



APPLICATION FOR ADS-B OUT OPERATIONAL APPROVAL

This form is designed to elicit all the required information from those operators requiring the ADS-B Out Operational Approval. Completed form should be submitted to the Flight Standards Office at the following address:

Flight Standards and Airworthiness Division
Civil Aviation Department

Level 4, Office Building, Civil Aviation Department Headquarters, 1 Tung Fai Road, Hong Kong International Airport, Lantau, Hong Kong
Email: ops@cad.gov.hk Fax: 2362 4250

The assessment to the application of the Operational Approval is based on EASA Acceptance Means of Compliance AMC 20-24. Applicants are strongly advised to read the AMC 20-24 and 'Notes for Completion' at the end of this form.

SECTION I OPERATOR DETAILS	
Operator :	_____
Applicant Name :	_____ Tel: _____
Date :	_____
Please note that a minimum of 30 days will normally be required to check and confirm the given information. If data is missing or omitted the process may take considerably longer.	



SECTION II AIRCRAFT DETAILS (Use continuation sheet if necessary)									
Aircraft Registration	Aircraft Model	GNSS Receiver Model	GNSS Receiver P/N	GNSS Receiver SA Aware	GNSS Receiver FDE	ADS-B Transponder Model	ADS-B Transponder P/N	Airworthiness Compliance Standard	
				Yes/No	Yes/No			AMC20-24	CASA CAO 20.18 App. XI



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SECTION III OPERATIONAL APPROVAL

1. Airworthiness Compliance

Airworthiness Compliance to EASA AMC 20-24 or equipment configuration standards compliance to Appendix XI of CASA CAO 20.18 are both acceptable.

Submit copies of relevant sections from Aircraft Flight Manual or other supporting certification data.

2. Operations Manuals and Training

Give reference of flight operations training programme and operational procedures. Refer to EASA AMC 20-24 paragraph 10.3.

Submit copies of relevant sections from Operations and Training Manuals.



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3. Minimum Equipment List

Give reference of relevant MEL. Refer to EASA AMC 20-24 paragraph 10.5.

Submit copies of the relevant sections from the proposed or actual MEL where the operation is addressed.

4. Continuing Airworthiness

Give details of maintenance programme to ensure the systems meet requirements. Refer to EASA AMC 20-24 paragraph 11.

Submit copies of the relevant sections from the proposed or actual Maintenance Schedules on the ABS-B systems.



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NOTES FOR COMPLETION

SECTION I & II - OPERATOR AND AIRCRAFT DETAILS

Section II is for the Approval Database and Monitoring Programme.

As Selective Availability (SA) aware and Fault Detection and Exclusion (FDE) functionalities will improve accuracy and integrity to the position source of ADS-B, the forward fitment of these functionalities to new aircraft is highly recommended.

Below are the examples on completing Section II table.

SECTION II AIRCRAFT DETAILS (Use continuation sheet if necessary)									
Aircraft Registration	Aircraft Model	GNSS Receiver Model	GNSS Receiver P/N	GNSS Receiver SA Aware Yes/No	GNSS Receiver FDE Yes/No	ADS-B Transponder Model	ADS-B Transponder P/N	Airworthiness Compliance Standard	
								AMC20-24	CAO 20.18 App. XI
B-Kxx	B777-367ER	Collins GLU920	822-1152-002	Yes	Yes	Honeywell TRA67A	066-01127-1602	✓	✓
B-Hxx	B747-467	Litton LTN2001MK2	466200-0104	No	Yes	Honeywell TRA67A	066-01127-1602		✓
B-Lxx	G550	Collins GPS-4000S	822-2189-001	No	Yes	Collins TDR-94D	622-9210-108	✓	



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SECTION III – OPERATIONAL APPROVAL

Paragraph 1 - The airworthiness compliance of EASA AMC20-24 is declared in the Aircraft Flight Manual, AFM supplement or other appropriate airworthiness documentation. If the aircraft does not have the equipment certification, alternatively compliance with Appendix XI of CASA CAO 20.18 specified requirements needs to be demonstrated.

ADS-B equipages compliance requirements can be referred to Hong Kong Airworthiness Notice 102F.

Paragraph 2 - Appropriate flight operations training programme and operational procedures are established to ensure that pilots are knowledgeable about ADS-B operations and their onboard operational equipment.

The Operations Manual, preferably Section B, should include a system description, operational and contingency procedures and training elements for use of the ADS-B application.

Aircraft operators should ensure that flight crew are thoroughly familiar with all relevant aspects of ADS-B applications. Flight crew training should address the

- a) General understanding of ADS-B operating procedures;
- b) Specific ADS-B associated phraseology;
- c) General understanding of the ADS-B technique and technology;
- d) Characteristics and limitations of the flight deck human-machine interface, including an overview of ADS-B environment and system descriptions.

Paragraph 3 - The Minimum Equipment List needs to reflect the functional requirements of the ADS-B system, such as GPS/MMR and ATC transponder.

Paragraph 4 - The continuing airworthiness of ADS-B system must be assured. Existing maintenance programme or a proposed maintenance programme needs to be reviewed to ensure that it meets relevant requirements.

Maintenance tests should include a periodic verification check of aircraft derived data including the ICAO 24 bit aircraft address using suitable ramp test equipment and periodicity for the check of the ADS-B transmitter should be established.

ANTI-BRIBERY REMINDER

Anyone, while having dealings of any kind with the Civil Aviation Department (CAD), should not offer advantage to the CAD officers, or else he may commit an offence under section 4(1) and/or section 8 of the Prevention of Bribery Ordinance (Chapter 201 of Laws of Hong Kong), and be liable to a maximum penalty of a fine of \$500,000 and imprisonment for 7 years.