

Basic ideas of environmental countermeasures and measures for co-existence (overview)

We will carry out countermeasures in a larger region based on the noise contours of 500,000 times. We will also examine and consult with organizations concerned on the points that have been strongly requested to be improved but not yet done, new countermeasures against night and early morning flights, and measures for regional development as follows;

Noise contours and enlargement of area to be covered

- Effects of the noise in the case of the number of departure and arrival slots of "500,000 times" will be estimated and environmental countermeasures such as the noise control works and the compensation for relocation expenses will be carried out in a larger area.
- Relaxation of restrictions on night flights will be taken into consideration.
- Effects of noise that would be generated by constructing "the runway for crosswind" that was planned at the opening of the airport will not be examined hereafter because the construction will not be executed in the future.

Raise the amount of grant for countermeasures in the surrounding area

- We consider the advance raise of total amount of grant because the number of households based on the noise contours at 500,000 times is increased and the calculation method of the annual number of departures and arrivals is changed to the calculation based on the airport capacity.

[Current] per household: 300,000 times,
per landing fee: 230,000 times (actual number)

[Planned] per household: 500,000 times,
per landing fee: 500,000 times (airport capacity)

- Review of allocation method
We consider a more effective support for development efforts by municipal government in the area under noise strain of a certain level by preferentially allocating a fixed amount of grant as "Regional promotion slot" from the annual grant, with their financial capability taken into account.

Relocation from the area where falling objects are reported

- Drawing a noise contours by taking the future increase of flights into account will allow a larger range of area to be specified for compensation for relocation expenses by Act on Special Measures concerning Countermeasures against Aircraft Noise around Specified Airports.
- We will continue to sincerely consult with organizations concerned on possible countermeasures against falling objects along with discussion on measures for co-prosperity and other various problems.

Upgrade of the noise control works

- We consider the aid that does not exceed the total price of special noise reduction sash and sheet glass, as a part of the total price of commercially available noise reduction sash and double pane window glass.

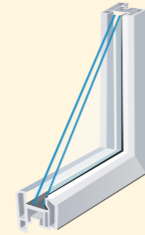


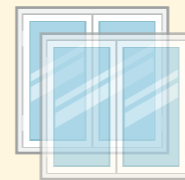
Figure of double pane window glass

No more dividing the small community (village) by contours line

- We will consult with organizations concerned with reference to the noise contours of 500,000 times.

Countermeasures against late-evening and early-morning flight noise (installment of internal windows in bedrooms)

- We will consult with organizations concerned on putting up internal windows in residential bedrooms which might have noise reduction effect of about 35dB~40dB when combined with the existing noise reduction works to secure the sound sleep of the people in the region in concurrence with the relaxation of restrictions on night flights.



Internal windows will be set up to improve the noise reduction effect.

Efforts for regional promotion and development

- We consider a more effective support for development efforts by municipal government in the area under noise strain of a certain level by preferentially allocating a fixed amount of grant as "Regional promotion allocation" from the annual grant, with their financial capability taken into account. (repetition)
- We will carry out the investigation on local transportation around Narita Airport with Liaison Council of Regional Promotion.

Further steps

With the proposals of NAA, "Confirmation of procedures for reviewing the further capacity enhancement of Narita Airport" was signed at the four-party council meeting held on September 27th, 2016. Contents include the items listed to the right. NAA will hold a meeting to explain the plans proposed by NAA to the people in the surrounding area of the airport.

- Chiba prefectural government and 9 municipalities will approve that the government and NAA will hold a meeting to explain NAA's proposals to residents including those who live in the noise strain area.
- As for the relaxation of restrictions on night flights, since its influence on the living environment of the people in the noise strain area will be large, the government and NAA will make a through explanation of the demand and the environmental countermeasures.
- The government and NAA will make the best efforts possible to receive community understanding and with cooperation and support of Chiba prefectural government and 9 municipalities.

