
APPROACH Procedures and Restrictions at Tokyo Haneda RJTT/HND

NOTE

This paper supersedes 19SAB03, 20SAB01, and 21SAB17.

BACKGROUND

Tokyo Haneda Airport is located only 5nm south of Metropolitan Tokyo and is partially a landfill airport on Tokyo Bay. The airport's history dates to the World War II era. Since then, the airport has made several expansions as the economy of Tokyo, and all of Japan, grew quickly. This rapid expansion resulted in airport modifications which are noncompliant with ICAO standards, and has created many complicated taxiways and operational limitations for the operators.

The proximity to the Metropolis causes numerous noise abatement measures at Haneda Airport. Many of these measures are related to the limited runway usage and its departure and approach routes; especially between 1500 and 1900, 2300 and 0600 local time, where there are restrictions for flying over the crowded city center.

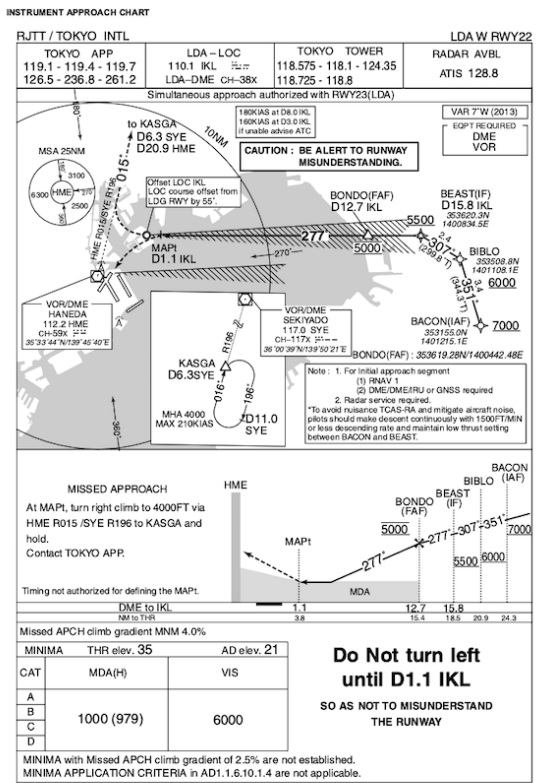
This Safety Bulletin describes runway operations and precautionary measures prevailing wind from south and west, including LDA 22&23, RNP 16L&R approaches and the difficult approach to fly VOR-A to RWY 16L.

PREVAILING WIND FROM SOUTH AND WEST

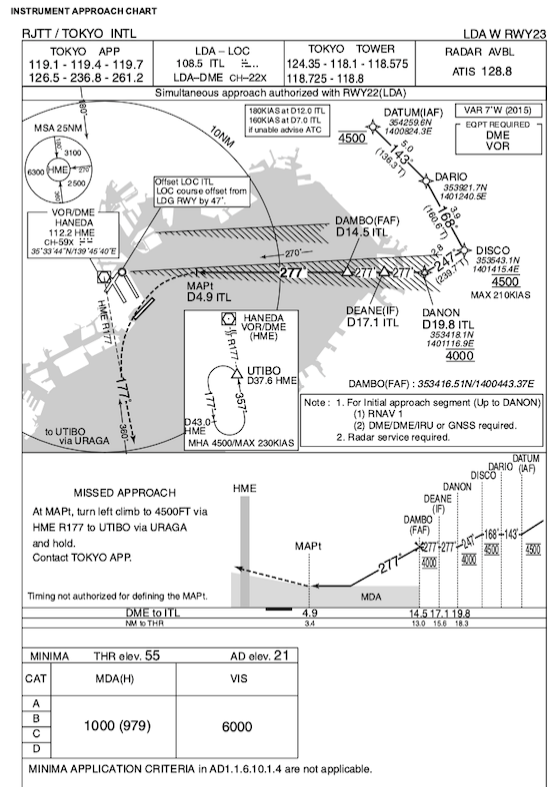
[\(Good Weather Between 0600-1500 LCL and 1900-2300 LCL\)](#)

The wind will blow from the southwest during the summer season, and for other seasons only when a cold pressure system is passing over Tokyo. In this case, RWY22 and 23 will be in use. If weather permits, the approach type to both runways will be LDA (Localizer-type Directional Aid) to avoid the noise sensitive area beyond 5nm on finals. This procedure requires 47 degrees final turn to RWY23, and 55 degrees turn to RWY22.

