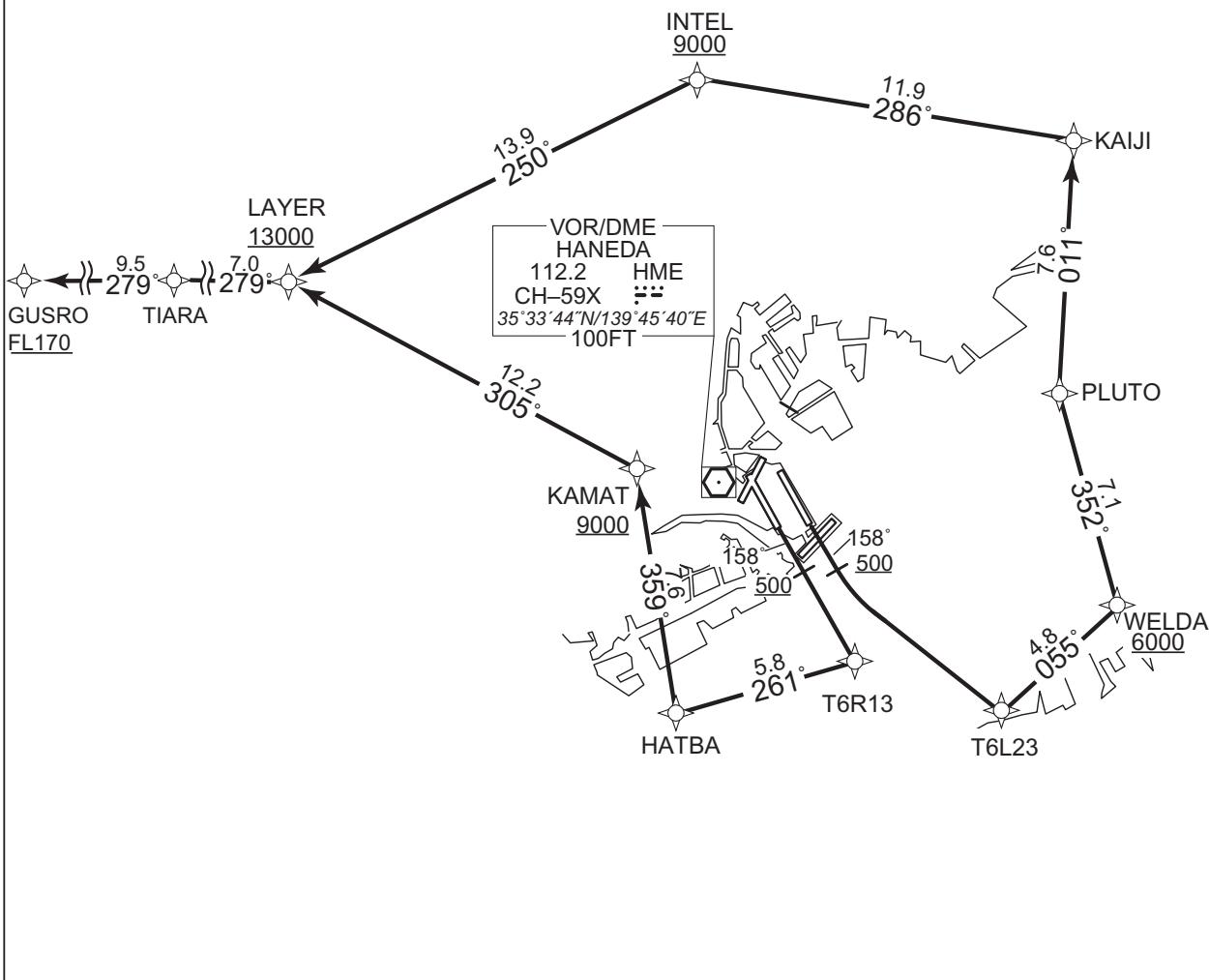
RJTT/TOKYO INTL

RNAV SID

| TIARA 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. |  |              |
| 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 | Critical DME |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1   |              |

VAR8°W

TIARA ONE B DEPARTURE RWY16R/16L



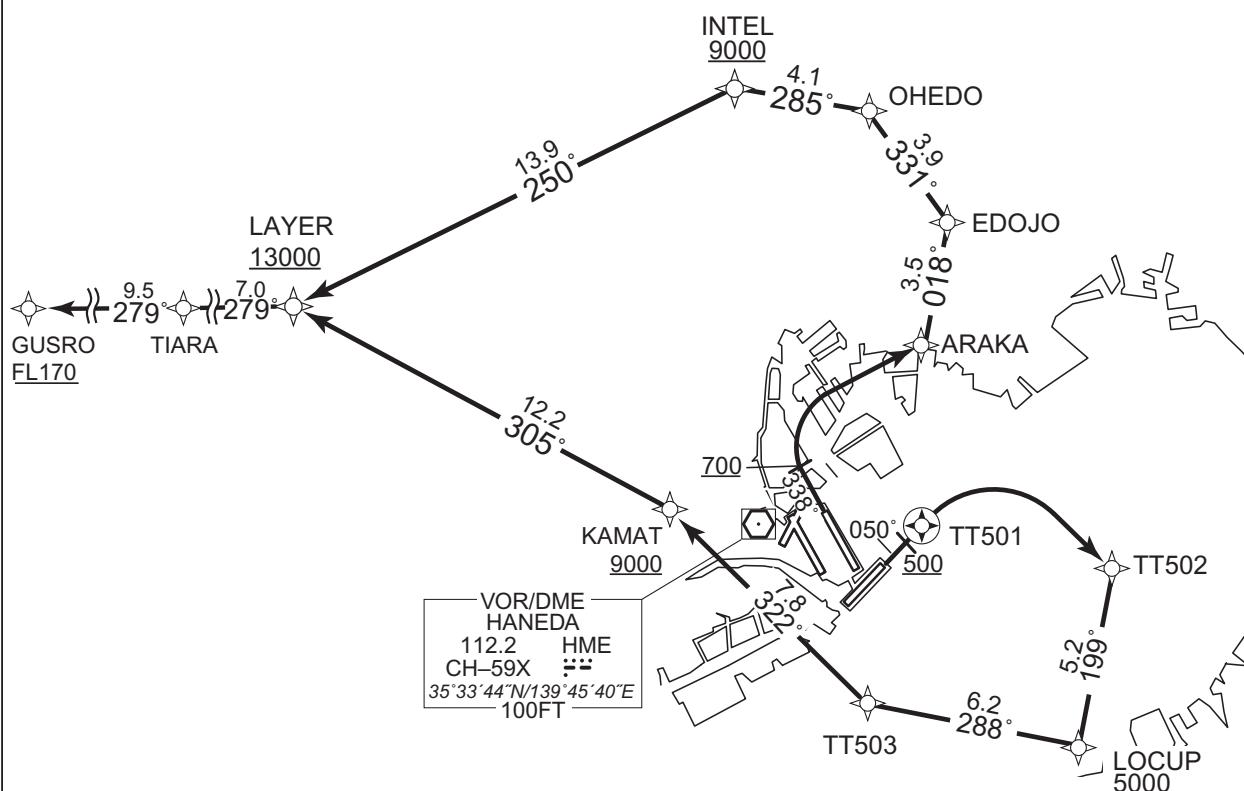
STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

VAR8°W

TIARA ONE B DEPARTURE      RWY 34R/05



CHANGE : New PROC.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

TIARA ONE 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 GUSRO 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 GUSRO 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 GUSRO 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 GUSRO at or above FL170.

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

**TIARA 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              | 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              | GUSRO               | –        | 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              | GUSRO               | –        | 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              | GUSRO               | –        | 279 (271.1)   | -7.6               | 9.5           | –              | +FL170        | –            | –              | RNAV1                    |

CHANGE : New PROC.

## 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              | GUSRO               | —        | 279 (271.1)   | -7.6               | 9.5           | —              | +FL170        | —            | —              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| ARAKA               | 353848.8N / 1395041.9E | OHEDO               | 354523.4N / 1394838.6E |
| EDOJO               | 354214.0N / 1395129.9E | PLUTO               | 353632.1N / 1395736.8E |
| GUSRO               | 353944.8N / 1390813.1E | T6L23               | 352627.6N / 1395539.1E |
| HATBA               | 352623.4N / 1394315.9E | T6R13               | 352800.8N / 1395006.4E |
| 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 | WELDA               | 352941.4N / 1395956.7E |

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

TIARA ONE C DEPARTURE

RNAV1

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

※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.

2) RADAR service required.

DME GAP

RWY16R : DER - 1.2NM FM DER  
RWY16L : DER - 1.0NM FM DER  
RWY34R : DER - 1.0NM FM DER  
RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT

Critical DME

RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11  
PQD 6.6NM to KAIJI - KAIJI

NRE 6.9NM to INTEL - 6.9NM to LAYER  
RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23  
PQD 6.6NM to KAIJI - KAIJI

NRE 6.9NM to INTEL - 6.9NM to LAYER  
RWY05 : HME DER - 2.7NM to TT502

TT503 - 3.8NM to KAMAT

1.8NM to KAMAT - KAMAT

HYD 1.2NM to TT503 - TT503

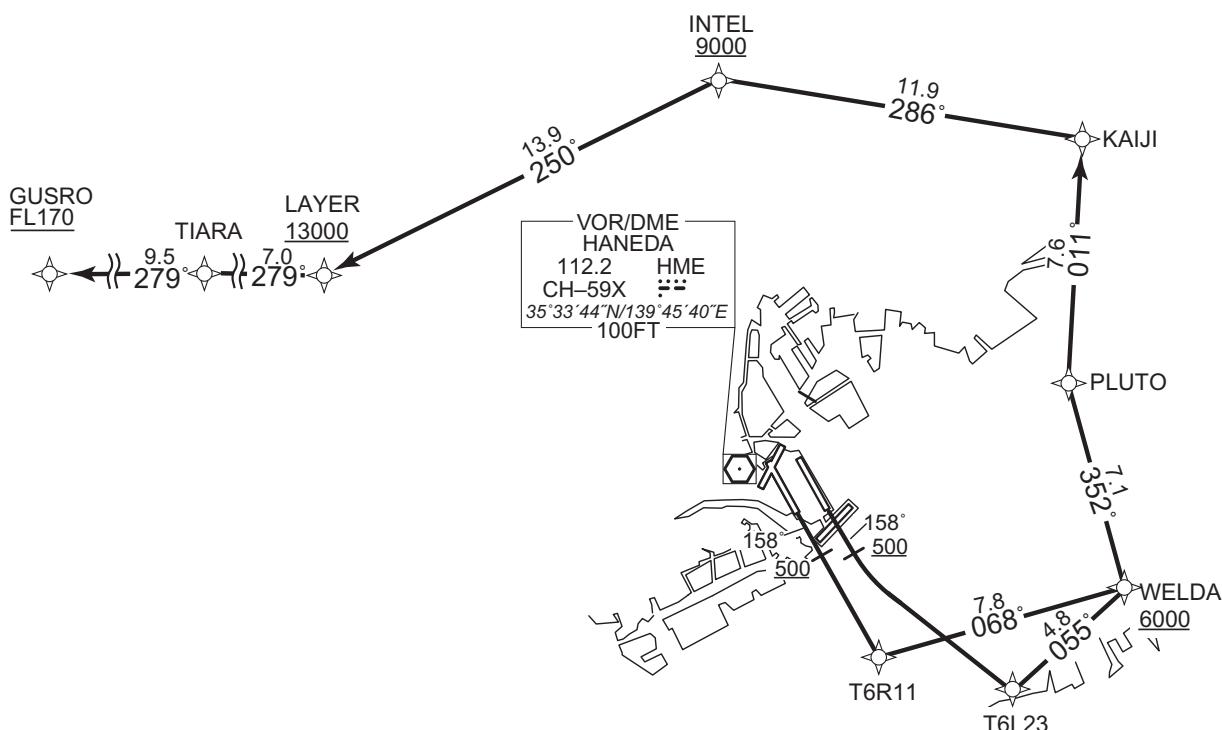
4.8NM to KAMAT - 3.8NM to KAMAT

Inappropriate Navaids

See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1

VAR8°W

TIARA ONE C DEPARTURE RWY16R/16L

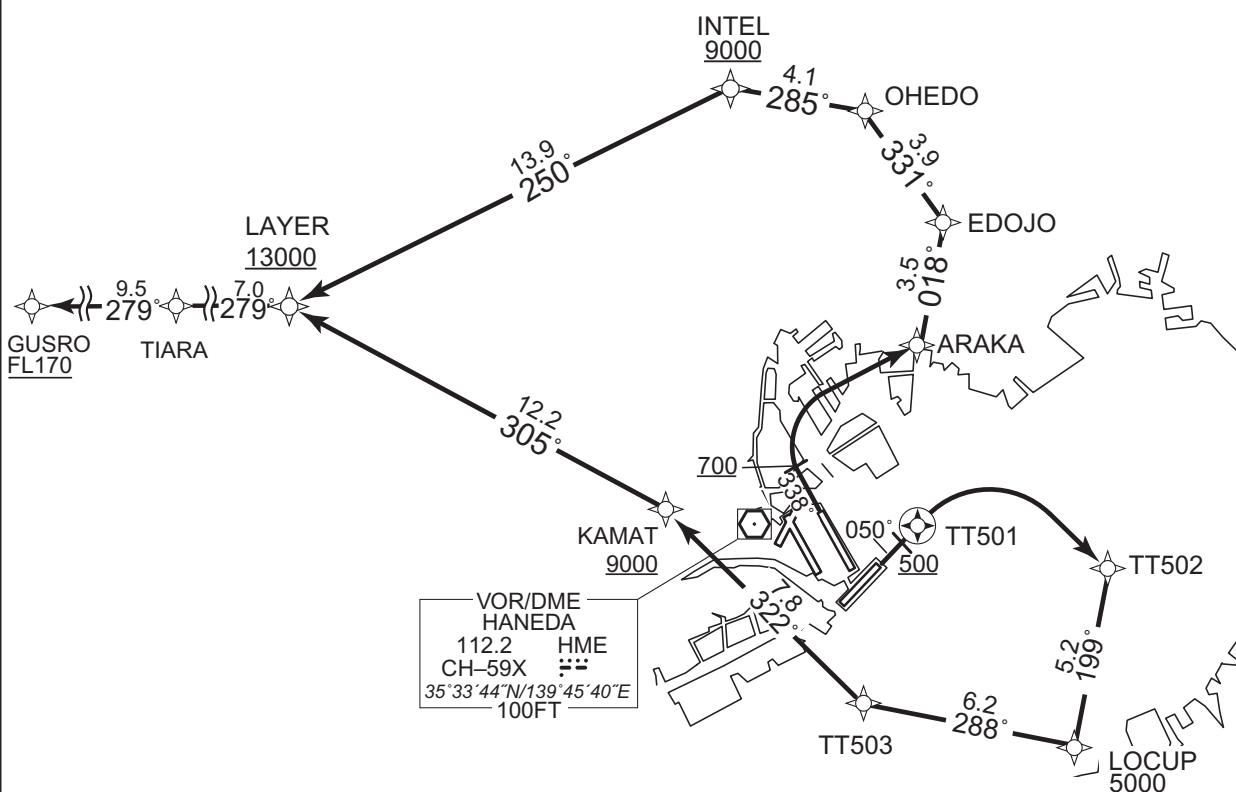


## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

VAR8°W

TIARA ONE C DEPARTURE      RWY 34R/05

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

TIARA 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 INTEL at or above 9000FT, to LAYER at or above 13000FT, to TIARA, to GUSRO 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 GUSRO 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 GUSRO 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 GUSRO at or above FL170.

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

TIARA 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              | 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              | GUSRO               | —        | 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              | GUSRO               | —        | 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              | GUSRO               | —        | 279 (271.1)   | -7.6               | 9.5           | —              | +FL170        | —            | —              | RNAV1                    |

## 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              | GUSRO               | -        | 279 (271.1)   | -7.6               | 9.5           | -              | +FL170        | -            | -              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| ARAKA               | 353848.8N / 1395041.9E | PLUTO               | 353632.1N / 1395736.8E |
| EDOJO               | 354214.0N / 1395129.9E | T6L23               | 352627.6N / 1395539.1E |
| GUSRO               | 353944.8N / 1390813.1E | 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 | WELDA               | 352941.4N / 1395956.7E |
| OHEDO               | 354523.4N / 1394838.6E |                     |                        |

CHANGE : New PROC.

## STANDARD DEPARTURE CHART-INSTRUMENT

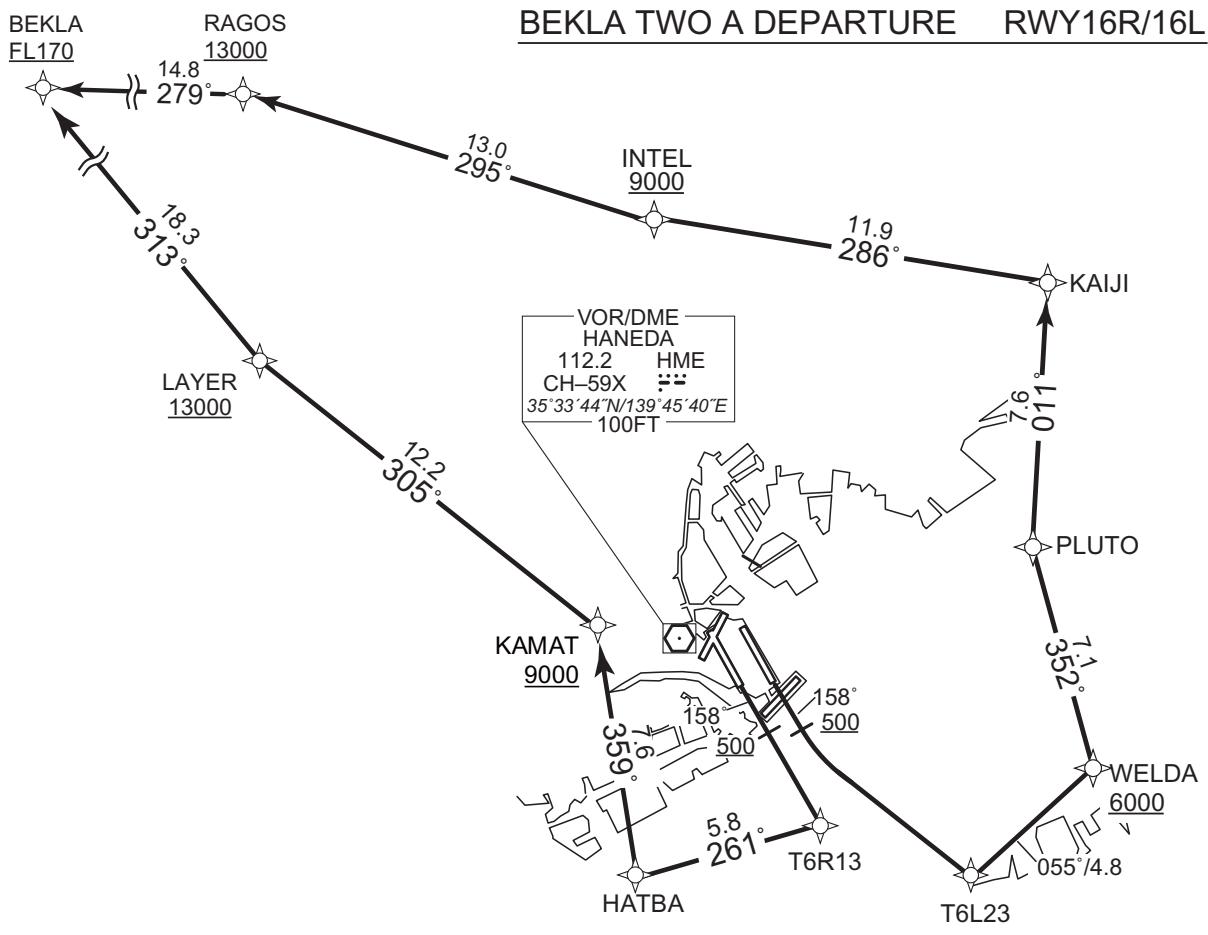
RJTT/TOKYO INTL

RNAV SID

| BEKLA TWO A DEPARTURE  |   | RNAV SID     |
|--|---|--------------|
| 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. |   |              |
| 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 | Critical DME |
| 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

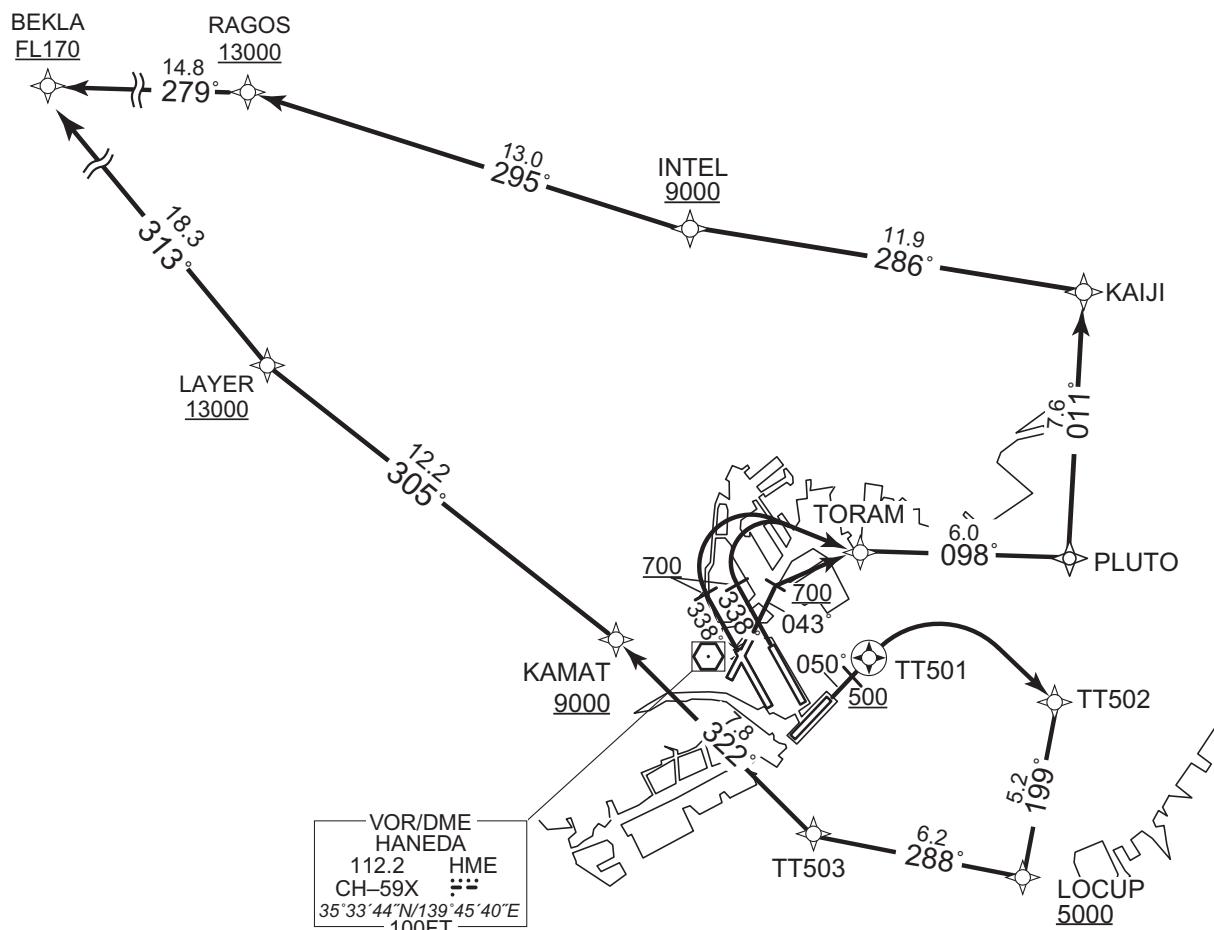
RJTT/TOKYO INTL

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.

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

| 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 |

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

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

BEKLA TWO B DEPARTURE

RNAV1

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

※The aircraft equipped with only DME/DME/IRU  
must be able to update its position without delay  
at the starting point of take-off rolling.

2) RADAR service required.

DME GAP

RWY16R : DER - 1.2NM FM DER  
RWY16L : DER - 1.0NM FM DER  
RWY34R : DER - 1.0NM FM DER  
RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT

Critical DME

RWY16R : HME 1.2NM FM DER - HATBA  
HYD 2.8NM to HATBA - 1.6NM to HATBA  
PQD HATBA - 1.6NM to KAMAT  
RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23  
PQD 6.6NM to KAIJI - KAIJI  
NRE 6.9NM to INTEL - INTEL  
RWY05 : HME DER - 2.7NM to TT502  
TT503 - 3.8NM to KAMAT  
1.8NM to KAMAT - KAMAT  
HYD 1.2NM to TT503 - TT503  
4.8NM to KAMAT - 3.8NM to KAMAT

Inappropriate  
Navaids

See AD1.1.6.10.3.Inappropriate NAVAIDs for  
RNAV1

VAR8°W(2020)

CHANGE : PROC renamed. VAR. RTE after KAMAT.

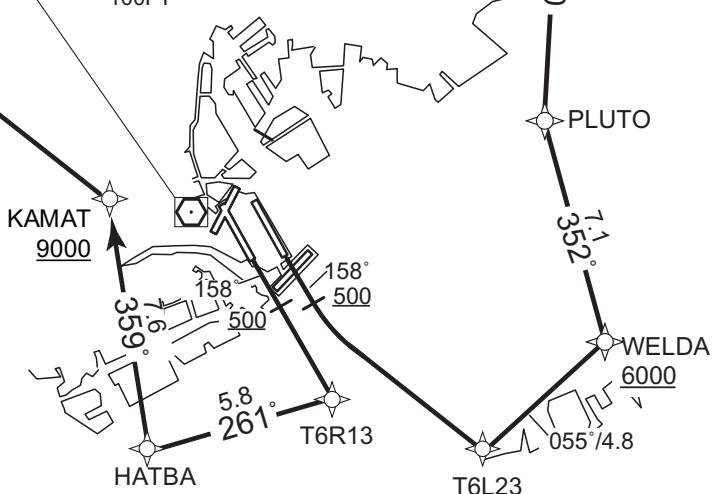
BEKLA  
FL170

RAGOS  
13000

BEKLA TWO B DEPARTURE

RWY16R/16L

VOR/DME  
HANEDA  
112.2 HME  
CH-59X :::  
35°33'44"N/139°45'40"E  
100FT

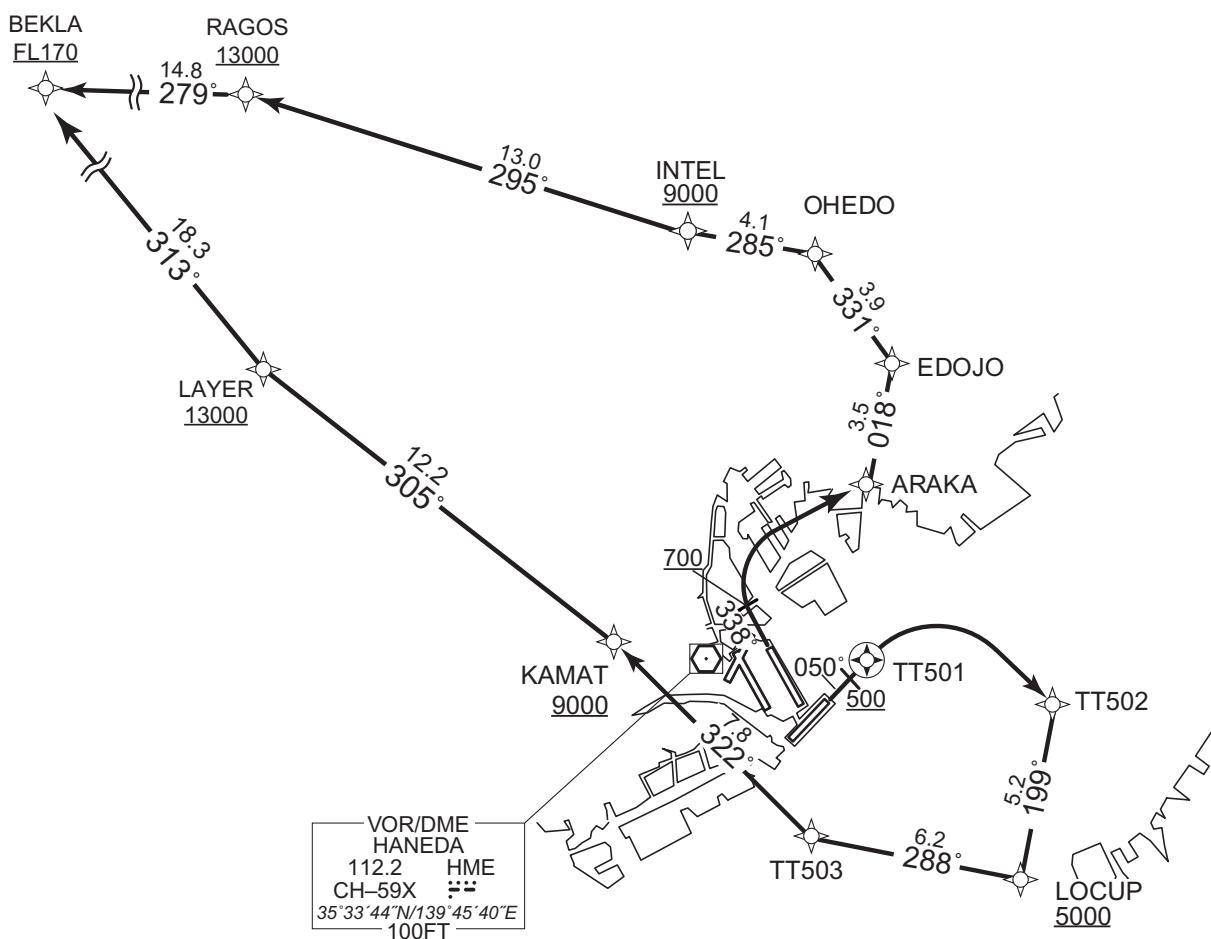


## STANDARD DEPARTURE CHART-INSTRUMENT

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

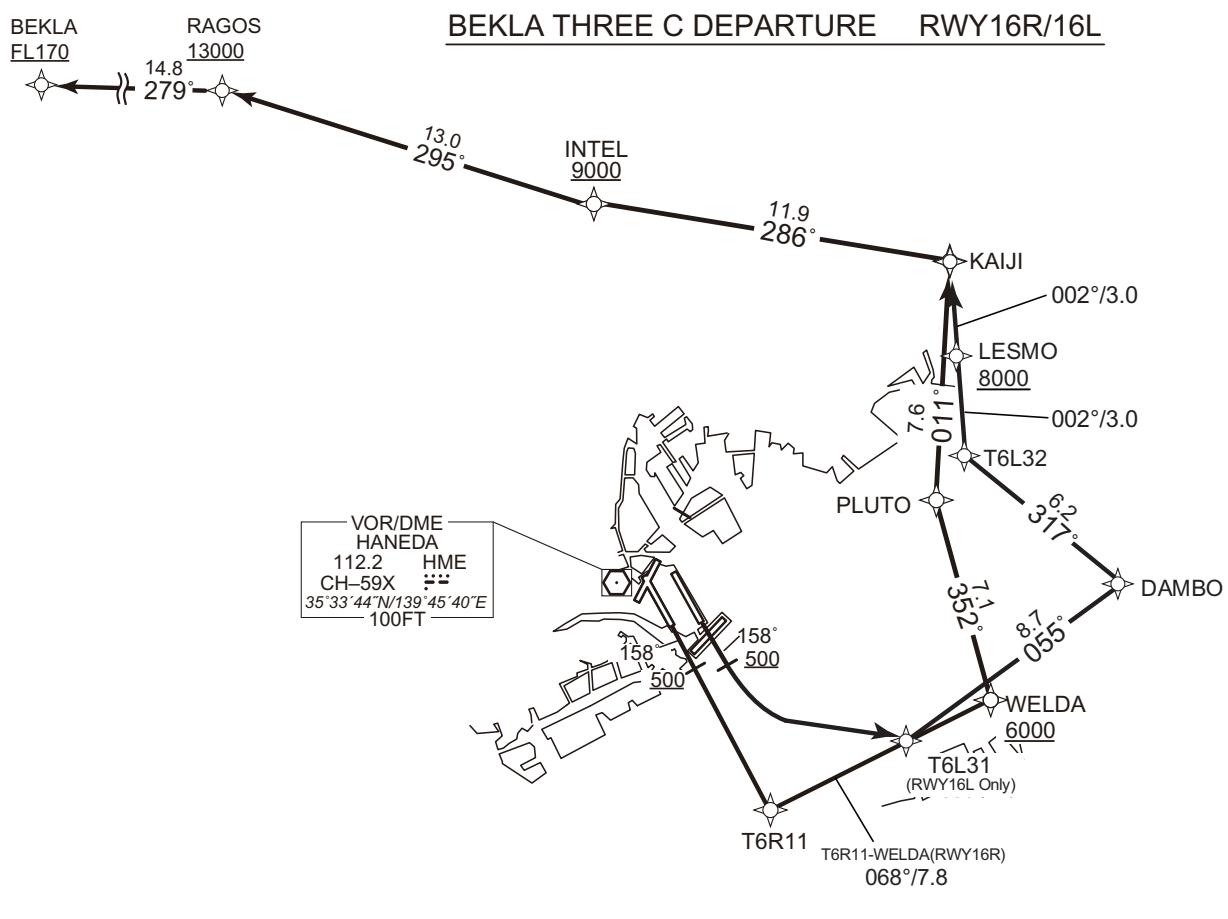
RJTT/TOKYO INTL

RNAV SID

| BEKLA THREE 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. |  |              |
| 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 | Critical DME |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1   |              |

VAR8°W

CHANGE : PROC renamed. PROC course until KAIJI(RWY16L).



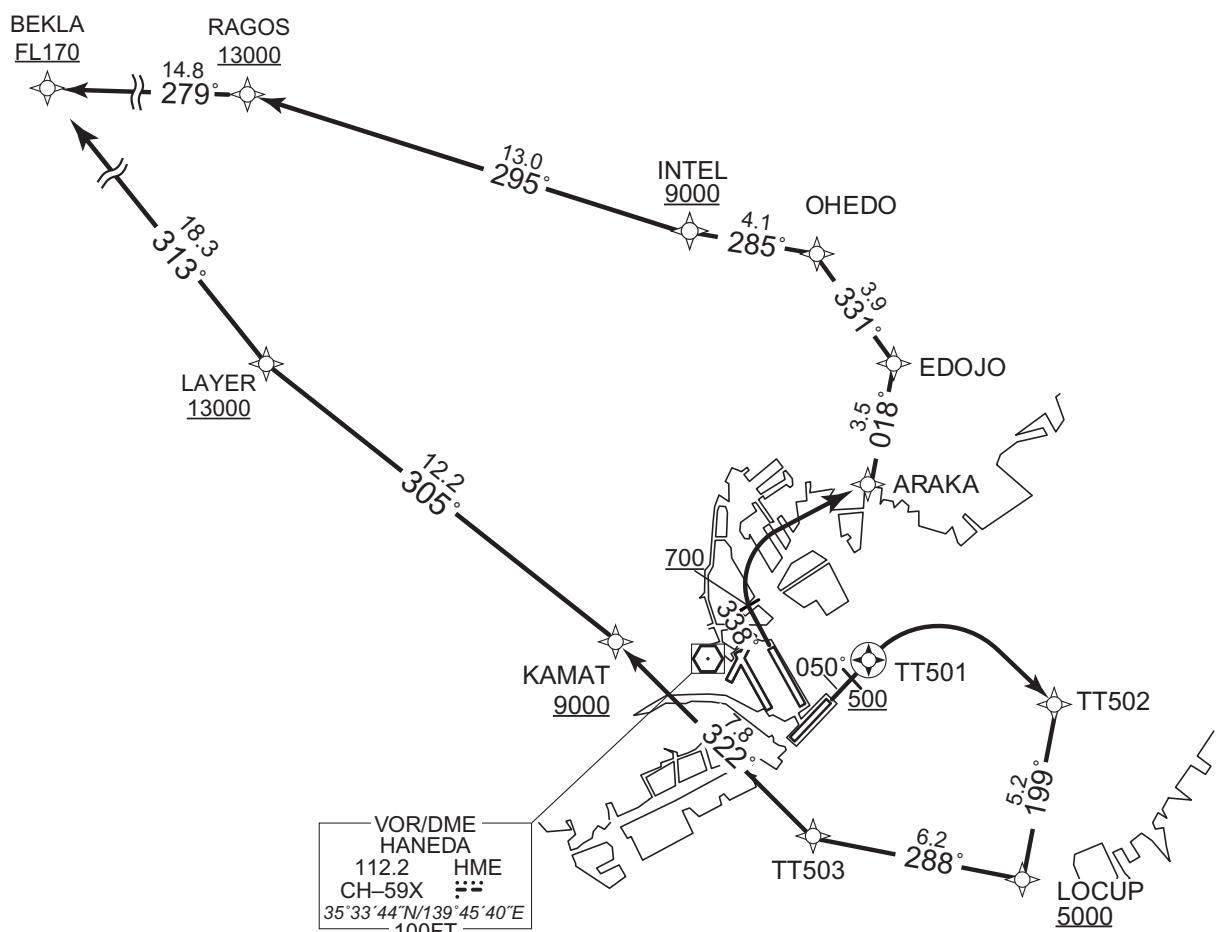
STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

VAR8°W

BEKLA THREE C DEPARTURE RWY34R/05



CHANGE : PROC renamed.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

BEKLA THREE 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 T6L31, to DAMBO, to T6L32, to LESMO at or above 8000FT, 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.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

BEKLA THREE 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              | 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              | INTEL               | —        | 286 (278.4)   | -7.6               | 11.9          | —              | +9000         | —            | —              | RNAV1                    |
| 008           | TF              | RAGOS               | —        | 295 (287.2)   | -7.6               | 13.0          | —              | +13000        | —            | —              | RNAV1                    |
| 009           | 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. PROG course(RWY16L).

## 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                    |

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 |
| DAMBO               | 353416.5N / 1400443.4E | RAGOS               | 354942.2N / 1392821.2E |
| EDOJO               | 354214.0N / 1395129.9E | T6L31               | 352822.8N / 1395648.0E |
| INTEL               | 354553.0N / 1394340.2E | T6L32               | 353810.9N / 1395852.2E |
| KAIJI               | 354409.6N / 1395806.6E | T6R11               | 352552.5N / 1395137.2E |
| KAMAT               | 353353.6N / 1394148.9E | TT501               | 353328.7N / 1395029.9E |
| LAYER               | 353925.4N / 1392829.5E | TT502               | 353224.4N / 1395720.7E |
| LESMO               | 354110.3N / 1395829.4E | TT503               | 352828.0N / 1394840.4E |
| LOCUP               | 352718.8N / 1395608.5E | WELDA               | 352941.4N / 1395956.7E |

CHANGE : PROC course(RWY16L).

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

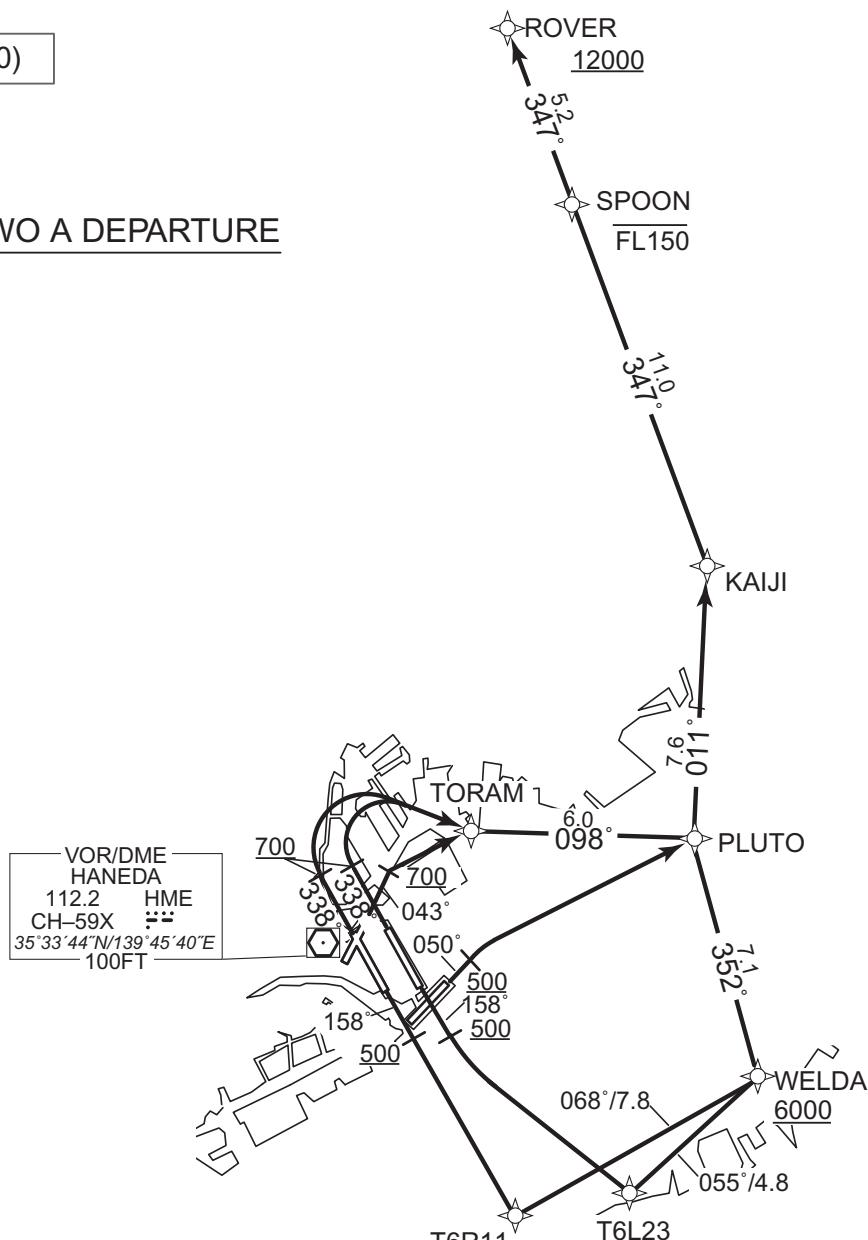
RNAV SID

| 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. |   |  |
| 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 | Critical DME   |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1  | 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 |

VAR8°W(2020)

ROVER TWO A DEPARTURE

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.

