

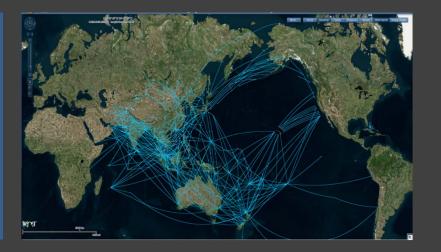


# Start



## INTRODUCTION



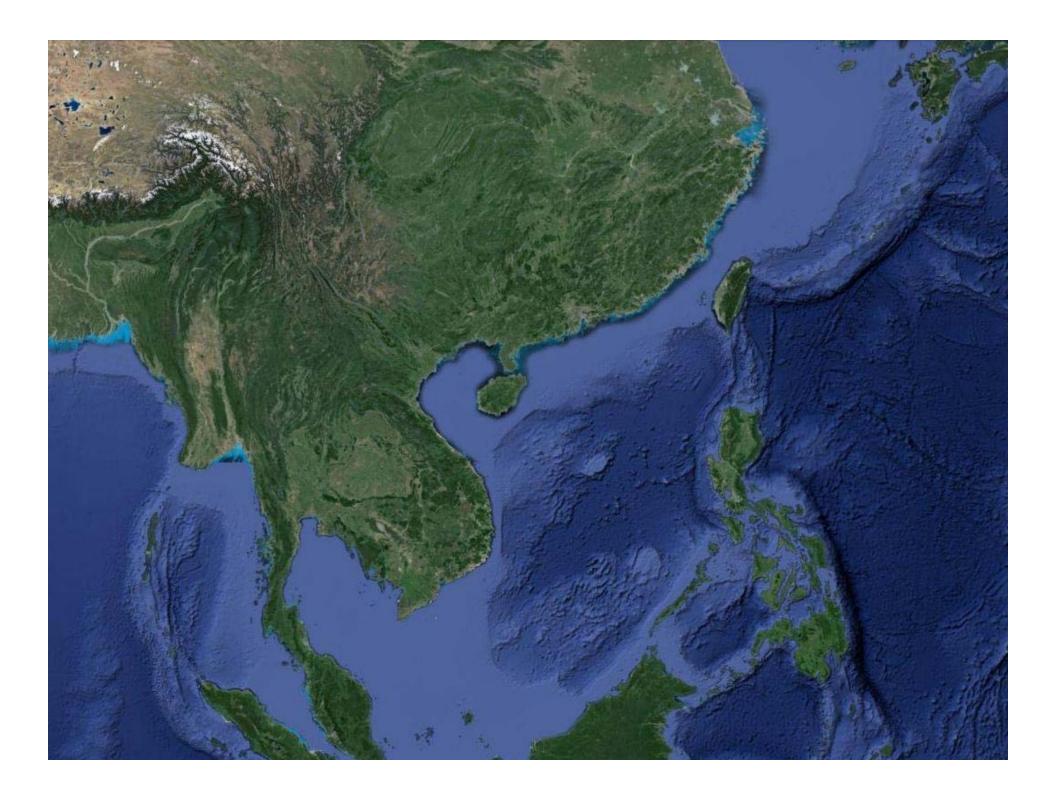


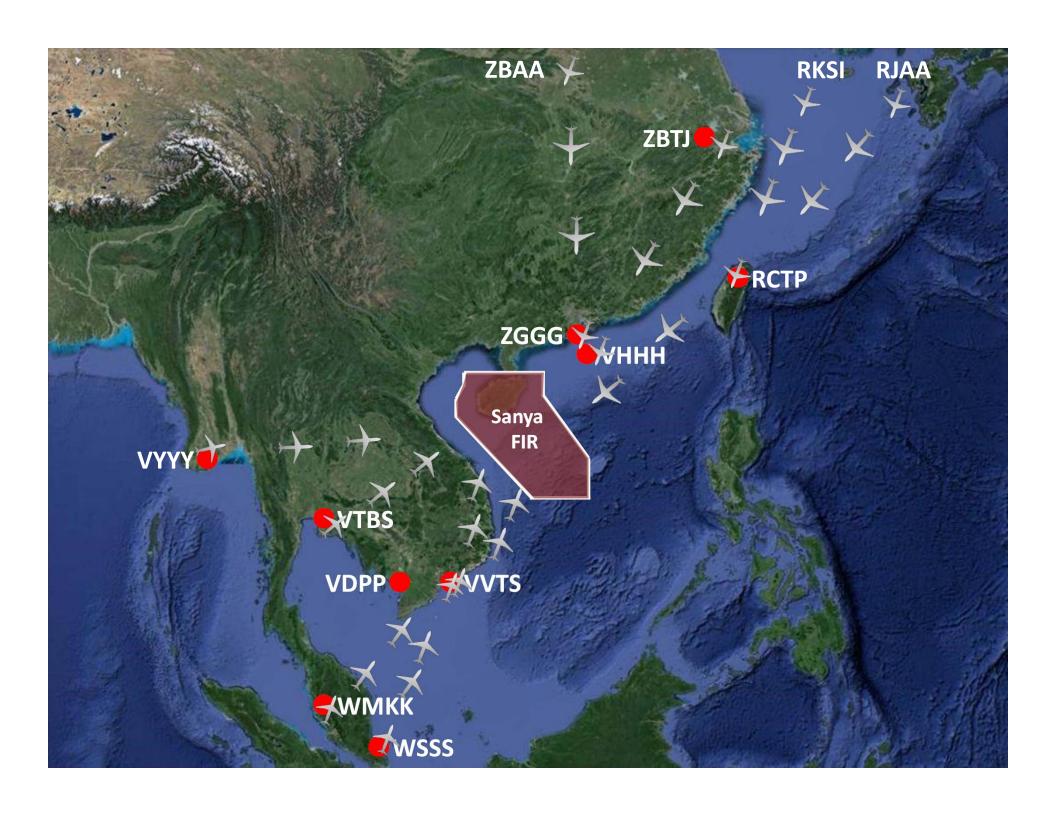