We listen earnestly and discuss openly for the future of the community and Narita

[Report on Capacity Enhancement of Narita Airport, vol.3]

Capacity enhancement is essential at Narita Airport for economic growth and regional development

Japan is sliding into a phase of serious aging society with fewer children. To increase the number of foreign visitors and to make the tourism a key industry is one of the national strategies. Narita Airport, the major gateway of Japan, needs to work on further airport capacity enhancement in order to fulfill the mission of contributing to the economic growth of Japan and for the regional development and promotion as well as to contribute to the realization of a tourism-oriented country. However, this capacity enhancement would result in enlarging the area that would be affected by the aircraft noise. In particular, relaxing the restrictions on night flights would put additional heavy strain on the neighboring community. We have presented not only the capacity enhancement plans of Narita Airport but also our basic ideas of environmental countermeasures and measures for coexistence at the four-party council* held in September, 2016. We would enrich environmental countermeasures and measures for coexistence in keeping with the basic ideas so as to realize the coexistence and co-prosperity of the neighboring community and the Airport.

* The four-party council consists of Ministry of Land, Infrastructure, Transport and Tourism, Chiba prefectural government, 9 municipalities in the surrounding area of Airport, and Narita International Airport Corporation (NAA).



NAA presented a report on a survey for capacity enhancement in which the explanation and the proposals were made regarding "Specific locations of runways," "Boundary of airport site," "Relaxation of restrictions on night flights," "Expected noise contour*," and "Basic ideas of environmental countermeasures and measures for coexistence" at the council meeting held on September 27th, 2016.

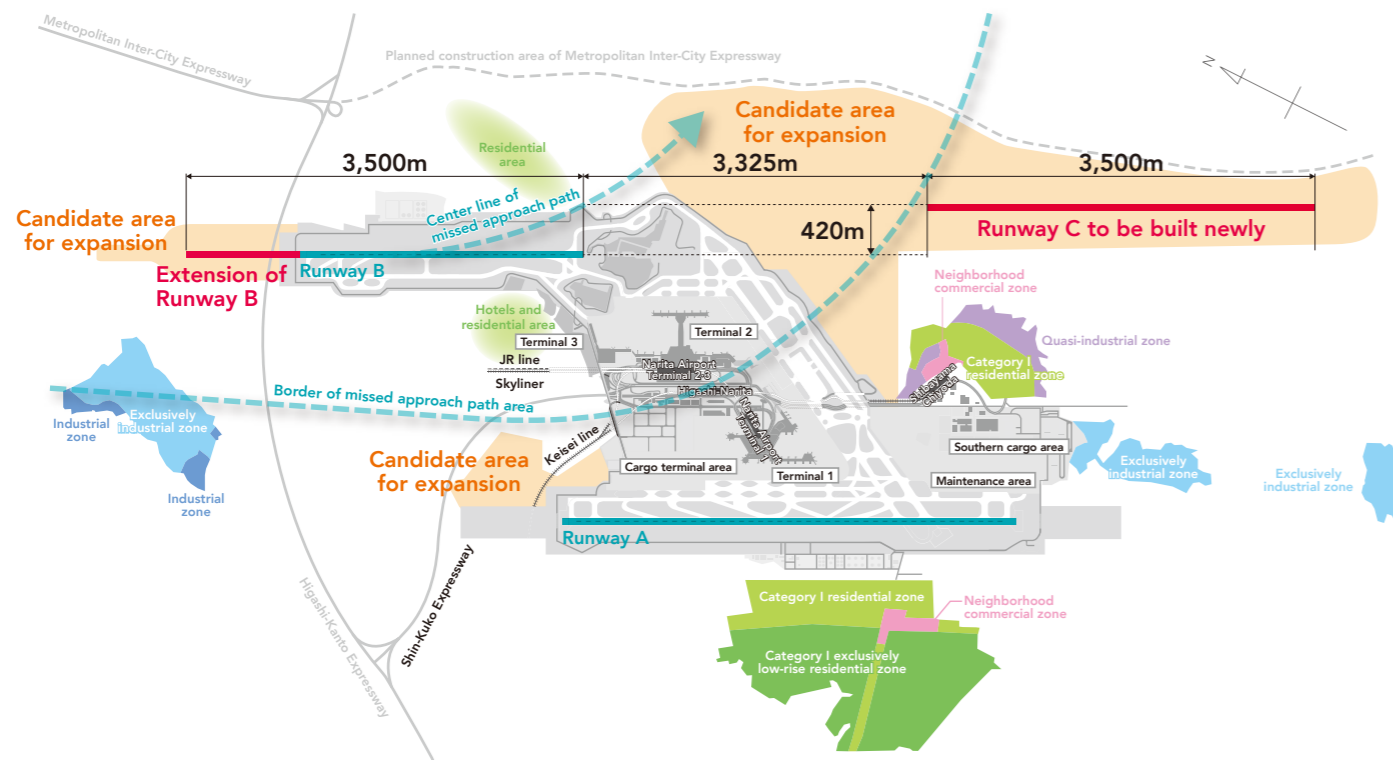
*Noise contour shows the area that is expectedly affected by the noise. "Contour" is a line drawn by connecting points of a same value such as an isobaric line of a weather chart or a contour of a map.



