

**AD 2 AERODROMES****RJAA AD 2.1 AERODROME LOCATION INDICATOR AND NAME****RJAA - NARITA INTL****RJAA AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA**

|   |  |  |
|---|--|--|
| 1 | ARP coordinates and site at AD   | 354555N 1402308E<br>178° / 0.5km from NARITA control tower<br>123° / 1.9km from RWY 16R THR<br>349° / 2.5km from RWY 34L THR<br>171° / 4.5km from RWY 16L THR<br>194° / 2.4km from RWY 34R THR                   |
| 2 | Direction and distance from (city)   | 57.5km (31nm) E (BRG. 80° GEO.) from Tokyo Station (JR)<br>7.0km (3.8nm) ESE (BRG. 100° GEO.) from Narita Station (JR)   |
| 3 | Elevation/ Reference temperature   | 135ft / 31°C (2018-2022)   |
| 4 | Geoid undulation at AD ELEV PSN  | 116ft  |
| 5 | MAG VAR/ Annual change   | 8°W (2023) / 3' W  |
| 6 | AD Administration, address, telephone, telefax, telex, AFS, e-mail and/or Web-site addresses | Narita International Airport Corporation (NAA)<br>Narita INTL Airport Corporation: P.O.BOX 80 Narita INTL Airport, Narita-shi, Chiba Pref Japan 282-8601<br>AFS: RJAAYDYX<br>Tel: 0476-34-5635 Fax: 0476-30-1577 |
| 7 | Types of traffic permitted (IFR/VFR)   | IFR/VFR  |
| 8 | Remarks  | Narita Airport Office (Civil Aviation Bureau)<br>Airport Administration Building , Narita INTL Airport , Narita-shi , Chiba Pref Japan 282-8601<br>Tel: 0476-32-6410 , 0476-32-6411 (OPS)                        |

**RJAA AD 2.3 OPERATIONAL HOURS**

|    |                           |  |
|----|---------------------------|--|
| 1  | AD Administration         | H24. (See RJAA AD 2.20)  |
| 2  | Customs and immigration   | Customs: 2100-1400<br>Immigration: 2030-1500                         |
| 3  | Health and sanitation     | Quarantine(human): 2100-1530<br>Quarantine(animal, plant): 2100-1500 |
| 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                  | H24  |
| 12 | Remarks                   | Nil  |

**RJAA AD 2.4 HANDLING SERVICES AND FACILITIES**

|   |   |   |
|---|---|---|
| 1 | Cargo-handling facilities               | All the modern institutions that deal with the weight thing to a Boeing 747 type freighter. |
| 2 | Fuel/ oil types                         | Fuel grades: Jet A-1.<br>Oil grades: All turbine grades.                                    |
| 3 | Fuelling facilities/ capacity           | Hydrant refuelling and fuel truck refuelling.   |
| 4 | De-icing facilities                     | By arrangement with handling agent.   |
| 5 | Hangar space for visiting aircraft      | By arrangement with operating airlines.   |
| 6 | Repair facilities for visiting aircraft | By arrangement with operating airlines.   |
| 7 | Remarks                                 | Nil   |

**RJAA AD 2.5 PASSENGER FACILITIES**

|   |                      |   |
|---|----------------------|---|
| 1 | Hotels               | Hotels around the airport.                                      |
| 2 | Restaurants          | At Airport  |
| 3 | Transportation       | Railways, buses and taxis.                                      |
| 4 | Medical facilities   | First aid treatment, ambulance; hospitals in Narita city 10km . |
| 5 | Bank and Post Office | At Airport  |
| 6 | Tourist Office       | At Airport  |
| 7 | Remarks              | Nil   |

**RJAA 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<br>Water-supply truck x 3,<br>Emergency medical equipments conveyance truck,<br>Small sized emergency medical equipments conveyance truck,<br>Destructive wrecking truck<br>Form tank<br>Ambulance x 2<br>Mobile command post |
| 3 | Capability for removal of disabled aircraft | B747-400 or B777-300ER<br>JAL STATION CONTROLLER (0476-34-3401)  |
| 4 | Remarks                                     | Nil  |

**RJAA AD 2.7 SEASONAL AVAILABILITY-CLEARING**

|   |                             |  |
|---|-----------------------------|--|
| 1 | Types of clearing equipment | Snow Removal Equipment :<br>snow plough x 14, snow sweeper x 7 , snow blower x 4   |
| 2 | Clearance priorities        | Seasonal availability: All seasons.<br>In general, the following priorities will be established for the clearing of the movement areas: RWY 16R/34L,TWY associated with RWY 16R/34L, Apron.<br>In the case of deposits (snow, slush and ice) on the movement areas, a report will be issued as a NOTAM (domestic distribution only) at least once a day. |
| 3 | Remarks                     | Nil  |

**RJAA AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS DATA**

|   |                                     |  |
|---|-------------------------------------|--|
| 1 | Apron surface and strength          | Surface : Concrete<br>Strength : PCN 140/R/C/X/T except<br>PCN 65/R/B/X/T NR174, 175, 181, 182, 183, 610A, 610B, 610C, 610D,<br>611, 612, 613, 614   |
| 2 | Taxiway width, surface and strength | Width: 30m except<br>25m on TWY C between B and P2-GWY,<br>TWY K between S4 and E7,<br>TWY C between S1 and S3, TWY T4 between S and S4-GWY,<br>TWY T between S7-GWY and T10,<br>TWY S7,<br>TWY B6, A3, A4, A5, A6, A7 and A8,<br>TWY E8, U8-GWY<br>TWY L between F5 and K, U5-GWY<br>23m on TWY K between B8 and E2, TWY P1 between C and P1-GWY<br>Surface: Asphalt except<br>Concrete on TWY A between A1 and W3-GWY, A9 and A10<br>Concrete on TWY B between B1 and B4<br>Strength : PCN 140/F/C/X/T except<br>PCN 140/R/C/X/T on TWY A between A1 and W3-GWY, A9 and A10<br>PCN 129/F/C/W/T on TWY B between B4 and K,<br>TWY K between B and E5<br>PCN 129/R/C/X/T on TWY B between B1 and B4<br>PCN 74/F/C/X/T on TWY P1 between C and P1-GWY |
| 3 | ACL and elevation                   | Location : Any portion on the apron areas available<br>Elevation : Terminal apron-40m<br>Maintenance apron-41m   |
| 4 | VOR checkpoints                     | Not available  |

|   |                 |   |
|---|-----------------|---|
| 5 | INS checkpoints | <p>Spot NR</p> <p>11 354600.51N 1402304.94E<br/>     12 354601.98N 1402304.50E<br/>     14 354602.87N 1402303.03E<br/>     15 354602.58N 1402301.34E<br/>     16 354601.31N 1402300.44E<br/>     17 354559.91N 1402300.98E<br/>     18 354558.99N 1402302.42E<br/>     21 354553.88N 1402258.58E<br/>     22 354554.25N 1402256.42E<br/>     23 354553.18N 1402255.14E<br/>     24 354551.94N 1402255.13E<br/>     25 354550.50N 1402256.92E<br/>     26 354547.90N 1402258.80E<br/>     27 354545.30N 1402300.67E<br/>     31 354543.18N 1402302.14E<br/>     32 354545.21N 1402305.37E<br/>     33 354541.08N 1402303.65E<br/>     34 354542.15N 1402306.79E<br/>     35 354538.99N 1402305.17E<br/>     36 354540.06N 1402308.31E<br/>     37 354536.37N 1402307.18E<br/>     38 354537.86N 1402309.62E<br/>     41 354534.12N 1402308.77E<br/>     42 354531.99N 1402310.21E<br/>     43 354530.67N 1402311.50E<br/>     44 354531.57N 1402313.00E<br/>     45 354533.14N 1402313.60E<br/>     46 354535.20N 1402315.12E<br/>     47 354536.69N 1402313.06E<br/>     51 354545.48N 1402315.31E<br/>     52 354543.69N 1402316.61E<br/>     53 354542.83N 1402318.28E<br/>     54 354543.67N 1402319.83E<br/>     54R 354543.33N 1402319.81E<br/>     54L 354541.97N 1402319.82E<br/>     55 354545.26N 1402320.42E<br/>     56 354547.48N 1402321.65E<br/>     57A 354550.23N 1402323.17E<br/>     57B 354552.40N 1402324.81E<br/>     58A 354555.32N 1402326.27E<br/>     58B 354557.54N 1402327.50E<br/>     61 354622.57N 1402323.82E<br/>     61R 354623.13N 1402324.18E<br/>     62 354620.48N 1402325.34E<br/>     62R 354621.07N 1402325.62E<br/>     63 354618.38N 1402326.85E<br/>     63R 354618.85N 1402327.13E<br/>     64 354616.28N 1402328.37E<br/>     64R 354616.70N 1402328.65E<br/>     65 354614.19N 1402329.88E<br/>     66 354612.33N 1402330.90E<br/>     66R 354612.54N 1402331.19E<br/>     67 354609.61N 1402332.49E<br/>     67L 354608.97N 1402333.31E<br/>     67R 354610.33N 1402331.70E<br/>     68 354606.86N 1402332.48E<br/>     68L 354605.96N 1402332.79E<br/>     68R 354607.08N 1402332.63E<br/>     71 354629.98N 1402318.47E<br/>     71R 354630.41N 1402318.74E<br/>     72 354632.08N 1402316.95E<br/>     72R 354632.55N 1402317.25E<br/>     73 354634.18N 1402315.44E<br/>     73R 354634.76N 1402315.68E<br/>     74 354636.28N 1402313.92E<br/>     74R 354636.87N 1402314.20E<br/>     75 354638.37N 1402312.41E<br/>     76 354642.28N 1402310.33E<br/>     77 354645.24N 1402308.20E<br/>     81 354634.76N 1402332.94E<br/>     82 354633.96N 1402329.30E<br/>     83 354636.86N 1402331.43E<br/>     84 354635.62N 1402328.20E<br/>     85 354638.96N 1402329.91E<br/>     86 354638.58N 1402326.06E<br/>     87 354640.33N 1402328.81E<br/>     88 354639.73N 1402327.38E<br/>     91 354632.67N 1402334.46E<br/>     92 354628.37N 1402333.34E<br/>     93 354630.57N 1402335.97E<br/>     94 354626.78N 1402334.59E<br/>     95 354628.47N 1402337.49E<br/>     96 354623.75N 1402336.68E<br/>     97 354626.38N 1402339.00E<br/>     98 354624.20N 1402338.60E<br/>     99 354625.22N 1402339.69E<br/>     100A 354645.43N 1402321.52E<br/>     100B 354644.64N 1402319.14E<br/>     100C 354643.68N 1402317.77E<br/>     100E 354646.68N 1402318.03E<br/>     100F 354647.37N 1402319.23E<br/>     101 354645.73N 1402321.30E<br/>     102 354645.35N 1402320.33E<br/>     103 354644.15N 1402317.85E<br/>     104 354645.26N 1402317.05E<br/>     105 354646.81N 1402319.28E<br/>     150 354647.95N 1402307.52E<br/>     151 354645.22N 1402308.15E<br/>     152 354644.59N 1402309.28E<br/>     153 354643.30N 1402310.04E<br/>     154 354642.08N 1402310.92E<br/>     155 354640.94N 1402311.92E<br/>     161 354649.37N 1402310.14E<br/>     162 354650.43N 1402311.38E<br/>     163 354651.50N 1402312.61E<br/>     164 354652.57N 1402313.85E<br/>     174 354653.66N 1402311.85E<br/>     175 354654.69N 1402313.04E<br/>     181 354659.34N 1402309.60E<br/>     182 354658.32N 1402308.41E<br/>     183 354656.62N 1402307.25E<br/>     191 354532.06N 1402324.78E<br/>     191L 354532.99N 1402324.35E<br/>     191R 354531.70N 1402323.63E<br/>     192 354529.48N 1402323.35E<br/>     192L 354530.42N 1402322.92E<br/>     192R 354529.13N 1402322.21E<br/>     201 354611.92N 1402301.14E<br/>     202 354610.54N 1402258.20E<br/>     203 354609.00N 1402255.05E<br/>     204 354607.79N 1402252.55E<br/>     205 354605.92N 1402250.30E<br/>     206 354607.75N 1402249.74E<br/>     207 354610.13N 1402248.02E<br/>     208 354612.39N 1402246.38E<br/>     209 354614.87N 1402244.60E<br/>     210 354617.53N 1402242.68E<br/>     211 354620.61N 1402240.45E<br/>     212 354623.01N 1402238.72E   </p> |
|---|-----------------|---|

|   |                 |   |
|---|-----------------|---|
| 5 | INS checkpoints | 221 354603.21N 1402242.92E<br>222 354605.04N 1402241.28E<br>223 354607.23N 1402239.83E<br>224 354609.40N 1402238.26E<br>225 354611.57N 1402236.69E<br>226 354614.07N 1402234.89E<br><br>231 354620.39N 1402231.23E<br>231A 354619.92N 1402231.56E<br>231B 354621.61N 1402230.34E<br>231C 354623.29N 1402229.12E<br>232 354622.90N 1402229.41E<br><br>401 354620.70N 1402346.98E<br>402 354617.95N 1402345.45E<br>402L 354619.19N 1402346.16E<br>402R 354618.33N 1402344.85E<br>403 354615.19N 1402343.93E<br>403L 354616.53N 1402344.65E<br>403R 354615.58N 1402343.33E<br><br>410 354604.27N 1402330.96E<br>410L 354603.35N 1402331.32E<br>410R 354604.99N 1402331.35E<br>411 354601.65N 1402329.51E<br>411L 354600.73N 1402329.87E<br>411R 354602.44N 1402329.71E<br>412 354559.64N 1402328.93E<br><br>421 354543.01N 1402334.72E<br>421L 354543.94N 1402334.71E<br>421R 354543.10N 1402334.01E<br>422 354545.50N 1402336.06E<br>422L 354546.41N 1402336.09E<br>422R 354545.58N 1402335.40E<br>423 354548.13N 1402337.52E<br>423L 354549.05N 1402337.55E<br>423R 354548.21N 1402336.85E<br>424 354550.65N 1402338.91E<br>424L 354551.56N 1402338.94E<br>424R 354550.72N 1402338.25E<br>425 354553.13N 1402340.29E<br>425L 354554.04N 1402340.32E<br>425R 354553.21N 1402339.62E<br>426 354555.62N 1402341.66E<br>426L 354556.53N 1402341.70E<br>426R 354555.69N 1402341.00E<br>427 354558.31N 1402343.21E<br>427L 354559.25N 1402342.76E<br>427R 354557.64N 1402342.91E<br>428 354600.90N 1402344.64E<br>428L 354601.84N 1402344.19E<br>428R 354600.23N 1402344.35E<br>429 354603.16N 1402344.82E<br>430 354604.46N 1402345.54E<br>431 354605.60N 1402346.66E<br><br>441 354638.90N 1402354.49E<br>441L 354639.25N 1402353.49E<br>441R 354638.01N 1402354.34E<br>442 354636.46N 1402356.26E<br>442L 354636.80N 1402355.26E<br>442R 354635.56N 1402356.11E<br>443 354634.01N 1402358.02E<br>443L 354634.56N 1402357.45E<br>443R 354633.29N 1402358.23E<br>444 354631.54N 1402359.83E<br>444L 354631.79N 1402358.62E<br>444R 354630.56N 1402359.50E<br>445 354629.10N 1402401.59E |
|---|-----------------|---|

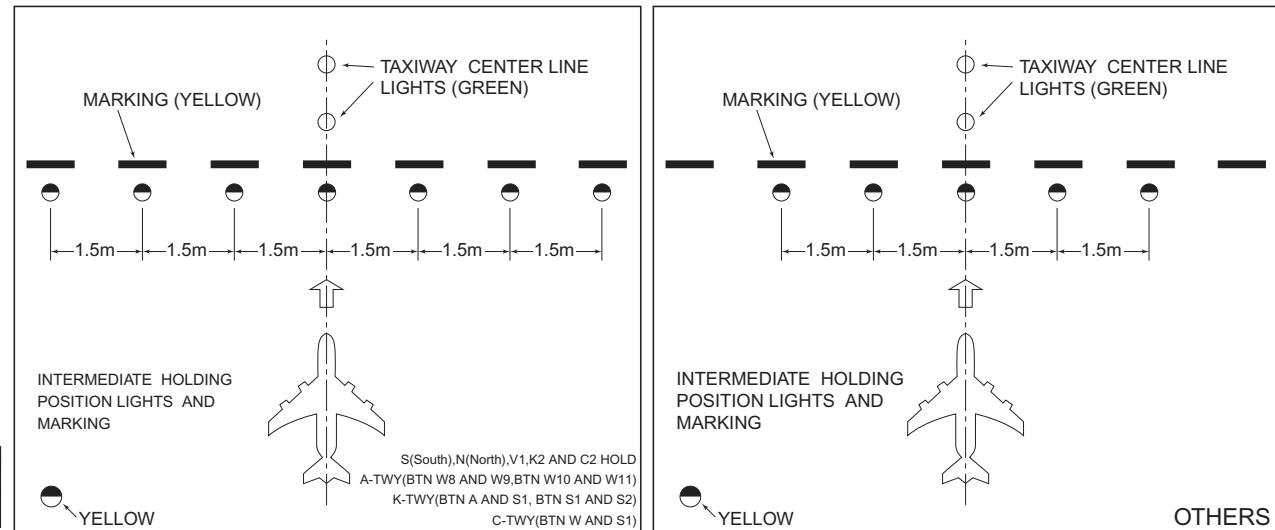
|   |                 |  |  |
|---|-----------------|--|--|
| 5 | INS checkpoints | 701 354506.04N 1402329.49E<br>702 354503.83N 1402329.27E<br>703 354501.63N 1402330.86E<br>704 354459.44N 1402332.44E<br>705 354457.24N 1402334.03E<br>706 354455.05N 1402335.61E<br>707 354452.85N 1402337.20E<br>708 354447.18N 1402341.29E<br>709 354444.88N 1402342.96E<br>710 354442.57N 1402344.63E | 801 354500.69N 1402328.75E<br>802 354458.41N 1402330.40E<br>803 354456.12N 1402332.05E<br>804 354454.00N 1402333.59E<br>805 354451.87N 1402335.12E<br>806 354446.19N 1402339.22E<br>807 354443.88N 1402340.89E<br>808 354441.58N 1402342.56E<br>902 354436.71N 1402351.15E<br>903 354435.35N 1402348.32E<br>904 354434.00N 1402345.49E<br>905 354433.63N 1402340.92E |
| 6 | Remarks         | Nil  |  |

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

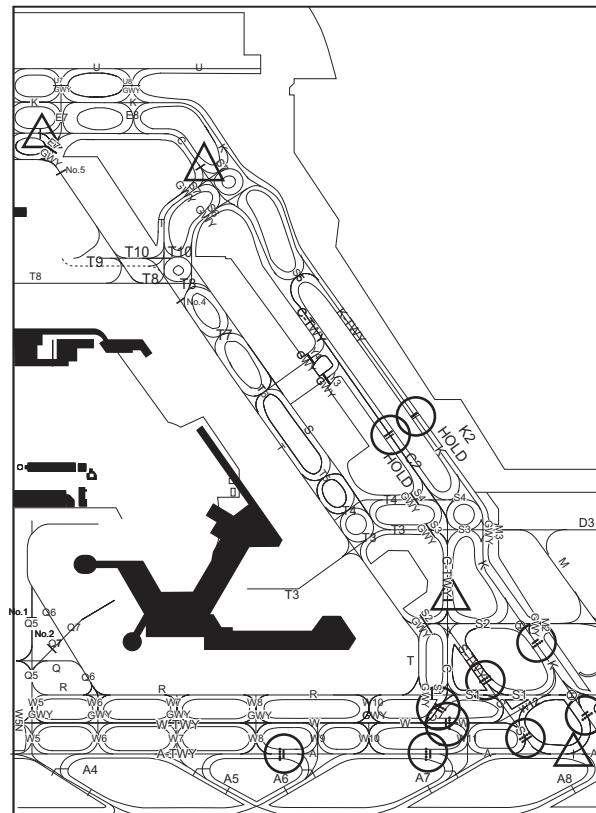
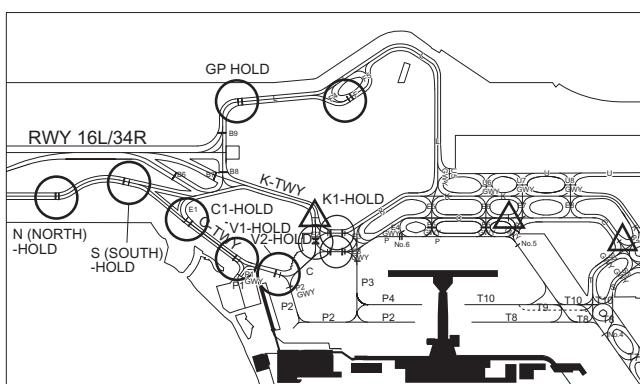
|   |  |   |
|---|--|---|
| 1 | Use of aircraft stand ID signs, TWY guide lines and Visual docking/ parking guidance system of aircraft stands | ACFT stand ID signs : NR11,12,14-18, 21-27, 31-38, 41-47, 51-56, 57A, 57B, 58A, 58B, 61-68, 71-77, 81-88, 91-99, 151-155, 161-164, 174, 175, 201-212, 231, 232<br>ACFT stand taxilane : See AD2.24 Aerodrome Ground Movement Chart<br>Visual docking guidance system : See attachment   |
| 2 | RWY and TWY markings and LGT   | RWY 16R/34L, 16L/34R:<br>(Marking) RWY designation, RWY CL, RWY THR, Aiming point, TDZ, RWY middle point, RWY side stripe<br>(LGT) RCLL , REDL, RTHL , RENL , RTZL , WBAR<br><br>TWY:<br>(Marking) TWY CL, RWY HLDG PSN, Mandatory instruction, TWY side stripe, Intermediate HLDG PSN(See attached chart), SFC painted location sign (See attached chart), SFC painted direction sign (See attached chart)<br>(LGT) TWY edge LGT, TWY CL LGT, Taxiing guidance signs, Stop bar LGT (A1 - A10, B1 - B9) , RWY guard LGT (A1 - A10, B1 - B9), Intermediate HLDG PSN LGT (See attached chart) |
| 3 | Stop bars  | Stop Bar Light Operations:<br>1) Stop bar lights are installed at each runway-holding position associated with RWY 16R/34L and 16L/34R.<br>2) Stop bar lights will be operated when the visibility or the lowest RVR of RWY 16R/34L and 16L/34R is at or less than 600m(1968ft)<br>3) Stop bar lights on TWY A1, A2, B8 and B9 are controlled individually by ATC.<br>4) Stop bar lights on TWY A3 - A10, B1 - B7 are not controlled individually by ATC.<br>5) During the period stop bar lights are operated, TWY A3 - A10, B1 - B7 are not available for the departing aircraft.         |
| 4 | Remarks  | Apron:<br>(Marking) ACFT stand, Taxilane CL, Taxilane side stripe and Stand ID<br>(LGT) Apron stop bar LGT<br>Other:<br>(Marking) Overrun area  |

## Intermediate Holding Position Lights and Markings

- The intermediate holding position lights and Markings identify the position where aircraft is to hold to prevent collision with other aircraft on the taxiway. The intermediate holding position lights operate simultaneously with the taxiway center line lights. The intermediate holding position lights consist of 5 or 7 yellow lights and the markings consist of a single broken line as illustrated in the figure below:
- Operational procedure  
The aircraft shall hold in front of these lights and markings only when instructed by ATC.



Intermediate holding position lights and markings

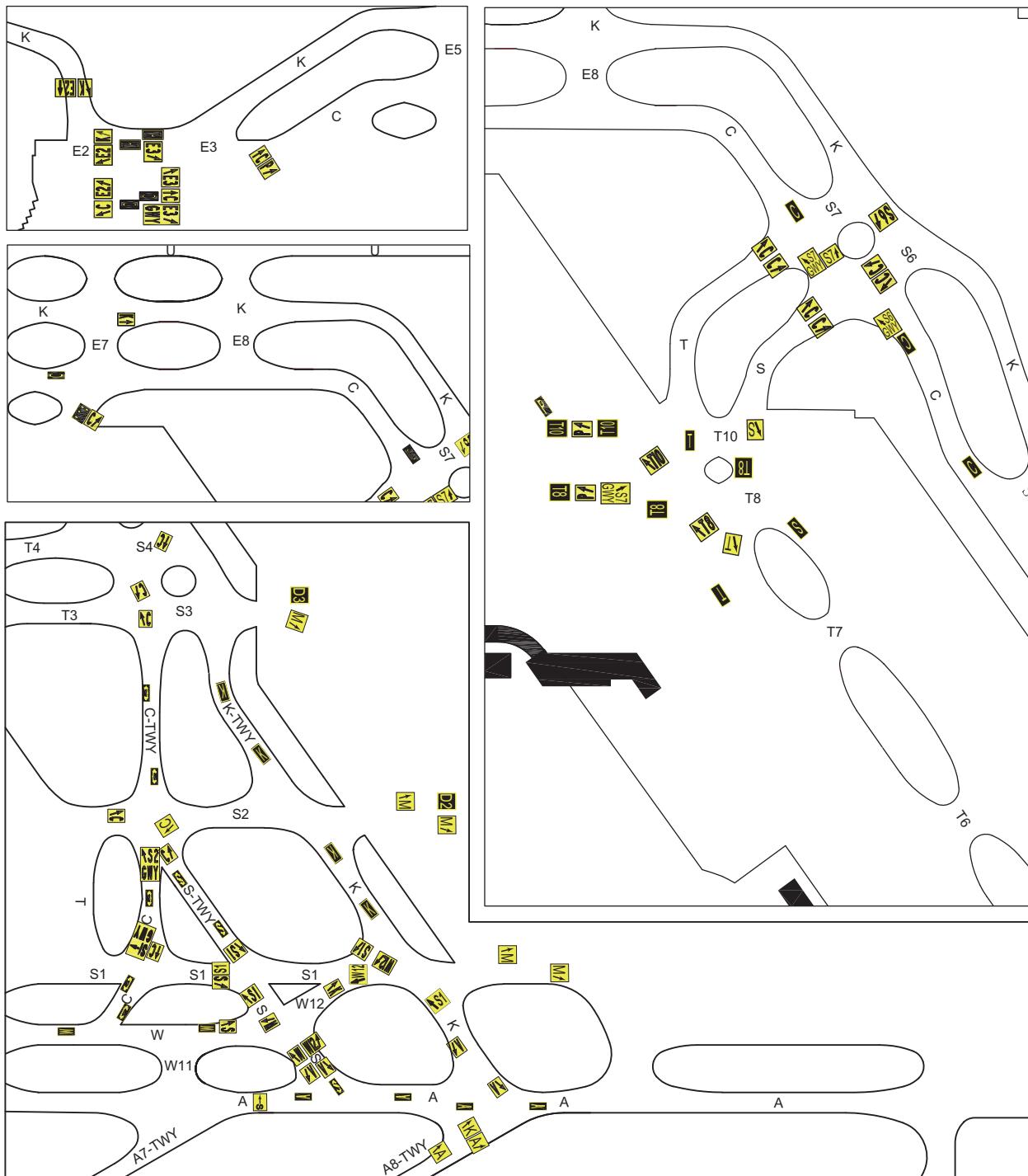


## Surface Painted Direction Sign and Surface Painted Location Sign

1. Type of Surface Painted Markings
  - (1)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.
  - (2)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 a yellow frame.
2. On the Taxiways at multi-crossing junctions and the standard taxiing routes, surface painted taxiway location and direction markings are provided as shown below.



## **APRON STOP BAR**

1. Apron stop bars are provided on the aprons. (Refer to the taxiing charts for their locations). Each apron stop bar consists of five lights, illuminated in red towards the direction of the aircraft movement and when turned on by ramp controllers. Apron stop bars designated No.1 and 2 are used for arriving aircraft and No.4, No.5 and 6 are used for both arriving and departing aircraft.
2. Aircraft is required to hold at apron stop bars until the red lights are turned off and "CLEARED TO TAXI" is given by radio.
3. As shown below, the red lights are visible when an aircraft following the yellow apron taxilane center line/green center line light approaches the apron stop bar.



## VISUAL DOCKING GUIDANCE SYSTEM

### 1. General

- (1) 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 visual docking guidance 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.

- (5) The following aircraft parking stands are equipped with a visual docking guidance system:

Safedock Type 1 (T1): NR11, 12, 14-15, 17, 22-27, 31, 33, 35, 37-38, 41-43, 47, 54-56, 57A, 57B, 58A, 58B

Safedock Type 2 (T2): NR16, 32, 34, 36, 44-46, 51-53, 61-68, 71-75, 81-88, 91-99

### 2. Safedock Type 1 (T1)

#### 2.1 Aircraft Type Indication

- (1) An operator on ground shall input the aircraft type into the system before the aircraft approaches the parking stand. Upon accepting the input, the system carries out internal calibration, starts the laser scanner simultaneously, and indicates the aircraft type according to the input. The system then will begin to indicate yellow lead-in arrows scrolling upwards prompting the aircraft to proceed (Fig.1).

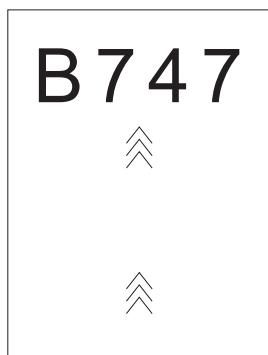


Fig. 1

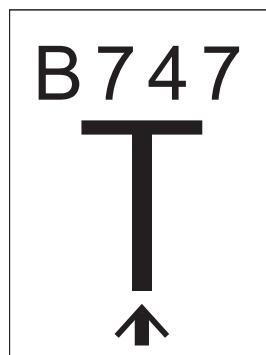


Fig. 2

- (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 15m 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 continue displaying "STOP", "ID FAIL" (Fig.3).

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.

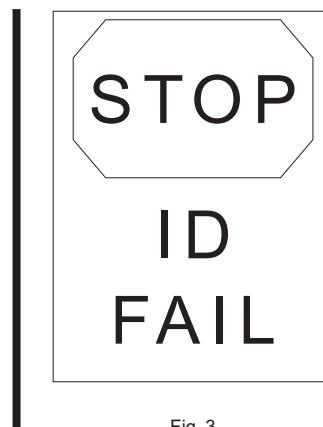


Fig. 3

## 2.2 Spot-in and Lateral Center line Guidance

- (1) When entering an aircraft parking stand 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.4).

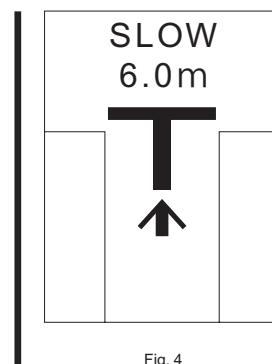


Fig. 4

- (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.5, Fig.6), and numerical value of remaining distance (Fig.7, Fig.8).

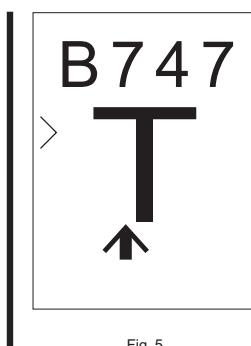


Fig. 5

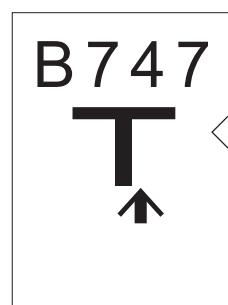


Fig. 6

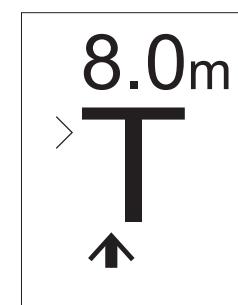


Fig. 7

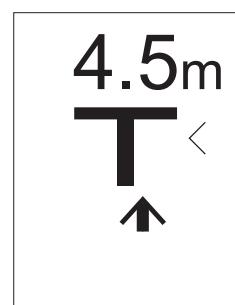


Fig. 8

## 2.3 Stop Guidance

- (1) When the approaching aircraft is within 20m 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 0.3m.

When the approaching aircraft is within 30m from the stopping position, display of digital countdown will start. As the aircraft approaches the stopping position, digital countdown is for every 1.0m (from 30 to 5m to the stopping position) or for every 0.5m (from 5 to 2m to the stopping position) or for every 0.1m (from 2m to the stopping position) (Fig.11, Fig.12).

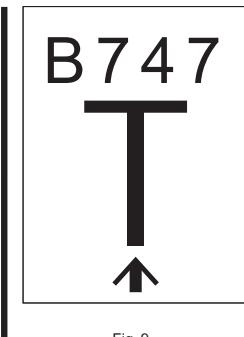


Fig. 9

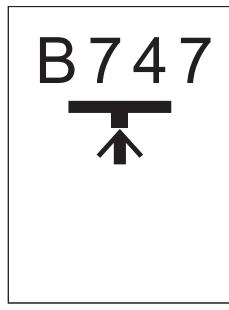


Fig. 10

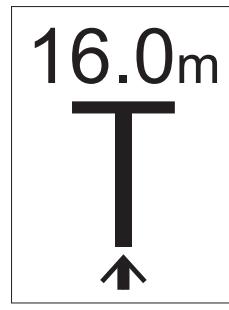


Fig. 11

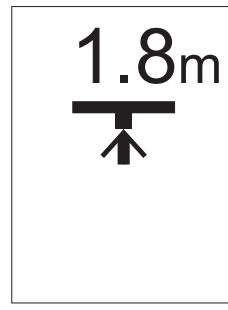


Fig. 12

- (2) When the aircraft reaches the stopping position, a message "STOP" with a red border will be displayed on the screen (Fig.13).

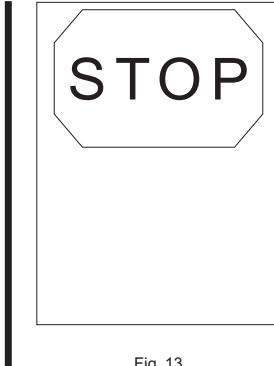


Fig. 13

- (3) When the aircraft is stopped at the correct stopping position, a message "OK" will be displayed on the screen in several seconds(Fig.14).



Fig. 14

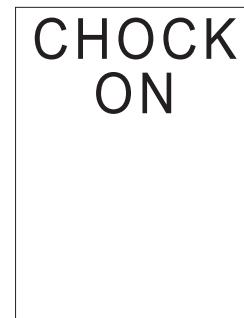


Fig. 15

- (4) When the operator applies chocks, and switches on "CHOCK ON" switch, a message "CHOCK ON" will be displayed on the screen(Fig.15).

- (5) If the aircraft stops at a position beyond the correct stopping position, a message "TOO FAR" will be displayed on the screen(Fig.16).



Fig. 16

#### 2.4 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.13, Fig.17).

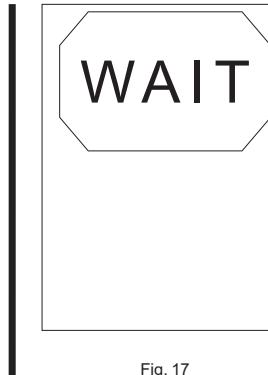


Fig. 17

- (2) 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 will deactivate the floating arrows and show "SLOW" (Fig.18).  
The message will be superseded by the closing rate bar as soon as the system detects the approaching aircraft.  
The pilot must not proceed beyond the passenger boarding bridge, unless the "SLOW" message has been superseded by the closing rate bar.



Fig. 18

3. Safedock Type 2 (T2)

3.1 Aircraft Type Indication

- (1) An operator on ground shall input the aircraft type into the system before the aircraft approaches the parking stand. Upon accepting the input, the system carries out internal calibration, starts the laser scanner simultaneously, and indicates the aircraft type according to the input. The system then will begin to indicate yellow lead-in arrows scrolling upwards prompting the aircraft to proceed (Fig.19).

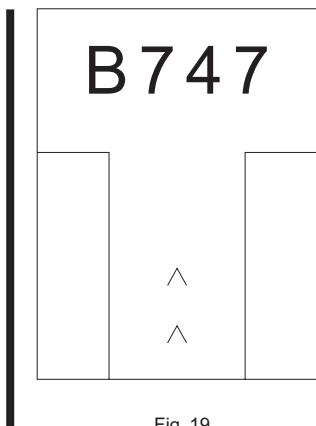


Fig. 19

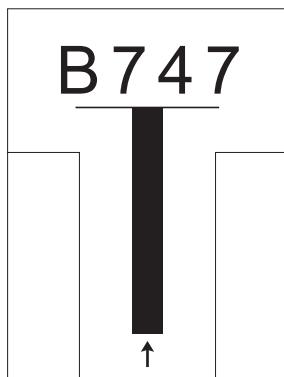


Fig. 20

- (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.20).
- (3) At least until the approaching aircraft arrives at a point 12m 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 (Fig.21 to Fig.23).

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.

→ Fig. 21 → Fig. 22 → Fig. 23

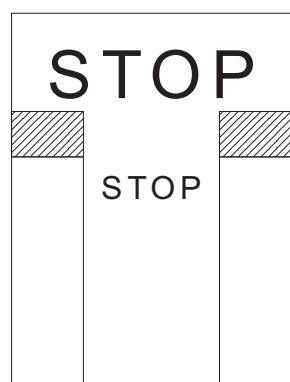


Fig. 21

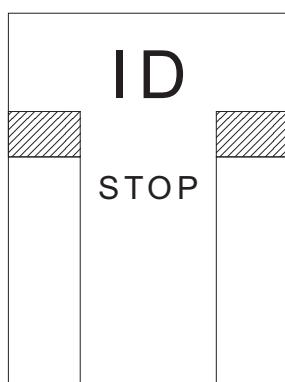


Fig. 22

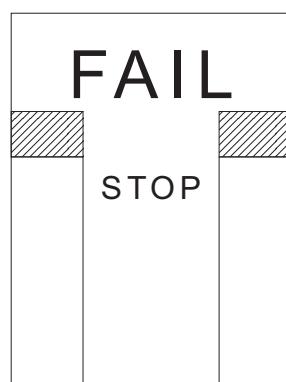


Fig. 23

3.2 Spot-in and Lateral Center line Guidance

- (1) When entering an aircraft parking stand using the system, the pilots should maneuver the aircraft at a low speed to the stopping position. In an event when "SLOW DOWN" is indicated on the display screen, the pilots should further decelerate the taxiing speed to avoid overshooting (Fig.24).

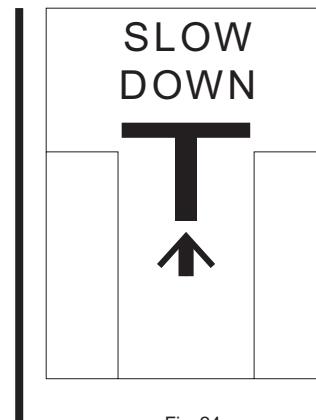


Fig. 24

- (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.25, Fig.26).

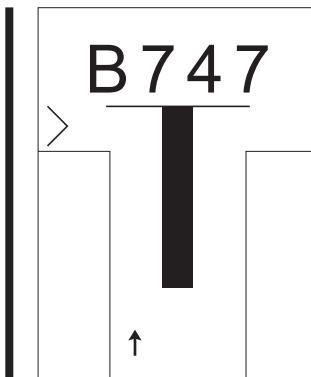


Fig. 25

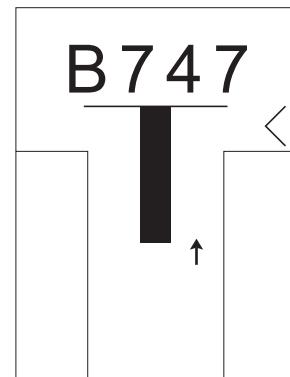


Fig. 26

### 3.3 Stop Guidance

- (1) When the approaching aircraft is within 16m 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.27 ,Fig.28).

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

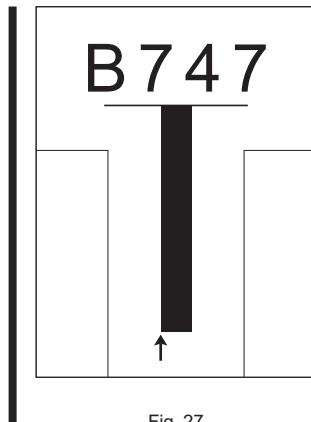


Fig. 27

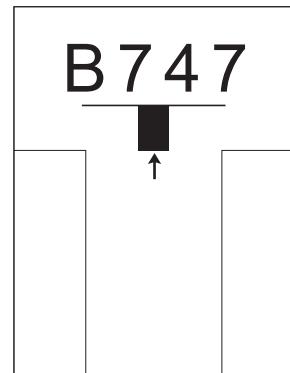


Fig. 28

- (2) 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.29).

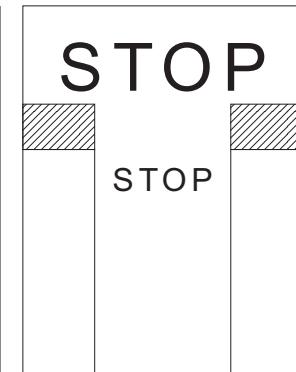


Fig. 29

- (3) When the aircraft is stopped at the correct stopping position, a message "OK" will be displayed on the screen in several seconds (Fig.30).

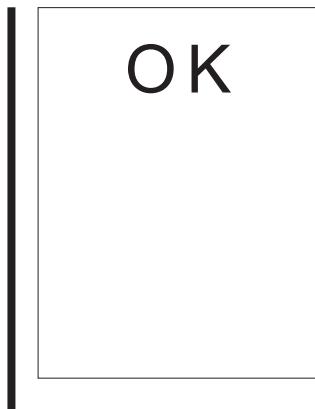


Fig. 30

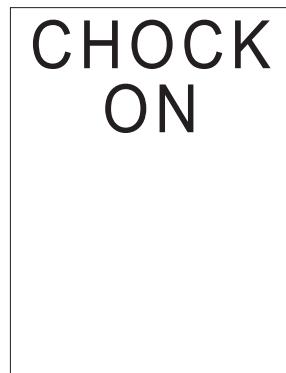


Fig. 31

- (4) When the operator applies chocks, and switches on "CHOCK ON" switch, a message "CHOCK ON" will be displayed on the screen (Fig.31).
- (5) If the aircraft stops at a position beyond the correct stopping position, a message "TOO FAR" will be displayed on the screen (Fig.32).



Fig. 32

### 3.4 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.21 to Fig.23 Fig.29, Fig.33).

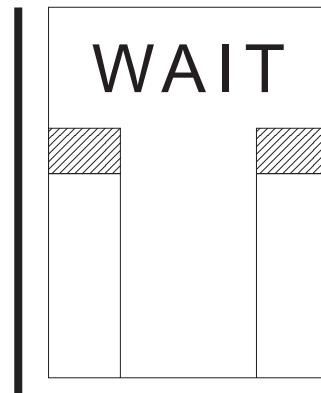


Fig. 33

- (2) 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 will deactivate the floating arrows and show "DOWN GRADE" (Fig.34, Fig.35).  
The message will be superseded by the closing rate bar as soon as the system detects the approaching aircraft.  
The pilot must not proceed beyond the passenger boarding bridge, unless the "DOWN GRADE" message has been superseded by the closing rate bar.

→ Fig. 34 → Fig. 35

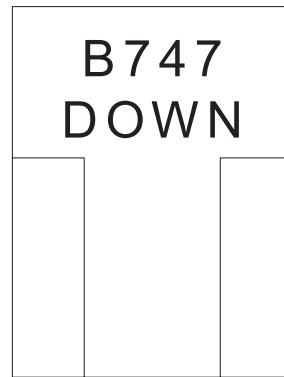


Fig. 34

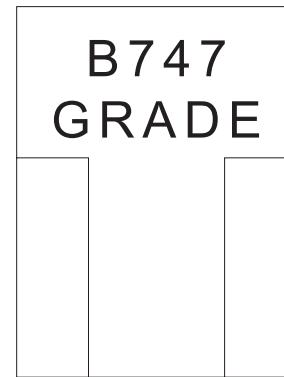
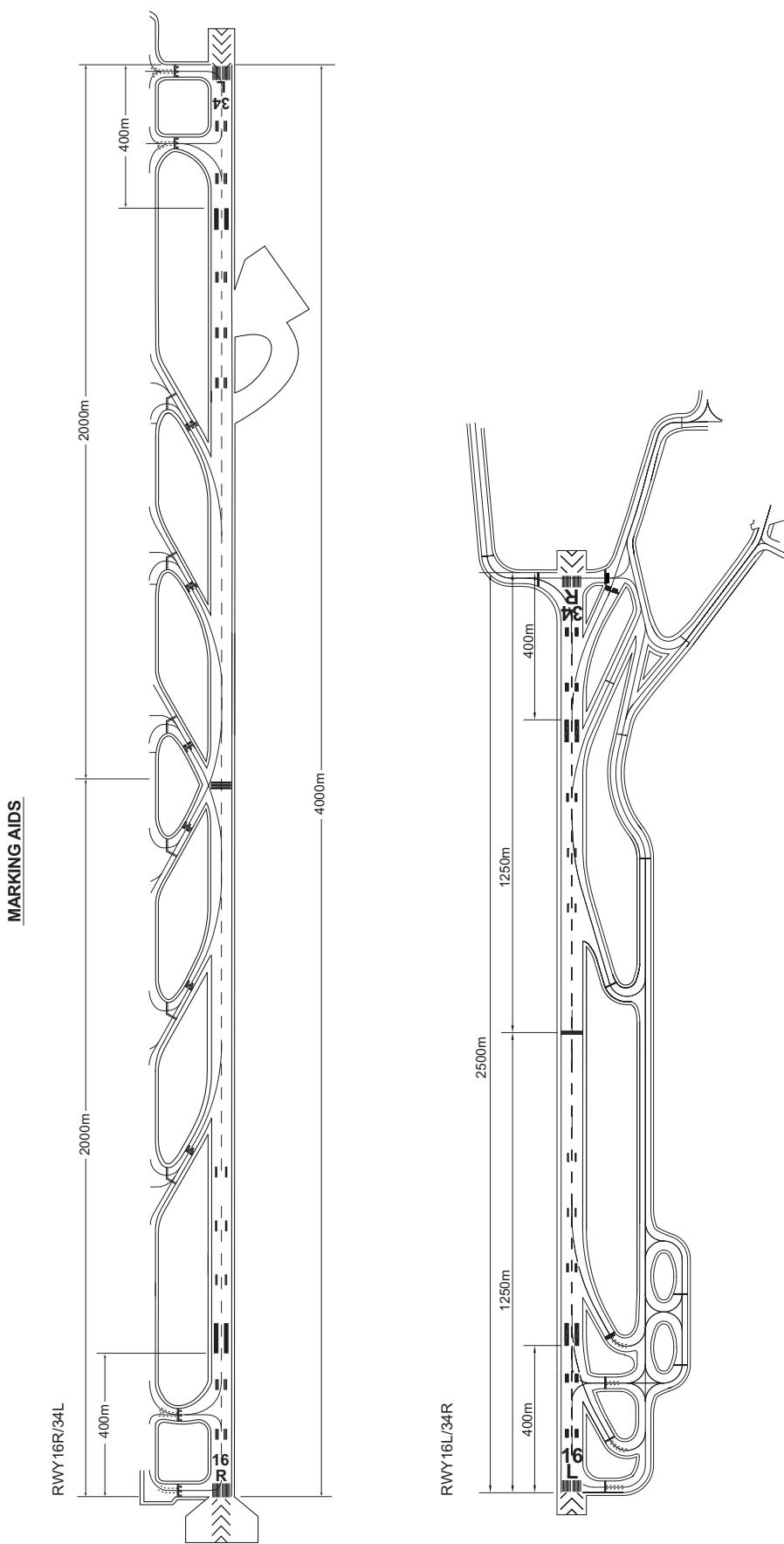


Fig. 35

## Marking aids



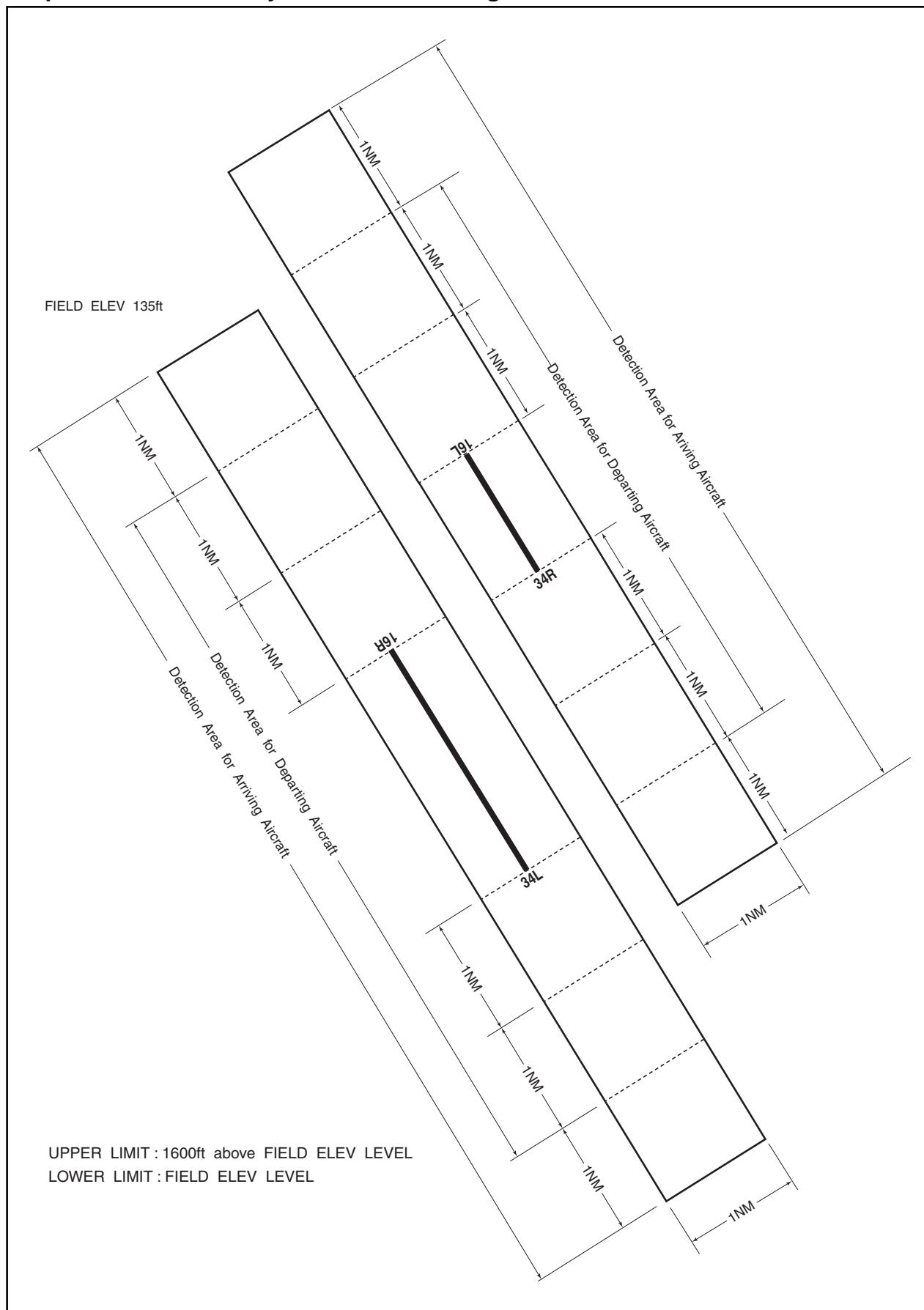
## RJAA AD 2.10 AERODROME OBSTACLES

In Area2 See Obstacle data

In Area3 To be developed

## RJAA AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

|    |  |   |
|----|--|---|
| 1  | Associated MET Office  | NARITA  |
| 2  | Hours of service<br>MET Office outside hours                           | H24   |
| 3  | Office responsible for TAF preparation<br>Periods of validity          | NARITA<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 available<br>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/T<sub>r</sub></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 Lidar for Airport Weather (See attached chart)  |
| 9  | ATS units provided with information                                    | TWR, APP, ATIS  |
| 10 | Additional information (limitation of<br>service, etc.)                | Nil   |

