



International Civil Aviation Organization
The Second Meeting of South China Sea Major Traffic Flow Review Group
(SCS-MTFRG/2)
Haikou, China, 22-24 July 2015

Agenda Item 3: Review of the existing MTF route structures in SCS Airspace and identifying priorities

MAJOR TRAFFIC FLOW IN SANYA FIR

(Presented by CHINA)

SUMMARY

This paper presents major traffic flow in Sanya FIR. It is an important region which guards the main route groups of the South China Sea Area. The air traffic flow of the main route groups such as A202, G221, A1, L642, M771, and N892 is growing rapidly, which ranks the Sanya FIR ahead of the ATFM zone in the South China Sea Area.

1. INTRODUCTION

Over the years, the South China Sea Area as one of the three major air traffic flows in the Asia Pacific Region - the transport hub of Southeast Asia and Northeast Asia, attracts even more attention with the rapid development of civil aviation and air traffic flow of in the Asia Pacific Region. With its rising significance in the Asia Pacific Region the South China Sea Area has become an important node and gradually become a barometer of promoting the development of civil aviation in the Asia Pacific Region.

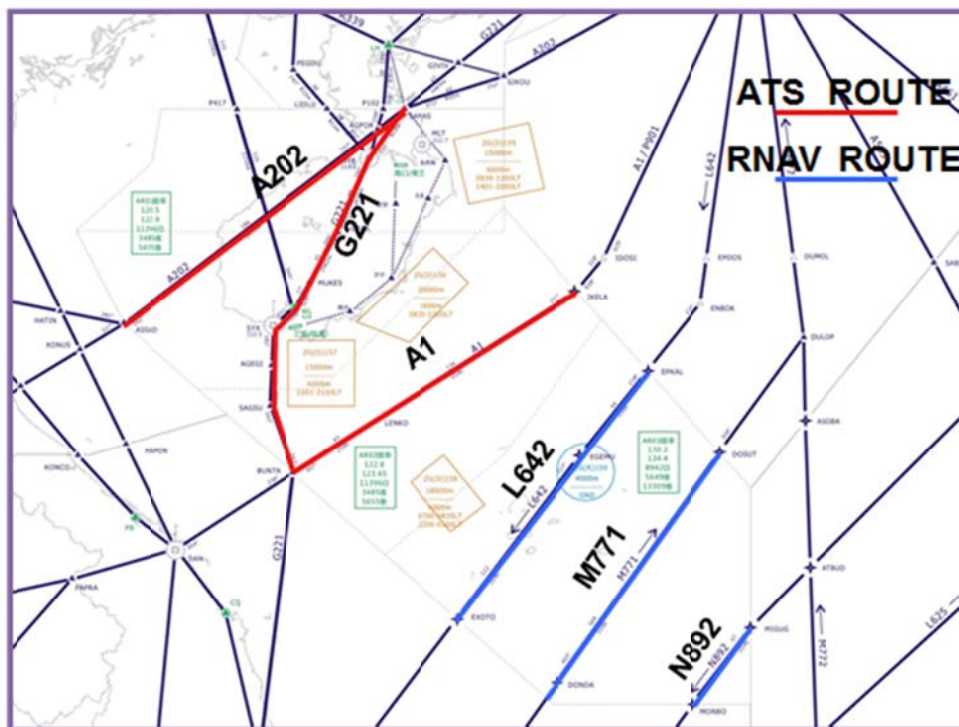


Figure 1 Sanya FIR Primary Routes

2. DISCUSSION

Route Structures

2.1 Route A202. The segment of route A202 in Sanya FIR is ASSAD - AGPOR – SAMAS which is one of China’s first RVSM routes. 30 nm of horizontal spacing has been used at the same level under the condition of radar control and the whole area is covered by VHF. Daily volume in sanya FIR segment is about 216 aircrafts and daily peak is 303 aircrafts.

2.2 Route A1. The segment of route A1 in Sanya FIR is IKELA-LENKO-BUNTA which uses RNP10 navigation technology. 30 nm of horizontal spacing has been used at the same level under the condition of radar control and the whole area is covered by VHF. Daily volume in sanya FIR segment is about 293 aircrafts and daily peak is 371 aircrafts.

2.3 L642/M771 Parallel routes. L642 / M771 use 50/50 miles area navigation technology that is 50 miles of autonomous navigation horizontal spacing at the same level. The segment of route L642 in Sanya FIR is EPKAL - EGEMU – EXOTO which the average daily flow is about 121 aircrafts and daily peak is 176 aircrafts. The segment of route M771 in Sanya FIR is DALBA-DONDA-DOSUT which average daily flow is about 92 aircrafts and daily peak is 132 aircrafts.

Traffic analysis

2.4 Annual flights data. In recent five years, the annual average growth rate of flights on route A202 in Sanya FIR is 13.6% of which the highest growth rate was 26.0% in 2013. The annual average growth rate of flights on route A1 is 12.7%. The annual average growth rate of flights on route L642 is 11.6% of which the highest growth rate reached 14.8% in 2011. The annual average growth rate of flights on route M771 is 4.1% of which the peak growth rate reached 10.2% in 2012.