**DISCUSSION** 







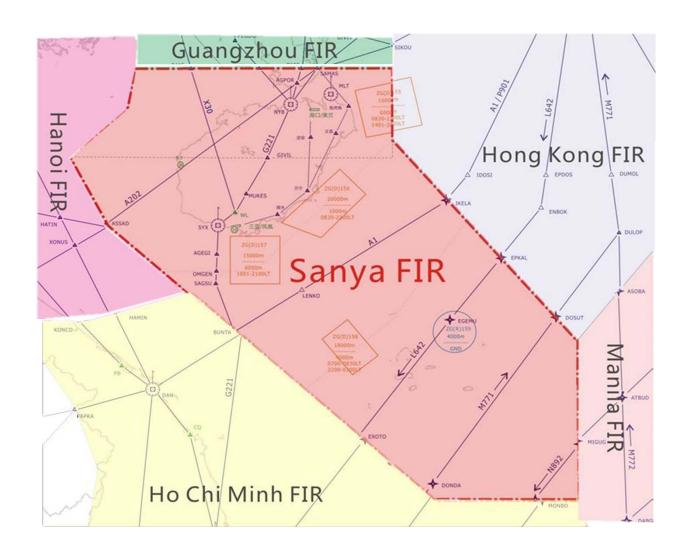


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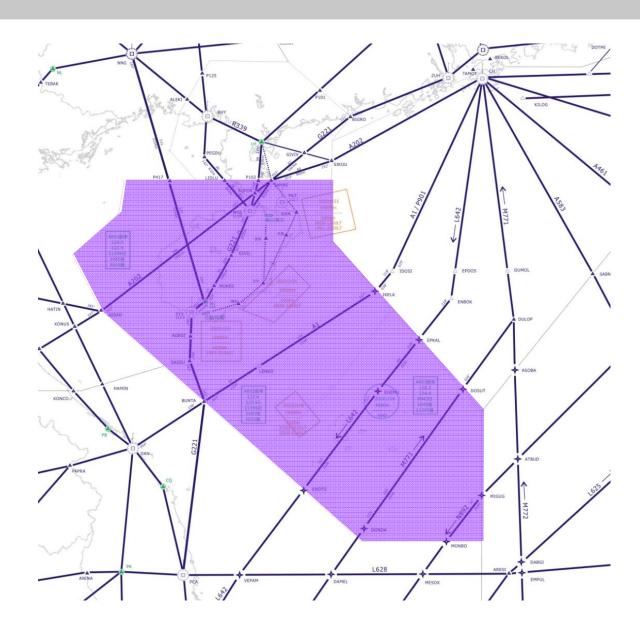
## **Geographical Position**