Airspace for the advisory service concerning low level wind shear

## RJAA AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

| Designations<br>RWY NR   | TRUE<br>BRG | Dimensions<br>of<br>RWY(M) | Strength(PCN) and<br>surface of RWY | THR coordinates<br>THR geoid undulation                            | THR elevation and<br>highest elevation of<br>TDZ of precision APP<br>RWY |
|--|-------------|----------------------------|-------------------------------------|--|--|
| 1  | 2           | 3                          | 4                                   | 5  | 6  |
| 16R  | 149.50°     | 4000x60                    | PCN 140/F/C/X/T<br>Asphalt          | 354627.80N<br>1402205.85E<br>116.4ft                               | THR ELEV:129.6ft<br>TDZ ELEV : 130.0ft                                   |
| 34L  | 329.51°     | 4000x60                    | PCN 140/F/C/X/T<br>Asphalt          | 354435.96N<br>1402326.66E<br>114.9ft                               | THR ELEV:139.4ft<br>TDZ ELEV : 140.0ft                                   |
| 16L  | 149.50°     | 2500x60                    | PCN 129/F/C/X/T<br>Asphalt          | 354818.72N<br>1402241.19E<br>117.2ft                               | THR ELEV:134.5ft<br>TDZ ELEV : 134.5ft                                   |
| 34R  | 329.51°     | 2500x60                    | PCN 129/F/C/X/T<br>Asphalt          | 354708.82N<br>1402331.72E<br>116.4ft                               | THR ELEV:141.1ft<br>TDZ ELEV : 139.7ft                                   |
| Slope of RWY   |             | Strip<br>Dimensions(M)     |                                     | RESA (Overrun)<br>Dimensions(M)                                    |  |
| 7  |             | 10                         |                                     | 11   |  |
| See below chart  |             | 4120x300                   |                                     | 164 × 300  |  |
|  |             | 4120x300                   |                                     | 90 × 300   |  |
| See below chart  |             | 2620x150                   |                                     | 40 × 300   |  |
|  |             | 2620x150                   |                                     | 240 × (MNM:120 MAX:300)*<br>*For detail, ask airport administrator |  |
| Remarks  |             |                            |                                     |  |  |
|  |             |                            | 14                                  |  |  |
| Dimension of RWY16R/34L grooved area is 3825m x 60m from THR of RWY34L.<br>NOTE : First 150m of RWY34L is paved by concrete, PCN is 140/R/C/X/T. |             |                            |                                     |  |  |
| Dimension of RWY16L/34R grooved area is 2500m x 60m.<br>NOTE : First 440m of RWY16L is paved by concrete, PCN is 129/R/C/X/T.                    |             |                            |                                     |  |  |
| Slope of RWY   |             |                            |                                     |  |  |
| <b>RWY 16R</b>   |             |                            |                                     |  |  |
| 39.5m  |             | 39.5m                      |                                     |  |  |
| 0%   |             | 0%                         |                                     |  |  |
| 0m   | 1000m       | 2000m                      | 3000m                               | 4000m  |  |
|  |             | 0.15%                      |                                     |  |  |
|  |             | (Mean slope:0.075%)        |                                     |  |  |
|  |             |                            | 42.5m                               |  |  |
|  |             |                            | 0%                                  |  |  |
| <b>RWY 34L</b>   |             |                            |                                     |  |  |
| 42.5m  |             |                            |                                     |  |  |
|  |             |                            |                                     |  |  |
| <b>RWY 16L</b>   |             |                            |                                     |  |  |
| 41.0m  |             | 41.0m                      |                                     |  |  |
| 0%   |             | 0%                         |                                     |  |  |
| 0m   | 1987m       | 2500m                      |                                     |  |  |
|  |             | 0.39%                      |                                     |  |  |
|  |             | (Mean slope:0.08%)         |                                     |  |  |
|  |             |                            | 43.0m                               |  |  |

**RJAA AD 2.13 DECLARED DISTANCES**

| RWY Designator | TORA<br>(m) | TODA<br>(m) | ASDA<br>(m) | LDA<br>(m) | Remarks |
|----------------|-------------|-------------|-------------|------------|---------|
| 1              | 2           | 3           | 4           | 5          | 6       |
| 16R            | 4000        | 4000        | 4000        | 4000       | Nil     |
| 34L            | 4000        | 4000        | 4000        | 4000       | Nil     |
| 16L            | 2500        | 2500        | 2500        | 2500       | Nil     |
| 34R            | 2500        | 2500        | 2500        | 2500       | Nil     |

**RJAA AD 2.14 APPROACH AND RUNWAY LIGHTING**

| RWY Designator                                | APCH<br>LGT<br>type<br>LEN<br>INTST | RTHL<br>Color<br>WBAR | PAPI<br>(VASIS)<br>Angle<br>DIST FM THR<br>MEHT | RTZL<br>LEN | RCLL<br>LEN<br>Spacing<br>Color<br>INTST          | REDL<br>LEN<br>Spacing<br>Color<br>INTST             | RENL<br>Color<br>WBAR | STWL<br>LEN<br>Color |
|---|-------------------------------------|-----------------------|---|-------------|---|--|-----------------------|----------------------|
| 1   | 2                                   | 3                     | 4   | 5           | 6   | 7  | 8                     | 9                    |
| 16R   | PALS<br>(CAT III)<br>900m<br>LIH    | Green<br>Green        | PAPI<br>3.0°/Left<br>431m<br>67.3ft             | 900m        | 4000m<br>15m<br>Coded color<br>(White/Red)<br>LIH | 4000m<br>30m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil(*)               |
| 34L   | PALS<br>(CAT I)<br>750m<br>LIH      | Green<br>Green        | PAPI<br>3.0°/Left<br>425m<br>67.3ft             | 900m        | 4000m<br>15m<br>Coded color<br>(White/Red)<br>LIH | 4000m<br>30m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil(*)               |
| 16L   | PALS<br>(CAT I)<br>900m<br>LIH      | Green<br>Green        | PAPI<br>3.0°/Left<br>419m<br>65.6ft             | 900m        | 2500m<br>30m<br>Coded color<br>(White/Red)<br>LIH | 2500m<br>30m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil(*)               |
| 34R   | PALS<br>(CAT I)<br>900m<br>LIH      | Green<br>Green        | PAPI<br>3.0°/Right<br>460m<br>66.2ft            | 900m        | 2500m<br>30m<br>Coded color<br>(White/Red)<br>LIH | 2500m<br>30m<br>Coded color<br>(White/Yellow)<br>LIH | Red                   | Nil(*)               |
| Remarks                                       |                                     |                       |   |             |   |  |                       |                      |
| 10  |                                     |                       |   |             |   |  |                       |                      |
| (*) Overrun area edge LGT(LEN:60m, color:Red) |                                     |                       |   |             |   |  |                       |                      |

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

|   |  |  |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | ABN: 354511N/1402400E, White/Green EV4.3sec, HO  |
| 2 | LDI location and LGT<br>Anemometer location and LGT      | LDI : Nil<br>Anemometer : RWY 34L : 276m from RWY 34L THR, LGTD<br>RWY 16R : 397m from RWY 16R THR, LGTD<br>RWY 34R : 415m from RWY 34R THR, LGTD<br>RWY 16L : 485m from RWY 16L THR, LGTD |
| 3 | TWY edge and center line lighting                        | TWY edge and center line lights installed. see AD 2.9  |
| 4 | Secondary power supply/ switch-over time                 | Within 1sec:<br>PALS(RWY16R/34L), PAPI, RENL, RTHL, WBAR, RCLL, RTZL, Stop bar LGT and RWY guard LGT(B1-B9)<br>Within 15sec: Other lights  |
| 5 | Remarks  | WDI LGT  |

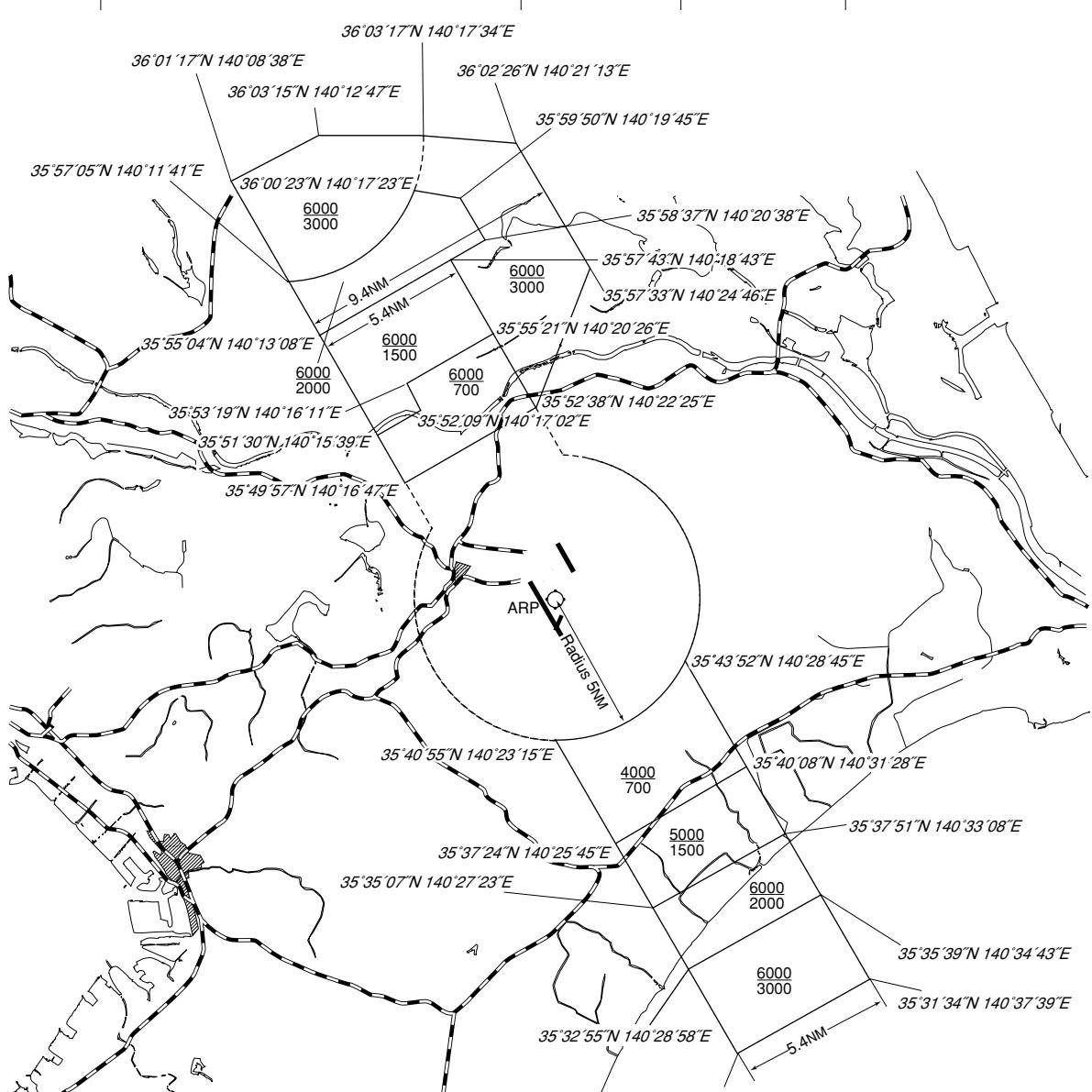
**RJAA AD 2.16 HELICOPTER LANDING AREA**

Nil

**RJAA 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                          |
| NARITA CTR                     | Area defined as follows.<br>(1) Area within a radius of 5nm of NARITA INTERNATIONAL ARP(3546N14023E).<br>(2) Area within a line connecting<br>354826N 1401749E,<br>355054N 1402341E,<br>355238N 1402225E,<br>354957N 1401647E and<br>354826N 1401749E | 3000 or below        | D                       | NARITA TWR<br>En                            | exclude area(1)            |
| NARITA PCA                     | See attached chart  |                      | C                       | TOKYO APP(1)<br>NARITA TWR(2)<br>En         | (1)Primary<br>(2)Secondary |
| TOKYO ACA                      | See RJTT attached chart   |                      | E                       | TOKYO APP<br>TOKYO DEP<br>TOKYO RADAR<br>En |                            |
| TOKYO TCA                      | See RJTT attached chart   |                      | E                       | TOKYO TCA<br>En                             |                            |

**成田特別管制区**  
**Narita Positive Control Area**

| NAME  | LATERAL LIMITS                    | UPPER LIMIT<br>(AMSL)          | UNIT<br>PROVIDING<br>SERVICE   | REMARKS   |
|---|-----------------------------------|--------------------------------|--|---|
|   |                                   | LOWER LIMIT<br>(AMSL)<br>M(ft) |  |   |
| 1   | 2                                 | 3                              | 4  | 5   |
| 成田<br>Narita  | 下記に示された区域<br>The area shown below |                                | Primary<br>Tokyo APP<br><br>124.4 127.7<br>261.2<br><br>Secondary<br>Narita Tower<br>118.2 118.35<br>236.8 | 当該空域を飛行しようとする航空機は東京アプローチ又は成田タワーに連絡し、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ること。<br><br>Pilot of aircraft operating in this area shall contact Tokyo APP or Narita Tower for ATC instructions giving informations on aircraft identification, position, altitude and pilot's intentions. |
|  <p>The map illustrates the Narita Positive Control Area (PCA) boundaries and flight levels. Key coordinates include:</p> <ul style="list-style-type: none"> <li>Top boundary: 36°03'17"N 140°17'34"E, 36°02'26"N 140°21'13"E, 35°59'50"N 140°19'45"E.</li> <li>Bottom boundary: 35°31'34"N 140°31'55"E, 35°32'55"N 140°28'58"E, 35°35'39"N 140°34'43"E.</li> <li>Left boundary: 35°57'05"N 140°11'41"E, 35°55'04"N 140°13'08"E, 35°53'19"N 140°16'11"E, 35°51'30"N 140°15'39"E, 35°49'57"N 140°16'47"E.</li> <li>Right boundary: 36°01'17"N 140°08'38"E, 36°03'15"N 140°12'47"E, 36°00'23"N 140°17'23"E, 35°57'43"N 140°18'43"E, 35°57'33"N 140°24'46"E, 35°55'21"N 140°20'26"E, 35°52'38"N 140°22'25"E, 35°52'09"N 140°17'02"E, 35°43'52"N 140°28'45"E, 35°40'08"N 140°31'28"E, 35°37'51"N 140°33'08"E, 35°35'39"N 140°34'43"E.</li> <li>Central features: A circle labeled "Radius 5NM" centered around the ARP (Approach Reference Point) at 35°43'52"N 140°28'45"E.</li> <li>Flight levels: 6000, 3000, 9.4NM, 5.4NM, 6000, 1500, 6000, 700, 4000, 700, 5000, 1500, 6000, 2000, 6000, 3000, 5.4NM.</li> </ul> |                                   |                                |  |   |

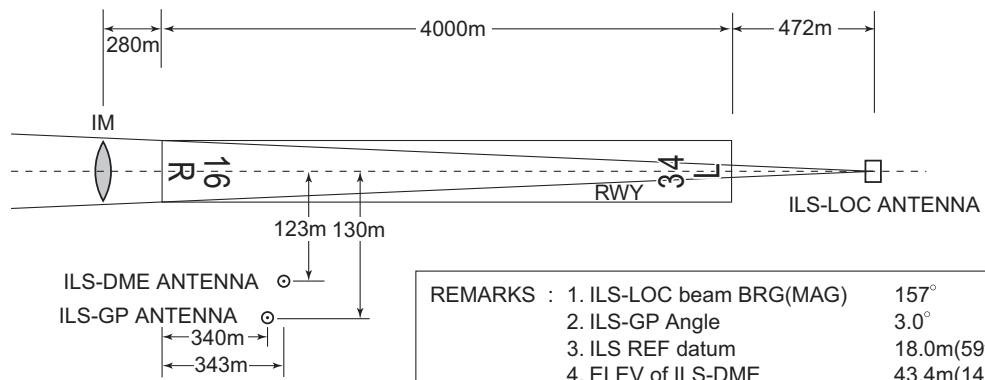
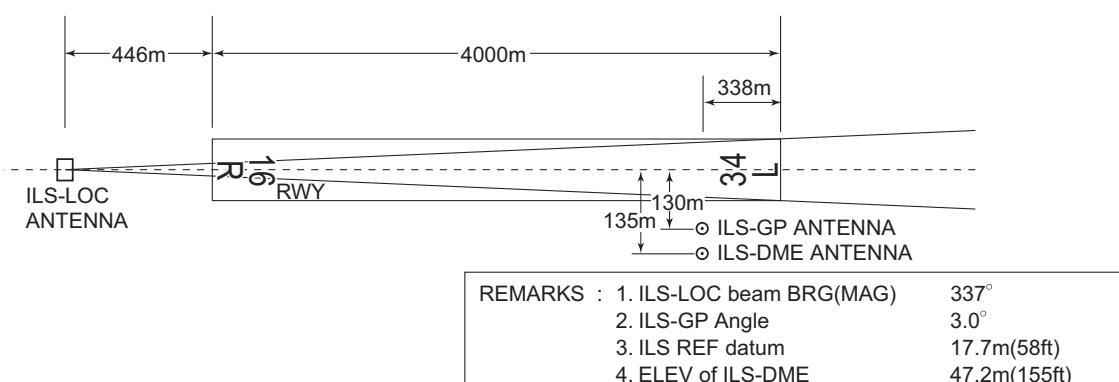
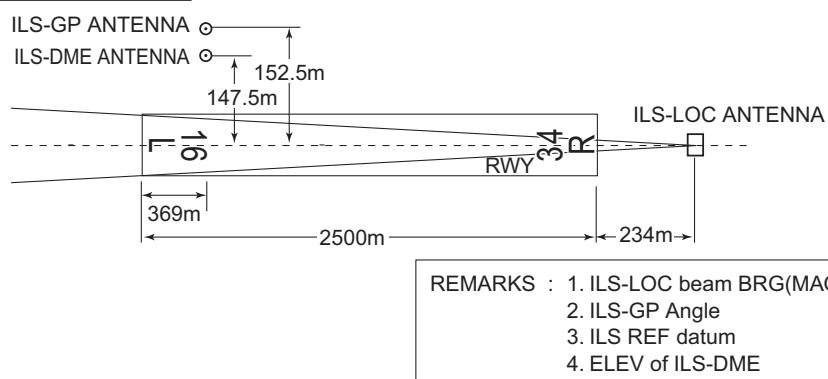
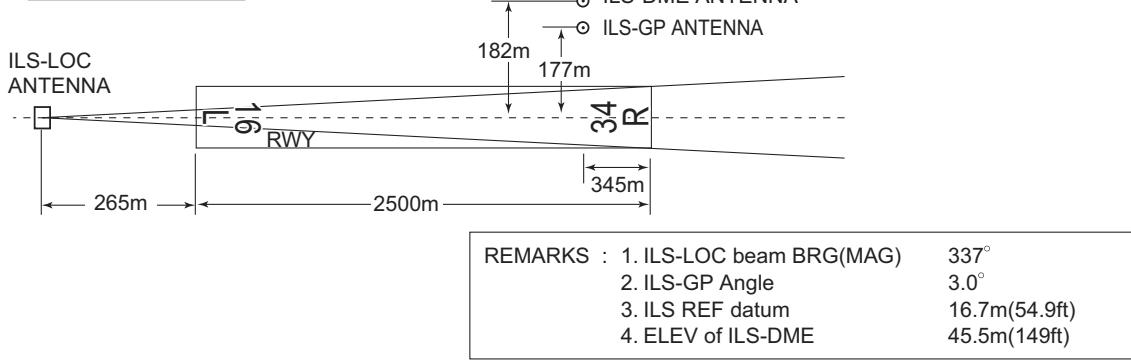
## RJAA AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation | Call sign           | Frequency  | Hours of operation | Remarks  |
|---------------------|---------------------|--|--------------------|--|
| 1                   | 2                   | 3  | 4                  | 5  |
| APP                 | Tokyo Approach      | 124.4MHz(1)<br>121.275MHz<br>125.2MHz<br>125.8MHz<br>127.7MHz<br>225.65MHz<br>121.5MHz(E)<br>243.0MHz(E) | H24                | (1)Primary   |
| ASR                 | Tokyo Radar         | 120.2MHz<br>121.5MHz(E)<br>243.0MHz(E)   | H24                |  |
| DEP                 | Tokyo Departure     | 124.2MHz(1)<br>119.6MHz<br>120.6MHz<br>125.525MHz<br>127.5MHz  | H24                |  |
| TCA                 | Tokyo TCA           | 119.45MHz<br>246.1MHz  | 2300 - 1030        |  |
| TWR                 | Narita Tower        | 118.2MHz(1)<br>118.35MHz<br>122.7MHz<br>126.2MHz<br>236.8MHz<br>121.5MHz(E)<br>243.0MHz(E)               | H24                |  |
| GND                 | Narita Ground       | 121.95MHz(1)<br>121.85MHz  | H24                |  |
| DELIVERY            | Narita Delivery     | 121.9MHz(1)<br>121.65MHz   | H24                |  |
| ATIS                | Narita INTL Airport | 128.25MHz  | H24                |  |
| RAMP                | Narita Ramp Control | 121.6MHz<br>121.75MHz  | H24                |  |
| A/G                 | Tokyo               | (2)  | H24                | (2)SELCAL AVBL<br>HF* RDO CK AVBL.<br>*LOCAL HF AT NARITA INTL AP.<br><br>NP:<br>2932KHz 5628KHz 5667KHz 6655KHz<br>8915KHz 8951KHz 10048KHz 11330KHz<br>13273KHz 17946KHz 21925KHz<br><br>CWP:<br>2998KHz 3455KHz 4666KHz 6532KHz<br>8903KHz 11384KHz 13300KHz 17904KHz |

## RJAA AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid<br>(VOR<br>declination) | ID  | Frequency             | Hours of<br>operation | Position of<br>transmitting<br>antenna<br>coordinates | Elevation of<br>DME<br>transmitting<br>antenna | Remarks  |
|-------------------------------------|-----|-----------------------|-----------------------|---|--|--|
| 1                                   | 2   | 3                     | 4                     | 5   | 6  | 7  |
| VOR                                 | NRE | 117.9MHz              | H24                   | 354656.44N/1402145.13E                                |  | VOR unusable:<br>110°-120° beyond 15nm BLW 3000ft.<br>120°-150° beyond 25nm BLW 3000ft.<br>170°-180° beyond 35nm BLW 3000ft.<br>210°-220° beyond 35nm BLW 4000ft.<br>260°-270° beyond 35nm BLW 3000ft.<br>280°-300° beyond 25nm BLW 3000ft<br><br>Note:There is a course roughness<br>due to crossing over the station by<br>other aircraft. |
| DME                                 | NRE | 1213MHz<br>(CH-126X)  | H24                   | 354656.44N/1402145.13E                                | 153ft  | DME unusable:<br>060°-110° beyond 30nm BLW 3000ft.<br>110°-120° beyond 20nm BLW 3000ft.<br>130°-140° beyond 25nm BLW 3000ft.<br>140°-150° beyond 35nm BLW 4000ft.<br>260°-270° beyond 35nm BLW 3000ft.<br>280°-300° beyond 25nm BLW 3000ft.  |
| ILS-LOC 16R<br>(CAT-III)            | IKF | 111.5MHz              | H24                   | 354422.75N/1402336.17E                                |  | Back course unusable.<br>LOC : 472m(1549ft) away<br>FM RWY34L THR,<br>BRG(MAG) 157°.   |
| ILS-GP 16R                          | -   | 332.9MHz              | H24                   | 354616.14N/1402208.25E                                |  | GP:340m(1115ft) inside FM<br>RWY16R THR,130m(427ft) W of<br>RCL.<br>GP angle 3.0°,<br>HGT of ILS Ref datum<br>18.0m(59ft).   |
| ILS-DME 16R                         | IKF | 1013MHz<br>(CH-52X)   | H24                   | 354616.17N/1402208.55E                                | 142ft  | DME : 343m(1125ft) inside FM<br>RWY16R THR, 123m(404ft)<br>W of RCL.   |
| IM 16R                              | -   | 75MHz                 | H24                   | 354635.61N/1402200.18E                                |  | IM : 280m(918ft) away FM RWY16R<br>THR.  |
| ILS-LOC 34L                         | IYQ | 111.9MHz              | H24                   | 354640.25N/1402156.83E                                |  | Back course unusable.<br>LOC : 446m(1463ft) away FM<br>RWY16R THR.<br>BRG(MAG) 337°.   |
| ILS-GP 34L                          | -   | 331.1MHz              | H24                   | 354443.26N/1402315.36E                                |  | GP : 338m(1109ft) inside FM<br>RWY34L THR, 130m(426ft) W of<br>RCL.<br>GP angle 3.0°<br>HGT of ILS Ref datum 17.7m(58ft).  |
| ILS-DME 34L                         | IYQ | 1017.0MHz<br>(CH-56X) | H24                   | 354443.18N/1402315.19E                                | 155ft  | DME : 338m(1109ft) inside FM<br>RWY34L THR, 135m(443ft) W of<br>RCL.   |

| Type of aid<br>(VOR<br>declination) | ID  | Frequency             | Hours of<br>operation | Position of<br>transmitting<br>antenna<br>coordinates | Elevation of<br>DME<br>transmitting<br>antenna | Remarks   |
|-------------------------------------|-----|-----------------------|-----------------------|---|--|---|
| 1                                   | 2   | 3                     | 4                     | 5   | 6  | 7   |
| ILS-LOC 16L                         | ITM | 110.7MHz              | H24                   | 354702.26N/1402336.44E                                |  | Back course unusable.<br>LOC : 234m(767ft) away FM<br>RWY34R THR,<br>BRG (MAG) 157°                                       |
| ILS-GP 16L                          | -   | 330.2MHz              | H24                   | 354810.90N/1402253.85E                                |  | GP : 369m(1210ft) inside FM<br>RWY16L THR, 153m(500ft) E of RCL.<br>GP angle 3.0°.<br>HGT of ILS Ref datum 16.53m(54.2ft) |
| ILS-DME 16L                         | ITM | 1005.0MHz<br>(CH-44X) | H24                   | 354810.82N/1402253.68E                                | 142ft  | DME: 369m(1210ft) inside FM<br>RWY16L THR, 148m(484ft) E of RCL.  |
| ILS-LOC 34R                         | ITJ | 110.9MHz              | H24                   | 354826.12N/1402235.80E                                |  | Back course unusable.<br>LOC : 265m(869ft) away FM<br>RWY16L THR,<br>BRG (MAG) 337°                                       |
| ILS-GP 34R                          | -   | 330.8MHz              | H24                   | 354721.37N/1402330.81E                                |  | GP : 345m(1131ft) inside FM<br>RWY34R THR, 177m(581ft) E of RCL.<br>GP angle 3.0°<br>HGT of ILS Ref datum 16.7m(54.9ft) . |
| ILS-DME 34R                         | ITJ | 1007.0MHz<br>(CH-46X) | H24                   | 354721.45N/1402330.99E                                | 149ft  | DME : 345m(1131ft) inside FM<br>RWY34R THR, 182m(597ft) E of RCL.   |
| DME                                 | SND | 1174MHz<br>(CH-87X)   | H24                   | 355606.33N/1395852.43E                                | 126ft  |   |
| MSAS                                |     | 1575.42MHz            | H24                   |   |  | Transmitting antennas are satellite based   |

ILS for RWY 16RILS for RWY 34LILS for RWY 16LILS for RWY 34R

## RJAA AD 2.20 LOCAL TRAFFIC REGULATIONS

### 1. Airport regulations

Local flying restrictions.

#### 1.Noise restrictions

Time restrictions on departures and arrivals:

- (A) No take off or landing shall be permitted during the hours from 1500 UTC to 2100 UTC with the exception of aircraft in an emergency or in an unavoidable situation.  
Note:"In an emergency or in an unavoidable situation" as described above shall be limited to the following cases:  
(a) Aircraft encountered with an abnormal situation.  
(b) When abnormal situation arose among crew or passengers.  
(c) Aircraft operating for the purpose of search-and-rescue activities.  
(d) Aircraft operating for the purpose of urgent news collection activities.  
(e) When take-off or landing is considered really unavoidable due to typhoon evacuation or other reasons.  
(f) When there arose necessity of urgent refuelling due to unusual weather conditions.
- (B) The airport office of JCAB shall not accept flight plans in violation of the paragraph (A) above.
- (C) (1) Only RWY 16R/34L is available during the hours from 1400 UTC to 1500 UTC  
(2) All aircraft taking off from/landing at Narita International Airport during the hours from 1400UTC to 1500UTC shall meet the following requirement.  
The sum of noise values of the aircraft is at least 10 EPNdB below the total noise standard values at the flyover, approach and sideline measurement points as defined in Annex16 to the Convention on International Civil Aviation Volume I Chapter 3 and all of the individual noise values measured at each of the measurement points are at least 2 EPNdB below the noise standard values at the corresponding points.  
(3) All aircraft scheduled to take off from/land at Narita International Airport during the hours from 2100UTC to 1400UTC shall also meet the criteria mentioned on paragraph (2) above in case they take off/land from 1400 UTC to 1500 UTC due to delay.  
(4) The provisions of the paragraph (1), (2), or (3) above shall not be applied in an emergency or in an unavoidable situation mentioned on the paragraph (A) above.

#### 2.Operation

##### (1) Efficient Use of 16L/34R

In order to maximize the operational efficiency of the airport, it is strongly encouraged for pilot to comply with the use of runway instructed by ATC, where ATC has determined its use upon giving due consideration to the overall traffic situation on the ground and in the air.

For this reason, arriving aircraft must be ready to accept landing on 16L/34R (2,500m) if ATC assigns the shorter runway. Departing aircraft, upon giving due consideration of the distance to the destination as well as aircraft performance, must be ready to accept take-off from the runway assigned by ATC.

However, in the event where the assigned runway cannot be accepted due to unavoidable circumstances such as weather conditions, arriving aircraft must notify ATC of its intention at initial contact with Tokyo Approach and departing aircraft must notify ATC when requesting ATC clearance.

##### (2) Gear down operation during an approach to RWY34L/RWY34R.

In order to prevent ice blocks falling from aircraft onto the ground, all flights making an approach to RWY34L/RWY34R from the seashore are required to complete gear down and locked before reaching IYQ 11.8DME (NRE 14.3DME) for RWY 34L/ ITJ 13.6DME (NRE 14.0DME) for RWY34R as far as the safety of the flight is not compromised.

##### (3) Missed approach

Pilot roles and responsibilities, when simultaneous parallel ILS approaches are being conducted.

If executing a missed approach prior to reaching the final approach fix (FAF), fly the lateral navigation path of the instrument procedure to the FAF. And,

###### A) ILS Z RWY16L

Comply with restrictions in the Instrument Approach Procedure (IAP) chart until reaching MARCH, then maintain 3,000FT until reaching FAF, then climb to the altitude specified for the missed approach procedure, except when another altitude is instructed by the ATC.

###### B) ILS RWY 34L

Maintain 4,000FT until reaching FAF, then climb to the altitude specified for the missed approach procedure, except when another altitude is instructed by the ATC.

###### C) ILS Z RWY16R/ILS Z RWY34R

Climb to the altitude specified for the missed approach procedure, except when another altitude is instructed by the ATC.

##### (4) On use of this airport for small aircraft

Take-off and landing of small aircraft shall be restricted by the airport authority excepting those engaged in security mission or permitted in advance.

#### 3.PDA (parts departing aircraft) reporting to NAA

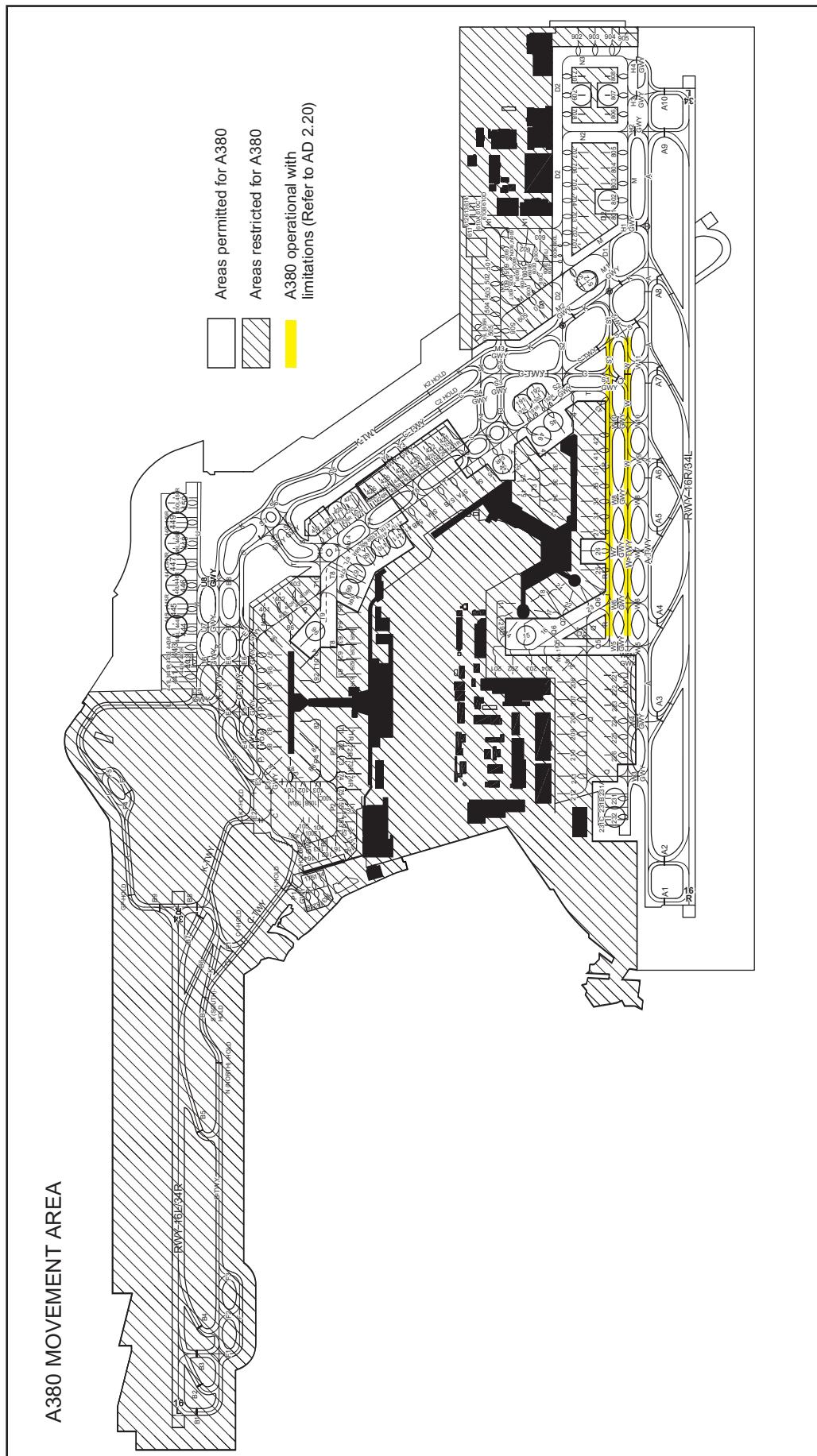
In order to secure the safety of aircraft operations and to rectify the issue of falling objects from aircraft operating in the vicinity of Narita International Airport, airline operators are required to notify NAA Ramp Control Office (Tel 0476-32-2246, Fax 0476-30-1586, E-mail unkan@naa.jp) of any "Parts Departing Aircraft" from flights operating to/from Narita International Airport, without delay. This information shall be shared by relevant parties in order to prevent recurrence of such.

**4.Special notice to Airbus A380 operators** (See A380 MOVEMENT AREA CHART)

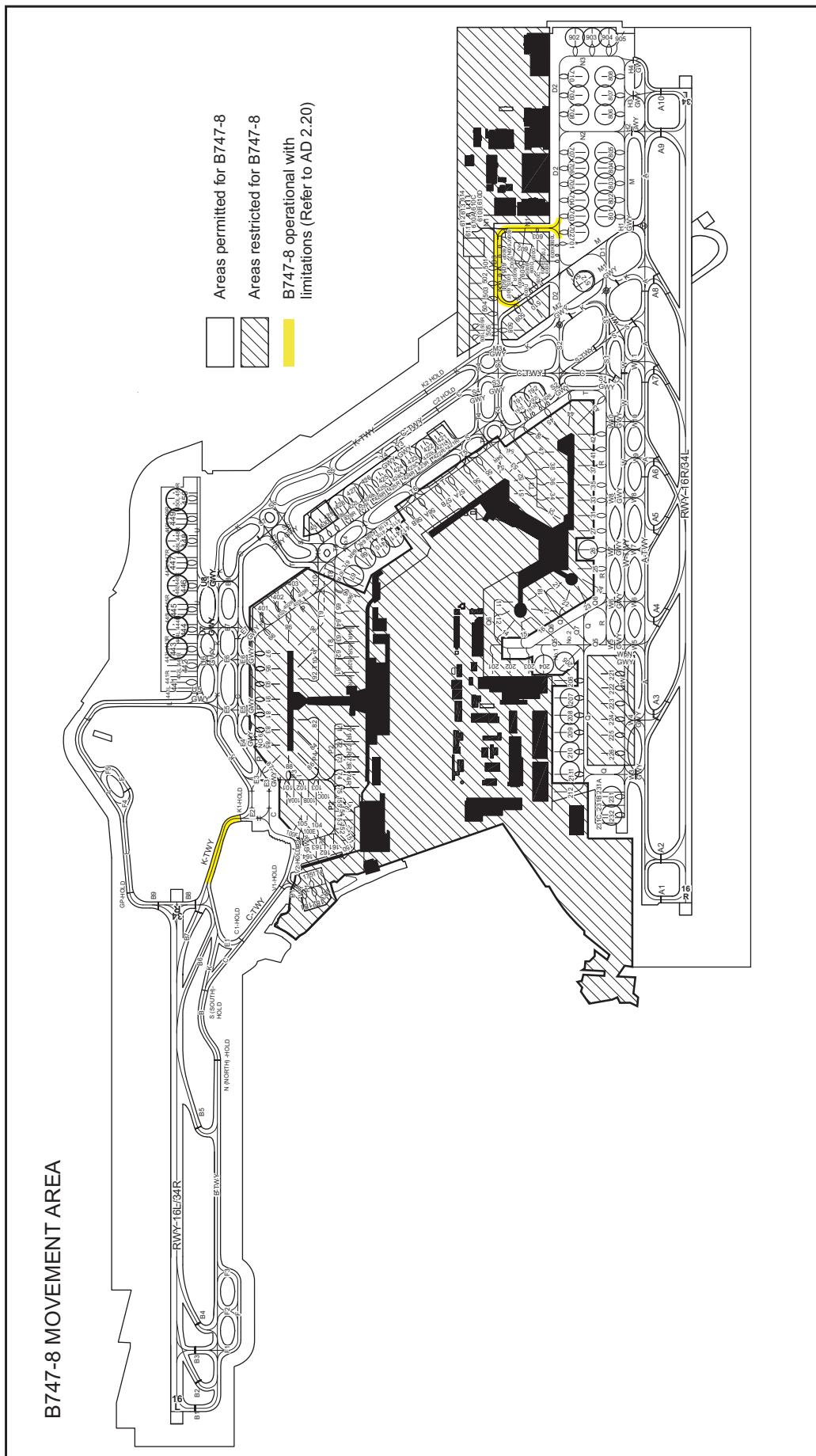
- (1) Runway:
  - The only available runway for A380 is 16R/34L, and A380 is not permitted to use RWY 16L/34R.
  - It is required to use digital avionics: modern digital autopilot or flight director with track hold guidance, as RWY 16R/34L is with an ICAO Code E OFZ (obstacle free zone).
- (2) Runway-holding position:
  - RWY-holding position markings on A1, A2, A9 and A10 are located at 120m from runway center line. Clearance is adequate when A380 is properly holding on these holding positions.
- (3) Taxiway and apron:
  - A380 ground movement is only permitted within the areas as shown on the attached chart "A380 MOVEMENT AREA".
  - Reduced taxiway-taxilane center line separation of 90m is applied for simultaneous A380 taxi at W and R between W5 and S1, at W between C and W12, and at S1 between C and S. On these taxiways/taxilanes, A380 needs to reduce taxiing speed and accurately track the center lines.
  - A380 should take taxilane T9 to taxi to NR96.
  - Taxilane T9 marking is blue.
  - T9 aircraft stand taxi lane center line lights are illuminated in alternating GREEN and BLUE.  
These lights are turned on by ramp controller for A380 aircraft arriving or departing to/from NR96 parking stand.
- (4) Taxiing route:
  - Unless there is a particular reason, A380 taxiing route is only permitted within the areas as shown on the attached chart "A380 MOVEMENT AREA".
- (5) Parking stand:
  - Available parking stands for A380 are: NR15, NR26, NR45, NR46, NR54, NR66, NR67, NR68, NR96, NR191, NR192, NR231, NR232, NR410, NR411, NR427, NR428, NR444, NR445, NR446, NR447, NR448, NR449, NR450, NR512, NR709, NR802 and NR807.
- (6) Ground power supply:
  - The fixed power facility is capable of supplying 180KVA at NR15, NR26, NR66, NR96, NR231 and NR232.
  - The fixed power facility is capable of supplying 300KVA at NR45 and NR46.
  - APU restriction is also applied to A380 as stipulated in RJAA AD2.21 Noise abatement procedures, (II) Other Information, (D)Restrictions about the use of auxiliary power unit (APU).

**5.Special notice to Boeing B747-8 operators** (See B747-8 MOVEMENT AREA CHART)

- (1) Runway:
  - All runways are available for B747-8.
  - It is required to use digital avionics: modern digital autopilot or flight director with track hold guidance, as all runways are with an ICAO Code E OFZ (obstacle free zone).
- (2) Taxiway and apron:
  - B747-8 ground movement is only permitted within the areas as shown on the attached chart "B747-8 MOVEMENT AREA".
  - Reduced taxiway center line-object separation is applied on K between B8 and E2. On this taxiway, B747-8 needs to reduce taxiing speed and accurately track the center line, as separation between wingtip and the boundary fence is 10.5m.
  - On taxiway D3, and N1 between D2 and D3, B747-8 is required to be towed during taxiing.
- (3) Taxiing route:
  - Unless there is a particular reason, B747-8 taxing route is only permitted within the areas as shown on the attached chart "B747-8 MOVEMENT AREA CHART".
- (4) Parking stand:
  - Available parking stands for B747-8 are: NR26, NR67, NR68, NR191, NR192, NR204, NR205, NR207, NR208, NR209, NR210, NR211, NR231, NR232, NR410, NR411, NR422, NR423, NR424, NR425, NR426, NR427, NR428, NR443, NR444, NR445, NR446, NR447, NR448, NR449, NR450, NR512, NR702, NR703, NR704, NR705, NR706, NR707, NR708, NR709, NR710, NR801, NR802, NR803, NR804, NR805, NR806, NR807, NR808, NR902, NR903 and NR904.



B747-8 MOVEMENT AREA



## 2. Taxiing to and from stands

## 2.1. GENERAL

**1.Ramp control**

## (1) Ramp control services

With a view to ensuring a safe and smooth flow of aircraft traffic on the apron, the Narita International Airport Corporation operates an aeronautical station (Frequency : 121.6MHz and 121.75MHz, Call sign : NARITA RAMP CONTROL) and issues instruction, approval, and/or necessary information to aircraft ground-moved within the apron areas.

## (2) Area of Competence

The area of competence is shown below. The Ramp Control will only issue such instruction, approval, and/or information, which are effective within the apron areas.

## (3) Procedures

## (A) Start-up Taxi Procedures for Departing Aircraft from Terminal Apron

- (a) Contact NARITA DELIVERY 15 minutes prior to starting engines. (see AD 2.22(V)).
- (b) When instructed by ATC, contact NARITA RAMP CONTROL on 121.6MHz or 121.75MHz for approval to start push-back or taxiing.
- (c) Taxi is to be started from a safe position with due regard to the effects of engine exhaust blast.
- (d) Unless otherwise specified by the "NARITA RAMP CONTROL", follow the route to the gateway (exit from entrance to apron) from the aircraft parking position, as shown on the Taxiing Charts.
- (e) Expect instructions to contact NARITA GROUND on 121.95MHz or 121.85MHz before leaving apron.
- (f) The name of the approaching gateway shall be reported at the initial contact with NARITA GROUND.
- (g) To avoid frequency congestion, report the current ATIS code to NARITA GROUND upon initial contact.

NOTE: DO NOT PROCEED INTO TAXIWAY WITHOUT TAXI INSTRUCTION FROM ATC.

## (B) Taxi Procedures for Arriving Aircraft into Terminal Apron

- (a) When instructed by ATC, contact NARITA RAMP CONTROL on 121.6MHz or 121.75MHz for approval to continue taxiing into the apron.
- (b) The name of the approaching gateway shall be reported at the initial contact with NARITA RAMP CONTROL.
- (c) Unless otherwise specified by the "NARITA RAMP CONTROL", follow the route to the parking position from the gateway, as shown on the Taxiing Charts.
- (d) When holding at an apron stop bar shown on the above chart, stop the aircraft in front of stop bar lights.
- (e) When approaching the assigned parking position, reduce engine power to the extent practicable so as not to cause any hazard to others with due regard to exhaust blast.

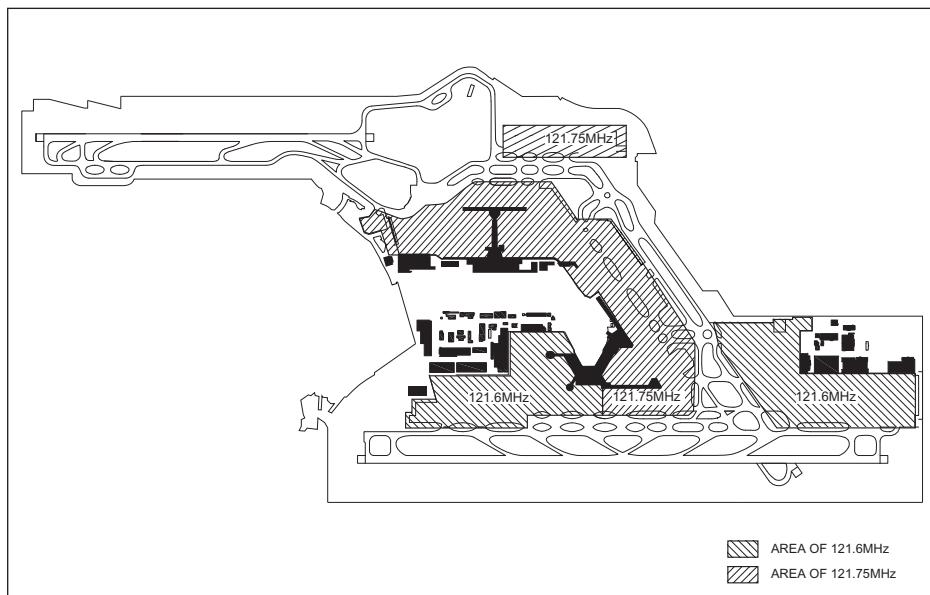
NOTE: DO NOT PROCEED INTO APRON WITHOUT APPROVAL FROM RAMP CONTROL.

## (C) Ground Movement of Aircraft other than Departing and Arriving Aircraft

Obtain an approval for taxi from the "NARITA RAMP CONTROL" prior to its start, then conform to the provisions of the paragraph (A) (Item (a), (b) and (g) are excluded) and (B).

## (D) Ground Movement of Towed Aircraft

Towed aircraft is also subject to the Ramp Control. For details, see the Aircraft Operations Regulations (UNYOKANRI SAISOKU).



## 2.2. TSAT Operation

### 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-taxiout) 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 Narita Ramp Control

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. Subject Aircraft

All IFR departures whose EOBT stated in flight plan between 2100UTC and 1130UTC 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. Operation procedures

3-1 TOBT

3-1-1 Aircraft Operator (AO)/Ground Handler (GH) should report TOBT no later than 25 minutes prior to EOBT. EOBT stated in flight plan will be processed as TOBT if manual input of TOBT cannot be accomplished.

3-1-2 TOBT should be input via Narita Airport Collaborative Decision Making (CDM) System ("CDM System").

3-1-3 TOBT can never be earlier than 15 minutes prior to EOBT, nor later than 30 minutes after EOBT.

3-1-4 An aircraft should be ready within +/-5 minutes of TOBT. If the aircraft is not ready within +/-5 minutes of last reported TOBT, the AO/GH should update TOBT accordingly.

3-1-5 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 radiotelephone (Voice RTF) or data link at Clearance Delivery.

[Example]

Voice RTF "TSAT 0930"

Data link "TSAT 0930"

3-2-2 TSAT is displayed on Visual Docking Guidance System (VDGS) 20 minutes prior to the TSAT. It should be noted that TSAT is generated 20 minutes prior to EOBT.

[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)

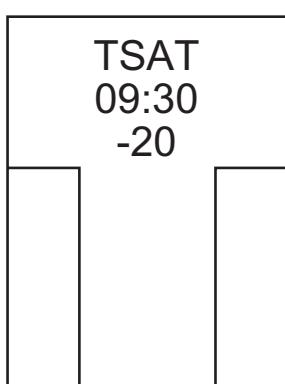


Figure 1

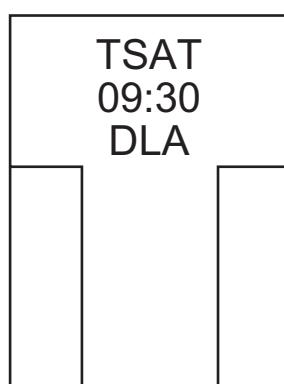


Figure 2

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 When TSAT is voided, it is displayed on VDGS.

[Example]

When TSAT is voided, the second row becomes "VOID" for 5 minutes. Then All displays go out. (Figure 4)

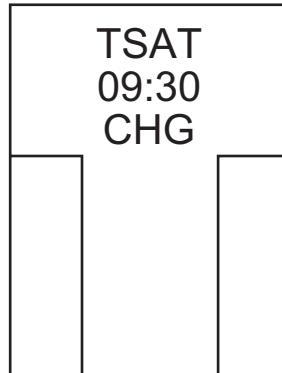


Figure 3

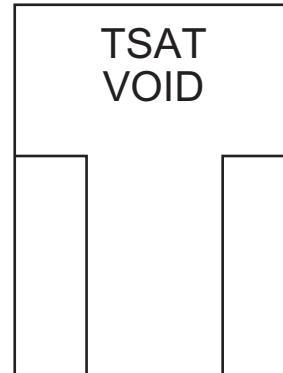


Figure 4

3-2-3 If VDGS is unserviceable or not installed in a parking stand, and TSAT is changed after ATC clearance has been issued, Narita Delivery or Narita Ramp Control informs a new TSAT to an aircraft.

#### 3-3 Validation of TSAT

3-3-1 The aircraft should recognize the TSAT displayed on VDGS as the valid TSAT.

3-3-2 If the VDGS is not installed or unserviceable, an aircraft should recognize the last TSAT notified by Narita Delivery or Narita Ramp Control as the valid TSAT.

#### 3-4 Cancellation

Narita Delivery or Narita Ramp Control notifies the aircraft by voice RTF or data link when TSAT is cancelled.

[Example]

Voice RTF "TSAT CANCELLED"

Data link "TSAT CNL"

#### 3-5 Pushback/Taxi Request

3-5-1 An aircraft should ensure the aircraft is ready for Pushback/Taxi at TSAT after obtained ATC clearance following RJAA AD 2.22 (V) ATC Procedures (2) Departure (A) ATC clearance. Regardless of above, an aircraft is able to request Pushback/Taxi from 3 minutes earlier than TSAT when the aircraft is ready.

3-5-2 If the aircraft cannot achieve TSAT, TOBT should be updated accordingly. If manual input of TOBT cannot be accomplished, the aircraft should request Pushback/Taxi as soon as the aircraft is ready.

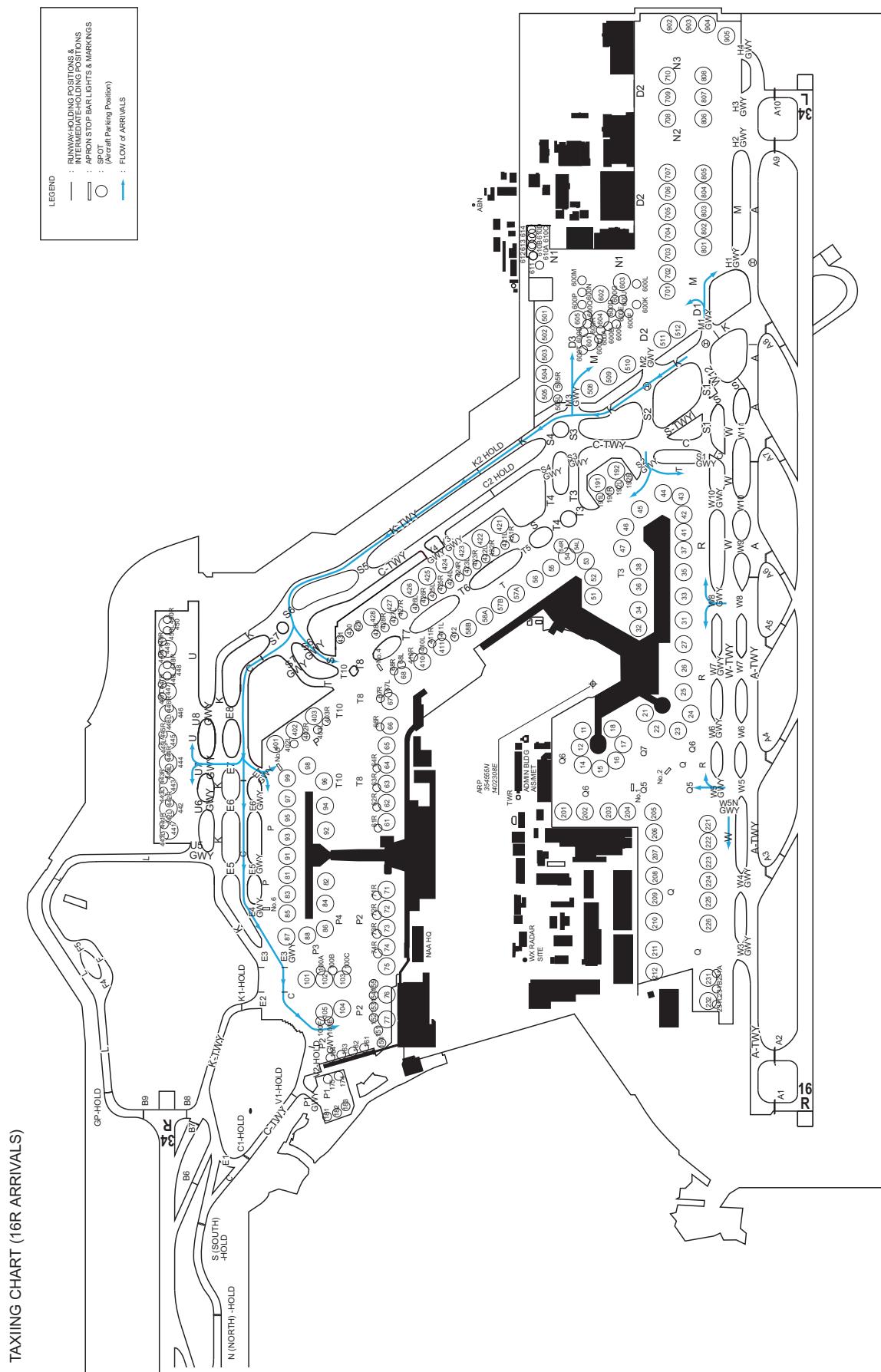
3-5-3 An aircraft is able to request Pushback/Taxi if Narita Delivery or Narita Ramp Control informs the TSAT has been cancelled regardless of displayed on VDGS.