Capacity enhancement would help Narita Airport keep up with the growing demand in the airline business and would advance the growth of economy and society of Japan with the expectation of the economic ripple effect and the employment creation effect in the surrounding area. This report explains the ways and means to increase the annual number of departure and arrival slots from 300,000 to 500,000 and the countermeasures against nuisances.

1 Another runway to be built newly· Extension of runway Expansion of airport site

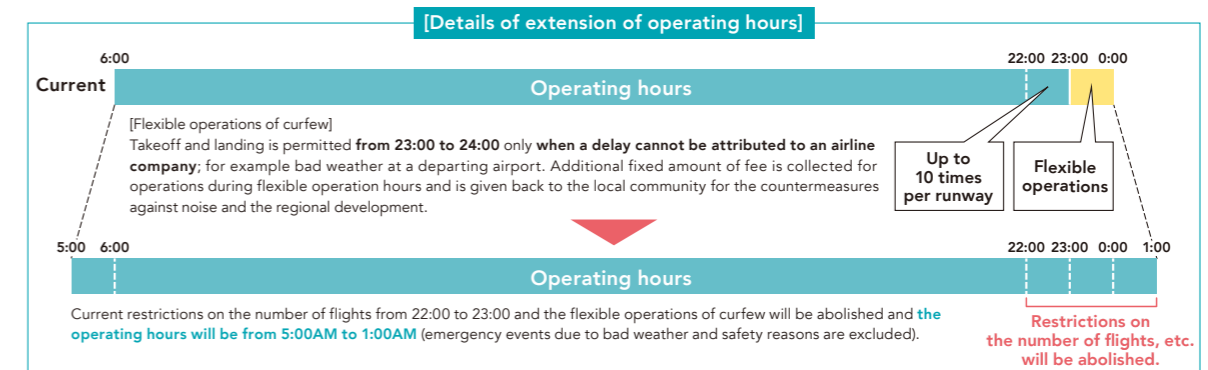
- Runway B will be extended northward so that the missed approach area of Runway B will not overlap Runway C. Location plan will conform to plans for construction of Metropolitan Inter-City Expressway (Ken-ou-do).
- It is necessary to expand the site by 1,000ha in order to achieve the 500,000 annual departure and arrival slots.
- Considering the designated city planning area and the residential area in the surrounding area of Airport, the candidate area for an expanded airport site will be as follows;



*It is necessary to consult and conduct an examination with organization concerned hereafter about the extension of Runway B and the construction of new Runway C since it will have an enormous influence on roads and other things including Higashi-Kanto Expressway and Metropolitan Inter-City Expressway, *It is necessary to consult and conduct an examination with organization concerned about the candidate area for expansion since it will be a large-scale expansion of 1,000ha.

2 Relaxation of restrictions on night flights. Seeking understanding for the current operating hours of [6:00-23:00] to be extended to [5:00-1:00]

Major airports in Asia and Middle East have been conducting aggressive activities to attract new airlines, new routes and more flights and promoting constructions for a large-scale improvement of airports to keep up with the fast-growing demand of the airline business. Circumstances surrounding Narita Airport, where need for longer opening hours of the airport facilities is desired by the increasing number of foreign visitors, the need for effective airport operations that support business models of Narita-based LCCs, and the demand of more user-friendliness as the largest international cargo logistics airport, have changed so much that the extension of operating hours is now an urgent issue to be accommodated.