Adding to the difficult final turn, both types of approach lack visual aids to the final course such as an approach lighting system which results in difficulties in locating the runway. For these reasons, pilots must check the approach chart and study beforehand where to turn on finals, etc.



LDA W RWY22 Approach



LDA W RWY23 Approach

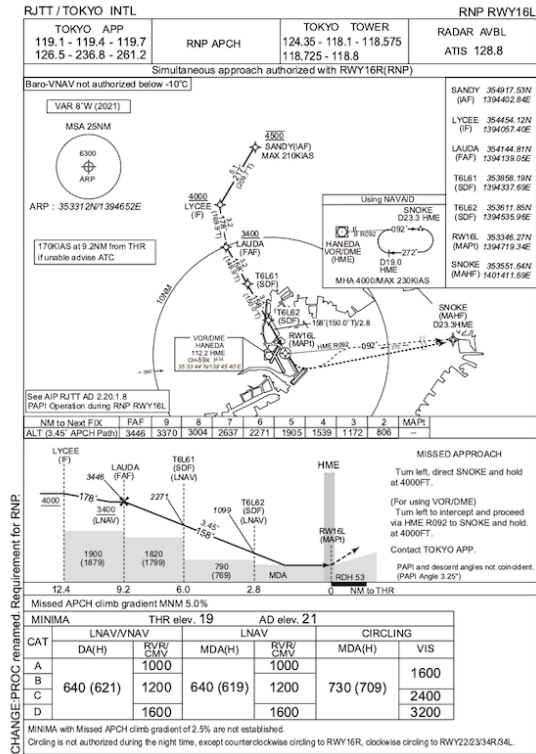
PREVAILING WIND FROM SOUTH AND WEST (Between 1500-1900 LCL)

When the wind blows from southeast to southwest, RWY 16L & 16R are used for departures and landings. To appease the local public regarding the noise pollution while approaches to these runways flying over Metropolitan Tokyo, the JCAB (Japan Civil Aviation Bureau) has created RNP approaches and ILS approaches to runways 16L&R. The ILS approaches are conventional 3° approaches but will only be used in bad weather. The RNP approaches are 3.45° approaches, and will be used exclusively, unless there are bad weather conditions. The criteria for "bad weather" is not defined.

Two PAPIs are installed for each runway emitting different angles independently. Similar operations are conducted at airports in different parts of the world, such as Frankfurt/Main runway 07L/25R, but the PAPI angles coincide to each type of approaches. When RNP 16L&R are in operation, 3.25° PAPI will be emitted and 3° PAPI will not be emitted. When ILS 16L&R are in operation, 3° PAPI will be emitted.