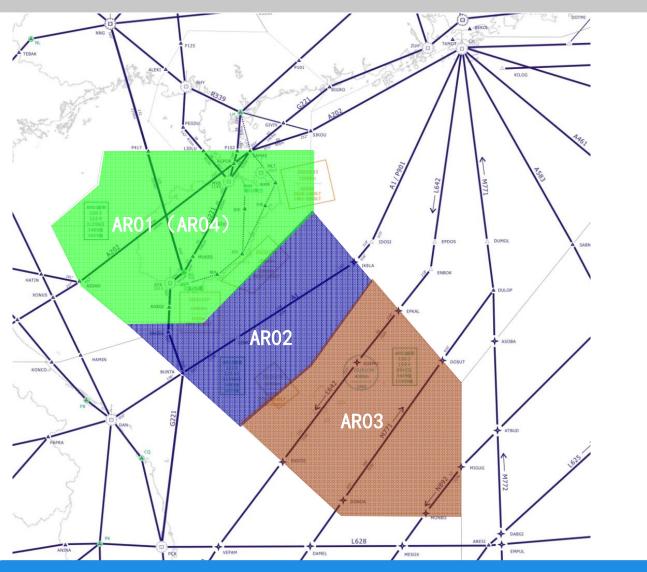
## Airspace and Sectors





#### Airspace and Sectors





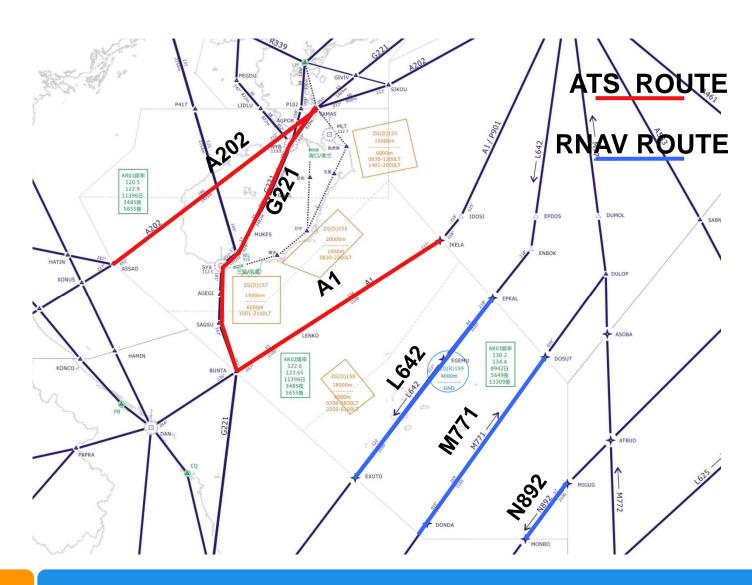
AR02/03

Controlling the flights over the South China Sea Areain accordance with the relevant standards and provisions of ICAO

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#### **ROUTES**



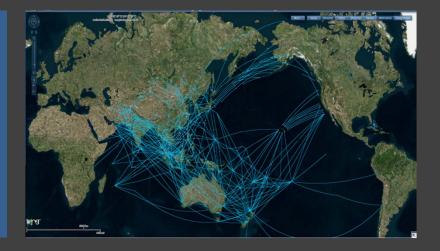


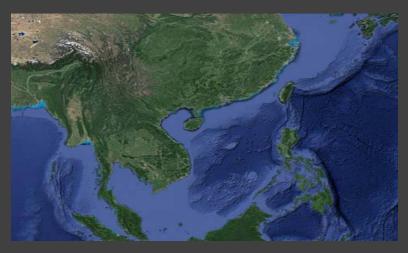
# Start



#### **INTRODUCTION**







**DISSCUSSION** 

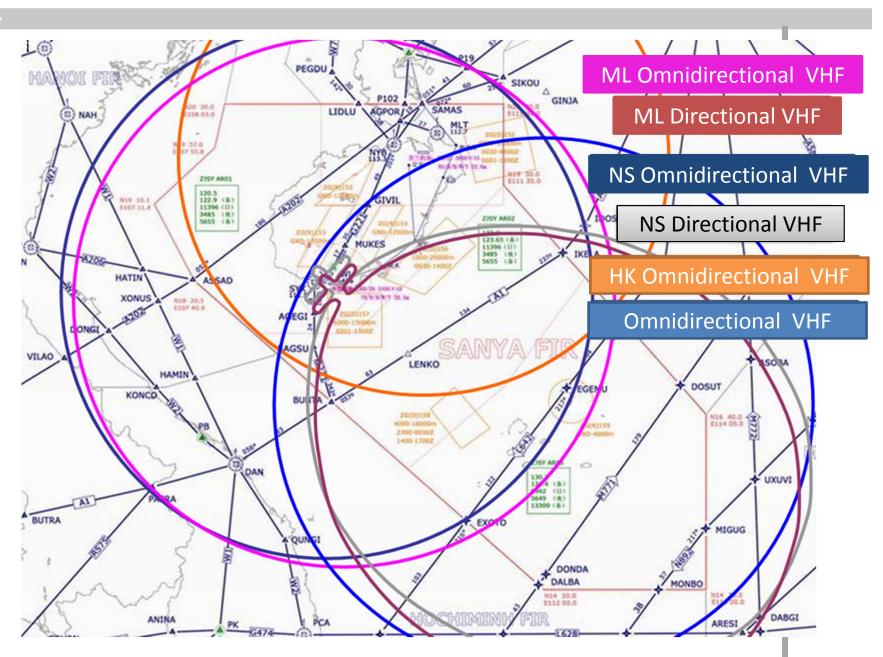




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#### **Communication Equipment**