3-5-4 Narita Ramp Control may give an instruction of Pushback/Taxi even before the TSAT depending on capacity of ground traffic. For that, the aircraft is requested to monitor the frequency instructed by Narita Delivery after obtaining ATC clearance.

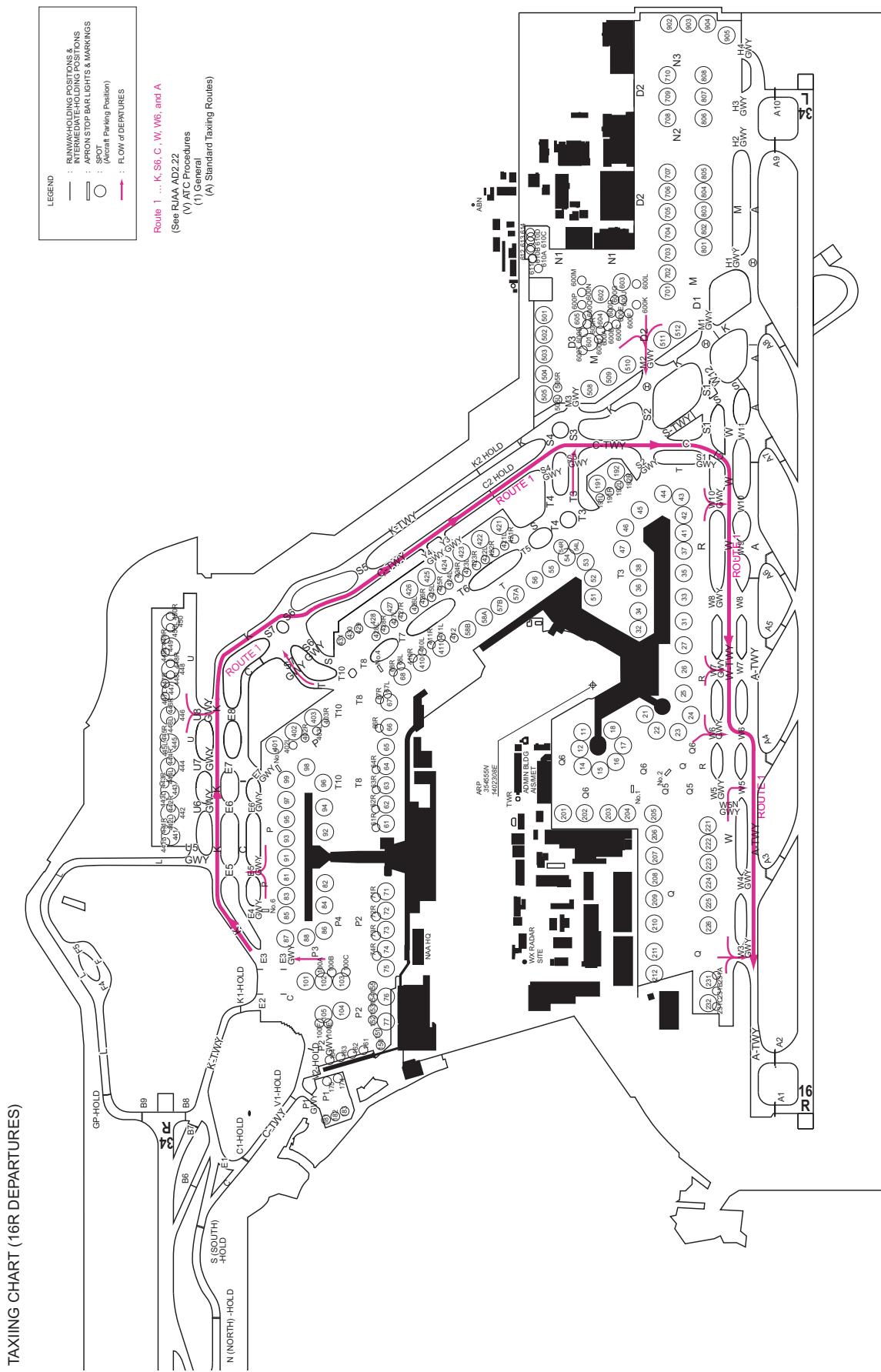
### 4. Suspension / Resumption of TSAT Operation

In case of suspension / resumption of TSAT Operation, it is announced by NOTAM RJAA and CDM System.

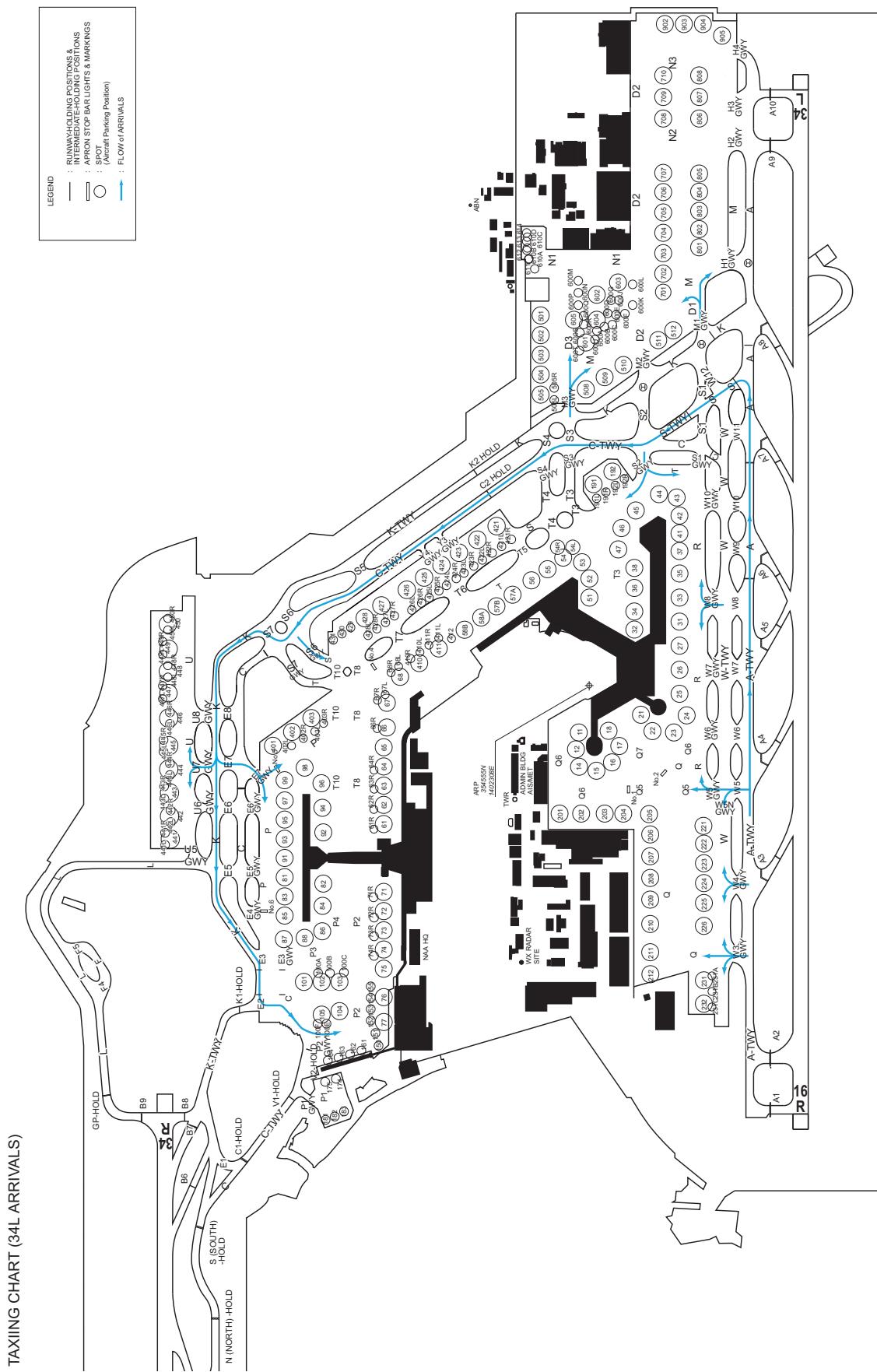
### 2.3. TAXIING CHART(16R ARRIVALS)



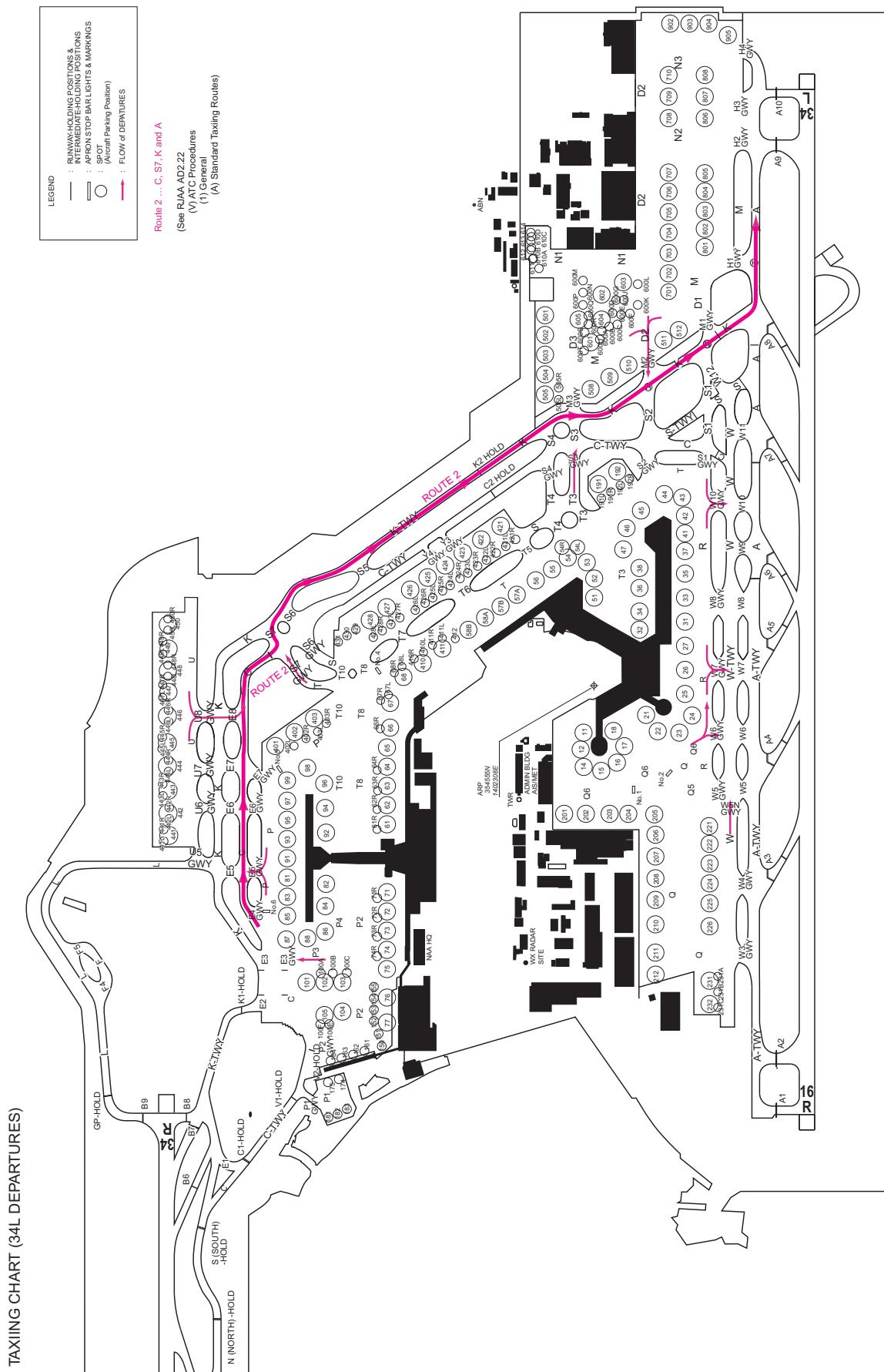
## 2.4. TAXIING CHART(16R DEPARTURES)



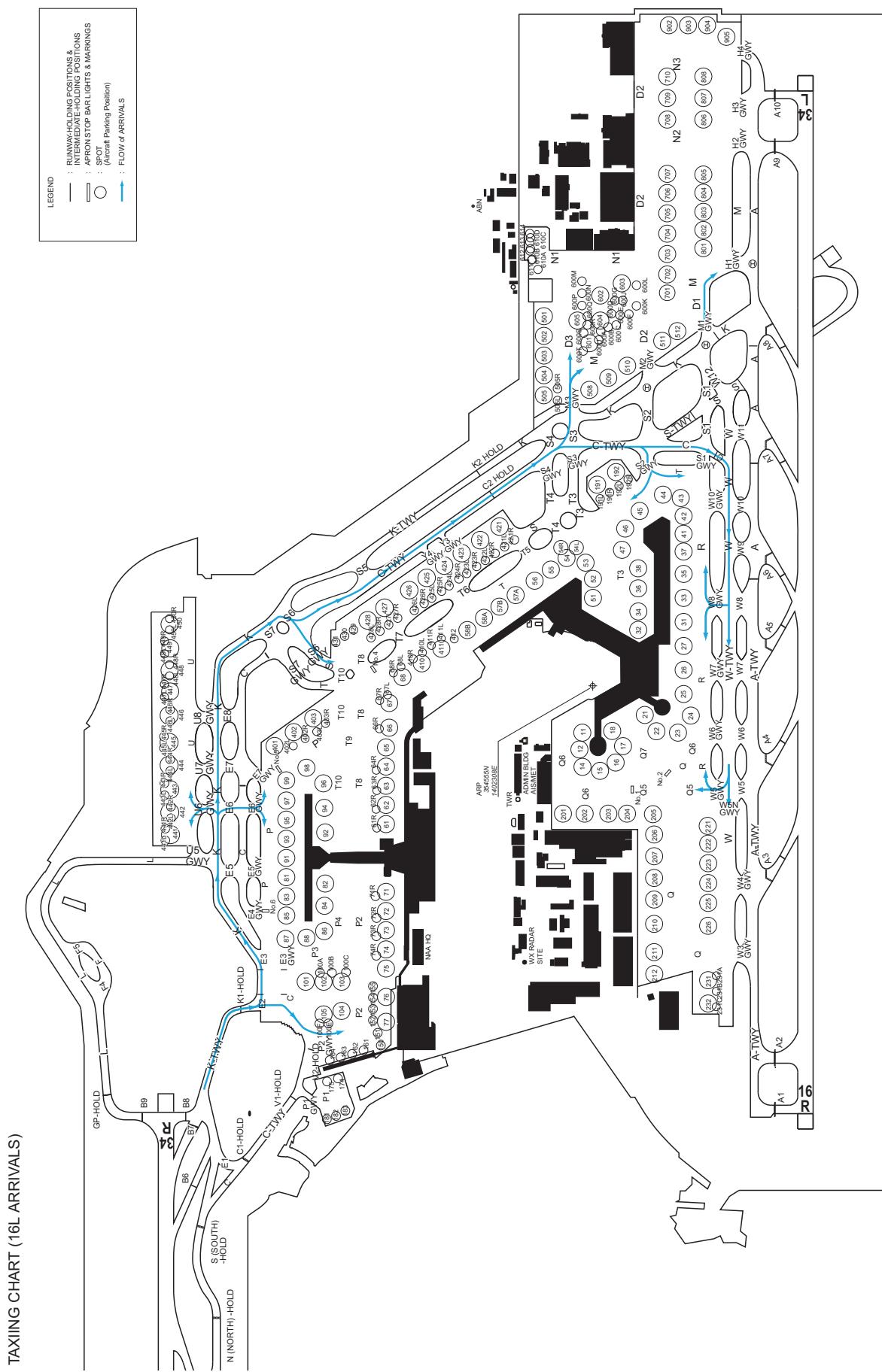
## 2.5. TAXIING CHART(34L ARRIVALS)



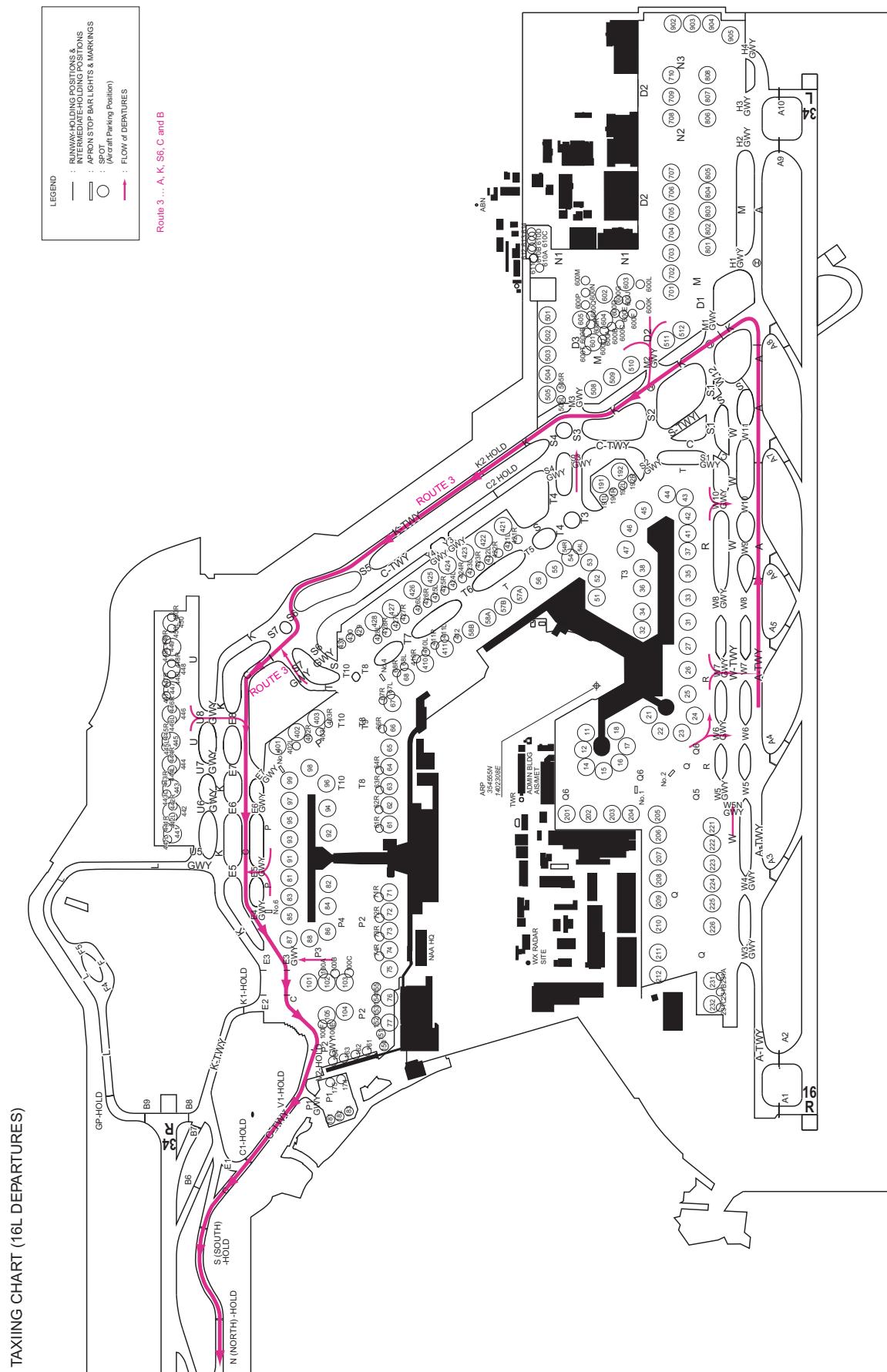
## 2.6. TAXIING CHART(34L DEPARTURES)



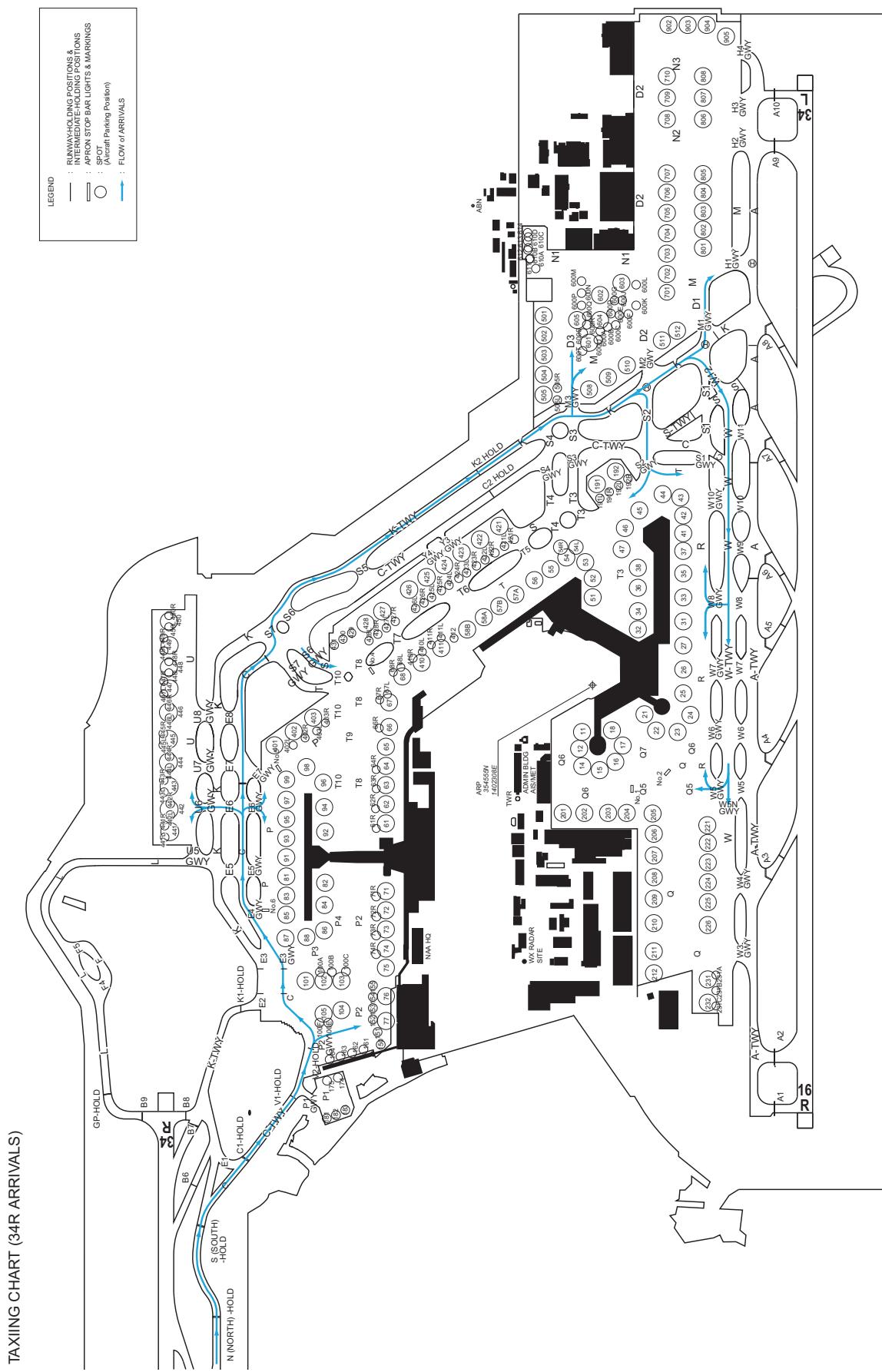
## 2.7. TAXIING CHART(16L ARRIVALS)



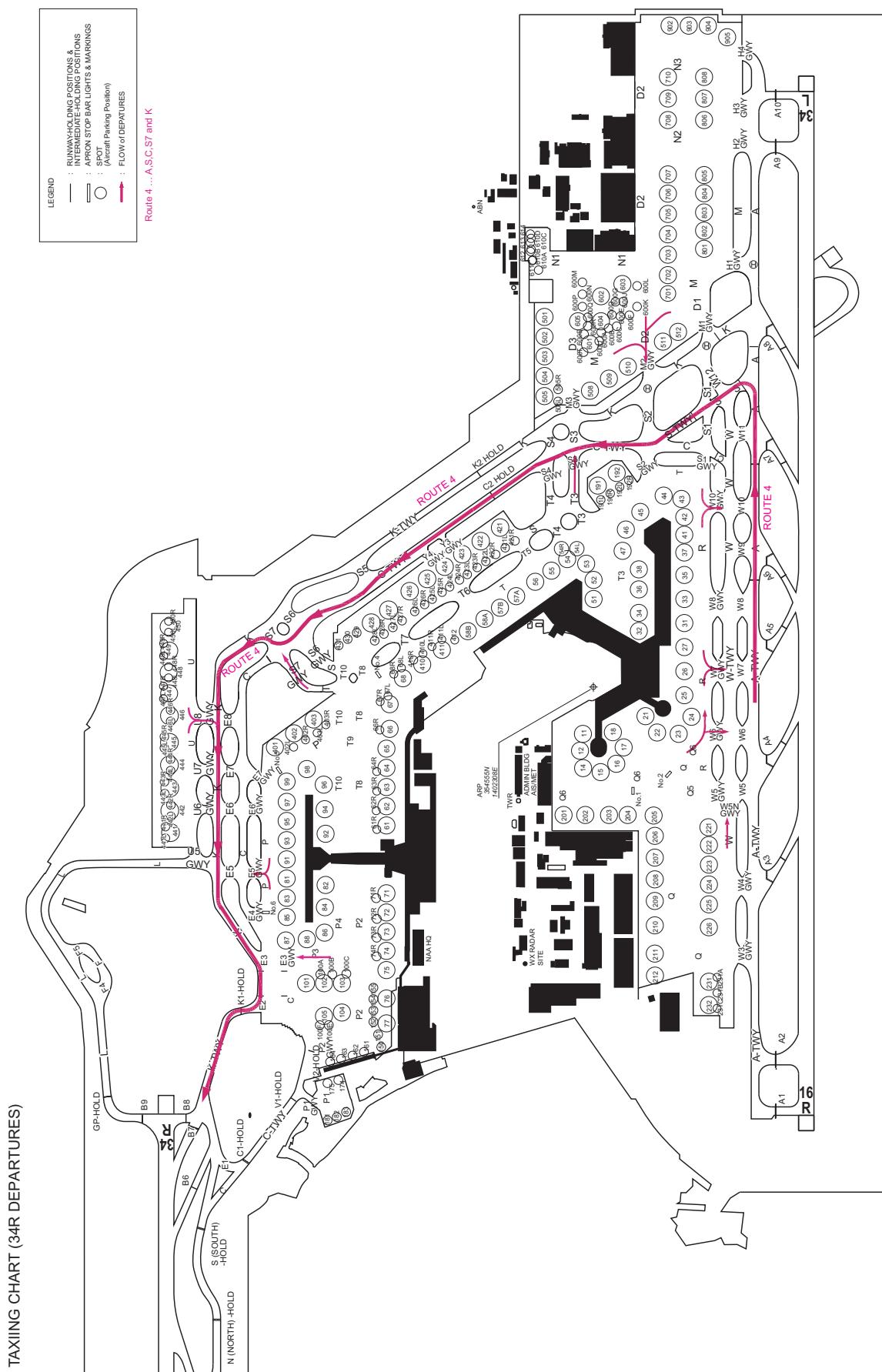
## 2.8. TAXIING CHART(16L DEPARTURES)



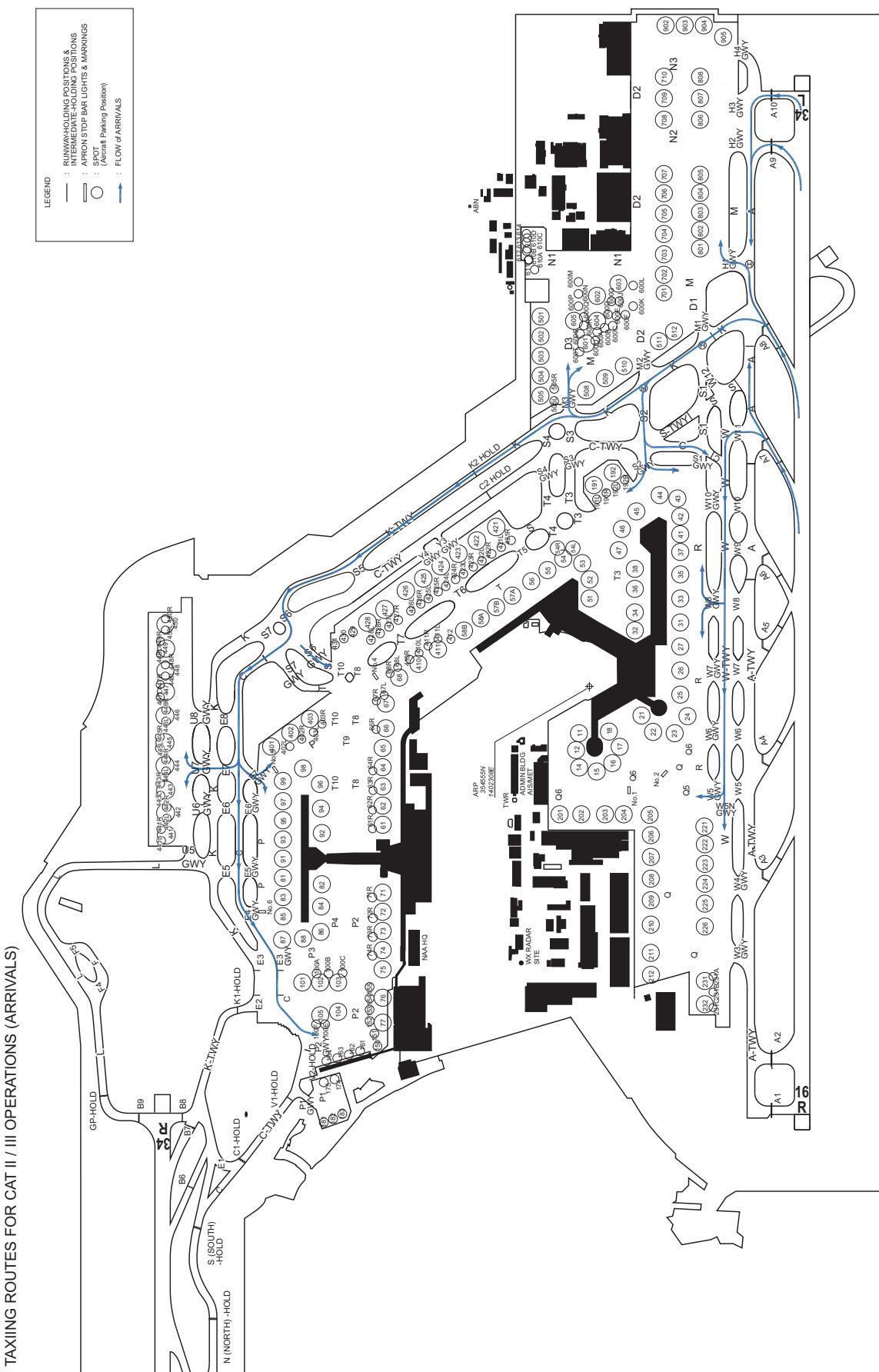
## 2.9. TAXIING CHART(34R ARRIVALS)



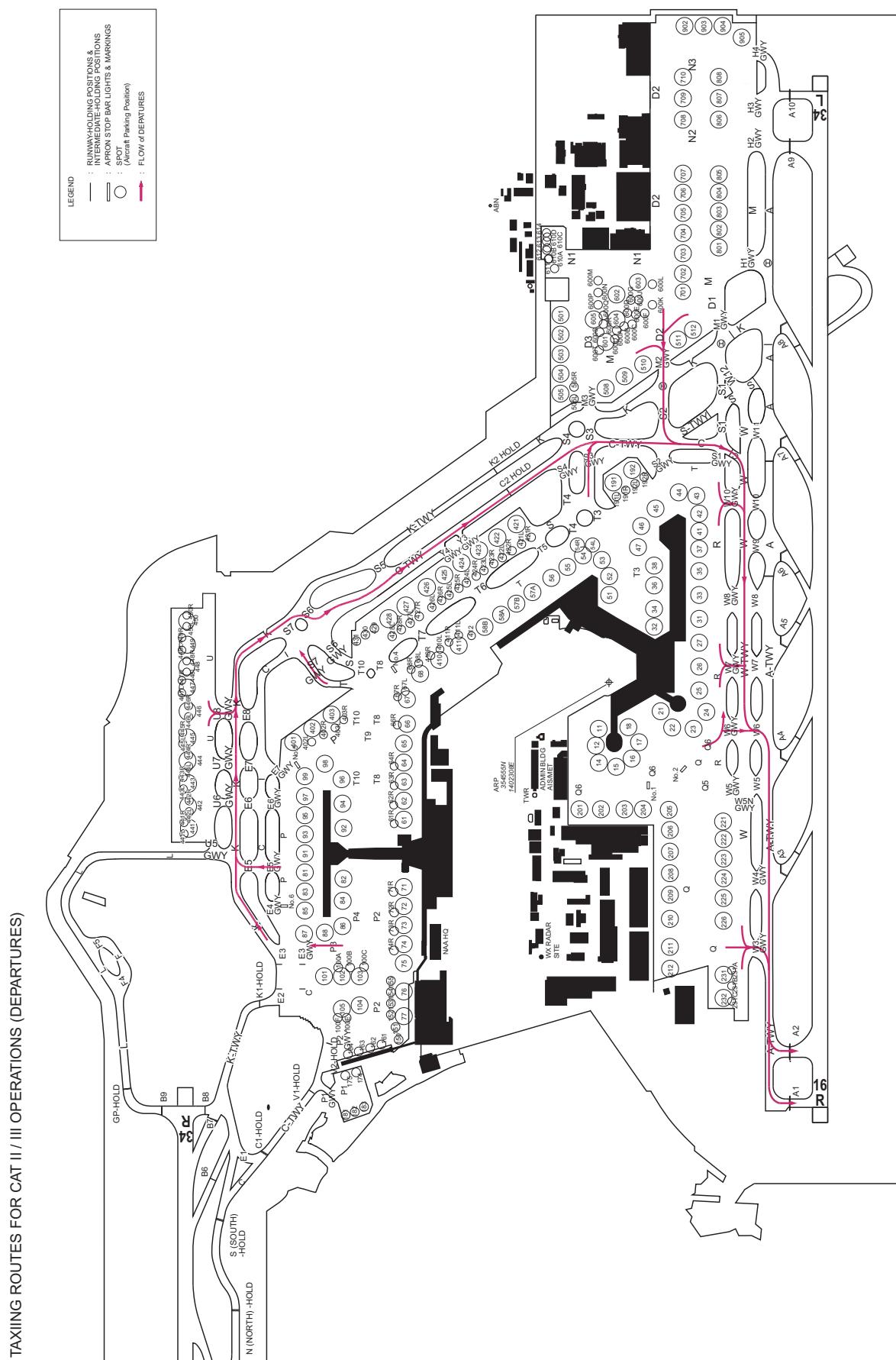
## 2.10. TAXIING CHART(34R DEPARTURES)



#### **2.11. TAXIING ROUTES FOR CAT II/III OPERATIONS(ARRIVALS)**



## 2.12. TAXIING ROUTES FOR CAT II/III OPERATIONS(DEPARTURES)



## 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

**1. Wing tip clearance at the TWY intersection (REF AD1.1 6.8)**

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

- (1) When B738 holding at the stop marking on TWY A2

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <22.6m | 22.6m < WS = <39.6m | WS > 39.6m |
|---|-------------|---------------------|------------|
| Wing tip clearance                          | *A          | *B                  | *C         |

- (2) When B738 holding at the stop marking on TWY A3

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <24m | 24m < WS = <41m | WS > 41m |
|---|-----------|-----------------|----------|
| Wing tip clearance                          | *A        | *B              | *C       |

- (3) When B738 holding at the stop marking on TWY A4

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <24m | 24m < WS = <41m | WS > 41m |
|---|-----------|-----------------|----------|
| Wing tip clearance                          | *A        | *B              | *C       |

- (4) When B738 holding at the stop marking on TWY A5

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <24m | 24m < WS = <41m | WS > 41m |
|---|-----------|-----------------|----------|
| Wing tip clearance                          | *A        | *B              | *C       |

- (5) When B738 holding at the stop marking on TWY A6

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <24m | 24m < WS = <41m | WS > 41m |
|---|-----------|-----------------|----------|
| Wing tip clearance                          | *A        | *B              | *C       |

- (6) When B738 holding at the stop marking on TWY A7

| Wing Span (WS) of aircraft taxiing on A TWY | WS = <24m | 24m < WS = <41m | WS > 41m |
|---|-----------|-----------------|----------|
| Wing tip clearance                          | *A        | *B              | *C       |

(7) When B738 holding at the stop marking on TWY A8

|   |           |                 |          |
|---|-----------|-----------------|----------|
| Wing Span (WS) of aircraft taxiing on A TWY | WS <= 24m | 24m < WS <= 41m | WS > 41m |
| Wing tip clearance                          | *A        | *B              | *C       |

(8) When B738 holding at the stop marking on TWY A9

|   |           |                 |          |
|---|-----------|-----------------|----------|
| Wing Span (WS) of aircraft taxiing on A TWY | WS <= 24m | 24m < WS <= 41m | WS > 41m |
| Wing tip clearance                          | *A        | *B              | *C       |

(9) When B738 holding at the stop marking on TWY B3

|   |           |
|---|-----------|
| Wing Span (WS) of aircraft taxiing on B TWY | WS <= 84m |
| Wing tip clearance                          | *A        |

**Legend:**

- \*A:wing tip clearance >=15m
- \*B:6.5m < wing tip clearance <15m
- \*C:wing tip clearance <6.5m

**2. On TWY K between E2 and B8 (See RJAA AD2.24 AD Chart)**

- Larger aircraft (such as B747-8, A340-600, B747-400, B777-200LR, B777-300/300ER and B777F) needs to reduce taxiing speed so as to accurately track the center line, as separation between either wing tip and the boundary fence in certain areas of the taxiway is limited to 10.5m.

**3. MD11/DC10 operations on RWY 16L/34R**

- MD11/DC10 needs to taxi with its center engine at idle on TWY B between F3 and K, TWY K between B and E2, in order to prevent jet blast.
- MD11/DC10 can not enter RWY16L/34R from B8, due to jet blast.

**4. Restricted taxiways**

- While taxiing in the apron area, follow yellow guideline strictly.  
In addition, taxiing behind the spot 76 and 77, in order to keep clearance between other aircraft or obstacle, the aircraft with wingspan of 60m or longer shall reduce taxiing speed and follow the taxiway center line strictly.
- All aircraft for runway 34R shall hold at "GP HOLD" on TWY L until receiving further taxi clearance to protect ILS glide slope signal.
- Only the aircraft with wingspan less than 36m can taxi on TWY P1.

**5. On Y3-GWY and Y4-GWY**

- Only when the aircraft with wingspan less than 36m is approved by ramp control, traffic to C TWY from the apron throughout Y3-GWY and Y4-GWY is permitted.  
Traffic to the apron from C TWY is not possible.

**6. Taxilane**

- On Taxilane T9, only A380 is permitted to taxi for NR96. (Taxilane T9 marking is blue.)

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

Nil

8. Helicopter traffic - limitation

Nil

9. Removal of disabled aircraft from runways

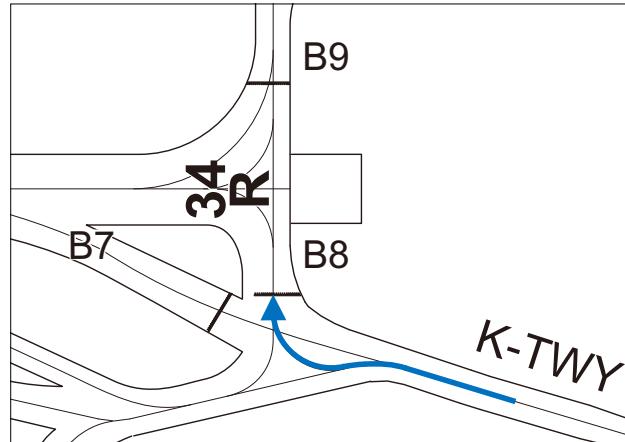
Nil

## 10. Hot Spot

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**Holding point B8

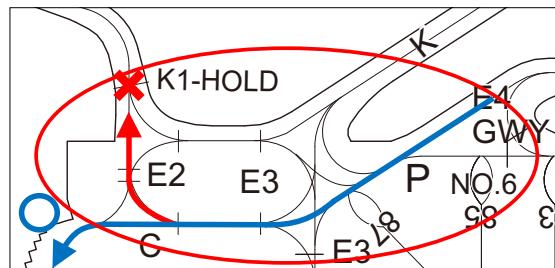
Pilots taxiing to holding point B8 are to make a slight left turn to join the centerline correctly.

**HS2**Complex Intersection area with a convergence of numerous TWYs(K, C, E2, E3, P) and E3GWY.

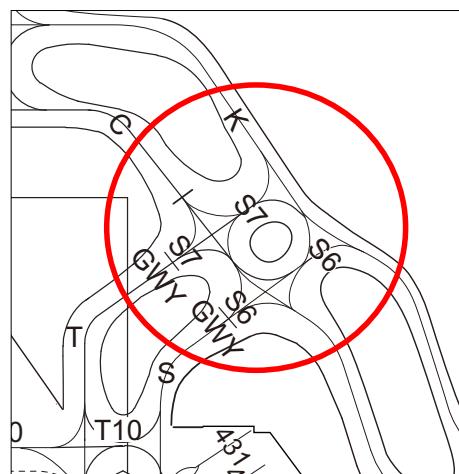
Numerous cases of entering the wrong TWY occur in this area.

In particular, entering K by mistake will cause "head-on" traffic with aircraft vacating from RWY16L.

Pilots taxiing to RWY16L via C must not make a right turn at E2 without ATC authorization.

**HS3**Complex intersection area with a convergence of numerous TWYs(K, C, S7, S6) and S7GWY/S6GWY.

Pilots taxiing via S7 or S6 should pay extra attention to signs and markings to avoid misunderstanding of TWYs.



**RJAA AD 2.21 NOISE ABATEMENT PROCEDURES****(I) 騒音軽減運航方式 (I) Noise abatement Operating Procedures**

(A) 空港周辺地域の航空機騒音を最小にするため、全ての乗員が次に掲げる運航方式、又は、これらの方と同等の効果がある他の適切な方式を採用するよう強く求めるものである。ただし、これらの方採用の最終的な権限はそれぞれの機長に委ねられており、機長が安全上の理由により必要と判断する場合は他の方を採用することができる。

## 1) 離陸について

- a) 離陸より 1500 フィート AGL(1635 フィート MSL) まで
    - 離陸推力
    - 離陸フラップまたは騒音軽減のための最適フラップ
    - 最大上昇勾配が得られる速度（機体姿勢角の制限範内であること）  
例.V2+10kt または 1.3Vs のうちいずれか大きい速度での上昇
  - b) 1500 フィート AGL(1635 フィート MSL) において
    - 上昇推力を下回らない出力まで減少
    - a) と同様なフラップ及び速度
  - c) 3000 フィート AGL(3135 フィート MSL)、またはそれ以上において
    - 運航上昇のための通常速度及びフラップ上げ操作
- 2) 進入について  
(ディレイド・フラップ進入及び低フラップ角着陸でのフラップ角設定)
- a) 次の地点を通過後、最終着陸フラップ角とすること。  
IKF から 4DME(RWY16R)、ITM から 4DME(RWY16L)、ITJ から 4DME(RWY34R)、IYQ から 4DME(RWY34L)
  - b) 該当する条件に対して、飛行規程で承認された性能資料に規定されている最小着陸フラップ角を最終着陸フラップ角とすること。

(B) 優先滑走路方式  
なし(C) 優先飛行経路  
なし

(A) It is strongly requested of all pilots to apply the following procedures, or any other appropriate procedures which are in effect equivalent to these procedures, in order to minimize public annoyance due to aircraft noise in the vicinity of the airport.  
The final authority to apply these procedures, however, rests on each pilot in command, and he may use other appropriate procedures if he determines it is necessary in the interest of safety.

## 1) Take-off

- a) Take-off to 1500ft AGL(1635ft MSL)
  - take-off power
  - take-off flaps or optimum flap setting for noise reduction.
  - climb at speed to gain maximum climb angle or as limited by body angle.  
e.g.V2+10kt or 1.3Vs whichever is greater

## b) At 1500ft AGL(1635ft MSL)

- reduce power to not less than climb power
- flaps and speed same as in a)

## c) At 3000ft AGL(3135ft MSL) or above

- normal speed and flap retraction schedule to enroute climb

## 2) Approach (delayed flap and reduced flap setting)

- a) Extend final landing flaps after passing 4DME from IKF for RWY16R, 4DME from ITM for RWY16L, 4DME from ITJ for RWY34R or 4DME from IYQ for RWY34L.
- b) Use, as the final landing flap setting, the minimum certificated landing flaps setting forth in the approved performance information in the Airplane Flight Manual for the applicable conditions.

(B) Preferential Runways Procedures  
Nil(C) Noise Preferential Routes  
Nil**(II) Other Information**

(A) Notwithstanding item (C), for improvement of noise abatement procedures, all aircraft departing from Narita International Airport strictly follow extension of the runway center line until passing 14DME from NRE for RWY16R, 14.0DME from NRE for RWY16L, 6DME from NRE for RWY34L or 5.5DME from NRE for RWY34R.

## (B) Aircraft engine ground run-up

In order to minimize noise disturbance in areas adjacent to this Airport, ground run-up of aircraft engine(s) is controlled in accordance with instructions specified in Narita International Airport Administrative Regulations (KUKO KANRI KITEI).

## (C) Observance of the flight routes

Unless otherwise instructed by ATC or under unavoidable circumstances, all aircraft arriving at and/or departing from the airport, over the inland area, are requested to follow the routes as prescribed in STARs and SIDs.

## (D) Restrictions about the use of auxiliary power unit (APU)

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

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

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

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

NOTE: Spot 11, 12, 14 - 18, 21 - 27, 31 - 38, 41 - 47, 51 - 56, 57A, 57B, 58A, 58B, 61 - 68, 71 - 77, 81 - 88, 91 - 99, 151 - 155, 161 - 164, 174, 175, 201 - 204, 206 - 212, 221-226, 231, 232, 410, 411 are aircraft parking stands with fixed power facilities.

**RJAA AD 2.22 FLIGHT PROCEDURES****(I) TAKE OFF MINIMA**

|   | RWY | ACFT CAT | REDL & RCLL                             |                          | REDL or RCLL or RCL Marking |                          | NIL (DAYTIME ONLY) |              |
|---|-----|----------|---|--------------------------|-----------------------------|--------------------------|--------------------|--------------|
|   |     |          | CEIL-RVR                                | CEIL-VIS                 | CEIL-RVR                    | CEIL-VIS                 | CEIL-RVR           | CEIL-VIS     |
| Multi-Engine ACFT with TKOF ALTN AP FILED | 16R | A,B,C    | 0' - 400m<br>* 0' - 200m<br>**0' - 150m | 0' - 400m<br>* 0' - 200m | 0' - 400m<br>* 0' - 250m    | 0' - 400m<br>* 0' - 250m | -                  | 0' - 500m    |
|   |     | D        | 0' - 400m<br>* 0' - 250m<br>**0' - 200m | 0' - 400m<br>* 0' - 250m | 0' - 400m<br>* 0' - 300m    | 0' - 400m<br>* 0' - 300m | -                  | 0' - 500m    |
|   | 34L | A,B,C,D  | 0' - 400m                               | 0' - 400m                | 0' - 400m                   | 0' - 400m                | -                  | 0' - 500m    |
|   | 16L | A,B,C,D  | 200' - 1600m                            | 200' - 1600m             | 200' - 1600m                | 200' - 1600m             | -                  | 200' - 1600m |
|   | 34R | A,B,C,D  | 0' - 400m                               | 0' - 400m                | 0' - 400m                   | 0' - 400m                | -                  | 0' - 500m    |
| OTHER                                     | 16R | A,B,C,D  | AVBL LDG MINIMA                         |                          |                             |                          |                    |              |
|   | 34L |          | AVBL LDG MINIMA                         |                          |                             |                          |                    |              |
|   | 16L |          | AVBL LDG MINIMA                         |                          |                             |                          |                    |              |
|   | 34R |          | AVBL LDG MINIMA                         |                          |                             |                          |                    |              |

\* APPLICABLE WHEN LVP/LVPD IN FORCE.

\*\* APPLICABLE WHEN LVP/LVPD IN FORCE and MULTIPLE RVRs AVAILABLE.

**(II) 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;

1. Contact Narita Tower.
2. If unable, proceed in accordance with visual flight rules.
3. If unable,
  - (1) RWY 34L/R; proceed to GIINA at last assigned altitude or 4,000 feet whichever is higher, and make an instrument approach to RWY34L.
  - (2) RWY 16L/R; proceed to LAKES at last assigned altitude or 6,000 feet whichever is higher, and make an instrument approach to RWY16R.

NOTE: Procedures other than above will be issued when situation required.

**(III) Category II / III Operations at Narita International Airport****1. Facilities**

The following facilities are available:

| Runway 16R   |
|--|
| <ul style="list-style-type: none"> <li>• ILS Runway 16R-CAT III</li> <li>• Lighting system Runway 16R-CAT III</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 ILS RWY 16R approach (CAT II )   | For ILS RWY 16R approach (CAT III)  |
|--|---|
| (1) ILS comprising; <ul style="list-style-type: none"> <li>• ILS-LOC 16R with standby transmitter</li> <li>• ILS-GP 16R with standby transmitter<br/>(When any standby transmitters unserviceable, downgrade ILS-CAT I.)</li> <li>• IM16R (When IM unserviceable, RA could be used as an alternate method)</li> <li>• ILS-DME 16R</li> </ul> | (1) ILS comprising; <ul style="list-style-type: none"> <li>• ILS-LOC 16R with standby transmitter (including far field monitor)</li> <li>• ILS-GP 16R with standby transmitter<br/>(When any standby transmitters or far field monitor unserviceable, downgrade ILS-CAT I.)</li> <li>• ILS-DME 16R</li> </ul> |
| (2) Lighting system comprising; <ul style="list-style-type: none"> <li>• PALS 16R (including side row barrettes)</li> <li>• High INTST REDL</li> <li>• High INTST RTHL</li> <li>• RCLL and RTZL</li> </ul>   | (2) Lighting system comprising; <ul style="list-style-type: none"> <li>• PALS 16R (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:

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

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

**3. Precision Approach Terrain Profile Chart**

See RJAA AD2.24

**4. Operating Minimum**

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

**5. LVP**

(1) LVP will be available when the following conditions are met:

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

(2) Taxiway available for CAT II / III Operations

- a) Exit taxiway: A7 - A10

NOTE: A6 is not available as exit taxiway. (Its taxiway center line lights will be turned off.)

b) Taxi routes as shown in RJAA AD2.20.2.10.TAXIING ROUTES FOR CAT II/III OPERATIONS(ARRIVALS)

c) In order to protect ILS Critical Area, an arrival aircraft may be given 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 exit taxiway center line lights change from alternate green and yellow to steady green.

**6. FOLLOW-ME service :**

FOLLOW-ME service will be available on request.

**7. Approval for CAT II / III Operations**

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

**(IV) LVTO at Narita International Airport****1. Facilities**

The following facilities are available:

|  |
|--|
| Runway 16R   |
| • Lighting system RWY 16R for LVTO   |
| • 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 LVTO   |
|--|
| (1) Lighting system comprising;                  |
| • High INTST REDL<br>• High INTST RENL<br>• RCLL |
| (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**

(1) 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.

(2) Taxiway available for LVTO

- a) Entering taxiway: A1 and A2

NOTE: Stop bar lights on A1 and A2 are controlled individually by ATC.

- b) Taxi routes as shown in RJAA AD2.20.2.11.TAXIING ROUTES FOR CAT II/III OPERATIONS(DEPARTURES)

**(V) ATC Procedures**

For the purpose of ensuring to provide the aircraft in and out of Narita with more orderly and efficient flow of traffic, aircraft operators are strongly requested to observe prearranged scheduled time and to comply with the following.

## (1) General

## (A) Standard Taxiing Routes (See RJAA AD2.20)

Unless otherwise required, the standard taxiing routes for Departure are instructed by ATC using route names in the table below.

|           |           | Route Name | Routing via           |
|-----------|-----------|------------|-----------------------|
| Departure | to RWY16R | ROUTE 1    | K, S6, C, W, W6 and A |
|           | to RWY34L | ROUTE 2    | C, S7, K and A        |
|           | to RWY16L | ROUTE 3    | A, K, S6, C and B     |
|           | to RWY34R | ROUTE 4    | A, S, C, S7 and K     |

NOTE: Alternate routing may be instructed by ATC as required.

## (2) Departure

## (A) ATC clearance

ATC clearance will be obtained by "Voice radiotelephone (Voice RTF)" or "Departure Clearance by data link (DCL)".

