



International Civil Aviation Organization

**Third Meeting of the Southeast Asia Route Review Task Force
(SEA-RR/TF/3)**

Bangkok, Thailand, 24 – 27 August 2010

Agenda Item 4: Review Current Operations across Southeast Asia and Identify Problem Areas

**TRAFFIC DATA ANALYSIS BY
THE DATA COLLECTION AND ANALYSIS
SMALL WORKING GROUP 1 (SWG/1)**

(Presented by Singapore and Thailand)

SUMMARY

This paper presents the traffic analysis based on the one week traffic data supplied by the States from January to May 2010

1. INTRODUCTION

1.1 The Southeast Asia Route Review Task Force (SEA-RR/TF) was established to review of ATS routes in the South China Sea area, taking in particular consideration to the AR9 flow of traffic. The SEA-RR/TF was to replace the RNP-SEA Task Force which had completed the implementation of 50/50NM horizontal separation minima on RNAV10 routes L642 and M771.

2. DISCUSSION

2.1 At the SEA-RR/TF/1 meeting, it was decided to establish Small Working Groups (SWGs) to concentrate on particular specialised issues and to report back to the plenary meeting with recommendations and actions. One of the SWG formed was the data collection and analysis- SWG/1 comprising Singapore and Thailand. The SWG/1 had been tasked to collect and analysis one week of traffic sampling data submitted by the States. This was agreed at the first SEA-RR/TF meeting. Every month, States are to collect one week of traffic data using the third Sunday of every month as the start point. The SWG/1 had envisaged a presentation at SEA-RR/TF 3 meeting using 6 months of the collected data to show traffic density of the routes in the SEA region, highlighting intersections with high volume of traffic and potential increase in certain sectors or city-pairs.

2.2 However, some States have not been submitting their traffic data to the SWG/1. This slowed down the progress of the SWG/1 in data analysis. States are again requested to submit the traffic sampling data to the SWG/1 to enable their analysis of the ATS routes in the Southeast Asia (SEA) areas in totality.

2.3 In order not to slow down the progress of the Task Force, the SWG/1 decided to use the incomplete information it received and assemble it into a presentation on the analysis of the routes within the SEA areas. It will be presented together with this paper.

2.4 The methodology in calculations will be explained in the presentation. States will be informed on the proper data collection process that may simplify their collection process and help the SWG/1 in their preparation of collected data for analysis.

2.5 The traffic data collected will be able to identify routes with high traffic volumes, list down city pairs in the region with high traffic counts, and the traffic patterns of routes in the region using hourly intervals. Owing to the limited data available, The SWG/1 can only focus on a small portion of airspace for analysis. However, this exercise served as an example of how States could, from such analysis, better utilise their airspace by adopting suitable measures to increase capacity and efficiency.

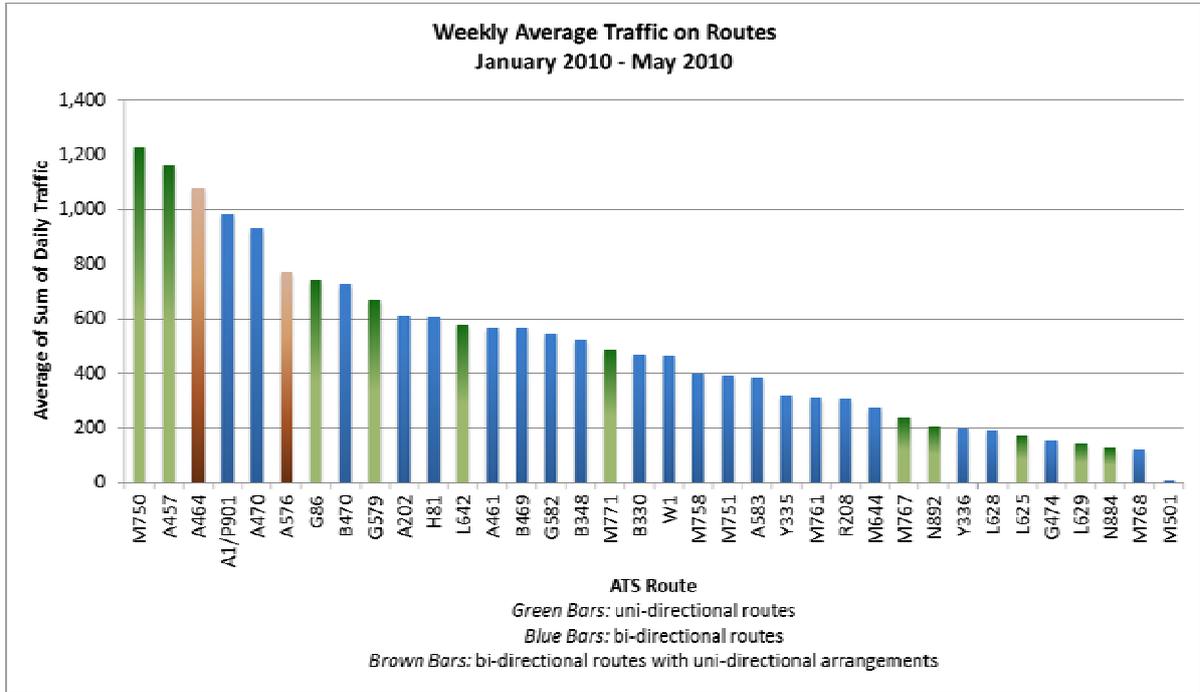
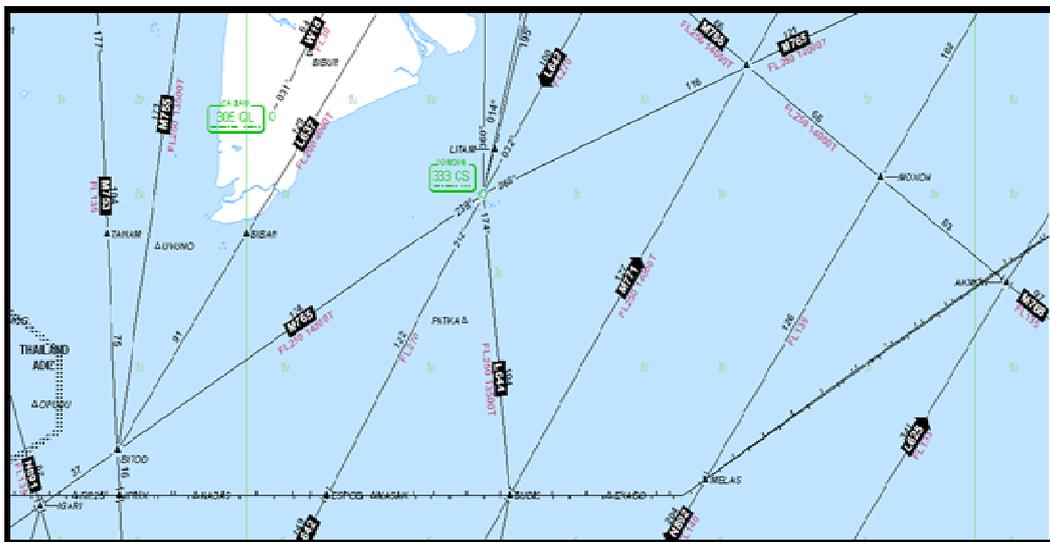