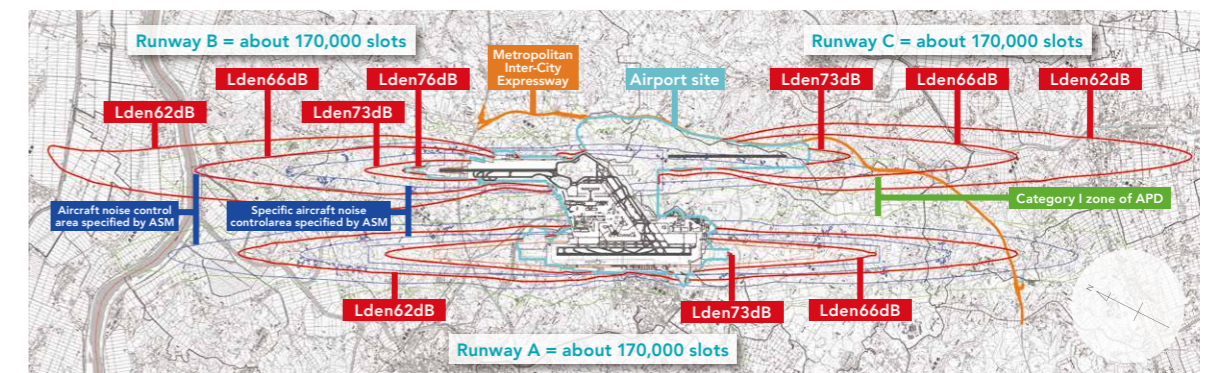


*In concurrence with the relaxation of restrictions on night flights, we will consult with organizations concerned as to putting up internal windows of double windows in order to secure sound sleep of people that improve the noise canceling effect in houses in the aircraft noise control area specified by Act on Special Measures concerning Countermeasures against Aircraft Noise around Specified Airports.

3 The map below shows the noise contours on the premise of 500,000 slots.

Plans of noise control zone regulated by Act*1 and Act*2 will be made based on this noise contours in view of cohesion of neighboring houses, landscape, terrestrial objects, etc.

*1: Act on Prevention of Damage caused by Aircraft Noise in Areas around Public Airports (=APD)
 *2: Act on Special Measures concerning Countermeasures against Aircraft Noise around Specified Airports (=ASM)



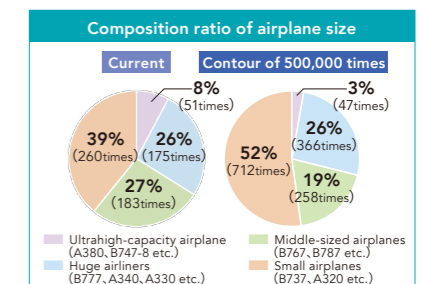
Lden62dB = Corresponds to Category I zone of APD (aid to the noise control work to residential houses, air conditioning function recovery construction, etc.)
 Corresponds to aircraft noise control area specified by ASM (liable to adopt noise insulation structures to buildings)
Lden66dB = Corresponds to Specific aircraft noise control area specified by ASM (residential houses and schools cannot be built, compensation for relocation expenses, purchase of land)
Lden73dB = Corresponds to Category II zone of APD (compensation for relocation and purchase of land)
Lden76dB = Corresponds to Category III zone of APD (compensation for relocation, purchase of land, setting up vegetated buffer)
 *Weather condition is set to the typical values (temperature 25 degrees Celsius, humidity 70%, calm)

Lden (Time-zone corrected day-evening-night equivalent sound level, unit: dB)
 Lden is an evaluation index of ambient criteria for aircraft noise and is used to evaluate the noise in APD and ASM. It represents the amount of noise in a day with the corrected value of +5dB in the evening hours (19:00-22:00) and +10dB in the nighttime (0:00-7:00 and 22:00-24:00) when the noise is heard louder than it actually is.

[The following tables show the premises to draw the noise contours.]

	Annual number of departures and arrivals for each runway	
	Contour of 500,000 times	
Runway A	About 170,000 times/year	
Runway B	About 170,000 times/year	
Runway C	About 170,000 times/year	
Total	500,000 times/year	

	Number of departures and arrivals for each time zone (500,000 times)	
	Per runway	Overall airport
From 5:00 to 6:59	22	66
From 7:00 to 18:59	332	996
From 19:00 to 21:59	75	225
From 20:00 to 0:59	32	96
Total	461	1,383



The government and NAA have estimated the number of departures and arrivals at Narita Airport will reach half-million times a year in the first few years of 2030s by the latter half of 2040s with the number of visitors of 75 millions a year and the amount of freight of 3 million ton a year.