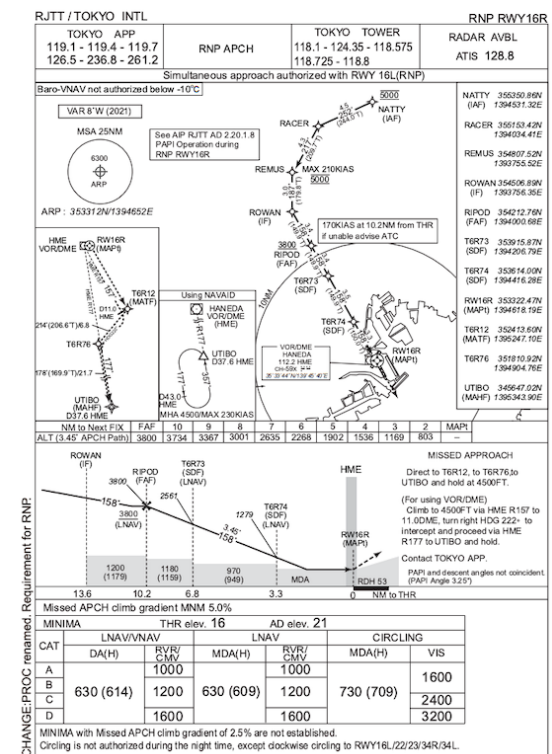
Both runways are also displaced in order to move the approaches farther away from the city. The Landing Distance Available (LDA) OF 16L will be reduced to 9700' and 16R to 8270' but with an EMAS constructed for shortened distance available.

INSTRUMENT APPROACH CHART

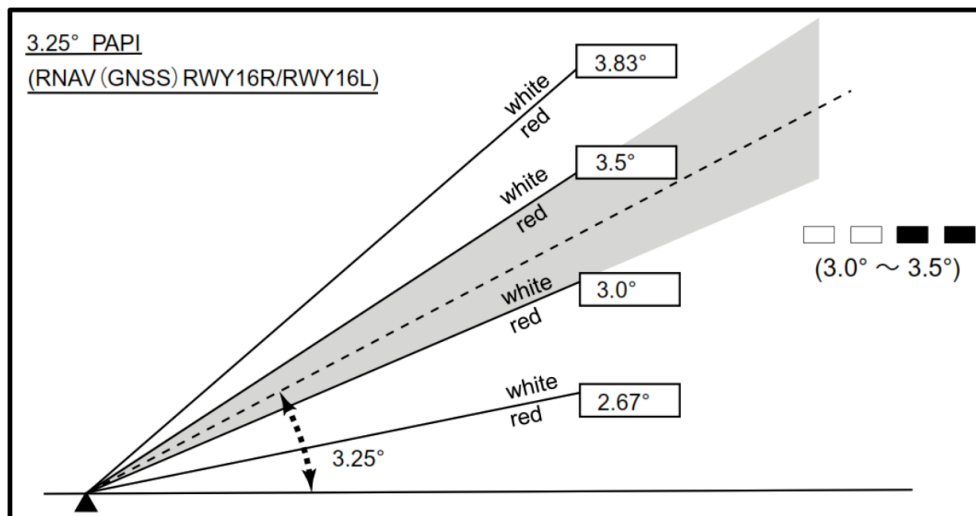


RNP RWY16L Approach

INSTRUMENT APPROACH CHART



RNP RWY16R Approach



3.25° PAPI at RWY16L&R

CONSIDERATIONS FOR RNP 16L&R

- Briefings should include energy management and configuration. The effect of temperature on the glide path should also be considered. Simulator trials show that gear down and landing flaps before the FAF allow for the best energy management on the final approach path.
- Brief the possibility of GPWS “Sink Rate” warnings and how they will be managed.
- Brief the strong possibility of becoming unstable, even at low altitude and be “go-around”-minded.
- At all times during the approach, but particularly during final approach, be aware of the thrust status of the aircraft as the engines may need to spool up from idle thrust. This will be particularly important during wind shear conditions.
- Avoid the temptation to “dive” for the correct PAPI indications. This may generate a GPWS warning and possibly destabilize the aircraft.
- Brief the flare technique and consider the impact of flaring too early or too late.
- With a reduced Landing Distance Available, the briefing should mention the scenario of a long landing.
- Consider carrying extra fuel due to the probability of having to go-around from the RNP approach and the significant holding if the ILS is required.