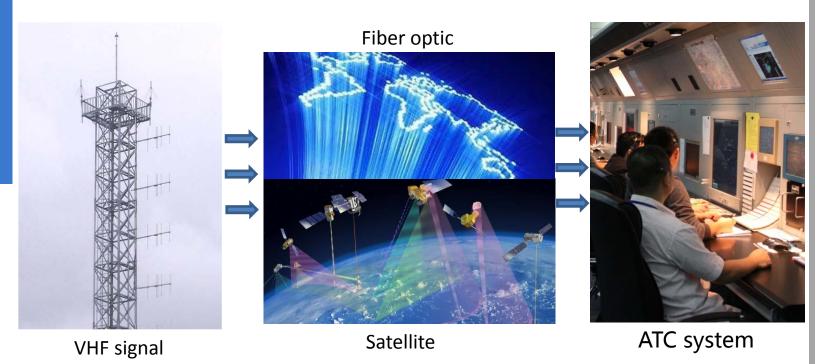
#### **Communication Equipment**



#### **Transmission Mode**



Omnidirectional Directional Equipment



HF

Also equipped high-frequency radio equipment

### **Communication Equipment**



# Coordinate with adjacent control unit



2

- 1 Primary: "hotline" and satellite line
- 2 Backup: direct-dial phone
- **3** Others: alternative ways

Α

### **Navigation Technology**



# **Advanced Technology**



3

Base on RNP10, positive development of RNP4

30NM longitudinal transfer separation has been used on route A1. Meanwhile, 50NM separation based on RNP10 has been implemented on the routes of L642 and M771

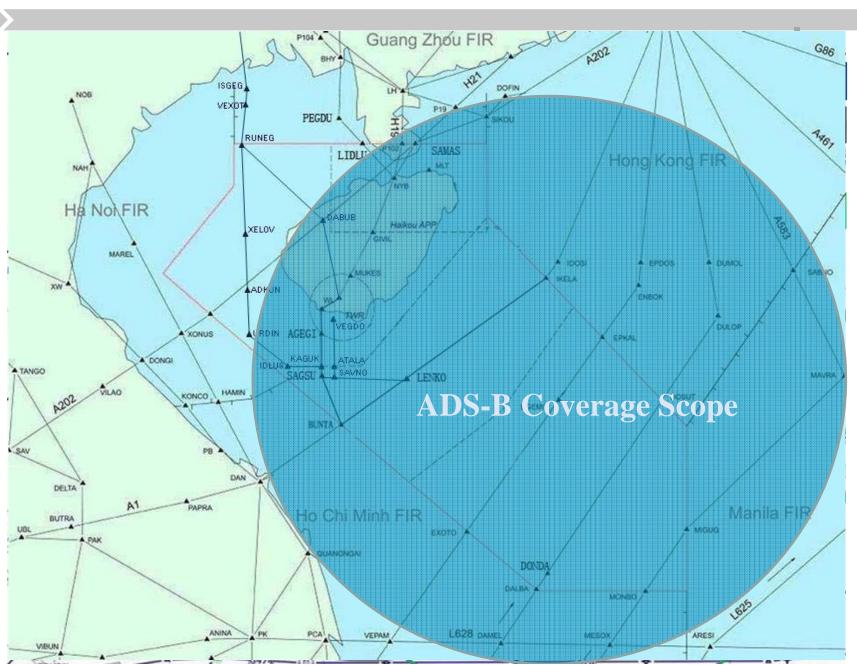
A study on the possibility of upgrading A1 from conventional routes to RNP4 has been considered as the preferred navigation. A parallel RNP4 route would be set to the south of route A1 with 30NM lateral distance.



Α

## Surveillance Equipment





#### Surveillance Equipment



#### 1 Multi-Radar Signal Fusion

- Multiplex secondary radar and/or ADS-B signals integrated in the automatic system
- Display the feedback of flight dynamic information on each display of control position;
- The standby automatic system has the same configuration of radar signal inputs.