## 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                    |

CHANGE : Magnetic Variation. RWY04:NRW01(Course).

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 |

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

ROVER TWO B DEPARTURE

RNAV1

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

※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.

2) RADAR service required.

DME GAP

RWY16R: DER - 1.2NM FM DER  
RWY16L: DER - 1.0NM FM DER  
RWY34R: DER - 1.0NM FM DER

Inappropriate Navaids

See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1

Critical DME

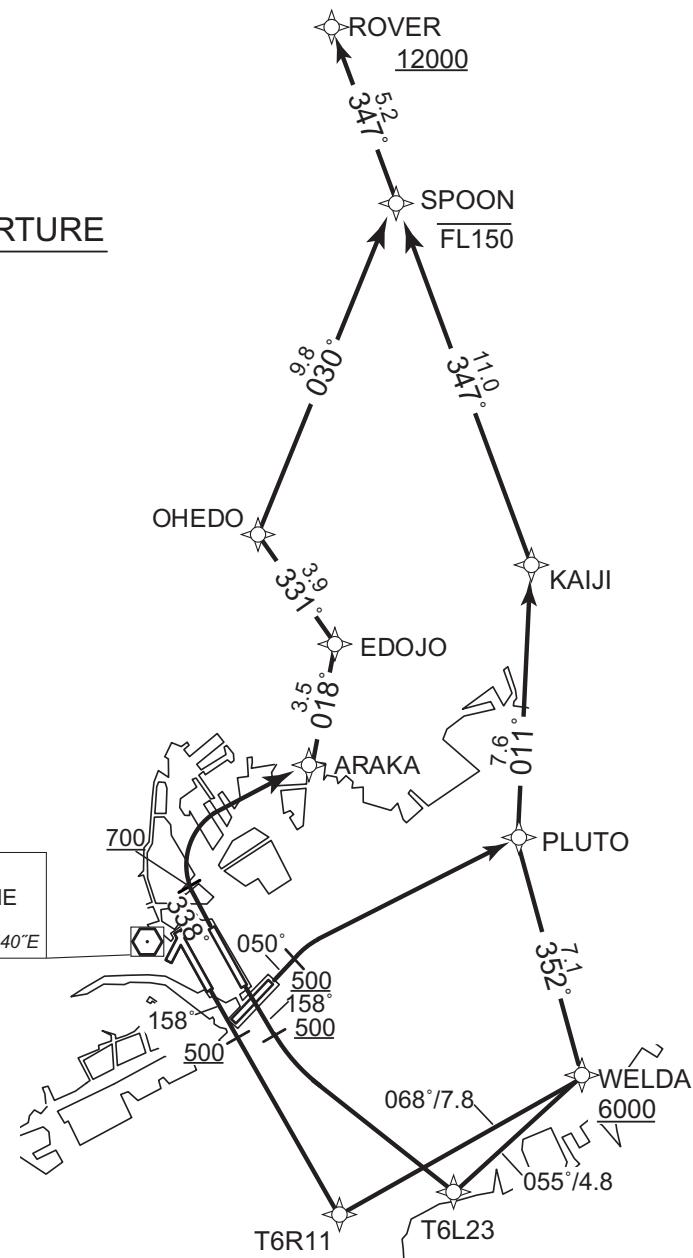
RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11  
PQD 6.6NM to KAIJI - KAIJI  
RWY16L : HME 1.0NM FM DER - 3.5NM to T6L23  
PQD 6.6NM to KAIJI - KAIJI  
RWY05 : HME DER - 2.2NM to PLUTO  
PQD 6.6NM to KAIJI - KAIJI

VAR8°W(2020)

ROVER TWO B DEPARTURE

CHANGE : PROC renamed.

VOR/DME  
HANEDA  
112.2 HME  
CH-59X  
35°33'44"N/139°45'40"E  
100FT



## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

ROVER TWO 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 : PROC renamed.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

ROVER 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              | 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 : PROC renamed.

## 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<br>(042.4) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | PLUTO               | —        | —              | -7.6               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | KAIJI               | —        | 011<br>(003.0) | -7.6               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | SPOON               | —        | 347<br>(339.2) | -7.6               | 11.0          | —              | -FL150        | —            | —              | RNAV1                    |
| 005           | TF              | ROVER               | —        | 347<br>(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 TWO C DEPARTURE

RNAV1

Note 1) DME/DME/IRU or GNSS required.  
 ※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.  
 2) RADAR service required.

DME GAP  
 RWY16R: DER - 1.2NM FM DER  
 RWY16L: DER - 1.0NM FM DER  
 RWY34R: DER - 1.0NM FM DER

Inappropriate Navaids  
 See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1

Critical DME

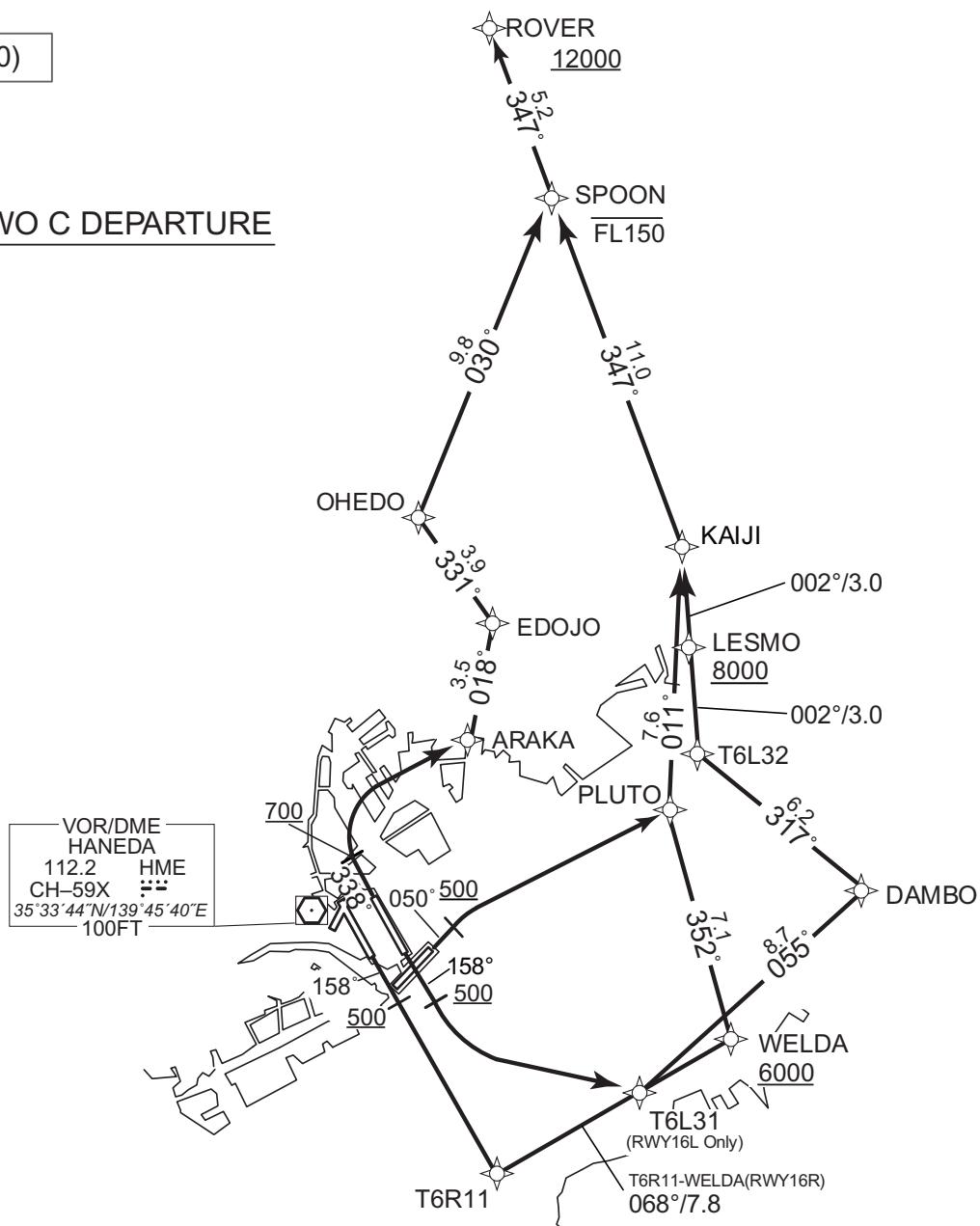
RWY16R : HME 1.2NM FM DER - 1.9NM to T6R11  
 PQD 6.6NM to KAIJI - KAIJI

RWY05 : HME DER - 2.2NM to PLUTO  
 PQD 6.6NM to KAIJI - KAIJI

VAR8°W(2020)

ROVER TWO C DEPARTURE

CHANGE : PROC renamed.



## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

ROVER 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 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 : PROC renamed.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

ROVER 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              | 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 : PROC renamed.

## 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

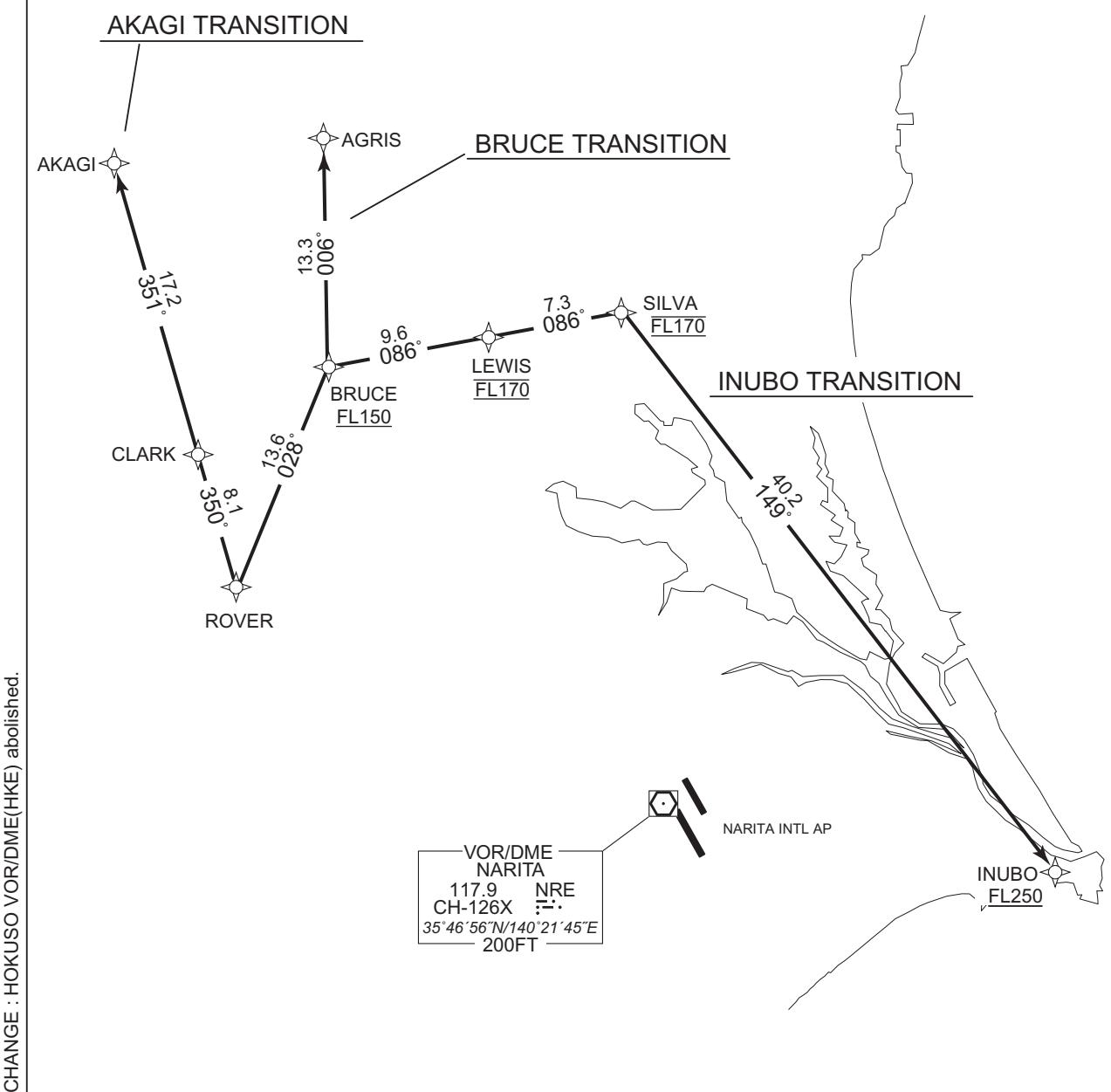
| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| ARAKA               | 353848.8N / 1395041.9E | ROVER               | 355918.3N / 1395059.3E |
| DAMBO               | 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.                 |  |                 |
| 2) RADAR service required.                            |  |                 |
| DME GAP   | -  | Critical DME    |
| Inappropriate Navaids                                 | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1 | -               |

VAR8°W(2019)



## 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                    |

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

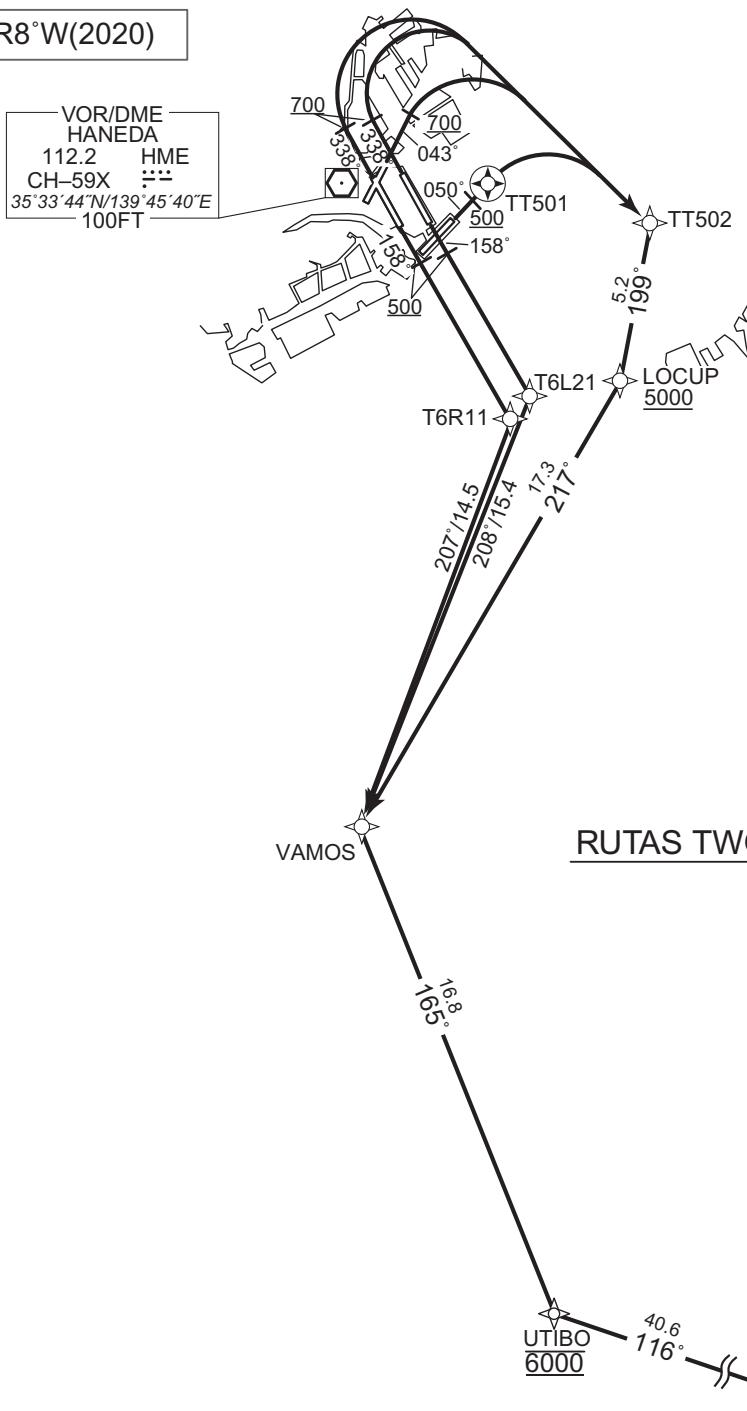
RJTT/TOKYO INTL

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<br><br>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<br><br>See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1  |              |   |

VAR8°W(2020)

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



## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

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<br>(150.0) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | T6R11               | —        | —              | -7.6               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | VAMOS               | —        | 207<br>(199.5) | -7.6               | 14.5          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | UTIBO               | —        | 165<br>(157.0) | -7.6               | 16.8          | —              | 6000          | —            | —              | RNAV1                    |
| 005           | TF              | RUTAS               | —        | 116<br>(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<br>(150.0) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | T6L21               | —        | —              | -7.6               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | VAMOS               | —        | 208<br>(200.7) | -7.6               | 15.4          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | UTIBO               | —        | 165<br>(157.0) | -7.6               | 16.8          | —              | 6000          | —            | —              | RNAV1                    |
| 005           | TF              | RUTAS               | —        | 116<br>(108.4) | -7.6               | 40.6          | —              | —             | —            | —              | RNAV1                    |

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

**STANDARD DEPARTURE CHART-INSTRUMENT**

RJTT/TOKYO INTL

RNAV SID

**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<br>(330.0) | -7.6               | —             | —              | +700          | —            | —              | RNAV1                    |
| 002           | DF              | TT502               | —        | —              | -7.6               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | LOCUP               | —        | 199<br>(190.9) | -7.6               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 004           | TF              | VAMOS               | —        | 217<br>(209.5) | -7.6               | 17.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | UTIBO               | —        | 165<br>(157.0) | -7.6               | 16.8          | —              | 6000          | —            | —              | RNAV1                    |
| 006           | TF              | RUTAS               | —        | 116<br>(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<br>(034.9) | -7.6               | —             | —              | +700          | —            | —              | RNAV1                    |
| 002           | DF              | TT502               | —        | —              | -7.6               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | LOCUP               | —        | 199<br>(190.9) | -7.6               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 004           | TF              | VAMOS               | —        | 217<br>(209.5) | -7.6               | 17.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | UTIBO               | —        | 165<br>(157.0) | -7.6               | 16.8          | —              | 6000          | —            | —              | RNAV1                    |
| 006           | TF              | RUTAS               | —        | 116<br>(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<br>(042.4) | -7.6               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | TT501               | Y        | —              | -7.6               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | DF              | TT502               | —        | —              | -7.6               | —             | R              | —             | —            | —              | RNAV1                    |
| 004           | TF              | LOCUP               | —        | 199<br>(190.9) | -7.6               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 005           | TF              | VAMOS               | —        | 217<br>(209.5) | -7.6               | 17.3          | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | UTIBO               | —        | 165<br>(157.0) | -7.6               | 16.8          | —              | 6000          | —            | —              | RNAV1                    |
| 007           | TF              | RUTAS               | —        | 116<br>(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 |

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

## STANDARD DEPARTURE CHART-INSTRUMENT

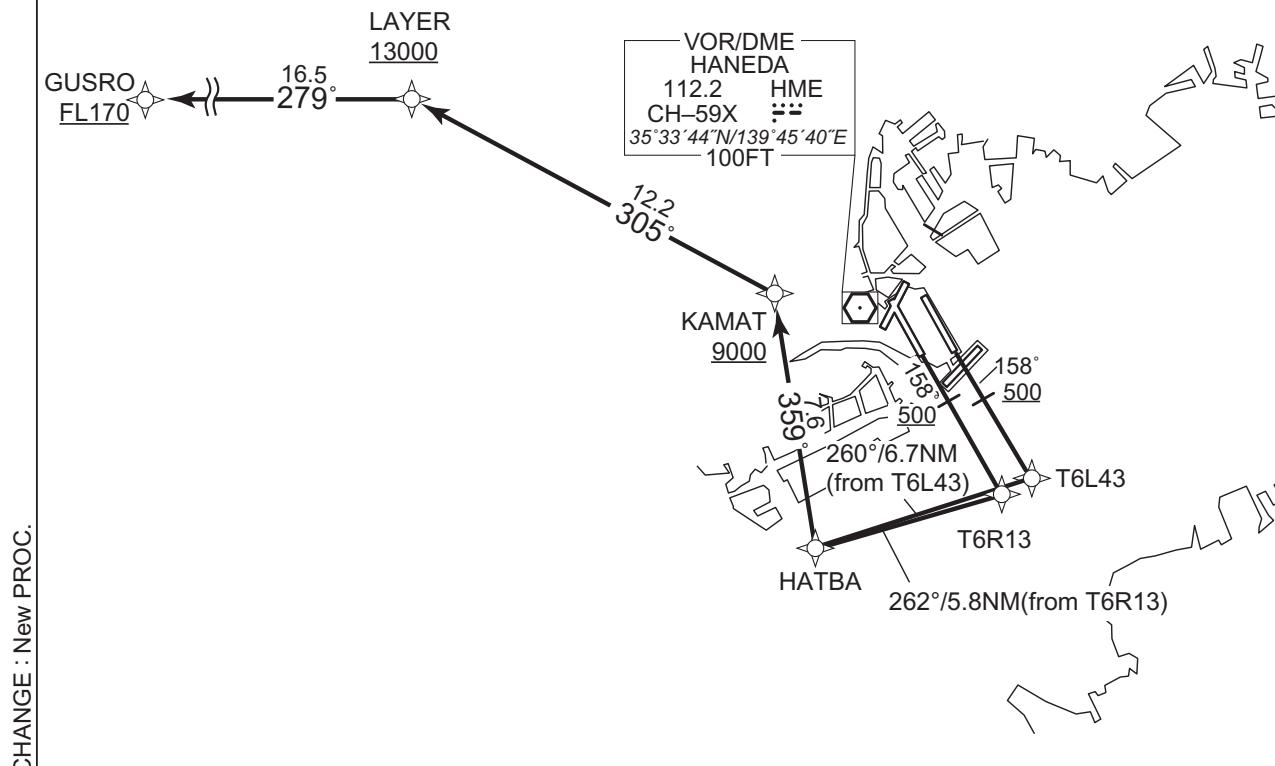
RJTT/TOKYO INTL

RNAV SID

| GUSRO ONE DEPARTURE  |  | RNAV SID  |
|--|--|---|
| 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. |  | RNAV1   |
| DME GAP  | RWY16R : DER - 1.2NM FM DER<br>RWY16L : DER - 1.0NM FM DER<br>RWY34R : DER - 1.0NM FM DER<br>3.8NM to KAMAT – 1.8NM to KAMAT<br>RWY34L : DER - 0.5NM FM DER<br>3.8NM to KAMAT – 1.8NM to KAMAT<br>RWY04 : DER - 1.7NM FM DER<br>3.8NM to KAMAT – 1.8NM to KAMAT<br>RWY05 : 3.8NM to KAMAT - 1.8NM to KAMAT<br>RWY22 : DER – 1.4NM FM DER | Critical DME<br>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 - HATBA<br>HYD 2.8NM to HATBA - 1.6NM to HATBA<br>PQD HATBA - 1.6NM to KAMAT<br>RWY34R : HME 1.0NM FM DER - 2.5NM 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>RWY34L : HME 0.5NM FM DER - 2.5NM 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>RWY04 : HME 1.7NM FM DER - 2.5NM 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>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 |
| Inappropriate Navaids  | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1   |   |

VAR8°W

GUSRO ONE DEPARTURE RWY16R/16L



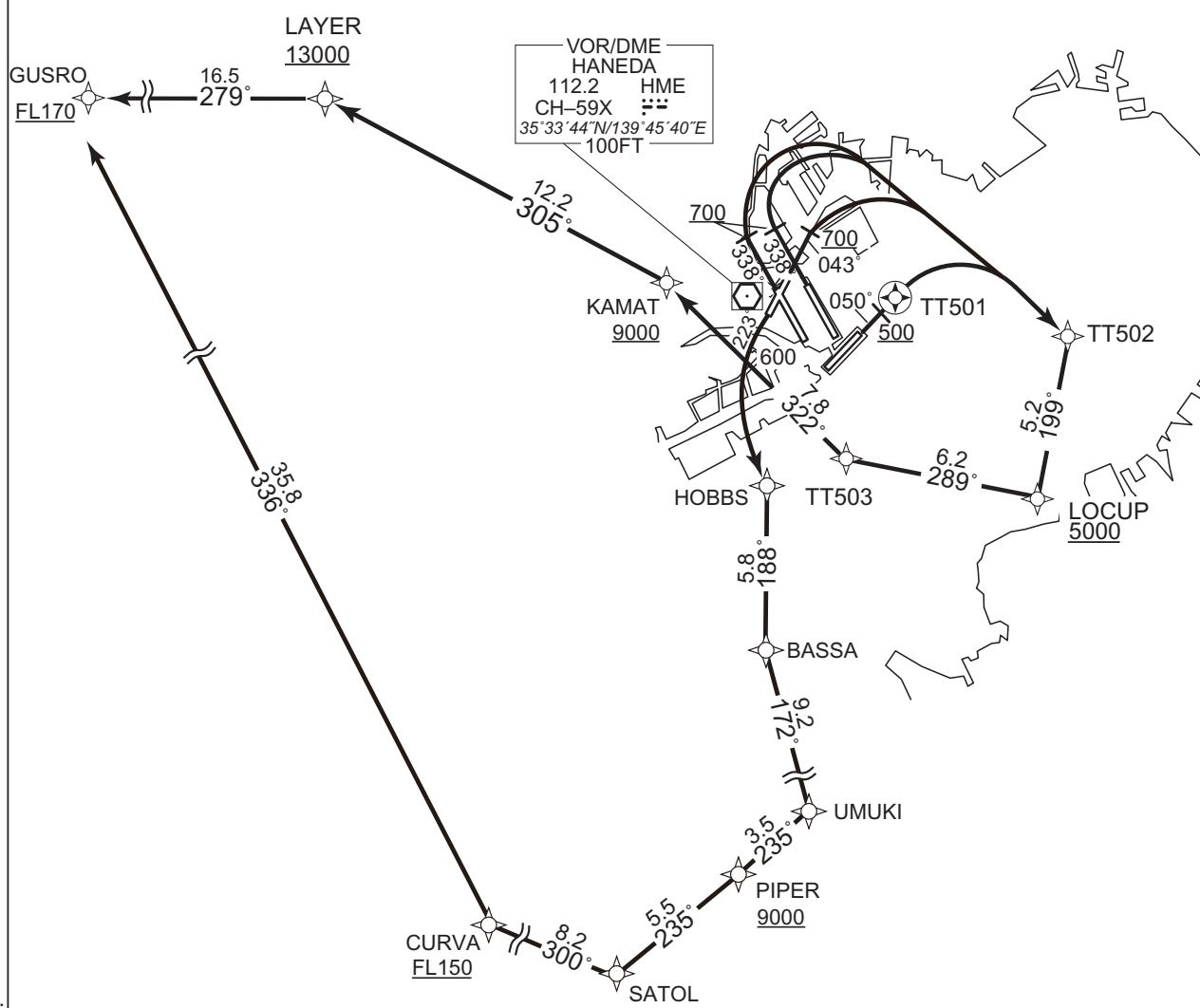
STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

VAR8°W

GUSRO ONE DEPARTURE RWY 34L/34R/04/05/22



## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

GUSRO ONE 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 GUSRO at or above FL170.

RWY16L : Climb on HDG 158° at or above 500FT, direct to T6L43, to HATBA, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO 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 TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO 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 TT503, to KAMAT at or above 9000FT, to LAYER at or above 13000FT, to GUSRO 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 GUSRO 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 GUSRO 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.

## STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

GUSRO ONE 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<br>(150.0) | -7.8               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | T6R13               | —        | —              | -7.8               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | HATBA               | —        | 262<br>(253.8) | -7.8               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | KAMAT               | —        | 359<br>(351.1) | -7.8               | 7.6           | —              | +9000         | —            | —              | RNAV1                    |
| 005           | TF              | LAYER               | —        | 305<br>(297.1) | -7.8               | 12.2          | —              | +13000        | —            | —              | RNAV1                    |
| 006           | TF              | GUSRO               | —        | 279<br>(271.2) | -7.8               | 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<br>(150.0) | -7.8               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | T6L43               | —        | —              | -7.8               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | HATBA               | —        | 260<br>(251.9) | -7.8               | 6.7           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | KAMAT               | —        | 359<br>(351.1) | -7.8               | 7.6           | —              | +9000         | —            | —              | RNAV1                    |
| 005           | TF              | LAYER               | —        | 305<br>(297.1) | -7.8               | 12.2          | —              | +13000        | —            | —              | RNAV1                    |
| 006           | TF              | GUSRO               | —        | 279<br>(271.2) | -7.8               | 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<br>(330.0) | -7.8               | —             | —              | +700          | —            | —              | RNAV1                    |
| 002           | DF              | TT502               | —        | —              | -7.8               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | LOCUP               | —        | 199<br>(190.9) | -7.8               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 004           | TF              | TT503               | —        | 289<br>(280.8) | -7.8               | 6.2           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | KAMAT               | —        | 322<br>(314.2) | -7.8               | 7.8           | —              | +9000         | —            | —              | RNAV1                    |
| 006           | TF              | LAYER               | —        | 305<br>(297.1) | -7.8               | 12.2          | —              | +13000        | —            | —              | RNAV1                    |
| 007           | TF              | GUSRO               | —        | 279<br>(271.2) | -7.8               | 16.5          | —              | +FL170        | —            | —              | RNAV1                    |

CHANGE : New PROC.

## 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)   | -7.8               | —             | —              | +700          | —            | —              | RNAV1                    |
| 002           | DF              | TT502               | —        | —             | -7.8               | —             | R              | —             | —            | —              | RNAV1                    |
| 003           | TF              | LOCUP               | —        | 199 (190.9)   | -7.8               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 004           | TF              | TT503               | —        | 289 (280.8)   | -7.8               | 6.2           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | KAMAT               | —        | 322 (314.2)   | -7.8               | 7.8           | —              | +9000         | —            | —              | RNAV1                    |
| 006           | TF              | LAYER               | —        | 305 (297.1)   | -7.8               | 12.2          | —              | +13000        | —            | —              | RNAV1                    |
| 007           | TF              | GUSRO               | —        | 279 (271.2)   | -7.8               | 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)   | -7.8               | —             | —              | +500          | —            | —              | RNAV1                    |
| 002           | DF              | TT501               | Y        | —             | -7.8               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | DF              | TT502               | —        | —             | -7.8               | —             | R              | —             | —            | —              | RNAV1                    |
| 004           | TF              | LOCUP               | —        | 199 (190.9)   | -7.8               | 5.2           | —              | +5000         | —            | —              | RNAV1                    |
| 005           | TF              | TT503               | —        | 289 (280.8)   | -7.8               | 6.2           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | KAMAT               | —        | 322 (314.2)   | -7.8               | 7.8           | —              | +9000         | —            | —              | RNAV1                    |
| 007           | TF              | LAYER               | —        | 305 (297.1)   | -7.8               | 12.2          | —              | +13000        | —            | —              | RNAV1                    |
| 008           | TF              | GUSRO               | —        | 279 (271.2)   | -7.8               | 16.5          | —              | +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)   | -7.8               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | HOBBS               | —        | —             | -7.8               | —             | L              | —             | —            | —              | RNAV1                    |
| 003           | TF              | BASSA               | —        | 188 (179.9)   | -7.8               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | UMUKI               | —        | 172 (163.9)   | -7.8               | 9.2           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | PIPER               | —        | 235 (227.4)   | -7.8               | 3.5           | —              | +9000         | —            | —              | RNAV1                    |
| 006           | TF              | SATOL               | —        | 235 (227.4)   | -7.8               | 5.5           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF              | CURVA               | —        | 300 (292.2)   | -7.8               | 8.2           | —              | +FL150        | —            | —              | RNAV1                    |
| 008           | TF              | GUSRO               | —        | 336 (328.3)   | -7.8               | 35.8          | —              | +FL170        | —            | —              | RNAV1                    |

CHANGE : New PROC.

STANDARD DEPARTURE CHART-INSTRUMENT

RJTT/TOKYO INTL

RNAV SID

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| BASSA               | 352108.8N / 1394542.2E | PIPER               | 350958.3N / 1394542.0E |
| CURVA               | 350919.0N / 1393124.4E | SATOL               | 350613.3N / 1394043.4E |
| GUSRO               | 353944.8N / 1390813.1E | T6L43               | 352828.4N / 1395104.6E |
| HATBA               | 352623.4N / 1394315.9E | T6R13               | 352800.8N / 1395006.4E |
| HOBBS               | 352653.9N / 1394541.3E | 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 |

CHANGE : New PROC.

**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.

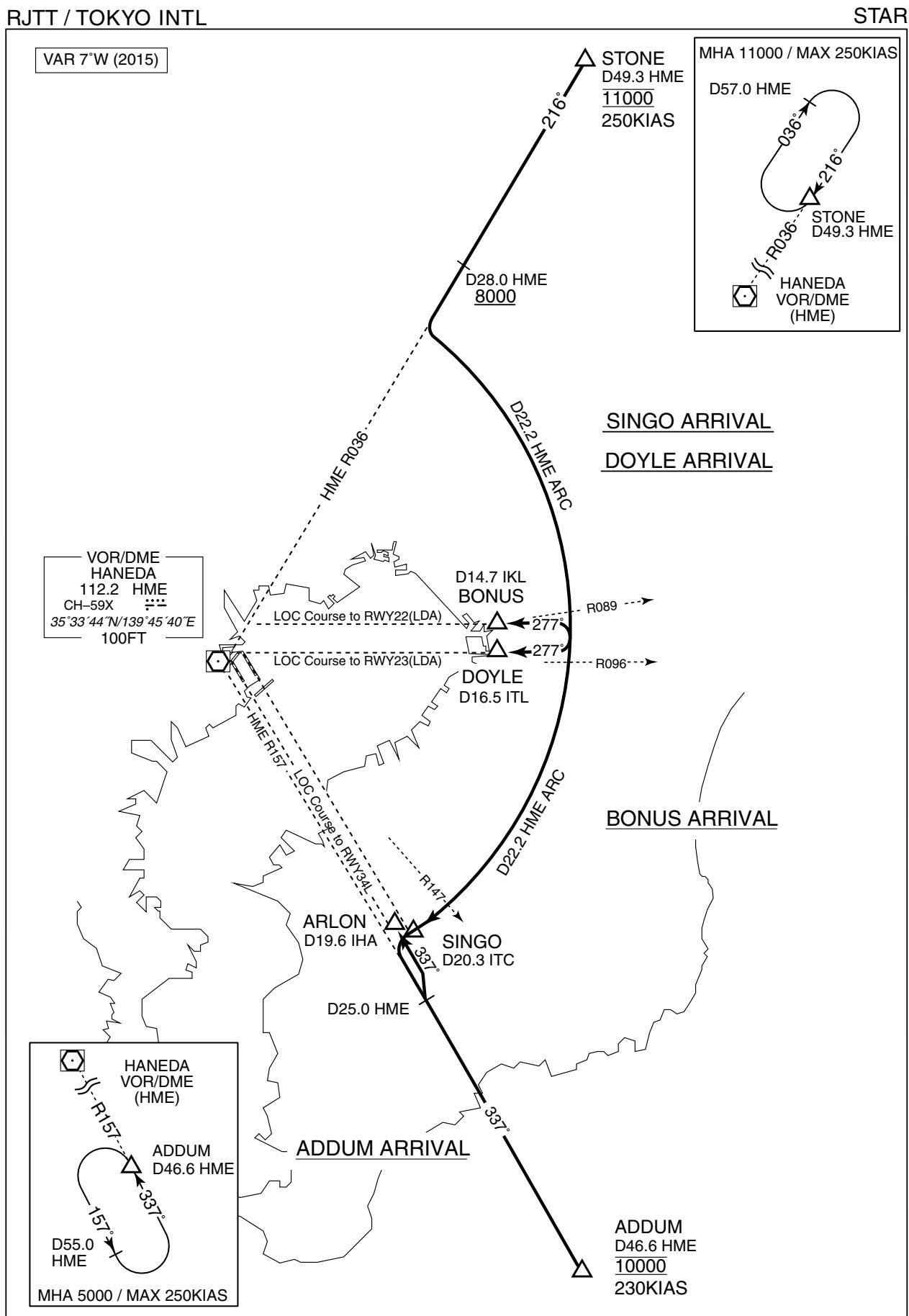
Cross ADDUM at 10000FT.

**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



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.

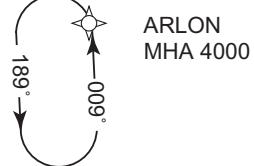
2) RADAR service required.

VAR 8° W(2019)

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

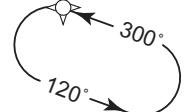


MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

WEDGE MHA 4000



TACAN TATEYAMA  
986 CH-25X  
34°58'15"N/139°50'17"E  
500FT

VORTAC OSHIMA  
113.1 CH-78X  
34°42'44"N/139°24'50"E  
2100FT

XAC  
TT450  
5.0 069°  
15.9 068°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

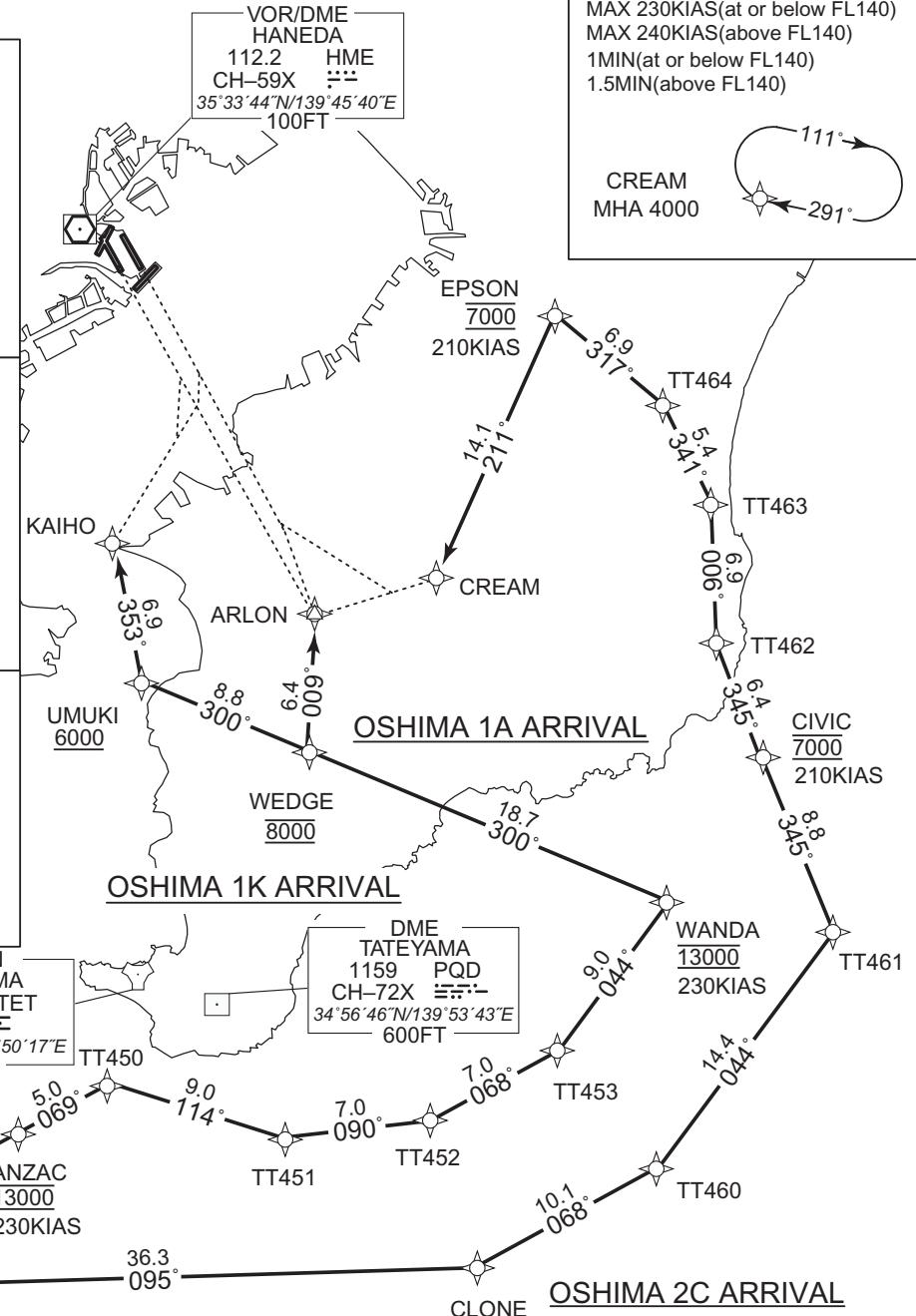
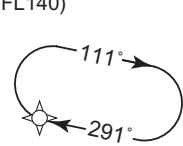
OSHIMA(XAC)  
MHA 5000  
098° 278°

VOR/DME HANEDA  
112.2 CH-59X  
35°33'44"N/139°45'40"E  
100FT

HME

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

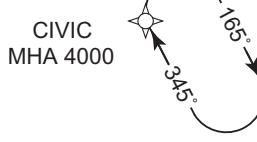
CREAM  
MHA 4000



CHANGE : ACORN abolished. ANZAC established.

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

CIVIC  
MHA 4000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

ANZAC  
MHA 5000  
248° 068°

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

OSHIMA 1A ARRIVAL

From XAC, to ANZAC 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              | ANZAC               | —        | 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)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 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 : ACORN abolished. ANZAC established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY34R/34L

OSHIMA 1K ARRIVAL

From XAC, to ANZAC 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              | ANZAC               | —        | 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)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -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                    |

CHANGE : ACCORN abolished. ANZAC established.