Show in detail below (a) or (b).

| CLEARANCE FLOW    | (a) Voice RTF  | (b) DCL   |
|-------------------|--|---|
| REQUEST CLEARANCE | <p>Call Narita Delivery (121.9) at 15 minutes before starting engines, with the following information.</p> <ul style="list-style-type: none"> <li>(1) Call sign</li> <li>(2) Destination</li> <li>(3) Proposed flight level</li> <li>(4) Parking position (spot number)</li> </ul>   | <p>Refer to ENR 1.5.4.1 (Operation for Departure Clearance by data link (DCL) )</p> <ul style="list-style-type: none"> <li>- Send RCD message at 15 minutes before starting engines.</li> <li>- Monitor Narita Delivery (121.9).</li> </ul> <p>NOTE:</p> <ul style="list-style-type: none"> <li>- Start monitoring Narita Delivery (121.9) once RCD message is sent. In case coordination is required, Narita Delivery calls the pilot on Voice RTF.</li> </ul> |
| OBTAIN CLEARANCE  | <p>Clearance will be delivered on Voice RTF or DCL as soon as possible after coordination with TOKYO ACC.</p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>- Clearance to specific aircraft will be deferred when coordination is not completed. If ATC clearance is not received in spite of being ready to start engines, the pilot shall inform Narita Delivery (121.9).</li> </ul>  |   |
| CALL READY        | <p>Call Narita Delivery (121.9) when ready to start engines.</p> <p>Regardless of clearance source, pilots shall report ready to start engines (=doors are closed, boarding bridge removed, push-back vehicle connected.) to Narita Delivery (121.9)</p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>- ATC will give different frequency (Narita Delivery 121.65 or Narita Ramp Control 121.6/121.75) to call ready to start engines if the situation requires.</li> </ul> |   |
| START ENGINES     | <ul style="list-style-type: none"> <li>- Delay information will be given if the situation requires</li> <li>- Contact Narita Ramp Control for approval to start engines ONLY WHEN instructed either Voice RTF or DCL by ATC</li> </ul>   |   |

## (B) Intersection departure

The remaining runway length for intersection departures are as follows.

| Runway | Taxiway        | Remaining runway length*                                       |
|--------|----------------|--|
| 34L    | A9             | 3,630m (11,930 feet)   |
| 16R    | A2             | 3,610m (11,870 feet)   |
| 34R    | B6<br>B7       | 1,860m (6,100feet)<br>2,100m (6,890feet)                       |
| 16L    | B2<br>B3<br>B4 | 2,030m (6,660feet)<br>2,150m (7,050feet)<br>1,740m (5,710feet) |

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

- (C) 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 RWY should be kept to a minimum. If unable to do so, notify to Narita Tower.

## (3) Arrival

- (A) Aircraft on final approach and in the control zone are recommended to turn the landing lights on.
- (B) Speedy Turn-Off Procedure
  - (a) For purposes of reducing runway occupancy time, pilots in their approach/landing briefing should plan on a specific exit taxiway and after landing, pilots should vacate the runway without delay, unless the use of another exit taxiway is assigned by ATC or unless the safety of the aircraft is jeopardized.
  - (b) The exit taxiways, as a rule, which arriving aircraft should plan to use for vacating the runway, are listed below.

| Runway | Taxiway | Distance from threshold(m/ft) | Remarks |
|--------|---------|-------------------------------|---------|
| 34L    | A5      | 1,800m(5,900feet)             | BTCL    |
|        | A4      | 2,250m(7,380feet)             | BTCL    |
| 16R    | A6      | 1,800m(5,900feet)             | BTCL    |
|        | A7      | 2,250m(7,380feet)             | BTCL    |
| 34R    | B4      | 1,740m(5,700feet)             | BTCL    |
|        | B2      | 2,030m(6,660feet)             | NONE    |
| 16L    | B6      | 1,860m(6,100feet)             | BTCL    |
|        | B7      | 2,100m(6,890feet)             | NONE    |

Remarks :Brighter Taxiway Center line Lights (BTCL) Installation

For purposes of assisting the speedy turn-off, the intensity of the taxiway center line lights listed above will be brighter than that of other taxiways to improve the recognition of these locations.

Those lights are also lighted during daytime VMC to clearly indicate the exit taxiways, however those lights may be turned off or may not be brighter due to other operational requirements.

- (c) Should pilots plan to use other exit taxiways other than those listed above, where possible, pilots should inform ATC accordingly.  
However, ATC may not be able to assign the exit taxiway as requested due to traffic conditions or any other reason.

**(VI) SIMULTANEOUS PARALLEL INDEPENDENT DEPARTURES (SPID)****1. Applicable aircraft for SPID**

SPID will be conducted for the aircraft flying RNAV1 SID on the adjacent runway complexes (RWY34L/34R or RWY16L/16R).

Note: For RWY34R, pilots are required to set the appropriate speed to avoid unintentional deviations (ex. ROUTE DISCONTINUITY on FMS\*) especially under strong wind conditions aloft.

\* FMS: Flight Management System

**2. Conditions**

SPID, where radar separation minima between aircraft on the adjacent straight-out departure courses are not prescribed, will be conducted when the following conditions are met. However, SPID shall not be applied under certain adverse weather conditions which might affect safe operations (e.g. windshear, strong crosswind, severe weather activity such as thunderstorms).

- (1) Departure No Transgression Zone (DNTZ) 610m wide is established equidistant between initial straight-out segments of departure courses and is depicted on the radar display.
- (2) Radar and appropriate frequencies are operating normally.

**3. Information of SPID**

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

"Simultaneous parallel departures (from runway [number] left and right are) in progress."

**4. FMS Validation and Phraseologies**

- (1) Pilots shall verify that the required RNAV path to the initial waypoint on the loaded SID is correctly associated with the departure runway. (see Table 1)

The following phraseologies require pilots' action to validate correct programming of the departure runway and departure procedures in FMS prior to take-off.

"VERIFY INITIAL WAYPOINT [initial fix]."

"RNAV TO [initial fix], RUNWAY [number], CLEARED FOR TAKE OFF."

Table 1: The initial fixes on RNAV SIDs associated with runway.

| RUNWAY | INITIAL FIX     | Departure Frequency* |
|--------|-----------------|----------------------|
| 34L    | ARIES(ASTRA **) | 124.2MHz             |
| 34R    | BOXER           | 119.6MHz             |
| 16L    | BEAMS           | 119.6MHz             |
| 16R    | ASPEN           | 124.2MHz             |

\* Unless otherwise instructed by ATC, a departure frequency is assigned for each runway.

\* Do not change a frequency to the Departure Frequency until instructed by Tower.

\*\* Only for PEDLA [number] DEPARTURE

- (2) If the loaded SID in FMS does not satisfy the initial-waypoint verification, pilots shall immediately advise ATC and shall not take-off until alternative instructions are received.

**5. Track monitoring**

Track monitoring for SPID shall be provided as follows;

- (1) Track monitoring controllers for each runway provide an initial departure control to ensure aircraft does not deviate from the required path within the initial straight-out climb.

Note: Parallel RNAV departures must not encroach on the airspace between extended parallel runway centerlines without specific ATC clearance. Manually intervene if necessary to stay on track to avoid transgressing in the direction of a parallel track.

- (2) Aircraft observed to continue on a track which will penetrate DNTZ will be instructed a heading to avoid aircraft on the adjacent departure course. If a deviating aircraft fails to respond to such instructions or is observed to penetrating DNTZ, the aircraft on the adjacent departure course shall be instructed to avoid the deviating aircraft.

"TRAFFIC ALERT, [repeat aircraft identification], TURN LEFT/RIGHT IMMEDIATELY, HEADING [number], (CLIMB AND) MAINTAIN [altitude]."

**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 or DEPARTURE FREQUENCY when situation required.

**(VII) SPECIAL VFR FLIGHT ROUTE FOR HELICOPTER**

Special VFR flight route for helicopter in the NARITA CONTROL ZONE (See Visual REP chart)  
SHISUI-ROUTE: SHISUI-TOMISATO-LUNCH

**RJAA AD 2.23 ADDITIONAL INFORMATION****1. HELIPAD**

- (1) Three helipads on TWY intersections of TWY K and S2, K and S1, A and H1. (Refer to the Aerodrome Chart)  
(2) Helipad WEST located on the west side of RWY34L. (Refer to the Aerodrome Chart)

**2. Scheduled maintenance hours on the runway**

Scheduled runway unserviceability due to runway and facilities maintenance. (See NOTAM RJAA)

**3. Vehicle traffic lines**

White broken lines in the apron areas (15 centimeter wide, 3 meter long, 2 meter apart).

**4. Obstruction**

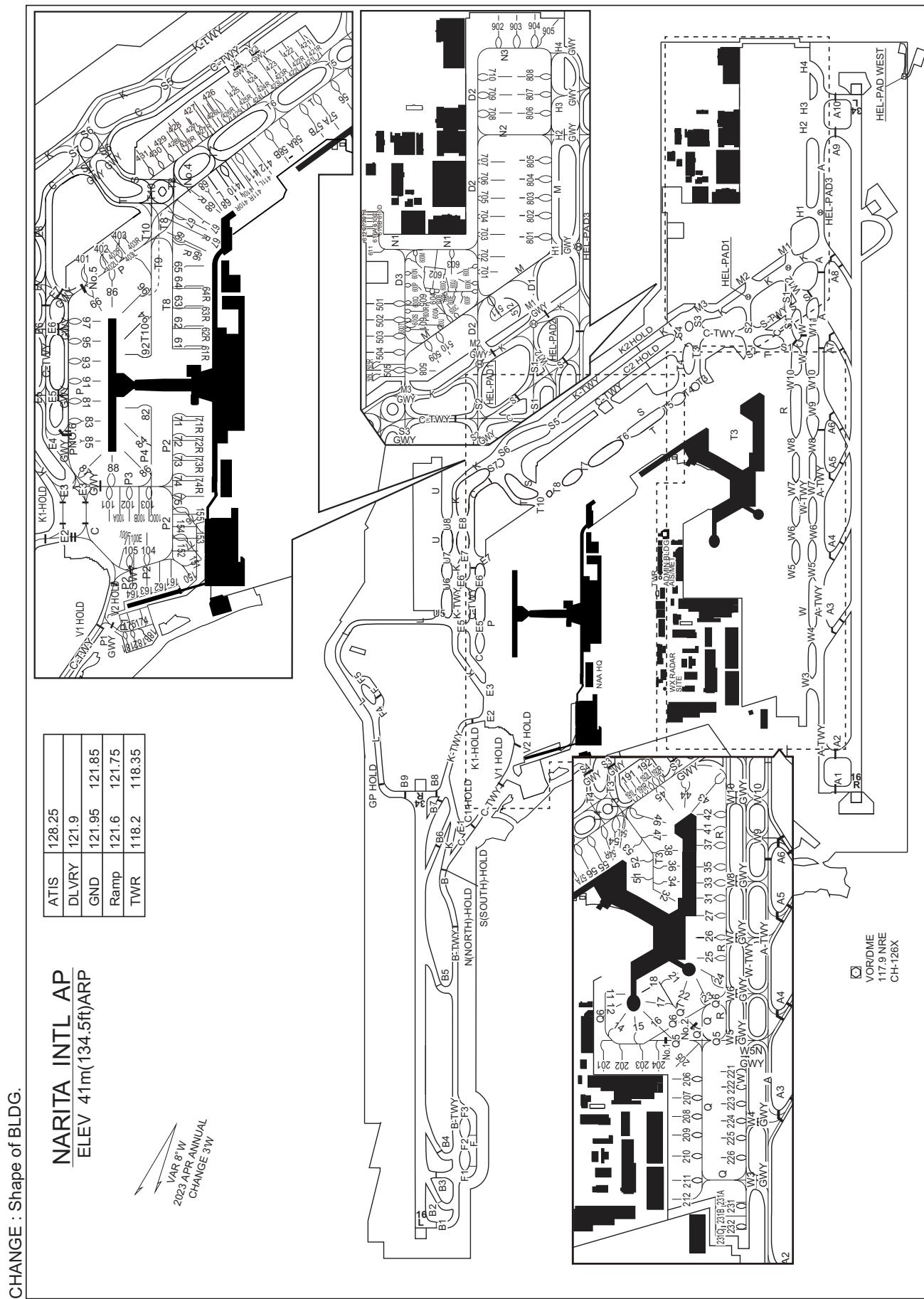
There are trees penetrating above the approach surface at the area about 400m before the Runway 34R threshold. Refer to attachment for detailed description and illustration of these obstructions and their relative positions to the obstruction lights. (See RJAA AD2.24)

## RJAA AD 2.24 CHARTS RELATED TO AN AERODROME

Aerodrome Chart-1  
Aerodrome Chart-2  
Aerodrome Ground Movement Chart  
Aerodrome Obstacle Chart-ICAO type A (RWY16R/34L)  
Aerodrome Obstacle Chart-ICAO type A (RWY16L/34R)  
Aerodrome Obstacle Chart-ICAO type B  
Precision Approach Terrain Chart  
Standard Departure Chart - Instrument (SAKURA)  
Standard Departure Chart - Instrument (AKAGI)  
Standard Departure Chart - Instrument (SUNNS)  
Standard Departure Chart - Instrument (TETRA-RNAV)  
Standard Departure Chart - Instrument (REDEK-RNAV)  
Standard Departure Chart - Instrument (PIGOK-RNAV)  
Standard Departure Chart - Instrument (GULBO-RNAV)  
Standard Departure Chart - Instrument (BORLO-RNAV)  
Standard Departure Chart - Instrument (PEDLA-RNAV)  
Standard Departure Chart - Instrument (OLVAN-RNAV)  
Standard Arrival Chart - Instrument (SOUTH)  
Standard Arrival Chart - Instrument (NORTH)  
Standard Arrival Chart - Instrument (RUTAS E/T-RNAV)  
Standard Arrival Chart - Instrument (SWAMP E/T-RNAV)  
Standard Arrival Chart - Instrument (SUPOK E/T-RNAV)  
Standard Arrival Chart - Instrument (LUBLA E/T-RNAV)  
Standard Arrival Chart - Instrument (RUTAS G/N-RNAV)  
Standard Arrival Chart - Instrument (SWAMP G/N-RNAV)  
Standard Arrival Chart - Instrument (SUPOK G/N-RNAV)  
Standard Arrival Chart - Instrument (LUBLA G/N-RNAV)  
Instrument Approach Chart (ILS RWY34L)  
Instrument Approach Chart (LOC RWY34L)  
Instrument Approach Chart (VOR RWY34L)  
Instrument Approach Chart (ILS Z RWY34R)  
Instrument Approach Chart (ILS Y or LOC RWY34R)  
Instrument Approach Chart (RNP RWY34R)  
Instrument Approach Chart (ILS Z RWY16R(CAT II & III))  
Instrument Approach Chart (ILS Y or LOC RWY16R(CAT II & III))  
Instrument Approach Chart (VOR RWY16R)  
Instrument Approach Chart (ILS Z RWY16L)  
Instrument Approach Chart (ILS Y or LOC Y RWY16L)  
Instrument Approach Chart (ILS X or LOC X RWY16L)  
Instrument Approach Chart (RNP RWY16L)  
Other Chart (HOLDING PATTERN)  
Other Chart (HOLDING PATTERN-RNAV)  
Other Chart (Visual REP)  
Other Chart (LDG CHART)  
Other Chart (LDG CHART / Trees)  
Other Chart (MVA CHART)

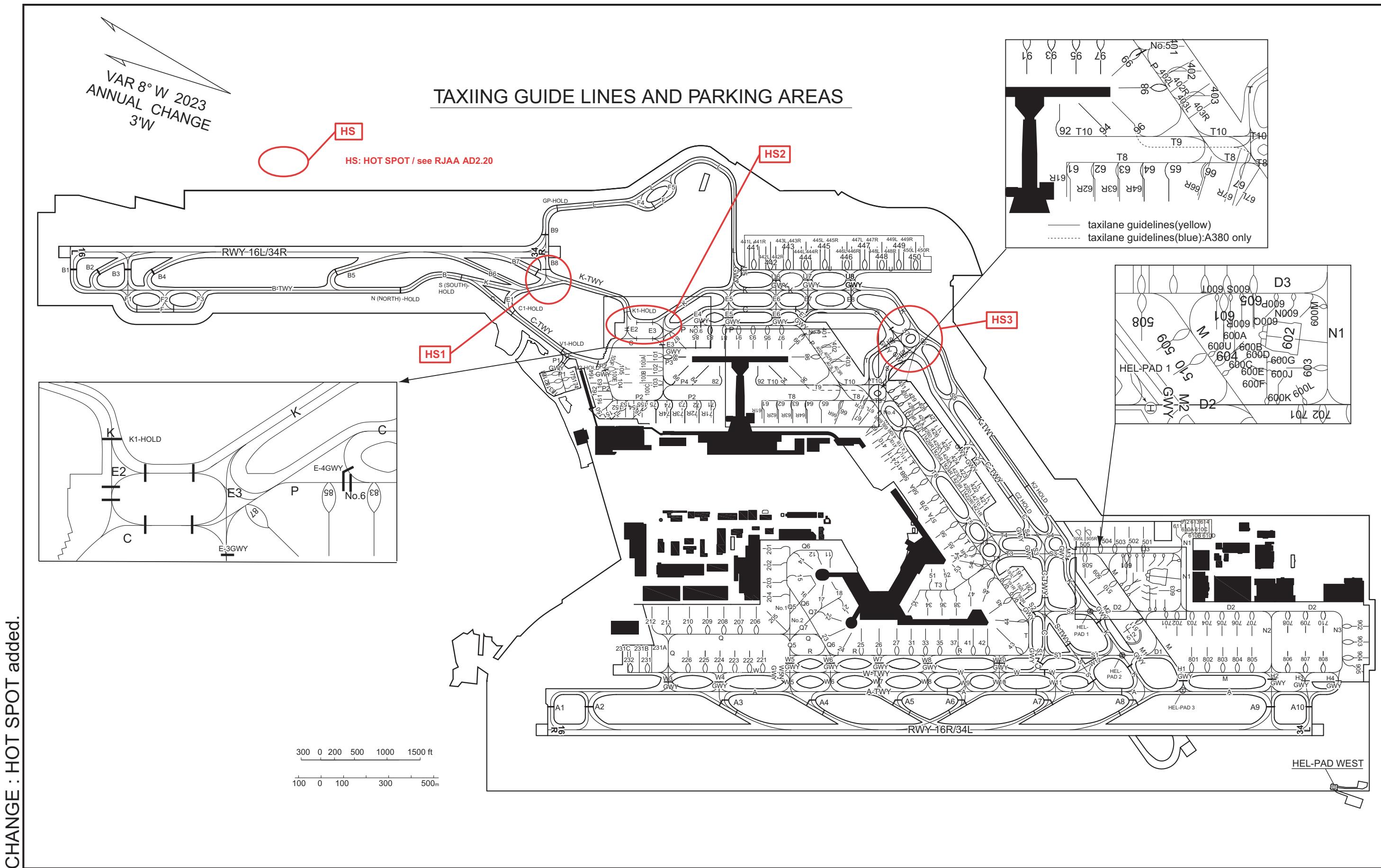
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## TAXIING GUIDE LINES AND PARKING AREAS



DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
MAGNETIC VARIATION 8° W-FEB 2023

8° W-FEB 2023

AERODROME OBSTRUCTION CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

NARITA INTERNATIONAL AIRPORT  
RWY : 16R/34L

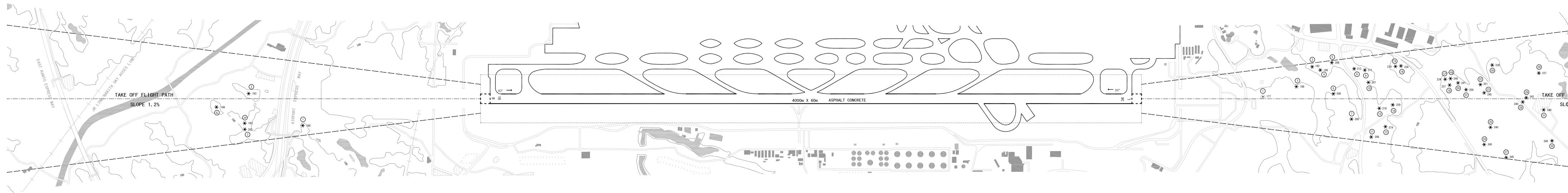
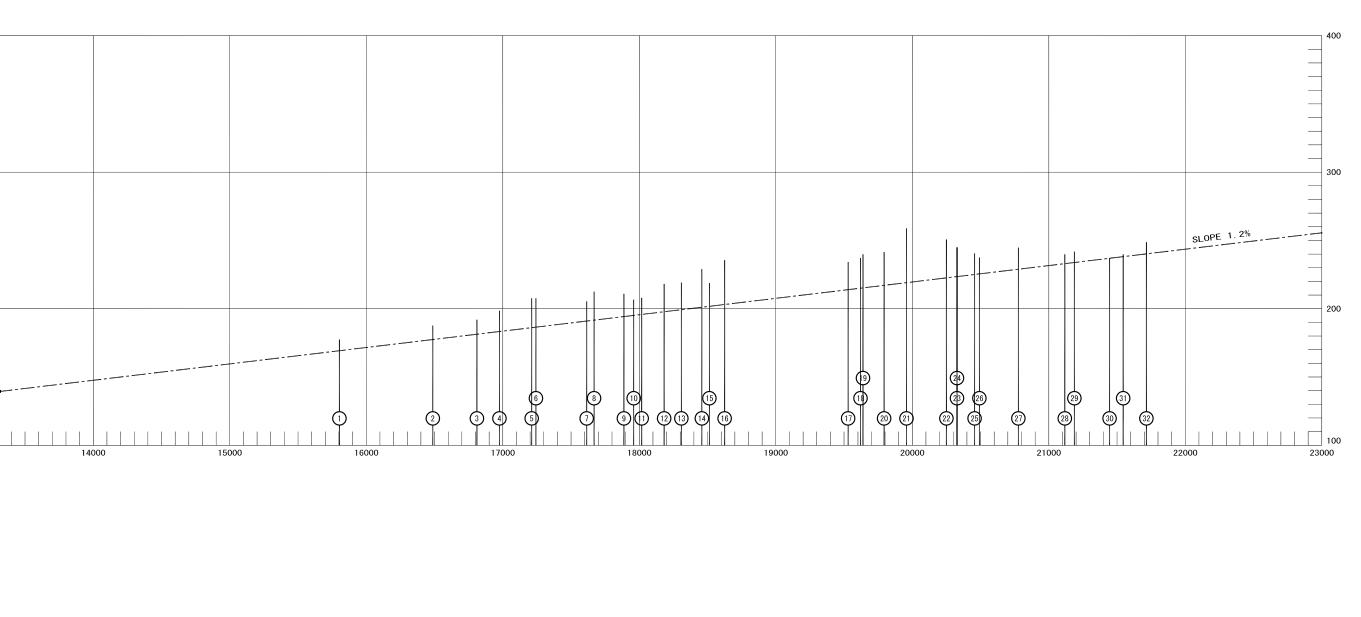
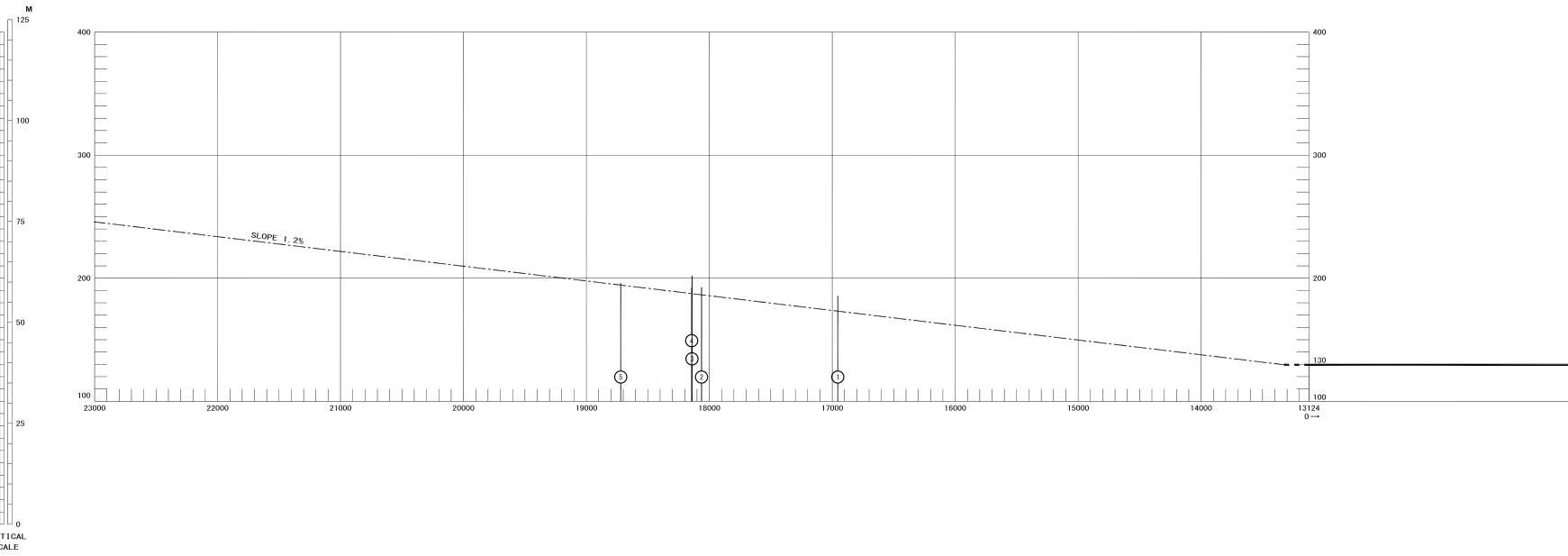
DECLARED DISTANCES

RWY 16R

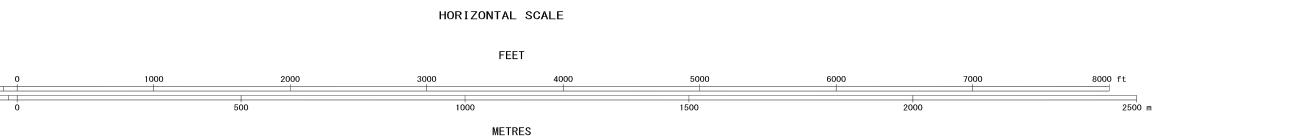
TAKE-OFF RUN AVAILABLE  
4000m  
ACCELERATE STOP DISTANCE AVAILABLE  
4000m  
LANDING DISTANCE AVAILABLE  
4000m

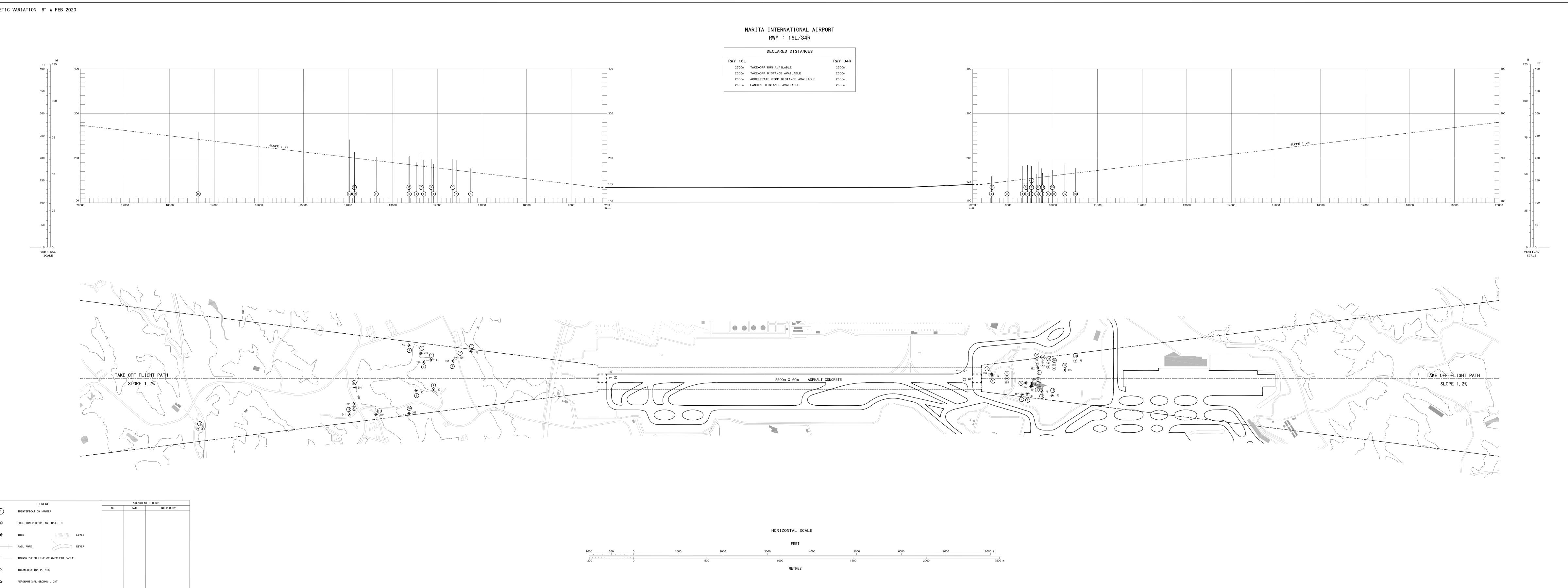
RWY 34L

4000m  
4000m  
4000m  
4000m



| LEGEND |                                     | AMENDMENT RECORD |      |            |
|--------|-------------------------------------|------------------|------|------------|
| ①      | IDENTIFICATION NUMBER               | Nr               | DATE | ENTERED BY |
| ○      | POLE, TOWER, SPIRE, ANTENNA, ETC    |                  |      |            |
| *      | TREE                                |                  |      |            |
| +      | RAIL ROAD                           |                  |      |            |
| —      | TRANSMISSION LINE OR OVERHEAD CABLE |                  |      |            |
| △      | TRIANGULATION POINTS                |                  |      |            |
| ★      | AERONAUTICAL GROUND LIGHT           |                  |      |            |



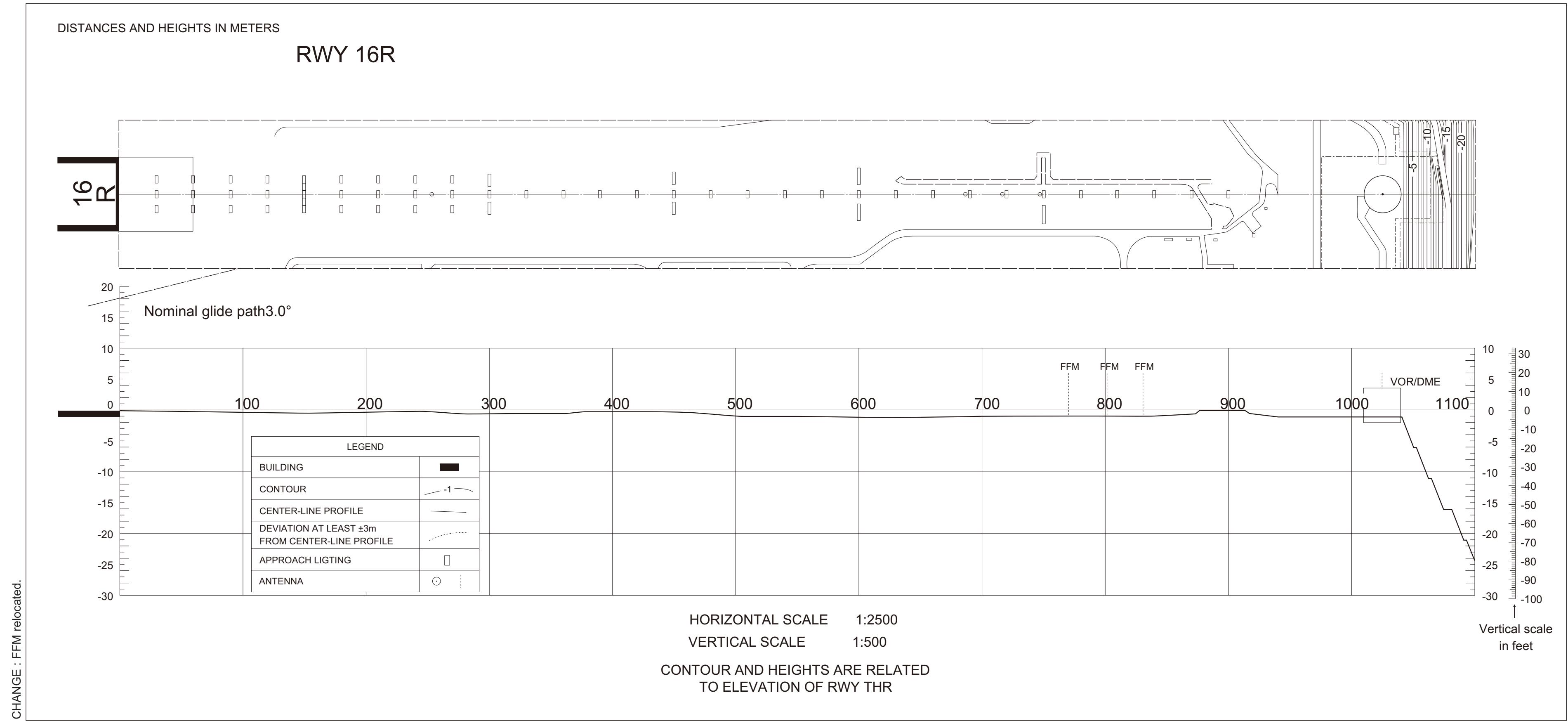
DIMENSIONS AND ELEVATIONS IN FEET BEARINGS ARE MAGNETIC  
MAGNETIC VARIATION 8° W-FEB 2023AERODROME OBSTRUCTION CHART-ICAO  
TYPE A (OPERATING LIMITATIONS)

AERODROME OBSTRUCTION CHART-ICAO

DIMENSIONS AND ELEVATION IN FEET BEARINGS ARE MAGNETIC



CHANGE : FFM relocated.



STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

SID

SAKURA FIVE DEPARTURE

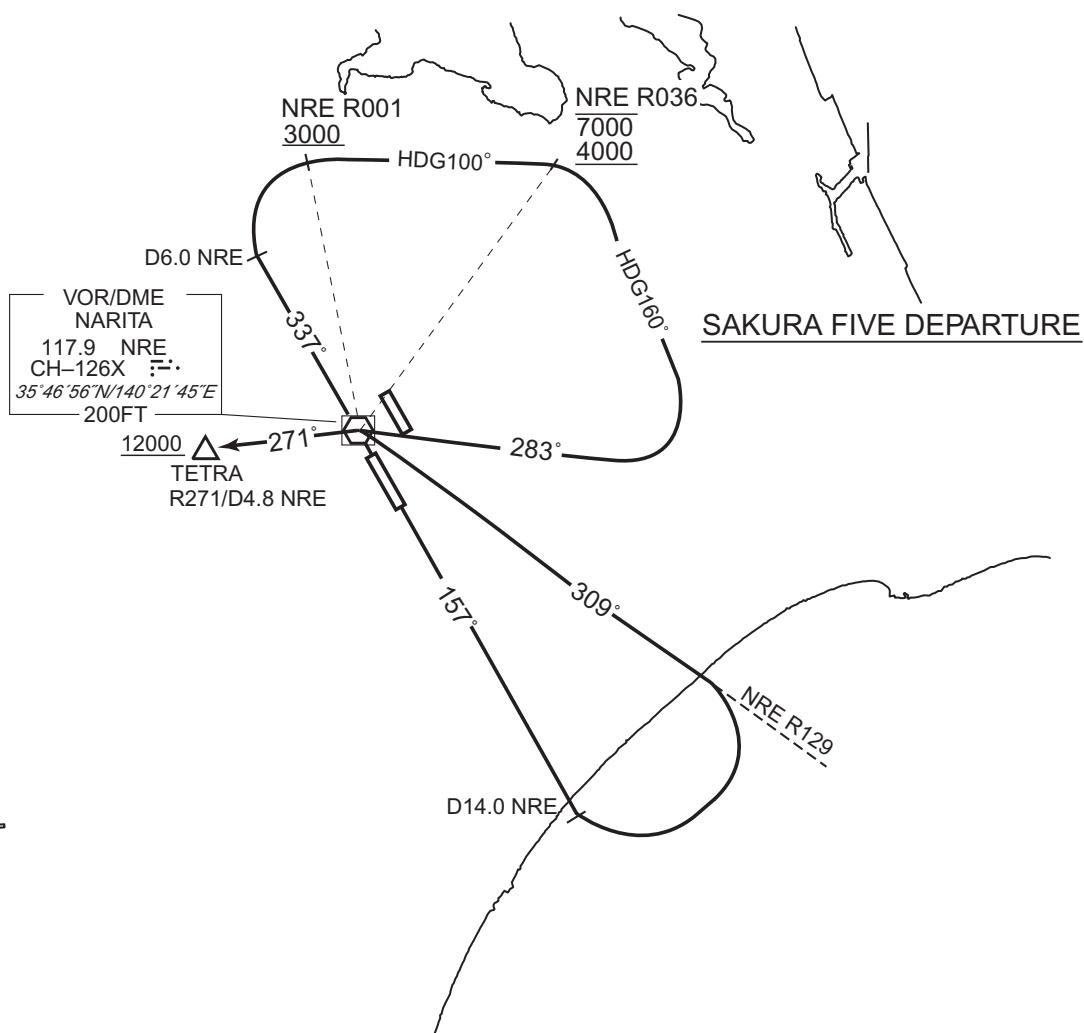
RWY 16R : Climb via NRE R157 to 14.0DME, turn left to intercept and proceed via NRE R129 to NRE VOR/DME, via NRE R271 to TETRA.  
Cross TETRA at or above 12000FT.

RWY 16L : (Not established)

RWY 34L : Climb via NRE R337 to 6.0DME, turn right HDG100° until crossing NRE R036, turn right HDG160° to intercept and proceed via NRE R103 to NRE VOR/DME, via NRE R271 to TETRA.  
Cross NRE R001 at or above 3000FT,  
cross NRE R036 between 4000FT and 7000FT,  
cross TETRA at or above 12000FT.

RWY 34R : (Not established)

CHANGE : PROC renamed. PROC FM RWY 16L/34R abolished. HOKUSO VOR/DME(HKE) abolished.



## STANDARD DEPARTURE CHART -INSTRUMENT

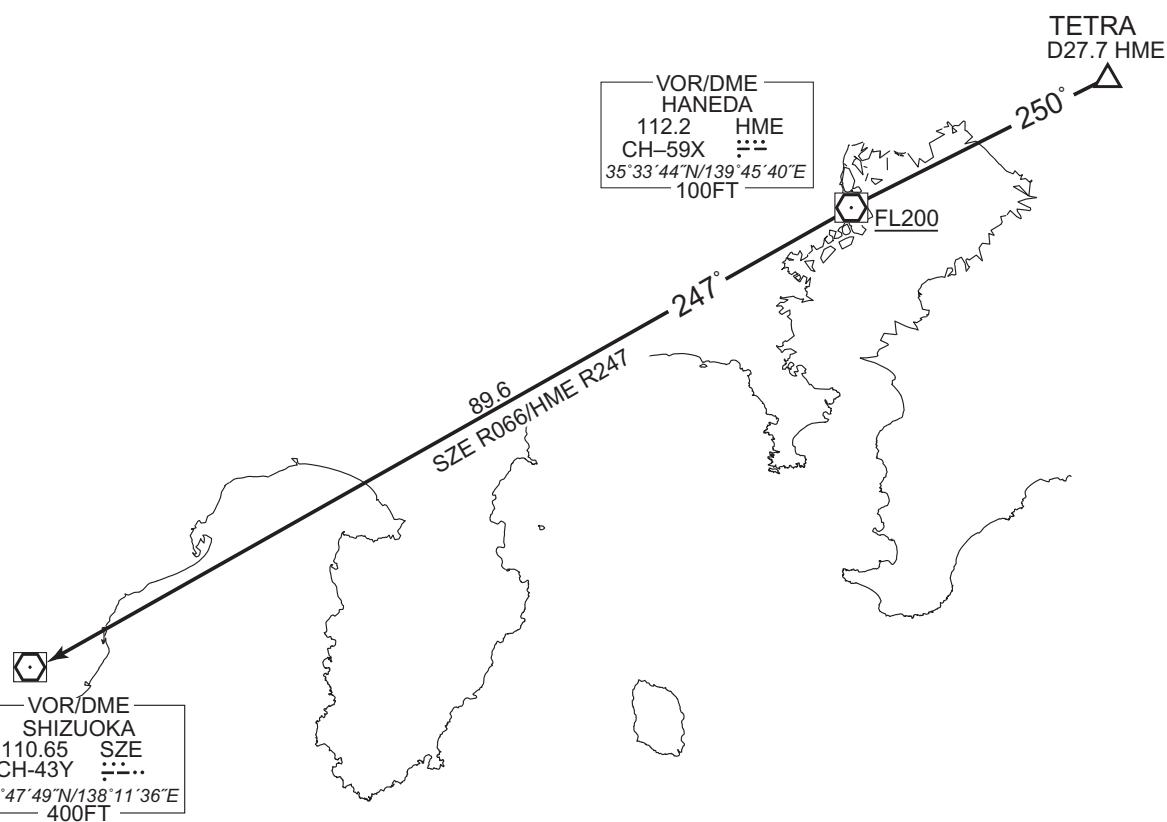
RJAA / NARITA INTL

TRANSITION

SHIZUOKA TRANSITION

From over TETRA, via HME R070 to HME VOR/DME, via HME R247/SZE R066 to SZE VOR/DME.

Cross HME VOR/DME at or above FL200.



CHANGE : Course FM SZE to HME.

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

SID

**AKAGI FOUR DEPARTURE**

**RWY16R** : Climb via NRE R157 to 14.0DME, turn right, direct to NRE VOR/DME, via NRE R326 to AKAGI via LOPIA and YAOKO.

Cross LOPIA at or above 12000FT, cross YAOKO at or above FL180.

**RWY16L** : (Not established)

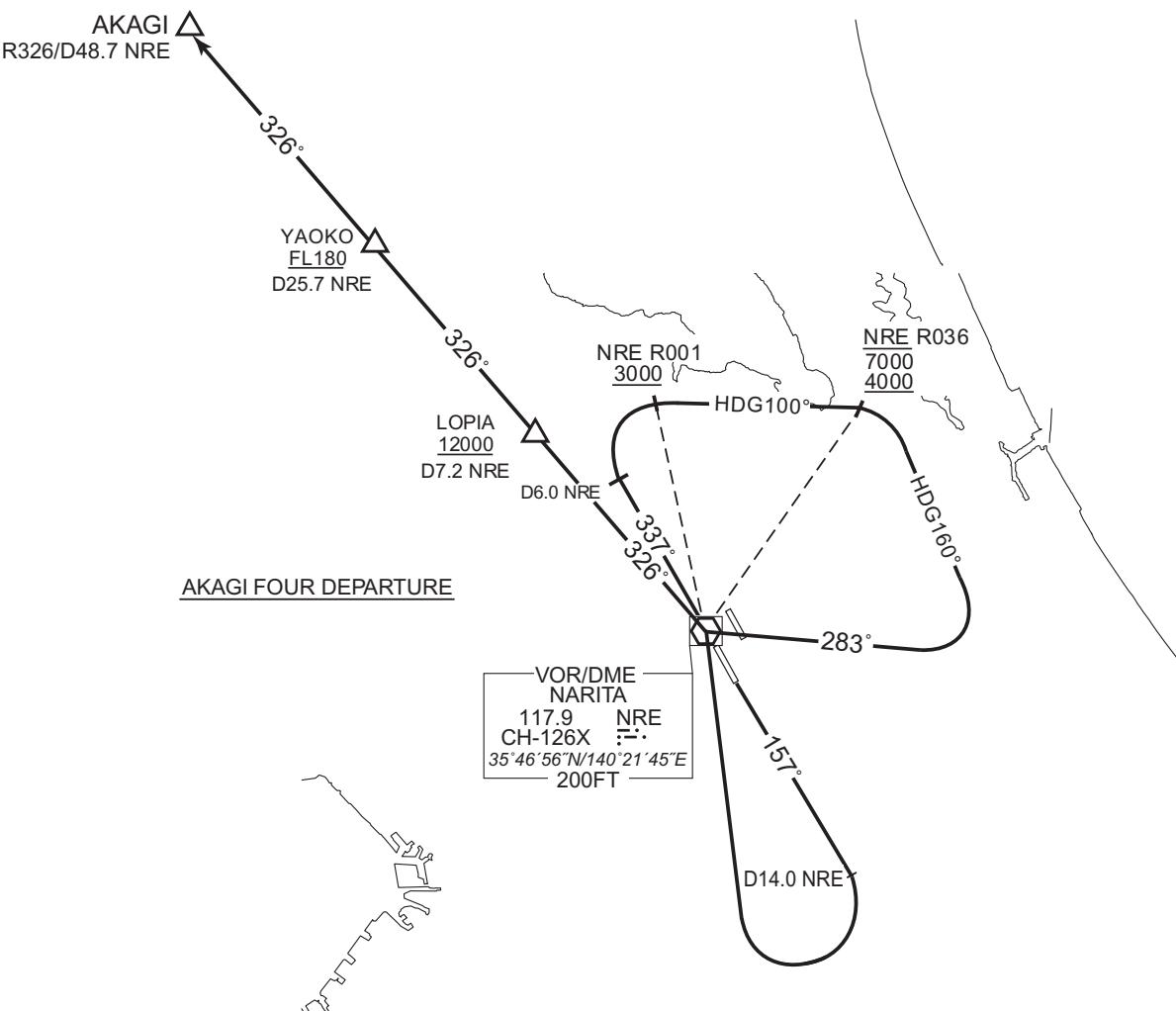
**RWY34L** : Climb via NRE R337 to 6.0DME, turn right HDG100° until crossing NRE R036, turn right HDG160° to intercept and proceed via NRE R103 to NRE VOR/DME, via NRE R326 to AKAGI via LOPIA and YAOKO.

Cross NRE R001 at or above 3000FT,  
cross NRE R036 between 4000FT and 7000FT,

cross LOPIA at or above 12000FT, cross YAOKO at or above FL180.

**RWY34R** : (Not established)

CHANGE : PROC renamed. PROC FM RWY 16L/34R abolished. HOKUSO VOR/DME(HKE) abolished.



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

SID

SUNNS TWO DEPARTURE

RWY16R : Climb via NRE R157 to 14.0DME, turn left HDG108° to intercept and proceed via NRE R138 to SUNNS via ROUSY.

Cross ROUSY at or above 7000FT, cross SUNNS at or above FL190.

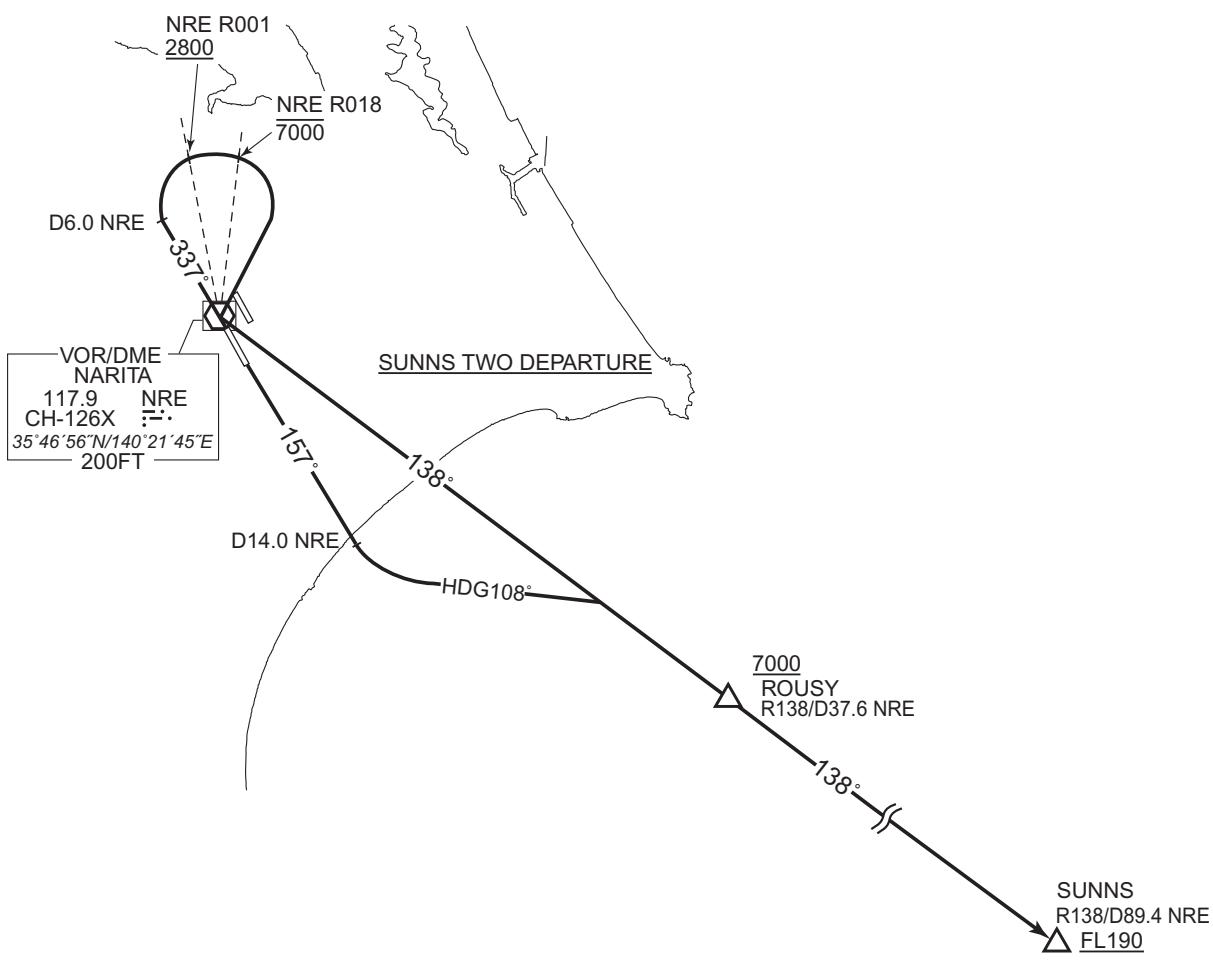
RWY16L : (Not established)

RWY34L : Climb via NRE R337 to 6.0DME, turn right, direct to NRE VOR/DME, via NRE R138 to SUNNS via ROUSY.

Cross NRE R001 at or above 2800FT,  
cross NRE R018 at or below 7000FT,  
cross ROUSY at or above 7000FT, cross SUNNS at or above FL190.

RWY34R : (Not established)

CHANGE : PROC renamed, PROC FM RWY 16L/34R abolished. HOKUSO VOR/DME(HKE) abolished.



STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

TETRA EIGHT 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.

Critical DME

RWY16R : TLD DER - 1.3NM FM DER

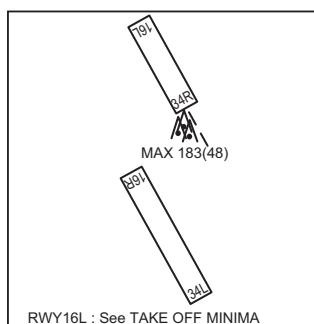
DME GAP

RWY34L : DER - 1.3NM FM DER

Inappropriate Navaids

See AD1.1.6.10.3. Inappropriate NAV AIDS for RNAV1

VAR 8° W

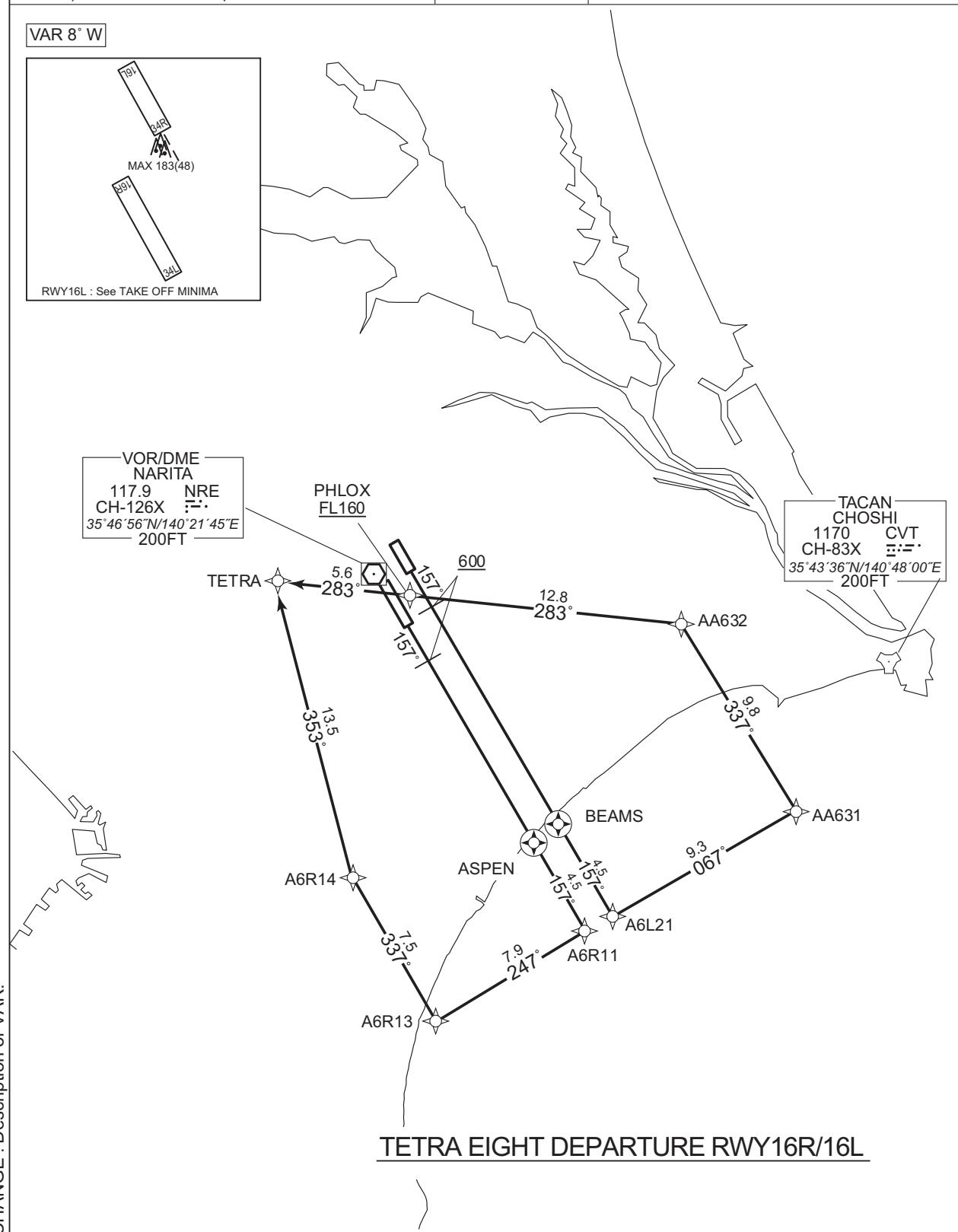


CHANGE : Description of VAR.