#### 2 More ADS-B Equipages

- Five ADS-B base stations would be deployed in Sanya FIR including four ongoing projects and the other one which has already been used;
- Old base station which has been used has already connected to the automatic system and covered the routes L642 and M771;
- ADS-B signals would be covering the overall Sanya FIR in the future

#### ATM capability



#### 1. Personnel

**83**Personnel in Sanya ACC

65
Licensed Controllers

The requirements of controller's capability to work alone need a longer training period of time.

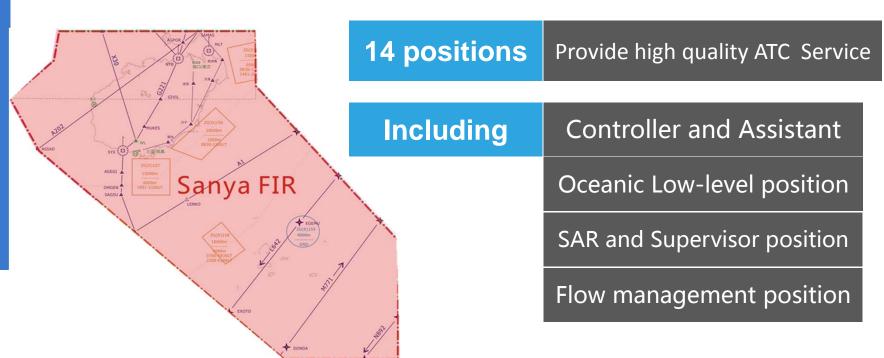
Therefore, a single controller has to pass a series of examinations to be a sophisticated one.

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## ATM capability



#### 2. Positions



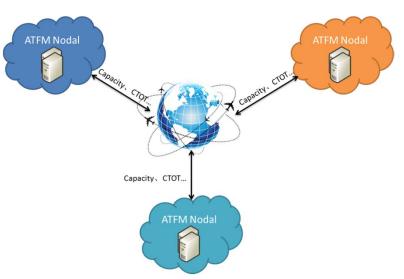
#### ATM capability



#### 3. ATFM



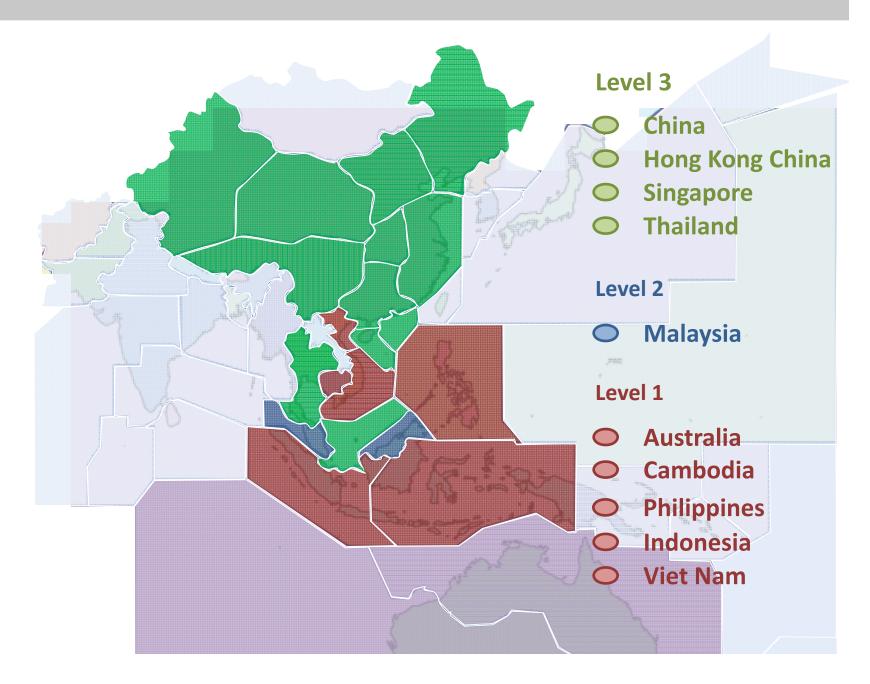
■ Ensure an optimum flow of air traffic to or through areas during times when demand exceeds, or is expected to exceed, available capacity of the ATC system.



- Sanya FIR launched the "collaborative flight delivery management" system.
- As the main approach of ATFM/CDM to contribute to the safety, efficiency, cost effectiveness, and environmental sustainability of an ATM system.

#### **ATFM Ops Trial Network Capability Map**





## Harmonized working group





ATFM Operational Trial



#### **Civil Aviation Administration of China**











