Filing Percentage is around 65% in Fukuoka FIR Oceanic area.
Started operation New Oceanic System (TOPS) in Feb 2019

- Trajectorized Oceanic Traffic Data Processing System (TOPS) is a next generation system for oceanic air traffic control.

- TOPS have started operation in February 2019.

- TOPS provides,
  - data link functions which includes AFN, ADS-C and CPDLC;
  - AIDC messaging function between RJJJ and other ATSUs including Manila ACC;
  - more accurate aircraft position data calculated from ADS-C report or position report, with using dynamic weather data; and
  - more stringent conflict probe and support for decision making for controllers.

- TOPS has new features which support,
  - PBCS framework;
  - ADS-C Climb and Descend Procedure (CDP)*; and
  - ADS-B In-Trail Procedure (ITP)*.
  *ADS-C CDP and ADS-B ITP will be supported from beginning of 2020.

Special Thanks for FAA's support
Current facility and shape of sectors

- **Sapporo ACC**
  - 6 sectors

- **Fukuoka ACC**
  - 11 sectors

- **Tokyo ACC**
  - 22 sectors

- **Kobe ACC**
  - 3 sectors
Redesigning the current domestic airspace (En-route and ACA)
Decreasing ATC workload totally and improving ATC operational efficiency.

Redesign of Airspace

Before redesign - En-route and ACA

After redesign

Change of Domestic Airspace and Facilities
We order to respond to an increase in the future traffic demand, conventional and different, to expand the ATC capacity by the airspace divided by altitude.

- By difference of cruising, climbing, and descending, we raise the treatment capacity of aircraft.
- In the high altitude airspace of low workload, the handling number of aircraft makes to increase.

Handling ability of Air Traffic Control was raised by reducing number of aircraft per 1 sector by subdivision of a sector conventionally.

However, enforcement of subdivision beyond this will increase the time and effort of taking over between sectors. Moreover, the airspace that detour for bad weather or turn order of an aircraft becomes less insufficient, and throughput declines conversely.

Current airspace composition and future airspace divided by altitude

Expand capacity and implementation stage
Draft of airspace composition in 2025

【Shape of Upper Area sectors】

Fukuoka UAC

Kobe ACC

【Shape of ACC sectors below FL335】
Draft of airspace composition in 2025

1. FUKUOKA UAC (Upper Area Sector + Oceanic sector)
   - EAST area: 11 sectors (within 4 Oceanic sector)
   - WEST area: 11 sectors (within 1 Oceanic sector)

2. TOKYO ACC (EAST of JAPAN below FL335)
   - North area: 7 sectors
   - East area: 8 sectors

3. KOBE ACC (WEST of JAPAN below FL335)
   - WEST area: 8 sectors
   - SOUTH area: 3 sectors

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~Number of sectors~

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<th>City</th>
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<td>22 (Oceanic 5)</td>
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Thanks