## 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            |
|---------------------|------------------------|---------------------|------------------------|
| ANZAC               | 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 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

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

RNAV STAR RWY34R/34L

RNAV 1

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

VAR 8° W(2019)

VOR/DME  
HANEDA  
112.2 HME  
CH-59X  $\cdots$   
35°33'44"N/139°45'40"E  
100FT

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

KAIHO  
MHA 4000  
 $173^{\circ}$   
 $353^{\circ}$

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

ARLON  
MHA 4000  
 $600^{\circ}$   
 $68^{\circ}$

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

WEDGE  
MHA 4000  
 $300^{\circ}$   
 $120^{\circ}$

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL  
MHA 5000  
 $039^{\circ}$   
 $219^{\circ}$

EPSON  
7000  
210KIAS

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

CREAM  
MHA 4000

AKSEL 2C ARRIVAL

ARLON  
UMUKI  
6000  
 $353^{\circ}$   
 $300^{\circ}$   
 $8.8^{\circ}$   
 $6.4^{\circ}$   
 $009^{\circ}$

AKSEL1A ARRIVAL

TACAN  
ONJUKU  
1191 OJT  
CH-104X  $\cdots$   
35°11'03"N/140°22'17"E  
400FT

TT464  
TT463  
TT462  
TT461

CIVIC  
7000  
210KIAS

WALLY  
12000  
230KIAS

AKSEL1K ARRIVAL

DME  
TATEYAMA  
1159 PQD  
CH-72X  $\cdots$   
34°56'46"N/139°53'43"E  
600FT

TT456  
TT455  
TT454  
CLONE  
 $090^{\circ}$   
 $068^{\circ}$   
 $090^{\circ}$   
 $039^{\circ}$   
 $14.8^{\circ}$   
 $085^{\circ}$   
 $10.1^{\circ}$   
 $068^{\circ}$

AKSEL  
12000 (for AKSEL 1A ARRIVAL, AKSEL 1K ARRIVAL)  
230KIAS (for AKSEL 1A ARRIVAL, AKSEL 1K ARRIVAL)

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

CIVIC  
MHA 4000

$165^{\circ}$   
 $345^{\circ}$

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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 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 : 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)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -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                    |

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)<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            |
|---------------------|------------------------|---------------------|------------------------|
| 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

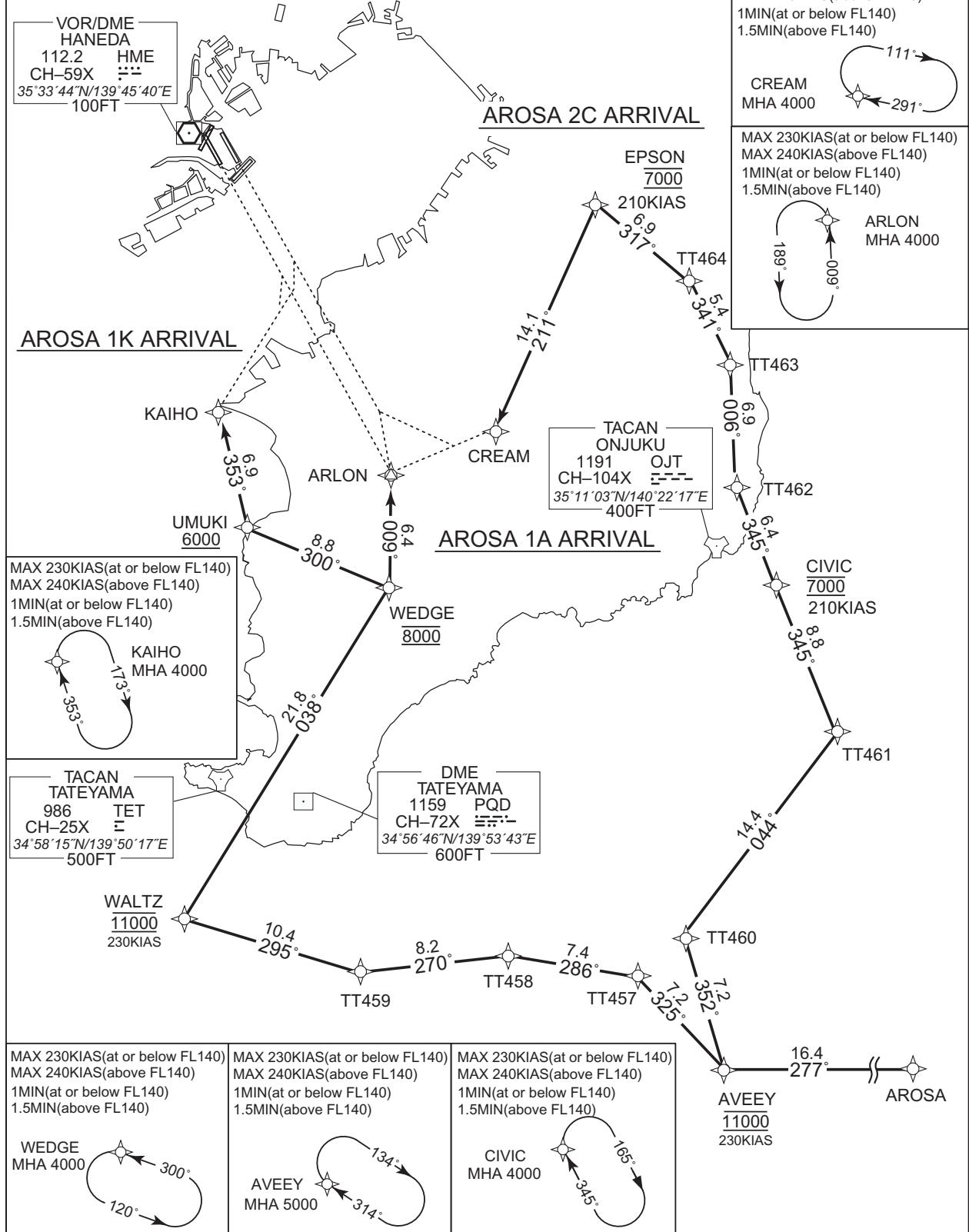
AROSA 1A ARRIVAL / AROSA 1K ARRIVAL  
AROSA 2C ARRIVAL

RNAV 1

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

2) RADAR service required.

VAR 8° W(2019)



## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 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 : 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -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                    |

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)<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            |
|---------------------|------------------------|---------------------|------------------------|
| 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.

VAR 8° W

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

KAIHO  
MHA 4000

NOT TO SCALE

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

ARLON  
MHA 4000

NOT TO SCALE

VOR/DME  
HANEDA  
112.2 HME  
CH-59X :::  
35°33'44"N/139°45'40"E  
100FT

TACAN  
SHIMOFUSA  
980 SHT  
CH-19X :::  
35°48'07"N/140°00'36"E  
100FT

NOT TO SCALE

DME  
MORIYA  
1174 SND  
CH-87X :::  
35°56'06"N/139°58'52"E  
100FT

COPSE

COACH  
8000  
210KIAS

NARITA INTL AP  
VOR/DME  
NARITA  
117.9 NRE  
CH-126X :::  
35°46'56"N/140°21'45"E  
200FT

TT465  
187°  
185°  
9.4°

TT466  
111°  
291°  
98°  
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399°  
400°

CHANGE : ANDEN established. TT469 abolished.

GODIN 2K ARRIVAL

TACAN  
TATEYAMA  
986 TET  
CH-25X :::  
34°58'15"N/139°50'17"E  
500FT

DME  
TATEYAMA  
1159 PQD  
CH-72X :::  
34°56'46"N/139°53'43"E  
600FT

GODIN 2A ARRIVAL

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NOT TO SCALE  
017° 197°  
GODIN MHA 8000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NOT TO SCALE  
017° 197°  
COLOR MHA 8000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NOT TO SCALE  
900° 981°  
COACH MHA 4000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NOT TO SCALE  
111°  
CREAM MHA 4000

TACAN  
ONJUKU  
1191 OJT  
CH-104X :::  
35°11'03"N/140°22'17"E  
400FT

## 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 ANDEN, 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              | ANDEN               | -        | 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 : ANDEN established. TT469 abolished.

## 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 ANDEN, 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              | ANDEN               | -        | 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)<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 | KAIHO               | 353 (345.5)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : ANDEN established. TT469 abolished.

## 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<br>(189.1) | -7.5               | 11.8          | -              | -13000        | -            | -              | RNAV1                    |
| 003           | TF              | COLOR               | -        | 197<br>(189.1) | -7.5               | 11.7          | -              | -11000        | -            | -              | RNAV1                    |
| 004           | TF              | COPSE               | -        | 188<br>(180.8) | -7.5               | 14.3          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | COACH               | -        | 185<br>(177.8) | -7.5               | 9.4           | -              | 8000          | 210          | -              | RNAV1                    |
| 006           | TF              | TT465               | -        | 187<br>(179.6) | -7.5               | 8.0           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | TT466               | -        | 136<br>(128.9) | -7.5               | 6.4           | -              | -             | -            | -              | RNAV1                    |
| 008           | TF              | TT467               | -        | 161<br>(153.5) | -7.5               | 5.0           | -              | -             | -            | -              | RNAV1                    |
| 009           | TF              | EDDIE               | -        | 186<br>(178.0) | -7.5               | 6.4           | -              | 8000          | 210          | -              | RNAV1                    |
| 010           | TF              | CREAM               | -        | 291<br>(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<br>(189.2)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 8000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | COLOR               | 197<br>(189.1)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 8000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | COACH               | 185<br>(177.8)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CREAM               | 291<br>(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            |
|---------------------|------------------------|---------------------|------------------------|
| ANDEN               | 351217.9N / 1400534.7E | GODIN               | 362425.3N / 1401655.9E |
| 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 | UMUKI               | 351219.1N / 1394849.2E |
| EDDIE               | 351447.4N / 1402140.9E |                     |                        |

CHANGE : ANDEN established. TT469 abolished.

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.

VAR 8° W

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

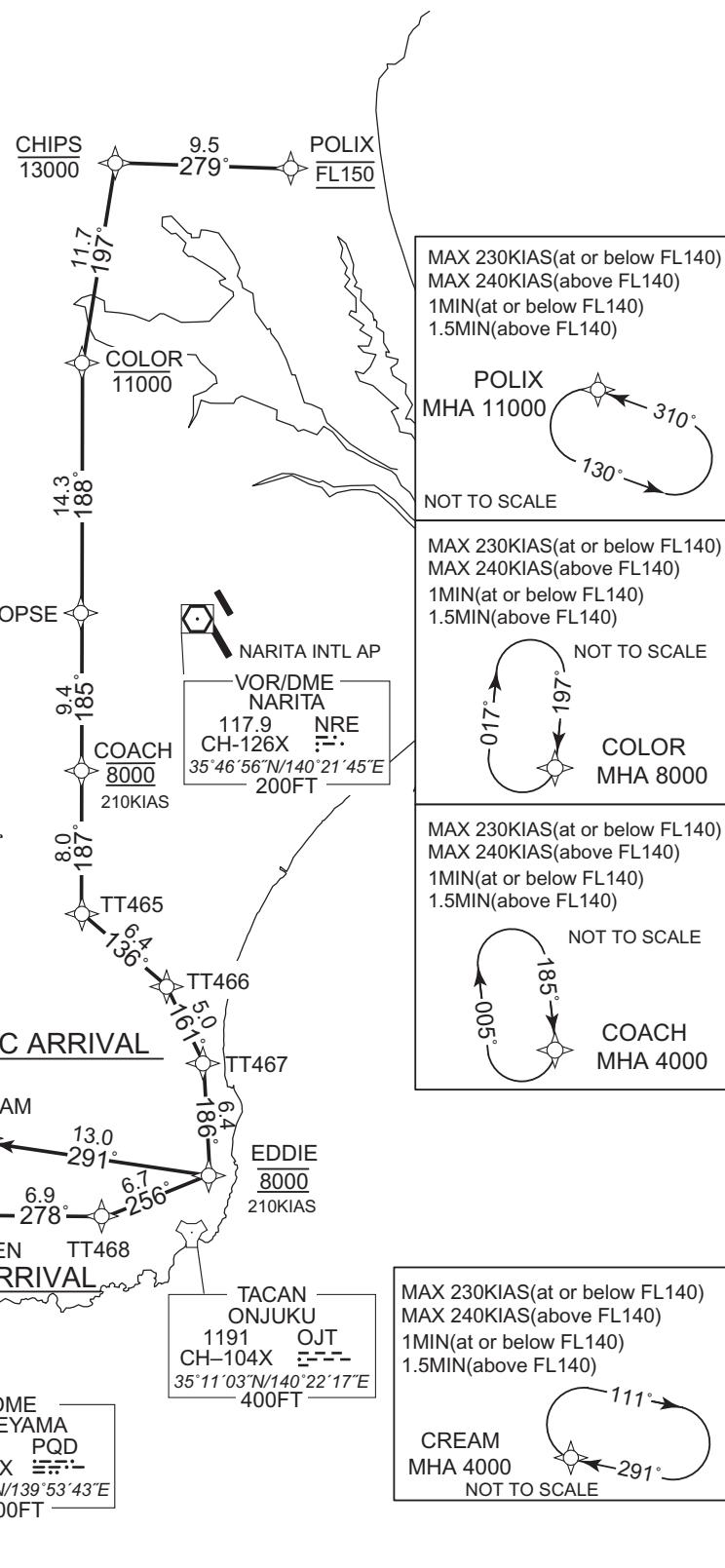
KAIHO  
MHA 4000

NOT TO SCALE

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

ARLON  
MHA 4000

NOT TO SCALE



## 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 ANDEN, 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              | ANDEN               | —        | 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)<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 | ARLON               | 009 (001.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : ANDEN established. TT469 abolished.

## 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 ANDEN, 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              | ANDEN               | -        | 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                    |

CHANGE : ANDEN established. TT469 abolished.

| 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 | 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 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            |
|---------------------|------------------------|---------------------|------------------------|
| ANDEN               | 351217.9N / 1400534.7E | KAIHO               | 351857.8N / 1394642.4E |
| 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 | UMUKI               | 351219.1N / 1394849.2E |
| EDDIE               | 351447.4N / 1402140.9E |                     |                        |

CHANGE : ANDEN established. TT469 abolished.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

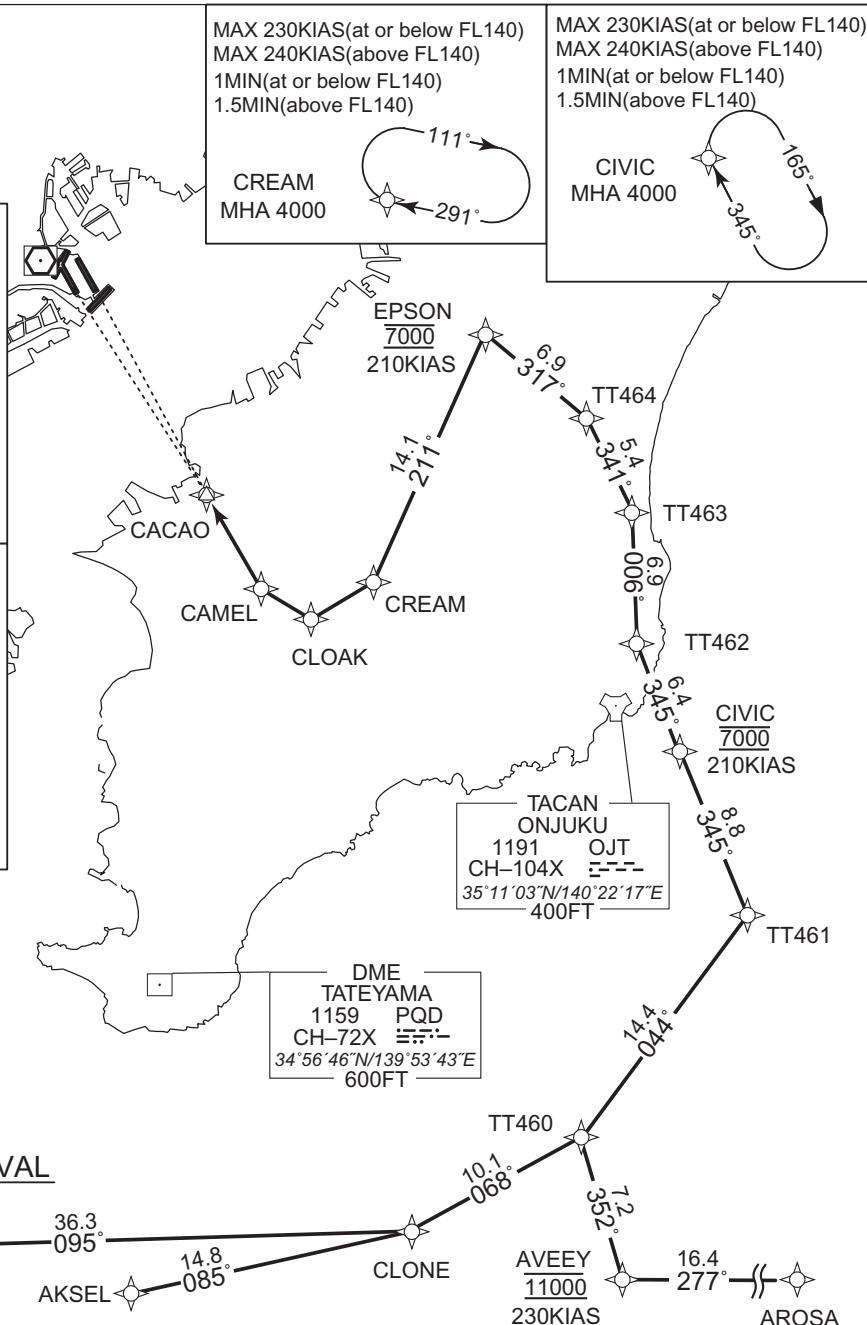
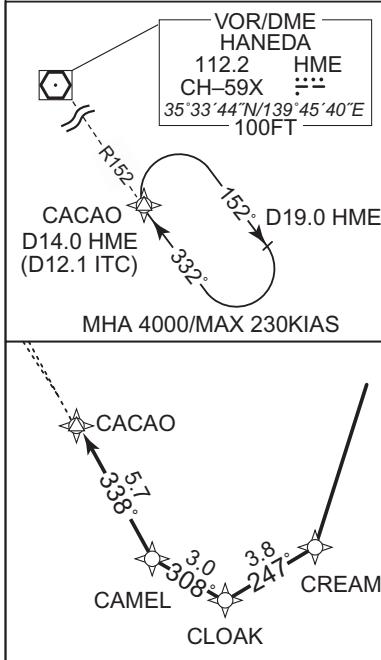
RNAV STAR RWY34R/34L

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

RNAV 1

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

VAR 8° W(2019)



CHANGE : AVEEY renamed

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

OSHIMA(XAC)  
MHA 5000

098° → 278°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL  
MHA 5000

039° → 219°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AVEEY  
MHA 5000

134° → 314°

## 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)<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                    |

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)<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                    |

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, 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              | 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)<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                    |

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

GODIN 1H ARRIVAL  
POLIX 1H ARRIVAL

RNAV STAR RWY34R/34L

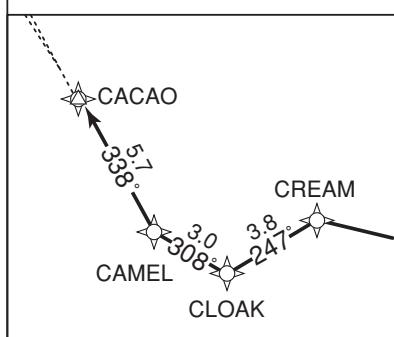
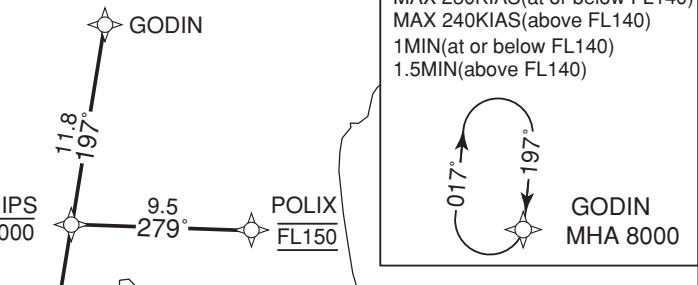
RNAV 1

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

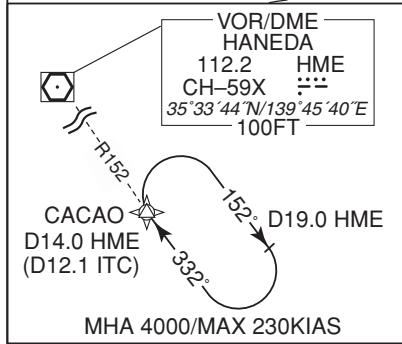
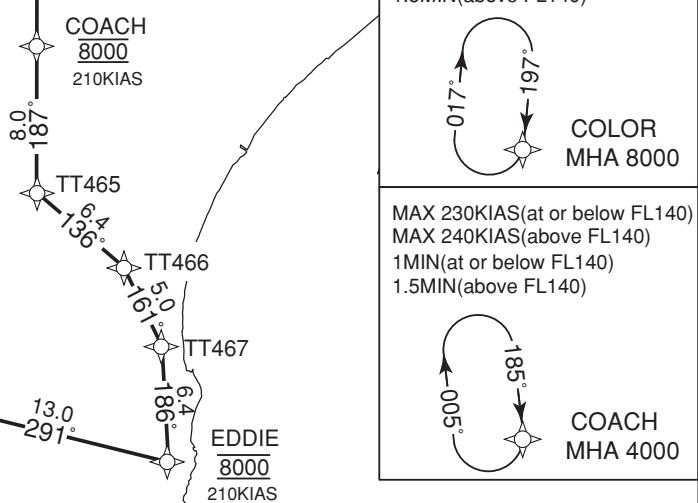
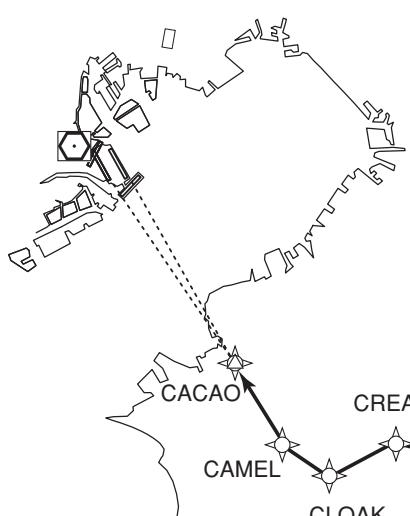
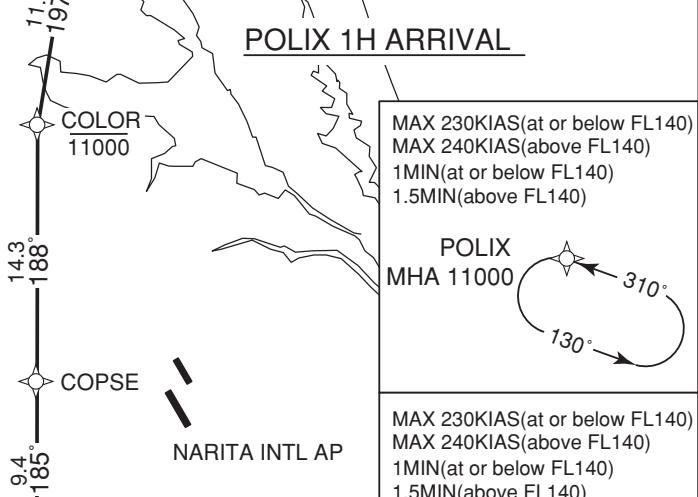
2) RADAR service required.

VAR 8° W(2019)

GODIN 1H ARRIVAL



POLIX 1H ARRIVAL



111° → 291° ← 291°

## 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)<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 | 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

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 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

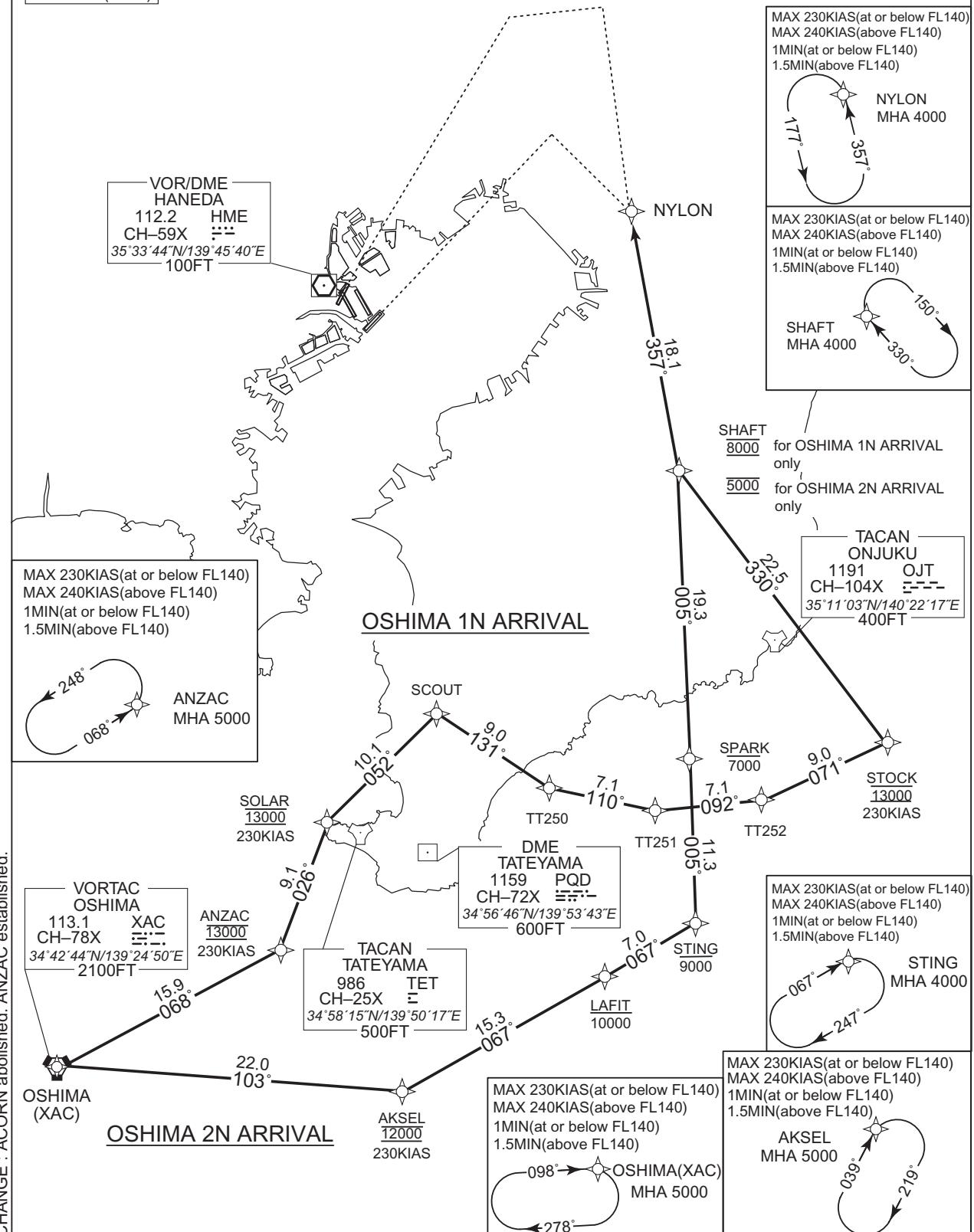
OSHIMA 1N ARRIVAL  
OSHIMA 2N ARRIVAL

RNAV 1

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

2) RADAR service required.

VAR 8° W(2019)



## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

OSHIMA 1N ARRIVAL

From XAC, to ANZAC 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              | ANZAC               | —        | 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)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 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 : ACCORN abolished. ANZAC established.

## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | AKSEL               | 039 (031.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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 : ACCORN abolished. ANZAC established.

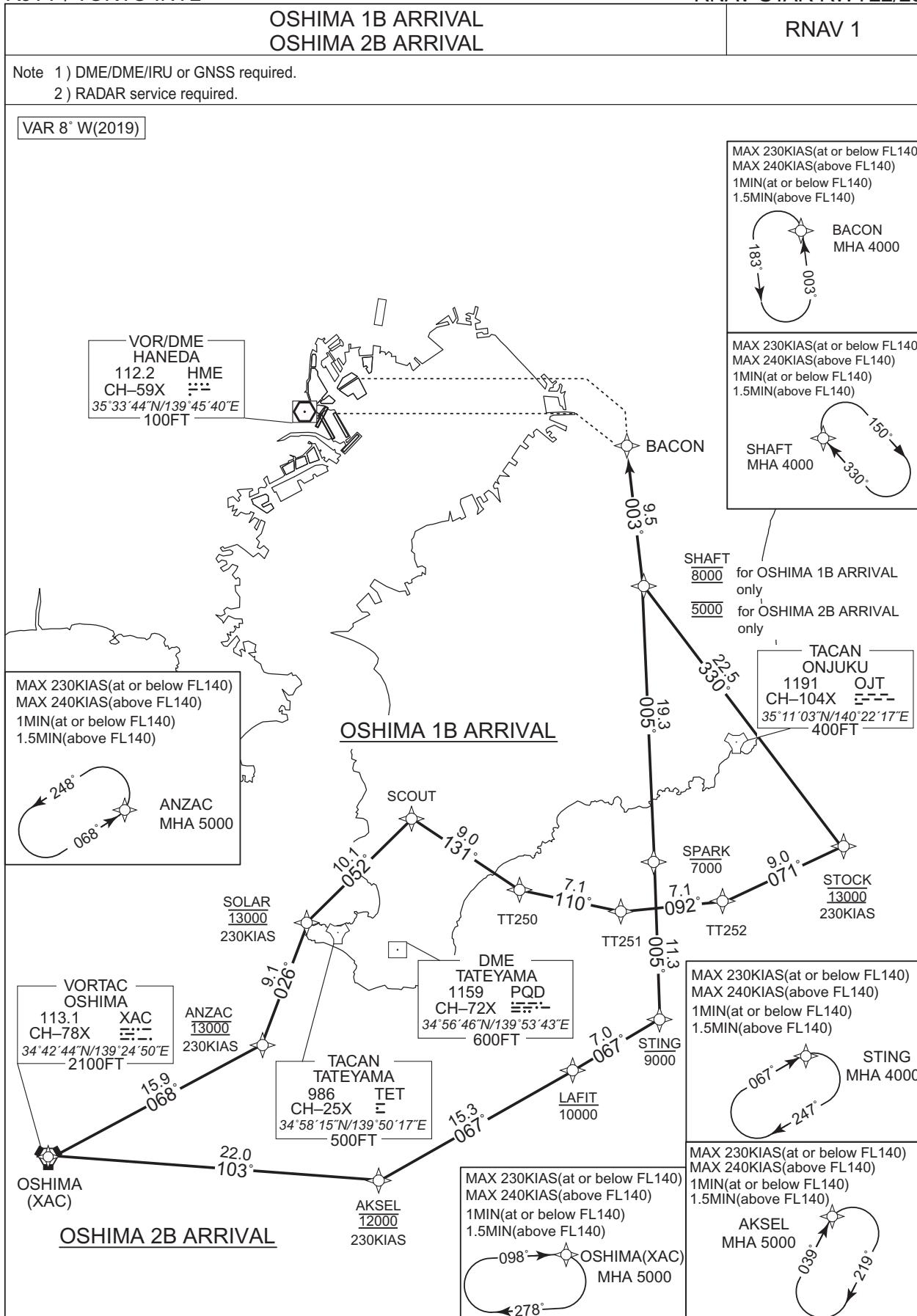
Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AKSEL               | 344039.5N / 1395126.9E | SPARK               | 350312.0N / 1401416.7E |
| ANZAC               | 345028.8N / 1394146.7E | 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 |

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23



CHANGE : ACCORN abolished ANZAC established

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

OSHIMA 1B ARRIVAL

From XAC, to ANZAC 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              | ANZAC               | -        | 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 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 : ACORN abolished. ANZAC established.

## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | AKSEL               | 039 (031.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AKSEL               | 344039.5N / 1395126.9E | SPARK               | 350312.0N / 1401416.7E |
| ANZAC               | 345028.8N / 1394146.7E | 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 |

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY22/23

AKSEL 1N ARRIVAL  
AKSEL 2N ARRIVAL

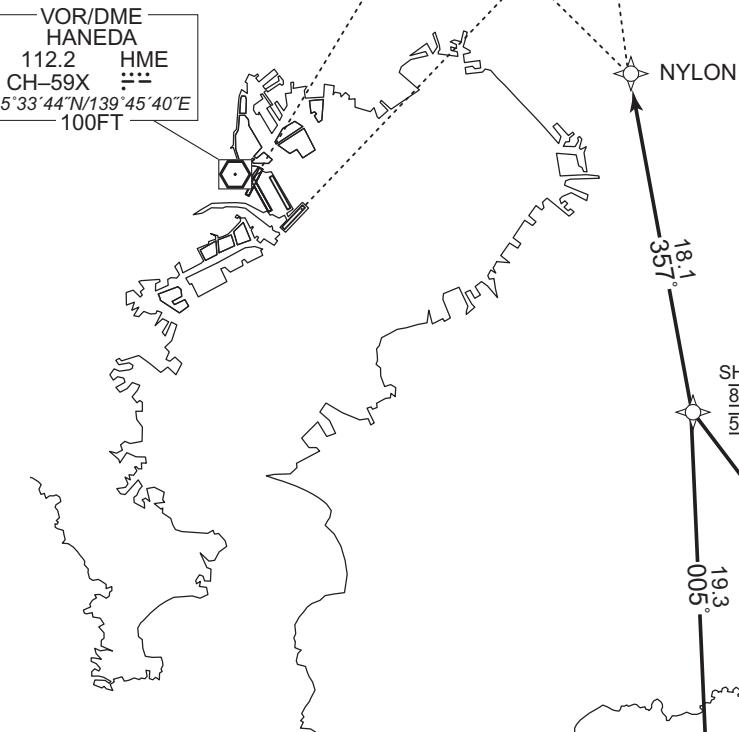
RNAV 1

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

2) RADAR service required.

VAR 8° W(2019)

VOR/DME  
HANEDA  
112.2 HME  
CH-59X   
35°33'44"N/139°45'40"E  
100FT



AKSEL 1N ARRIVAL

TACAN  
TATEYAMA  
986 TET  
CH-25X   
34°58'15"N/139°50'17"E  
500FT

DME  
TATEYAMA  
1159 PQD  
CH-72X   
34°56'46"N/139°53'43"E  
600FT



AKSEL 2N ARRIVAL

CHANGE : STOWE renamed

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL MHA 5000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NYLON  
MHA 4000  
177° 357°

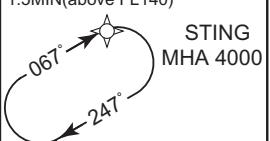
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SHAFT  
MHA 4000  
150° 330°

TACAN  
ONJUKU  
1191 OJT  
CH-104X   
35°11'03"N/140°22'17"E  
400FT

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

STING  
MHA 4000



## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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                    |

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

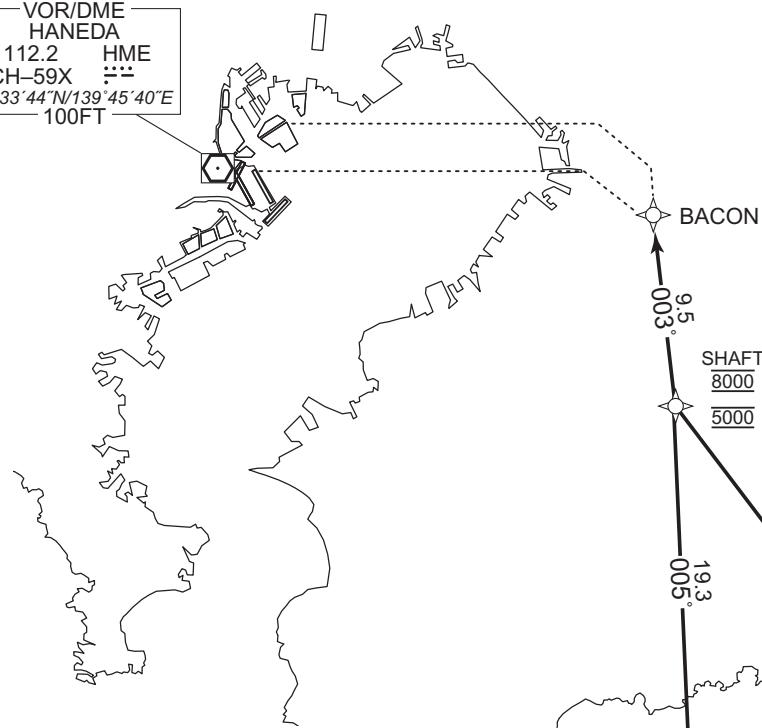
RNAV 1

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

2) RADAR service required.

VAR 8° W(2019)

VOR/DME  
HANEDA  
112.2 HME  
CH-59X   
35°33'44"N/139°45'40"E  
100FT



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

BACON  
MHA 4000  
183° ↘ 003°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SHAFT  
MHA 4000  
150° ↘ 330°

SHAFT  
8000 for AKSEL 1B ARRIVAL only  
5000 for AKSEL 2B ARRIVAL only

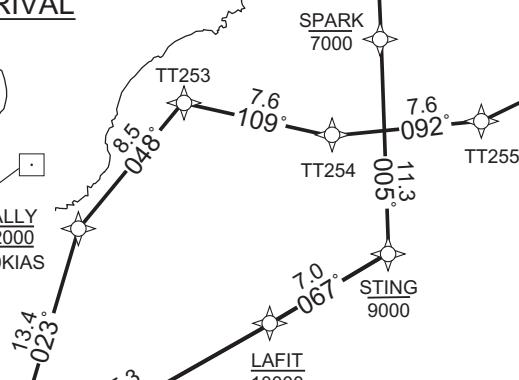
TACAN  
ONJUKU  
1191 OJT  
CH-104X   
35°11'03"N/140°22'17"E  
400FT

AKSEL 1B ARRIVAL

TACAN  
TATEYAMA  
986 TET  
CH-25X   
34°58'15"N/139°50'17"E  
500FT

DME  
TATEYAMA  
1159 PQD  
CH-72X   
34°56'46"N/139°53'43"E  
600FT

SALLY  
12000  
230KIAS



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL  
MHA 5000  
039° ↗ 219°

AKSEL  
12000  
230KIAS

AKSEL 2B ARRIVAL

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

STING  
MHA 4000  
067° ↗ 241°

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)<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 : 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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                    |

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

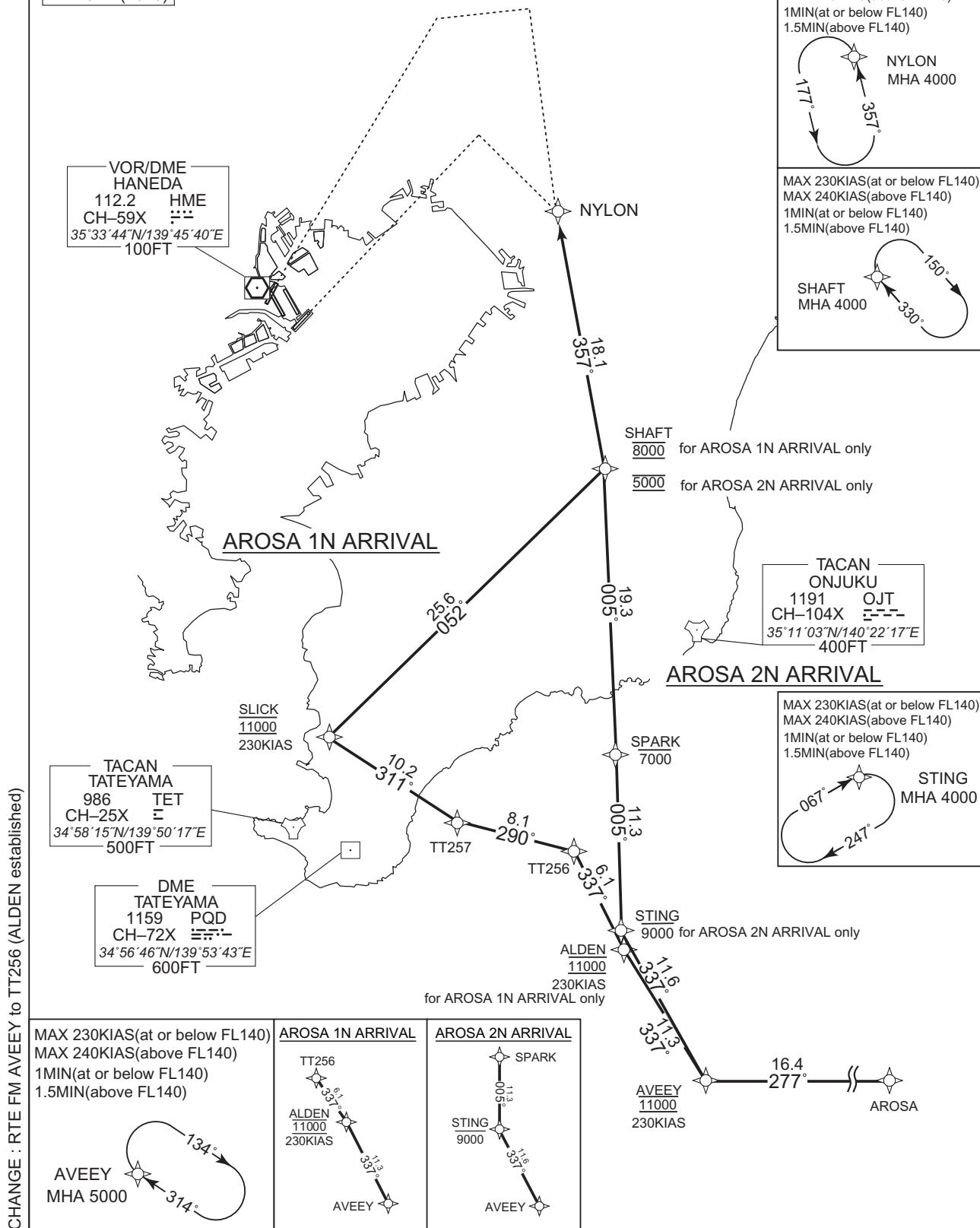
AROSA 1N ARRIVAL  
AROSA 2N ARRIVAL

RNAV STAR RWY22/23

RNAV 1

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

VAR 8° W(2019)



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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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                    |

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

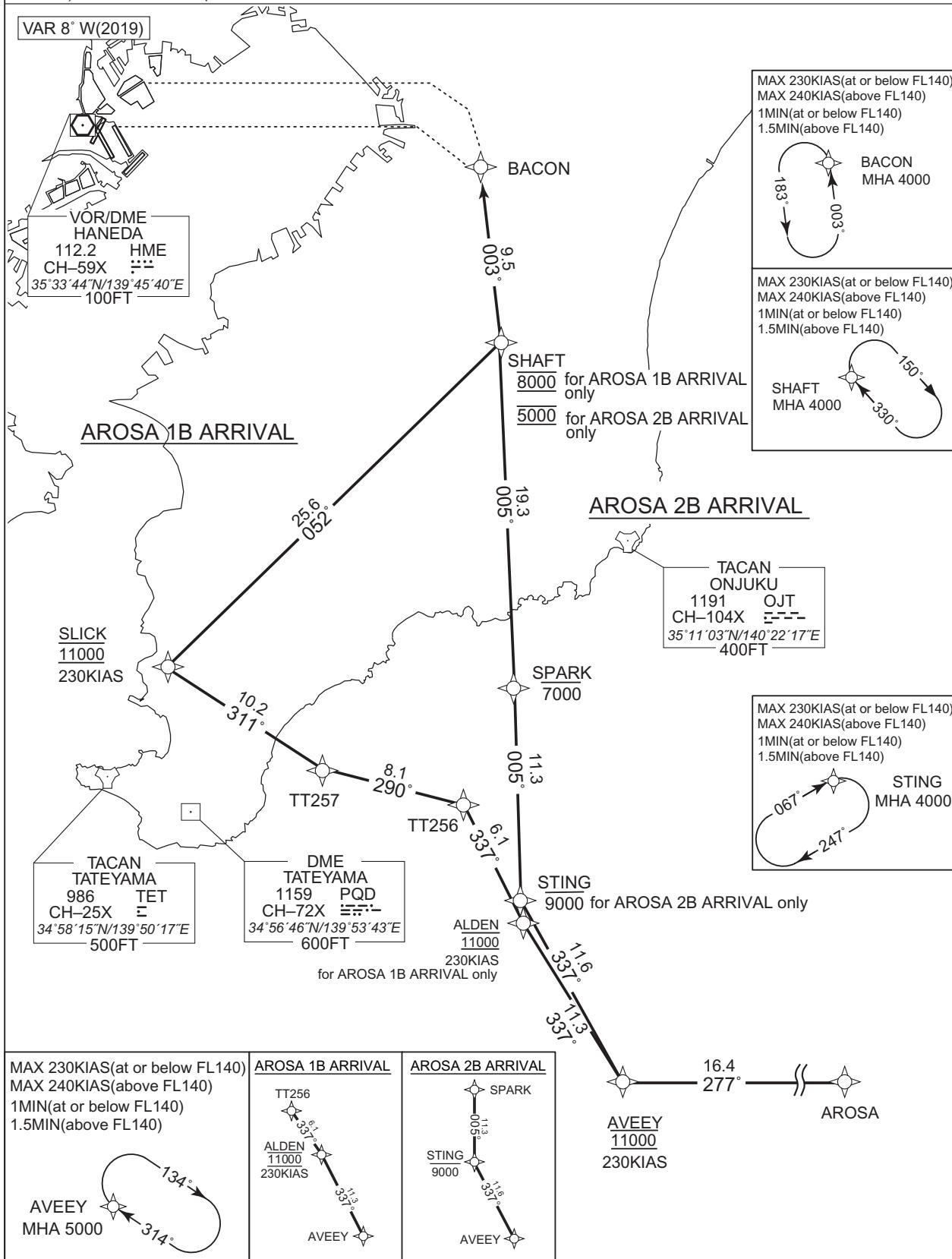
RNAV STAR RWY22/23

AROSA 1B ARRIVAL  
AROSA 2B ARRIVAL

RNAV 1

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

2) RADAR service required.



## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -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                    |

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

GODIN 1S ARRIVAL  
GODIN 1D ARRIVAL

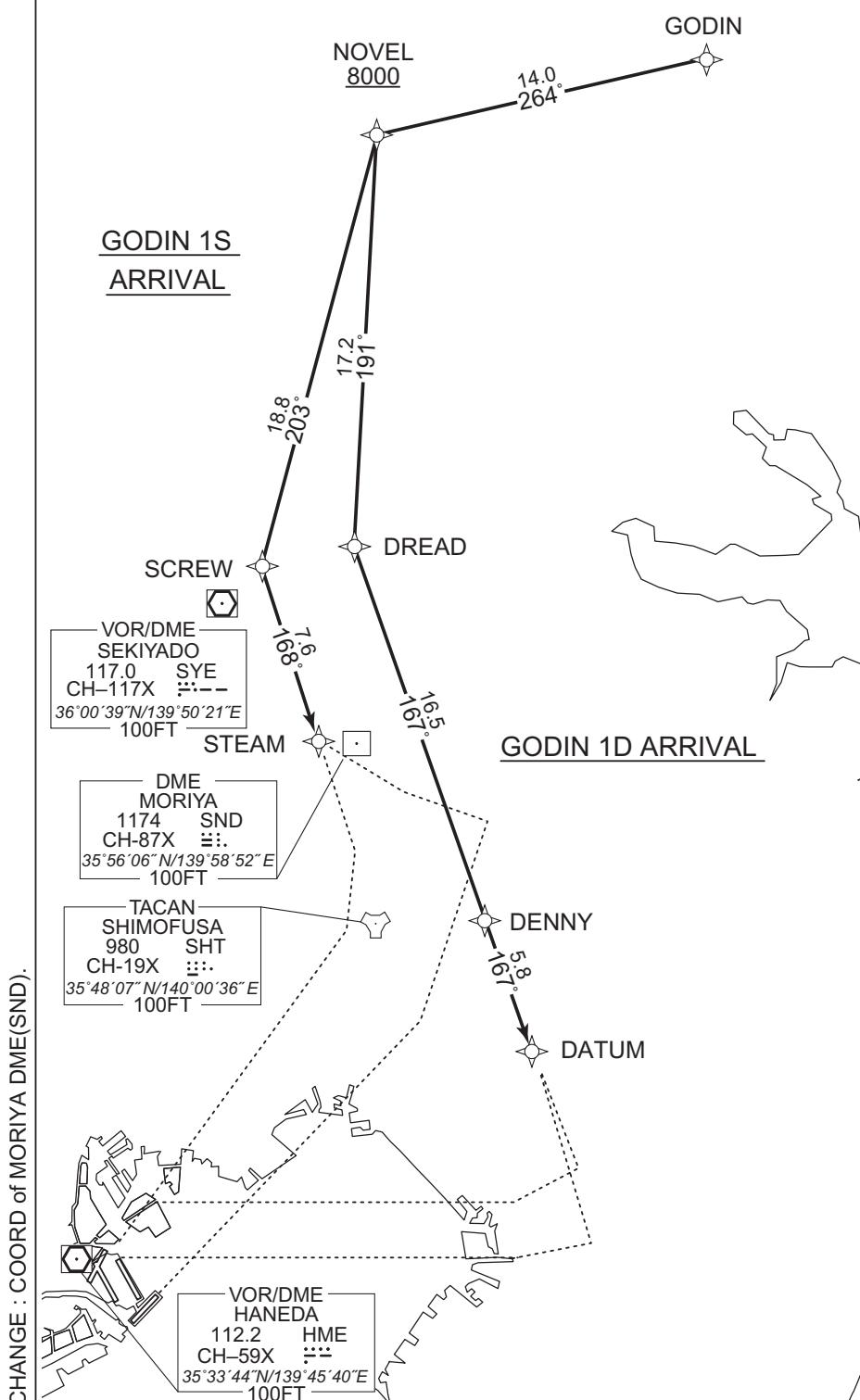
RNAV STAR RWY22/23

RNAV 1

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

2 ) RADAR service required.

VAR 8° W(2019)



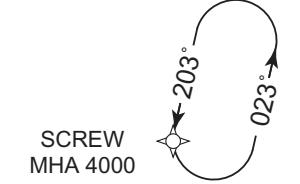
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



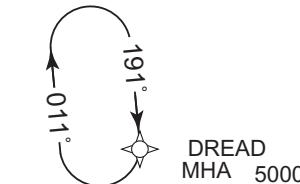
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



## 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)<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 | SCREW               | 203 (195.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## 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

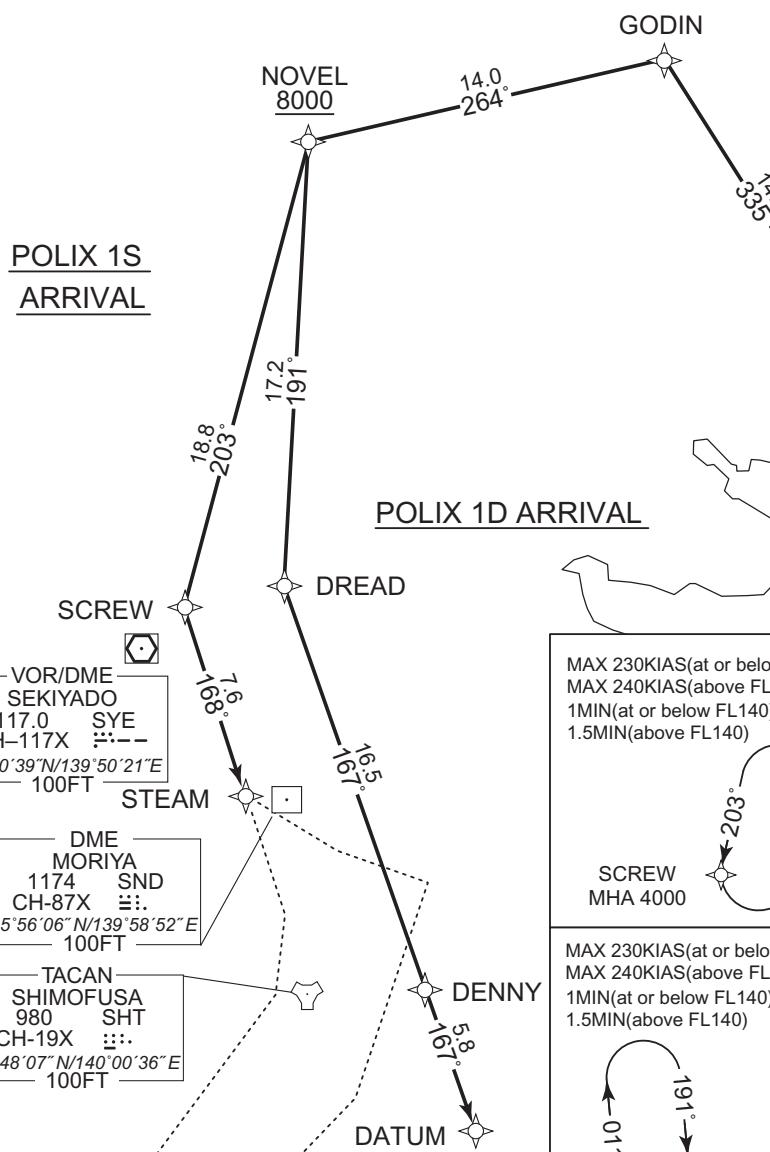
POLIX 1S ARRIVAL  
POLIX 1D ARRIVAL

RNAV 1

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

2 ) RADAR service required.

VAR 8° W(2019)



|  |  |
|--|--|
| MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)<br>1MIN(at or below FL140)<br>1.5MIN(above FL140) | MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)<br>1MIN(at or below FL140)<br>1.5MIN(above FL140) |
| SCREW MHA 4000   | POLIX MHA 11000  |
| MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)<br>1MIN(at or below FL140)<br>1.5MIN(above FL140) | MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)<br>1MIN(at or below FL140)<br>1.5MIN(above FL140) |
| DREAD MHA 5000   | GODIN MHA 8000   |

CHANGE : COORD of MORIYA DME(SND).

## 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)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| 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 | SCREW               | 203 (195.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-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)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| 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 | 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.

VAR 8° W(2019)

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SNARE  
MHA 4000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NUMAN  
MHA 4000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NEURO

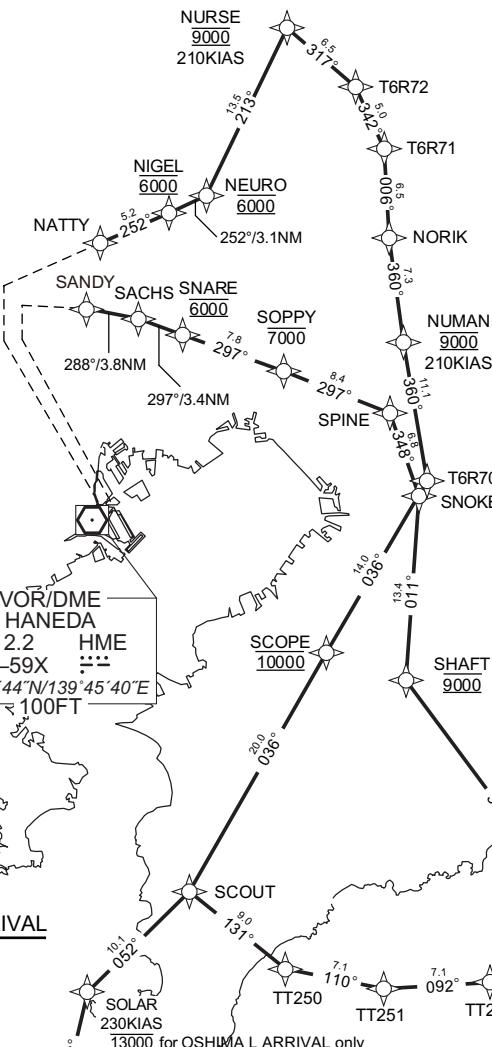
MHA 4000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

ANZAC

MHA 5000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

OSHIMA(XAC)  
MHA 5000

OSHIMA R ARRIVAL

OSHIMA (XAC)

ANZAC

026°

153°

032°

101°

137°

130°

110°

092°

071°

098°

278°

OSHIMA L ARRIVAL

OSHIMA R ARRIVAL

OSHIMA L ARRIVAL

OSHIMA L ARRIVAL

SPINE

846

89

SNOKE

13.4

011°

SHAFT

9000

OSHIMA R ARRIVAL

NUMAN

9000

210KIAS

14.0

036°

SCOPE

10000

CHANGE : ACCORN, T6L60 abolished. ANZAC, SACHS established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

OSHIMA L ARRIVAL

From XAC, to ANZAC, 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 SACHS, 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              | ANZAC               | -        | 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              | SACHS               | -        | 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 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 | SPINE               | 348 (340.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SNARE               | 297 (289.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : ACCORN, T6L60 abolished. ANZAC, SACHS established.

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

OSHIMA R ARRIVAL

From XAC, to ANZAC, 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              | ANZAC               | -        | 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                    |

CHANGE : ACCORN abolished. ANZAC established.

| 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 | ANZAC               | 068 (060.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NUMAN               | 360 (352.5)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -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                    |

## STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| ANZAC               | 345028.8N / 1394146.7E | SNOKE               | 353551.6N / 1401411.7E |
| NATTY               | 355350.9N / 1394531.3E | SOLAR               | 345909.2N / 1394518.5E |
| 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 | STOCK               | 350438.7N / 1403002.9E |
| NUMAN               | 354714.4N / 1401204.9E | T6R70               | 353614.4N / 1401351.4E |
| NURSE               | 360939.3N / 1400153.3E | T6R71               | 360059.5N / 1401045.1E |
| SACHS               | 354838.2N / 1394838.4E | T6R72               | 360530.2N / 1400804.3E |
| SANDY               | 354917.5N / 1394402.8E | TT250               | 350129.7N / 1400308.5E |
| SCOPE               | 352358.4N / 1400538.3E | TT251               | 345957.7N / 1401136.0E |
| SCOUT               | 350624.1N / 1395356.8E | TT252               | 350039.9N / 1402013.0E |
| SHAFT               | 352227.4N / 1401313.3E | XAC                 | 344244.1N / 1392450.5E |
| SNARE               | 354731.1N / 1395238.1E |                     |                        |

CHANGE : ACCORN, T6L60 abolished. ANZAC, SACHS established.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

AKSEL L ARRIVAL  
AKSEL R ARRIVAL

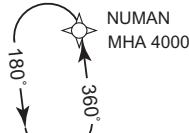
RNAV 1

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

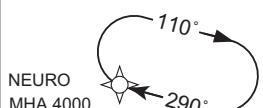
2) RADAR service required.

VAR 8° W(2019)

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)



AKSEL L ARRIVAL  
AKSEL R ARRIVAL

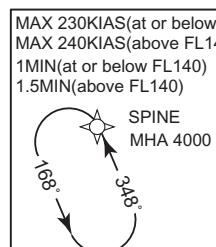
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SNARE  
MHA 4000



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SPINE  
MHA 4000



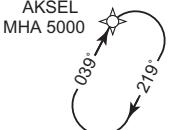
NURSE  
9000  
210KIAS  
NEURO  
6000  
NIGEL  
6000  
NEURO  
6000  
NATTY  
5.2  
252°  
SANDY  
288°/3.8NM  
SACHS  
297°/3.4NM  
SNARE  
6000  
297°  
SOPPY  
7000  
297°  
SPINE  
MHA 4000  
NUMAN  
9000  
210KIAS  
NORIK  
360°  
T6R72  
5.0  
342°  
T6R71  
6.5  
360°  
SNOKE  
T6R70  
11.1  
348°  
SHAFT  
MHA 4000

VOR/DME  
HANEDA  
112.2 HME  
CH-59X  
35°33'44"N/139°45'40"E  
100FT

AKSEL R ARRIVAL

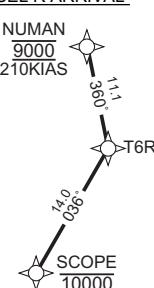
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL  
MHA 5000



AKSEL L ARRIVAL  
SPINE  
348°  
SNOKE  
134°  
111°  
SHAFT  
9000  
AKSEL R ARRIVAL

AKSEL L ARRIVAL  
NUMAN  
9000  
210KIAS  
360°  
T6R70  
14.0  
036°



CHANGE : T6L60 abolished. SACHS established.

## 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 SACHS, 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              | SACHS               | —        | 297 (289.0)   | -7.5               | 3.4           | —              | —             | —            | —              | RNAV1                    |
| 013           | TF              | SANDY               | —        | 288 (280.0)   | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |

CHANGE : T6L60 abolished, SACHS established.

| 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 | SPINE               | 348 (340.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SNARE               | 297 (289.1)           | -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 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)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NUMAN               | 360 (352.5)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -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            |
|---------------------|------------------------|---------------------|------------------------|
| AKSEL               | 344039.5N / 1395126.9E | SHAFT               | 352227.4N / 1401313.3E |
| NATTY               | 355350.9N / 1394531.3E | SNARE               | 354731.1N / 1395238.1E |
| NEURO               | 355727.6N / 1395441.3E | SNOKE               | 353551.6N / 1401411.7E |
| NIGEL               | 355607.5N / 1395117.8E | SOPPY               | 354458.8N / 1400140.3E |
| NORIK               | 355428.9N / 1401054.5E | SPINE               | 354213.5N / 1401125.8E |
| NUMAN               | 354714.4N / 1401204.9E | STOWE               | 350325.9N / 1403111.4E |
| NURSE               | 360939.3N / 1400153.3E | T6R70               | 353614.4N / 1401351.4E |
| SACHS               | 354838.2N / 1394838.4E | T6R71               | 360059.5N / 1401045.1E |
| SALLY               | 345333.9N / 1395540.1E | T6R72               | 360530.2N / 1400804.3E |
| SANDY               | 354917.5N / 1394402.8E | TT253               | 350001.4N / 1400224.6E |
| SCOPE               | 352358.4N / 1400538.3E | TT254               | 345826.5N / 1401129.4E |
| SCOUT               | 350624.1N / 1395356.8E | TT255               | 345910.9N / 1402041.4E |

CHANGE : T6L60 abolished. SACHS established.

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.

VAR 8° W(2019)

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NUMAN  
MHA 4000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

NEURO  
MHA 4000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SNARE

MHA 4000

717°  
297°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SPINE  
MHA 4000

89°  
84°

AROSA L ARRIVAL

SPINE  
SNOKE  
SHAFT  
9000

AROSA R ARRIVAL

NUMAN  
9000  
210KIAS  
T6R72  
T6R71  
NORIK  
SCOPE  
10000

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SHAFT  
MHA 4000

150°  
330°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AVEEY  
MHA 5000

134°  
314°

VOR/DME  
HANEDA  
112.2 HME  
CH-59X  
35°33'44"N/139°45'40"E  
100FT

CHANGE : T6L60 abolished. SACHS established.

AROSA R ARRIVAL

AROSA L ARRIVAL

SLICK  
11000  
230KIAS

328°  
311°

101°  
102°

290°  
281°

TT257  
TT256

81°  
82°

ALDEN  
11000  
230KIAS

151°  
152°

AVEEY  
11000  
230KIAS

164°  
277°

AROSA

## 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 SACHS, 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              | SACHS               | -        | 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)<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 | SPINE               | 348 (340.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SNARE               | 297 (289.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : T6L60 abolished. SACHS established.

## 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)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NUMAN               | 360 (352.5)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -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            |
|---------------------|------------------------|---------------------|------------------------|
| ALDEN               | 345141.1N / 1401505.3E | SCOUT               | 350624.1N / 1395356.8E |
| AROSA               | 344201.7N / 1404157.3E | SHAFT               | 352227.4N / 1401313.3E |
| AVEEY               | 344155.9N / 1402158.0E | SLICK               | 350412.7N / 1395120.0E |
| NATTY               | 355350.9N / 1394531.3E | SNARE               | 354731.1N / 1395238.1E |
| NEURO               | 355727.6N / 1395441.3E | SNOKE               | 353551.6N / 1401411.7E |
| NIGEL               | 355607.5N / 1395117.8E | SOPPY               | 354458.8N / 1400140.3E |
| NORIK               | 355428.9N / 1401054.5E | SPINE               | 354213.5N / 1401125.8E |
| NUMAN               | 354714.4N / 1401204.9E | T6R70               | 353614.4N / 1401351.4E |
| NURSE               | 360939.3N / 1400153.3E | T6R71               | 360059.5N / 1401045.1E |
| SACHS               | 354838.2N / 1394838.4E | T6R72               | 360530.2N / 1400804.3E |
| SANDY               | 354917.5N / 1394402.8E | TT256               | 345655.4N / 1401122.9E |
| SCOPE               | 352358.4N / 1400538.3E | TT257               | 345838.5N / 1400146.6E |

CHANGE : T6L60 abolished. SACHS established.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

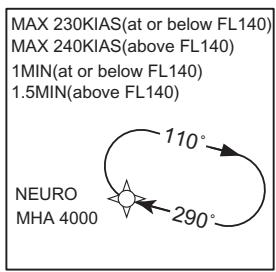
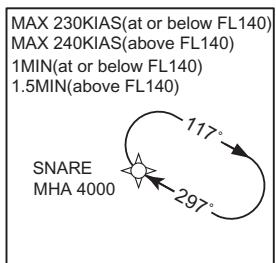
GODIN L ARRIVAL  
GODIN R ARRIVAL

RNAV STAR RWY16L/16R

RNAV 1

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

VAR 8° W(2019)



MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

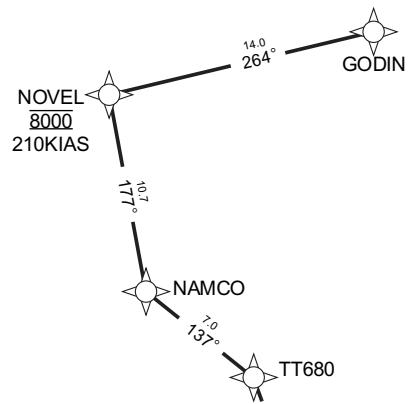
NOVEL  
MHA 5000

264°  
084°

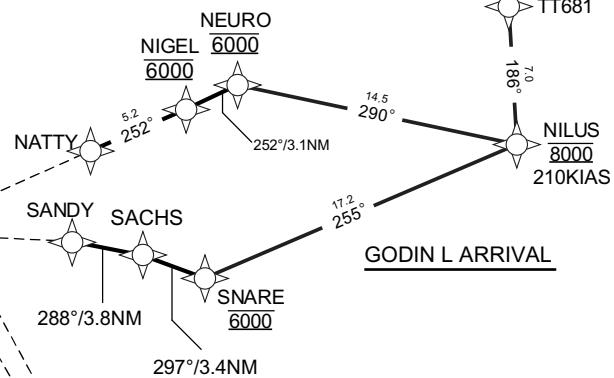
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

017°  
197°

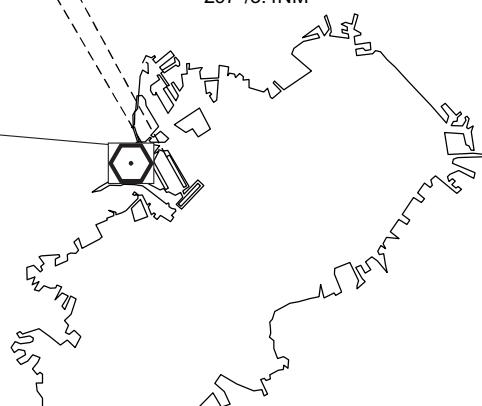
GODIN  
MHA 8000



GODIN R ARRIVAL



GODIN L ARRIVAL



CHANGE : T6L60 abolished, SACHS established.

|                        |        |
|------------------------|--------|
| VOR/DME                | HANEDA |
| 112.2                  | HME    |
| CH-59X                 | ⋮⋮     |
| 35°33'44"N/139°45'40"E |        |
| 100FT                  |        |

## 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 SACHS, 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              | SACHS               | -        | 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)<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 | SNARE               | 297 (289.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : T6L60 abolished. SACHS established.

## 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 | SACHS               | 354838.2N / 1394838.4E |
| NATTY               | 355350.9N / 1394531.3E | SANDY               | 354917.5N / 1394402.8E |
| NEURO               | 355727.6N / 1395441.3E | SNARE               | 354731.1N / 1395238.1E |
| NIGEL               | 355607.5N / 1395117.8E | TT680               | 360608.2N / 1400904.0E |
| NILUS               | 355415.2N / 1401208.8E | TT681               | 360113.8N / 1401158.7E |

CHANGE : T6L60 abolished. SACHS established.

STANDARD ARRIVAL CHART-INSTRUMENT

RJTT / TOKYO INTL

RNAV STAR RWY16L/16R

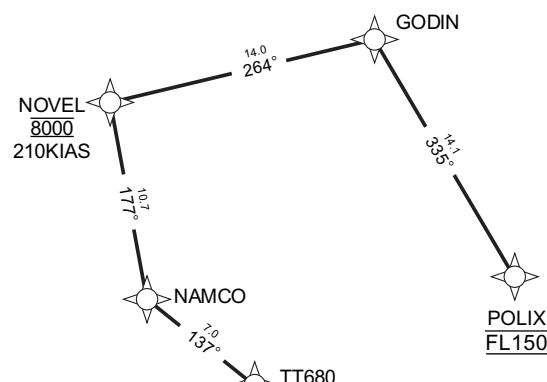
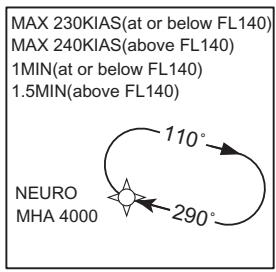
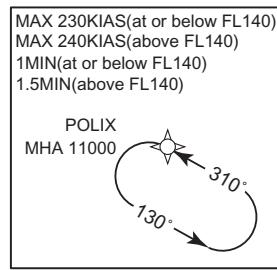
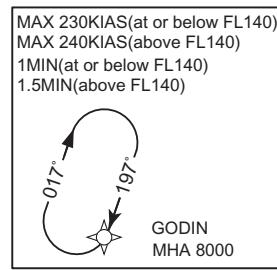
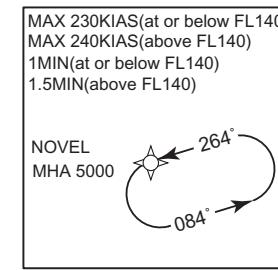
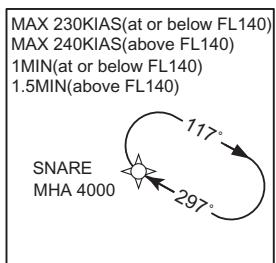
POLIX L ARRIVAL  
POLIX R ARRIVAL

RNAV 1

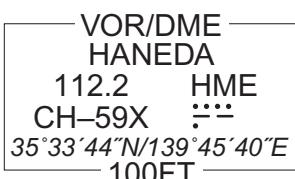
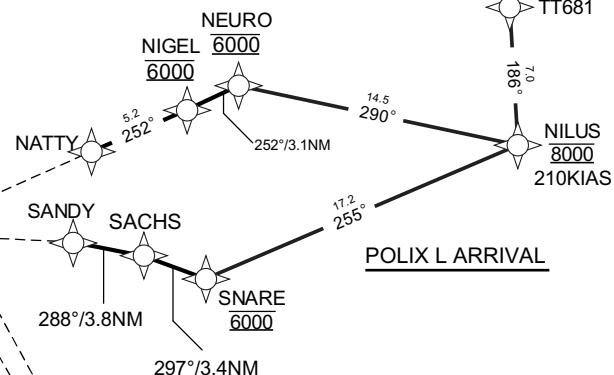
Note 1) DME/DME/IRU or GNSS required.

2) RADAR service required.

VAR 8° W(2019)



POLIX R ARRIVAL



CHANGE : T6L60 abolished. SACHS established.

## 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 SACHS, 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<br>(327.2) | -7.5               | 14.1          | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | NOVEL               | —        | 264<br>(256.4) | -7.5               | 14.0          | —              | 8000          | 210          | —              | RNAV1                    |
| 004           | TF              | NAMCO               | —        | 177<br>(169.8) | -7.5               | 10.7          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | TT680               | —        | 137<br>(129.7) | -7.5               | 7.0           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | TT681               | —        | 162<br>(154.3) | -7.5               | 5.4           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF              | NILUS               | —        | 186<br>(178.9) | -7.5               | 7.0           | —              | 8000          | 210          | —              | RNAV1                    |
| 008           | TF              | SNARE               | —        | 255<br>(247.0) | -7.5               | 17.2          | —              | 6000          | —            | —              | RNAV1                    |
| 009           | TF              | SACHS               | —        | 297<br>(289.0) | -7.5               | 3.4           | —              | —             | —            | —              | RNAV1                    |
| 010           | TF              | SANDY               | —        | 288<br>(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<br>(302.3)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 11000                 | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GODIN               | 197<br>(189.2)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 8000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NOVEL               | 264<br>(256.4)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SNARE               | 297<br>(289.1)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : T6L60 abolished. SACHS established.

## 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)<br>1.5(+14001) | —                      | L              | 11000                 | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| 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 | POLIX               | 361237.1N / 1402622.5E |
| NAMCO               | 361035.1N / 1400226.3E | SACHS               | 354838.2N / 1394838.4E |
| NATTY               | 355350.9N / 1394531.3E | SANDY               | 354917.5N / 1394402.8E |
| NEURO               | 355727.6N / 1395441.3E | SNARE               | 354731.1N / 1395238.1E |
| 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 : T6L60 abolished. SACHS established.

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.

VAR 8° W(2019)

VOR/DME  
HANEDA  
112.2 HME  
CH-59X \*\*\*  
35°33'44"N/139°45'40"E  
100FT

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

KAIHO  
MHA 4000

353°  
353°

DME  
YOKOSUKA  
1196 HYD  
CH-109X \*\*\*  
35°15'20"N/139°35'15"E  
500FT

TACAN  
TATEYAMA  
986 TET  
CH-25X \*\*\*  
34°58'15"N/139°50'17"E  
500FT

OSHIMA NIGHT ARRIVAL

VORTAC  
OSHIMA  
113.1 XAC  
CH-78X \*\*\*  
34°42'44"N/139°24'50"E  
2100FT

OSHIMA  
(XAC)

UMUKI  
6000

UTIBO

AKSEL

MESSE NIGHT ARRIVAL

TACAN  
ONJUKU  
1191 OJT  
CH-104X \*\*\*  
35°11'03"N/140°22'17"E  
400FT

DME  
TATEYAMA  
1159 PQD  
CH-72X \*\*\*  
34°56'46"N/139°53'43"E  
600FT

AROSA NIGHT ARRIVAL  
AKSEL NIGHT ARRIVAL

AVEEY  
16.4 277°  
AROSA

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

OSHIMA(XAC)  
MHA 5000  
098° 278°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AKSEL  
MHA 5000  
039° 219°

MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)  
1MIN(at or below FL140)  
1.5MIN(above FL140)

AVEEY  
MHA 5000  
734° 374°

## 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)<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

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<br>(006.6) | -7.5               | 16.2          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | UMUKI               | -        | 353<br>(345.5) | -7.5               | 16.1          | -              | +6000         | -            | -              | RNAV1                    |
| 004           | TF              | KAIHO               | -        | 353<br>(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<br>(031.2)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | KAIHO               | 353<br>(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<br>(269.8) | -7.5               | 16.4          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | UTIBO               | -        | 310<br>(302.8) | -7.5               | 27.5          | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | UMUKI               | -        | 353<br>(345.5) | -7.5               | 16.1          | -              | +6000         | -            | -              | RNAV1                    |
| 005           | TF              | KAIHO               | -        | 353<br>(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<br>(306.1)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | KAIHO               | 353<br>(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)<br>1.5(+14001) | -                      | L              | 6000                  | -                     | -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                    |

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

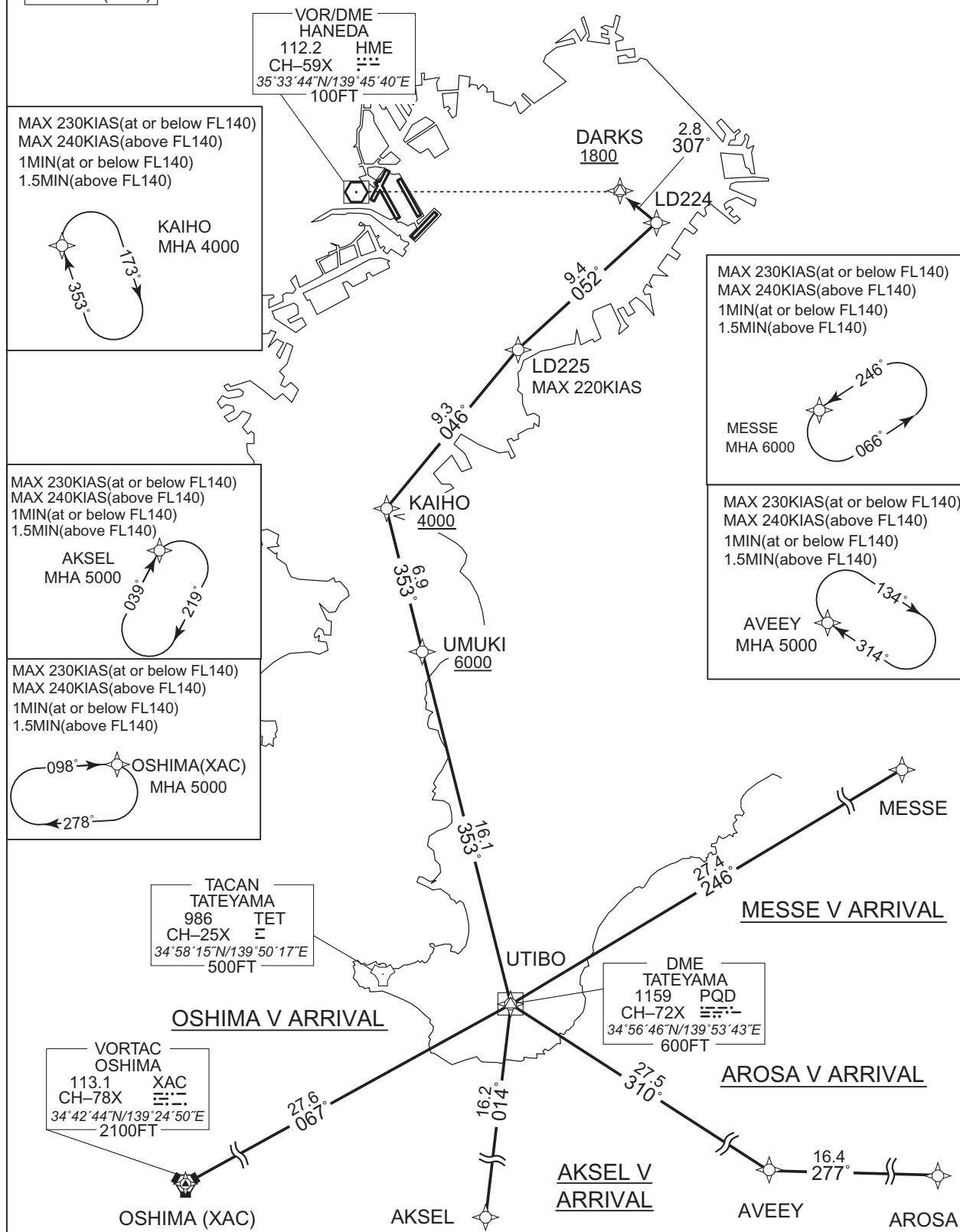
**OSHIMA V ARRIVAL / AKSEL V ARRIVAL  
AROSA V ARRIVAL / MESSE V ARRIVAL**

RNAV 1

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

2 ) RADAR service required.