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

PHLOX  
FL160

TACAN  
CHOSHII  
1170 CVT  
CH-83X  
35°43'36"N/140°48'00"E  
200FT

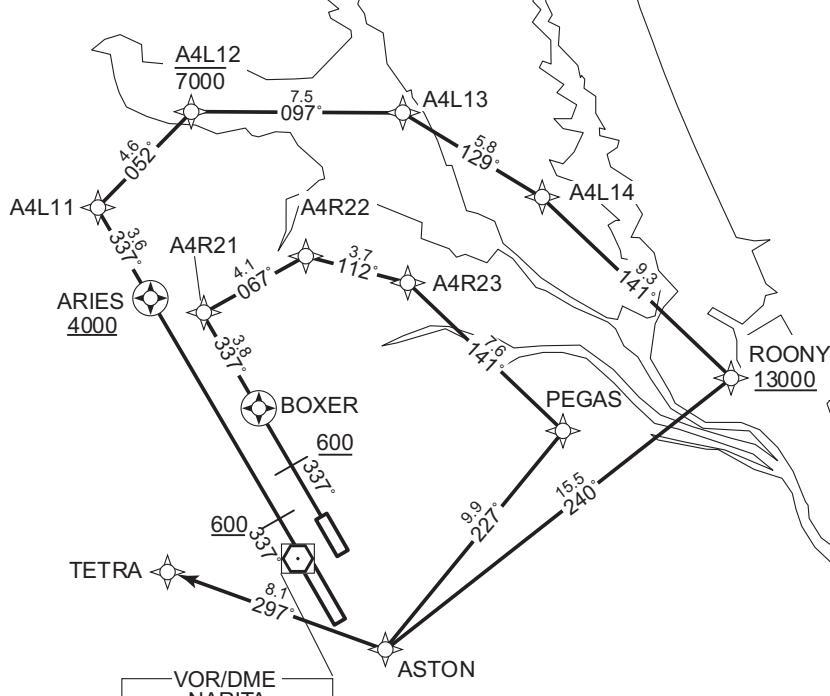


## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

VAR 8° W

TETRA EIGHT DEPARTURE RWY34L/34R

CHANGE : Description of VAR.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

TETRA EIGHT DEPARTURE

RWY16R : Climb on HDG157° at or above 600FT, direct to ASPEN, to A6R11, to A6R13, to A6R14, to TETRA.

RWY16L : Climb on HDG157° at or above 600FT, direct to BEAMS, to A6L21, to AA631, to AA632, to PHLOX at or above FL160, to TETRA.

RWY34L : Climb on HDG337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY at or above 13000FT, to ASTON, to TETRA.

RWY34R : Climb on HDG337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to ASTON, to TETRA.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R11               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A6R13               | —        | 247<br>(239.5) | -7.5               | 7.9           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A6R14               | —        | 337<br>(329.6) | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | TETRA               | —        | 353<br>(345.1) | -7.5               | 13.5          | —              | —             | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | AA631               | —        | 067<br>(059.5) | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | AA632               | —        | 337<br>(329.8) | -7.5               | 9.8           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PHLOX               | —        | 283<br>(275.3) | -7.5               | 12.8          | —              | +FL160        | —            | —              | RNAV1                    |
| 007           | TF               | TETRA               | —        | 283<br>(275.1) | -7.5               | 5.6           | —              | —             | —            | —              | RNAV1                    |

CHANGE : ALT1 Restriction on A4R23, PROC renamed.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | -                   | -        | 337 (329.6)   | -7.5               | -             | -              | +600          | -            | -              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | -             | -7.5               | -             | -              | +4000         | -            | -              | RNAV1                    |
| 003           | TF               | A4L11               | -        | 337 (329.5)   | -7.5               | 3.6           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF               | A4L12               | -        | 052 (044.3)   | -7.5               | 4.6           | -              | -7000         | -            | -              | RNAV1                    |
| 005           | TF               | A4L13               | -        | 097 (089.4)   | -7.5               | 7.5           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF               | A4L14               | -        | 129 (121.2)   | -7.5               | 5.8           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF               | ROONY               | -        | 141 (133.2)   | -7.5               | 9.3           | -              | +13000        | -            | -              | RNAV1                    |
| 008           | TF               | ASTON               | -        | 240 (232.1)   | -7.5               | 15.5          | -              | -             | -            | -              | RNAV1                    |
| 009           | TF               | TETRA               | -        | 297 (289.5)   | -7.5               | 8.1           | -              | -             | -            | -              | RNAV1                    |

## RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | -                   | -        | 337 (329.6)   | -7.5               | -             | -              | +600          | -            | -              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 003           | TF               | A4R21               | -        | 337 (329.6)   | -7.5               | 3.8           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF               | A4R22               | -        | 067 (059.3)   | -7.5               | 4.1           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF               | A4R23               | -        | 112 (104.6)   | -7.5               | 3.7           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF               | PEGAS               | -        | 141 (133.4)   | -7.5               | 7.6           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF               | ASTON               | -        | 227 (219.2)   | -7.5               | 9.9           | -              | -             | -            | -              | RNAV1                    |
| 008           | TF               | TETRA               | -        | 297 (289.5)   | -7.5               | 8.1           | -              | -             | -            | -              | RNAV1                    |

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | AA631               | 353619.9N / 1404431.9E |
| A4L12               | 360232.6N / 1401646.8E | AA632               | 354446.7N / 1403828.9E |
| A4L13               | 360236.7N / 1402559.7E | ARIES               | 355607.4N / 1401505.9E |
| A4L14               | 355937.8N / 1403205.0E | ASPEN               | 353451.0N / 1403028.1E |
| A4R21               | 355529.4N / 1401729.2E | ASTON               | 354344.6N / 1402518.6E |
| A4R22               | 355734.5N / 1402150.1E | BEAMS               | 353533.0N / 1403153.1E |
| A4R23               | 355638.8N / 1402614.7E | BOXER               | 355213.0N / 1401951.6E |
| A6L21               | 353137.9N / 1403441.9E | PEGAS               | 355126.3N / 1403302.1E |
| A6R11               | 353056.9N / 1403316.2E | PHLOX               | 354556.6N / 1402246.1E |
| A6R13               | 352654.9N / 1402452.6E | ROONY               | 355317.4N / 1404024.4E |
| A6R14               | 353324.7N / 1402011.9E | TETRA               | 354626.4N / 1401555.8E |

CHANGE : Update

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV TRANSITION

AGRIS TRANSITION /KIMIN TRANSITION / ENPAR TRANSITION

RNAV1

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

Critical DME

-

2) RADAR service required.

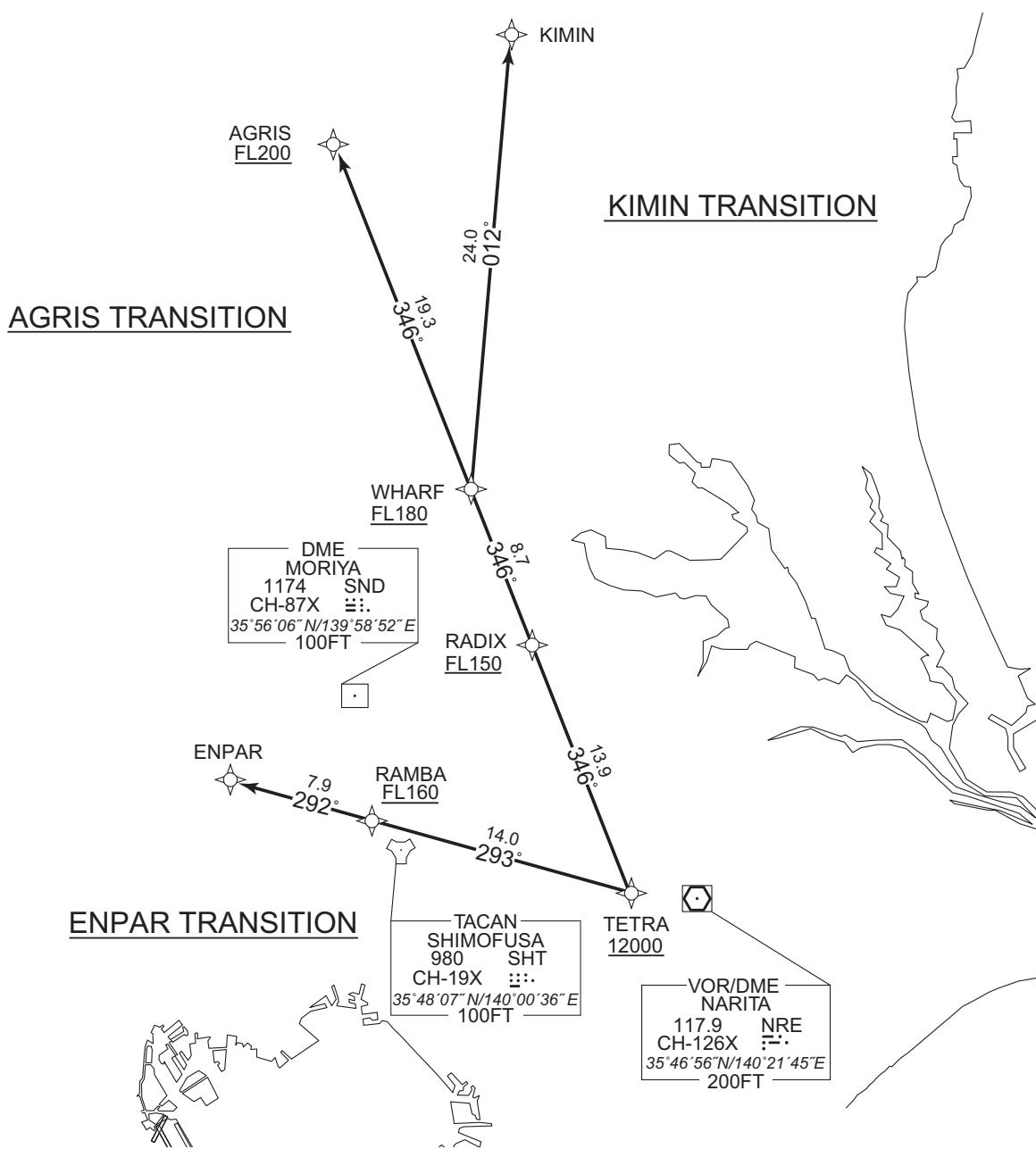
DME GAP

-

Inappropriate  
Navaids

See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1

VAR8°W



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV TRANSITION

AGRIS TRANSITION

From TETRA at or above 12000FT, to RADIX at or above FL150, to WHARF at or above FL180, to AGRIS at or above FL200.

| Serial Number | 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              | TETRA               | —        | —             | -7.5               | —             | —              | +12000        | —            | —              | RNAV1                    |
| 002           | TF              | RADIX               | —        | 346 (338.1)   | -7.5               | 13.9          | —              | +FL150        | —            | —              | RNAV1                    |
| 003           | TF              | WHARF               | —        | 346 (338.1)   | -7.5               | 8.7           | —              | +FL180        | —            | —              | RNAV1                    |
| 004           | TF              | AGRIS               | —        | 346 (338.0)   | -7.5               | 19.3          | —              | +FL200        | —            | —              | RNAV1                    |

KIMIN TRANSITION

From TETRA at or above 12000FT, to RADIX at or above FL150, to WHARF at or above FL180, to KIMIN.

| Serial Number | 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              | TETRA               | —        | —             | -7.5               | —             | —              | +12000        | —            | —              | RNAV1                    |
| 002           | TF              | RADIX               | —        | 346 (338.1)   | -7.5               | 13.9          | —              | +FL150        | —            | —              | RNAV1                    |
| 003           | TF              | WHARF               | —        | 346 (338.1)   | -7.5               | 8.7           | —              | +FL180        | —            | —              | RNAV1                    |
| 004           | TF              | KIMIN               | —        | 012 (004.1)   | -7.5               | 24.0          | —              | —             | —            | —              | RNAV1                    |

ENPAR TRANSITION

From TETRA at or above 12000FT, to RAMBA at or above FL160, to ENPAR.

| Serial Number | 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              | TETRA               | —        | —             | -7.5               | —             | —              | +12000        | —            | —              | RNAV1                    |
| 002           | TF              | RAMBA               | —        | 293 (285.1)   | -7.5               | 14.0          | —              | +FL160        | —            | —              | RNAV1                    |
| 003           | TF              | ENPAR               | —        | 292 (284.9)   | -7.5               | 7.9           | —              | —             | —            | —              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AGRIS               | 362514.7N / 1395633.1E | RAMBA               | 355003.7N / 1395917.7E |
| ENPAR               | 355205.2N / 1394954.3E | TETRA               | 354626.4N / 1401555.8E |
| KIMIN               | 363119.5N / 1400738.2E | WHARF               | 360722.6N / 1400531.1E |
| RADIX               | 355917.2N / 1400933.2E |                     |                        |

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

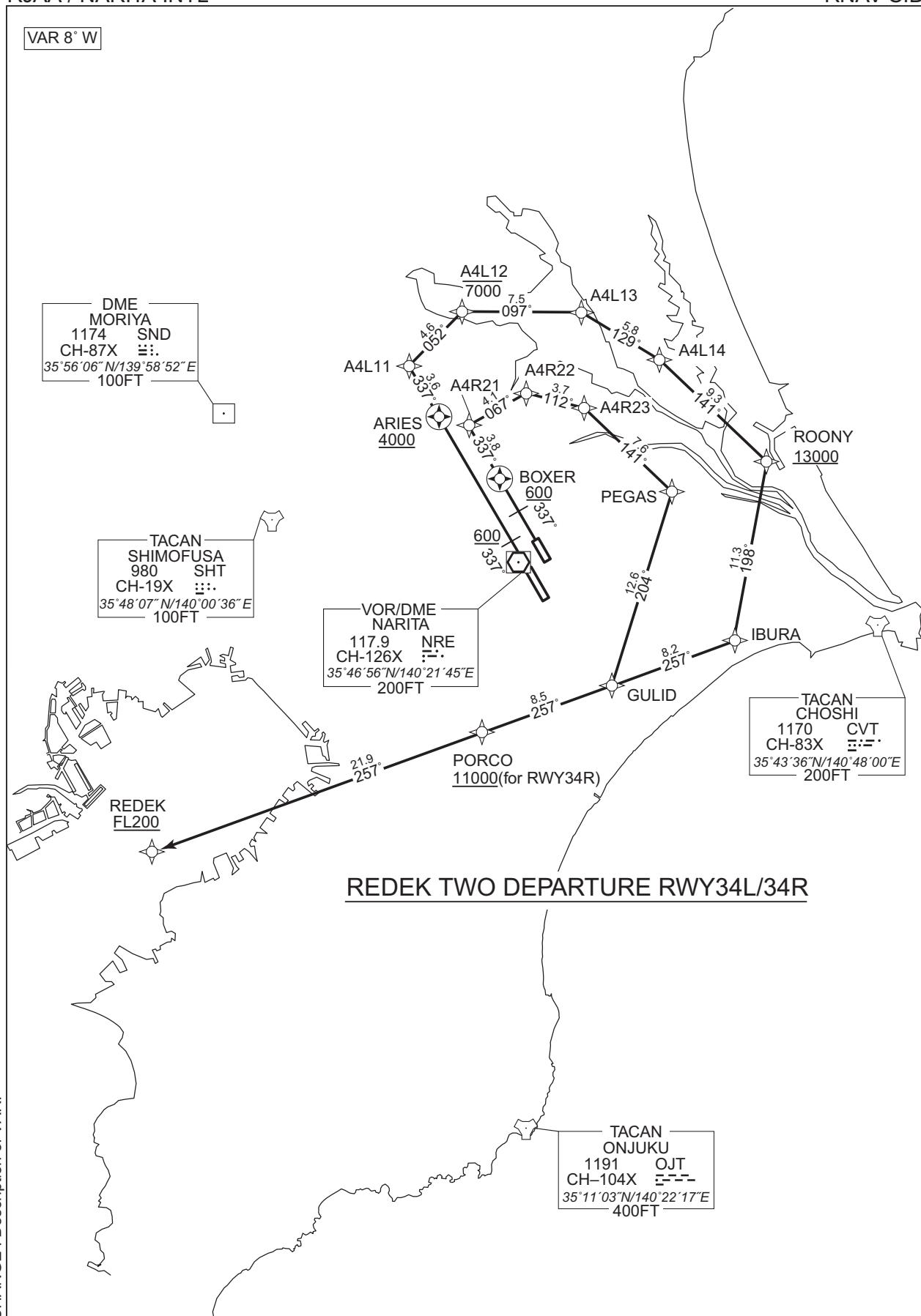
| REDEK TWO DEPARTURE  |                       | RNAV1   |
|--|-----------------------|---|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU must be able to update its position without delay at the starting point of take-off rolling.<br>2) RADAR service required.                                     | Critical DME          | RWY16R:TLD DER – 1.3NM FM DER<br>RWY16L :TLD DER – 3.4NM FM DER |
|  | DME GAP               | RWY34L :DER – 1.3NM FM DER                                      |
|  | Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1                |
| <p><b>VAR 8° W</b></p> <p>RWY16L : See TAKE OFF MINIMA</p> <p>TACAN SHIMOFUSA 980 SHT CH-19X 35°48'07"N/140°00'36"E 100FT</p>  |                       |   |
| <p><b>REDEK TWO DEPARTURE RWY16R/16L</b></p> <p>VOR/DME NARITA 117.9 NRE CH-126X 35°46'56"N/140°21'45"E 200FT</p> <p>TACAN CHOSHI 1170 CVT CH-83X 35°43'36"N/140°48'00"E 200FT</p> <p>TACAN ONJUKU 1191 OJT CH-104X 35°11'03"N/140°22'17"E 400FT</p> |                       |   |

CHANGE : Description of VAR.

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

REDEK TWO DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R12, to KUJYU at or above 11000FT, to REDEK at or above FL200.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to AA631, to AA632, to ACURE, to PAGOT at or above FL160, to REDEK at or above FL200.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY at or above 13000FT, to IBURA, to GULID, to PORCO, to REDEK at or above FL200.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to GULID, to PORCO at or above 11000FT, to REDEK at or above FL200.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157 (149.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R12               | —        | 157 (149.7)   | -7.5               | 10.6          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | KUJYU               | —        | 247 (239.5)   | -7.5               | 9.2           | —              | +11000        | —            | —              | RNAV1                    |
| 005           | TF               | REDEK               | —        | 293 (285.7)   | -7.5               | 28.6          | —              | +FL200        | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157 (149.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157 (149.7)   | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | AA631               | —        | 067 (059.5)   | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | AA632               | —        | 337 (329.8)   | -7.5               | 9.8           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | ACURE               | —        | 283 (275.3)   | -7.5               | 8.9           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | PAGOT               | —        | 232 (224.1)   | -7.5               | 6.9           | —              | +FL160        | —            | —              | RNAV1                    |
| 008           | TF               | REDEK               | —        | 250 (242.6)   | -7.5               | 25.8          | —              | +FL200        | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23. PROC renamed.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | —             | -7.5               | —             | —              | +4000         | —            | —              | RNAV1                    |
| 003           | TF               | A4L11               | —        | 337 (329.5)   | -7.5               | 3.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4L12               | —        | 052 (044.3)   | -7.5               | 4.6           | —              | -7000         | —            | —              | RNAV1                    |
| 005           | TF               | A4L13               | —        | 097 (089.4)   | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | A4L14               | —        | 129 (121.2)   | -7.5               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | ROONY               | —        | 141 (133.2)   | -7.5               | 9.3           | —              | +13000        | —            | —              | RNAV1                    |
| 008           | TF               | IBURA               | —        | 198 (190.0)   | -7.5               | 11.3          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | GULID               | —        | 257 (249.8)   | -7.5               | 8.2           | —              | —             | —            | —              | RNAV1                    |
| 010           | TF               | PORCO               | —        | 257 (249.7)   | -7.5               | 8.5           | —              | —             | —            | —              | RNAV1                    |
| 011           | TF               | REDEK               | —        | 257 (249.6)   | -7.5               | 21.9          | —              | +FL200        | —            | —              | RNAV1                    |

## RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A4R21               | —        | 337 (329.6)   | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4R22               | —        | 067 (059.3)   | -7.5               | 4.1           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A4R23               | —        | 112 (104.6)   | -7.5               | 3.7           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PEGAS               | —        | 141 (133.4)   | -7.5               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | GULID               | —        | 204 (196.9)   | -7.5               | 12.6          | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | PORCO               | —        | 257 (249.7)   | -7.5               | 8.5           | —              | +11000        | —            | —              | RNAV1                    |
| 009           | TF               | REDEK               | —        | 257 (249.6)   | -7.5               | 21.9          | —              | +FL200        | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

Waypoint Coordinates

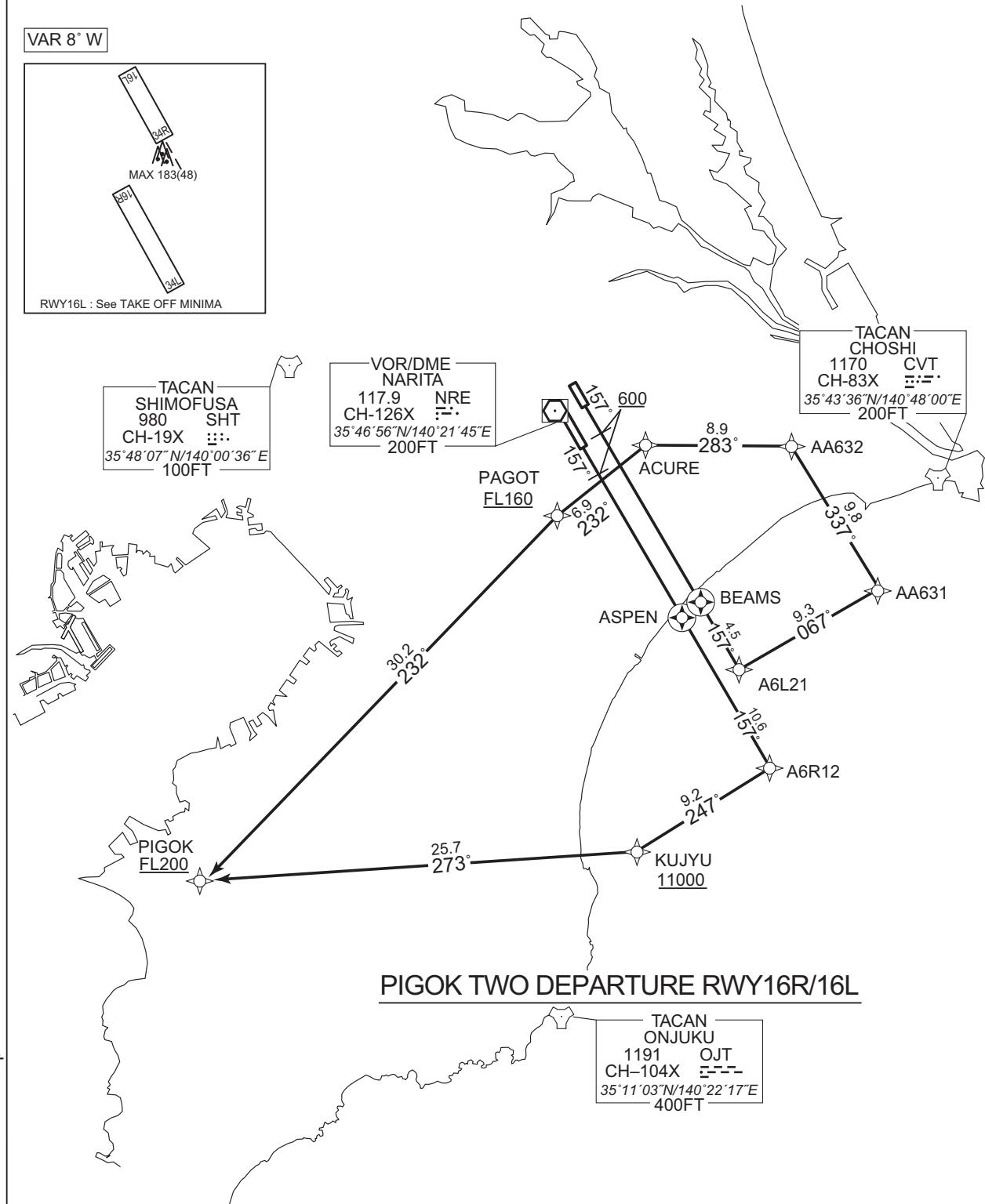
| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | ARIES               | 355607.4N / 1401505.9E |
| A4L12               | 360232.6N / 1401646.8E | ASPEN               | 353451.0N / 1403028.1E |
| A4L13               | 360236.7N / 1402559.7E | BEAMS               | 353533.0N / 1403153.1E |
| A4L14               | 355937.8N / 1403205.0E | BOXER               | 355213.0N / 1401951.6E |
| A4R21               | 355529.4N / 1401729.2E | GULID               | 353921.3N / 1402830.3E |
| A4R22               | 355734.5N / 1402150.1E | IBURA               | 354212.1N / 1403759.5E |
| A4R23               | 355638.8N / 1402614.7E | KUJYU               | 352104.0N / 1402719.8E |
| A6L21               | 353137.9N / 1403441.9E | PAGOT               | 354039.6N / 1402139.4E |
| A6R12               | 352543.5N / 1403700.7E | PORCO               | 353624.3N / 1401843.5E |
| AA631               | 353619.9N / 1404431.9E | PEGAS               | 355126.3N / 1403302.1E |
| AA632               | 354446.7N / 1403828.9E | REDEK               | 352844.1N / 1395333.8E |
| ACURE               | 354535.6N / 1402732.3E | ROONY               | 355317.4N / 1404024.4E |

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

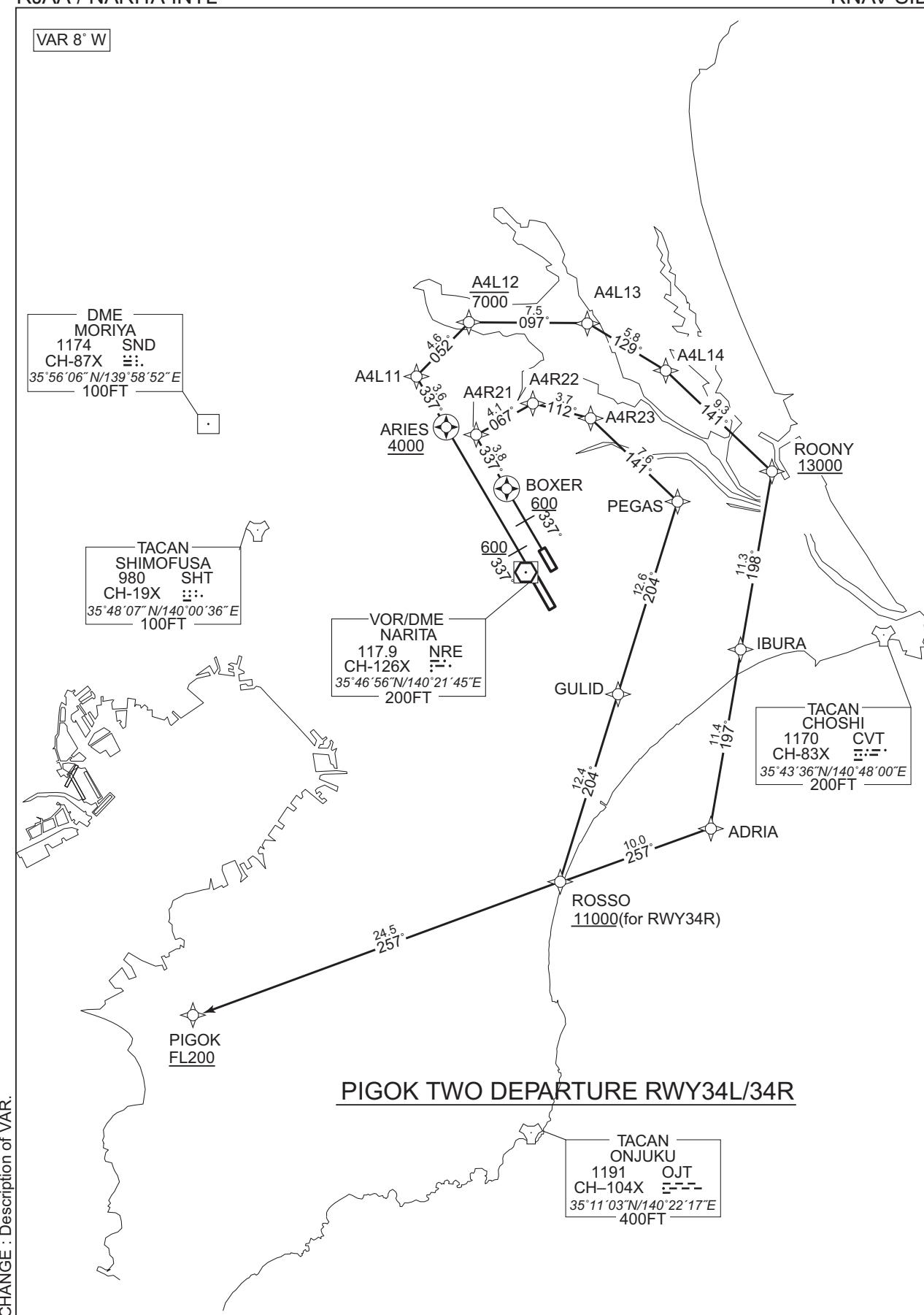
| PIGOK TWO DEPARTURE  |                       | RNAV1  |
|--|-----------------------|--|
| Note 1) DME/DME/IRU or GNSS required.<br>※The aircraft equipped with only DME/DME/IRU<br>must be able to update its position without delay<br>at the starting point of take-off rolling.<br>2) RADAR service required. | Critical DME          | RWY16R:TLD DER – 1.3NM FM DER<br>RWY16L:TLD DER – 3.4NM FM DER |
|  | DME GAP               | RWY34L :DER – 1.3NM FM DER                                     |
|  | Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1               |



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

PIGOK TWO DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R12, to KUJYU at or above 11000FT, to PIGOK at or above FL200.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to AA631, to AA632, to ACURE, to PAGOT at or above FL160, to PIGOK at or above FL200.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY at or above 13000FT, to IBURA, to ADRIA, to ROSSO, to PIGOK at or above FL200.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to GULID, to ROSSO at or above 11000FT, to PIGOK at or above FL200.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R12               | —        | 157<br>(149.7) | -7.5               | 10.6          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | KUJYU               | —        | 247<br>(239.5) | -7.5               | 9.2           | —              | +11000        | —            | —              | RNAV1                    |
| 005           | TF               | PIGOK               | —        | 273<br>(265.3) | -7.5               | 25.7          | —              | +FL200        | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | AA631               | —        | 067<br>(059.5) | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | AA632               | —        | 337<br>(329.8) | -7.5               | 9.8           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | ACURE               | —        | 283<br>(275.3) | -7.5               | 8.9           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | PAGOT               | —        | 232<br>(224.1) | -7.5               | 6.9           | —              | +FL160        | —            | —              | RNAV1                    |
| 008           | TF               | PIGOK               | —        | 232<br>(224.0) | -7.5               | 30.2          | —              | +FL200        | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23. PROC renamed.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337<br>(329.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | —              | -7.5               | —             | —              | +4000         | —            | —              | RNAV1                    |
| 003           | TF               | A4L11               | —        | 337<br>(329.5) | -7.5               | 3.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4L12               | —        | 052<br>(044.3) | -7.5               | 4.6           | —              | -7000         | —            | —              | RNAV1                    |
| 005           | TF               | A4L13               | —        | 097<br>(089.4) | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | A4L14               | —        | 129<br>(121.2) | -7.5               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | ROONY               | —        | 141<br>(133.2) | -7.5               | 9.3           | —              | +13000        | —            | —              | RNAV1                    |
| 008           | TF               | IBURA               | —        | 198<br>(190.0) | -7.5               | 11.3          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | ADRIA               | —        | 197<br>(189.9) | -7.5               | 11.4          | —              | —             | —            | —              | RNAV1                    |
| 010           | TF               | ROSSO               | —        | 257<br>(249.8) | -7.5               | 10.0          | —              | —             | —            | —              | RNAV1                    |
| 011           | TF               | PIGOK               | —        | 257<br>(249.6) | -7.5               | 24.5          | —              | +FL200        | —            | —              | RNAV1                    |

## RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337<br>(329.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A4R21               | —        | 337<br>(329.6) | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4R22               | —        | 067<br>(059.3) | -7.5               | 4.1           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A4R23               | —        | 112<br>(104.6) | -7.5               | 3.7           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PEGAS               | —        | 141<br>(133.4) | -7.5               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | GULID               | —        | 204<br>(196.9) | -7.5               | 12.6          | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | ROSSO               | —        | 204<br>(196.9) | -7.5               | 12.4          | —              | +11000        | —            | —              | RNAV1                    |
| 009           | TF               | PIGOK               | —        | 257<br>(249.6) | -7.5               | 24.5          | —              | +FL200        | —            | —              | RNAV1                    |

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | ARIES               | 355607.4N / 1401505.9E |
| A4L12               | 360232.6N / 1401646.8E | ASPEN               | 353451.0N / 1403028.1E |
| A4L13               | 360236.7N / 1402559.7E | BEAMS               | 353533.0N / 1403153.1E |
| A4L14               | 355937.8N / 1403205.0E | BOXER               | 355213.0N / 1401951.6E |
| A4R21               | 355529.4N / 1401729.2E | GULID               | 353921.3N / 1402830.3E |
| A4R22               | 355734.5N / 1402150.1E | IBURA               | 354212.1N / 1403759.5E |
| A4R23               | 355638.8N / 1402614.7E | KUJYU               | 352104.0N / 1402719.8E |
| A6L21               | 353137.9N / 1403441.9E | PAGOT               | 354039.6N / 1402139.4E |
| A6R12               | 352543.5N / 1403700.7E | PEGAS               | 355126.3N / 1403302.1E |
| AA631               | 353619.9N / 1404431.9E | PIGOK               | 351854.3N / 1395555.6E |
| AA632               | 354446.7N / 1403828.9E | ROONY               | 355317.4N / 1404024.4E |
| ACURE               | 354535.6N / 1402732.3E | ROSSO               | 352729.0N / 1402404.4E |
| ADRIA               | 353056.8N / 1403534.3E |                     |                        |

CHANGE : New PROC

## **STANDARD DEPARTURE CHART -INSTRUMENT**

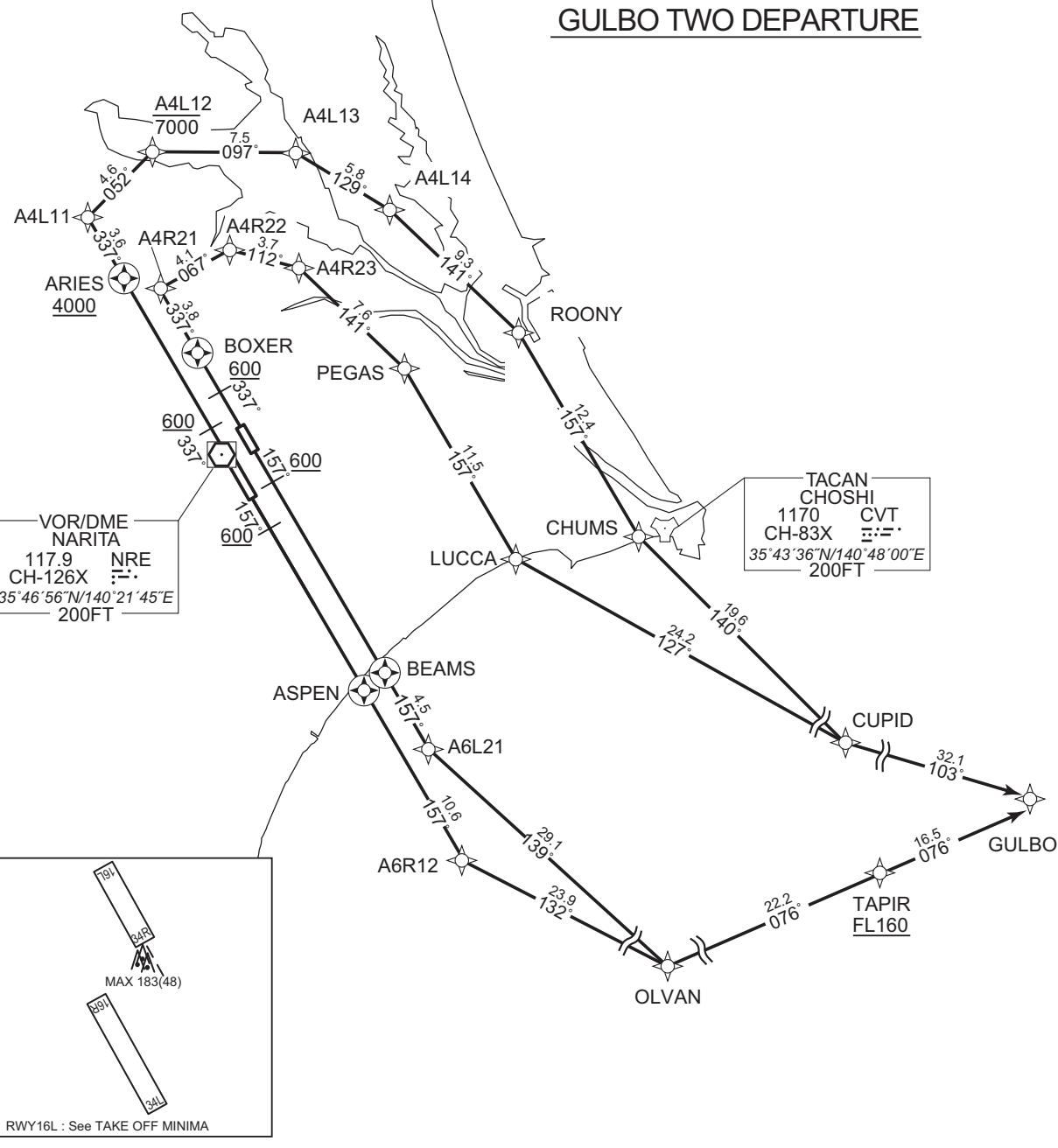
RJAA / NARITA INTL

RNAV SID

| GULBO 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. | Critical DME          | RWY16R:TLD DER – 1.3NM FM DER<br>RWY16L:TLD DER – 3.4NM FM DER |
|  | DME GAP               | RWY34L :DER – 1.3NM FM DER                                     |
| 2) RADAR service required.   | Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1               |

VAR 8° W

## GULBO TWO DEPARTURE



CHANGE : Description of VAR.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

GULBO TWO DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R12, to OLVAN, to TAPIR at or above FL160, to GULBO.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to OLVAN, to TAPIR at or above FL160, to GULBO.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY, to CHUMS, to CUPID, to GULBO.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to LUCCA, to CUPID, to GULBO.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R12               | —        | 157<br>(149.7) | -7.5               | 10.6          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 132<br>(124.2) | -7.5               | 23.9          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | TAPIR               | —        | 076<br>(068.0) | -7.5               | 22.2          | —              | +FL160        | —            | —              | RNAV1                    |
| 006           | TF               | GULBO               | —        | 076<br>(068.3) | -7.5               | 16.5          | —              | —             | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 139<br>(131.8) | -7.5               | 29.1          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | TAPIR               | —        | 076<br>(068.0) | -7.5               | 22.2          | —              | +FL160        | —            | —              | RNAV1                    |
| 006           | TF               | GULBO               | —        | 076<br>(068.3) | -7.5               | 16.5          | —              | —             | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23. PROC renamed.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | —             | -7.5               | —             | —              | +4000         | —            | —              | RNAV1                    |
| 003           | TF               | A4L11               | —        | 337 (329.5)   | -7.5               | 3.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4L12               | —        | 052 (044.3)   | -7.5               | 4.6           | —              | -7000         | —            | —              | RNAV1                    |
| 005           | TF               | A4L13               | —        | 097 (089.4)   | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | A4L14               | —        | 129 (121.2)   | -7.5               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | ROONY               | —        | 141 (133.2)   | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | CHUMS               | —        | 157 (149.7)   | -7.5               | 12.4          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | CUPID               | —        | 140 (132.0)   | -7.5               | 19.6          | —              | —             | —            | —              | RNAV1                    |
| 010           | TF               | GULBO               | —        | 103 (095.1)   | -7.5               | 32.1          | —              | —             | —            | —              | RNAV1                    |

## RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A4R21               | —        | 337 (329.6)   | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4R22               | —        | 067 (059.3)   | -7.5               | 4.1           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A4R23               | —        | 112 (104.6)   | -7.5               | 3.7           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PEGAS               | —        | 141 (133.4)   | -7.5               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | LUCCA               | —        | 157 (149.6)   | -7.5               | 11.5          | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | CUPID               | —        | 127 (119.8)   | -7.5               | 24.2          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | GULBO               | —        | 103 (095.1)   | -7.5               | 32.1          | —              | —             | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23.

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | BEAMS               | 353533.0N / 1403153.1E |
| A4L12               | 360232.6N / 1401646.8E | BOXER               | 355213.0N / 1401951.6E |
| A4L13               | 360236.7N / 1402559.7E | CHUMS               | 354237.0N / 1404806.0E |
| A4L14               | 355937.8N / 1403205.0E | CUPID               | 352930.3N / 1410557.3E |
| A4R21               | 355529.4N / 1401729.2E | GULBO               | 352632.9N / 1414509.6E |
| A4R22               | 355734.5N / 1402150.1E | LUCCA               | 354132.8N / 1404011.4E |
| A4R23               | 355638.8N / 1402614.7E | OLVAN               | 351214.1N / 1410111.3E |
| A6L21               | 353137.9N / 1403441.9E | PEGAS               | 355126.3N / 1403302.1E |
| A6R12               | 352543.5N / 1403700.7E | ROONY               | 355317.4N / 1404024.4E |
| ARIES               | 355607.4N / 1401505.9E | TAPIR               | 352028.5N / 1412621.9E |
| ASPEN               | 353451.0N / 1403028.1E |                     |                        |

CHANGE : New PROC

## STANDARD DEPARTURE CHART -INSTRUMENT

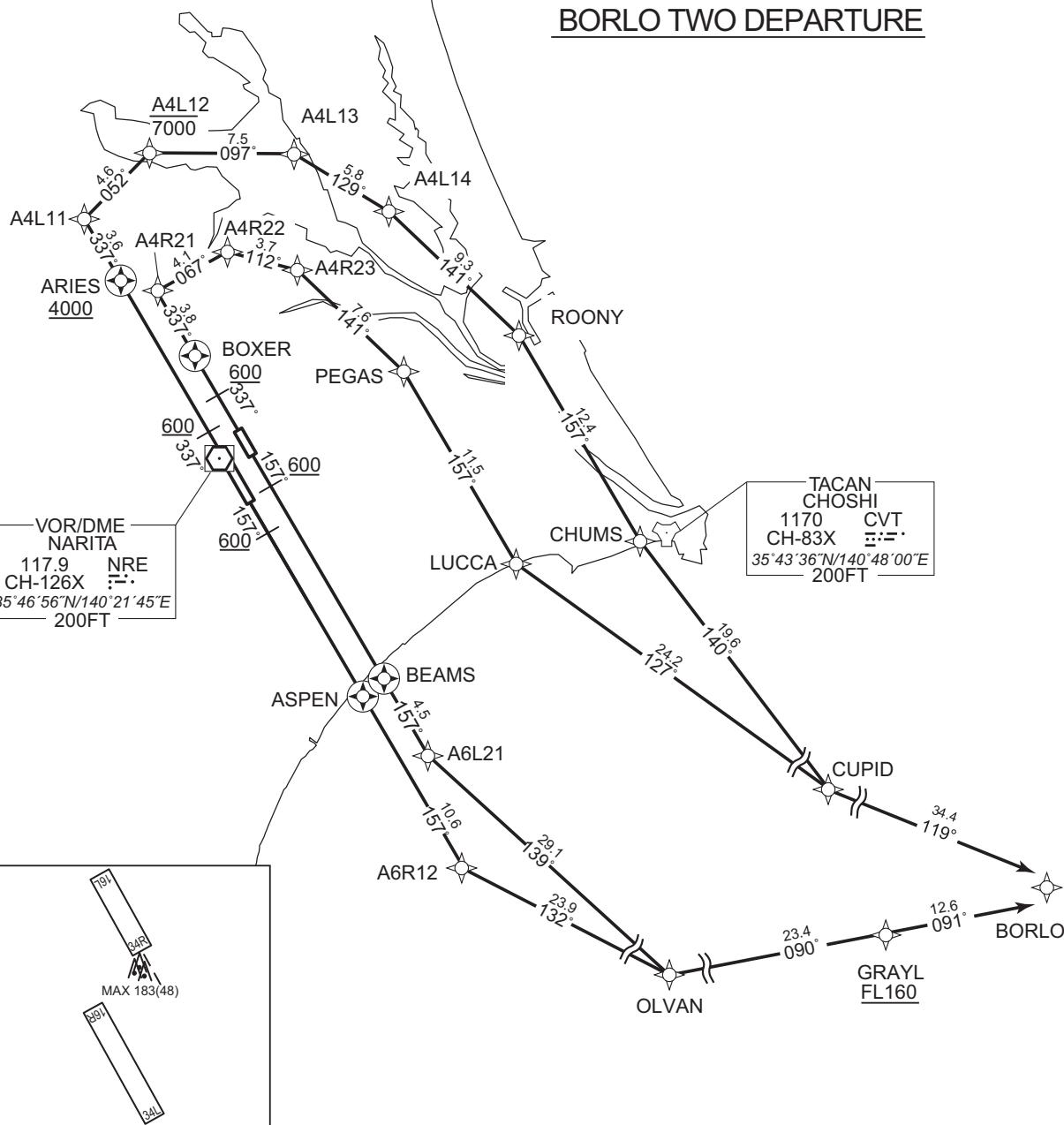
RJAA / NARITA INTL

RNAV SID

| BORLO 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:TLD DER – 1.3NM FM DER<br>RWY16L:TLD DER – 3.4NM FM DER |
|  | DME GAP               | RWY34L :DER – 1.3NM FM DER                                     |
|  | Inappropriate Navaids | See AD1.1.6.10.3.Inappropriate NAVAIDs for RNAV1               |

VAR 8° W

## BORLO TWO DEPARTURE



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

BORLO TWO DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R12, to OLVAN, to GRAYL at or above FL160, to BORLO.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to OLVAN, to GRAYL at or above FL160, to BORLO.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY, to CHUMS, to CUPID, to BORLO.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to LUCCA, to CUPID, to BORLO.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R12               | —        | 157<br>(149.7) | -7.5               | 10.6          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 132<br>(124.2) | -7.5               | 23.9          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | GRAYL               | —        | 090<br>(082.9) | -7.5               | 23.4          | —              | +FL160        | —            | —              | RNAV1                    |
| 006           | TF               | BORLO               | —        | 091<br>(083.2) | -7.5               | 12.6          | —              | —             | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 139<br>(131.8) | -7.5               | 29.1          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | GRAYL               | —        | 090<br>(082.9) | -7.5               | 23.4          | —              | +FL160        | —            | —              | RNAV1                    |
| 006           | TF               | BORLO               | —        | 091<br>(083.2) | -7.5               | 12.6          | —              | —             | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23. PROC renamed.

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337<br>(329.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | —              | -7.5               | —             | —              | +4000         | —            | —              | RNAV1                    |
| 003           | TF               | A4L11               | —        | 337<br>(329.5) | -7.5               | 3.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4L12               | —        | 052<br>(044.3) | -7.5               | 4.6           | —              | -7000         | —            | —              | RNAV1                    |
| 005           | TF               | A4L13               | —        | 097<br>(089.4) | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | A4L14               | —        | 129<br>(121.2) | -7.5               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | ROONY               | —        | 141<br>(133.2) | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | CHUMS               | —        | 157<br>(149.7) | -7.5               | 12.4          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | CUPID               | —        | 140<br>(132.0) | -7.5               | 19.6          | —              | —             | —            | —              | RNAV1                    |
| 010           | TF               | BORLO               | —        | 119<br>(111.9) | -7.5               | 34.4          | —              | —             | —            | —              | RNAV1                    |

## RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337<br>(329.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A4R21               | —        | 337<br>(329.6) | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4R22               | —        | 067<br>(059.3) | -7.5               | 4.1           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A4R23               | —        | 112<br>(104.6) | -7.5               | 3.7           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PEGAS               | —        | 141<br>(133.4) | -7.5               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | LUCCA               | —        | 157<br>(149.6) | -7.5               | 11.5          | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | CUPID               | —        | 127<br>(119.8) | -7.5               | 24.2          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | BORLO               | —        | 119<br>(111.9) | -7.5               | 34.4          | —              | —             | —            | —              | RNAV1                    |

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

Waypoint Coordinates

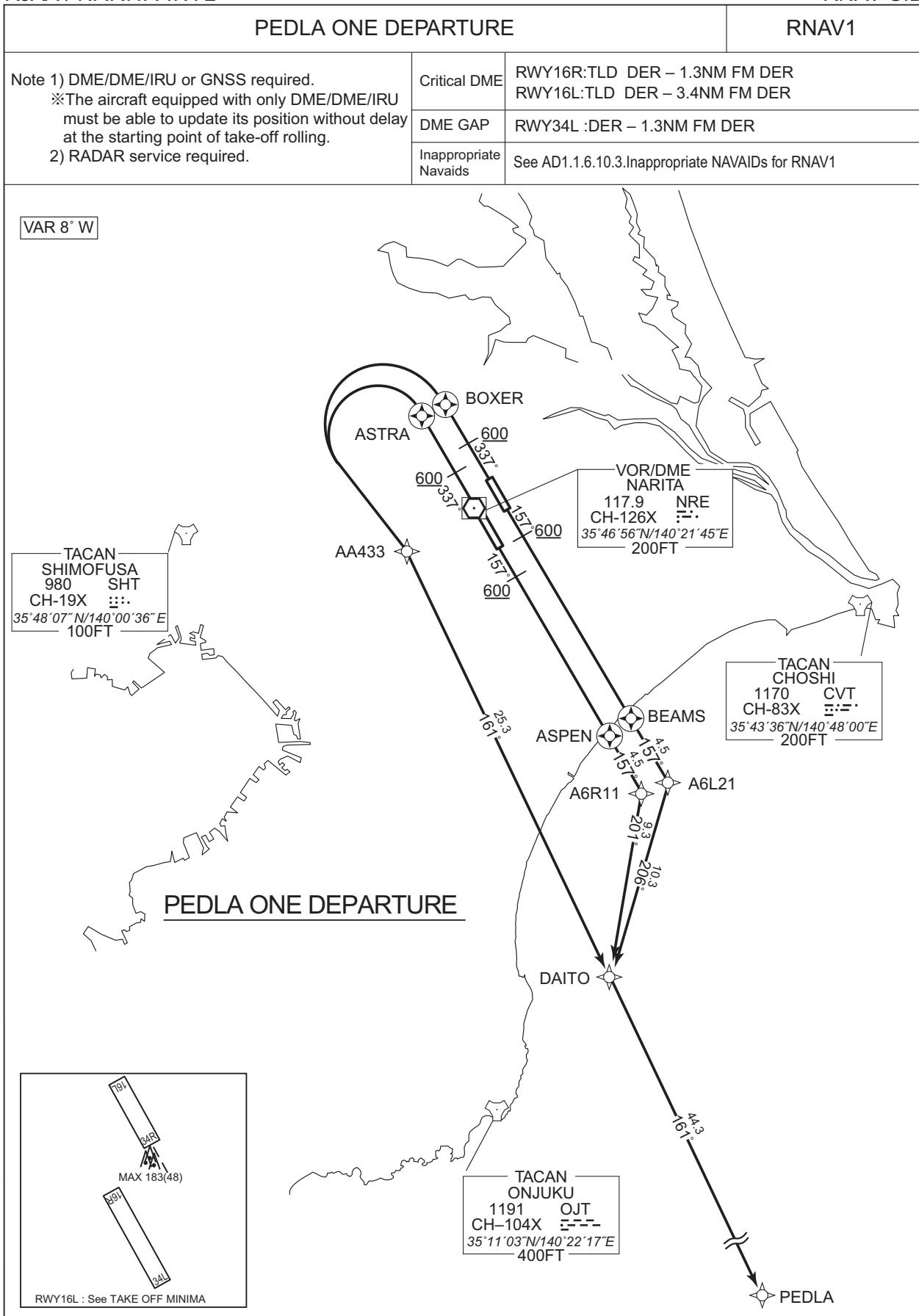
| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | BEAMS               | 353533.0N / 1403153.1E |
| A4L12               | 360232.6N / 1401646.8E | BORLO               | 351633.8N / 1414455.6E |
| A4L13               | 360236.7N / 1402559.7E | BOXER               | 355213.0N / 1401951.6E |
| A4L14               | 355937.8N / 1403205.0E | CHUMS               | 354237.0N / 1404806.0E |
| A4R21               | 355529.4N / 1401729.2E | CUPID               | 352930.3N / 1410557.3E |
| A4R22               | 355734.5N / 1402150.1E | GRAYL               | 351504.8N / 1412938.0E |
| A4R23               | 355638.8N / 1402614.7E | LUCCA               | 354132.8N / 1404011.4E |
| A6L21               | 353137.9N / 1403441.9E | OLVAN               | 351214.1N / 1410111.3E |
| A6R12               | 352543.5N / 1403700.7E | PEGAS               | 355126.3N / 1403302.1E |
| ARIES               | 355607.4N / 1401505.9E | ROONY               | 355317.4N / 1404024.4E |
| ASPEN               | 353451.0N / 1403028.1E |                     |                        |

CHANGE : New PROC

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

PEDLA ONE DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R11, to DAITO, to PEDLA.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to DAITO, to PEDLA.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ASTRA, turn left direct to AA433, to DAITO, to PEDLA.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, turn left direct to AA433, to DAITO, to PEDLA.