Figure 1: Weekly Average Traffic on ATS Routes from January 2010 – May 2010 Data

2.6 From Figure 1 above, we can see a representation of the various routes in the region with its associated traffic counts. The figure also showed the route arrangement, whether it is uni-directional or bi-directional. The traffic count could be represented in hourly movement data chart as shown in Figure 2 below (Using traffic data provided by Viet Nam in February 2010).



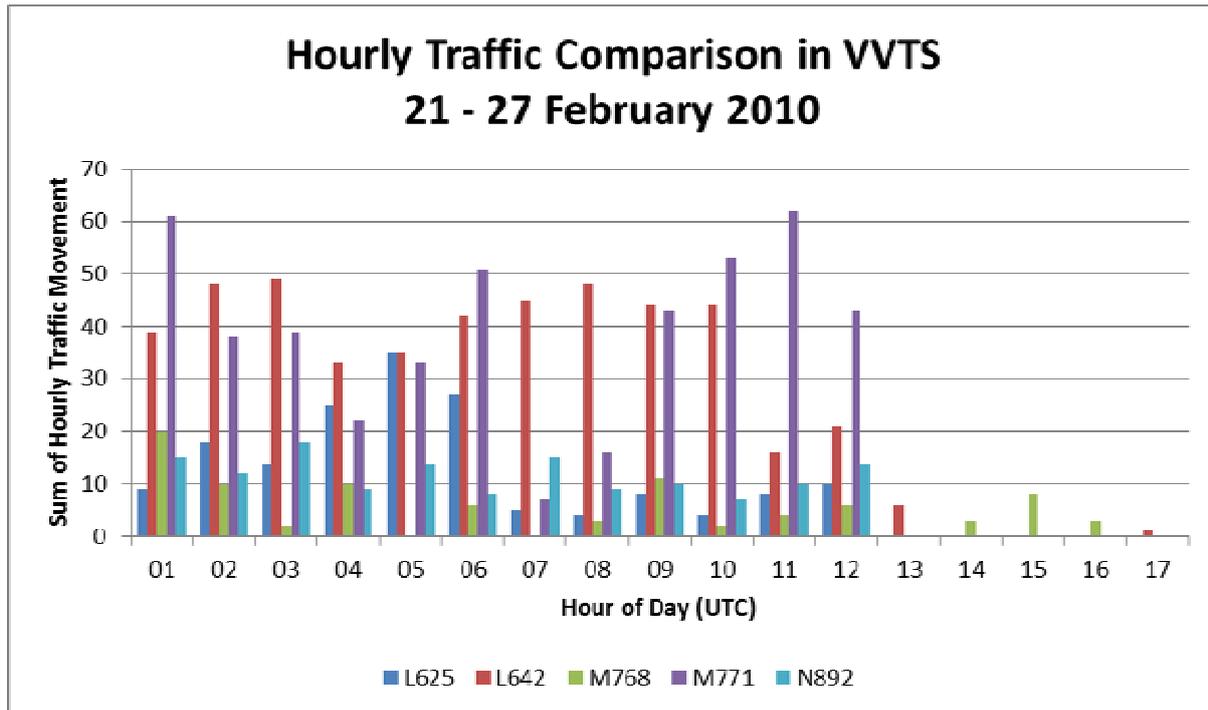


Figure 2: Sample Hourly Traffic Count at Intersection between M768, L642, M771, N892 and L625 based on Ho Chi Minh FIR (VVTS) TSD in 21 – 27 February 2010 for M768 traffic at AKMON, L642 at ESPOB, M771 at DUDIS, N892 at MELAS and L625 traffic at AKMON

2.7 From Figure 2, States could have a graphical representation of the traffic flow within a portion of their airspace by the hour. From this, States could determine the most appropriate measures to improve the efficiency and capacity in the portion of airspace.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- (a) Note the need to provide traffic sampling data in accordance to the agreed template;
- (b) The methodology in deriving the traffic counts;
- (c) Note the usefulness of the analysis using traffic sampling data provided;
- (d) Consider the additional proposal by the SWG, if any, during the presentation.

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