VAR 8° W(2019)



## 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)<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

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)<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 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 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              | 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)<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 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 |

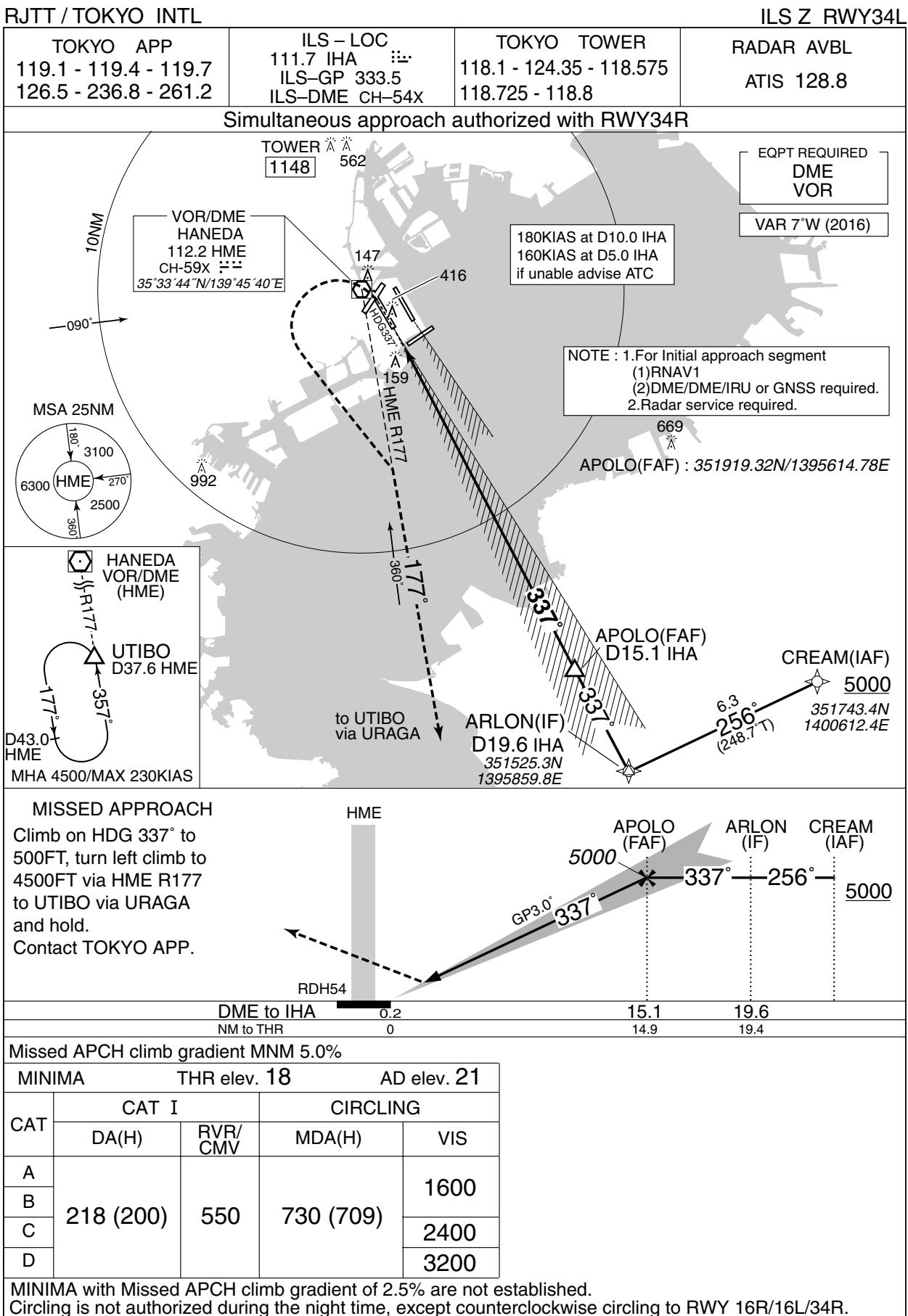
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 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)<br>1.5(+14001) | -                      | L              | 6000                  | -                     | -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                    |

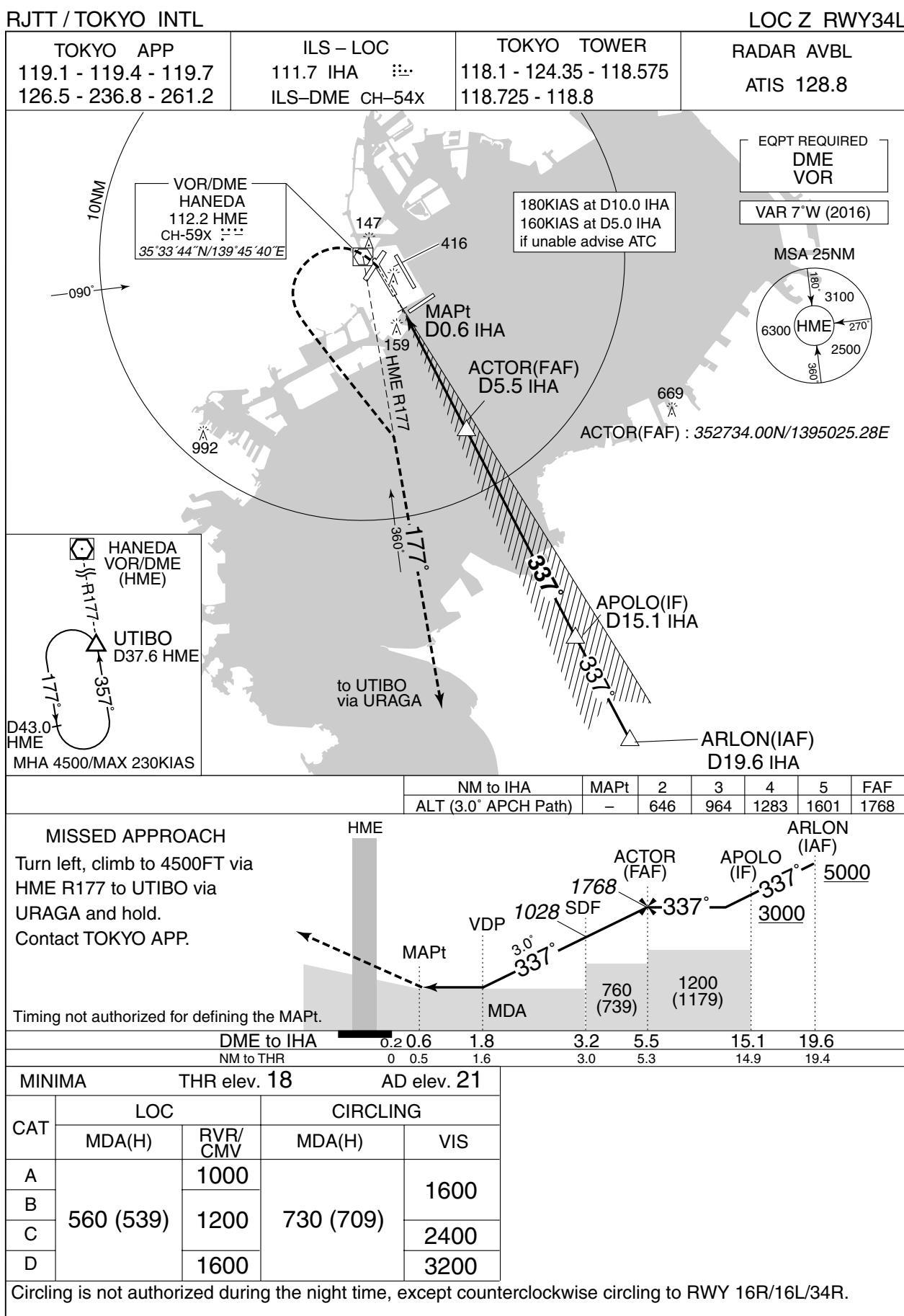
Waypoint Coordinates

| 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 |                     |                        |

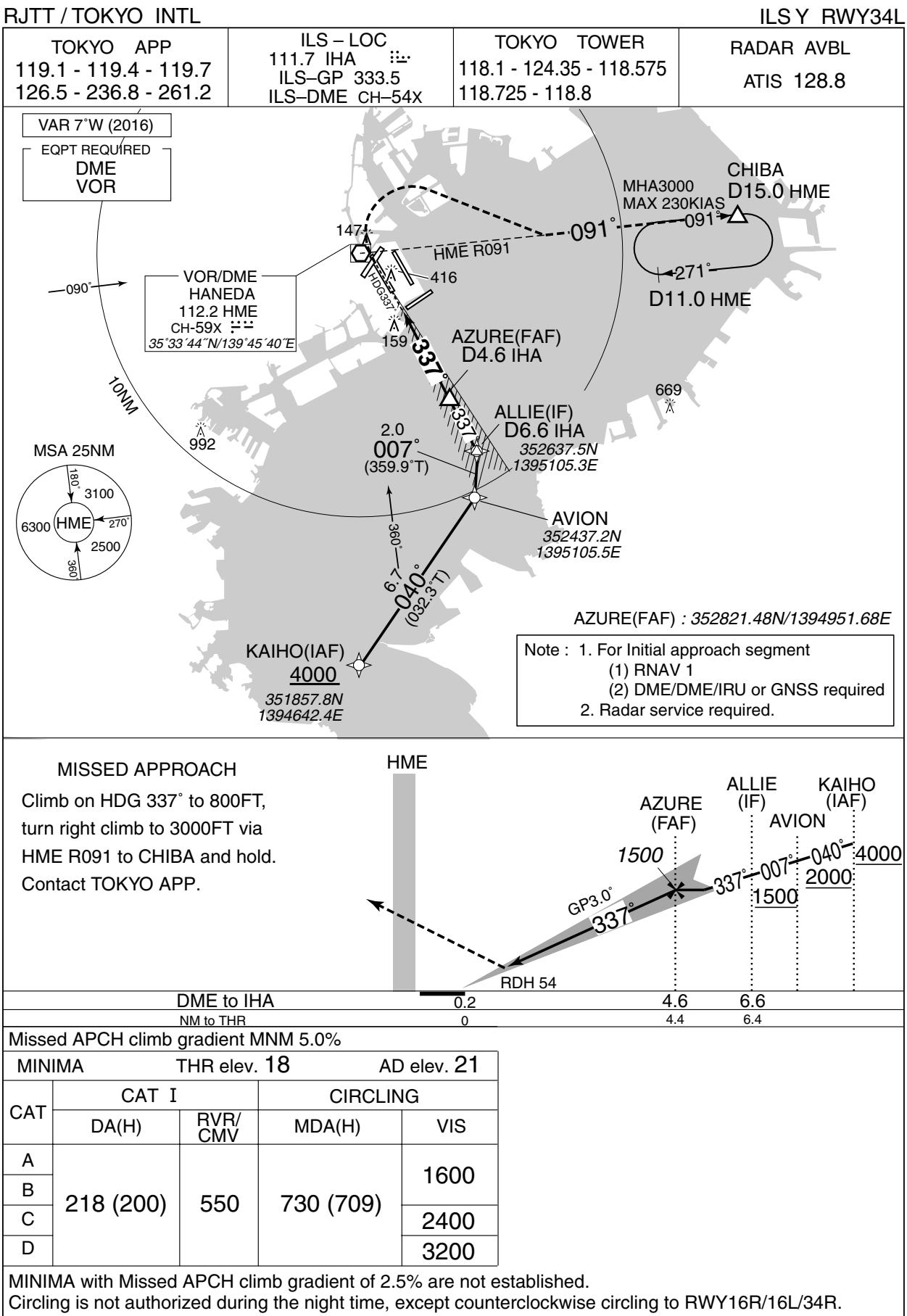
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART



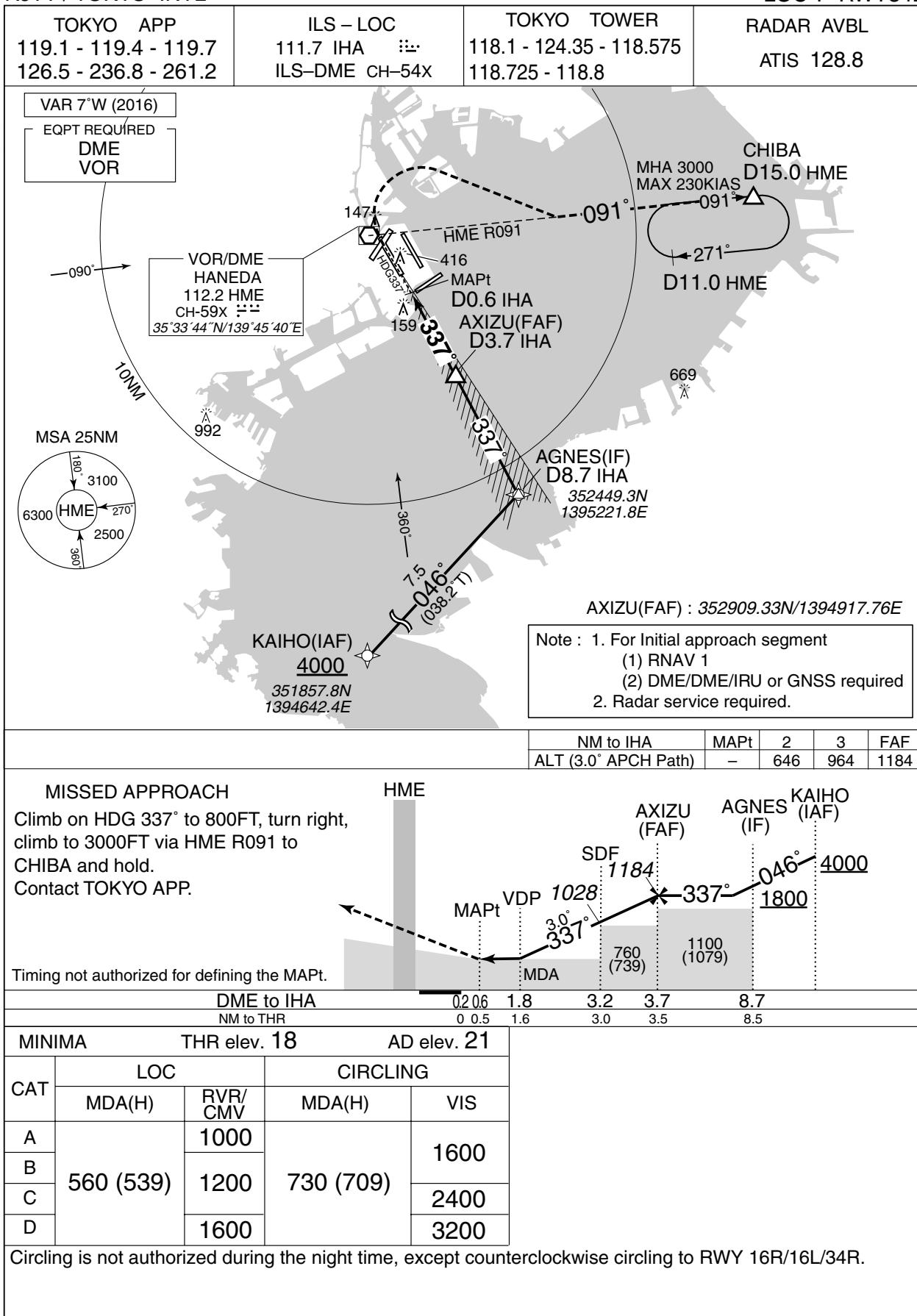
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

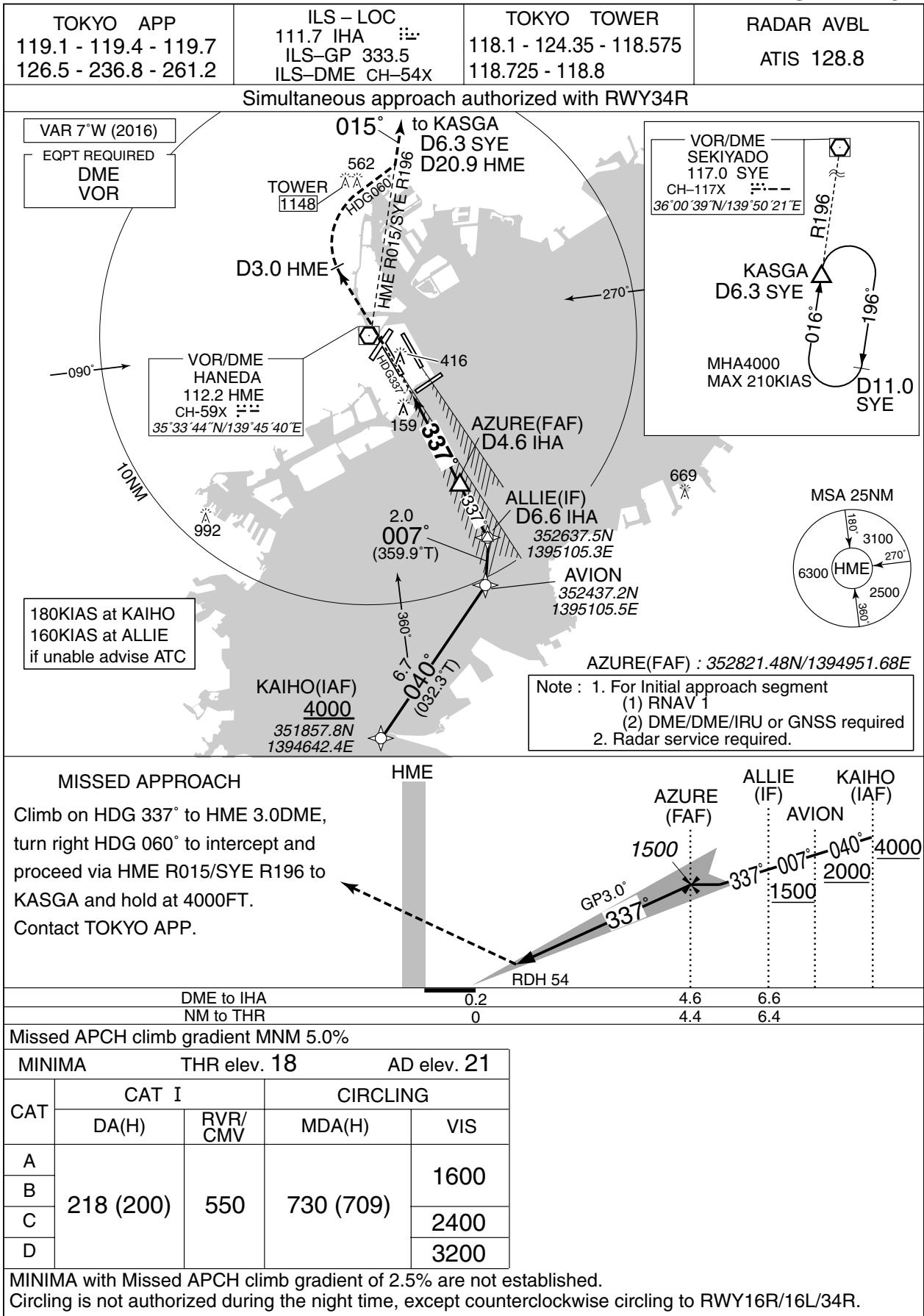
LOC Y RWY34L



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

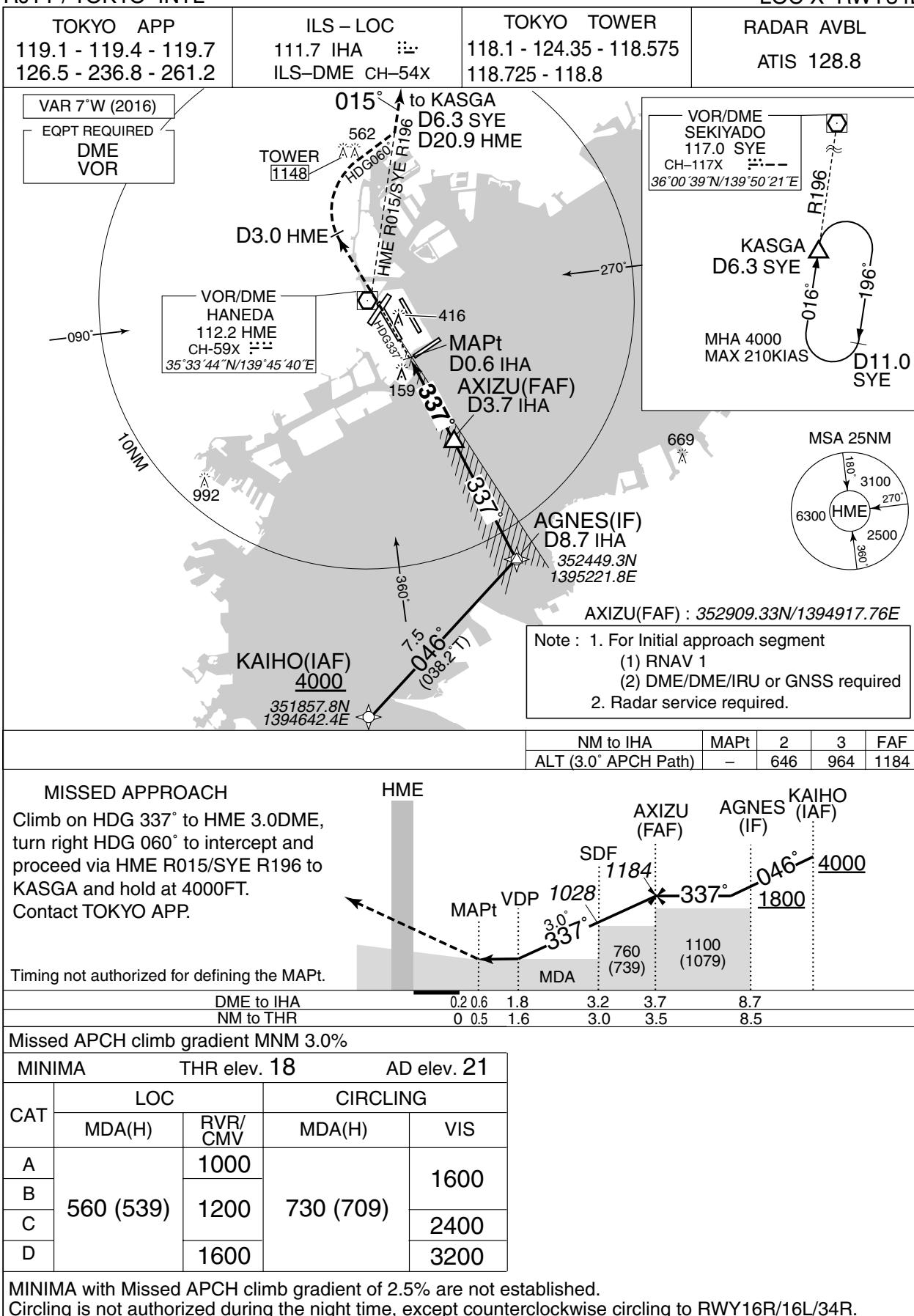
ILS X RWY34L



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

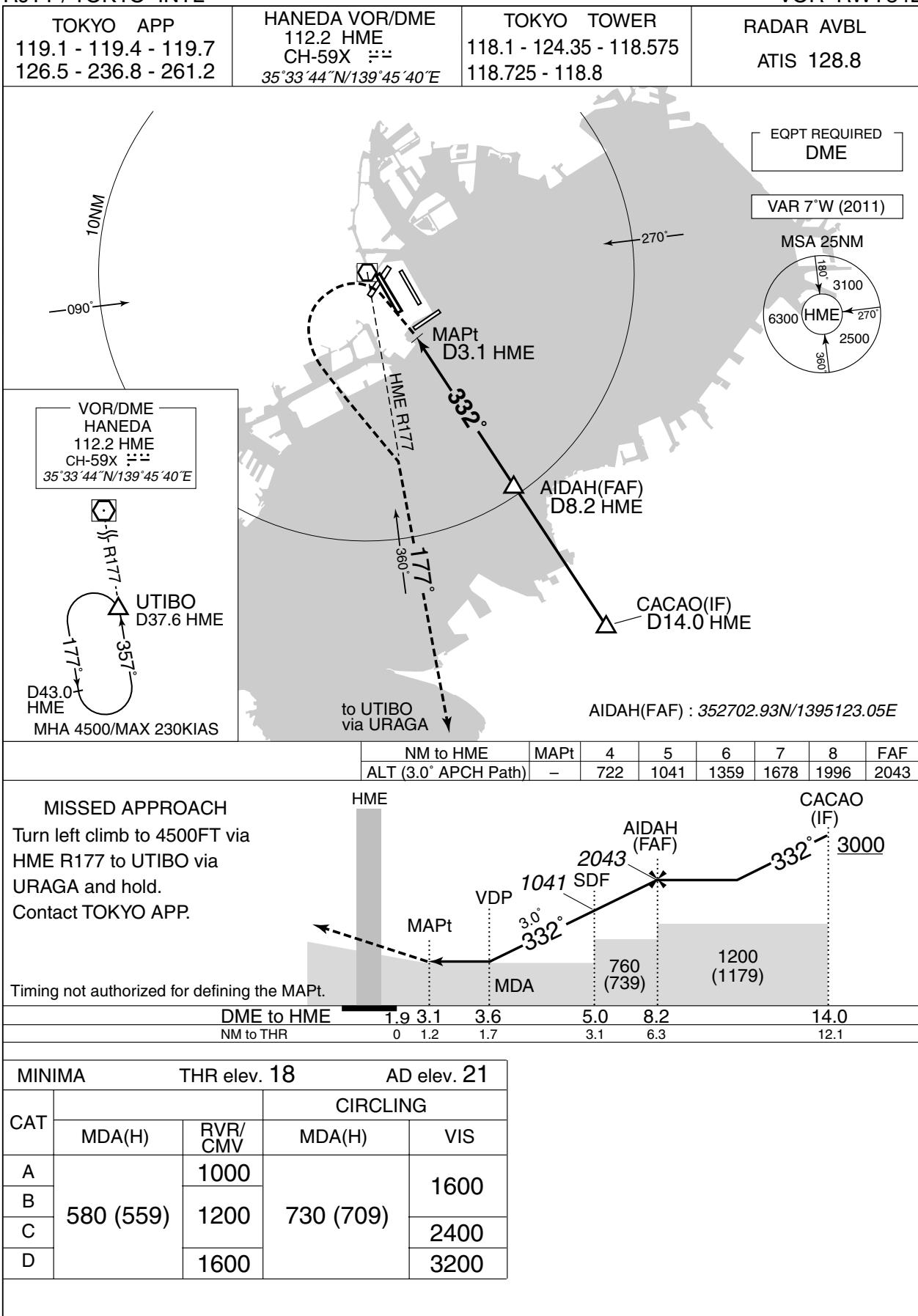
LOC X RWY34L



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

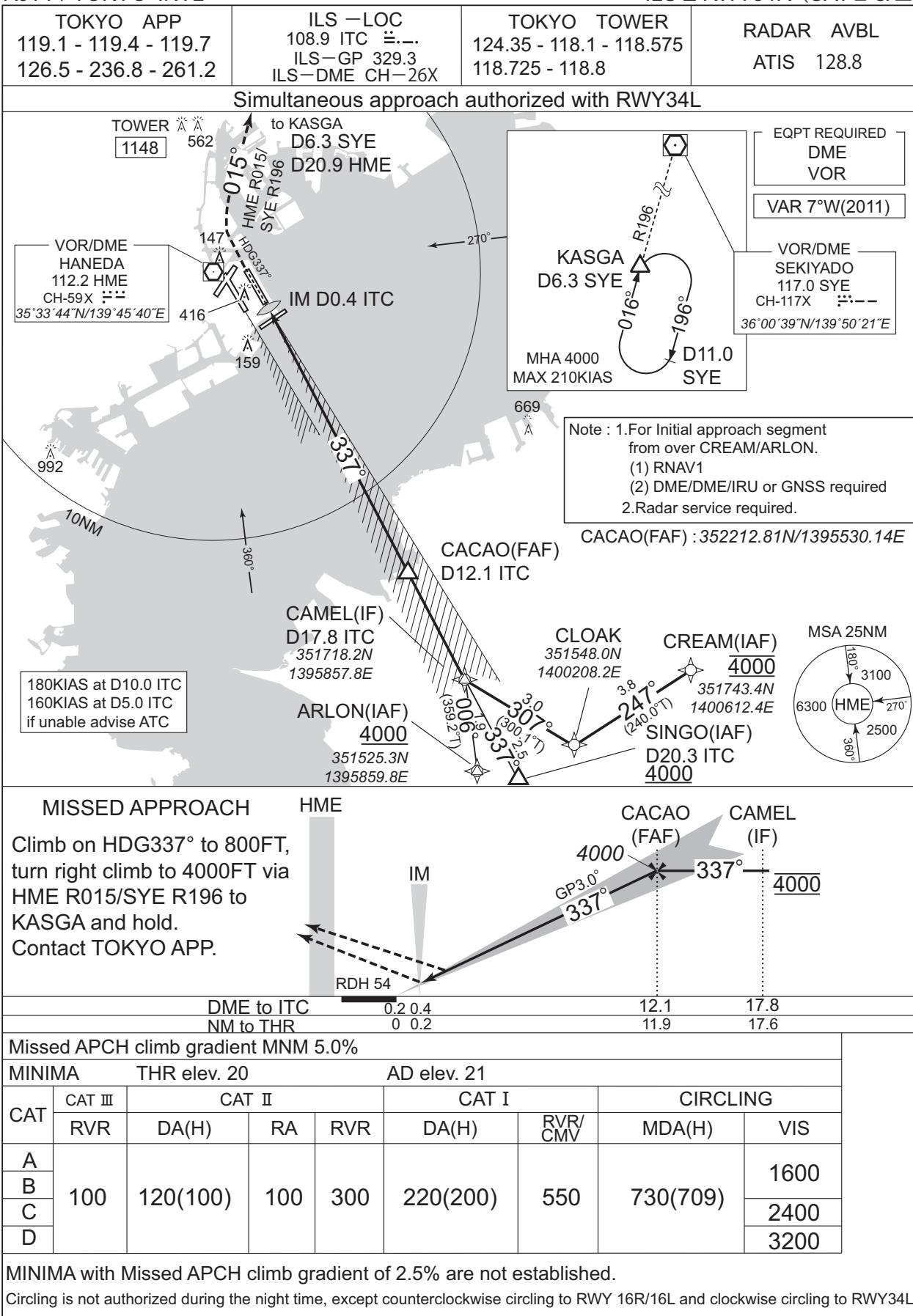
VOR RWY34L



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

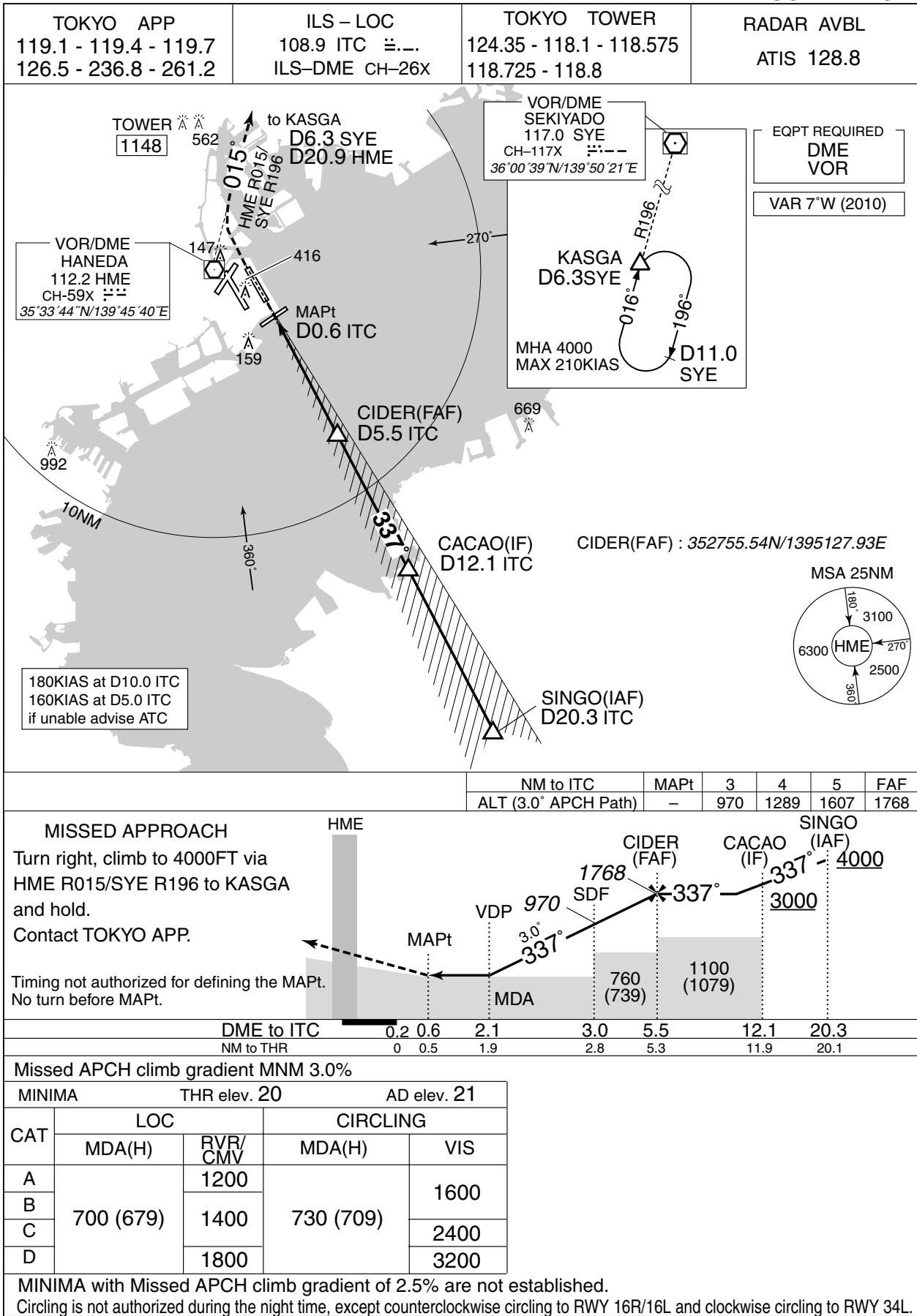
ILS Z RWY34R (CAT II &amp; III)



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

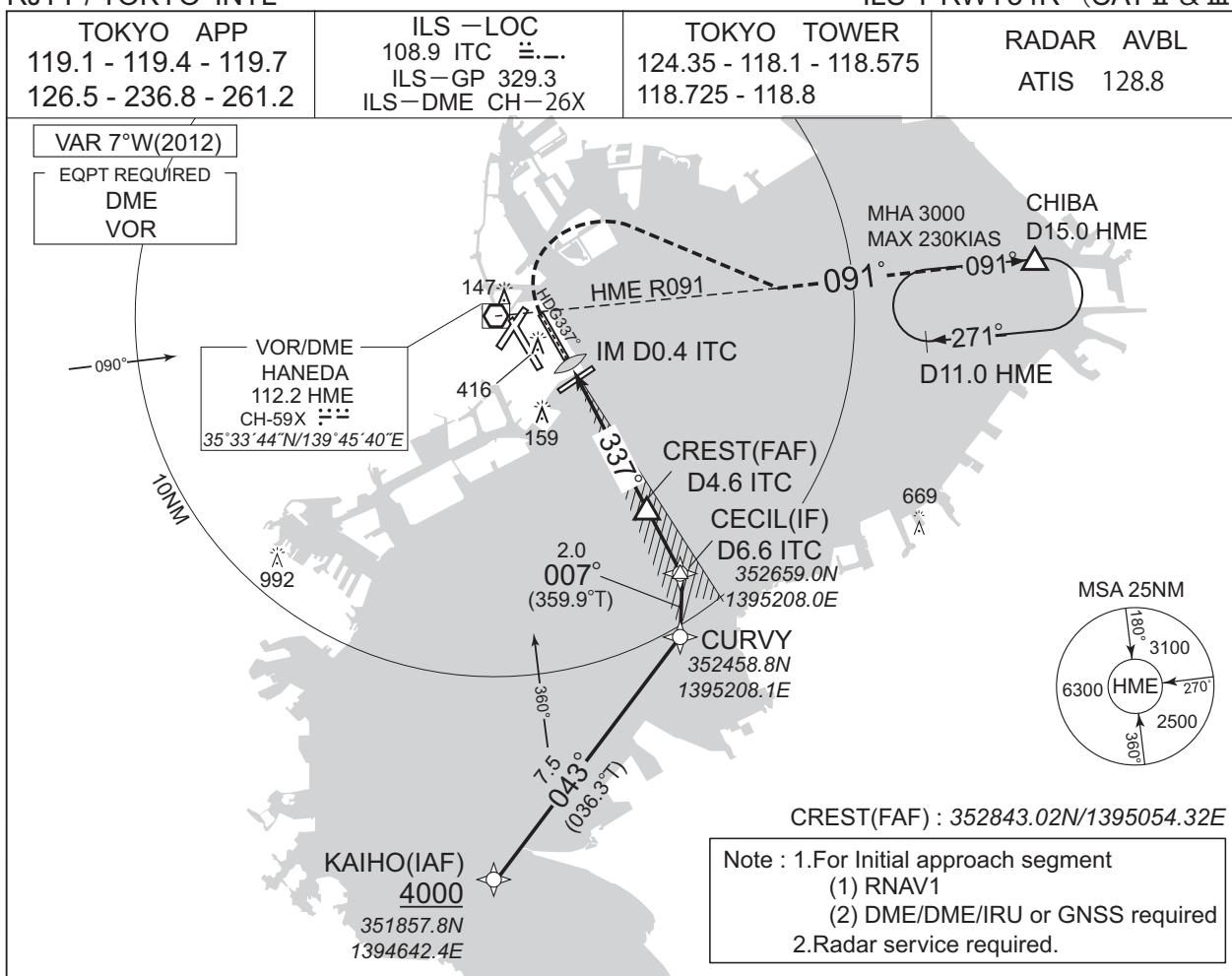
LOC Z RWY34R



## INSTRUMENT APPROACH CHART

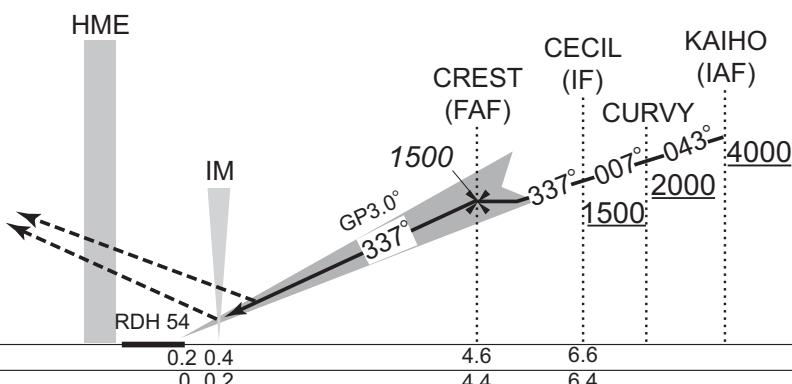
RJTT / TOKYO INTL

ILS Y RWY34R (CAT II &amp; III)



## 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  
NM to THR0.2 0.4  
0 0.2

Missed APCH climb gradient MNM 5.0%

MINIMA THR elev. 20

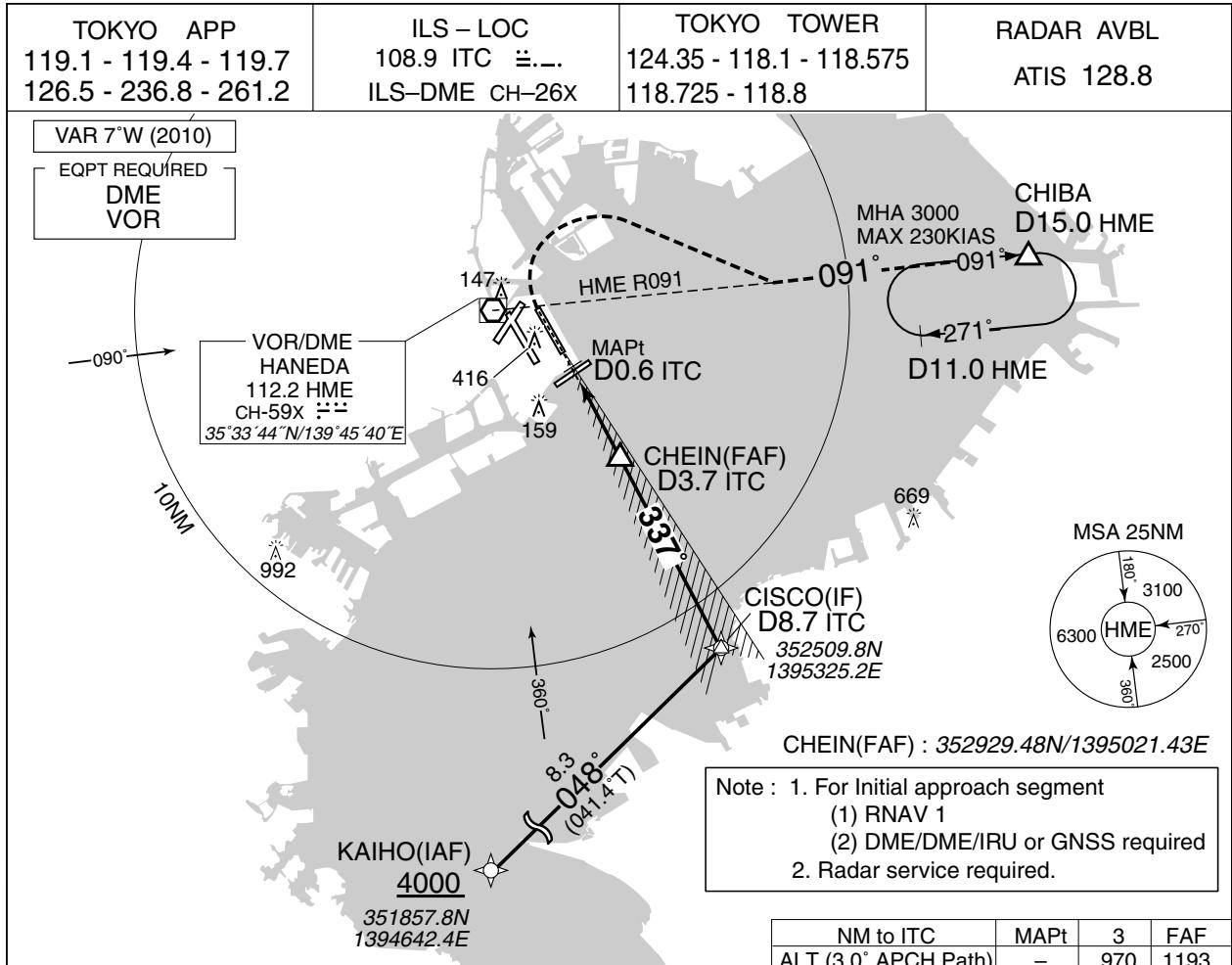
AD elev. 21

CHANGE: MINIMA(CAT IIIA, IIIB → CAT III).

INSTRUMENT APPROACH CHART

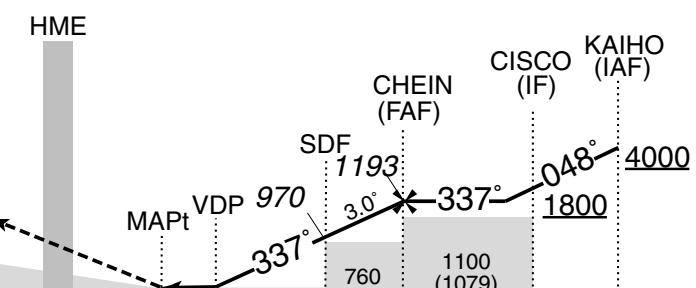
RJTT / TOKYO INTL

LOC Y RWY34R



**MISSSED 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.

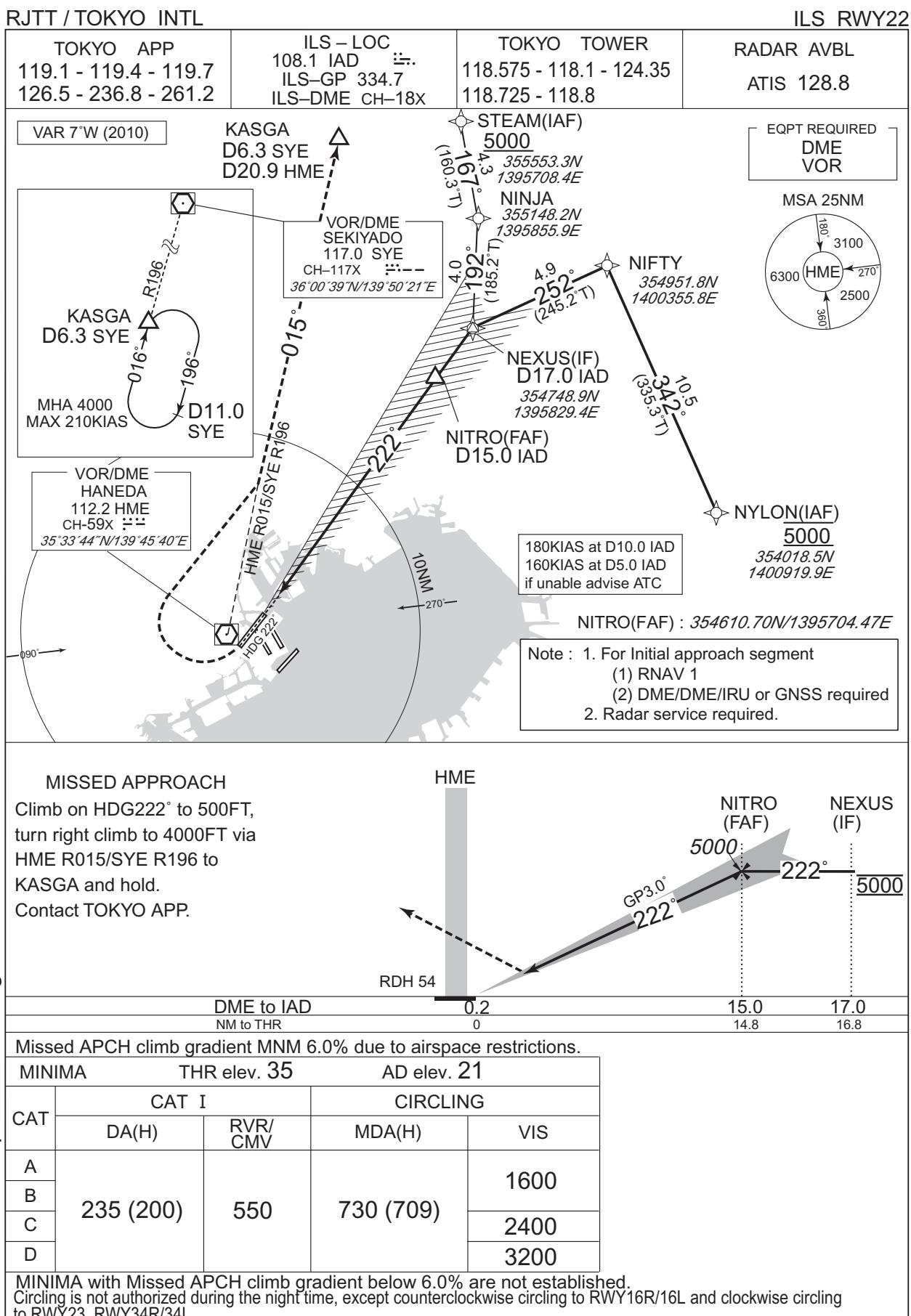


| DME to ITC | 0.2 | 0.6 | 2.1 | 3.0 | 3.7 | 8.7 |
|------------|-----|-----|-----|-----|-----|-----|
| NM to THR  | 0   | 0.5 | 1.9 | 2.8 | 3.5 | 8.5 |

| MINIMA |           | THR elev. 20 | AD elev. 21 |      |
|--------|-----------|--------------|-------------|------|
| CAT    | LOC       | CIRCLING     |             |      |
|        | MDA(H)    | RVR/<br>CMV  | MDA(H)      | VIS  |
| A      |           | 1200         |             |      |
| B      | 700 (679) | 1400         | 730 (709)   | 1600 |
| 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.