## 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              | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | A6R11               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | DAITO               | —        | 201<br>(193.3) | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | PEDLA               | —        | 161<br>(153.9) | -7.5               | 44.3          | —              | —             | —            | —              | 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              | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | DAITO               | —        | 206<br>(198.7) | -7.5               | 10.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | PEDLA               | —        | 161<br>(153.9) | -7.5               | 44.3          | —              | —             | —            | —              | RNAV1                    |

CHANGE : New PROC

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

## RWY34L

| Serial Number | 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              | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | ASTRA               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | DF              | AA433               | —        | —             | -7.5               | —             | L              | —             | —            | —              | RNAV1                    |
| 004           | TF              | DAITO               | —        | 161 (153.9)   | -7.5               | 25.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | PEDLA               | —        | 161 (153.9)   | -7.5               | 44.3          | —              | —             | —            | —              | 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              | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF              | BOXER               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | DF              | AA433               | —        | —             | -7.5               | —             | L              | —             | —            | —              | RNAV1                    |
| 004           | TF              | DAITO               | —        | 161 (153.9)   | -7.5               | 25.3          | —              | —             | —            | —              | RNAV1                    |
| 005           | TF              | PEDLA               | —        | 161 (153.9)   | -7.5               | 44.3          | —              | —             | —            | —              | RNAV1                    |

Waypoint Coordinates

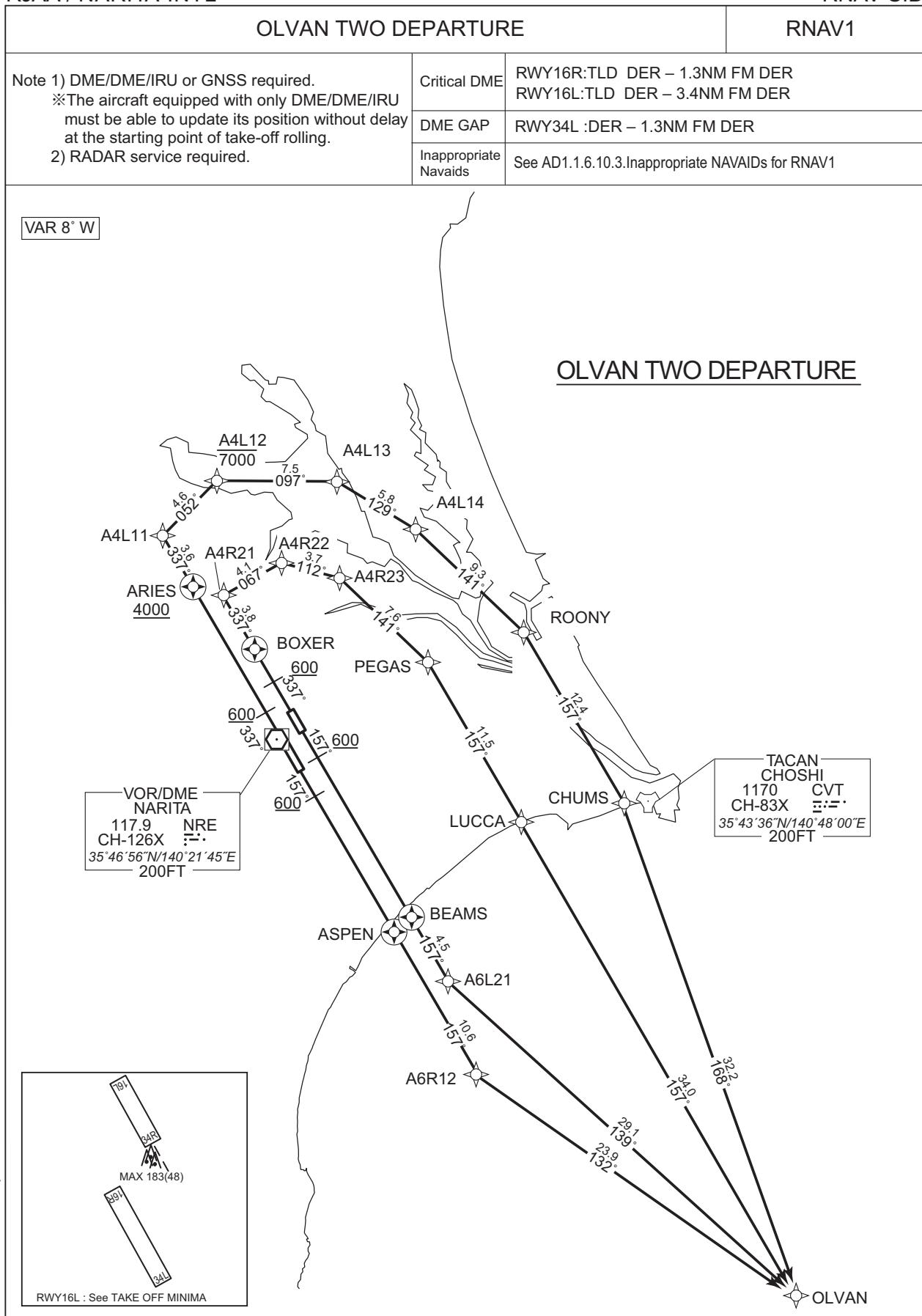
| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA433               | 354438.5N / 1401700.8E | BEAMS               | 353533.0N / 1403153.1E |
| A6L21               | 353137.9N / 1403441.9E | BOXER               | 355213.0N / 1401951.6E |
| A6R11               | 353056.9N / 1403316.2E | DAITO               | 352153.6N / 1403039.0E |
| ASPEN               | 353451.0N / 1403028.1E | PEDLA               | 344203.7N / 1405420.5E |
| ASTRA               | 355207.1N / 1401800.2E |                     |                        |

CHANGE : New PROC

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

OLVAN TWO DEPARTURE

RWY16R : Climb on HDG 157° at or above 600FT, direct to ASPEN, to A6R12, to OLVAN.

RWY16L : Climb on HDG 157° at or above 600FT, direct to BEAMS, to A6L21, to OLVAN.

RWY34L : Climb on HDG 337° at or above 600FT, direct to ARIES at or above 4000FT, to A4L11, to A4L12 at or below 7000FT, to A4L13, to A4L14, to ROONY, to CHUMS, to OLVAN.

RWY34R : Climb on HDG 337° at or above 600FT, direct to BOXER, to A4R21, to A4R22, to A4R23, to PEGAS, to LUCCA, to OLVAN.

## RWY16R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ASPEN               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6R12               | —        | 157<br>(149.7) | -7.5               | 10.6          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 132<br>(124.2) | -7.5               | 23.9          | —              | —             | —            | —              | RNAV1                    |

## RWY16L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 157<br>(149.6) | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BEAMS               | Y        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A6L21               | —        | 157<br>(149.7) | -7.5               | 4.5           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | OLVAN               | —        | 139<br>(131.8) | -7.5               | 29.1          | —              | —             | —            | —              | RNAV1                    |

CHANGE : ALT Restriction on A4R23. PROC renamed.

STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV SID

RWY34L

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | ARIES               | Y        | —             | -7.5               | —             | —              | +4000         | —            | —              | RNAV1                    |
| 003           | TF               | A4L11               | —        | 337 (329.5)   | -7.5               | 3.6           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4L12               | —        | 052 (044.3)   | -7.5               | 4.6           | —              | -7000         | —            | —              | RNAV1                    |
| 005           | TF               | A4L13               | —        | 097 (089.4)   | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | A4L14               | —        | 129 (121.2)   | -7.5               | 5.8           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | ROONY               | —        | 141 (133.2)   | -7.5               | 9.3           | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | CHUMS               | —        | 157 (149.7)   | -7.5               | 12.4          | —              | —             | —            | —              | RNAV1                    |
| 009           | TF               | OLVAN               | —        | 168 (160.6)   | -7.5               | 32.2          | —              | —             | —            | —              | RNAV1                    |

RWY34R

\*MUST be used for database coding.

| Serial Number | 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               | —                   | —        | 337 (329.6)   | -7.5               | —             | —              | +600          | —            | —              | RNAV1                    |
| 002           | DF               | BOXER               | Y        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 003           | TF               | A4R21               | —        | 337 (329.6)   | -7.5               | 3.8           | —              | —             | —            | —              | RNAV1                    |
| 004           | TF               | A4R22               | —        | 067 (059.3)   | -7.5               | 4.1           | —              | —             | —            | —              | RNAV1                    |
| 005           | TF               | A4R23               | —        | 112 (104.6)   | -7.5               | 3.7           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF               | PEGAS               | —        | 141 (133.4)   | -7.5               | 7.6           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF               | LUCCA               | —        | 157 (149.6)   | -7.5               | 11.5          | —              | —             | —            | —              | RNAV1                    |
| 008           | TF               | OLVAN               | —        | 157 (149.6)   | -7.5               | 34.0          | —              | —             | —            | —              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| A4L11               | 355915.6N / 1401249.1E | ARIES               | 355607.4N / 1401505.9E |
| A4L12               | 360232.6N / 1401646.8E | ASPEN               | 353451.0N / 1403028.1E |
| A4L13               | 360236.7N / 1402559.7E | BEAMS               | 353533.0N / 1403153.1E |
| A4L14               | 355937.8N / 1403205.0E | BOXER               | 355213.0N / 1401951.6E |
| A4R21               | 355529.4N / 1401729.2E | CHUMS               | 354237.0N / 1404806.0E |
| A4R22               | 355734.5N / 1402150.1E | LUCCA               | 354132.8N / 1404011.4E |
| A4R23               | 355638.8N / 1402614.7E | OLVAN               | 351214.1N / 1410111.3E |
| A6L21               | 353137.9N / 1403441.9E | PEGAS               | 355126.3N / 1403302.1E |
| A6R12               | 352543.5N / 1403700.7E | ROONY               | 355317.4N / 1404024.4E |

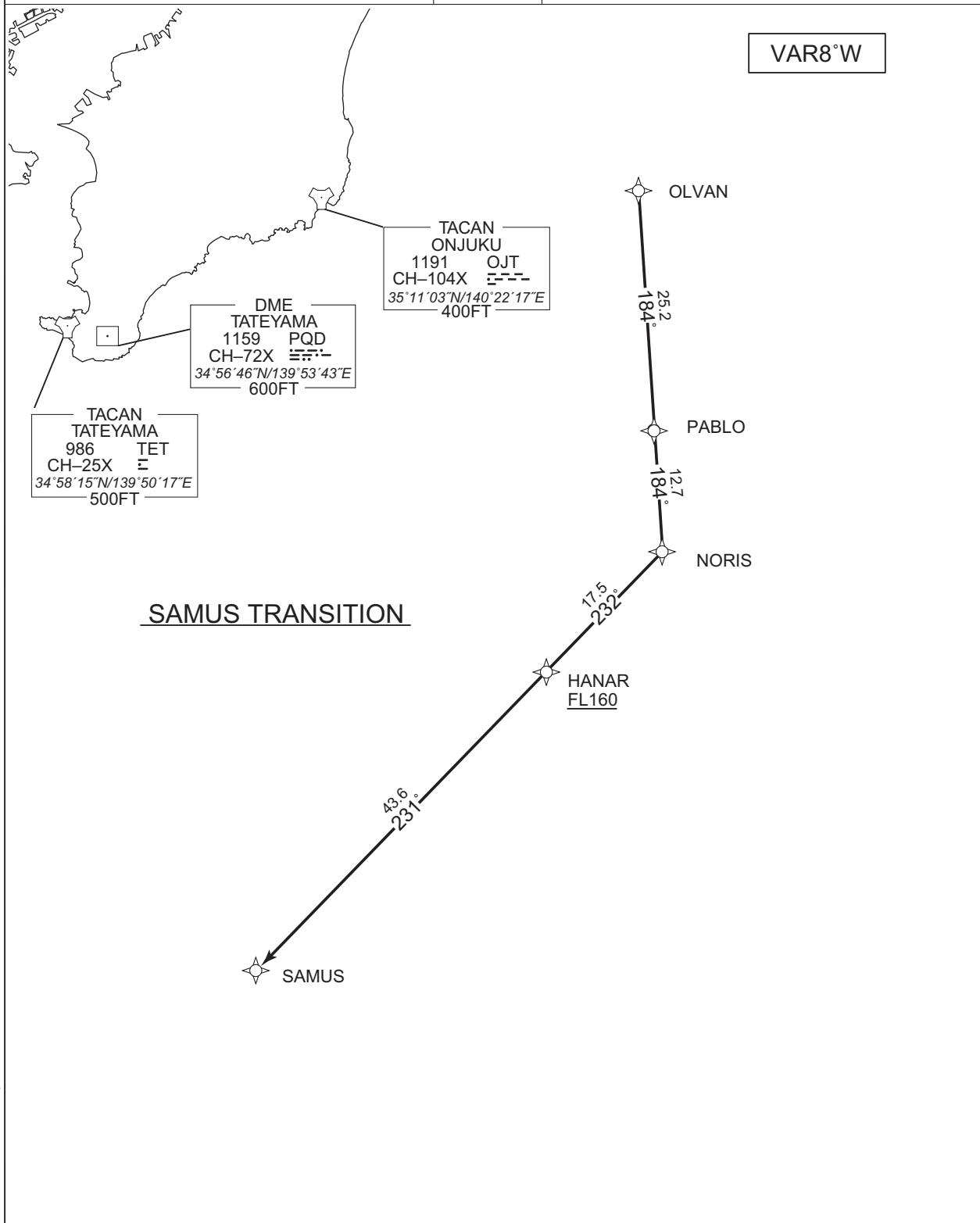
CHANGE : ALT Restriction on A4R23

## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV TRANSITION

| SAMUS 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 |



## STANDARD DEPARTURE CHART -INSTRUMENT

RJAA / NARITA INTL

RNAV TRANSITION

SAMUS TRANSITION

From OLVAN, to PABLO, to NORIS, to HANAR at or above FL160,  
to SAMUS.

| Serial Number | 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              | OLVAN               | —        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | PABLO               | —        | 184<br>(176.3) | -7.5               | 25.2          | —              | —             | —            | —              | RNAV1                    |
| 003           | TF              | NORIS               | —        | 184<br>(176.3) | -7.5               | 12.7          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | HANAR               | —        | 232<br>(224.0) | -7.5               | 17.5          | —              | +FL160        | —            | —              | RNAV1                    |
| 005           | TF              | SAMUS               | —        | 231<br>(223.8) | -7.5               | 43.6          | —              | —             | —            | —              | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| HANAR               | 342149.9N / 1404923.3E | PABLO               | 344705.1N / 1410309.6E |
| NORIS               | 343426.6N / 1410408.5E | SAMUS               | 335020.0N / 1401305.0E |
| OLVAN               | 351214.1N / 1410111.3E |                     |                        |

CHANGE : New PROC

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STANDARD ARRIVAL CHART -INSTRUMENT

RJAA / NARITA INTL

STAR

BOSPA SOUTH ALFA ARRIVAL

From over BOSPA, via NRE R095 to SIMAK, via NRE 21.0DME clockwise ARC to intercept and proceed via NRE R157 to GIINA.  
Cross BOSPA at or above 8000FT, cross GIINA at 4000FT.

BOSPA SOUTH BRAVO ARRIVAL

From over BOSPA, via NRE R095 to SIMAK, via NRE 21.0DME clockwise ARC to intercept and proceed via NRE R153 to TEMIS.  
Cross BOSPA at or above 8000FT, cross TEMIS at or above 5000FT.

BINKS SOUTH ALFA ARRIVAL

From over BINKS, via HDG007° to intercept and proceed via NRE R157 to GIINA.  
Cross GIINA at 4000FT.

BINKS SOUTH BRAVO ARRIVAL

From over BINKS, via HDG007° to intercept and proceed via NRE R153 to TEMIS.  
Cross TEMIS at or above 5000FT.

SWAMP SOUTH ALFA ARRIVAL

From over SWAMP, via NRE R022 to DANTE, via NRE 21.0DME clockwise ARC to intercept and proceed via NRE R157 to GIINA via SIMAK.  
Cross DANTE at or above 11000FT, cross SIMAK at or above 9000FT, cross GIINA at 4000FT.

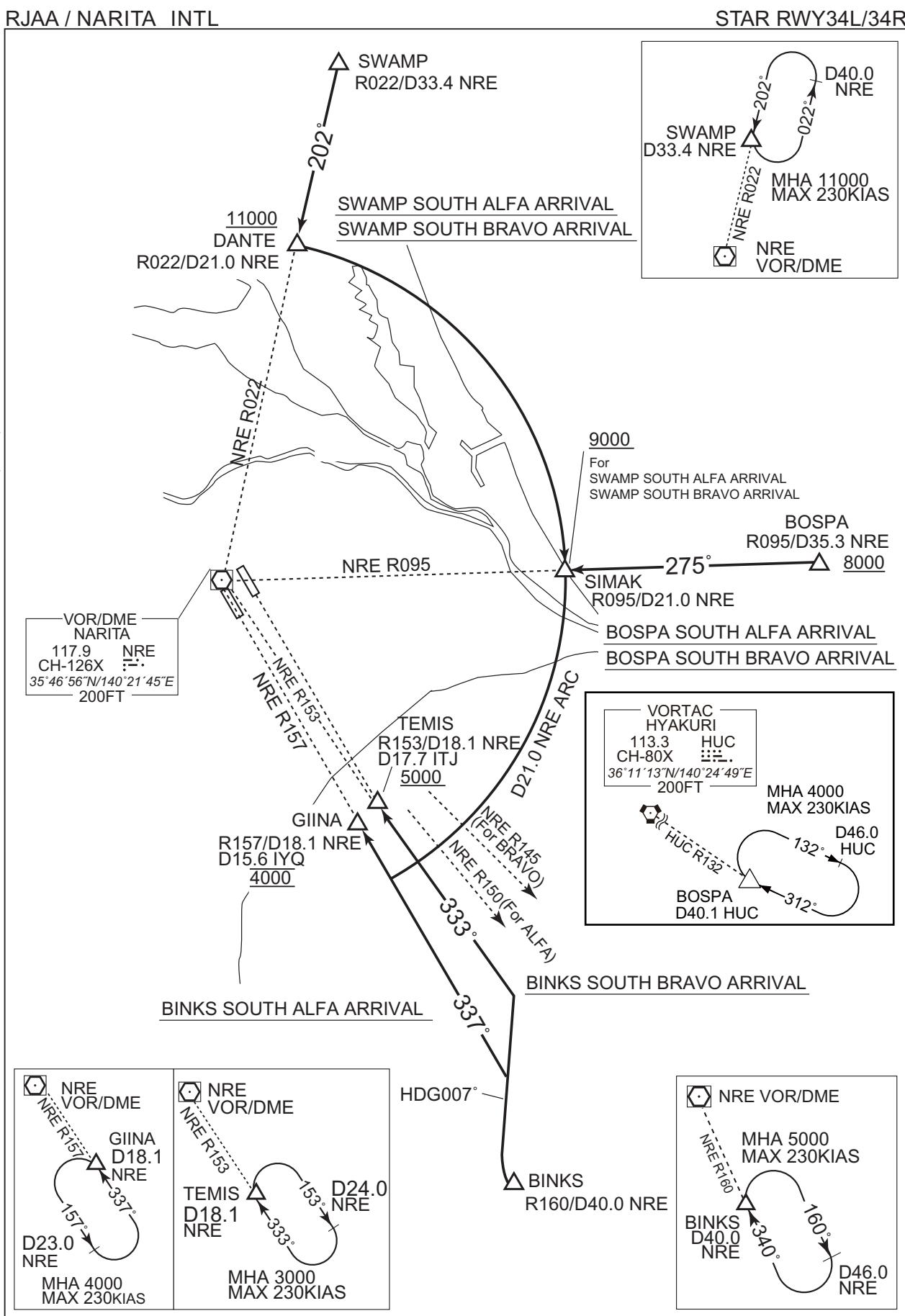
SWAMP SOUTH BRAVO ARRIVAL

From over SWAMP, via NRE R022 to DANTE, via NRE 21.0DME clockwise ARC to intercept and proceed via NRE R153 to TEMIS via SIMAK.  
Cross DANTE at or above 11000FT, cross SIMAK at or above 9000FT, cross TEMIS at or above 5000FT.

CHANGE : BOSPA SOUTH ALFA/BRAVO ARRIVAL established. ABBOT SOUTH ALFA/BRAVO ARRIVAL abolished.  
BINKS SOUTH BRAVO ARRIVAL. SWAMP SOUTH ALFA/BRAVO ARRIVAL.

## **STANDARD ARRIVAL CHART -INSTRUMENT**

**CHANGE : BOSPA SOUTH ALFA/BRAVO ARRIVAL** established. **ABBOT SOUTH ALFA/BRAVO ARRIVAL** abolished.  
**BINKS SOUTH BRAVO ARRIVAL**. **SWAMP SOUTH ALFA/BRAVO ARRIVAL HOKUSO VOR/DME(HKE)** abolished.



STANDARD ARRIVAL CHART -INSTRUMENT

RJAA / NARITA INTL

STAR

BOSPA NORTH ARRIVAL

From over BOSPA, via NRE R095 to intercept and proceed via NRE 12.8DME counterclockwise ARC to LAKES.

Cross BOSPA at or above 8000FT, cross LAKES at or above 6000FT.

BINKS NORTH ARRIVAL

From over BINKS, via NRE R160 to intercept and proceed via NRE 21.0DME counterclockwise ARC to SIMAK, via NRE R095 to intercept and proceed via NRE 12.8DME counterclockwise ARC to LAKES.

Cross LAKES at or above 6000FT.

LAKES NORTH ARRIVAL

From over SWAMP, via NRE R022 to DANTE, via NRE 21.0DME clockwise ARC to SIMAK, via NRE R095 to intercept and proceed via NRE 12.8DME counterclockwise ARC to LAKES.

Cross DANTE at or above 11000FT, cross SIMAK at or above 9000FT, cross LAKES at or above 6000FT.

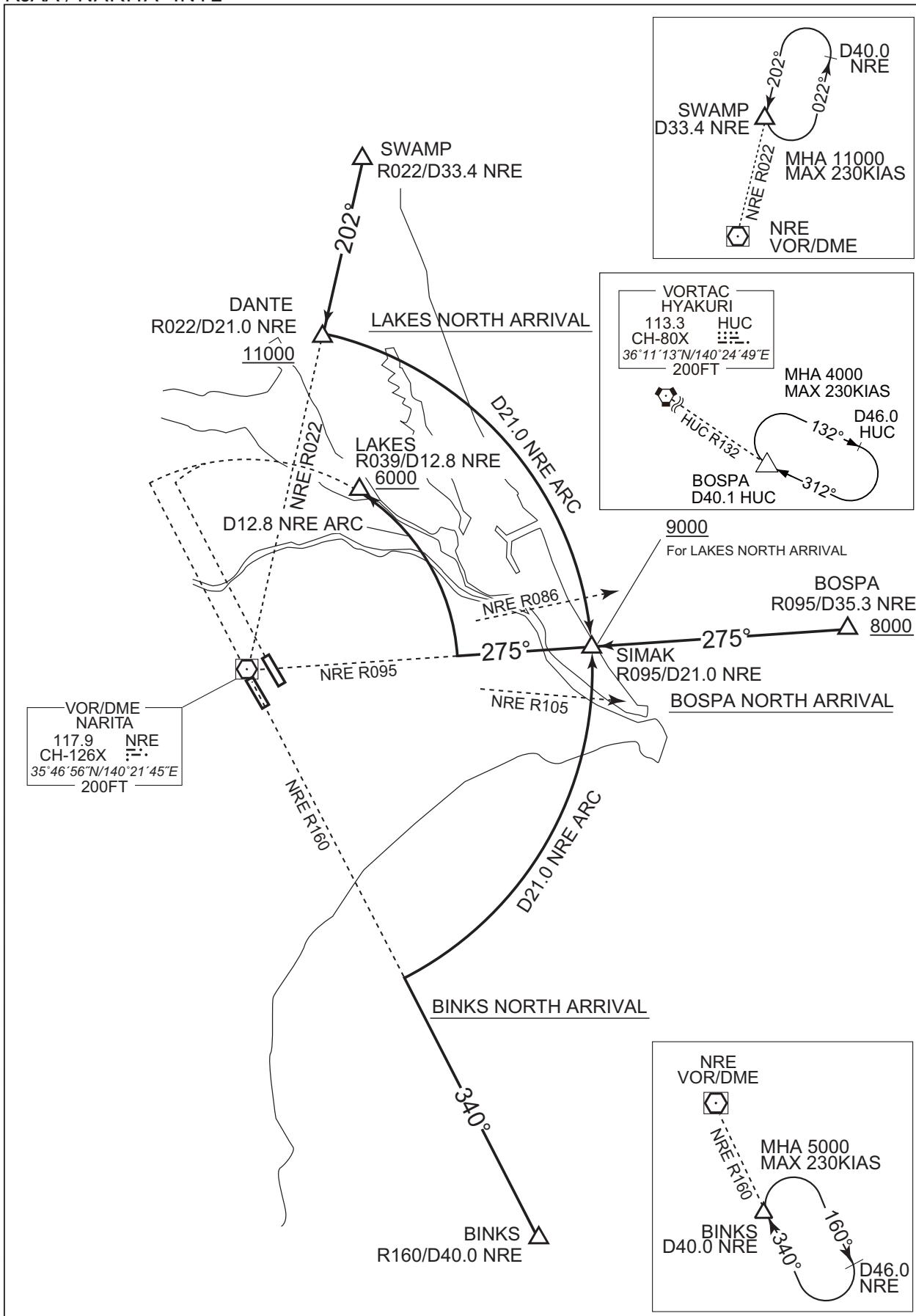
CHANGE : BOSPA NORTH ARRIVAL established. ABBOT NORTH ARRIVAL abolished. BINKS NORTH ARRIVAL abolished.

## STANDARD ARRIVAL CHART -INSTRUMENT

RJAA / NARITA INTL

STAR RWY16R/16L

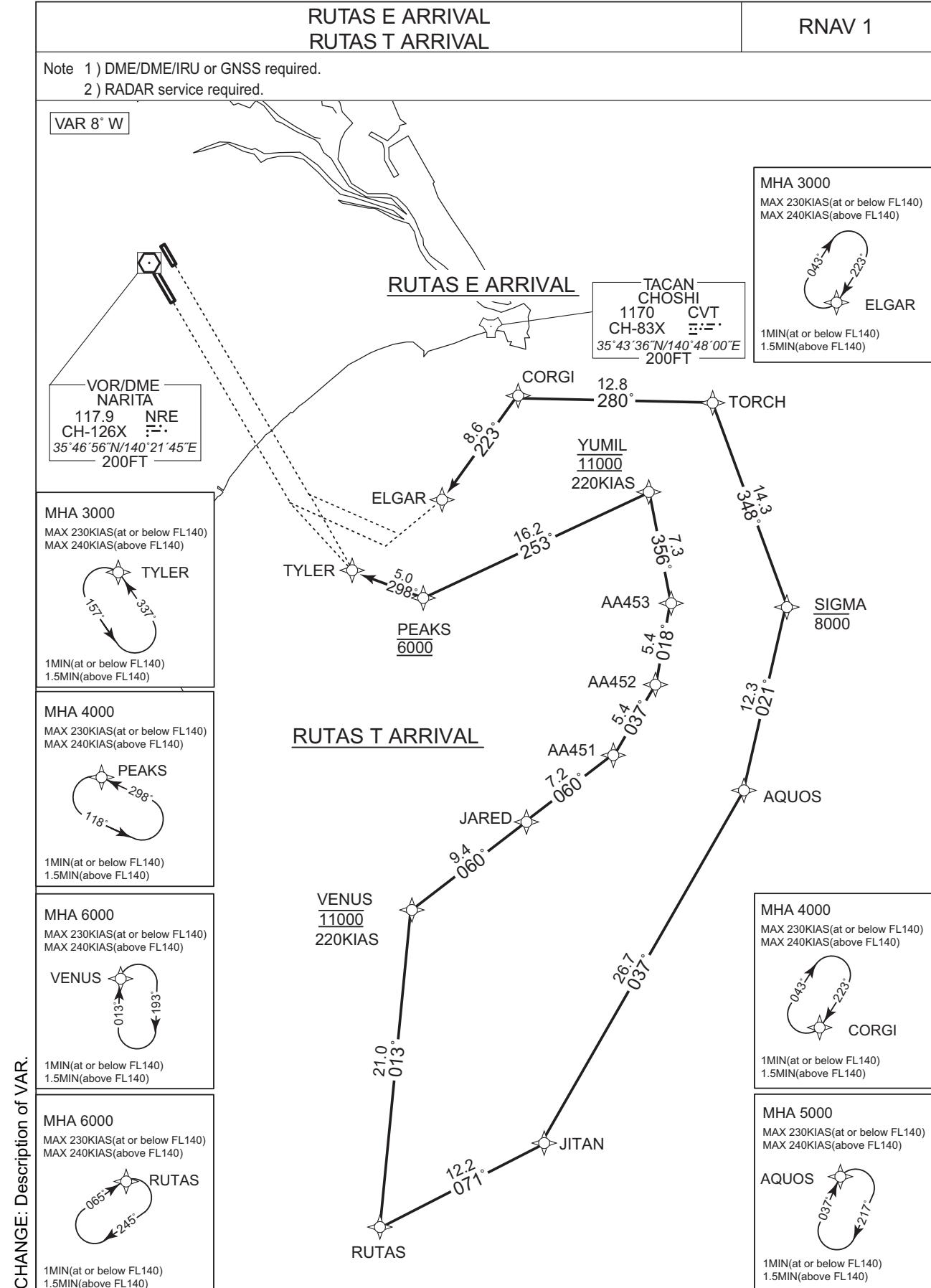
CHANGE : BOSPA NORTH ARRIVAL. HOKUSO VOR/DME(HKE) abolished. BINKS NORTH ARRIVAL.



STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R



## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

RUTAS E ARRIVAL

From RUTAS, to JITAN, to AQUOS, to SIGMA at or below 8000FT, to TORCH, to CORGI, to ELGAR.

|                       |   |
|-----------------------|---|
| 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              | RUTAS               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | JITAN               | -        | 071 (063.5)   | -7.5               | 12.2          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | AQUOS               | -        | 037 (029.1)   | -7.5               | 26.7          | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | SIGMA               | -        | 021 (013.8)   | -7.5               | 12.3          | -              | -8000         | -            | -              | RNAV1                    |
| 005           | TF              | TORCH               | -        | 348 (340.3)   | -7.5               | 14.3          | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | CORGİ               | -        | 280 (272.8)   | -7.5               | 12.8          | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | ELGAR               | -        | 223 (215.7)   | -7.5               | 8.6           | -              | -             | -            | -              | 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 | RUTAS               | 065 (057.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | AQUOS               | 037 (029.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CORGİ               | 223 (215.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ELGAR               | 223 (215.7)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

RUTAS T ARRIVAL

From RUTAS, to VENUS at 11000FT, to JARED, to AA451, to AA452, to AA453, to YUMIL at 11000FT, to PEAKS at 6000FT, to TYLER.

|                       |   |
|-----------------------|---|
| 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              | RUTAS               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VENUS               | -        | 013 (005.8)   | -7.5               | 21.0          | -              | 11000         | 220          | -              | RNAV1                    |
| 003           | TF              | JARED               | -        | 060 (052.3)   | -7.5               | 9.4           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | AA451               | -        | 060 (052.1)   | -7.5               | 7.2           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA452               | -        | 037 (029.7)   | -7.5               | 5.4           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA453               | -        | 018 (010.7)   | -7.5               | 5.4           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | YUMIL               | -        | 356 (348.2)   | -7.5               | 7.3           | -              | 11000         | 220          | -              | RNAV1                    |
| 008           | TF              | PEAKS               | -        | 253 (245.0)   | -7.5               | 16.2          | -              | 6000          | -            | -              | RNAV1                    |
| 009           | TF              | TYLER               | -        | 298 (290.2)   | -7.5               | 5.0           | -              | -             | -            | -              | 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 | RUTAS               | 065 (057.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | VENUS               | 013 (005.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PEAKS               | 298 (290.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | TYLER               | 337 (329.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE: JARED renamed. HLDG Pattern (PEAKS) established.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA451               | 351449.2N / 1405911.3E | PEAKS               | 352507.2N / 1404352.7E |
| AA452               | 351930.7N / 1410228.5E | RUTAS               | 344349.3N / 1404034.2E |
| AA453               | 352449.7N / 1410342.2E | SIGMA               | 352425.5N / 1411318.3E |
| AQUOS               | 351229.7N / 1410942.5E | TORCH               | 353752.8N / 1410721.7E |
| CORGİ               | 353829.8N / 1405138.9E | TYLER               | 352650.5N / 1403807.8E |
| ELGAR               | 353129.2N / 1404527.4E | VENUS               | 350440.1N / 1404309.7E |
| JARED               | 351024.8N / 1405215.4E | YUMIL               | 353158.6N / 1410151.7E |
| JITAN               | 344914.2N / 1405349.3E |                     |                        |

CHANGE: JARED renamed

## **STANDARD ARRIVAL CHART - INSTRUMENT**

RJAA / NARITA INTL

## RNAV STAR RWY34L/34R

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

RNAV 1

VAR 8° W

MHA 3000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

**MHA 3000**  
MAX 230KIAS(at or below FL140)  
MAX 210KIAS(above FL140)

TYLER

151°      331°

1MIN(at or below FL140)  
1.5MIN(above FL140)

MHA 6000  
 MAX 230KIAS(at or below FL140)  
 MAX 240KIAS(above FL140)



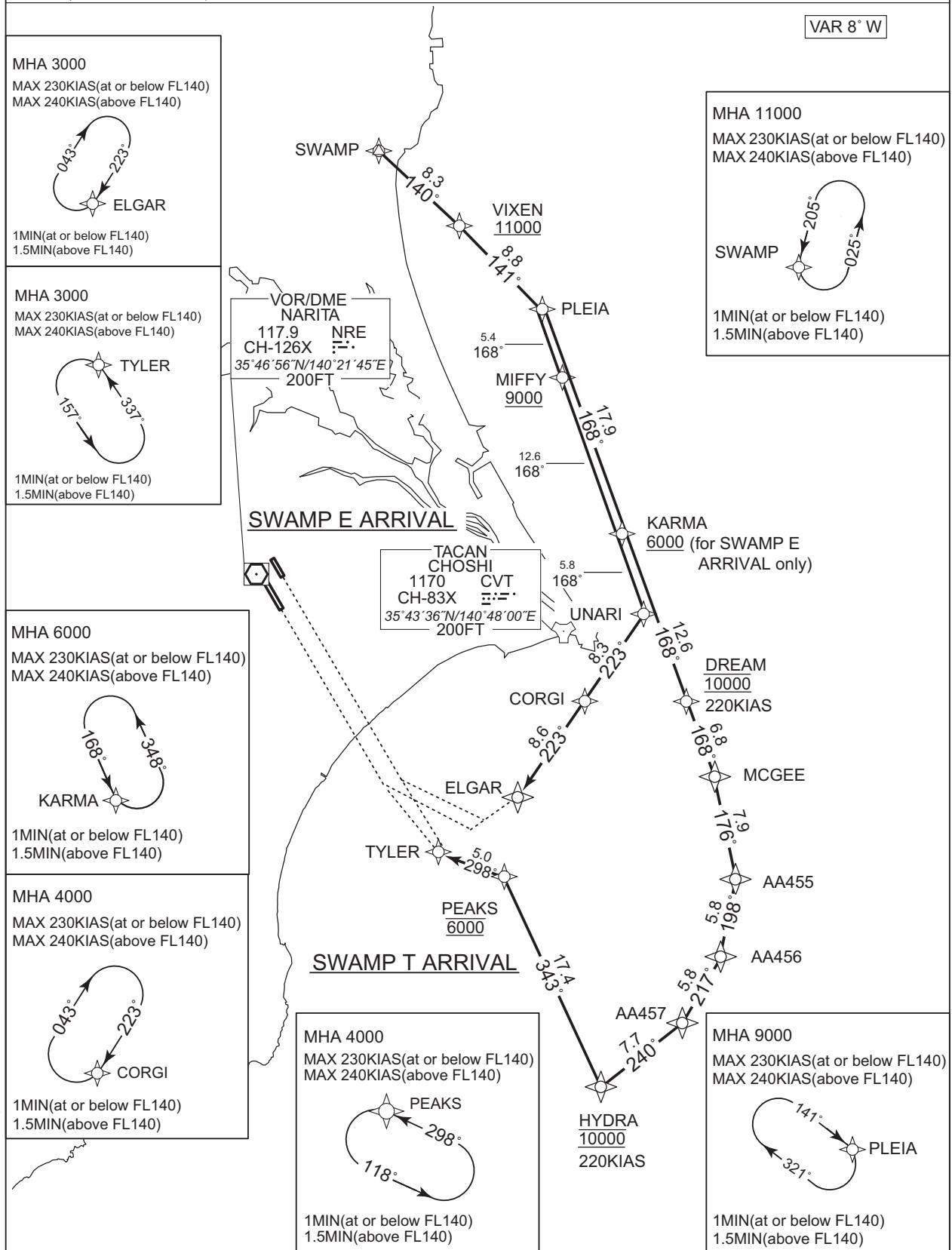
168°                  348°

KARMA

1MIN(at or below FL140)  
 1.5MIN(above FL140)

MHA 4000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

## CHANGE: Description of VAR.



## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

SWAMP E ARRIVAL

From SWAMP, to VIXEN at or above 11000FT, to PLEIA, to MIFFY at or above 9000FT, to KARMA at or above 6000FT, to UNARI, to CORGI, to ELGAR.

|                       |   |
|-----------------------|---|
| 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              | SWAMP               | -        | -              | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VIXEN               | -        | 140<br>(133.0) | -7.5               | 8.3           | -              | +11000        | -            | -              | RNAV1                    |
| 003           | TF              | PLEIA               | -        | 141<br>(133.0) | -7.5               | 8.8           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | MIFFY               | -        | 168<br>(160.3) | -7.5               | 5.4           | -              | +9000         | -            | -              | RNAV1                    |
| 005           | TF              | KARMA               | -        | 168<br>(160.3) | -7.5               | 12.6          | -              | +6000         | -            | -              | RNAV1                    |
| 006           | TF              | UNARI               | -        | 168<br>(160.4) | -7.5               | 5.8           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | CORGI               | -        | 223<br>(215.8) | -7.5               | 8.3           | -              | -             | -            | -              | RNAV1                    |
| 008           | TF              | ELGAR               | -        | 223<br>(215.7) | -7.5               | 8.6           | -              | -             | -            | -              | 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 | SWAMP               | 205<br>(197.0)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PLEIA               | 141<br>(133.1)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 9000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | KARMA               | 168<br>(160.3)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CORGI               | 223<br>(215.8)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ELGAR               | 223<br>(215.7)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : New PROC

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

SWAMP T ARRIVAL

From SWAMP, to VIXEN at or above 11000FT, to PLEIA, to KARMA, to DREAM at 10000FT, to MCGEE, to AA455, to AA456, to AA457, to HYDRA at 10000FT, to PEAKS at 6000FT, to TYLER.

|                       |   |
|-----------------------|---|
| 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              | SWAMP               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VIXEN               | -        | 140 (133.0)   | -7.5               | 8.3           | -              | +11000        | -            | -              | RNAV1                    |
| 003           | TF              | PLEIA               | -        | 141 (133.0)   | -7.5               | 8.8           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | KARMA               | -        | 168 (160.3)   | -7.5               | 17.9          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | DREAM               | -        | 168 (160.4)   | -7.5               | 12.6          | -              | 10000         | 220          | -              | RNAV1                    |
| 006           | TF              | MCGEE               | -        | 168 (160.4)   | -7.5               | 6.8           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | AA455               | -        | 176 (168.2)   | -7.5               | 7.9           | -              | -             | -            | -              | RNAV1                    |
| 008           | TF              | AA456               | -        | 198 (190.7)   | -7.5               | 5.8           | -              | -             | -            | -              | RNAV1                    |
| 009           | TF              | AA457               | -        | 217 (209.8)   | -7.5               | 5.8           | -              | -             | -            | -              | RNAV1                    |
| 010           | TF              | HYDRA               | -        | 240 (232.1)   | -7.5               | 7.7           | -              | 10000         | 220          | -              | RNAV1                    |
| 011           | TF              | PEAKS               | -        | 343 (335.1)   | -7.5               | 17.4          | -              | 6000          | -            | -              | RNAV1                    |
| 012           | TF              | TYLER               | -        | 298 (290.2)   | -7.5               | 5.0           | -              | -             | -            | -              | RNAV1                    |

CHANGE: MCGEE renamed. HLDG Pattern (PEAKS) 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 | SWAMP               | 205 (197.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PLEIA               | 141 (133.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 9000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | KARMA               | 168 (160.3)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PEAKS               | 298 (290.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | TYLER               | 337 (329.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

Waypoint Coordinates

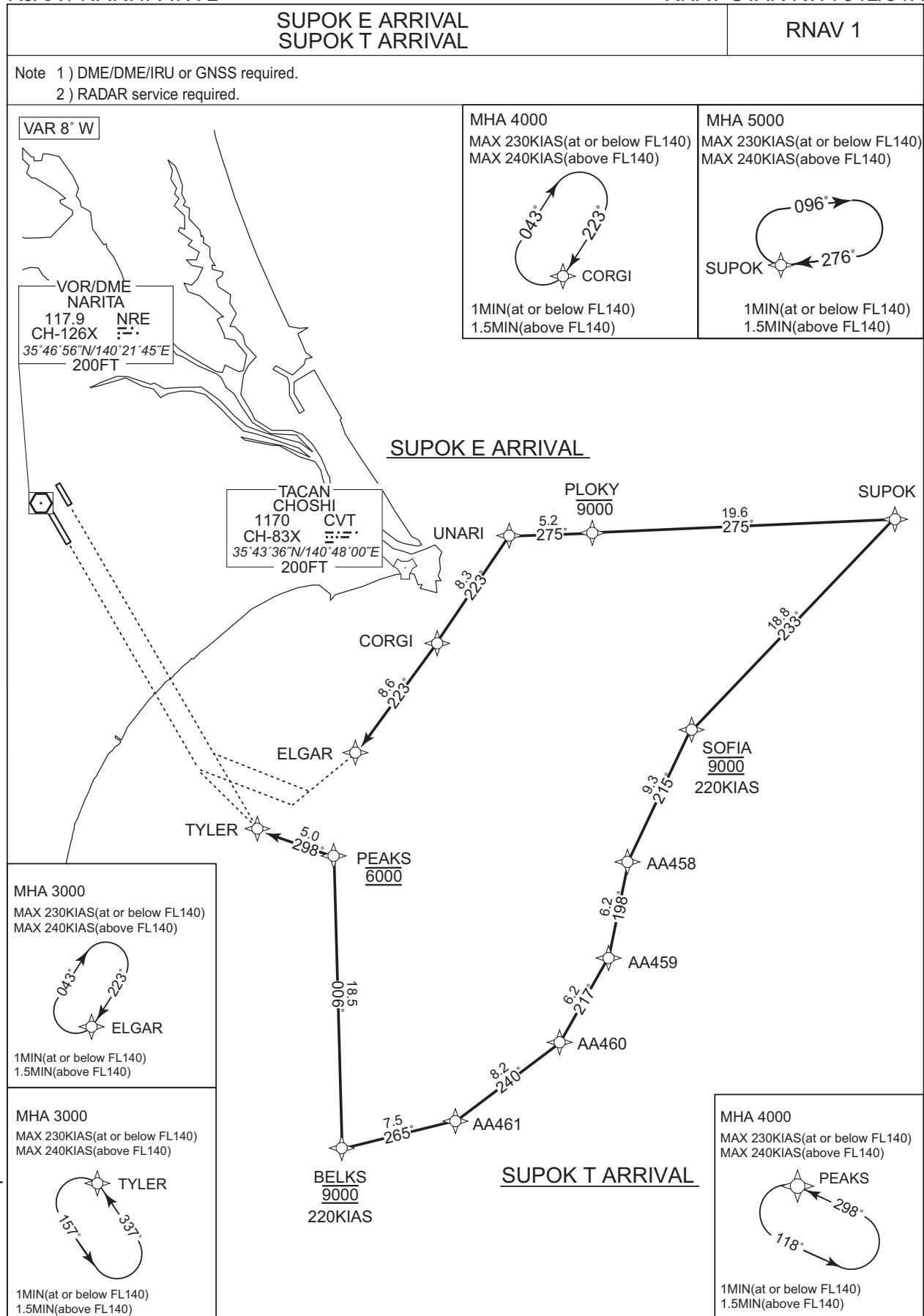
| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA455               | 352448.3N / 1410510.3E | MCGEE               | 353229.0N / 1410311.8E |
| AA456               | 351905.7N / 1410351.0E | MIFFY               | 360232.1N / 1404959.5E |
| AA457               | 351403.4N / 1410019.2E | PEAKS               | 352507.2N / 1404352.7E |
| CORGI               | 353829.8N / 1405138.9E | PLEIA               | 360734.8N / 1404745.4E |
| DREAM               | 353853.3N / 1410023.9E | SWAMP               | 361914.4N / 1403217.0E |
| ELGAR               | 353129.2N / 1404527.4E | TYLER               | 352650.5N / 1403807.8E |
| HYDRA               | 350919.4N / 1405252.5E | UNARI               | 354513.8N / 1405737.1E |
| KARMA               | 355042.9N / 1405512.4E | VIXEN               | 361335.9N / 1403947.1E |

CHANGE : MCGEE renamed

STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R



CHANGE: Description of VAR.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

SUPOK E ARRIVAL

From SUPOK, to PLOKY at or below 9000FT, to UNARI, to CORGI, to ELGAR.

|                       |   |
|-----------------------|---|
| 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              | SUPOK               | -        | -              | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | PLOKY               | -        | 275<br>(267.9) | -7.5               | 19.6          | -              | -9000         | -            | -              | RNAV1                    |
| 003           | TF              | UNARI               | -        | 275<br>(267.4) | -7.5               | 5.2           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | CORGI               | -        | 223<br>(215.8) | -7.5               | 8.3           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | ELGAR               | -        | 223<br>(215.7) | -7.5               | 8.6           | -              | -             | -            | -              | 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 | SUPOK               | 276<br>(268.6)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CORGI               | 223<br>(215.8)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ELGAR               | 223<br>(215.7)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

SUPOK T ARRIVAL

From SUPOK, to SOFIA at 9000FT, to AA458, to AA459, to AA460, to AA461, to BELKS at 9000FT, to PEAKS at 6000FT, to TYLER.

|                       |   |
|-----------------------|---|
| 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              | SUPOK               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | SOFIA               | -        | 233 (225.2)   | -7.5               | 18.8          | -              | 9000          | 220          | -              | RNAV1                    |
| 003           | TF              | AA458               | -        | 215 (207.2)   | -7.5               | 9.3           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | AA459               | -        | 198 (190.7)   | -7.5               | 6.2           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA460               | -        | 217 (209.8)   | -7.5               | 6.2           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA461               | -        | 240 (232.2)   | -7.5               | 8.2           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | BELKS               | -        | 265 (257.8)   | -7.5               | 7.5           | -              | 9000          | 220          | -              | RNAV1                    |
| 008           | TF              | PEAKS               | -        | 006 (358.3)   | -7.5               | 18.5          | -              | 6000          | -            | -              | RNAV1                    |
| 009           | TF              | TYLER               | -        | 298 (290.2)   | -7.5               | 5.0           | -              | -             | -            | -              | 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 | SUPOK               | 276 (268.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PEAKS               | 298 (290.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | TYLER               | 337 (329.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA458               | 352446.9N / 1410638.5E | PEAKS               | 352507.2N / 1404352.7E |
| AA459               | 351840.7N / 1410513.6E | PLOKY               | 354528.3N / 1410402.3E |
| AA460               | 351317.5N / 1410127.0E | SOFIA               | 353300.1N / 1411149.9E |
| AA461               | 350814.0N / 1405329.6E | SUPOK               | 354614.1N / 1412810.0E |
| BELKS               | 350638.5N / 1404433.3E | TYLER               | 352650.5N / 1403807.8E |
| CORGI               | 353829.8N / 1405138.9E | UNARI               | 354513.8N / 1405737.1E |
| ELGAR               | 353129.2N / 1404527.4E |                     |                        |

CHANGE : HLDG Pattern (PEAKS) established

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

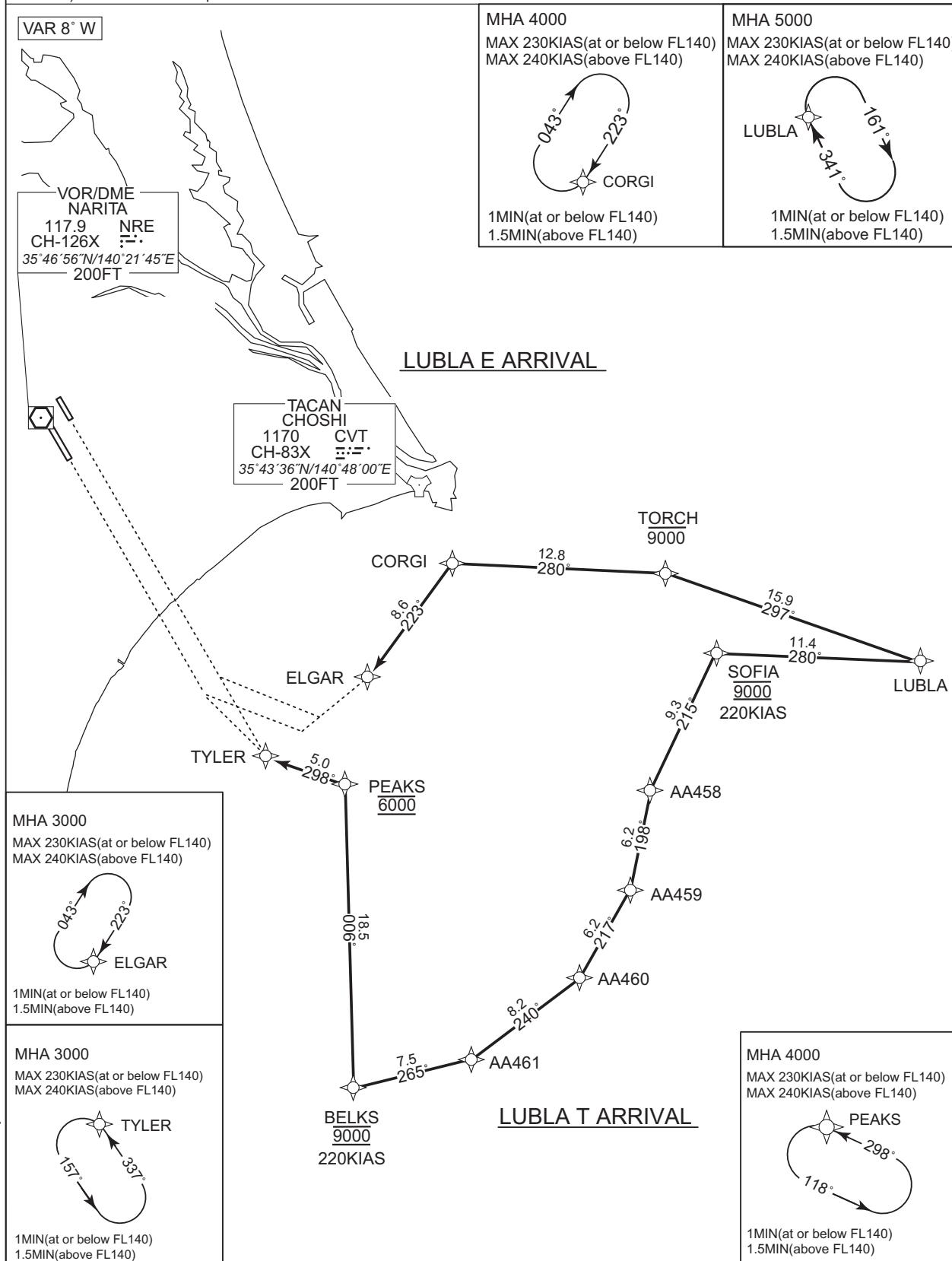
RNAV STAR RWY34L/34R

LUBLA E ARRIVAL  
LUBLA T ARRIVAL

RNAV 1

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

2) RADAR service required.



