



**International Civil Aviation Organization**

**NINTH MEETING OF THE  
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND  
METEOROLOGY SUB-GROUP OF APANPIRG  
(CNS/MET SG/9)**

Bangkok, Thailand, 11–15 July 2005

**Agenda Item 4:           Aeronautical Mobile Service**

**Agenda Item 14:       Review of deficiencies in the CNS and MET fields**

**IMPROVEMENT OF CNS SYSTEMS IN YANGON FIR**

(Presented by Myanmar)

**SUMMARY**

This paper presents information on improvement of air-ground communications and proposed to delete the communication deficiency as the deficiency has been eliminated.

**1.       INTRODUCTION**

1.1     Due to the geographical area of Myanmar, the Department of Civil Aviation, had to implement Remote Controlled Air Ground (RCAG) VHF stations through out Yangon FIR. In 1989, Myanmar has implemented two RCAG stations in Mandalay and Dawei, followed by Lashio and in Kawthoung and Patheingyi in 1996, providing over 90 per cent FIR under VHF coverage.

1.2     The system was supported by fixed crystal transmitters and linked by leased Microwave lines from Myanmar Post and Telecommunication Department.

1.3     During the past years, the system suffered from interference caused by illegal high power cordless phone and most of the sites encounter heavy disturbances.

**2.       DISCUSSION**

2.1     Civil Aviation, Myanmar planned upgrading of the RCAG VHF system since then. The government also tried to stop the use of illegal telephone, with little success. Department of Civil Aviation changed the frequency of the sector II frequency from 134.2 MHz to the general-purpose frequency 127.1 MHz, however some of the RCAG site could not be used.

2.2     In 2004, Civil Aviation, Myanmar made agreement with Aeronautical Radio of Thailand Ltd. (AEROTHAI) to renew the RCAG with a modern digital VHF system complete with solar powers and own VSAT links.

2.3 Installation started in March 2005, and the new system was fully operational with effect from 9 June 2005 as published in AIP SUP 01/05 after a month trial.

2.4 The sector I, (the northern sector) frequency 133.2 was replaced with 126.75 MHz and the Sector II, (the southern sector) frequency 134.2 was replaced with 128.75 MHz.

2.5 The VHF coverage in Yangon FIR is shown in the attached chart.

### **3. NEAR-TERM DEVELOPMENTS**

3.1 Civil Aviation, Myanmar has also contracted with THALES, to for the supply of the HF SSB transmitters with SELCAL system.

3.2 The first transmitter will be delivered and installed in July 2005.

### **4. FUTURE DEVELOPMENTS**

4.1 Civil Aviation, Myanmar has also allocated budget this year for the replacement of VOR/DMEs as well as Secondary Surveillance Radar at Myeik to complete the surveillance capability.

### **5. ACTION BY THE MEETING**

5.1 The meeting is invited to:

- i) note the progress in improving communication; and
- ii) in view of the progress made in improving VHF air-ground communication in Yangon FIR consider deleting the communication deficiency in Yangon FIR from the list of deficiencies developed by APANPIRG.

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# MYANMAR ATS ROUTES AND RCAG COVERAGE