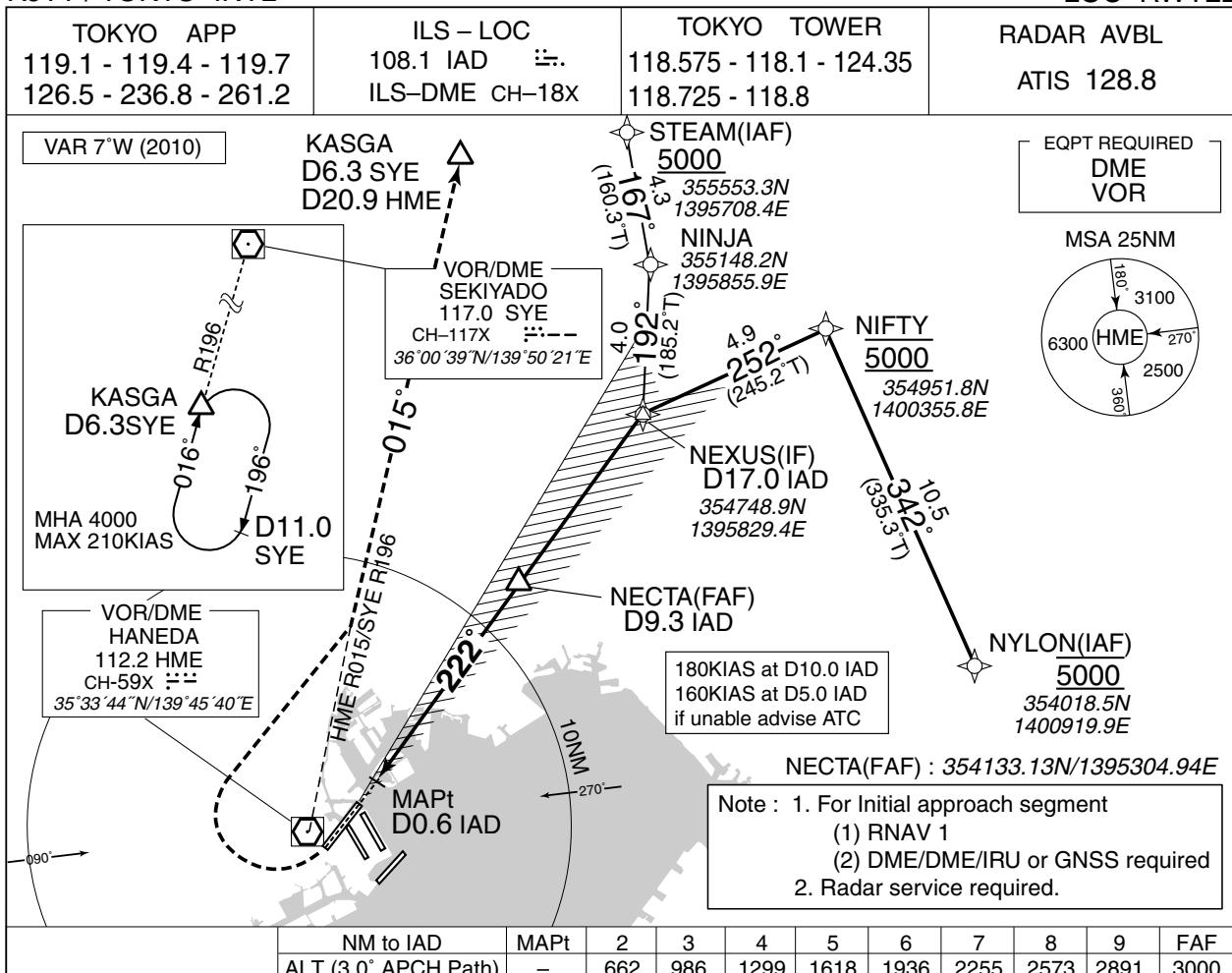
## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

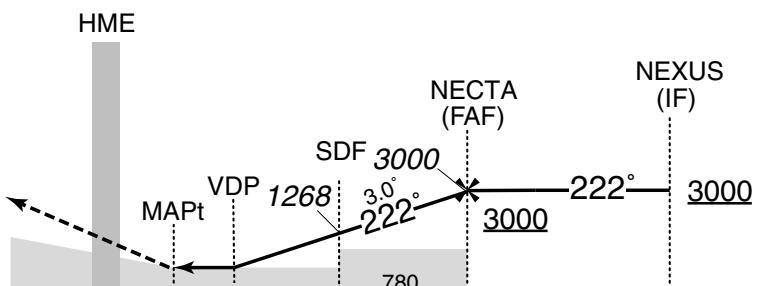
LOC RWY22



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  
NM to THR

|     |     |     |     |     |      |
|-----|-----|-----|-----|-----|------|
| 0.2 | 0.6 | 1.9 | 3.9 | 9.3 | 17.0 |
| 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   | 1000      |         |           | 1600 |
| B   | 600 (579) | 1200    | 730 (709) | 2400 |
| C   |           |         |           | 3200 |
| D   | 1600      |         |           |      |

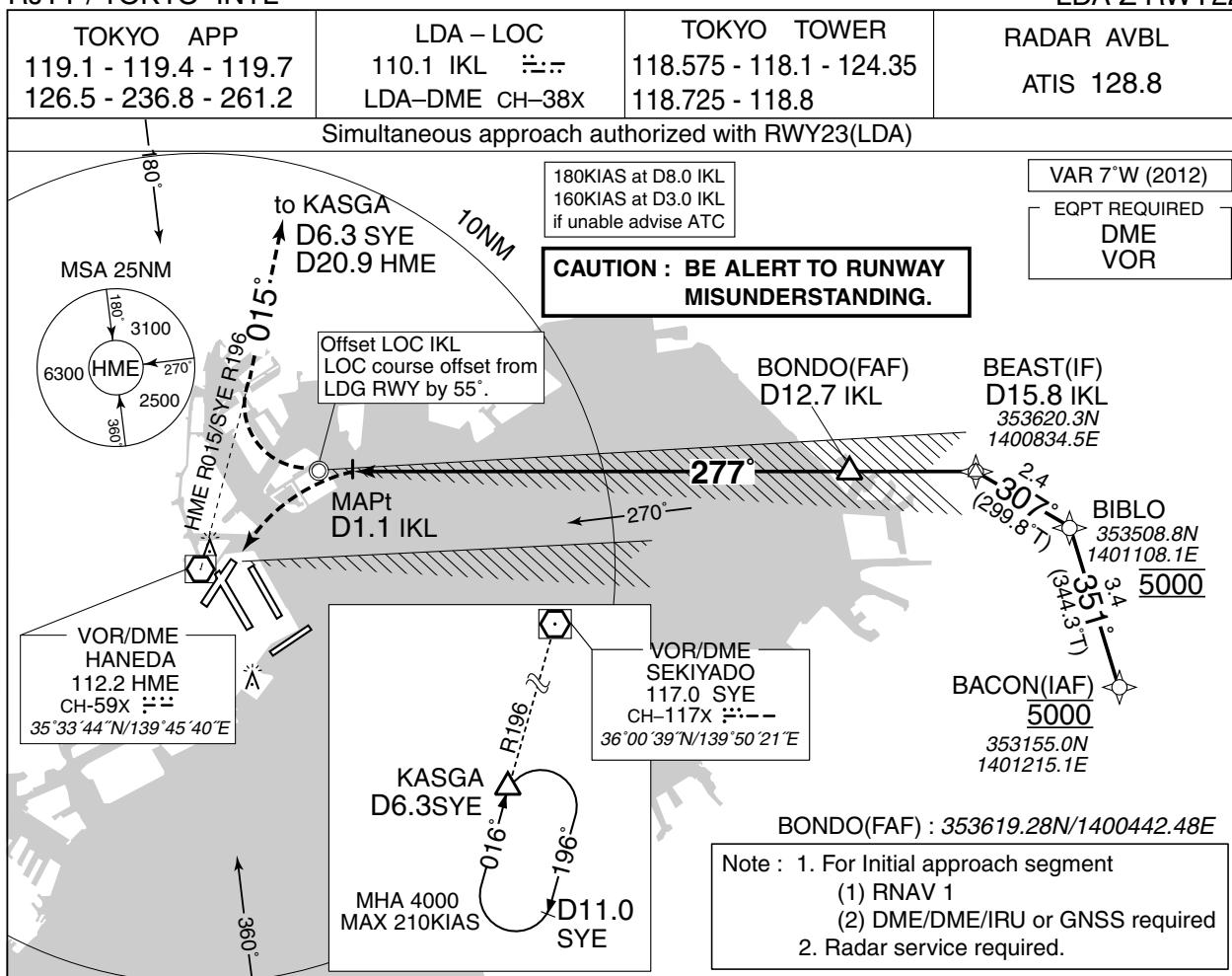
MINIMA with Missed APCH climb gradient of 2.5% are not established.

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

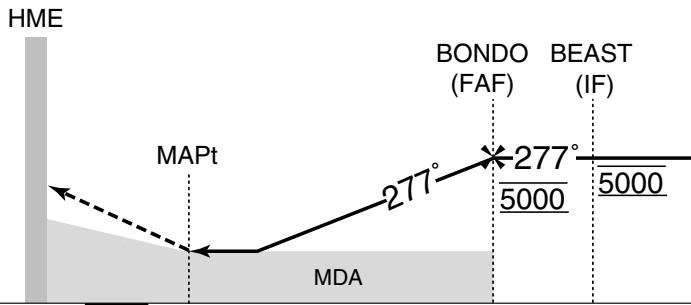
LDA Z RWY22



## MISSSED 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      |              |             |
| B      |              |             |
| C      | 1000 (979)   | 6000        |
| 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

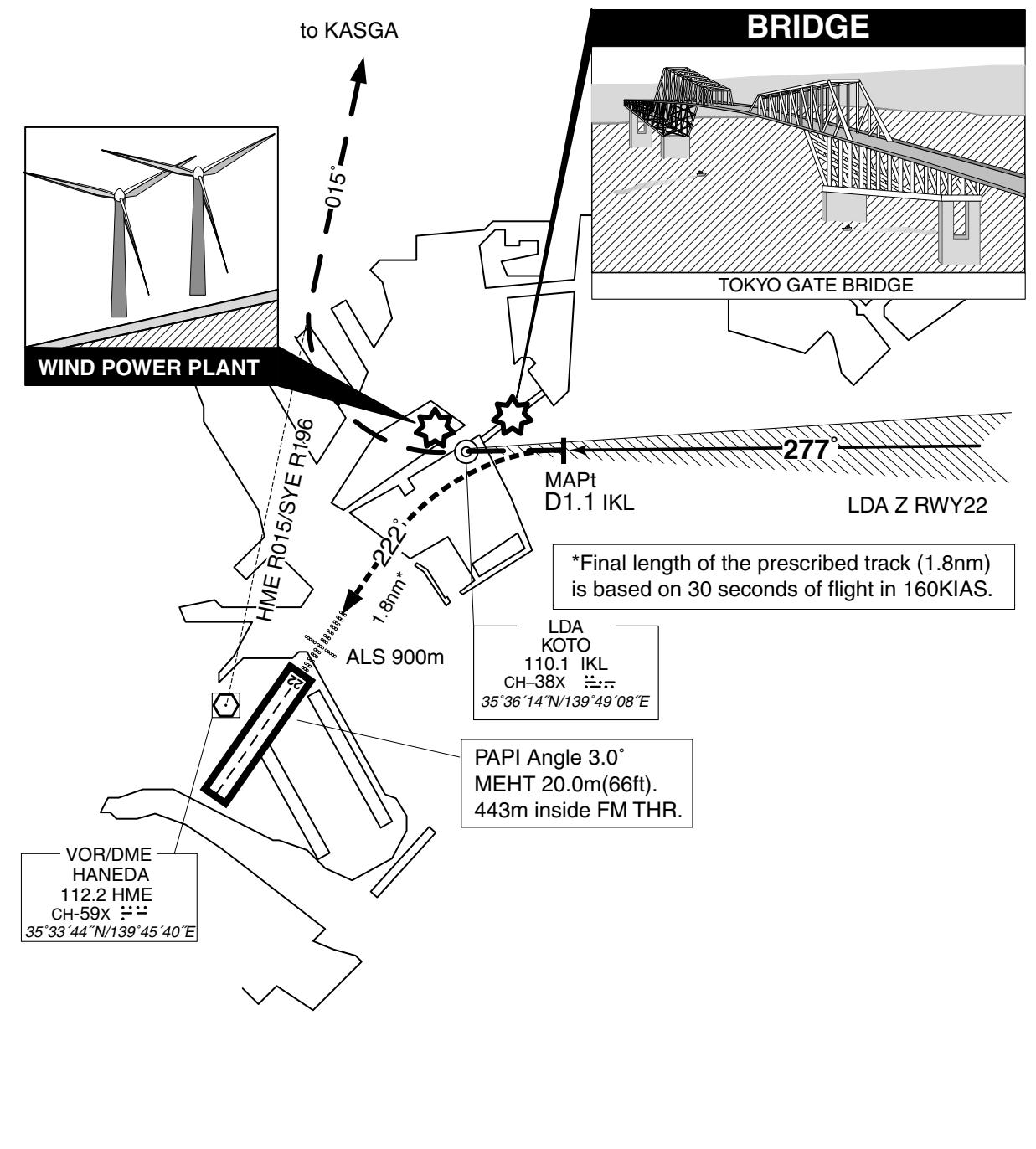
RJTT / TOKYO INTL

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.

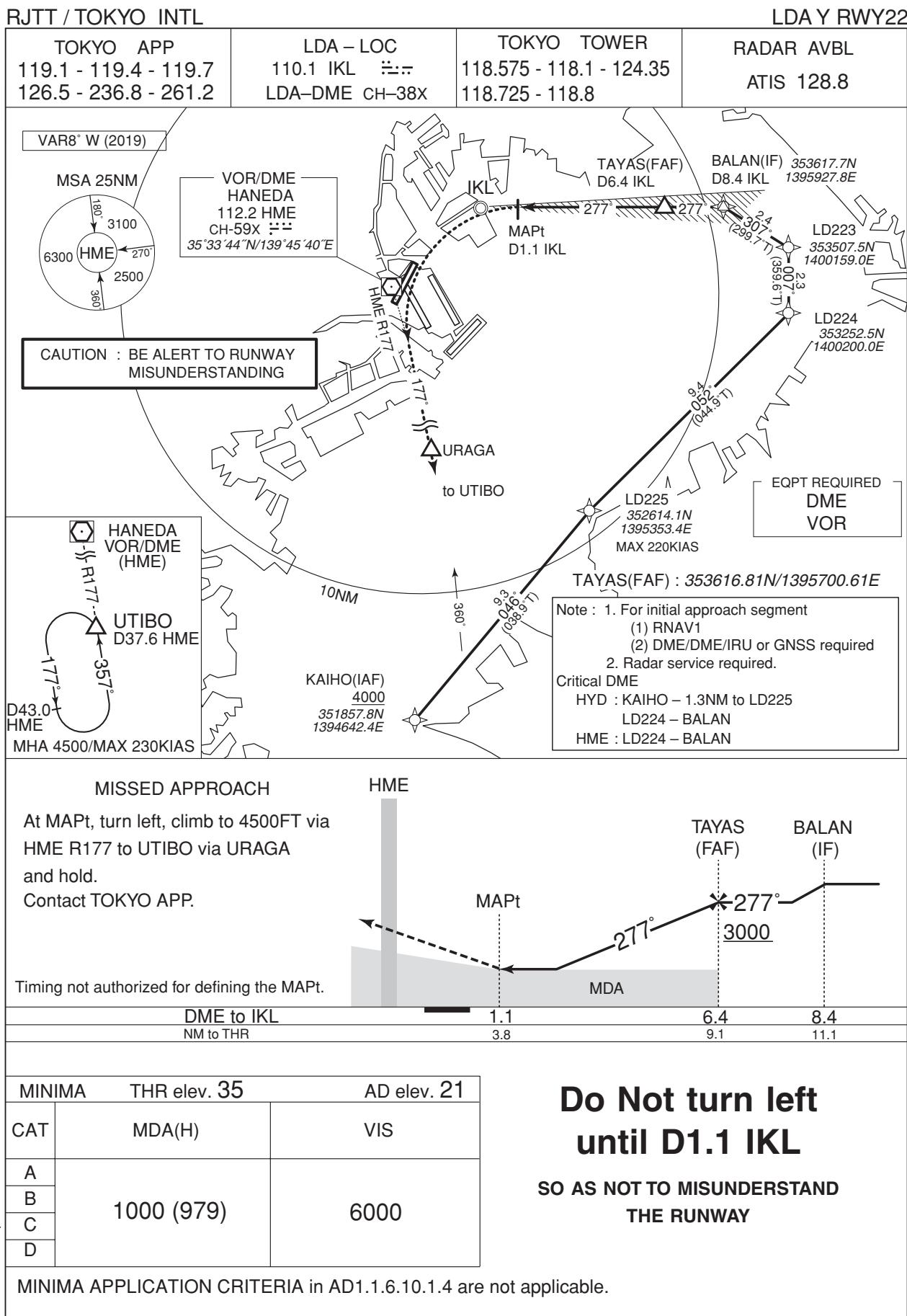
Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



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



CHANGE : Update

INSTRUMENT APPROACH CHART

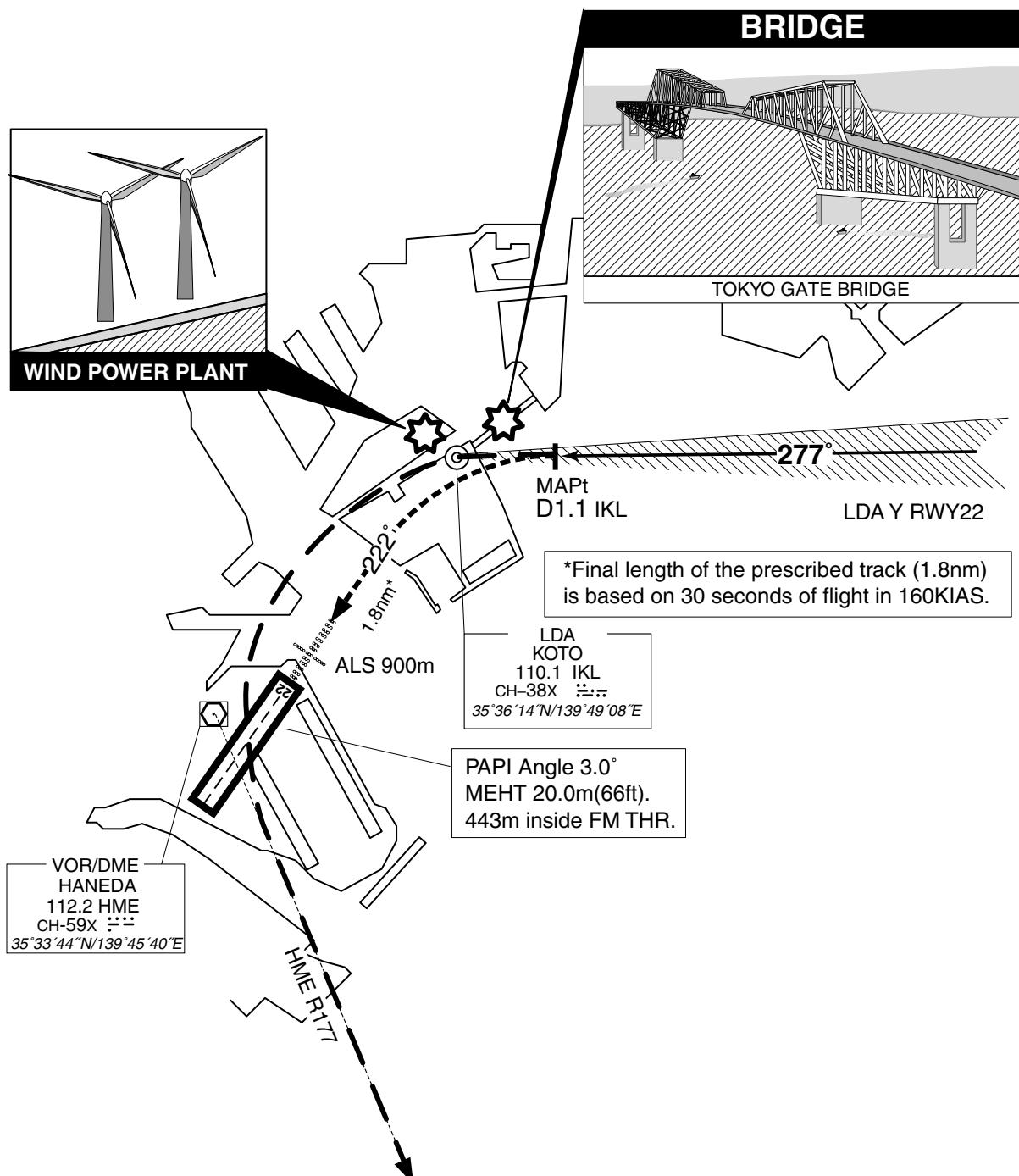
RJTT / TOKYO INTL

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.

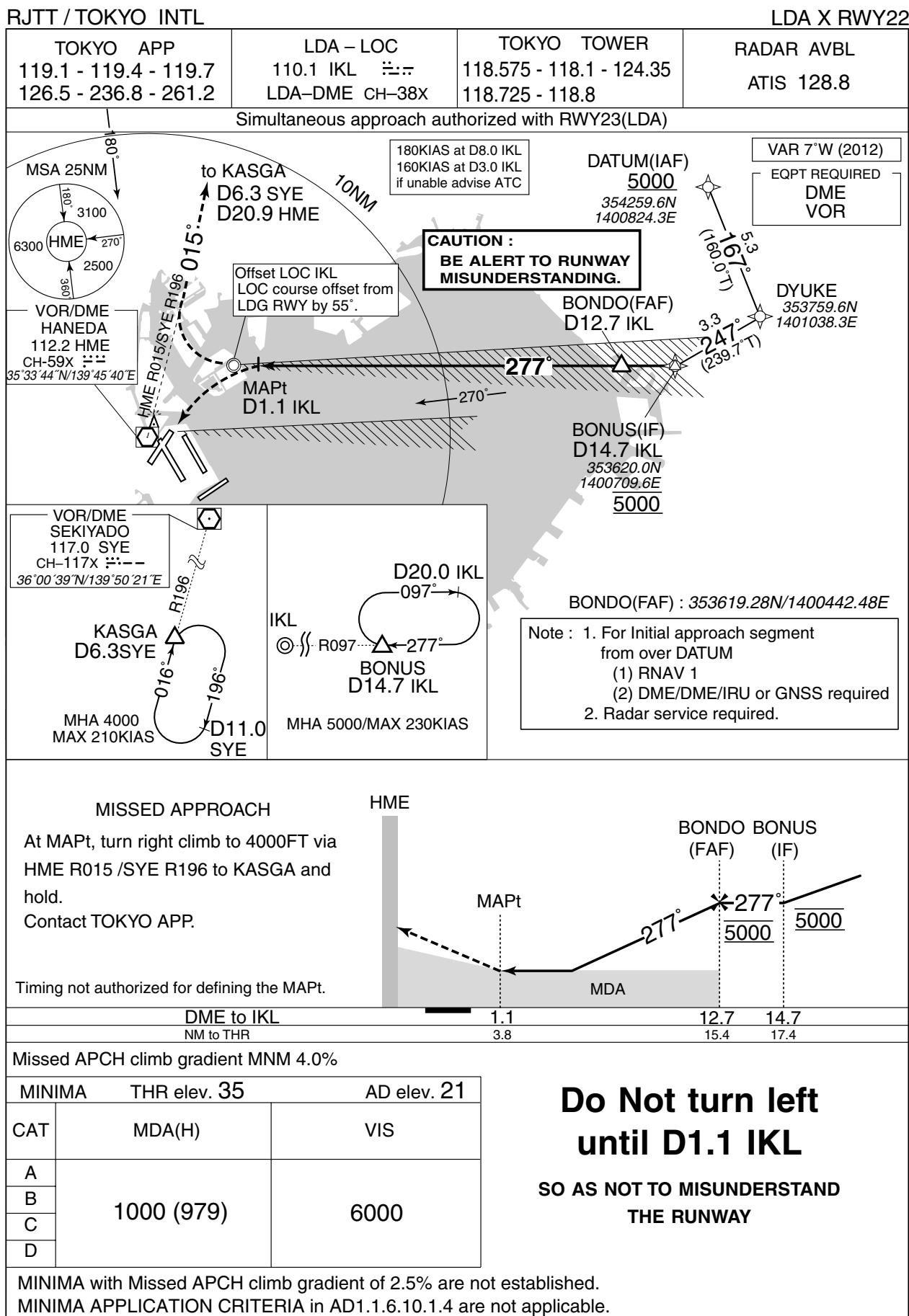
Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



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



INSTRUMENT APPROACH CHART

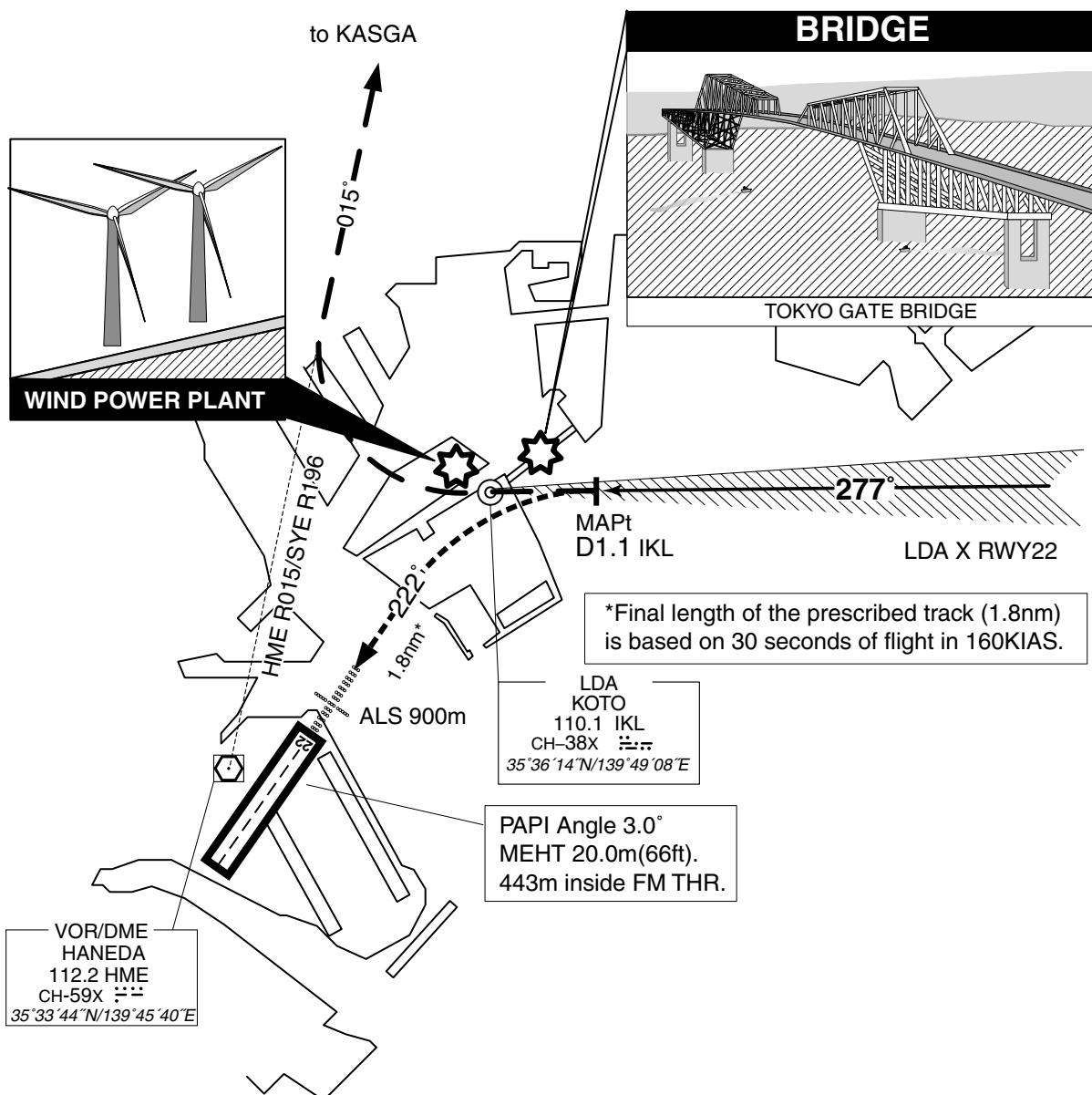
RJTT / TOKYO INTL

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.



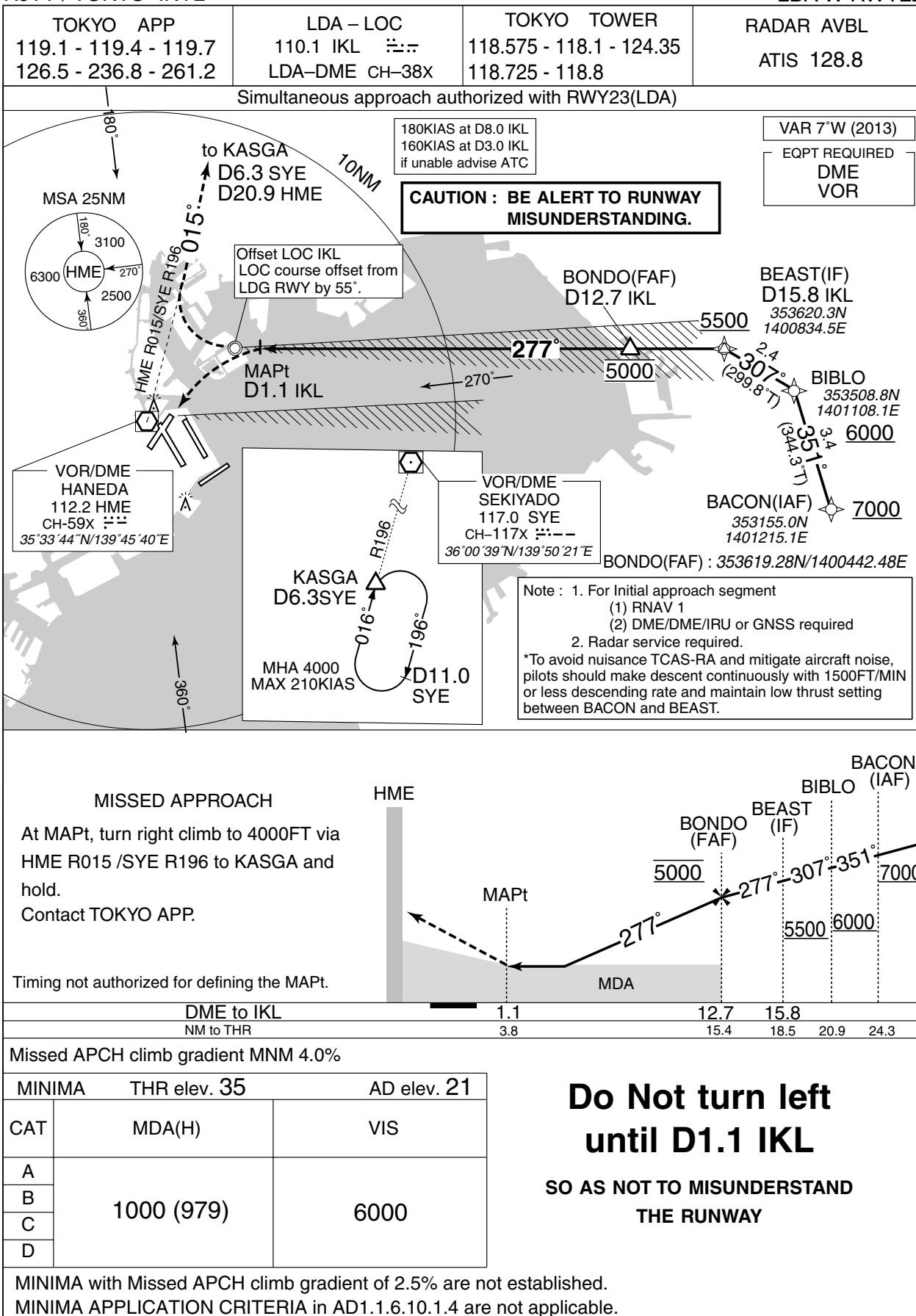
In case of GO AROUND, pilot should report ATC as soon as practicable.

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



INSTRUMENT APPROACH CHART

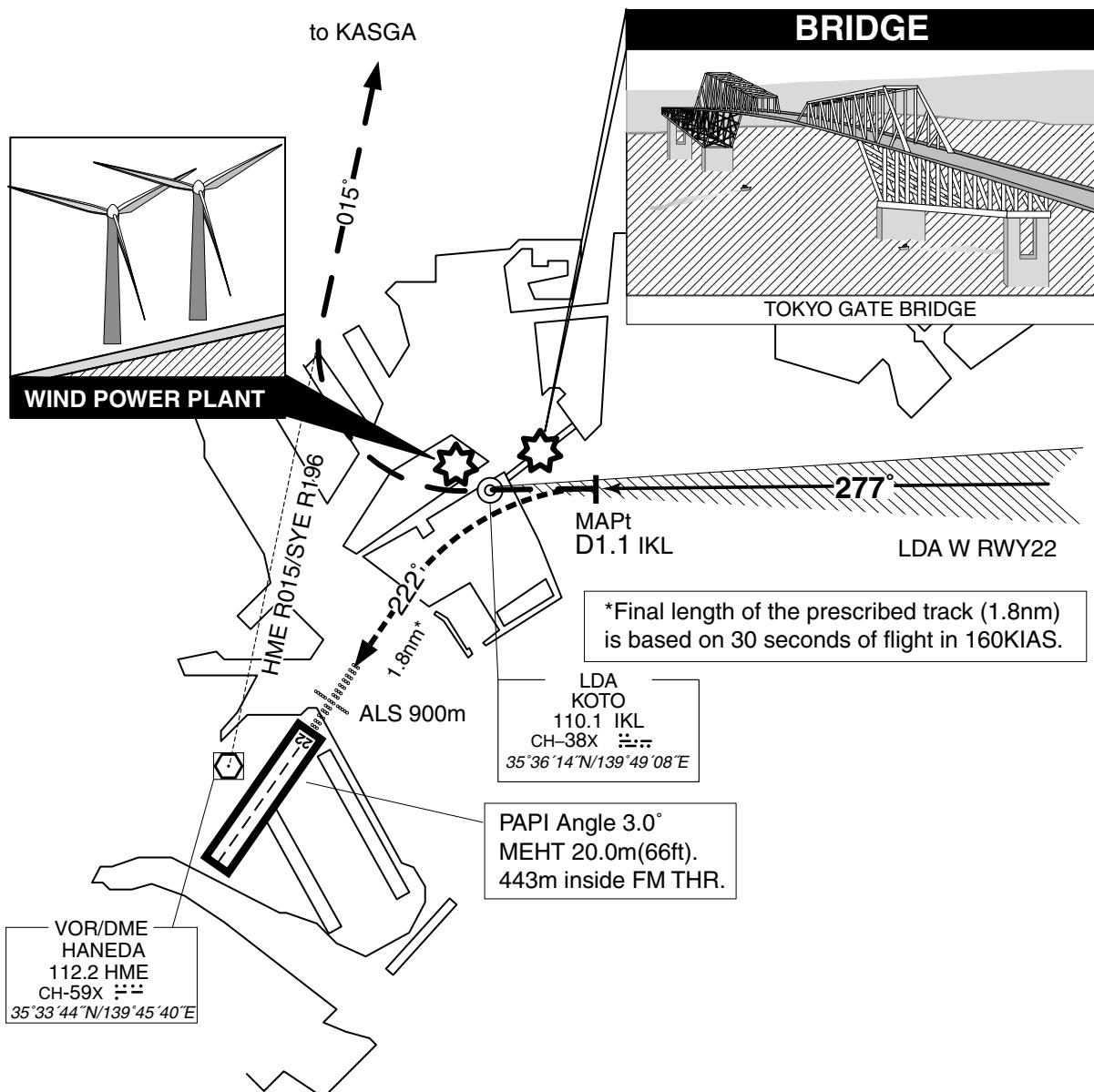
RJTT / TOKYO INTL

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.

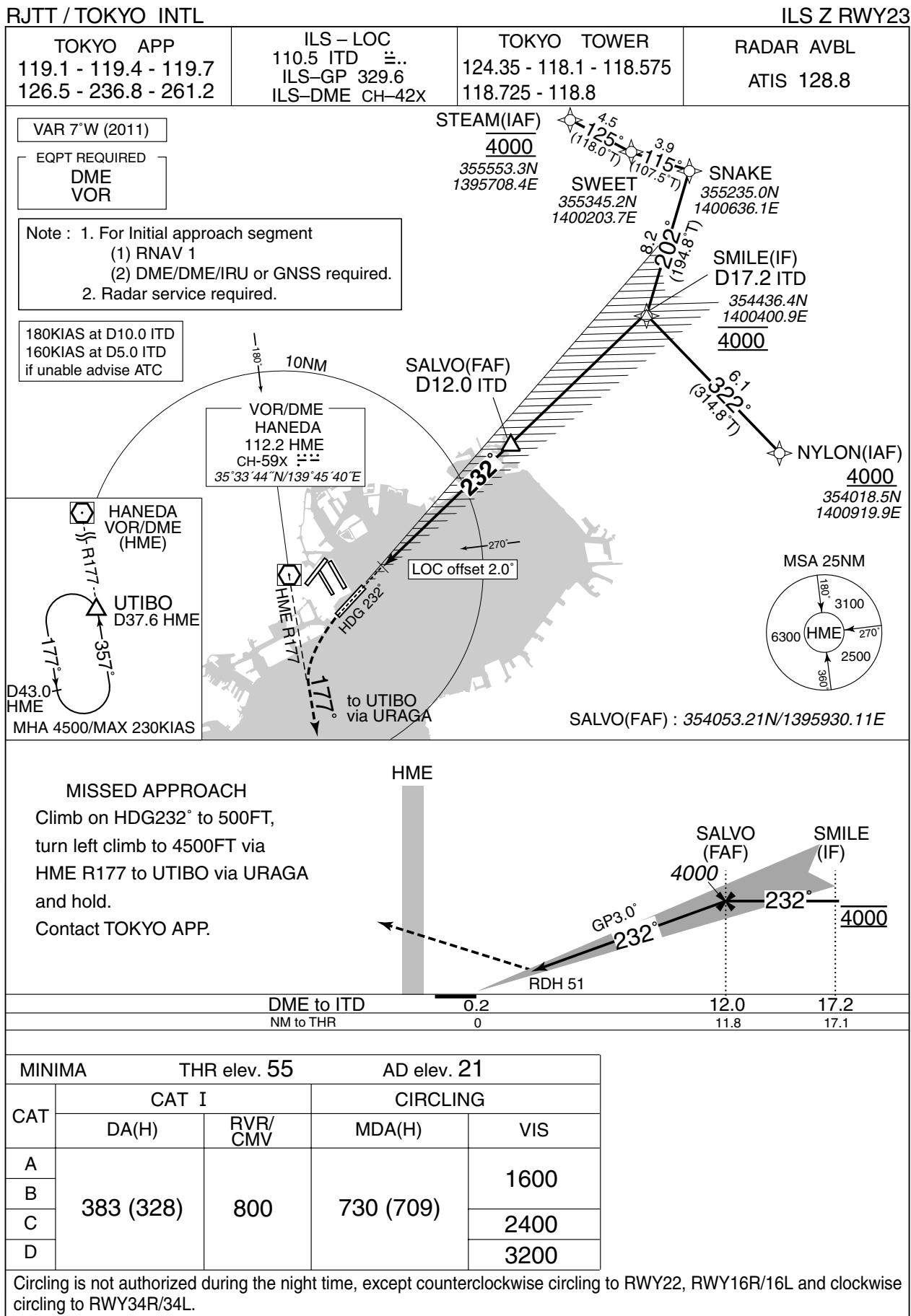
Note : Remain on the LDA until passing MAPt so as not to penetrate the NTZ, and to avoid the RWY23 traffic.



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.