PREVAILING WIND FROM SOUTH AND WEST

(In Good Weather During 2300-0600 LCL)

During the midnight hours, the approach path avoids the city center to a certain extent. In westerly or southerly wind conditions, RWY23 will be in use since it is located farthest away from the city. If this runway is closed for some reason, the next available runway will become RWY16L, and the only approach type to this runway will be VOR-A. Due to the noise abatement measures, the final course is uniquely laid out. From the final approach course (274 radial), you will join downwind (337 radial) with a right turn, then on to final (157 radial).

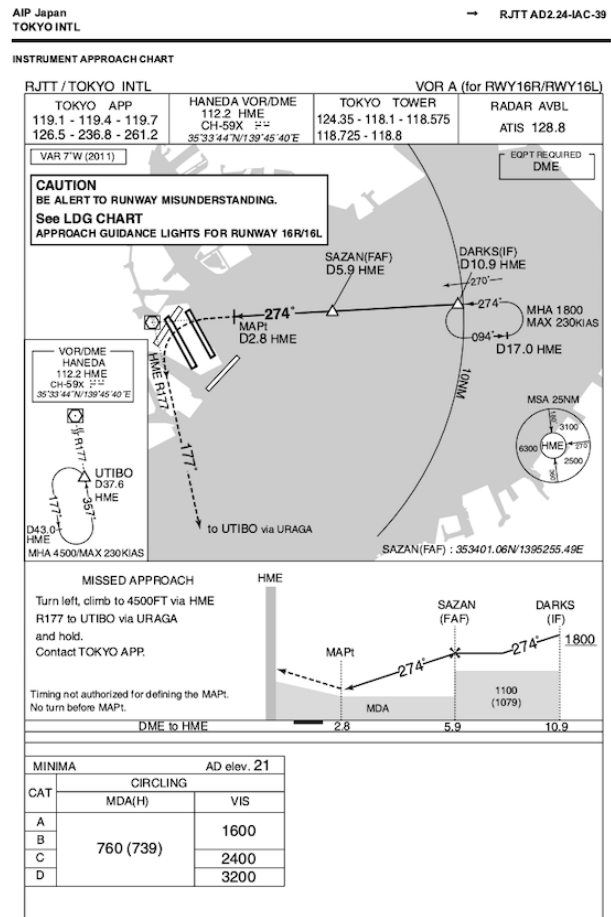
There have been some negative opinions for such a large international airport to adopt this procedure, however, due to the noise abatement measures during midnight hours, this airport will continue using this approach. You may request for LDA RWY22, which is another option, although this may not be recommended due to the tail-wind considerations.

RECOMMENDED PROCEDURES FOR VOR A

For those pilots flying in during the midnight hours (2300-0600 LCL) to Haneda Airport, you need to be well prepared when conducting the VOR-A approach to RWY16L & R. Here are some recommended techniques for safe operation:

VOR-A Approach (RWY16L&R)

- Passing DARKS, descend to 1100ft and lower the gear
 - After passing DARKS, landing configuration should be made
- Descend to MDA 760ft after joining downwind
 - Final approach course is almost perpendicular to the runway, so maintain high altitude to keep the positional awareness of the runway
- Passing SAZAN, start right turn immediately at HME D5.0
 - HME VOR is located 1nm west of RWY16L, so it will be extremely difficult to join a proper **VOR A (for RWY16L&R) Approach** downwind from the MAP (D2.8) since you will be only 1.8nm from the runway
- At abeam the runway end, start the clock and begin final left turn at 15 seconds
 - There are several buildings to the north of the airport which will make it difficult to see the runway.
- DO NOT descend from MDA too early
 - There is a tendency to begin descent too soon due to unfamiliarity to the low altitude circling approach. Judge the descent timing using flight instruments and position of the runway.



Civil Aviation Bureau, Japan (EFF:30 JAN 2020)

5/12/19

ALPA Japan will continue to monitor the situation as foreign traffic is increasing to operate into Tokyo/Haneda. If you have any questions or concerns, please contact ALPA Japan (airport@alpajapan.org).

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