CHANGE: Description of VAR.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

LUBLA E ARRIVAL

From LUBLA, to TORCH at or below 9000FT, to CORGI, to ELGAR.

|                       |   |
|-----------------------|---|
| 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              | LUBLA               | —        | —              | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | TORCH               | —        | 297<br>(289.5) | -7.5               | 15.9          | —              | -9000         | —            | —              | RNAV1                    |
| 003           | TF              | CORGI               | —        | 280<br>(272.8) | -7.5               | 12.8          | —              | —             | —            | —              | RNAV1                    |
| 004           | TF              | ELGAR               | —        | 223<br>(215.7) | -7.5               | 8.6           | —              | —             | —            | —              | 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 | LUBLA               | 341<br>(333.9)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CORGI               | 223<br>(215.8)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ELGAR               | 223<br>(215.7)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 3000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY34L/34R

LUBLA T ARRIVAL

From LUBLA, to SOFIA at 9000FT, to AA458, to AA459, to AA460, to AA461, to BELKS at 9000FT, to PEAKS at 6000FT, to TYLER.

|                       |   |
|-----------------------|---|
| 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              | LUBLA               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | SOFIA               | -        | 280 (272.2)   | -7.5               | 11.4          | -              | 9000          | 220          | -              | RNAV1                    |
| 003           | TF              | AA458               | -        | 215 (207.2)   | -7.5               | 9.3           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | AA459               | -        | 198 (190.7)   | -7.5               | 6.2           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA460               | -        | 217 (209.8)   | -7.5               | 6.2           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA461               | -        | 240 (232.2)   | -7.5               | 8.2           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | BELKS               | -        | 265 (257.8)   | -7.5               | 7.5           | -              | 9000          | 220          | -              | RNAV1                    |
| 008           | TF              | PEAKS               | -        | 006 (358.3)   | -7.5               | 18.5          | -              | 6000          | -            | -              | RNAV1                    |
| 009           | TF              | TYLER               | -        | 298 (290.2)   | -7.5               | 5.0           | -              | -             | -            | -              | 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 | LUBLA               | 341 (333.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PEAKS               | 298 (290.2)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | TYLER               | 337 (329.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 3000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA458               | 352446.9N / 1410638.5E | ELGAR               | 353129.2N / 1404527.4E |
| AA459               | 351840.7N / 1410513.6E | LUBLA               | 353235.0N / 1412550.8E |
| AA460               | 351317.5N / 1410127.0E | PEAKS               | 352507.2N / 1404352.7E |
| AA461               | 350814.0N / 1405329.6E | SOFIA               | 353300.1N / 1411149.9E |
| BELKS               | 350638.5N / 1404433.3E | TORCH               | 353752.8N / 1410721.7E |
| CORG                | 353829.8N / 1405138.9E | TYLER               | 352650.5N / 1403807.8E |

STANDARD ARRIVAL CHART - INSTRUMENT

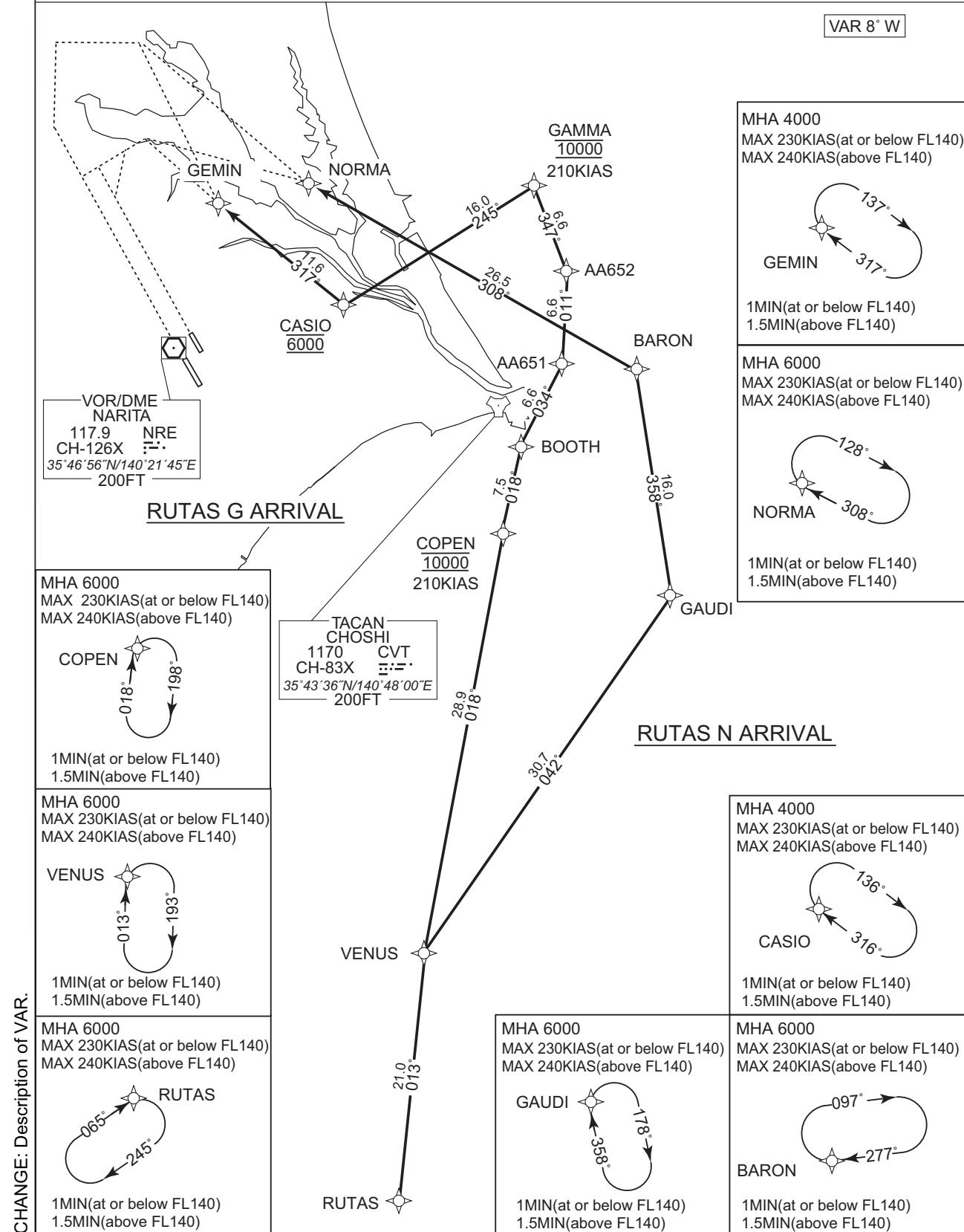
RJAA / NARITA INTL

RNAV STAR RWY16R/16L

RUTAS G ARRIVAL  
RUTAS N ARRIVAL

RNAV 1

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



## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

RUTAS G ARRIVAL

From RUTAS, to VENUS, to COPEN at 10000FT, to BOOTH, to AA651, to AA652, to GAMMA at 10000FT, to CASIO at 6000FT, to GEMIN.

|                       |   |
|-----------------------|---|
| 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              | RUTAS               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VENUS               | -        | 013 (005.8)   | -7.5               | 21.0          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | COPEN               | -        | 018 (010.5)   | -7.5               | 28.9          | -              | 10000         | 210          | -              | RNAV1                    |
| 004           | TF              | BOOTH               | -        | 018 (010.6)   | -7.5               | 7.5           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA651               | -        | 034 (026.6)   | -7.5               | 6.6           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA652               | -        | 011 (003.1)   | -7.5               | 6.6           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | GAMMA               | -        | 347 (339.6)   | -7.5               | 6.6           | -              | 10000         | 210          | -              | RNAV1                    |
| 008           | TF              | CASIO               | -        | 245 (237.6)   | -7.5               | 16.0          | -              | 6000          | -            | -              | RNAV1                    |
| 009           | TF              | GEMIN               | -        | 317 (309.1)   | -7.5               | 11.6          | -              | -             | -            | -              | 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 | RUTAS               | 065 (057.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | VENUS               | 013 (005.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | COPEN               | 018 (010.5)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CASIO               | 316 (308.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GEMIN               | 317 (309.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : BOOTH renamed

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

RUTAS N ARRIVAL

From RUTAS, to VENUS, to GAUDI, to BARON, to NORMA.

|                       |   |
|-----------------------|---|
| 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              | RUTAS               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VENUS               | -        | 013 (005.8)   | -7.5               | 21.0          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | GAUDI               | -        | 042 (034.1)   | -7.5               | 30.7          | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | BARON               | -        | 358 (351.0)   | -7.5               | 16.0          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | NORMA               | -        | 308 (300.0)   | -7.5               | 26.5          | -              | -             | -            | -              | 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 | RUTAS               | 065 (057.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | VENUS               | 013 (005.8)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GAUDI               | 358 (351.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | BARON               | 277 (270.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NORMA               | 308 (300.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA651               | 354615.0N / 1405457.4E | GAMMA               | 355856.3N / 1405234.6E |
| AA652               | 355247.8N / 1405523.8E | GAUDI               | 353002.4N / 1410418.1E |
| BARON               | 354551.0N / 1410112.0E | GEMIN               | 355738.6N / 1402450.7E |
| BOOTH               | 354023.6N / 1405120.5E | NORMA               | 355900.8N / 1403254.0E |
| CASIO               | 355021.4N / 1403556.1E | RUTAS               | 344349.3N / 1404034.2E |
| COPEN               | 353303.7N / 1404939.2E | VENUS               | 350440.1N / 1404309.7E |

CHANGE : BOOTH renamed

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

SWAMP G ARRIVAL  
SWAMP N ARRIVAL

RNAV 1

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

2) RADAR service required.

MHA 11000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

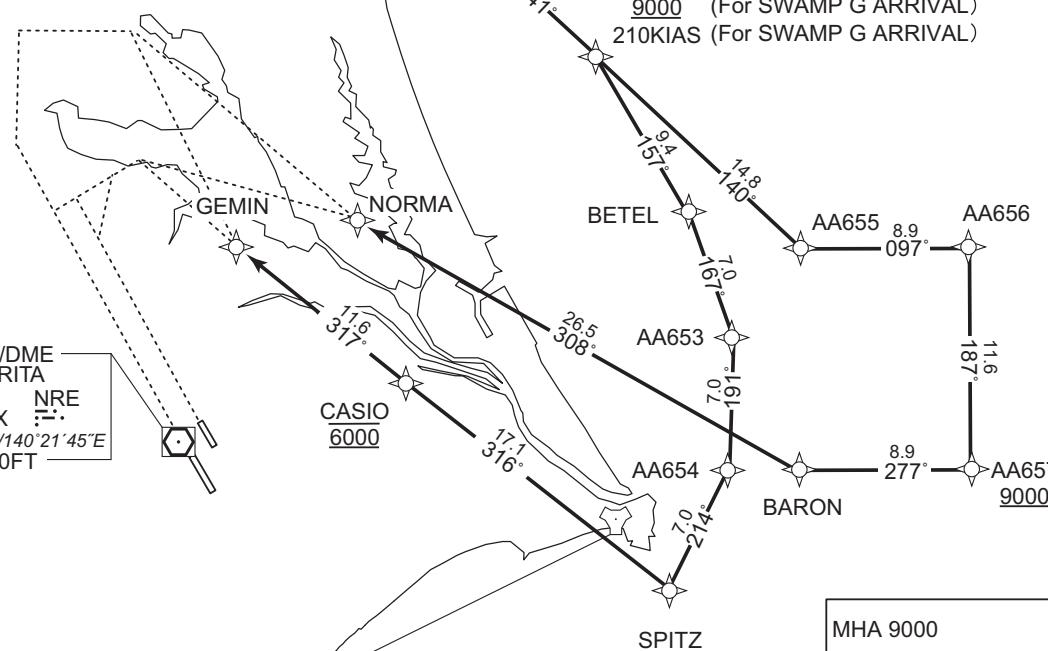
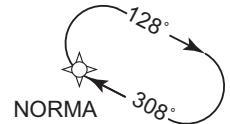
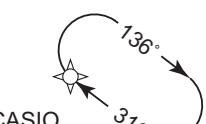
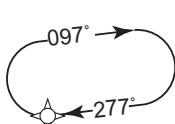
VAR 8° W

SWAMP  
205°  
025°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

SWAMP

VIXEN

11000

SWAMP N ARRIVALPLEIA  
9000 (For SWAMP G ARRIVAL)  
210KIAS (For SWAMP G ARRIVAL)MHA 9000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)1MIN(at or below FL140)  
1.5MIN(above FL140)MHA 4000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)1MIN(at or below FL140)  
1.5MIN(above FL140)MHA 6000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)1MIN(at or below FL140)  
1.5MIN(above FL140)MHA 4000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)1MIN(at or below FL140)  
1.5MIN(above FL140)MHA 6000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)1MIN(at or below FL140)  
1.5MIN(above FL140)

CHANGE: Description of VAR.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

SWAMP G ARRIVAL

From SWAMP, to VIXEN at or above 11000FT, to PLEIA at 9000FT, to BETEL, to AA653, to AA654, to SPITZ at 9000FT, to CASIO at 6000FT, to GEMIN.

|                       |   |
|-----------------------|---|
| 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              | SWAMP               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VIXEN               | -        | 140 (133.0)   | -7.5               | 8.3           | -              | +11000        | -            | -              | RNAV1                    |
| 003           | TF              | PLEIA               | -        | 141 (133.0)   | -7.5               | 8.8           | -              | 9000          | 210          | -              | RNAV1                    |
| 004           | TF              | BETEL               | -        | 157 (149.1)   | -7.5               | 9.4           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA653               | -        | 167 (159.6)   | -7.5               | 7.0           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA654               | -        | 191 (183.1)   | -7.5               | 7.0           | -              | -             | -            | -              | RNAV1                    |
| 007           | TF              | SPITZ               | -        | 214 (206.6)   | -7.5               | 7.0           | -              | 9000          | 210          | -              | RNAV1                    |
| 008           | TF              | CASIO               | -        | 316 (308.6)   | -7.5               | 17.1          | -              | 6000          | -            | -              | RNAV1                    |
| 009           | TF              | GEMIN               | -        | 317 (309.1)   | -7.5               | 11.6          | -              | -             | -            | -              | 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 | SWAMP               | 205 (197.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PLEIA               | 141 (133.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 9000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CASIO               | 316 (308.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GEMIN               | 317 (309.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : New PROC

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

SWAMP N ARRIVAL

From SWAMP, to VIXEN at or above 11000FT, to PLEIA, to AA655, to AA656, to AA657 at or above 9000FT, to BARON, to NORMA.

|                       |   |
|-----------------------|---|
| 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              | SWAMP               | -        | -              | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | VIXEN               | -        | 140<br>(133.0) | -7.5               | 8.3           | -              | +11000        | -            | -              | RNAV1                    |
| 003           | TF              | PLEIA               | -        | 141<br>(133.0) | -7.5               | 8.8           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | AA655               | -        | 140<br>(132.9) | -7.5               | 14.8          | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA656               | -        | 097<br>(089.9) | -7.5               | 8.9           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | AA657               | -        | 187<br>(180.0) | -7.5               | 11.6          | -              | +9000         | -            | -              | RNAV1                    |
| 007           | TF              | BARON               | -        | 277<br>(270.0) | -7.5               | 8.9           | -              | -             | -            | -              | RNAV1                    |
| 008           | TF              | NORMA               | -        | 308<br>(300.0) | -7.5               | 26.5          | -              | -             | -            | -              | 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 | SWAMP               | 205<br>(197.0)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | L              | 11000                 | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PLEIA               | 141<br>(133.1)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 9000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | BARON               | 277<br>(270.0)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NORMA               | 308<br>(300.0)        | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA653               | 355257.7N / 1405644.1E | CASIO               | 355021.4N / 1403556.1E |
| AA654               | 354557.9N / 1405615.8E | GEMIN               | 355738.6N / 1402450.7E |
| AA655               | 355728.9N / 1410110.3E | NORMA               | 355900.8N / 1403254.0E |
| AA656               | 355729.4N / 1411209.0E | PLEIA               | 360734.8N / 1404745.4E |
| AA657               | 354551.6N / 1411209.1E | SPITZ               | 353942.4N / 1405223.9E |
| BARON               | 354551.0N / 1410112.0E | SWAMP               | 361914.4N / 1403217.0E |
| BETEL               | 355931.6N / 1405343.4E | VIXEN               | 361335.9N / 1403947.1E |

STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

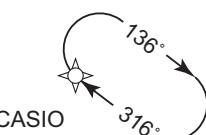
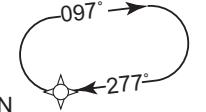
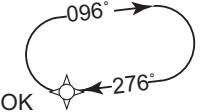
RNAV STAR RWY16R/16L

SUPOK G ARRIVAL  
SUPOK N ARRIVAL

RNAV 1

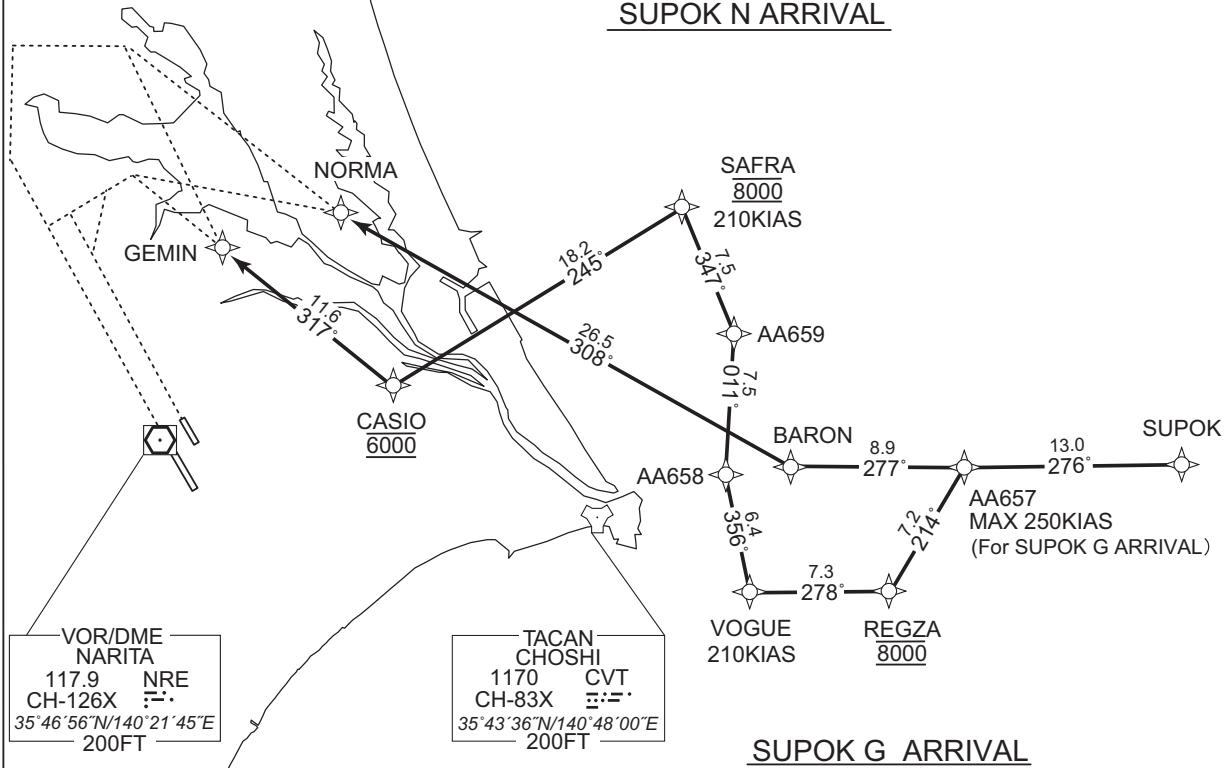
Note 1) DME/DME/IRU or GNSS required.

2) RADAR service required.

|  |  |   |  |
|--|--|---|--|
|  | MHA 4000<br>MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)   | MHA 6000<br>MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)  | MHA 5000<br>MAX 230KIAS(at or below FL140)<br>MAX 240KIAS(above FL140)   |
|  | CASIO<br><br>1MIN(at or below FL140)<br>1.5MIN(above FL140) | BARON<br><br>1MIN(at or below FL140)<br>1.5MIN(above FL140) | SUPOK<br><br>1MIN(at or below FL140)<br>1.5MIN(above FL140) |

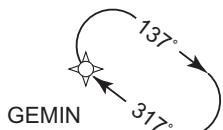
VAR 8° W

SUPOK N ARRIVAL



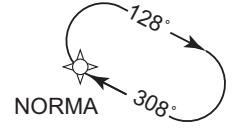
SUPOK G ARRIVAL

MHA 4000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)



1MIN(at or below FL140)  
1.5MIN(above FL140)

MHA 6000  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)



1MIN(at or below FL140)  
1.5MIN(above FL140)

CHANGE: Description of VAR.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

SUPOK G ARRIVAL

From SUPOK, to AA657, to REGZA at 8000FT, to VOGUE, to AA658, to AA659, to SAFRA at 8000FT, to CASIO at 6000FT, to GEMIN.

|                       |   |
|-----------------------|---|
| 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              | SUPOK               | —        | —             | -7.5               | —             | —              | —             | —            | —              | RNAV1                    |
| 002           | TF              | AA657               | —        | 276 (268.4)   | -7.5               | 13.0          | —              | —             | -250         | —              | RNAV1                    |
| 003           | TF              | REGZA               | —        | 214 (206.8)   | -7.5               | 7.2           | —              | 8000          | —            | —              | RNAV1                    |
| 004           | TF              | VOGUE               | —        | 278 (270.3)   | -7.5               | 7.3           | —              | —             | 210          | —              | RNAV1                    |
| 005           | TF              | AA658               | —        | 356 (348.4)   | -7.5               | 6.4           | —              | —             | —            | —              | RNAV1                    |
| 006           | TF              | AA659               | —        | 011 (003.1)   | -7.5               | 7.5           | —              | —             | —            | —              | RNAV1                    |
| 007           | TF              | SAFRA               | —        | 347 (339.6)   | -7.5               | 7.5           | —              | 8000          | 210          | —              | RNAV1                    |
| 008           | TF              | CASIO               | —        | 245 (237.6)   | -7.5               | 18.2          | —              | 6000          | —            | —              | RNAV1                    |
| 009           | TF              | GEMIN               | —        | 317 (309.1)   | -7.5               | 11.6          | —              | —             | —            | —              | 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 | SUPOK               | 276 (268.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CASIO               | 316 (308.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GEMIN               | 317 (309.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

SUPOK N ARRIVAL

From SUPOK, to AA657, to BARON, to NORMA.

|                       |   |
|-----------------------|---|
| 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              | SUPOK               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | AA657               | -        | 276 (268.4)   | -7.5               | 13.0          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | BARON               | -        | 277 (270.0)   | -7.5               | 8.9           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | NORMA               | -        | 308 (300.0)   | -7.5               | 26.5          | -              | -             | -            | -              | 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 | SUPOK               | 276 (268.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | BARON               | 277 (270.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NORMA               | 308 (300.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA657               | 354551.6N / 1411209.1E | NORMA               | 355900.8N / 1403254.0E |
| AA658               | 354540.9N / 1405734.1E | REGZA               | 353925.8N / 1410809.1E |
| AA659               | 355307.6N / 1405804.5E | SAFRA               | 360006.9N / 1405452.2E |
| BARON               | 354551.0N / 1410112.0E | SUPOK               | 354614.1N / 1412810.0E |
| CASIO               | 355021.4N / 1403556.1E | VOGUE               | 353927.6N / 1405908.4E |
| GEMIN               | 355738.6N / 1402450.7E |                     |                        |

## **STANDARD ARRIVAL CHART - INSTRUMENT**

RJAA / NARITA INTL

**RNAV STAR RWY16R/16L**

RNAV 1

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

2 ) RADAR service required.

**LUBLA N ARRIVAL**

**LUBLA G ARRIVAL**

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

**TACAN CHOSHI**  
1170 CH-83X  
35°43'36"N/140°48'00"E  
200FT

**MHA 4000**  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

**MHA 6000**  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

**MHA 5000**  
MAX 230KIAS(at or below FL140)  
MAX 240KIAS(above FL140)

**CASIO**  
136°  
376°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

**BARON**  
097°  
277°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

**LUBLA**  
161°  
341°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

**GEMIN**  
137°  
377°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

**NORMA**  
128°  
308°  
1MIN(at or below FL140)  
1.5MIN(above FL140)

**AA659**  
18.2 245°  
15 341°  
0.1 7.5  
AA658  
26.5 308°  
35.6 356°  
VOGUE 210KIAS  
7.3 278°  
REGZA 8000  
15.9 303°  
(For LUBLA G ARRIVAL)

**SAFRA 8000**  
210KIAS

**LUBLA**

**VAR 8° W**

## CHANGE: Description of VAR.

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

LUBLA G ARRIVAL

From LUBLA, to REGZA at 8000FT, to VOGUE, to AA658, to AA659, to SAFRA at 8000FT, to CASIO at 6000FT, to GEMIN.

|                       |   |
|-----------------------|---|
| 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              | LUBLA               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | REGZA               | -        | 303 (295.5)   | -7.5               | 15.9          | -              | 8000          | -            | -              | RNAV1                    |
| 003           | TF              | VOGUE               | -        | 278 (270.3)   | -7.5               | 7.3           | -              | -             | 210          | -              | RNAV1                    |
| 004           | TF              | AA658               | -        | 356 (348.4)   | -7.5               | 6.4           | -              | -             | -            | -              | RNAV1                    |
| 005           | TF              | AA659               | -        | 011 (003.1)   | -7.5               | 7.5           | -              | -             | -            | -              | RNAV1                    |
| 006           | TF              | SAFRA               | -        | 347 (339.6)   | -7.5               | 7.5           | -              | 8000          | 210          | -              | RNAV1                    |
| 007           | TF              | CASIO               | -        | 245 (237.6)   | -7.5               | 18.2          | -              | 6000          | -            | -              | RNAV1                    |
| 008           | TF              | GEMIN               | -        | 317 (309.1)   | -7.5               | 11.6          | -              | -             | -            | -              | 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 | LUBLA               | 341 (333.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CASIO               | 316 (308.6)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GEMIN               | 317 (309.1)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 4000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : New PROC

## STANDARD ARRIVAL CHART - INSTRUMENT

RJAA / NARITA INTL

RNAV STAR RWY16R/16L

LUBLA N ARRIVAL

From LUBLA, to REGZA, to BARON, to NORMA.

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

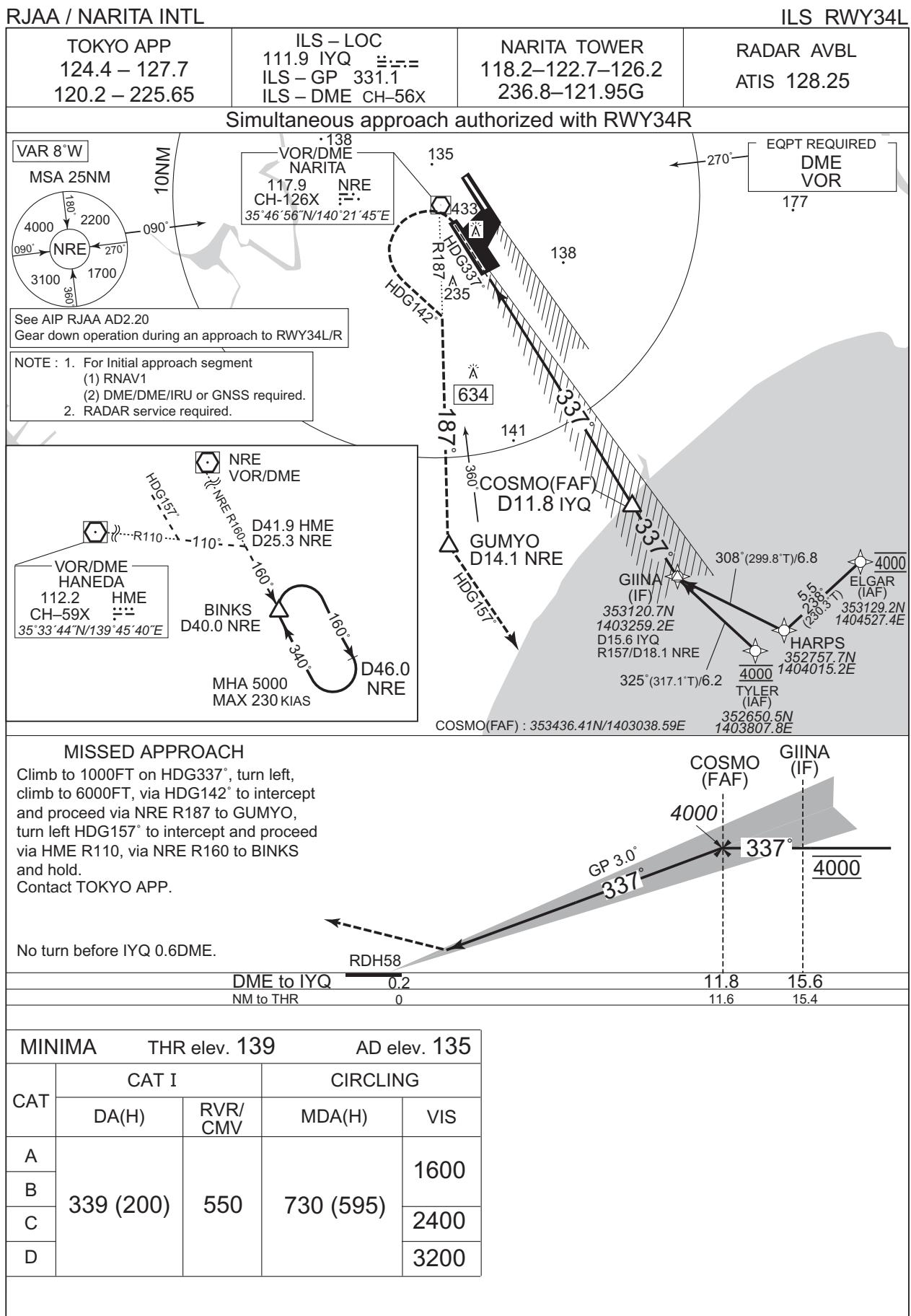
| Serial Number | Path Descriptor | Waypoint Identifier | Fly Over | Course °M(°T) | Magnetic Variation | Distance (NM) | Turn Direction | Altitude (FT) | Speed (KIAS) | Vertical Angle | Navigation Specification |
|---------------|-----------------|---------------------|----------|---------------|--------------------|---------------|----------------|---------------|--------------|----------------|--------------------------|
| 001           | IF              | LUBLA               | -        | -             | -7.5               | -             | -              | -             | -            | -              | RNAV1                    |
| 002           | TF              | REGZA               | -        | 303 (295.5)   | -7.5               | 15.9          | -              | -             | -            | -              | RNAV1                    |
| 003           | TF              | BARON               | -        | 326 (318.7)   | -7.5               | 8.6           | -              | -             | -            | -              | RNAV1                    |
| 004           | TF              | NORMA               | -        | 308 (300.0)   | -7.5               | 26.5          | -              | -             | -            | -              | 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 | LUBLA               | 341 (333.9)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 5000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | BARON               | 277 (270.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NORMA               | 308 (300.0)           | -7.5               | 1.0(-14000)<br>1.5(+14001) | -                      | R              | 6000                  | -                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AA658               | 354540.9N / 1405734.1E | LUBLA               | 353235.0N / 1412550.8E |
| AA659               | 355307.6N / 1405804.5E | NORMA               | 355900.8N / 1403254.0E |
| BARON               | 354551.0N / 1410112.0E | REGZA               | 353925.8N / 1410809.1E |
| CASIO               | 355021.4N / 1403556.1E | SAFRA               | 360006.9N / 1405452.2E |
| GEMIN               | 355738.6N / 1402450.7E | VOGUE               | 353927.6N / 1405908.4E |

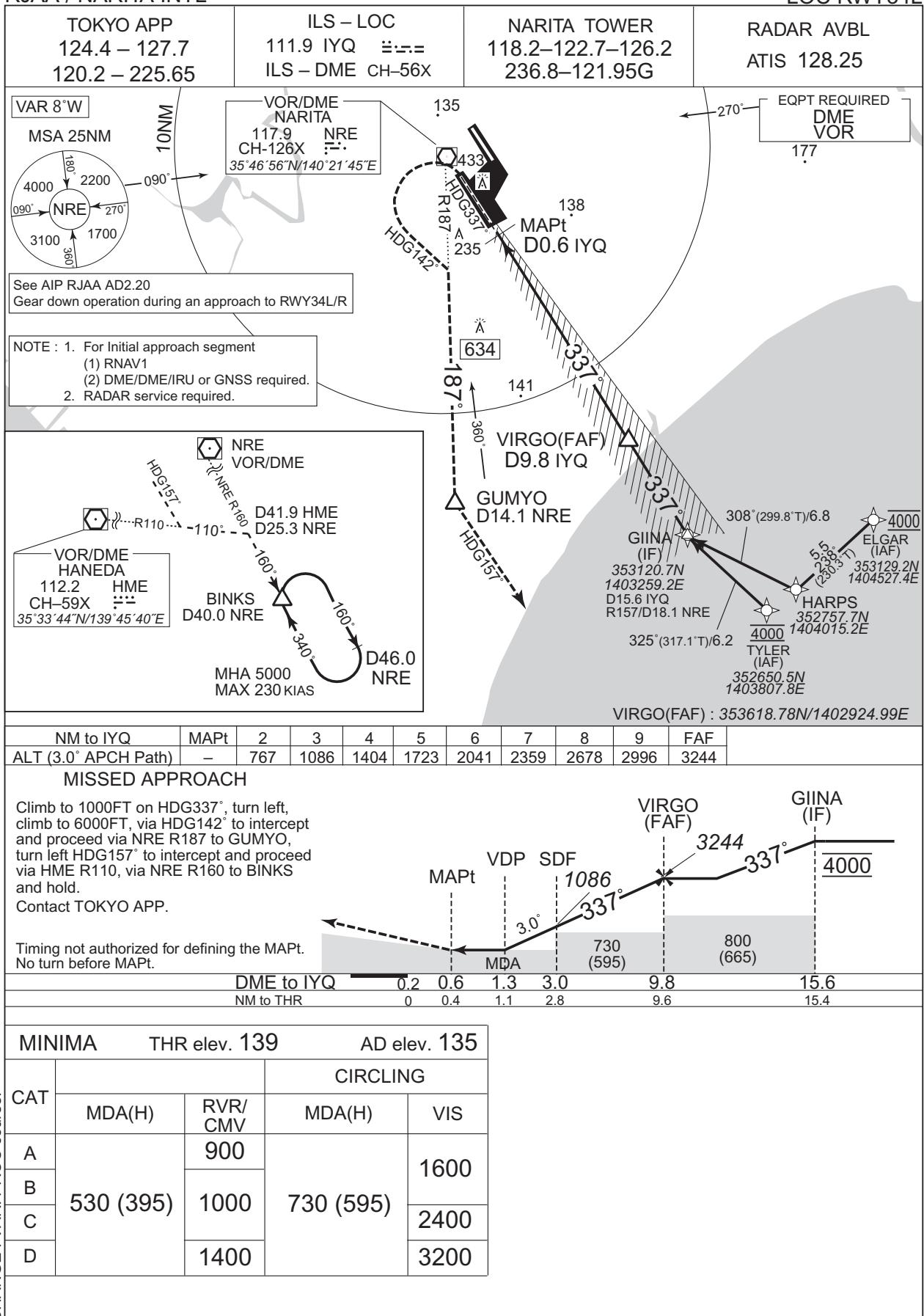
INSTRUMENT APPROACH CHART



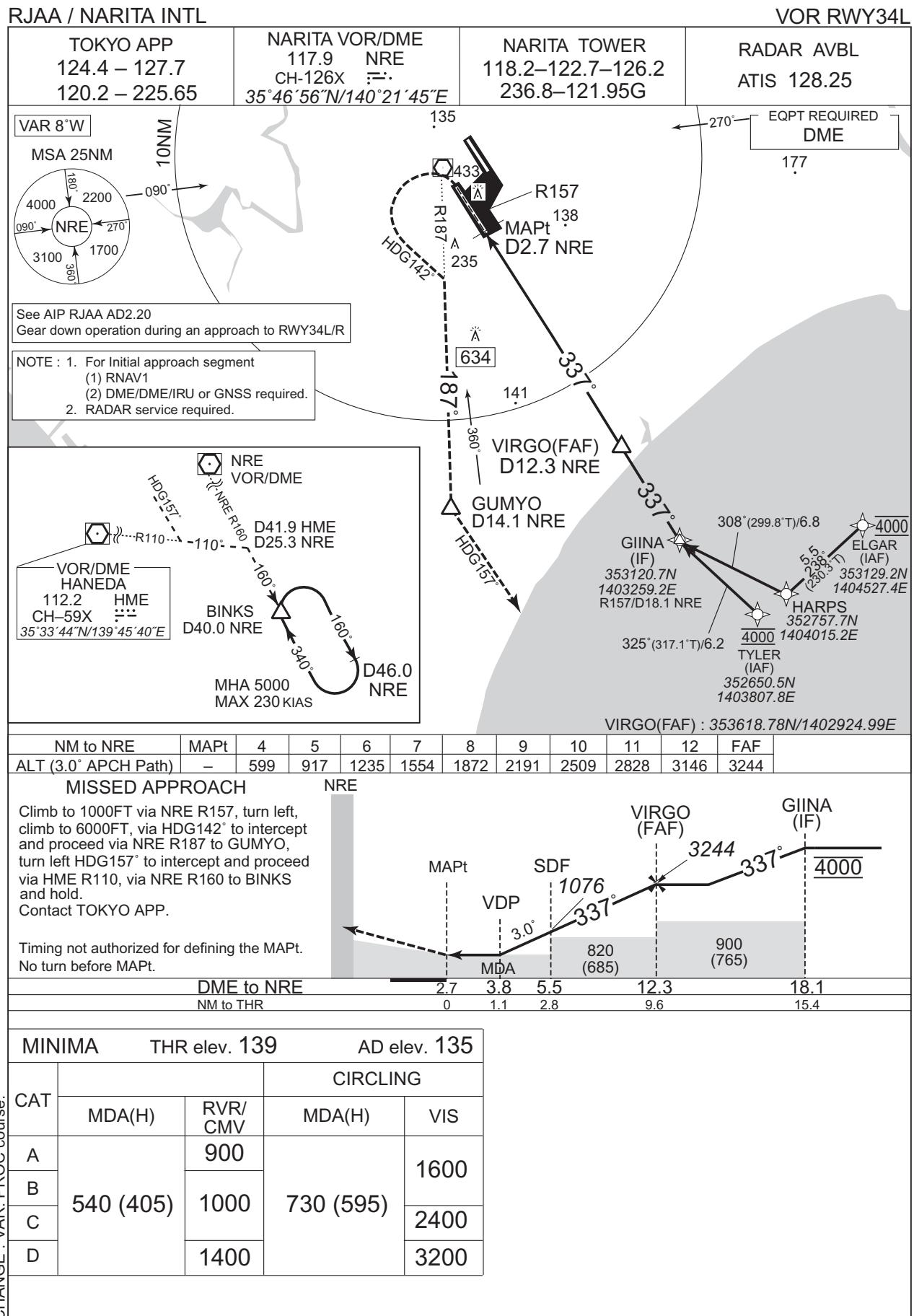
## INSTRUMENT APPROACH CHART

## RJAA / NARITA INTL

## LOC RWY34L



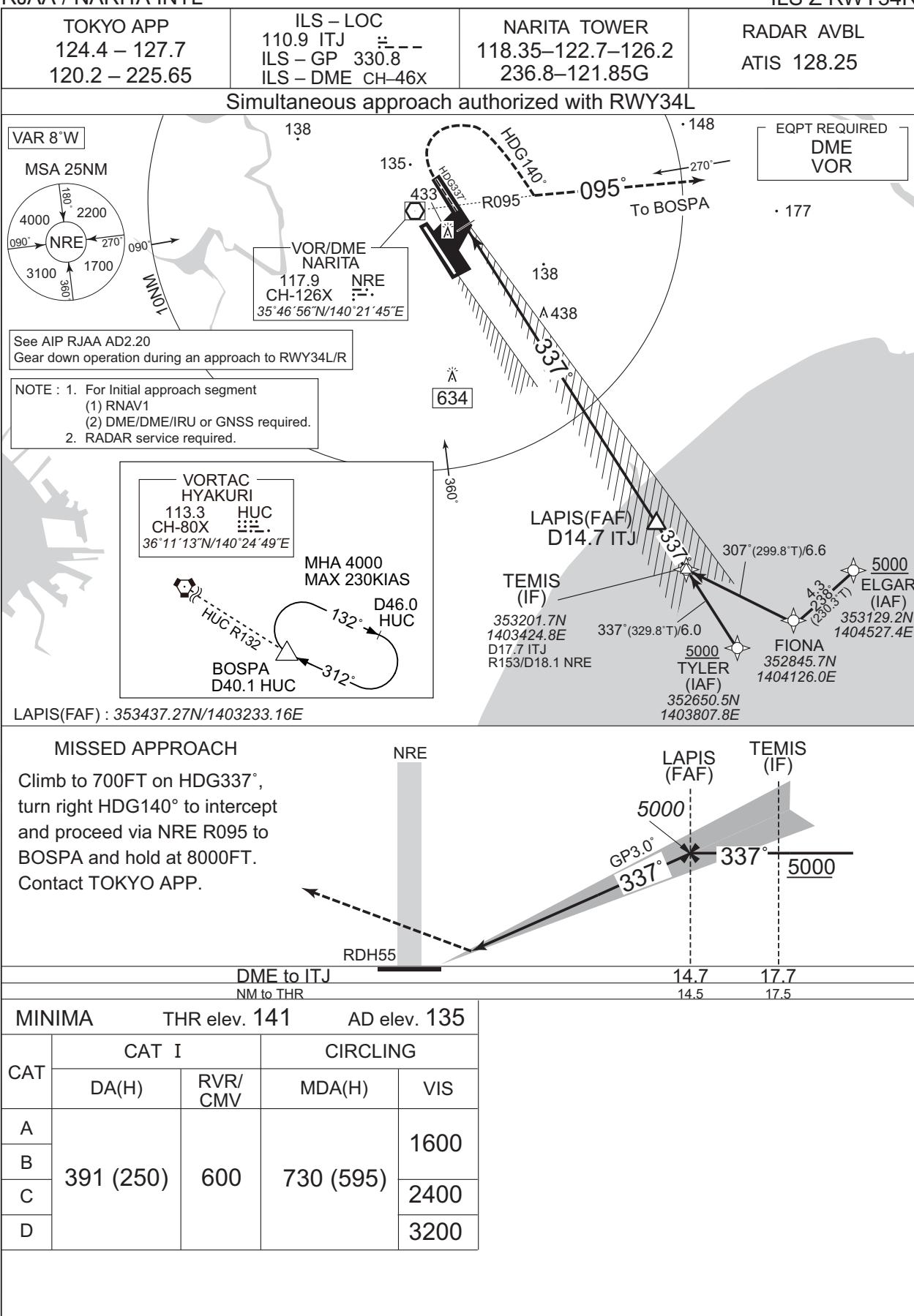
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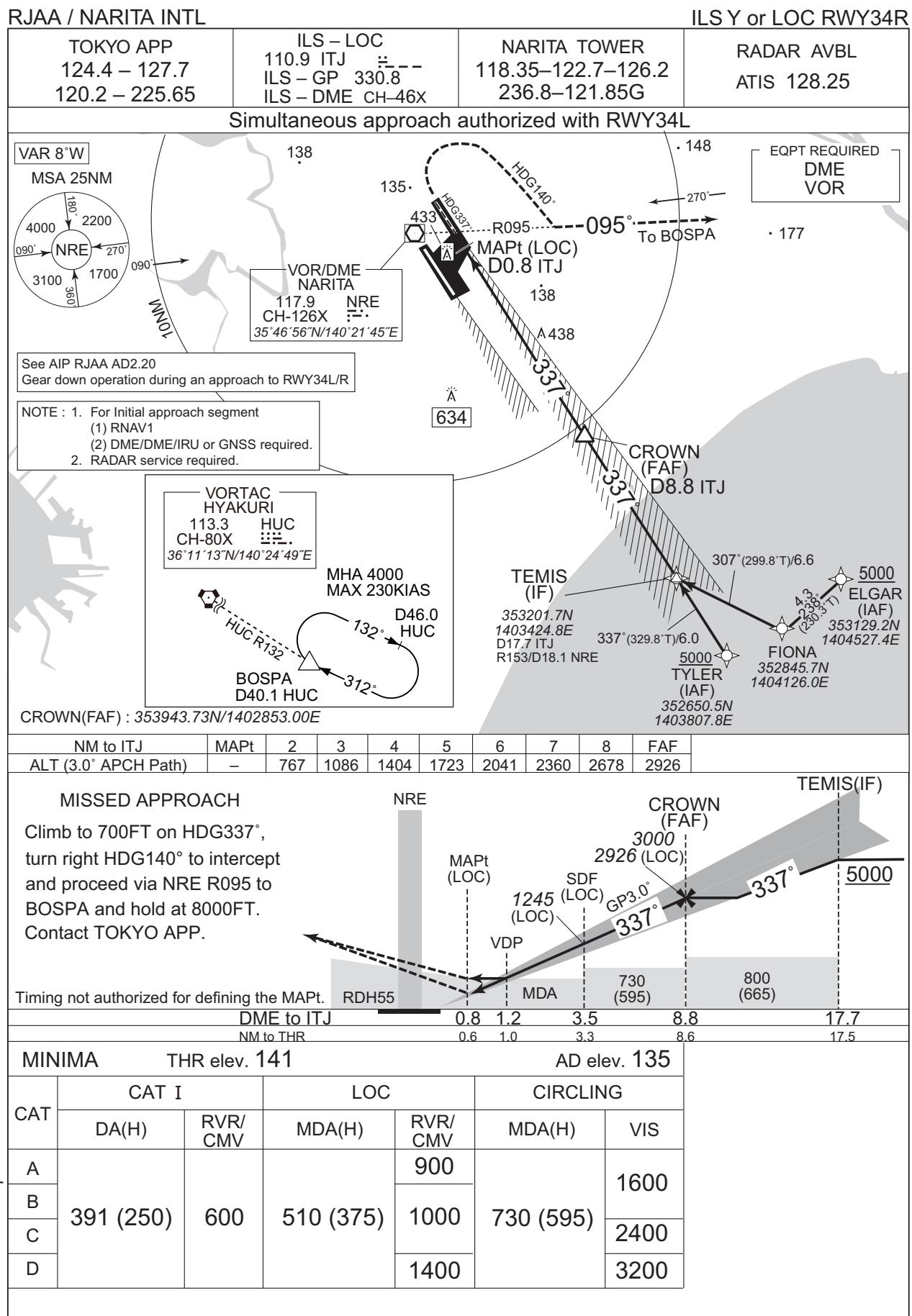
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RJAA / NARITA INTL

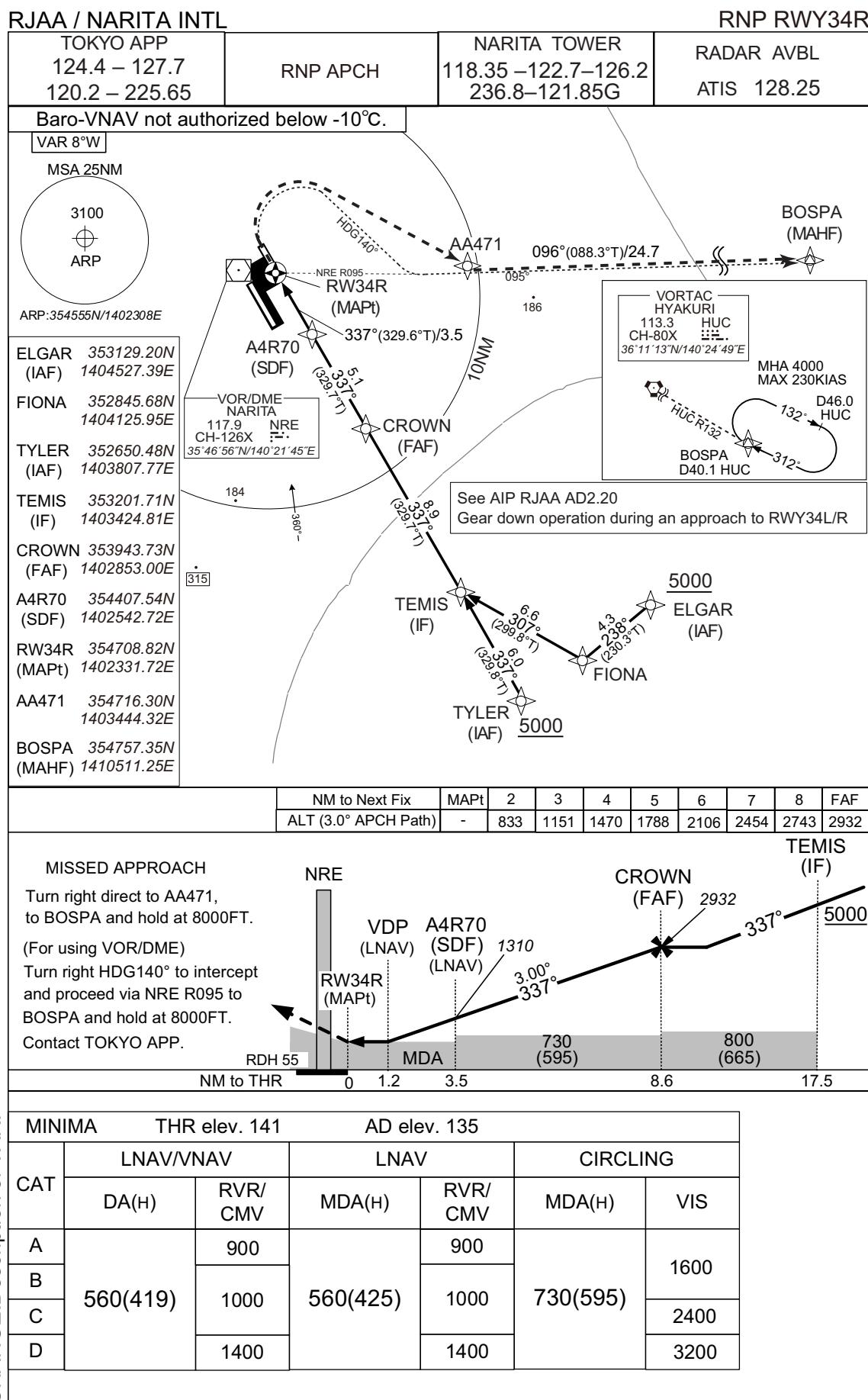
ILS Z RWY34R



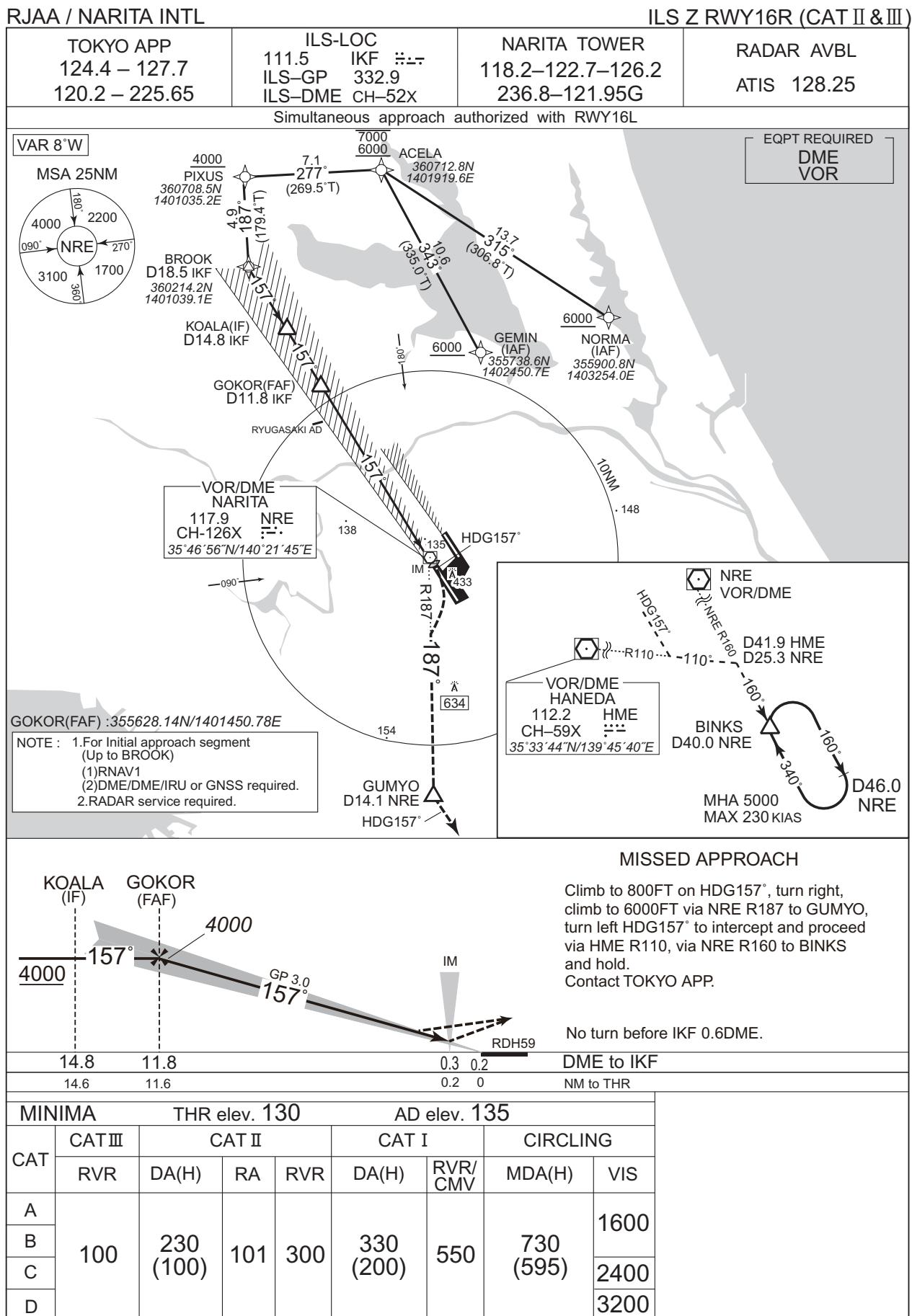
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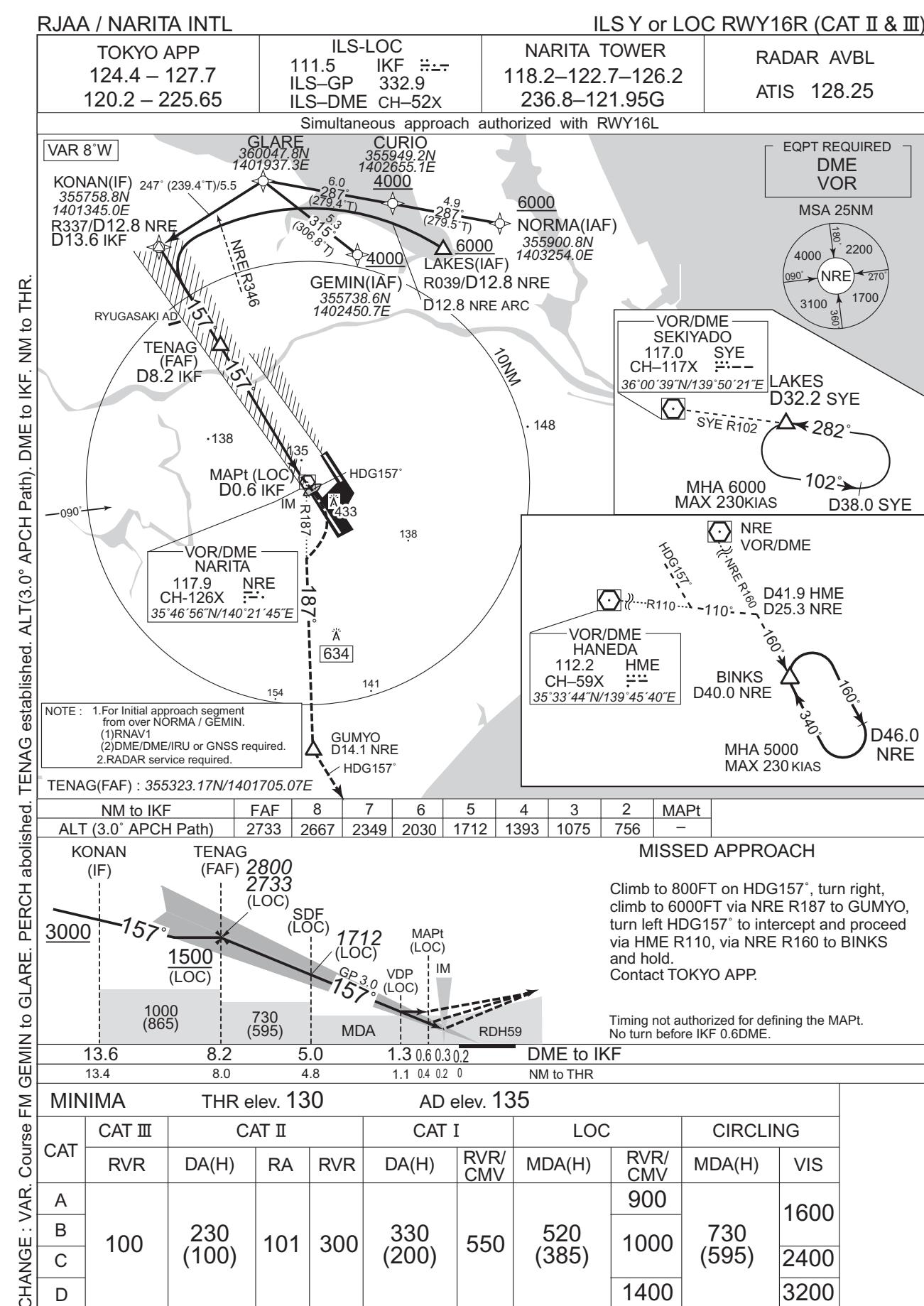
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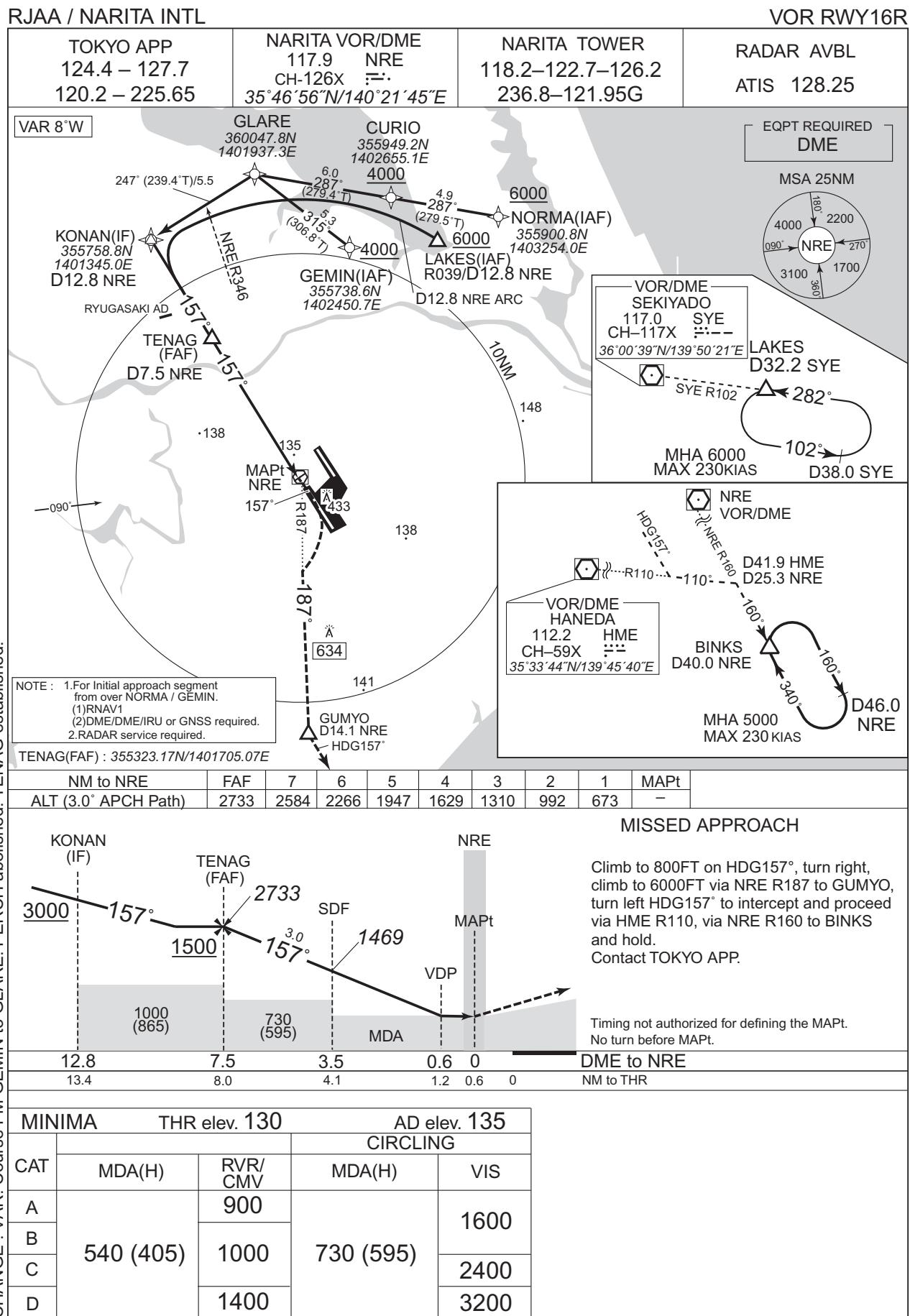
INSTRUMENT APPROACH CHART