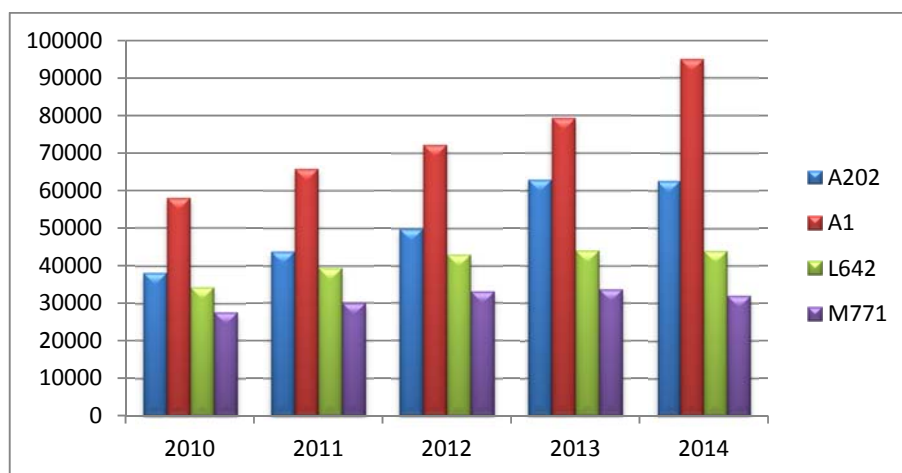


Figure 2 Annual flights histogram

2.5 Analysis of annual average daily flights. In recent five years, the annual average growth rate of daily flights on route A202 in Sanya FIR is 16.1% of which the peak growth rate was 26.4% in 2013. The annual average growth rate of daily flights on route A1 is 12.0%. The annual average growth rate of daily flights on route L642 is 4.6% of which the highest growth rate reached 14.9% in 2011. The annual average growth rate of daily flights on route M771 is 2.6% of which the peak growth rate reached 10.0% in 2012.

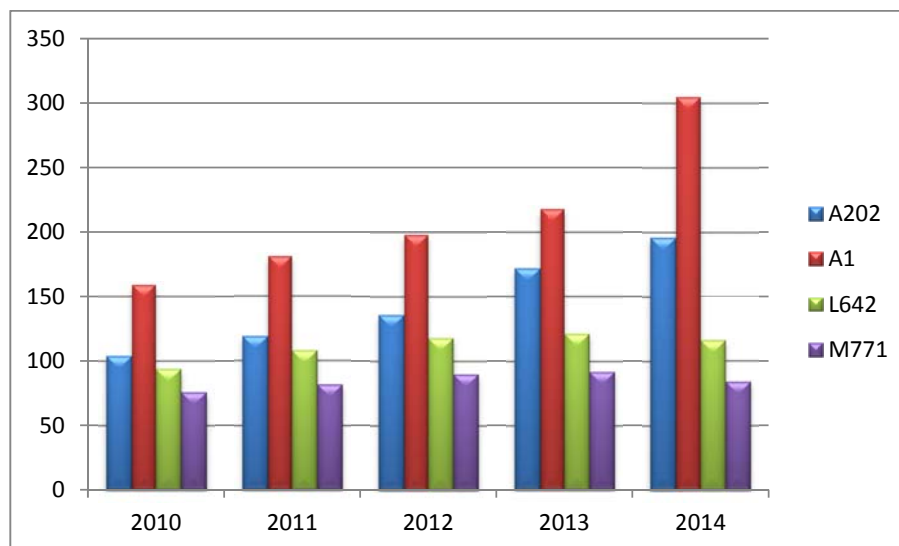


Figure 3 Annual average daily flights histogram

Air Traffic Flow Management

2.6 Sanya FIR is an important region which guards the main route groups of the South China Sea Area. The air traffic flow of the main route groups such as A202, G221, A1, L642, M771, and N892 is growing rapidly, which ranks the Sanya FIR ahead of the ATFM zone in the South China Sea Area.

2.7 Since January 2015, Sanya FIR launched the "collaborative flight delivery management" as the main approach of CDM/ATFM in civil aviation transportation, which preliminary realized the goal of reducing flight delays, avoiding flight passengers' long time waiting in the cabin etc. The ATMB CAAC developed a set of operation rules, which has been applied to the process of collaborative flight delivery management, has played a key role.

2.8 Through a collaborative research from China, Singapore, Thailand, Hong Kong, China, Malaysia, and along with other relevant stakeholders, ATFM Operational Trial has been started since 29 June 2015. The Trial would first focus on addressing Demand-Capacity Balancing (DCB) at individual airports through regulating arriving flights using CTOT and Ground Delay Program (GDP) at ports of origin. Subsequently the project would focus on DCB within sectors and airspace managed by participating ANSPs as well as looking into flow management of long-haul inter-regional flights.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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