



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

Agenda Item 4: Review of the current and planned CNS/ATM capabilities and identifying associated reduced horizontal separation

GENERAL SITUATION OF ATC SUPPORT CAPABILITY AT SOUTH CHINA SEA AREA

(Presented by CHINA)

SUMMARY

This paper presents the general situation of ATC support capability at South China Sea Area. Routes A202, A1, G221, L642, M771 and N892 in Sanya FIR are important and busy air channels connecting Southeast Asia and mainland China as well as the Northeast Asia. This presentation will elaborate on the situation of communication equipment, navigation technology, and surveillance equipment in this area.

1. INTRODUCTION

1.1 Sanya FIR located in north central of the South China Sea Area, and covers an area of airspace about 279,000 square kilometers to the south of Guangzhou FIR, the north of Ho Chi Minh, the west of Hong Kong and Manila, the east of Hanoi FIR. It is the important air channels connecting Southeast Asia and mainland China as well as the Northeast Asia.

1.2 Sanya FIR is mainly divided into four high level control sectors including AR01, AR02, AR03 and AR04, and each sector has its own level limitations.. AR01 and AR04 are the domestic sectors which are set to control the flights over Hainan Island in accordance with the relevant standards and provisions of CAAC. AR02 and AR03 are the oceanic sectors which are set to control the flights over the South China Sea Area in accordance with the relevant standard provisions of ICAO.

1.3 Sanya FIR has 6 international routes which A1, A202 and G221 are the conventional ATS routes, L642, M771 and N892 (PBN route N892 is temporarily delegated by Ho Chi Minh) are the PBN routes. In addition, there are also some other routes such as W70, W170, W171 in Sanya FIR.

crew which already meet the qualification criteria and indicate the RNP4 capability in the FPL.

Surveillance Equipment

2.5 The overall airspace at FL290 or above of oceanic sectors in Sanya FIR has been covered by four secondary surveillance radars. In addition, ADS-B has also been equipped in the same airspace. Therefore, it realizes the double coverage by radar and ADS-B.

2.6 Multiplex secondary radar and/or ADS-B signals integrated in the automatic system, and display the feedback of flight dynamic information on the display of each control position. The standby automatic system has the same configuration of radar signal input. The radar signal is transmitted by two ways, satellite and fiber optic, with high reliability.

2.7 Five ADS-B base stations would be deployed in Sanya FIR including four ongoing projects and one already been used.. Currently, the ongoing construction projects of ADS-B base stations in Sanya FIR have not connected to the main automatic system, and the old base station which has been used has already linked to the automatic system and covered the routes L642 and M771. ADS-B signals would cover the overall Sanya FIR in the near future.

ATM capability

2.8 There are 83 personnel including 65 licensed controllers compliance with the qualifications of Radar and ADS-B in Sanya Area Control Center. 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.

2.9 14 positions have been set up in Sanya Area Control Center to provide high quality air traffic control service which including controller, Assistant, Oceanic Low-level, SAR, Flow Management, Supervisor positions and so on.

2.10 As air traffic flow management (ATFM) service is to 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" as the main approach of ATFM/CDM to contribute to the safety, efficiency, cost effectiveness, and environmental sustainability of an ATM system in South China Sea Area.

2.11 As the level 3 participant of the ongoing Cross-border ATFM Ops Trial, ATMB CAAC along with states around South China Sea Area worked together to develop guidance on building up capability for readiness to actively participate in the trial. The close cooperation and collaboration led to the commencement of the Cross Border ATFM Operational Trial on 29 June 2015.

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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