## INSTRUMENT APPROACH CHART



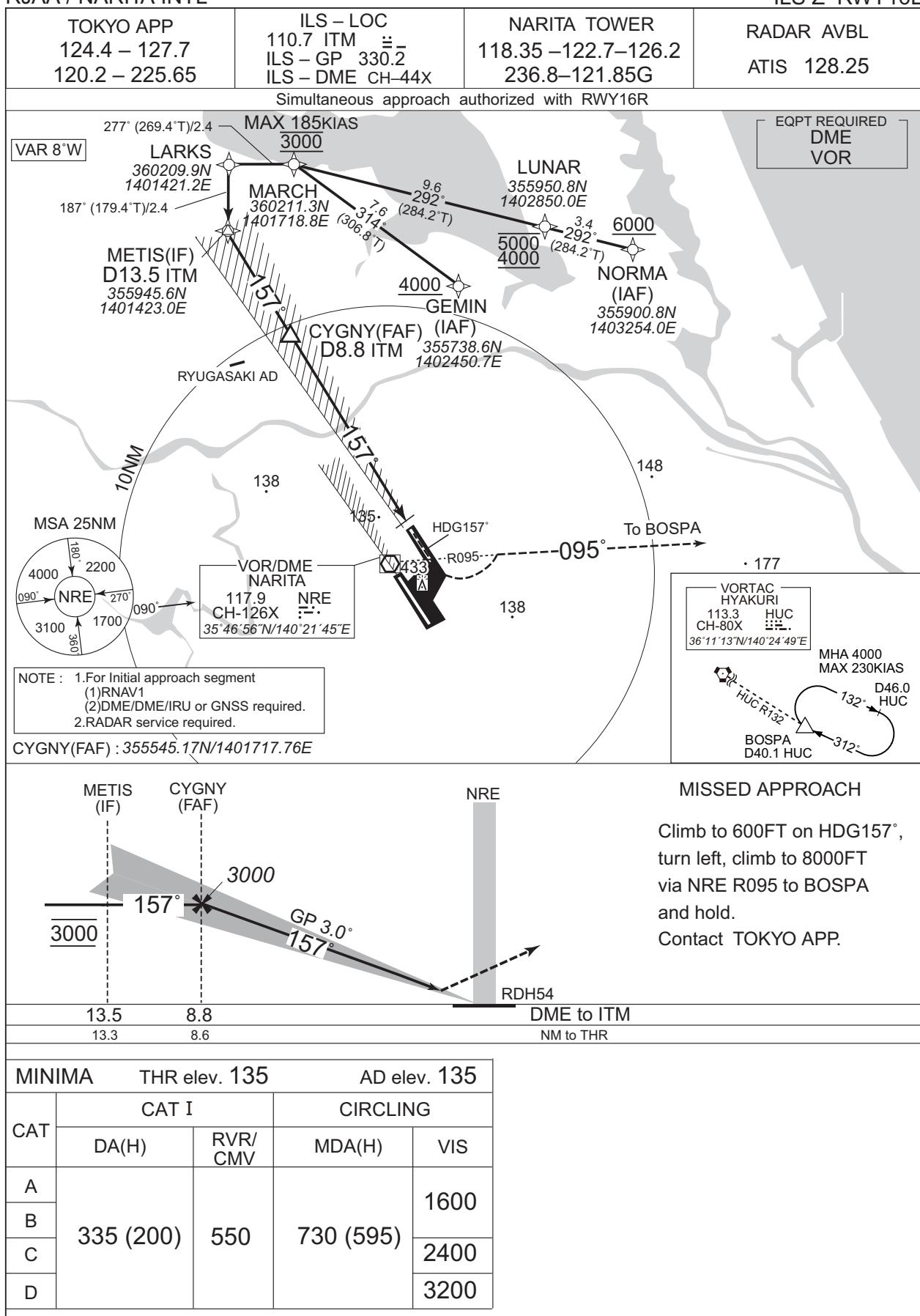
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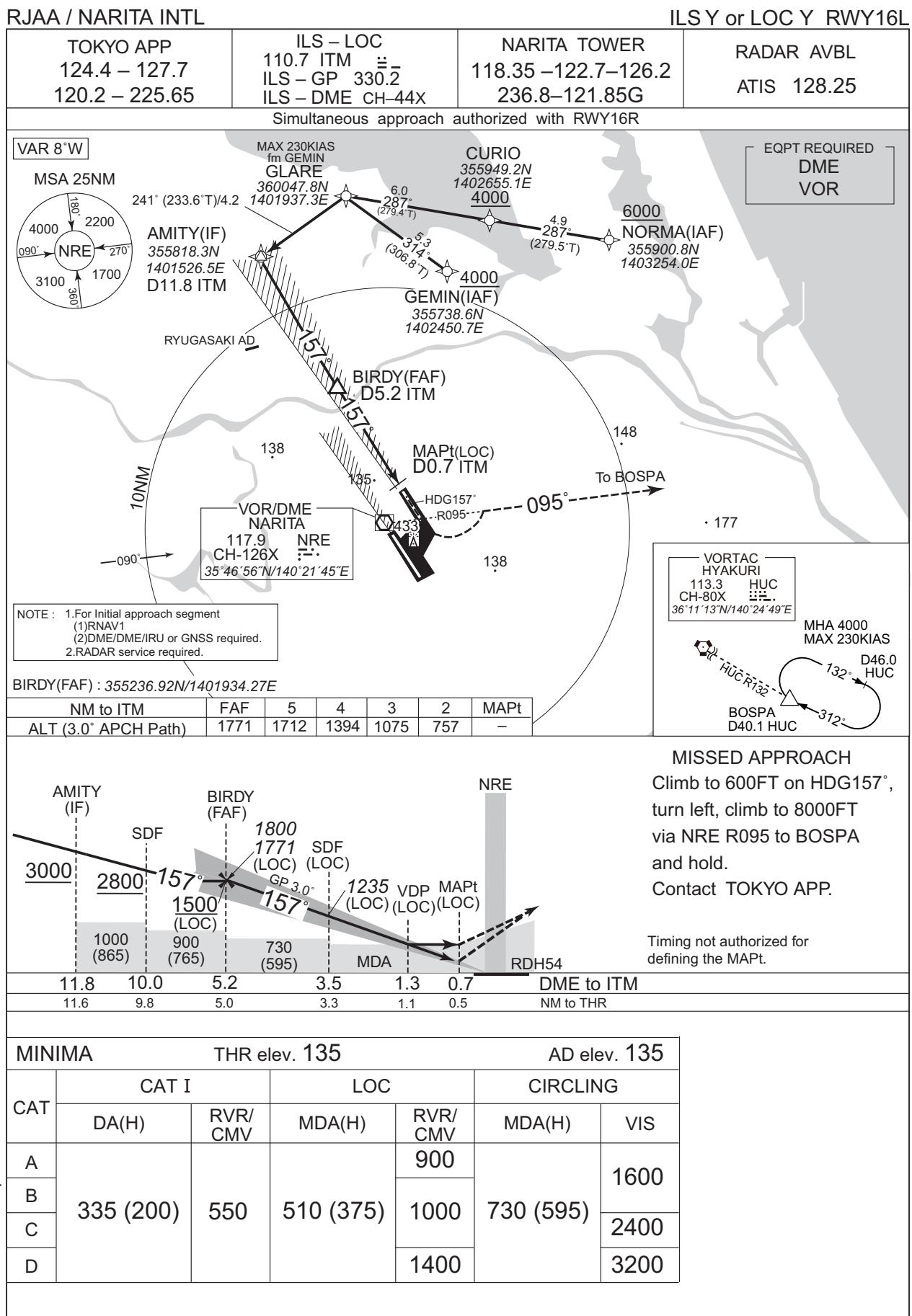
## INSTRUMENT APPROACH CHART

RJAA / NARITA INTL

ILS Z RWY16L



## INSTRUMENT APPROACH CHART



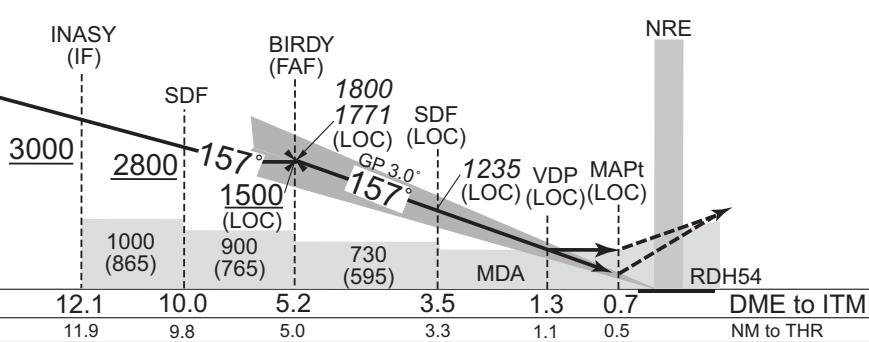
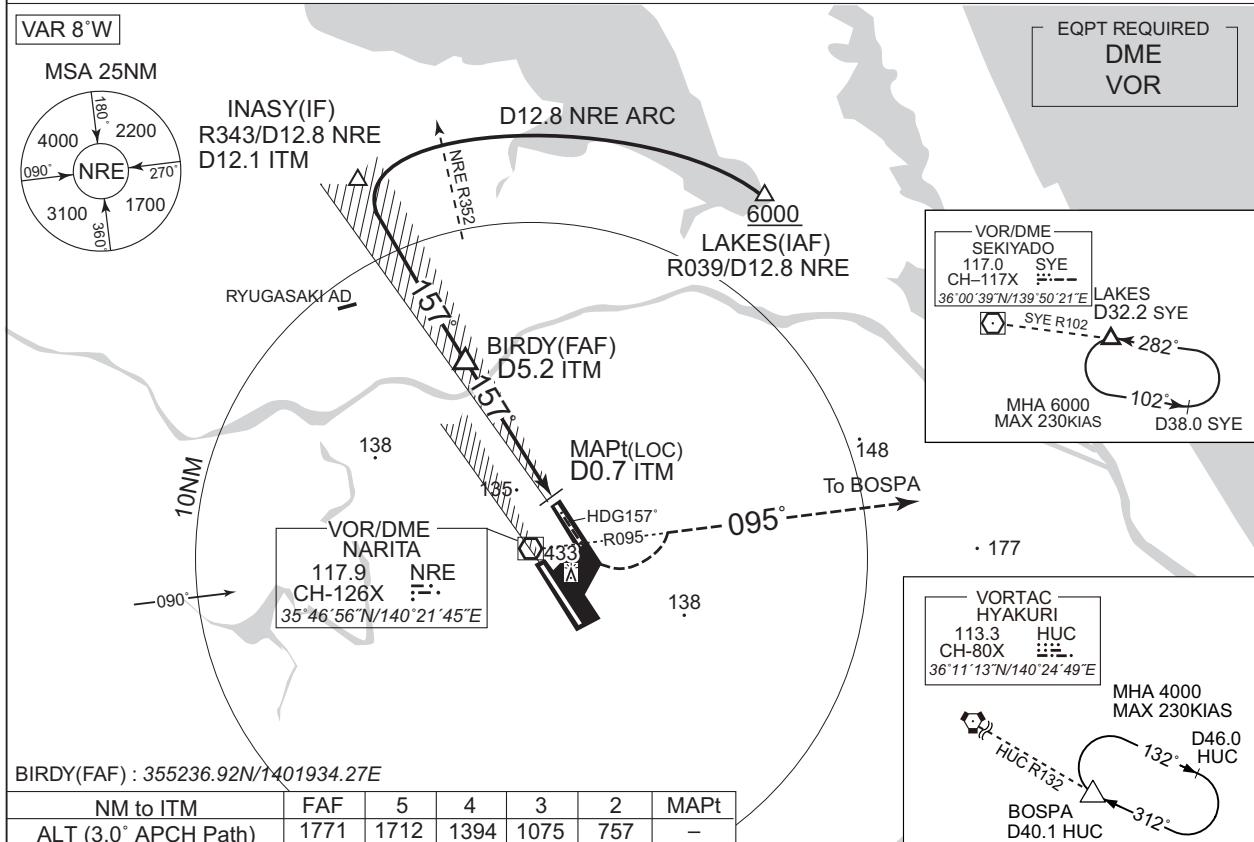
## INSTRUMENT APPROACH CHART

RJAA / NARITA INTL

ILS X or LOC X RWY16L

|  |  |   |                           |
|--|--|---|---------------------------|
| TOKYO APP<br>124.4 – 127.7<br>120.2 – 225.65 | ILS – LOC<br>110.7 ITM<br>ILS – GP 330.2<br>ILS – DME CH-44X | NARITA TOWER<br>118.35 – 122.7 – 126.2<br>236.8 – 121.85G | RADAR AVBL<br>ATIS 128.25 |
|--|--|---|---------------------------|

Simultaneous approach authorized with RWY16R



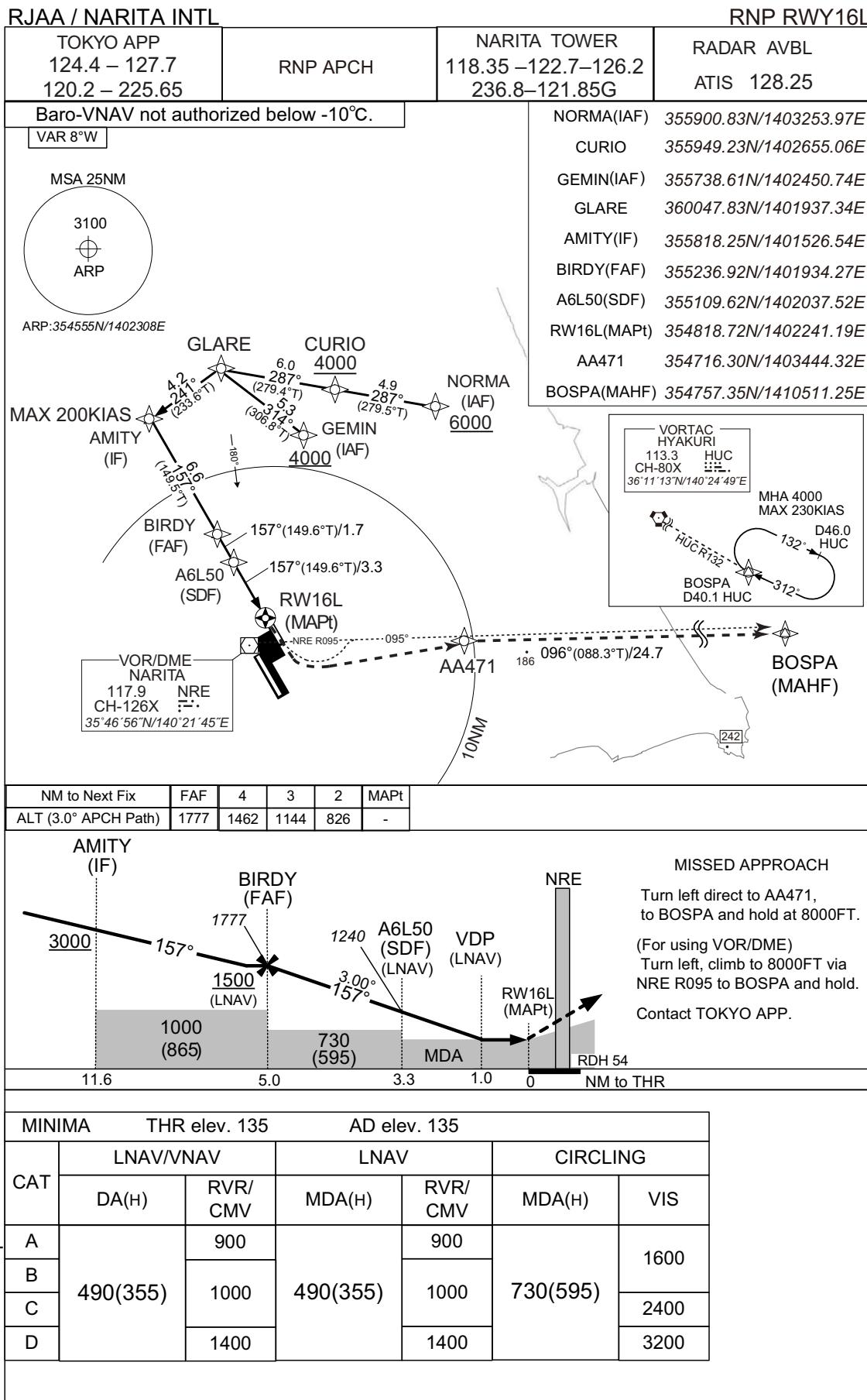
**MISSED APPROACH**  
Climb to 600FT on HDG157°, turn left, climb to 8000FT via NRE R095 to BOSPA and hold.  
Contact TOKYO APP.

Timing not authorized for defining the MAPt.

| CAT | CAT I     |         | LOC       |         | CIRCLING  |      |
|-----|-----------|---------|-----------|---------|-----------|------|
|     | DA(H)     | RVR/CMV | MDA(H)    | RVR/CMV | MDA(H)    | VIS  |
| A   |           |         |           | 900     |           |      |
| B   | 335 (200) | 550     | 510 (375) | 1000    | 730 (595) | 1600 |
| C   |           |         |           |         |           | 2400 |
| D   |           |         |           | 1400    |           | 3200 |

CHANGE : Description of VAR.

INSTRUMENT APPROACH CHART

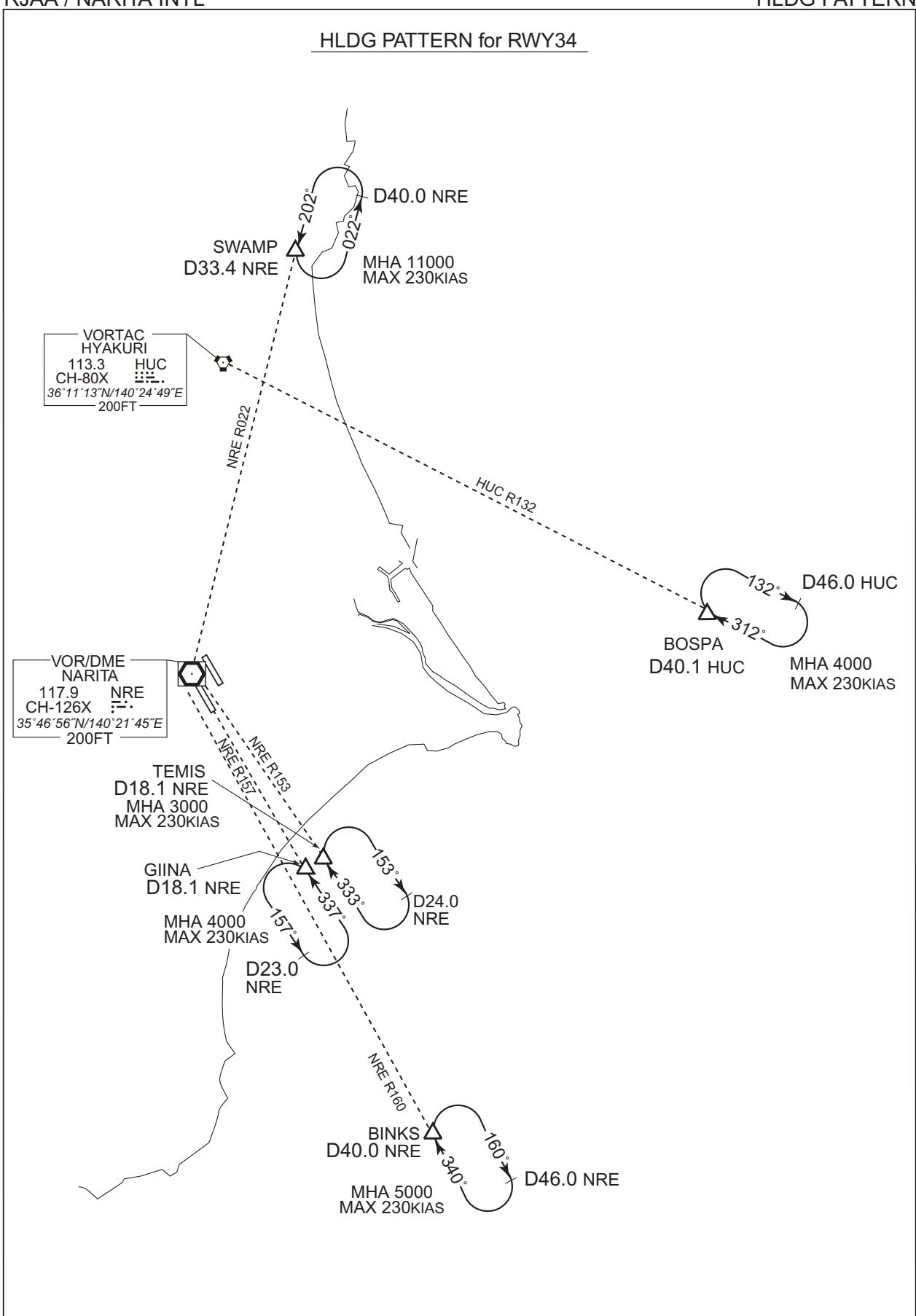


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RJAA / NARITA INTL

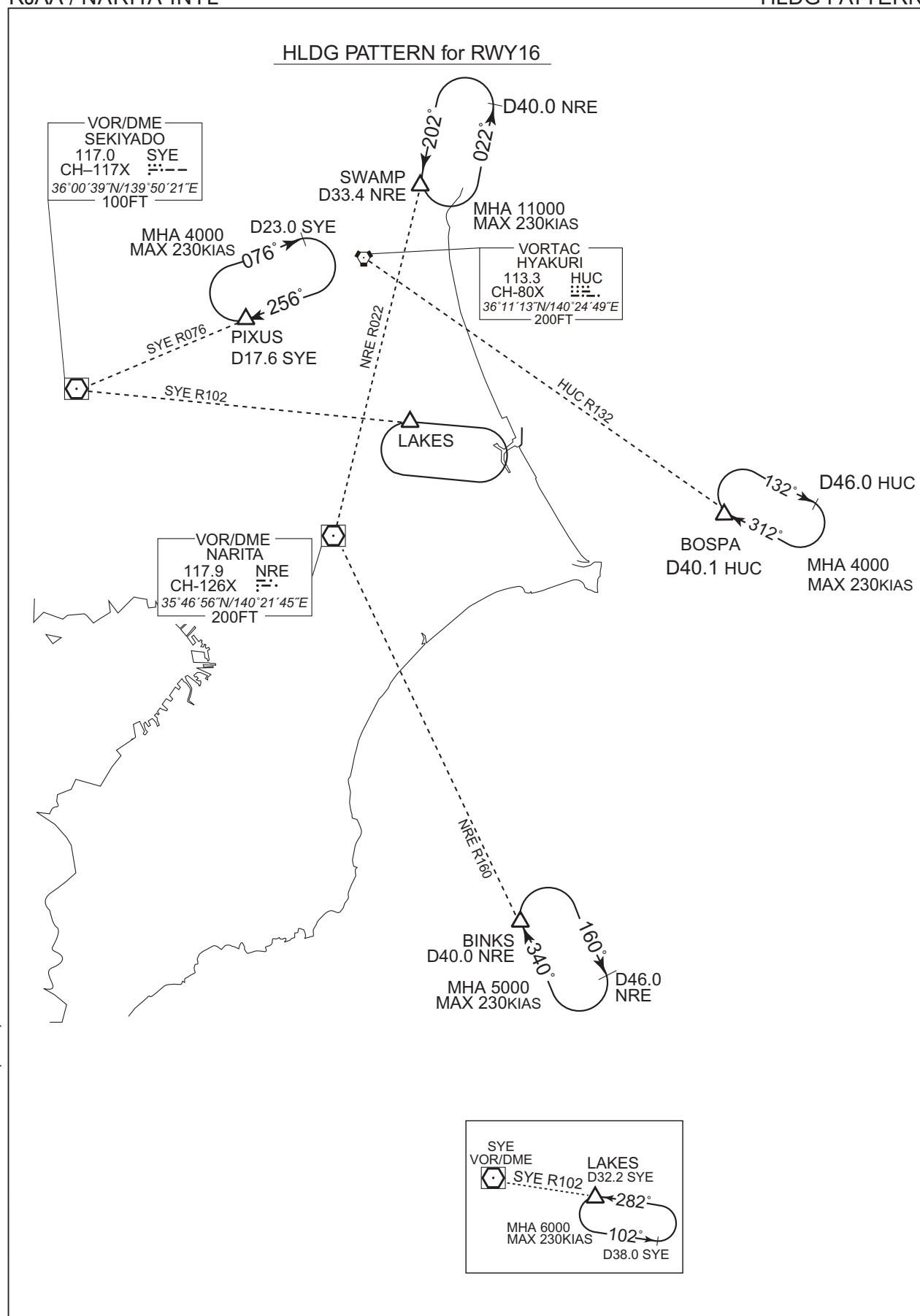
HLDG PATTERN

CHANGE : HOKUSO VOR/DME(HKE) abolished. HLDG course(TEMIS), BOSPA established. ABBOT, SWIMY abolished.



RJAA / NARITA INTL

HLDG PATTERN



Civil Aviation Bureau,Japan (EFF:25 MAR 2021)

RJAA / NARITA INTL

RNAV HLDG PATTERN

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

RNAV 1

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

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

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

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

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

SWAMP  
MHA 11000

NORMA  
MHA 6000

GEMIN

CASIO  
MHA 4000

TYLER

MHA 3000

VENUS

MHA 6000

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

PLEIA  
MHA 9000

KARMA  
BARON  
MHA 6000

SUPOK  
MHA 5000

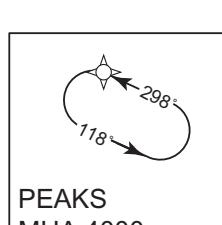
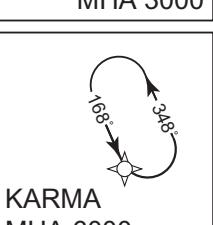
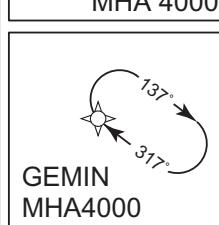
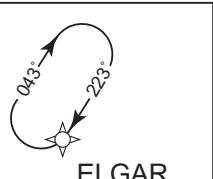
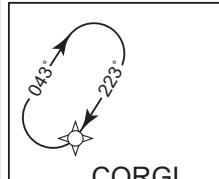
GAUDI  
MHA 6000

LUBLA  
MHA 5000

AQUOS  
MHA 5000

RUTAS  
MHA 6000

CHANGE : COORD of MORIYA DME(SND).



## RJAA / NARITA 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 | AQUOS               | 037 (029.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | BARON               | 277 (270.0)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CASIO               | 316 (308.6)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | COPEN               | 018 (010.5)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | CORGI               | 223 (215.8)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | ELGAR               | 223 (215.7)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 3000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GAUDI               | 358 (351.0)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | GEMIN               | 317 (309.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | KARMA               | 168 (160.3)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | LUBLA               | 341 (333.9)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | NORMA               | 308 (300.0)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PEAKS               | 298 (290.2)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 4000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | PLEIA               | 141 (133.1)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 9000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | RUTAS               | 065 (057.9)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SUPOK               | 276 (268.6)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 5000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | SWAMP               | 205 (197.0)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 11000                 | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | TYLER               | 337 (329.8)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | L              | 3000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |
| Hold | VENUS               | 013 (005.8)          | -7.5               | 1.0(-14000)<br>1.5(+14001) | —                      | R              | 6000                  | —                     | -230(-14000)<br>-240(+14001) | RNAV1                    |

CHANGE : PEAKS established

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RNAV HLDG PATTERN

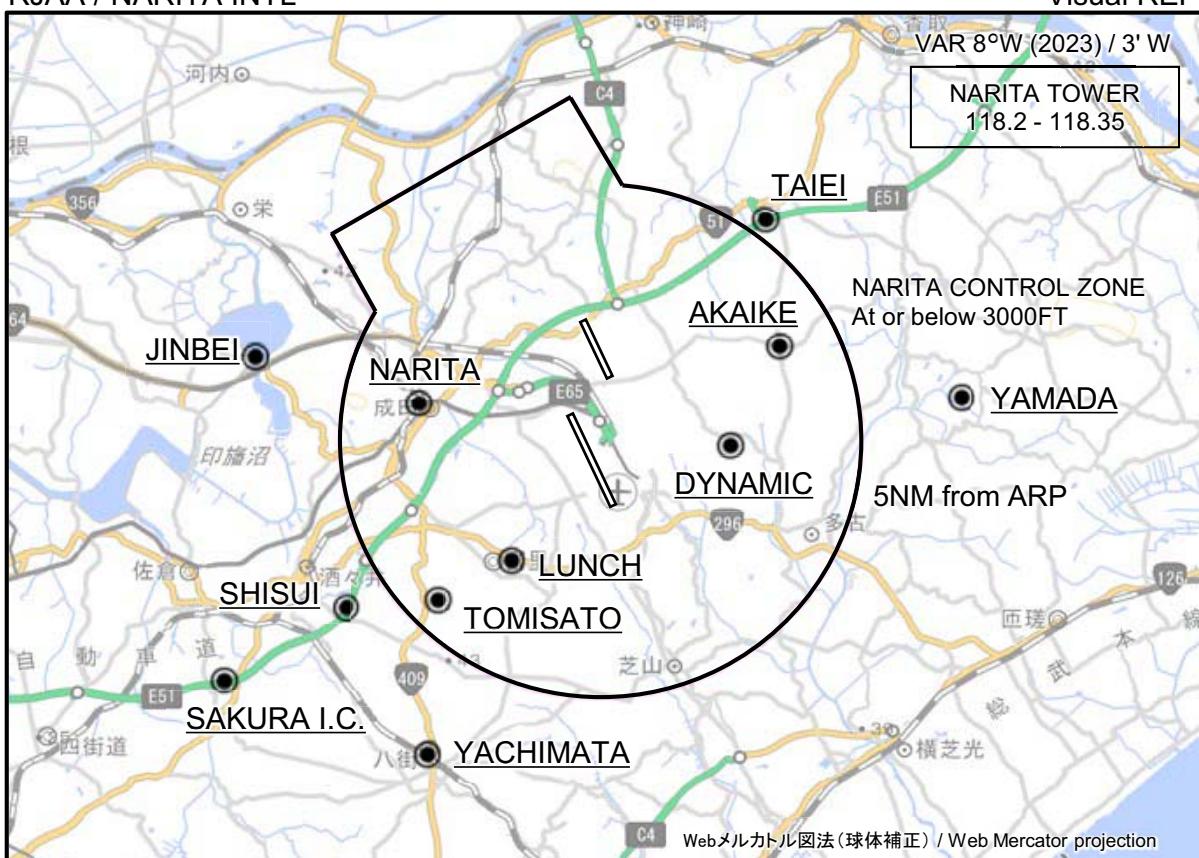
Waypoint Coordinates

| Waypoint Identifier | Coordinates            | Waypoint Identifier | Coordinates            |
|---------------------|------------------------|---------------------|------------------------|
| AQUOS               | 351229.7N / 1410942.5E | LUBLA               | 353235.0N / 1412550.8E |
| BARON               | 354551.0N / 1410112.0E | NORMA               | 355900.8N / 1403254.0E |
| CASIO               | 355021.4N / 1403556.1E | PEAKS               | 352507.2N / 1404352.7E |
| COPEN               | 353303.7N / 1404939.2E | PLEIA               | 360734.8N / 1404745.4E |
| CORGI               | 353829.8N / 1405138.9E | RUTAS               | 344349.3N / 1404034.2E |
| ELGAR               | 353129.2N / 1404527.4E | SUPOK               | 354614.1N / 1412810.0E |
| GAUDI               | 353002.4N / 1410418.1E | SWAMP               | 361914.4N / 1403217.0E |
| GEMIN               | 355738.6N / 1402450.7E | TYLER               | 352650.5N / 1403807.8E |
| KARMA               | 355042.9N / 1405512.4E | VENUS               | 350440.1N / 1404309.7E |

CHANGE : PEAKS established

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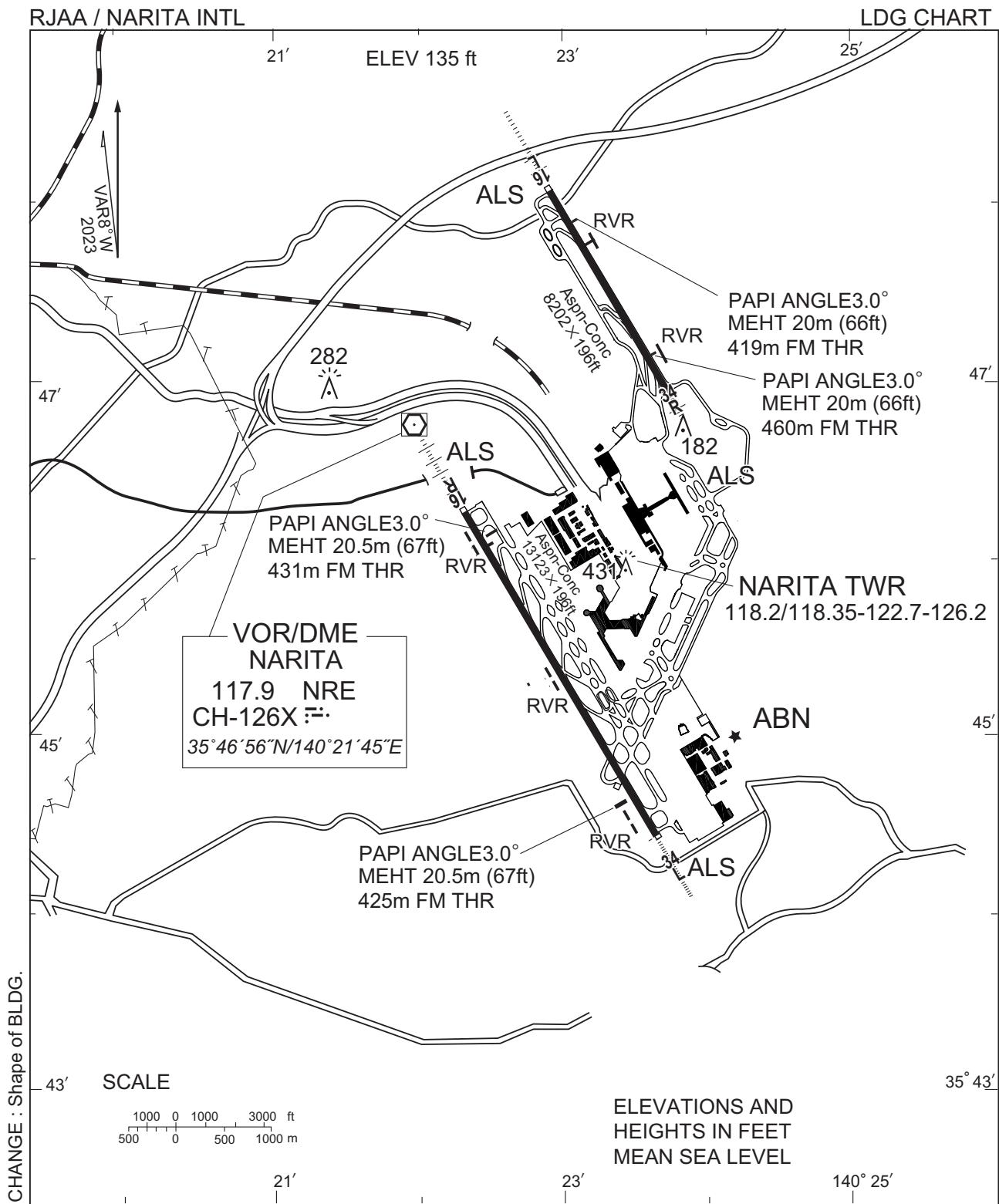
Visual REP



※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).

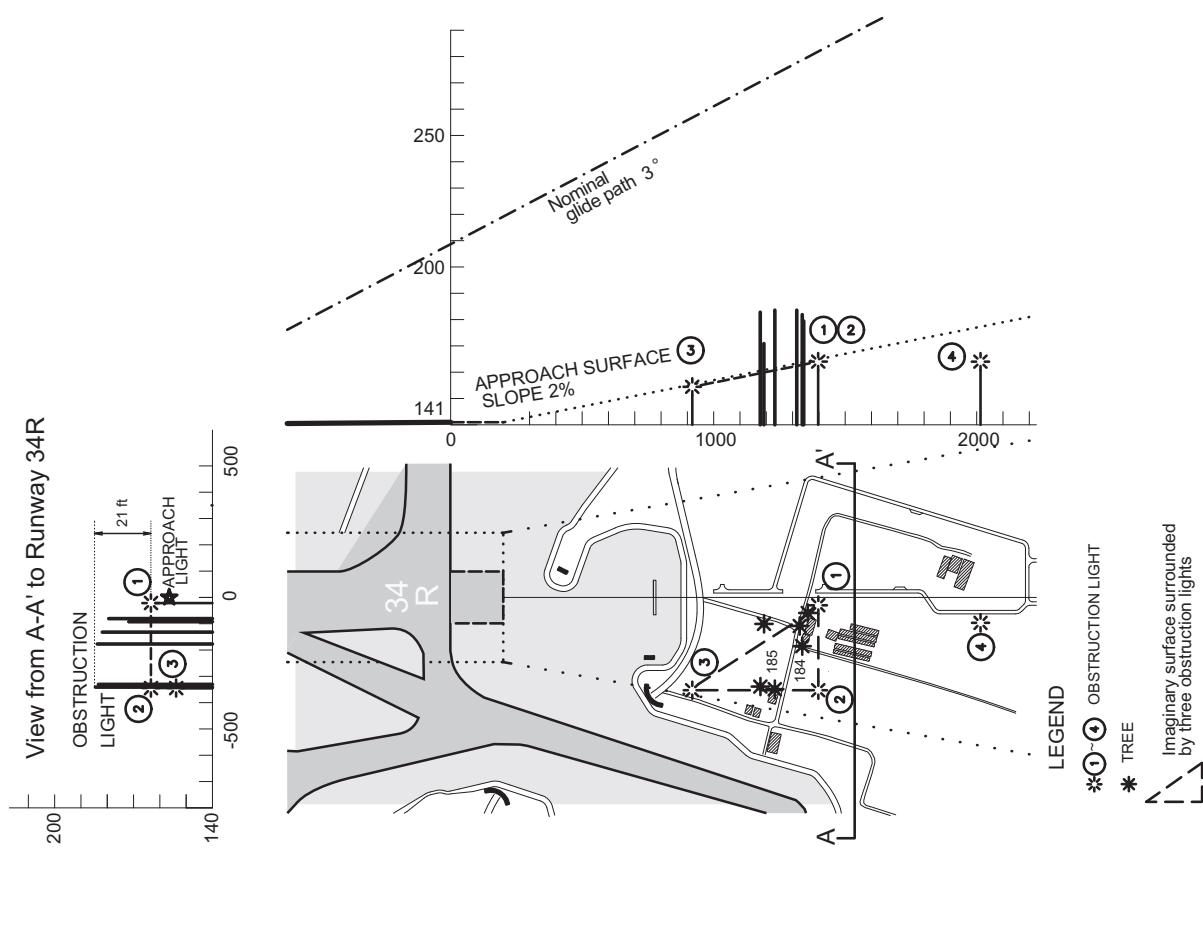
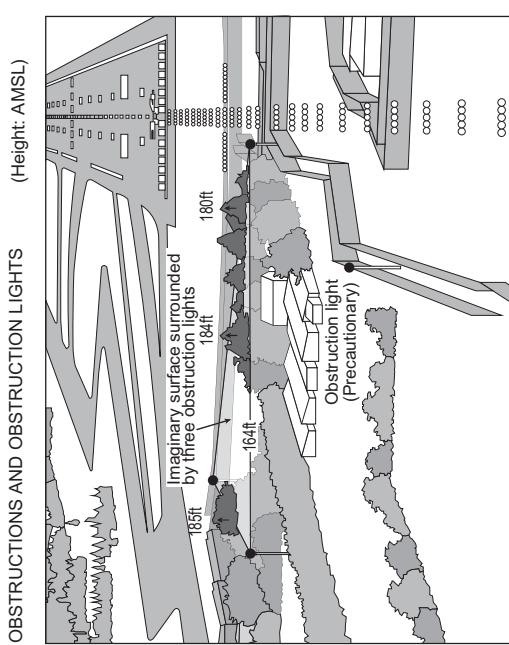
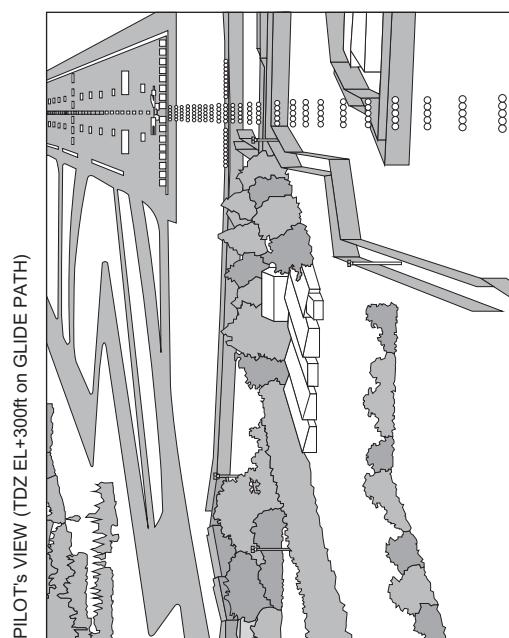
CHANGE : Visual REP abolished(Radisson).

| Call sign                        | BRG / DIST from ARP | Remarks                                       |
|----------------------------------|---------------------|---|
| 大栄<br>Taiei                      | 036°T / 5.3NM       | 東関東自動車道大栄インターチェンジ<br>Interchange              |
| 赤池<br>Akaike                     | 061°T / 3.9NM       | 赤池交差点<br>Akaike Intersection                  |
| 甚兵衛<br>Jinbei                    | 284°T / 6.8NM       | 甚兵衛大橋<br>Jinbei Bridge                        |
| 山田<br>Yamada                     | 083°T / 7.0NM       | 山田ARSRサイト<br>Yamada ARSR Site                 |
| 成田<br>Narita                     | 282°T / 3.6NM       | JR成田駅<br>JR Narita Station                    |
| ダイナミック<br>Dynamic                | 092°T / 2.5NM       | ダイナミックゴルフ俱楽部クラブハウス<br>Dynamic Golf Club House |
| ランチ<br>Lunch                     | 216°T / 2.9NM       | 給食センター<br>Lunch Center                        |
| 富里<br>Tomisato                   | 225°T / 4.4NM       | 富里第二工業団地<br>Industrial Park                   |
| 酒々井<br>Shisui                    | 236°T / 5.9NM       | 酒々井パーキングエリア<br>Parking Area                   |
| 佐倉インターチェンジ<br>Sakura Interchange | 237°T / 8.6NM       | 東関東自動車道佐倉インターチェンジ<br>Interchange              |
| 八街<br>Yachimata                  | 208°T / 7.0NM       | JR八街駅<br>JR Station                           |



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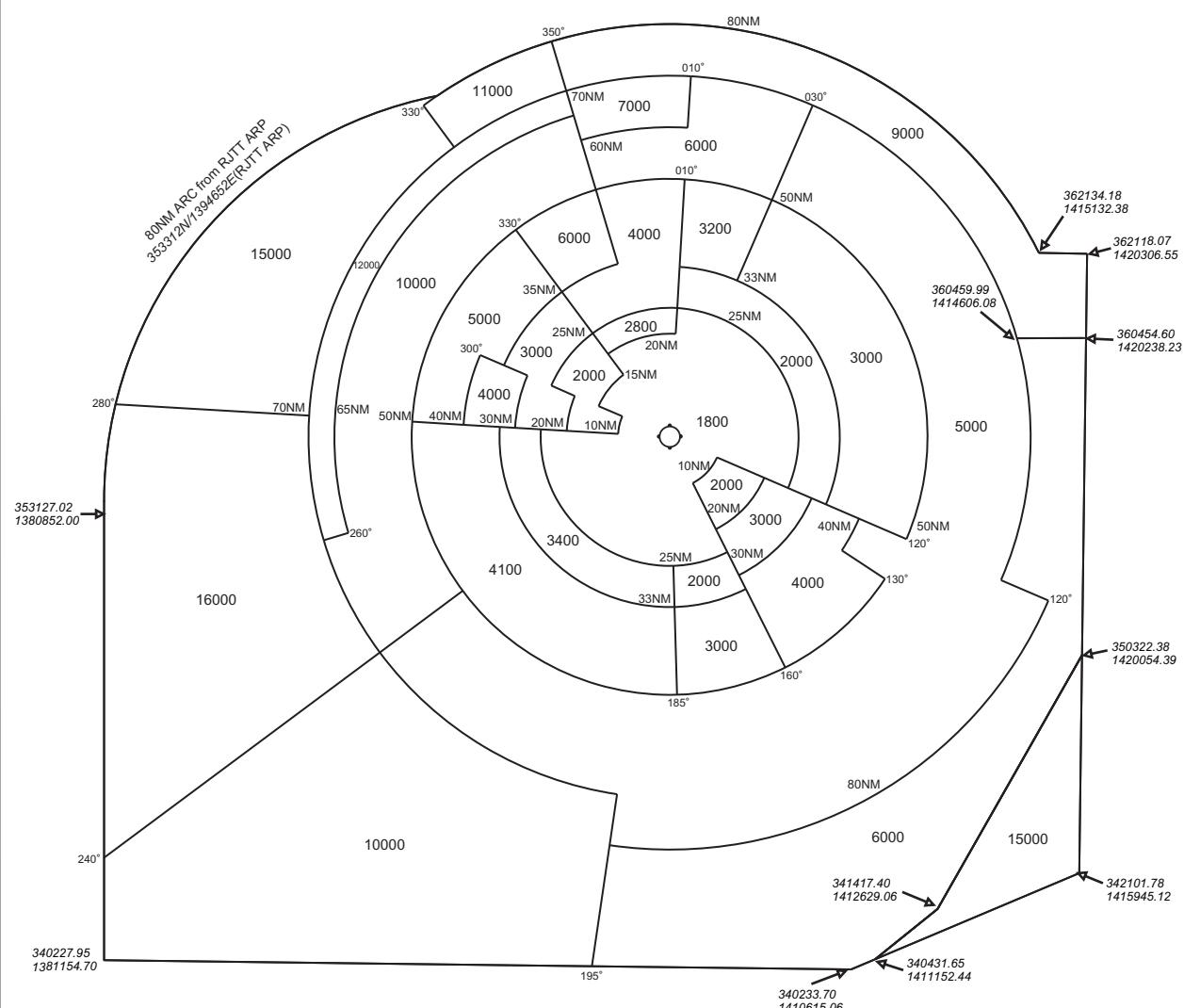
LDG CHART (Trees existence on final approach area of Runway 34R)



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Minimum Vectoring Altitude CHART

VAR 8° W(2023)



CHANGE : VAR.

**INTENTIONALLY LEFT BLANK**