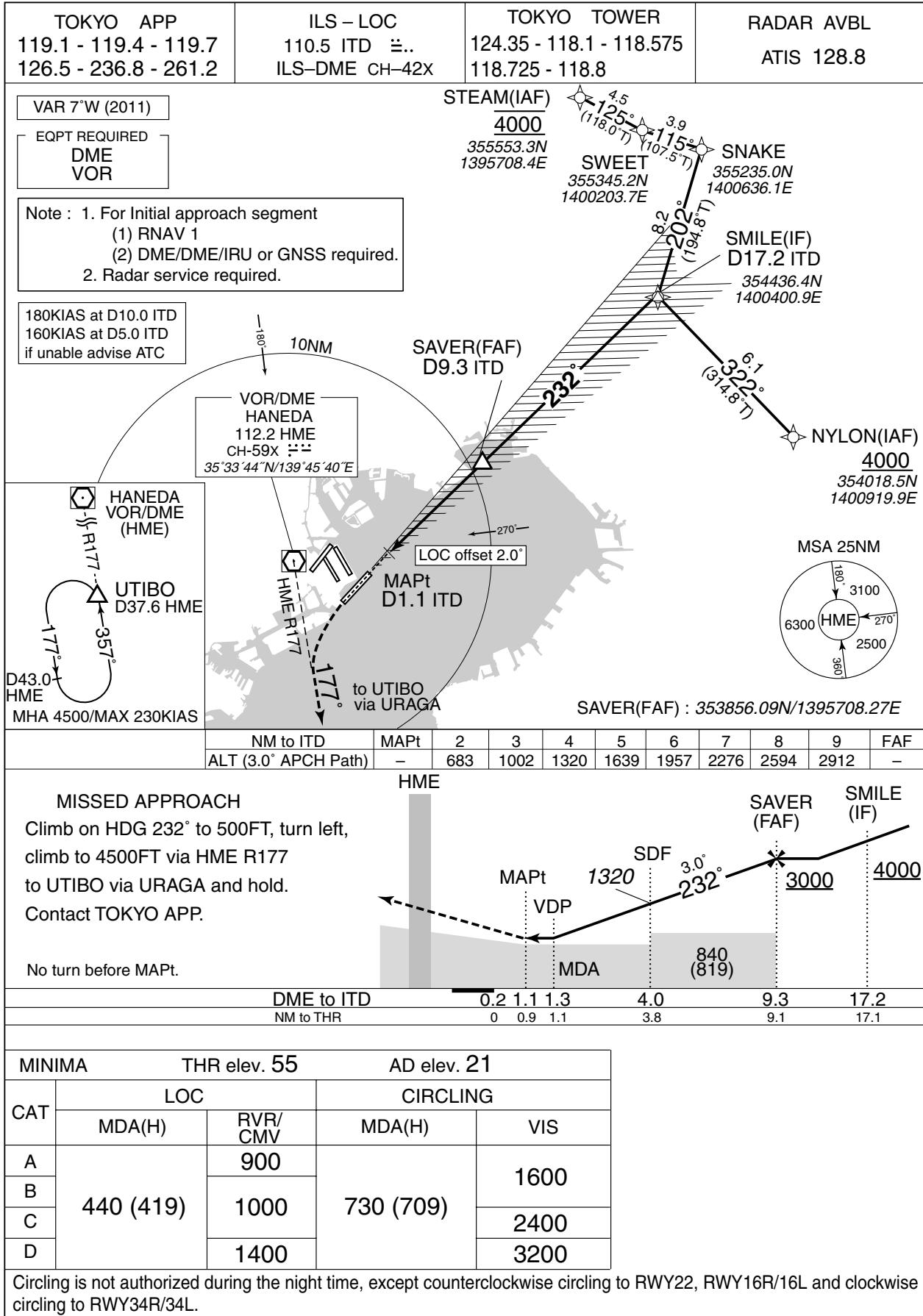
## INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

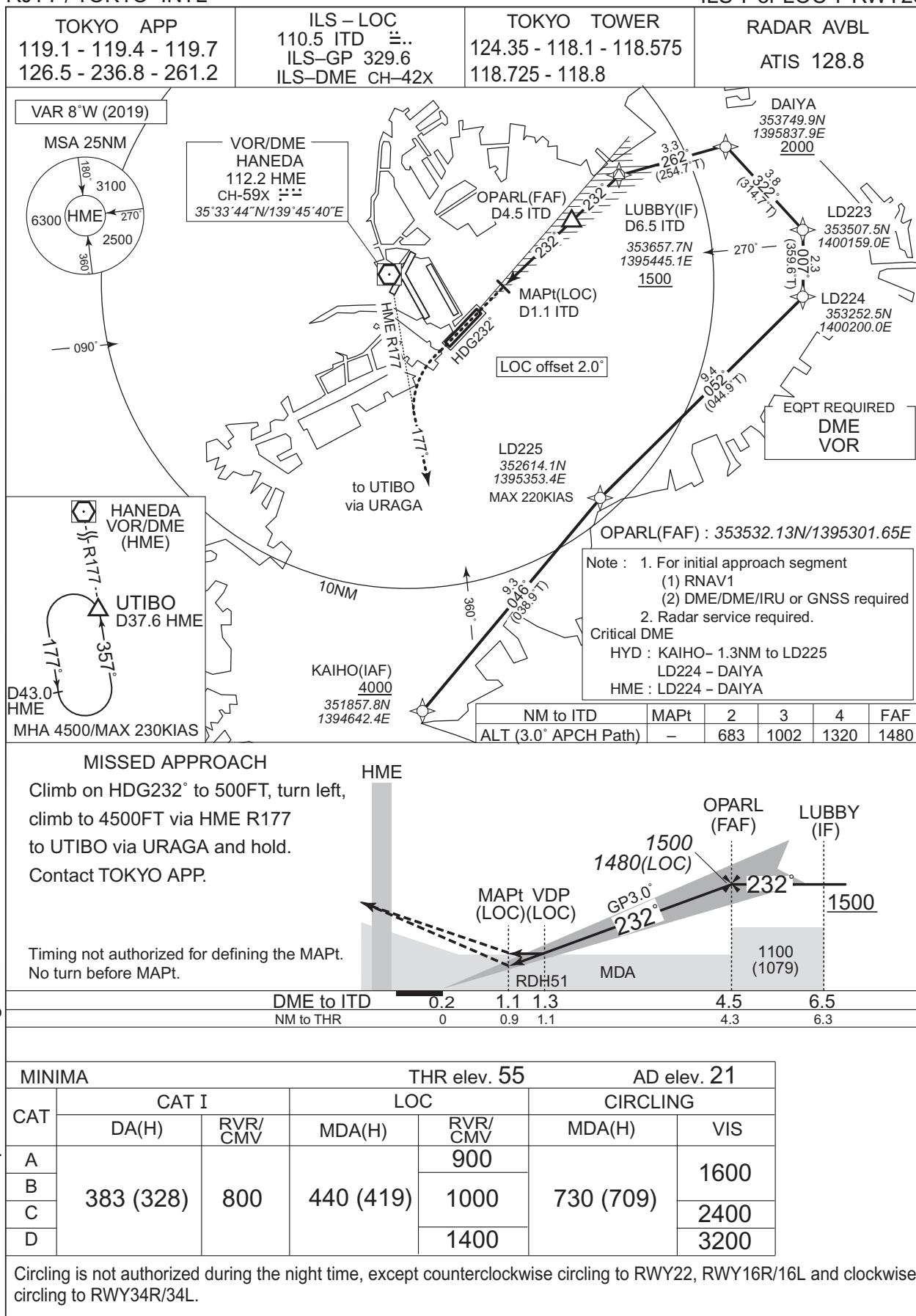
LOC Z RWY23



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

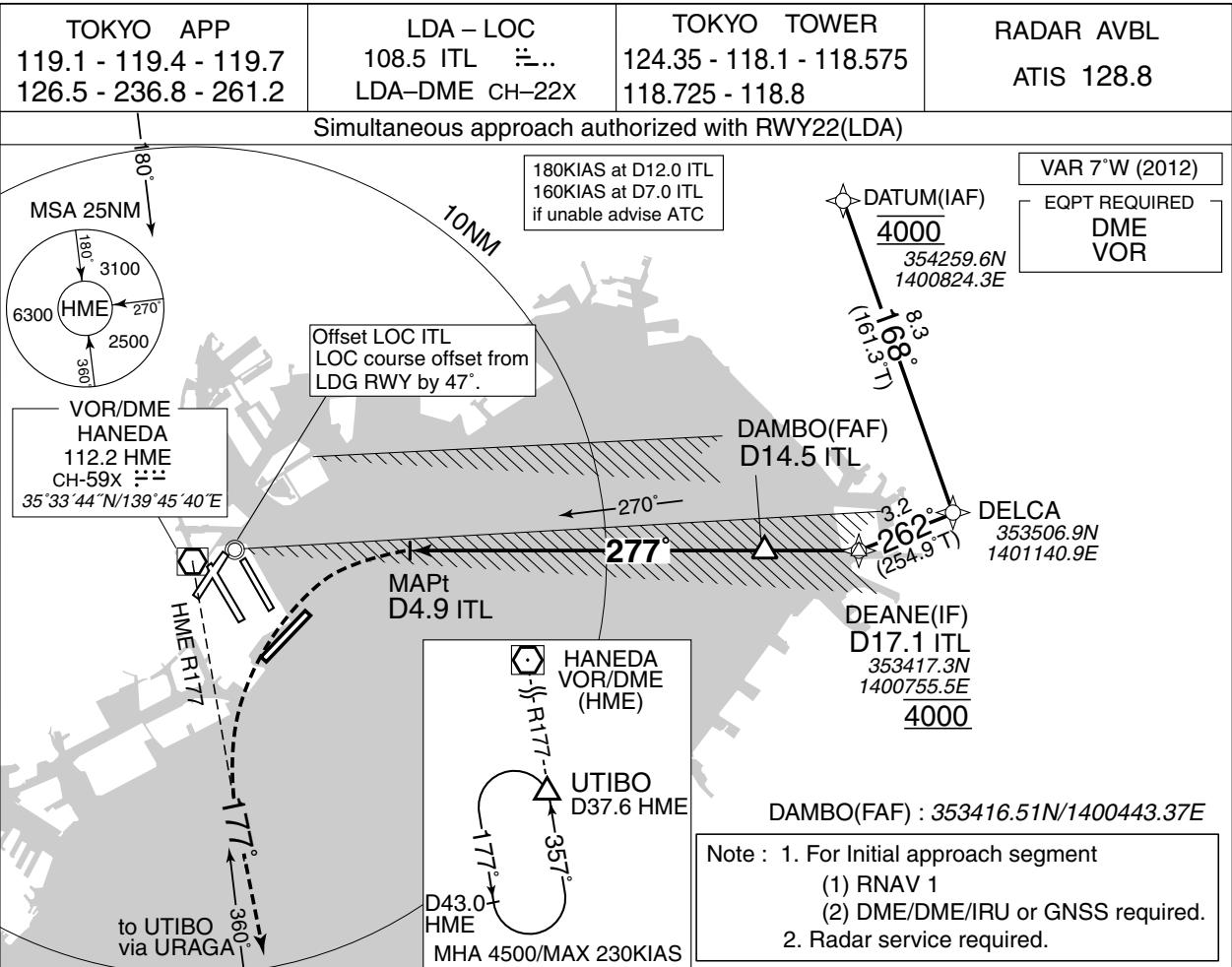
ILS Y or LOC Y RWY23



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

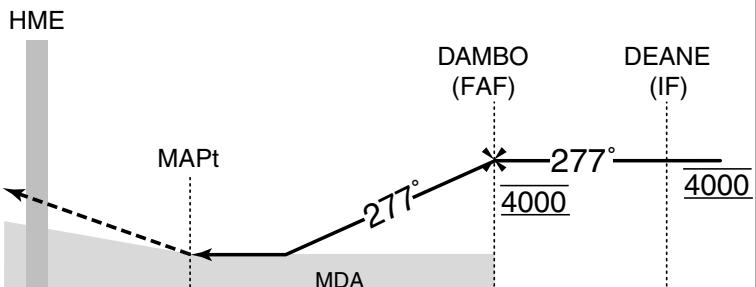
LDA Z RWY23



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.



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

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

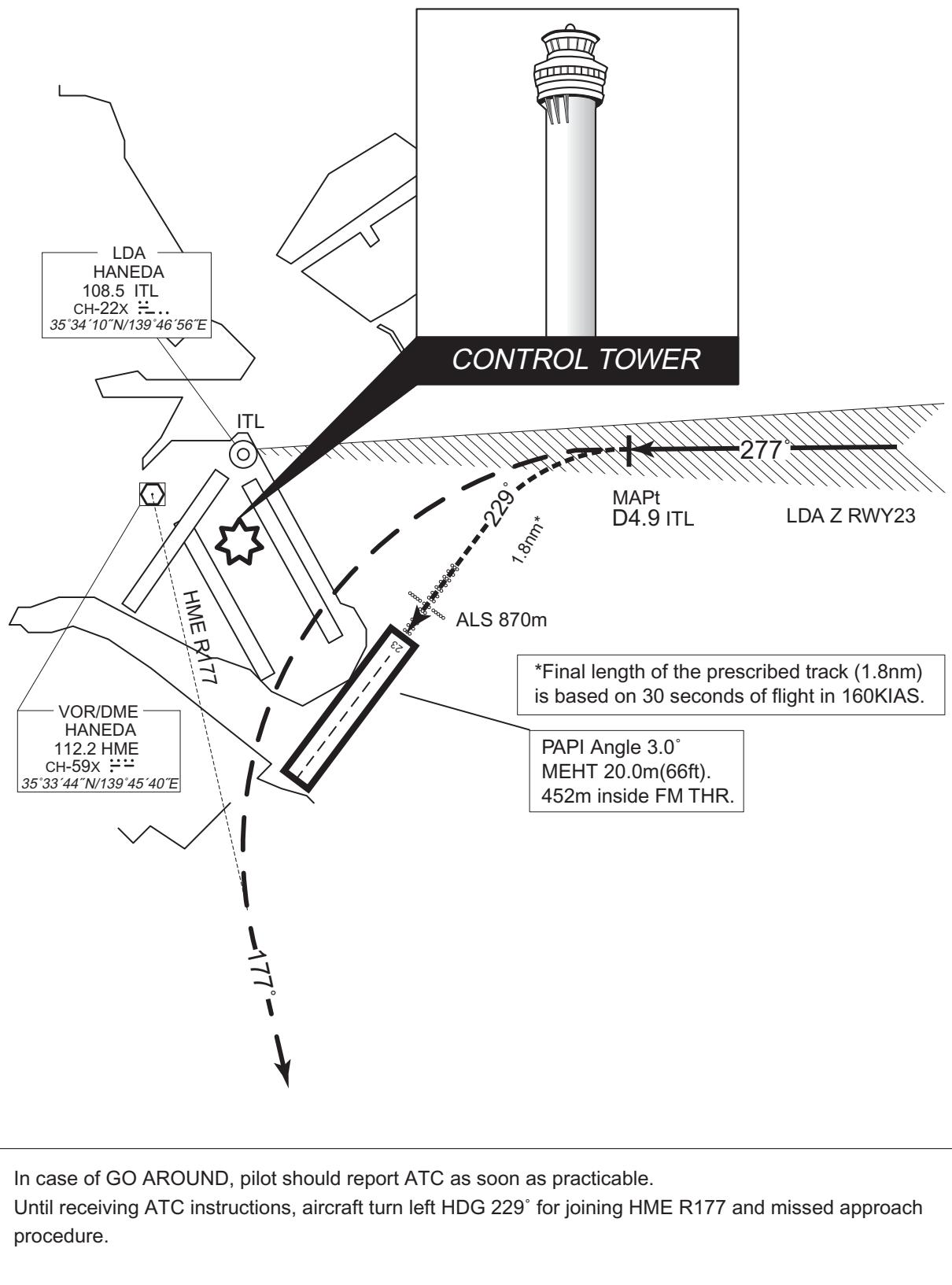
## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA Z RWY23

## Visual Prescribed Track for LDA Z RWY23

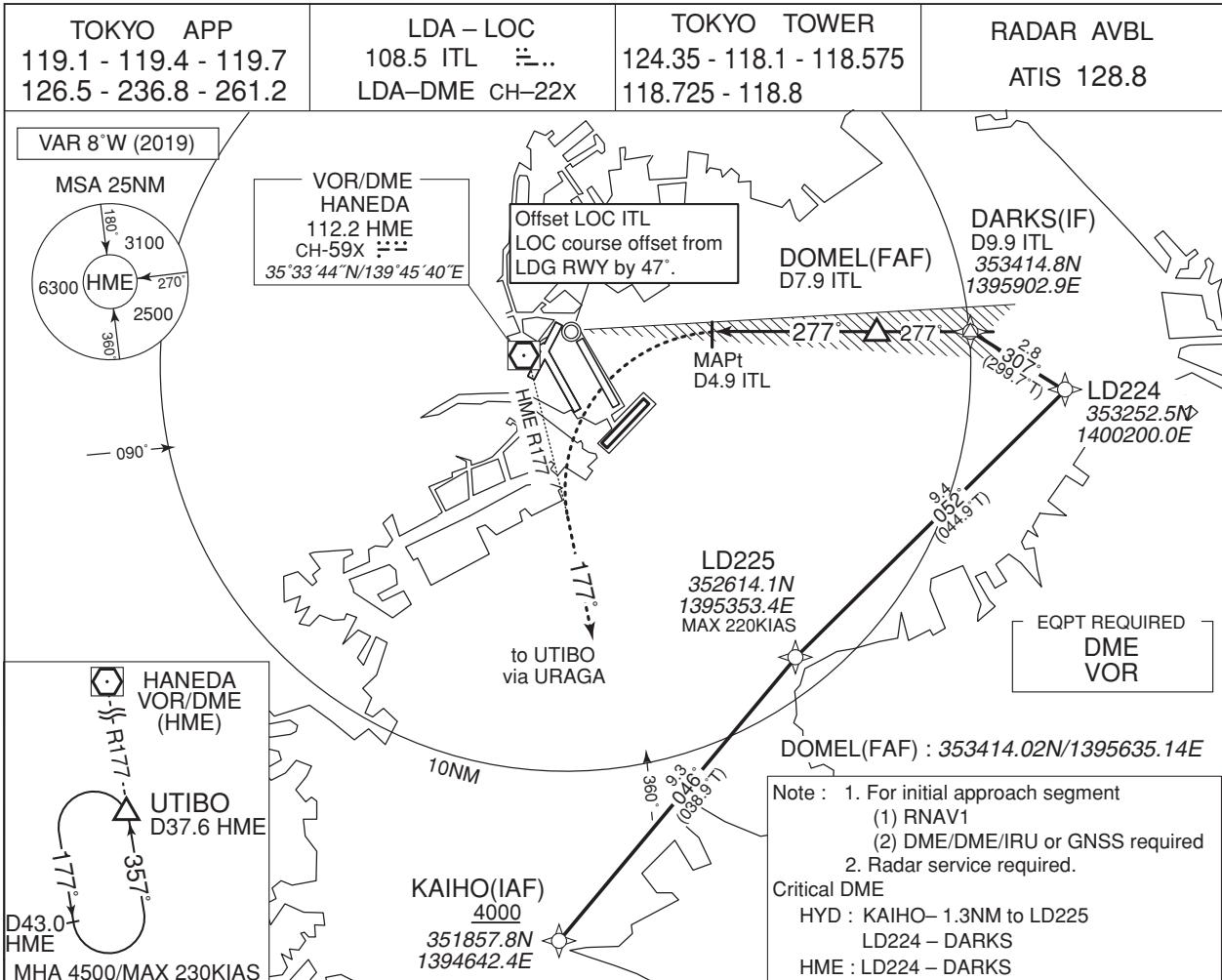
Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA Y RWY23



MISSED APPROACH

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

HME

DOMEL (FAF) DARKS (IF)

Timing not authorized for defining the MAPt.

MAPt

MDA

4.9

7.9

9.9

1800

DME to ITL

NM to THR

3.4

6.4

8.4

MINIMA THR elev. 55 AD elev. 21

| CAT | MDA(H)     | VIS  |
|-----|------------|------|
| A   |            |      |
| B   |            |      |
| C   |            |      |
| D   | 1000 (979) | 6000 |

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

CHANGE : Update

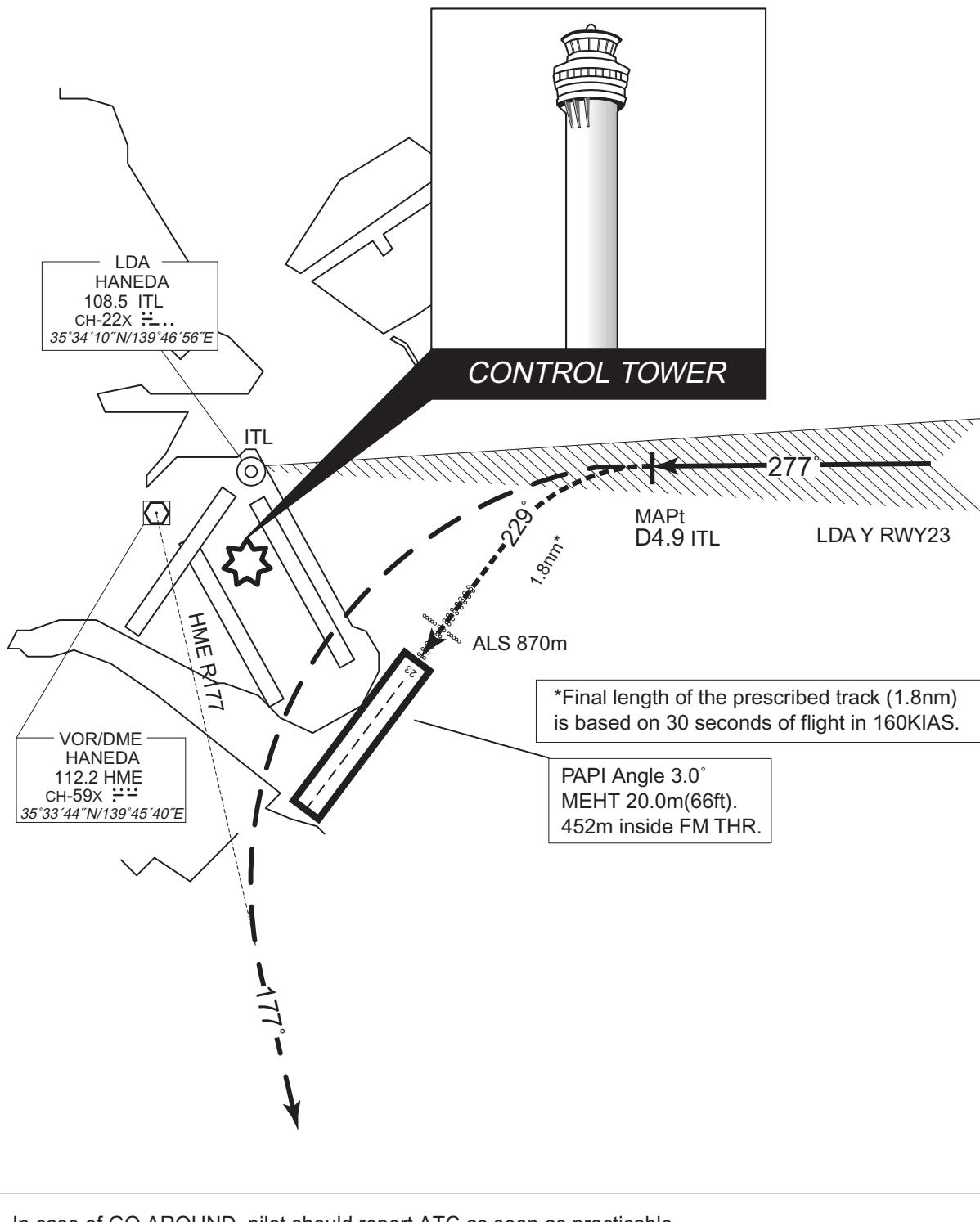
## INSTRUMENT APPROACH CHART

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.



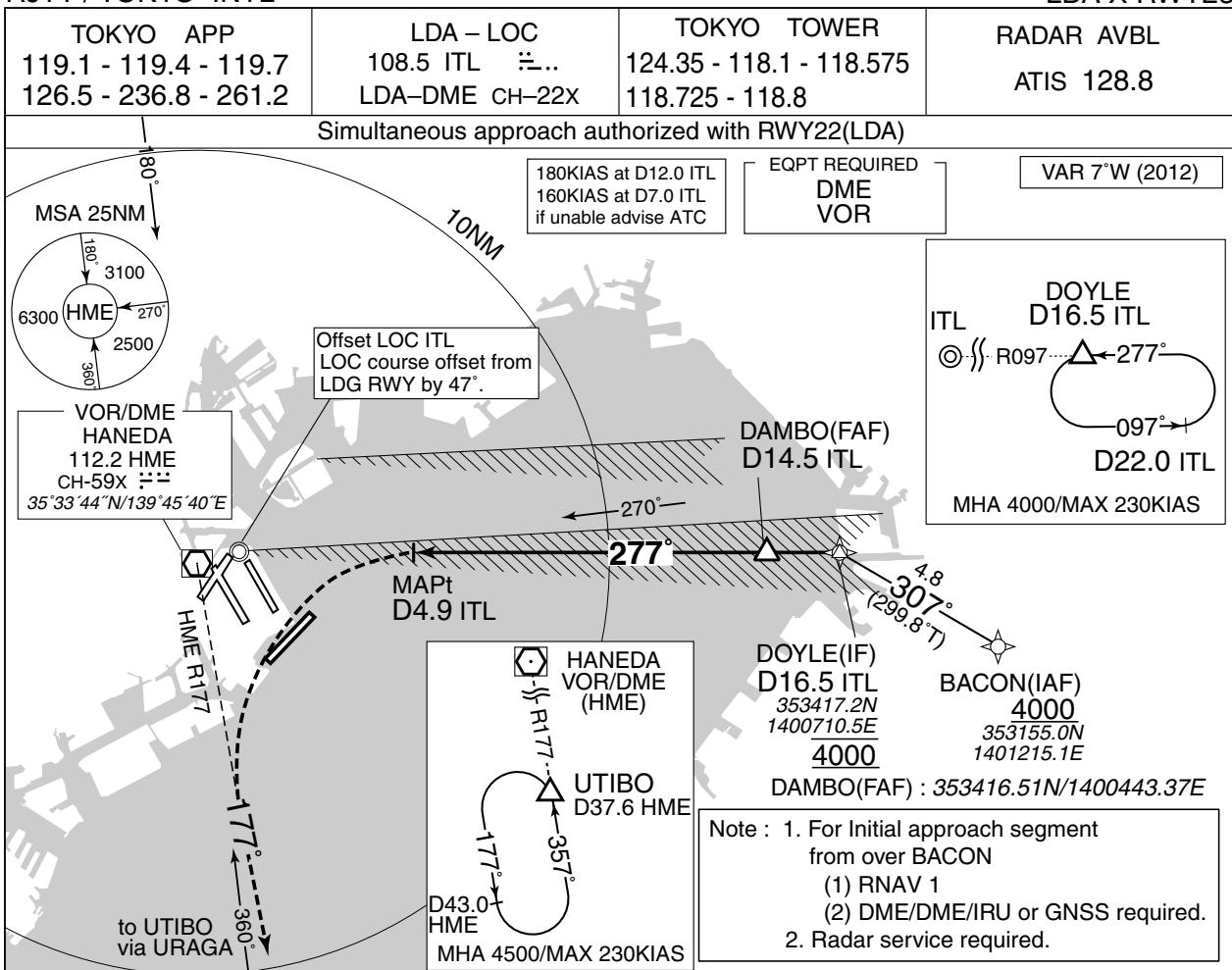
In case of GO AROUND, pilot should report ATC as soon as practicable.

Until receiving ATC instructions, aircraft turn left HDG 229° for joining HME R177 and missed approach procedure.

INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

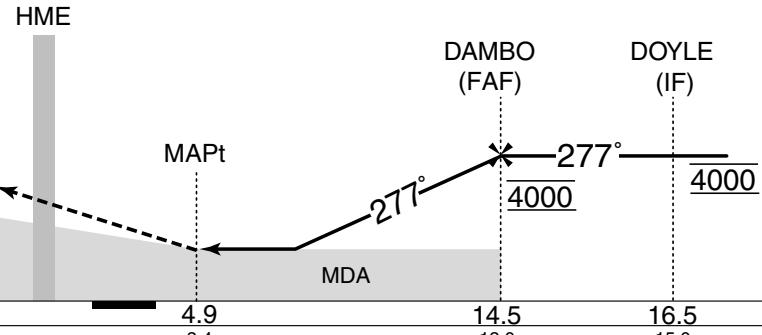
LDA X RWY23



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.



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

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

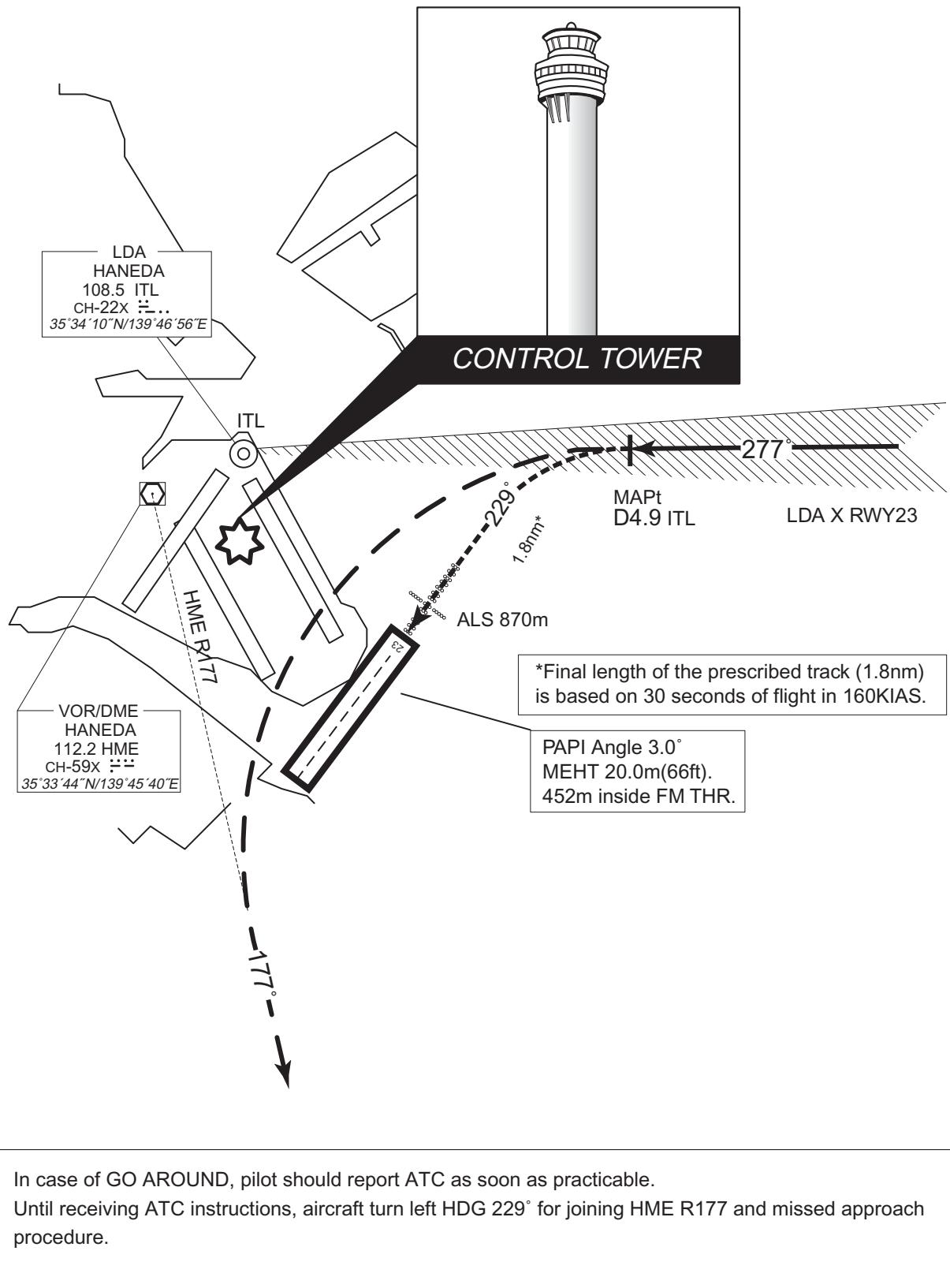
## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA X RWY23

## Visual Prescribed Track for LDA X RWY23

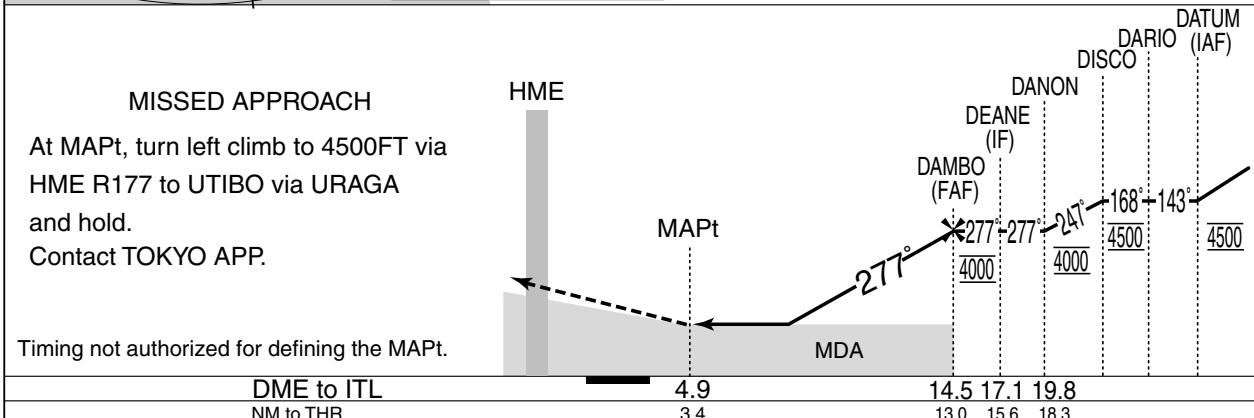
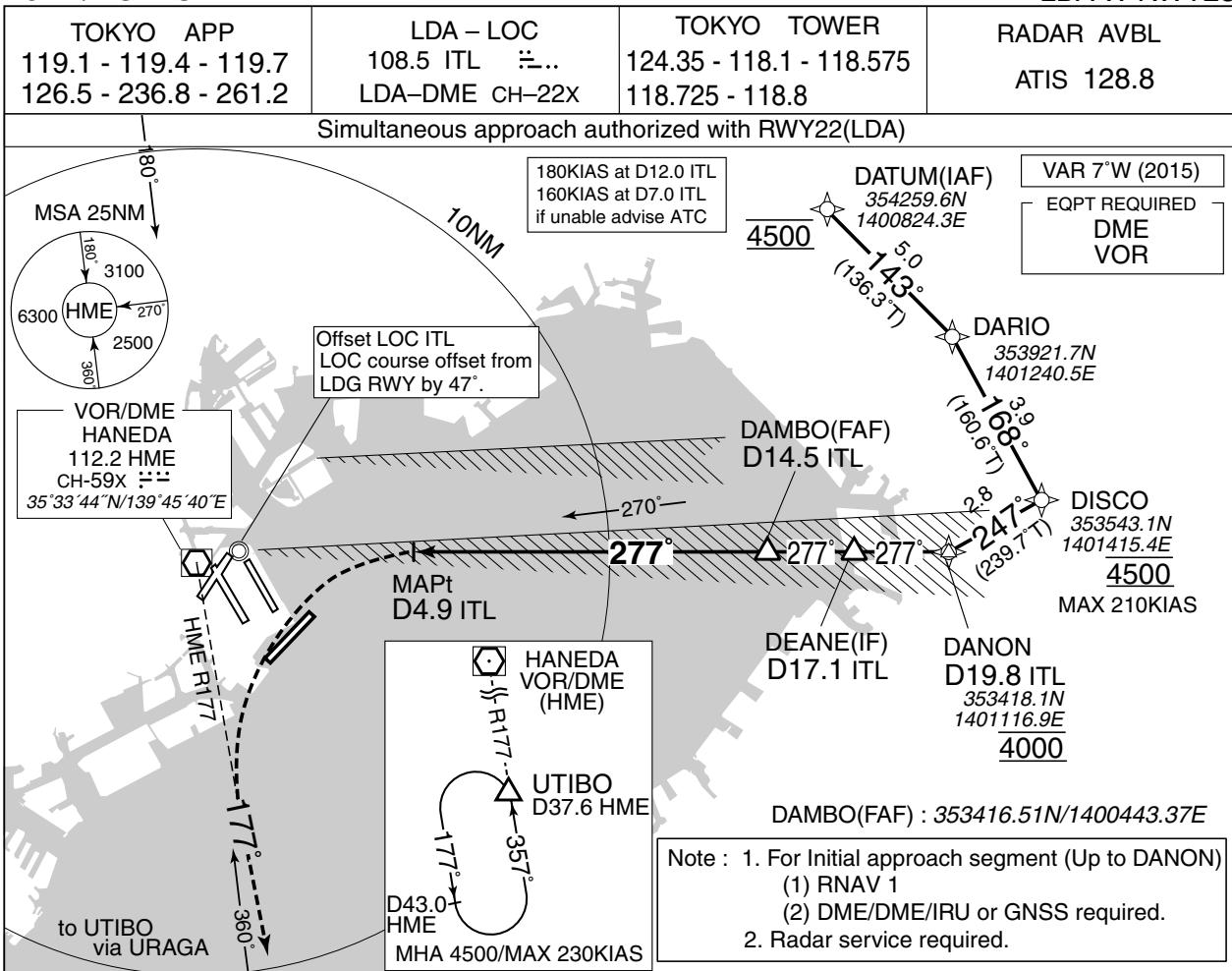
Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA W RWY23



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

MINIMA APPLICATION CRITERIA in AD1.1.6.10.1.4 are not applicable.

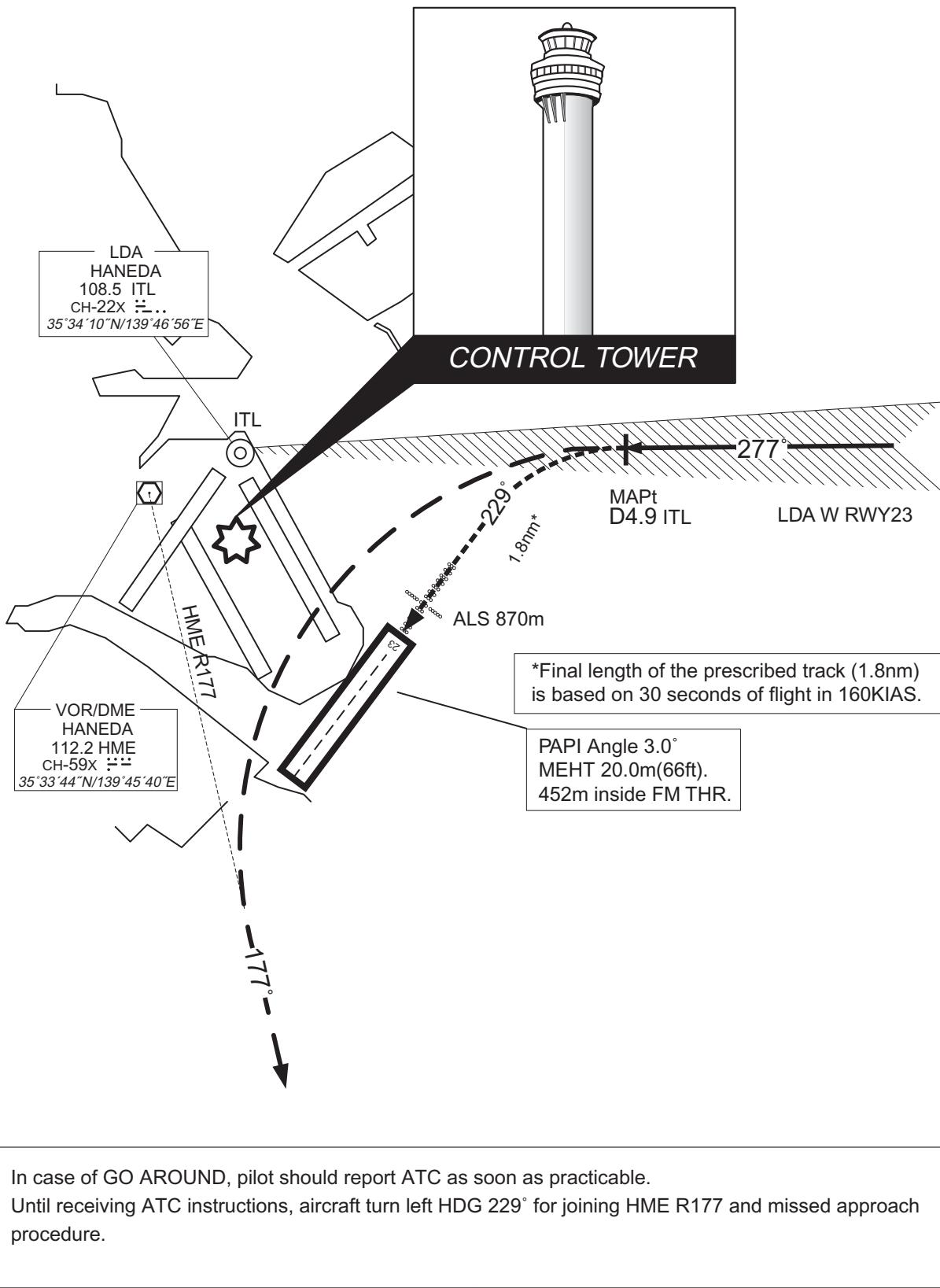
## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

LDA W RWY23

## Visual Prescribed Track for LDA W RWY23

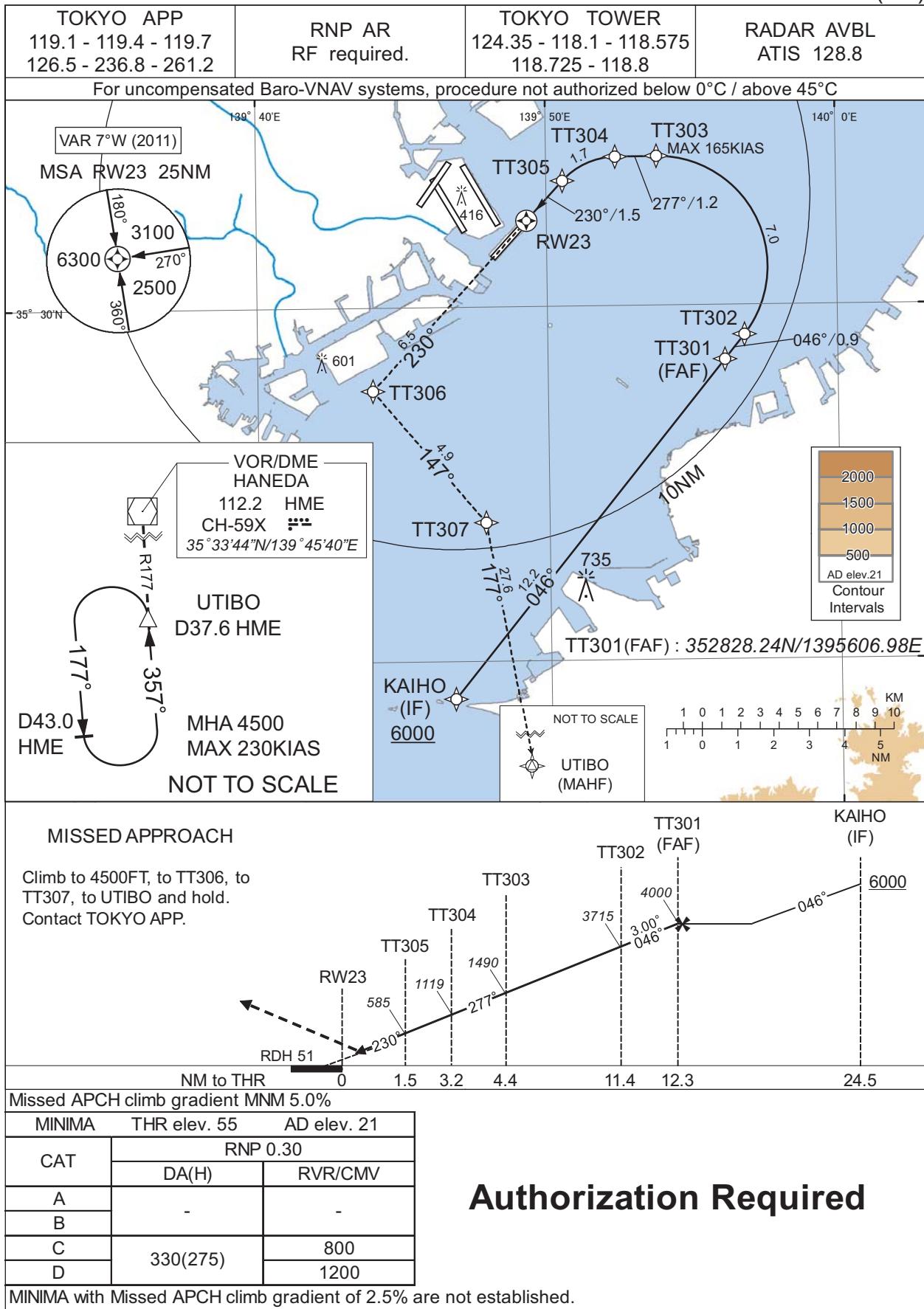
Visual manoeuvre with Prescribed Track (VPT) : VPT stands for visual maneuvering after the MAPt using prescribed track.



INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

RNP RWY23(AR)



## INSTRUMENT APPROACH CHART

RJTT / TOKYO INTL

RNP RWY23(AR)

Coding Table

| Serial Number | Path Descriptor                 | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | VPA/ RDH (°/FT) | RNP Value |
|---------------|---------------------------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|-----------------|-----------|
| 001           | IF                              | 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:<br>TTRF1<br>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:<br>TTRF2<br>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       |

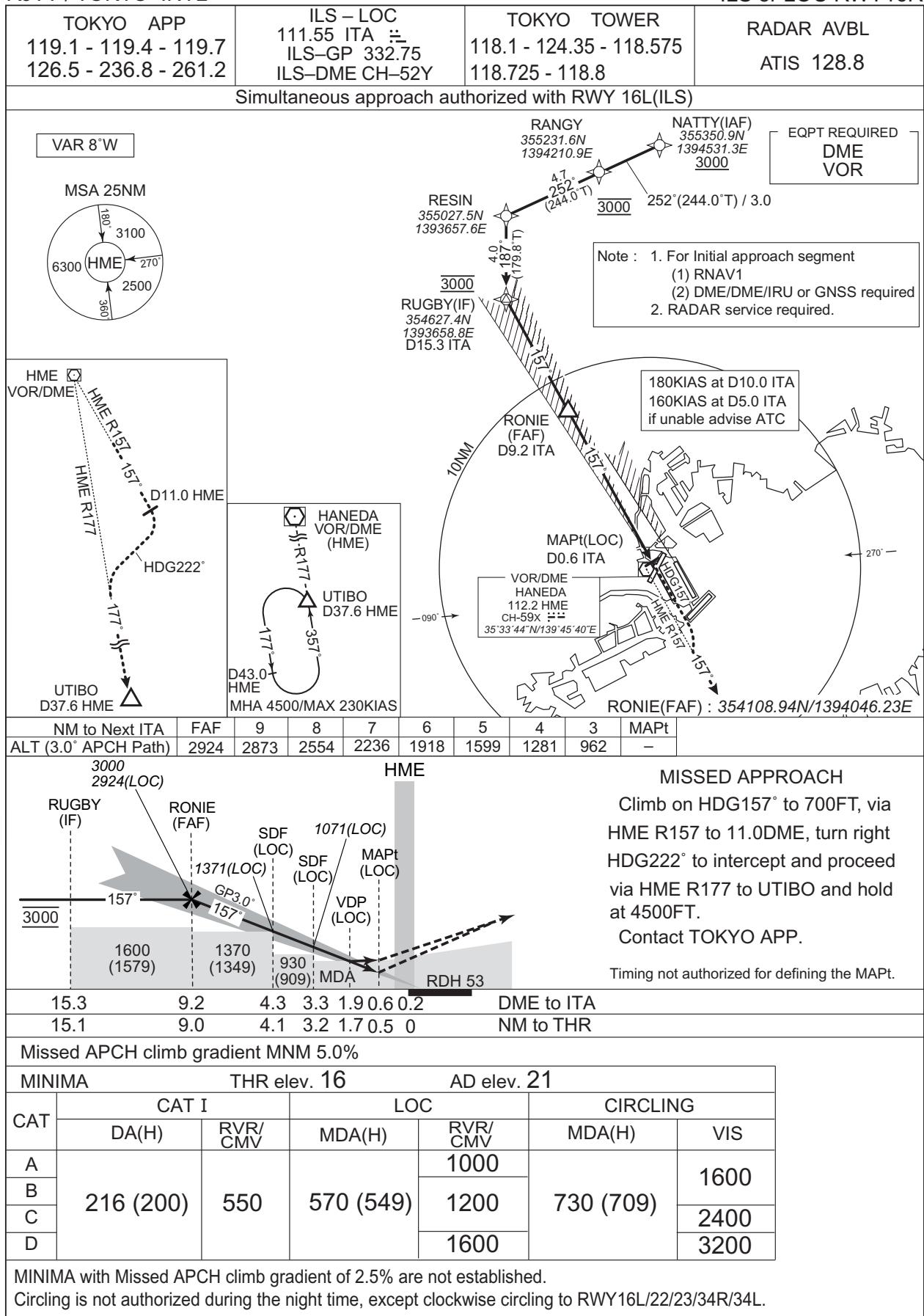
Waypoint Coordinates

| 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 |                          |                          |

CHANGE : PROC renamed.

INSTRUMENT APPROACH CHART

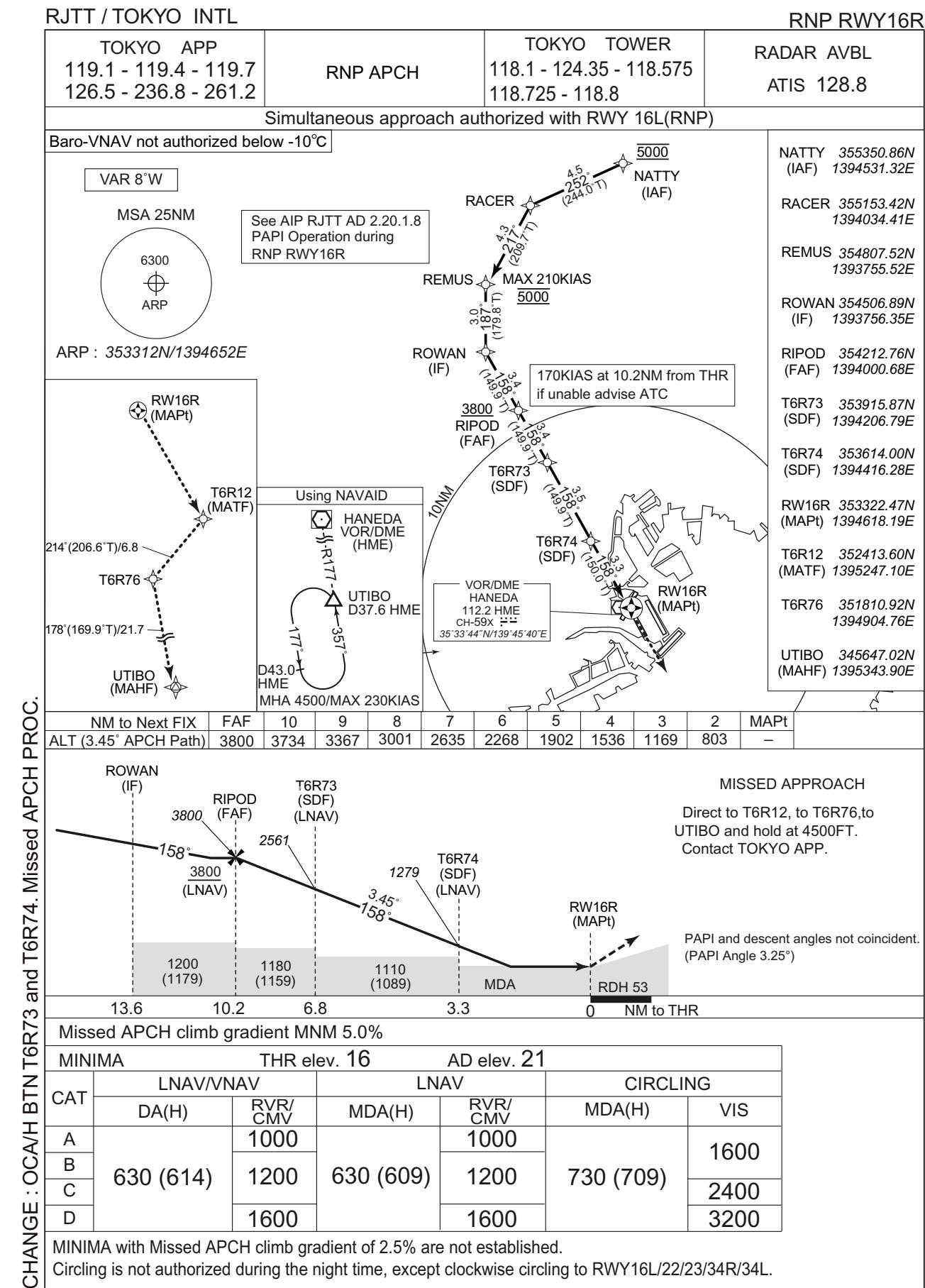
RJTT / TOKYO INTL



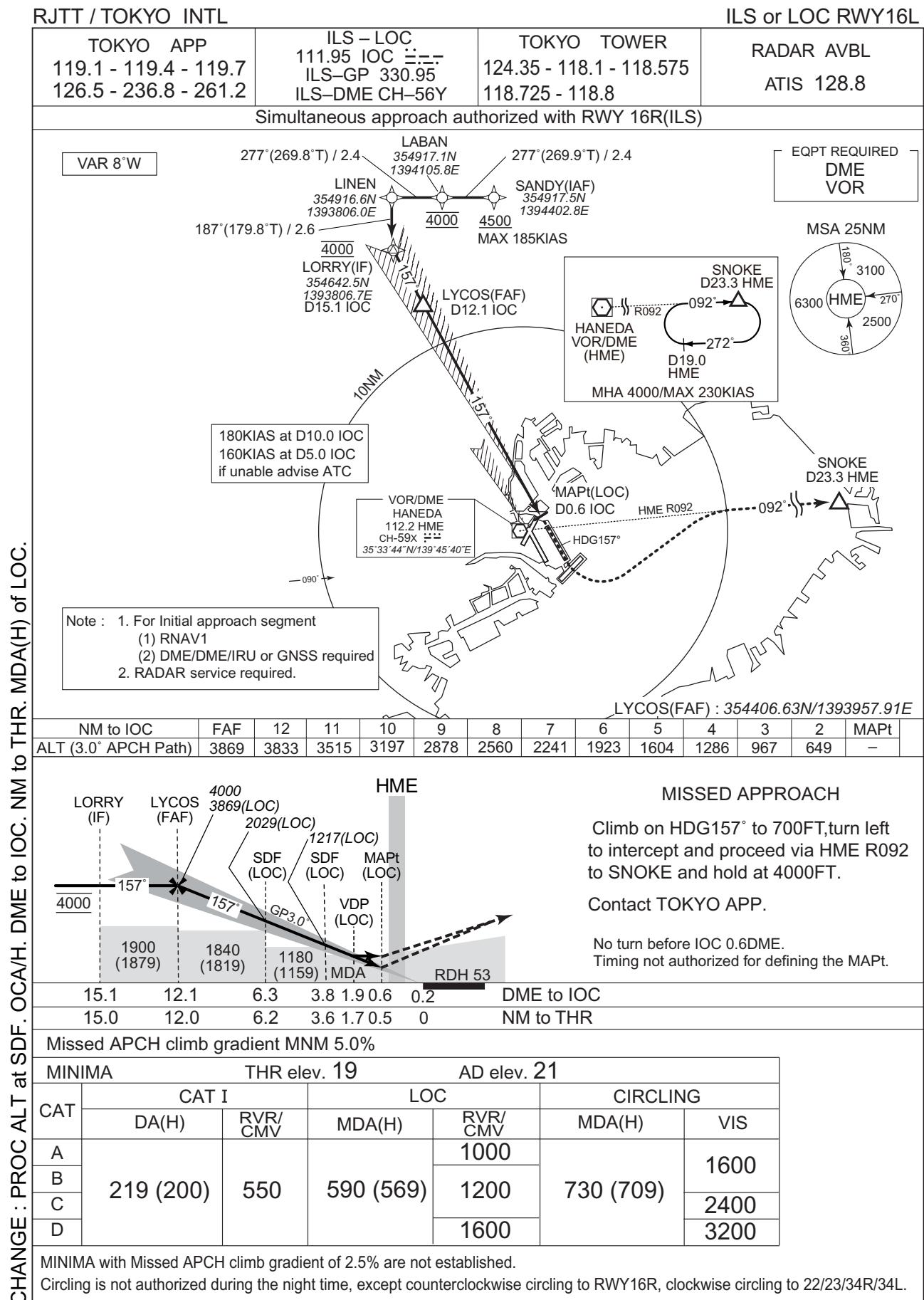
CHANGE : OCA/H BTN RUGBY and RONIE.  
C

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.

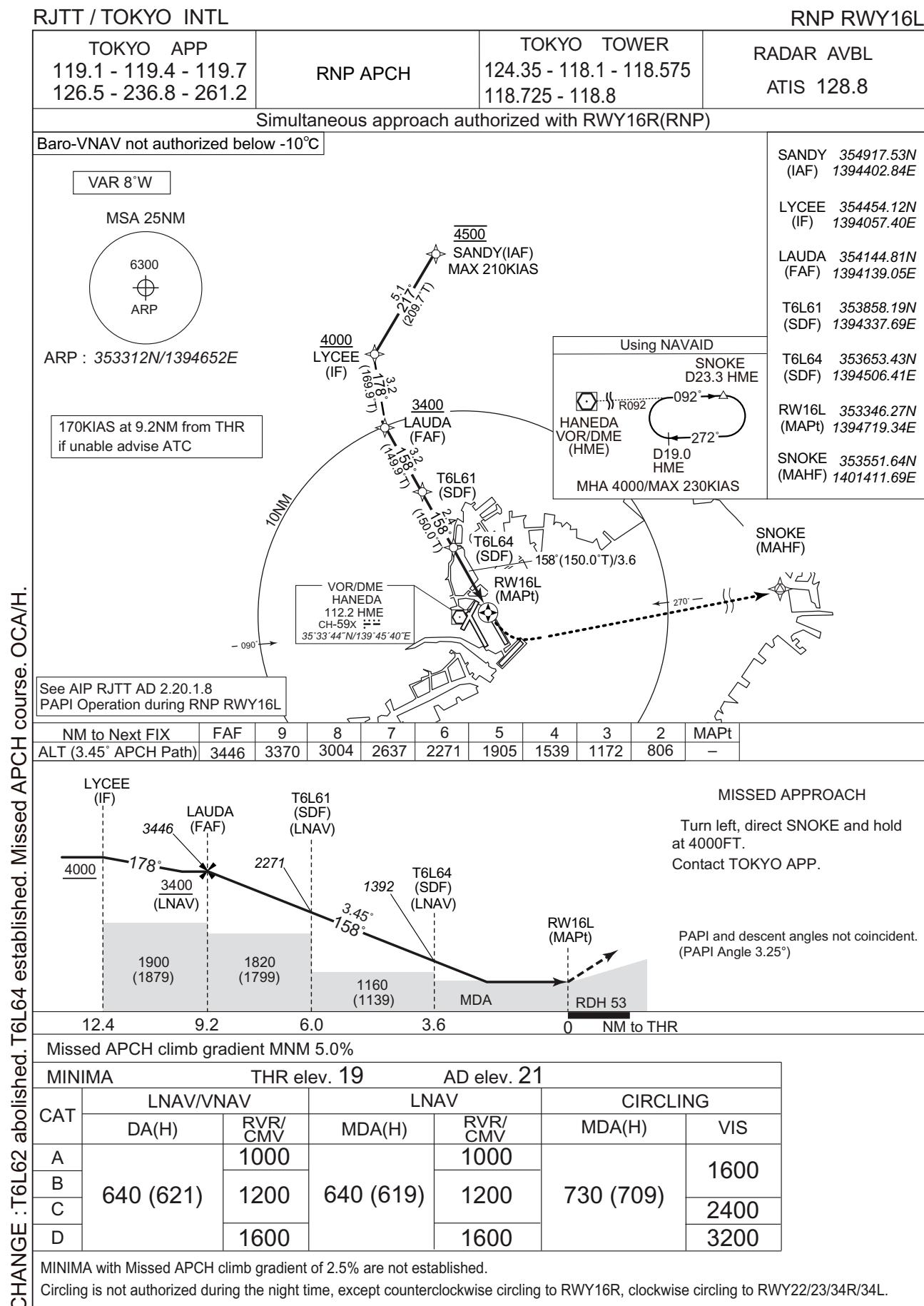
## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART



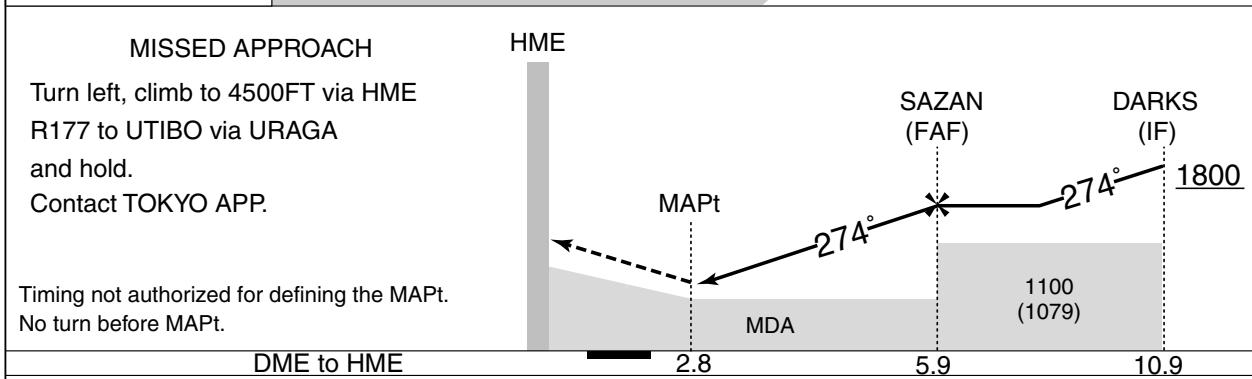
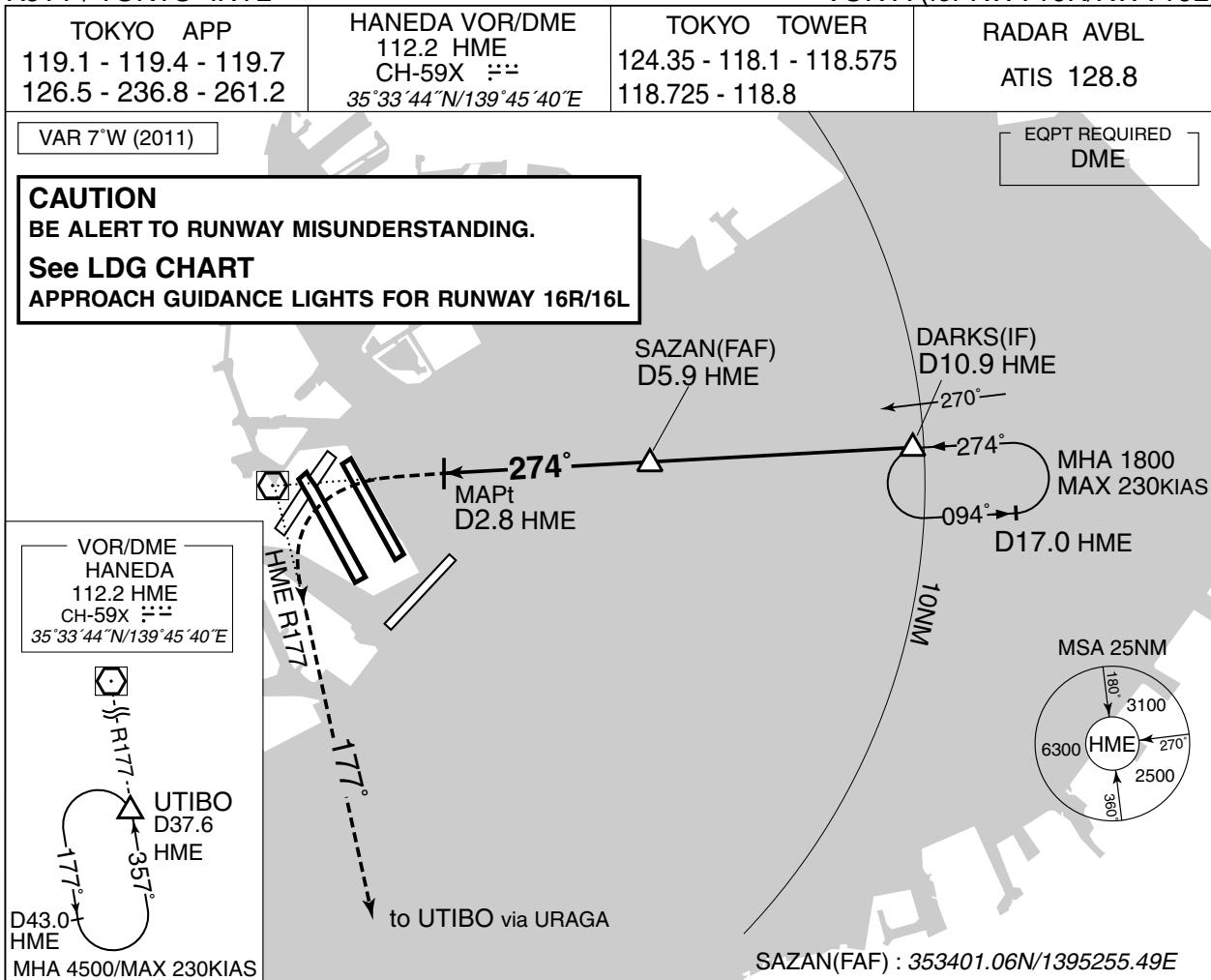
## INSTRUMENT APPROACH CHART



INSTRUMENT APPROACH CHART

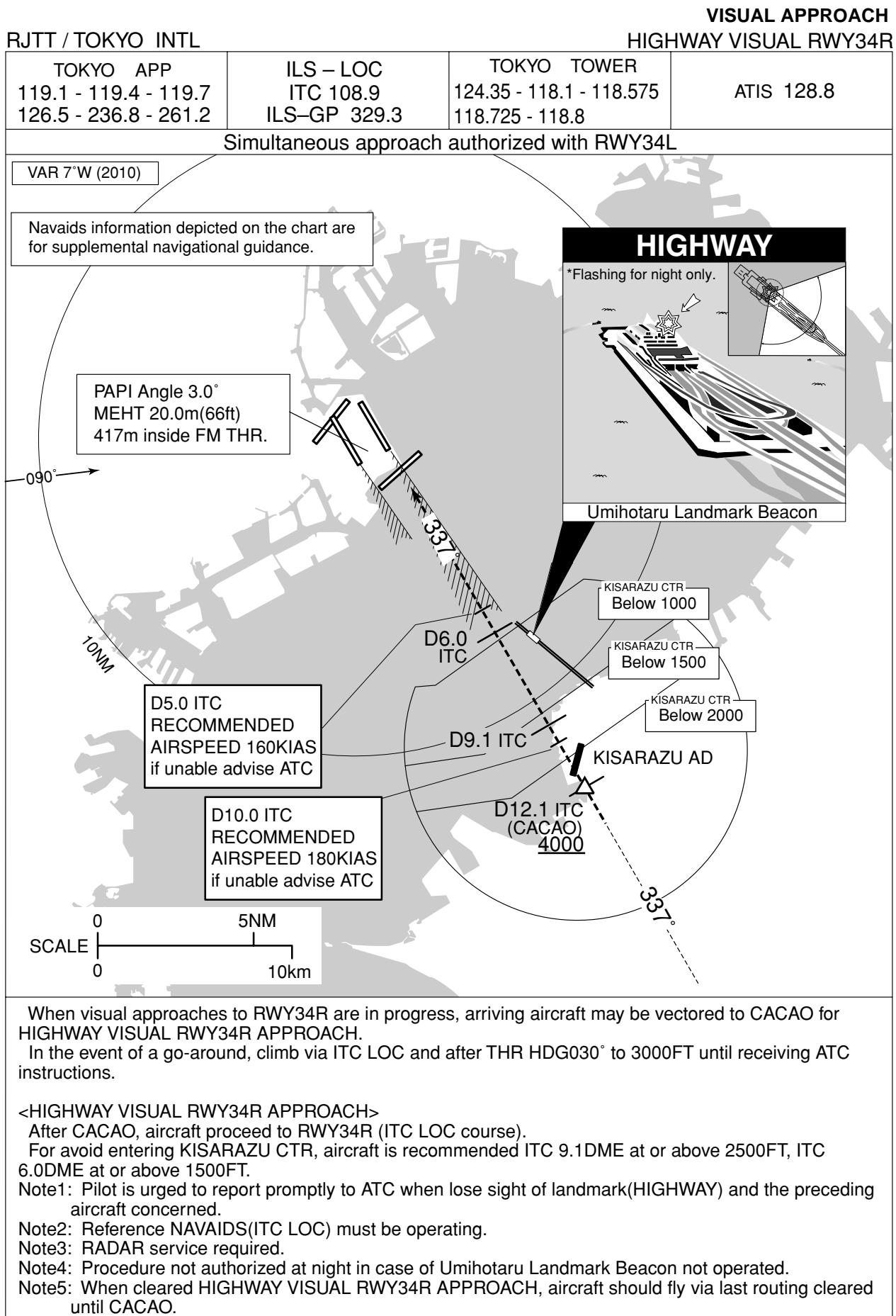
RJTT / TOKYO INTL

VOR A (for RWY16R/RWY16L)



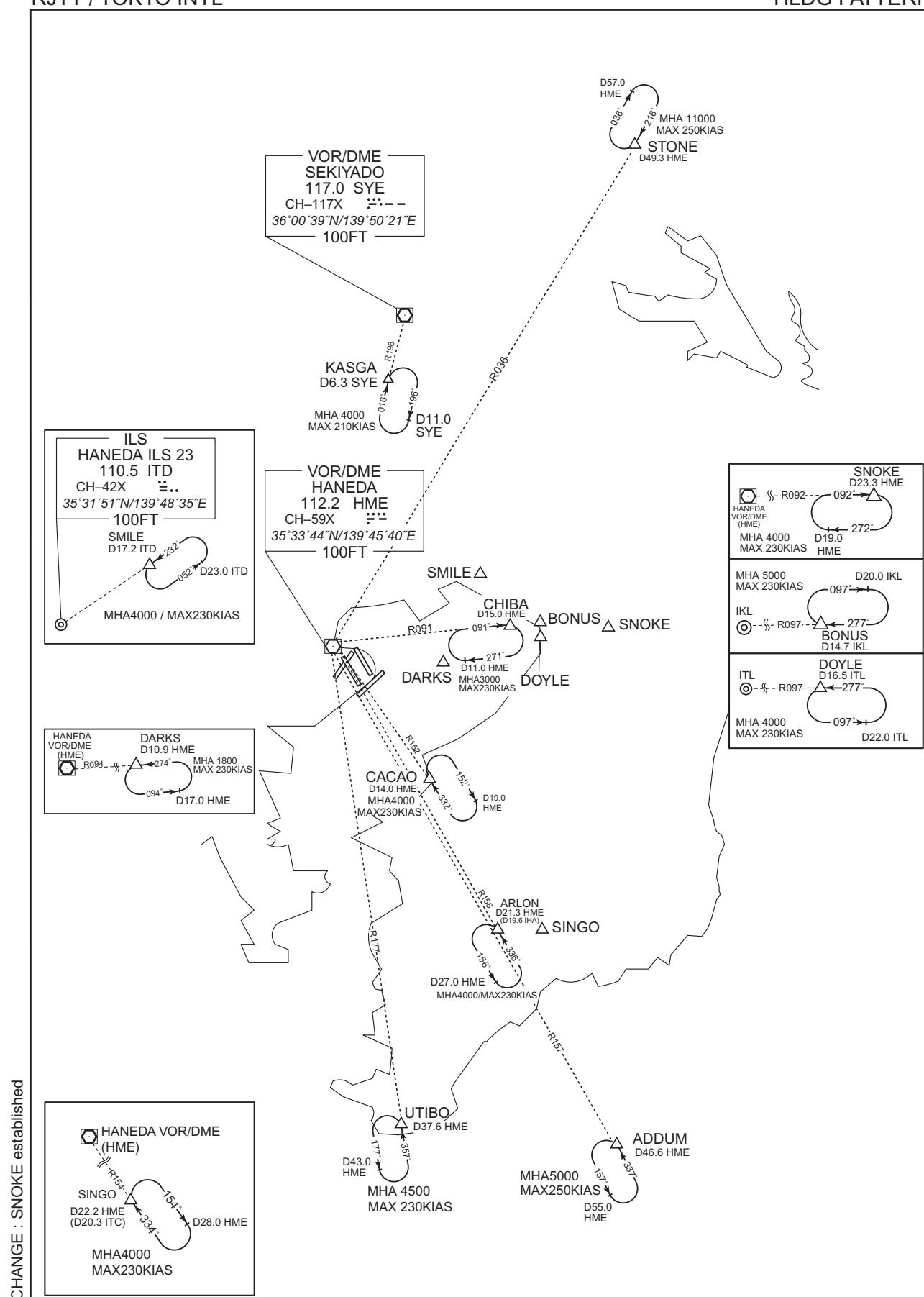
| MINIMA |           | AD elev. 21 |  |
|--------|-----------|-------------|--|
| CAT    | CIRCLING  |             |  |
|        | MDA(H)    | VIS         |  |
| A      |           | 1600        |  |
| B      | 760 (739) |             |  |
| C      |           | 2400        |  |
| D      |          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

**INTENTIONALLY LEFT BLANK**



RJTT / TOKYO INTL

HLDG PATTERN



RJTT / TOKYO INTL

RNAV HLDG PATTERN

|   |                         |        |
|---|-------------------------|--------|
| Note 1) DME/DME/IRU or GNSS required.<br>2) RADAR service required.   |                         | RNAV 1 |
| 1. Outbound Time / Distance<br>2. Speed<br>→ See Tabular Description. |                         |        |
| ARLON<br>MHA 4000   | BACON<br>MHA 4000       |        |
| COACH<br>MHA 4000   | CREAM<br>MHA 4000       |        |
| DREAD<br>MHA 5000   | MESSE<br>MHA 6000       |        |
| SCREW<br>MHA 4000   | STING<br>MHA 4000       |        |
| NUMAN<br>MHA 4000   | OSHIMA(XAC)<br>MHA 5000 |        |
| NEURO<br>MHA 4000   |                         |        |

CHANGE : ACORN abolished. ANZAC 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 | AKSEL               | 039 (031.2)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ANZAC               | 068 (060.8)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 5000                  | —                     | -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                    |
| Hold | AVEEY               | 314 (306.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -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                    |
| Hold | CIVIC               | 345 (337.7)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -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 | COLOR               | 197 (189.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 8000                  | —                     | -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                    |
| Hold | DENNY               | 167 (159.9)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -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 | GODIN               | 197 (189.2)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 8000                  | —                     | -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                    |
| Hold | MESSE               | 246 (238.8)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 6000                  | —                     | -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                    |
| Hold | NOVEL               | 264 (256.4)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NUMAN               | 360 (352.5)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 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                    |
| Hold | POLIX               | 310 (302.3)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 11000                 | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SCREW               | 203 (195.2)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -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 | SNARE               | 297 (289.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SPINE               | 348 (340.6)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | STING               | 067 (059.6)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | WEDGE               | 300 (292.4)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | XAC                 | 098 (090.3)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : ACORN abolished. ANZAC established.

RJTT / TOKYO INTL

RNAV HLDG PATTERN

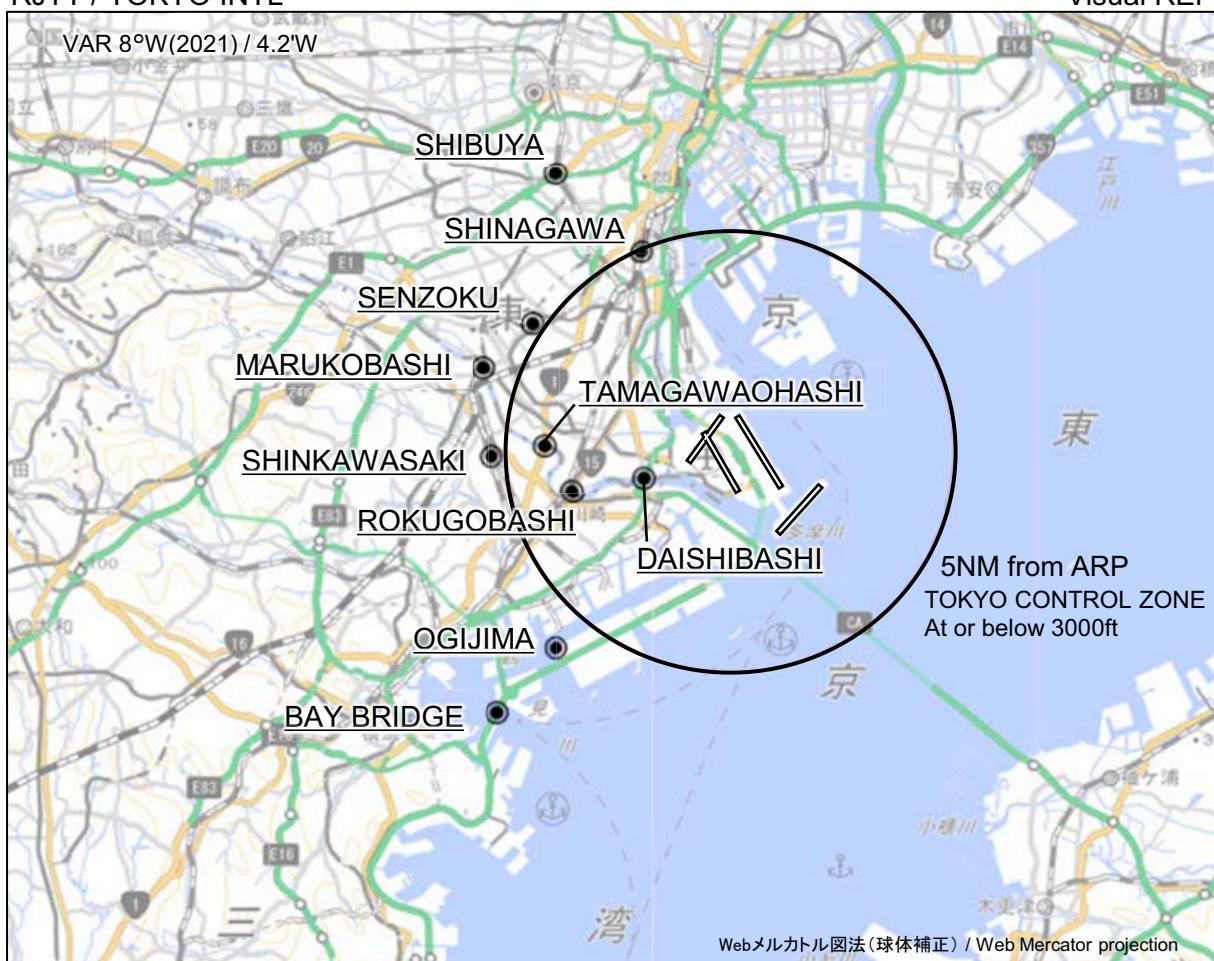
Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AKSEL               | 344039.5N / 1395126.9E | MESSE               | 351100.8N / 1402214.7E |
| ANZAC               | 345028.8N / 1394146.7E | 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 : ACORN abolished. ANZAC established.

RJTT / TOKYO INTL

Visual REP



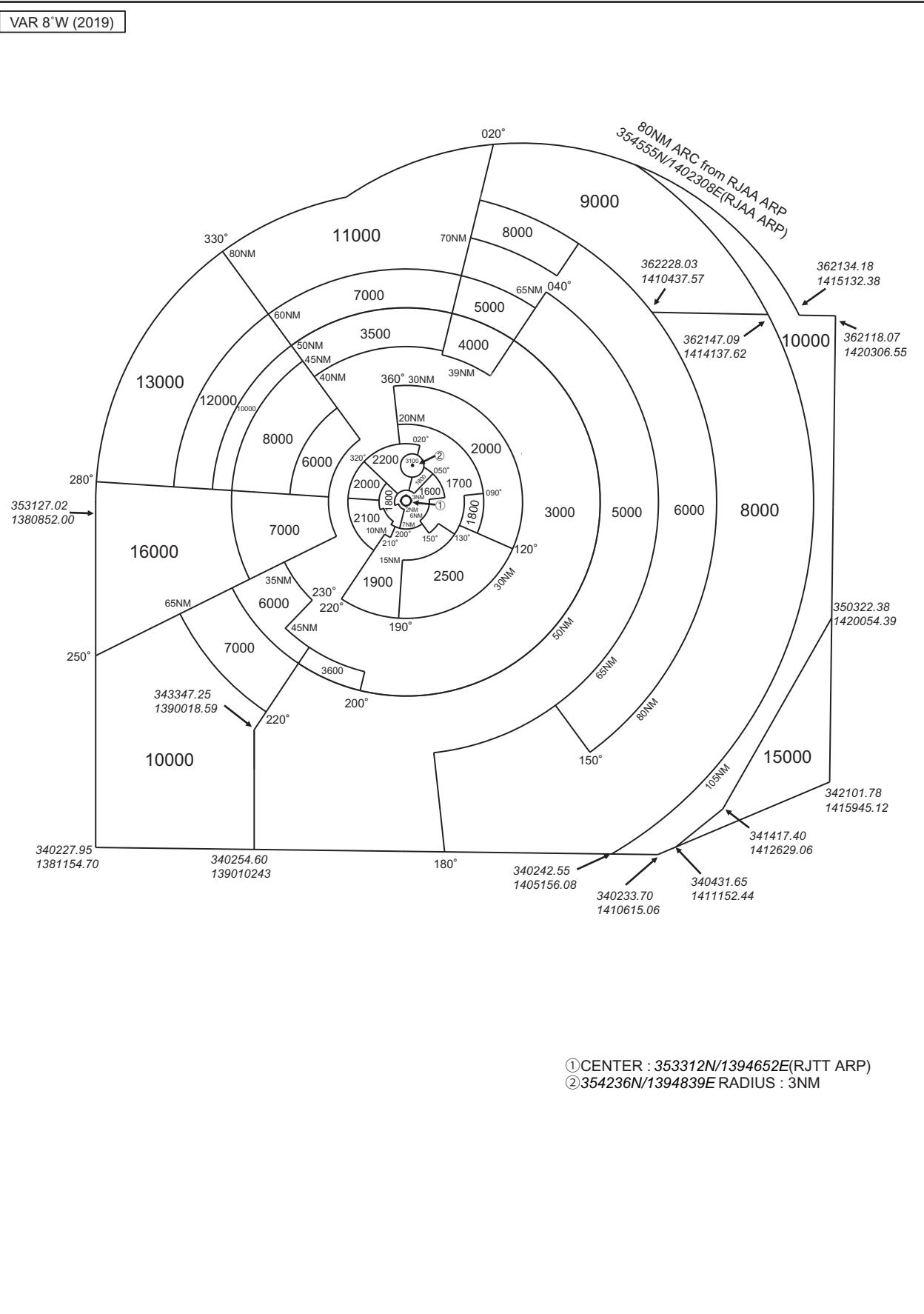
※図中に標高を示す数字がある場合、単位はメートル(m)である。The unit of measurement used to express elevation is meter(m).

| Call sign               | BRG / DIST from ARP | Remarks                          |
|-------------------------|---------------------|----------------------------------|
| 渋谷<br>Shibuya           | 328°T / 7.4NM       | JR駅<br>JR Station                |
| 品川<br>Shinagawa         | 336°T / 5.0NM       | JR駅<br>JR Station                |
| 洗足<br>Senzoku           | 303°T / 5.3NM       | 池<br>Pond                        |
| 丸子橋<br>Marukobashi      | 289°T / 5.8NM       | 橋<br>Bridge                      |
| 多摩川大橋<br>Tamagawaohashi | 272°T / 4.2NM       | 橋<br>Bridge                      |
| 新川崎<br>Shinkawasaki     | 269°T / 5.4NM       | JR駅<br>JR Station                |
| 大師橋<br>Daishibashi      | 253°T / 2.0NM       | 橋<br>Bridge                      |
| 六郷橋<br>Rokugobashi      | 255°T / 3.7NM       | 橋<br>Bridge                      |
| 扇島<br>Ogijima           | 221°T / 5.9NM       | 扇島の西端<br>West edge of the island |
| ベイブリッジ<br>Bay Bridge    | 221°T / 7.9NM       | (首都高速湾岸線)橋<br>Bridge             |

CHANGE : VAR.

RJTT / TOKYO INTL

Minimum Vectoring Altitude CHART



**PAPI:**

RWY16L-3.0°, MEHT 19.9m (65ft)

412m inside from THR.

RWY16L-3.25°, MEHT 19.9m(65ft)

378m 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.

RWY16R-3.25°, MEHT 19.9m(65ft)

397m 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.

RWY22-3.0°, MEHT 19.5m (63ft)

438m inside from THR.

RWY23-3.0°, MEHT 20.0m (66ft)

452m inside from THR.

**RWY Grooving :**

RWY16L/34R 3360m X 40m

RWY16R/34L 3000m X 40m

RWY04/22 2500m X 40m

RWY05/23 2500m X 40m

## Attachment-1

Local flying restriction of Tokyo INTL AP

Unless otherwise authorized by ATC.

Aircraft other than the arriving at and/or departing from Tokyo International Airport are required not to fly over the Kawasaki Petrochemical Complex area, and even in case of flying over the area, not to fly below an altitude of 3,000 feet.

