

**HONG KONG SPECIAL ADMINISTRATIVE REGION
PEOPLE'S REPUBLIC OF CHINA
AERONAUTICAL INFORMATION SERVICE**

PHONE	+852 2910 6174
FAX	+852 2910 1180
AFS	VHHHYOYX
EMAIL	aic@cad.gov.hk

(ISO 9001 CERTIFIED)
AIR TRAFFIC MANAGEMENT DIVISION
CIVIL AVIATION DEPARTMENT
HONG KONG INTERNATIONAL AIRPORT

AIRAC AIP Supplement A11/14 29 August 2014

**Revision to Automatic Dependent Surveillance Broadcast
(ADS-B) out Operations within Hong Kong FIR**

1. Introduction

- 1.1 Hong Kong Civil Aviation Department issued AIP Supplement A13/13 on 29 October 2013 to notify aircraft operators on the plan to introduce ADS-B Operation on PBN routes L642 and M771 with effect from 12 December 2013(Phase 1), and in the whole Hong Kong FIR with effect from 11 December 2014(Phase 2).
- 1.2 Phase 1 had been implemented in line with the relevant Area Control Centres along the PBN routes L642 and M771, and harmonization of operation on both routes was achieved.
- 1.3 After reviewing the progress of system upgrade and the scope of changes in ATC operations, an adjustment to the phase 2 implementation date is considered necessary.
- 1.4 This AIP Supplement is to notify airspace users of the change in the ADS-B implementation plan for Hong Kong FIR.

2. Implementation Plan

- 2.1 The effective date that all aircraft flying within Hong Kong FIR at or above FL290 shall be installed with ADS-B equipage complying with the requirements in paragraph 3.1, 3.2 or 3.3 is now revised from 11 December 2014 to 8 December 2016.
- 2.2 For all aircraft flying within Hong Kong FIR with ADS-B equipage not complying with paragraph 3.1, 3.2 or 3.3, the ADS-B equipage shall be:
 - (a) deactivated; or
 - (b) set to transmit only a value of zero for the Navigation Uncertainty Category (NUC_p) or Navigation Integrity Category (NIC).

3. Requirements for ADS-B Out Equipage

- 3.1 ADS-B equipage comply with 'RTCA DO-260 Minimum Operational Performance Standards', which is equivalent to ES Version 0 as specified in ICAO Annex 10, Volume IV, Chapter 3, Paragraph 3.1.2.8.6 and Chapter 2 of ICAO Doc 9871.

- 3.2 ADS-B equipage comply with ‘RTCA DO-260A Minimum Operational Performance Standards’, which is equivalent to ES Version 1 as specified in ICAO Annex 10, Volume IV, Chapter 3, Paragraph 3.1.2.8.6 and Chapter 3 of ICAO Doc 9871.
- 3.3 ADS-B equipage comply with ‘RTCA DO-260B Minimum Operational Performance Standards’, which is equivalent to ES Version 2 as specified in Chapter 4 of ICAO Doc 9871.

NOTE: To harmonise the ADS-B equipage, APANPIRG suggested to standardize the equipment requirements. The following are the acceptable means of compliance to paragraphs 3.1, 3.2 or 3.3.

- (a) The ADS-B equipage that have been certificated as meeting EASA Acceptable Means of Compliance AMC 20-24 “Certification Considerations for Enhanced ATS in Non-Radar Areas using ADS-B Surveillance (ADS-B-NRA) via 1090 MHz Extended Squitter”, or
- (b) The ADS-B equipage that meet the equipment configuration standards of Australian Civil Aviation Order 20.18 Appendix XI, or
- (c) The ADS-B equipage that have been certified as meeting FAA Advisory Circular (FAA AC) 20-165 or later changes.

4. Aircraft Operator’s Approval

- 4.1 The aircraft operator must have the relevant ADS-B operational approval from the State of Registry.

5. Operational Limitations

- 5.1 Aircraft not complying with paragraph 3 or 4.1 will not be accorded priority to operate in the designated airspace and in the assignment of flight levels therein.

6. Flight Planning Requirements

- 6.1 Aircraft operator complying with the requirement stipulated in paragraph 3 and 4.1 are to indicate the appropriate ADS-B designator in section 10 of the flight plan.

- B1 ADS-B with dedicated 1090 MHz ADS-B “out” capability
- B2 ADS-B with dedicated 1090 MHz ADS-B “out” and “in” capability

- 6.2 The aircraft identification(ACID) must be accurately recorded in item 7 of the ICAO Flight Plan form. The Aircraft Identification, not exceeding 7 characters, is to be entered both in item 7 of the flight plan and replicated exactly when set in the aircraft (for transmission as Flight ID) as follows :

- a) The ICAO three-letter designator for the aircraft operating agency followed by the flight identification (e.g. KLM511, BAW213, JTR25),
- or,

- b) The registration marking of the aircraft (e.g. EIAKO, 4XBCD, OOTEK), when the aircraft is not equipped with radio.

Note 1: No zeros, hyphens, dashes or spaces are to be added when the Aircraft Identification consists of less than 7 characters.

Note 2: Appendix 2 to PANS-ATM refers. ICAO designators and telephony designators for aircraft operating agencies are contained in ICAO Doc 8585.

7. Contingencies

- 7.1 When an aircraft is ADS-B equipped but the equipment has become unserviceable during flight, the pilot in command or aircraft operator must inform ATC as soon as possible.

8. Cancellation

- 8.1 AIP Supplement A13/13 is hereby superseded.
- 8.2 This AIP Supplement will be cancelled when the contents are incorporated into the AIP.

End