



International Civil Aviation Organization

The Sixth Meeting of the Western Pacific/South China Sea RVSM Scrutiny Working Group (WPAC/SCS RSG/06)

Bangkok, Thailand, 7 – 9 April 2009

-
- Agenda Item 3: WPAC/SCS FLOS/FLAS Implementation Feedback**
Agenda Item 4: LHD Reduction Activities
Agenda Item 6: ATS Route Matters

RVSM OPERATIONS WITHIN HO CHI MINH FIR

(Presented by Viet Nam)

SUMMARY

This paper provides brief overview on revised flight level arrangements implemented within Ho Chi Minh FIR from July 2008 up to now. The paper also proposes considerations for its application improvement in the coming time.

1. INTRODUCTION

- 1.1 Basing on the results of the ICAO RVSM Scrutiny Working Group (WPAC/SCS RSG) meetings, the Civil Aviation Administration of Viet Nam (CAAV) has developed a comprehensive plan for revised flight level arrangements within Ha Noi and Ho Chi Minh FIRs.
- 1.2 The main contents of activities are of developing implementation plan, finalizing the flight operational and ATC RVSM procedures; re-signing the ATC Supplementary LOAs, enhancing communication facilities, especially ATS direct speech circuit; supplementing ATC procedures and flight operational manuals, training air traffic controllers and technical staffs, air crews and flight dispatchers of airlines, publication of AIP Supplements, etc.
- 1.3 At present, the flight level arrangement within Ha Noi and Ho Chi Minh FIRs is as follows:
- Flight level spectrum: FL290-FL410.
 - FLAS within Ha Noi FIR: Single RVSM FLs.
 - FLAS within Ho Chi Minh FIR: Modified RVSM FLs assigned for 04 parallel RNAV routes L642, M771, N892 and L625: FL310, FL320, FL350, FL360, FL390, FL400; single RVSM FLs assigned on the resting ATS routes.
- 1.4 The daily average traffic volume in February 2009 on major ATS routes is as follows:
- Domestic and int'l route W1: 100 - 120 flights
 - Routes A1/P901: 110 - 120 flights
 - Routes L642: 82 flights
 - Route M771: 76 flights

- Routes N892 and L625: 35 - 40 flights (on each ATS route)
- Routes G474 - L628: 25 flights
- Route M768: 15 flights

2. OPERATIONAL STATUS WITHIN HO CHI MINH FIR FROM JULY 2008

- 2.1 With the new RVSM FLAS implementation, it is easy to remember flight level numbers (avoiding possible confusions); there have been a greater number of flight levels used in the Ha Noi and Ho Chi Minh FIRs, so that a capacity has been increased.
- 2.2 The most traffic has been cleared to fly at optimum flight levels. This is met traffic demand which is being increasingly from day to day especially on ATS routes W1, A1/P901, and 4 parallel RNAV routes within Ho Chi Minh FIR. The traffic delays have been reduced.
- 2.3 A number of transition areas were reduced, so that the level changes are kept to minimum. The level changes over certain points have not much affect to ATC operations.
- 2.4 No-PDC flight levels being allocated for certain ATS/RNAV routes are quite suitable for traffic loading and reduction of ATC coordination between ACCs concerned. ATC strategical separation has been established at crossing points enhancing flight safety as well as reducing ATC coordination and ATC workload subsequently. ATC coordination amongst the relevant ACCs is carried out in quite good manner.
- 2.5 However, there are existing issues as follows:
 - 1) The flow control restrictions on traffic bounding for Taipei from route A1 and traffic bounding for Shenzhen, Guangzhou from M771 have imposed workload on the controllers. A necessary measures and closer ATC coordination amongst ACCs concerned should be applied.
 - 2) The flight changes at BITOD are taken place due to the track directions change for traffic on route L637 – M753/M755 and V.V. One of measures is consideration for adding ATS/RNAV routes which has addressed below.
 - 3) Some cases of Large Height Deviation have been occurred in the area of transfer of control between Ho Chi Minh ACC and Manila ACC. The details were reported to MAAR as specified by Regional agreement. The causes could be of none strictly compliance with the provisions of ATC LOA and maintaining assigned flight level during transfer process. The quality of transfer of control between Ho Chi Minh ACC and Manila ACC should be enhanced and flight crews should pay attention for assigned flight level as especially for airspace area with HF communications. Apart from that, a closer contact between two ACC chiefs should be continuously maintained.

3. THE LARGE-SCALE BAD WEATHER DEVIATION PROCEDURE

- 3.1 This contingency procedure should be considered when there are at least 5 weather deviation requests of 10NM or more within a 30 minute period. The initial No-PDC level assignment basis on contingency plan for large-scale weather deviations is allocated for Ho Chi Minh FIR as FL320, FL360, FL400 on L642/N892 and FL310, FL350, FL390 on L625/M771.
- 3.2 From July 2008 to November 2008, weather conditions in Ho Chi Minh FIR were uncomfortable because of tropical cyclone, typhoon, severe turbulences... A large number of flights had to deviate far away from track or divert to domestic routes and the large weather deviation procedures had been activated for some times. From December 2008 to March 2009, the weather has been more comfortable, there were some occurrences of wake turbulence.

- 3.3 With the revised flight level arrangement, more flight levels available for Northeast and Southwest bound. As a result, operations of the flights were smooth and safe. The current large-scale bad weather deviation procedures should be remained.

4. ADDITIONAL ATS ROUTES

- 4.1 In order to meet user's requirements, CAAV has set up the Programme on establishing and revising ATS routes, including domestic and int'l routes. This programme would be carried out in coordination with ICAO Regional Office, Civil Aviation Authority of China, Laos, Cambodia, and Thailand.

- 4.2 The proposed ATS routes are intended by CAAV as follows:

- 1) ATS route between NASAN – LADIS – AKSAG
- 2) Extension of ATS route B329 from PAKSE to VILAO – NAMHA (Ha Noi FIR)
- 3) ATS route between Cat Bi – SIKOU
- 4) ATS route between Cat Bi – Haikou and Cat Bi – Sanya
- 5) ATS route between ASSAD – IKELA
- 6) Extension of ATS route G221 from BUNTA to DVOR/DME Phu Cat
- 7) ATS/RNAV route between DVOR/DME Phu Cat – IKELA (long term solution)
- 8) ATS route from Can Tho – VOR/DME Phnom Penh
- 9) ATS route from DVOR/DME Cam Ranh – MESOX
- 10) RNAV route between Tan Son Nhat – ENREP

- 4.3 The purpose of proposed new and revised routes would reduce flight distance and time, facilitate flight and ATC operations. Apart from that, the proposed new routes at items 9) and 10) would also resolve the disadvantages as abovementioned.

5. ACTIONS REQUIRED

- 5.1 The Meeting is invited to

- note the information on RVSM implementation status.
- discuss a further enhancing ATC coordination amongst ACCs concerned.
- discuss for agreement in principle for establishing new ATS/RNAV route between Tan Son Nhat – ENREP to resolve the disadvantage of level change over BITID.

.....