

Announcement of the Department of Civil Aviation (ADCA)

Subject: Airplane Maintenance Program of an AOC holder B.E. 2557

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By the virtue of section 3.8 under Article 3 of RCAB No. 86 regarding Air Navigation of an Aircraft, Given on 23 December B.E. 2552, which requires the AOC holder conducting the operations in accordance with the requirements prescribed by the DCA regarding Aircraft Maintenance. This consists of section 12 (3) of ADCA subject 'Air Navigation by Aeroplane of AOC holder B.E. 2557' issued on 12 May B.E. 2557 which required the operator shall submit an Aeroplane Maintenance Program to the DCA for approval. The content of Aeroplane Maintenance Program and its approval shall be in accordance with a designated in a notification by the DCA. Therefore, the DCA has issued the ADCA on 'Airplane Maintenance Program for AOC holder B.E. 2557' as follow:

Article 1. This announcement shall be called 'ADCA, Subject: Aeroplane Maintenance Program for an AOC holder B.E. 2557'

Article 2. This Announcement shall come into force upon expiration of 90 days from the date of notification.

Article 3. The AOC holder shall establish Aeroplane Maintenance Program based on the following requirements:

(3.1) Continuing Airworthiness Requirement issue by the TC holder or STC holder, including requirements of the state of design or state of manufacturer;

(3.2) Aircraft maintenance requirements issued by the DCA;

(3.3) Other requirements established by AOC holders which approved by the DCA;

Article 4. Aeroplane Maintenance Program is established in accordance with an Article 3, shall have at least contain the following:

(4.1) Name and address of an AOC holder;

(4.2) Aeroplane's model, Engine, Propeller, as well as nationality and registration mark of an aeroplane;

(4.3) Content page and page numbering;

(4.4) Release Date/Month/Year of Aeroplane Maintenance Program and List of Effective Page and Record of Revision;

(4.5) The statement of an AOC holder to ensure that 'The aeroplane shall be maintained in accordance with Aeroplane Maintenance Program approved by the DCA, which shall be continuously updated and present'.

(4.6) Aerplane's utilisation shall contain detail on it's evaluation and Aeroplane Annual Utilisation, of which usage duration shall be in line with the duration as per described in an Aircraft Maintenance Program of an TC holder;

(4.7) Check periods shall be in conjunction with the way Aircraft operates

(4.8) Procedure for revising Aeroplane Maintenance Program and amendment record;

(4.9) Procedure for extending Maintenance period, of which shall be approved by DCA

(4.10) Tasks and Periods: Tasks used for established Aerplane Maintenance Program shall be contained within Maintenance Planning Document (MPD) for large aircraft and Aircraft Maintenance Manual (AMM) for small aircraft, of which, issued by a TC holder, as follow:

(a) Maintenance tasks for each system: Engine, Propeller, Navigation equipment, Emergency equipment, Communication equipment, Electrical equipments, Electrical system, Fuel system, Hydraulic system, etc. Checking period and checking procedure, together with associating documents shall be established;

(b) Non-schedule maintenance tasks;

(c) Pre-flight maintenance task;

(d) Maintenance tasks following incidents, such as Hard landing, Lightning strike, Overweight landing, or other potential failures which picked up by an Engineer, Pilot or Aircrew;

(e) Maintenance tasks, Testing procedure after replacement of important items such as instruments, equipment, etc. which may require Test flight;

(f) Maintenance tasks for aircraft operating under special operations such as, Reduce Vertical Separation Minimum (RVSM), Required Navigation Performance (RNP), Extended Range Twin Engine Operation (ETOPS), where applicable;

(g) Maintenance tasks for continuing airworthiness in case of aircraft undergone modification, i.e. Supplemental Type Certificate (STC), Service Bulletin, Field Approval, or in case of aircraft undergone Structure repair which requires evaluation in order to assess/identify the checking period.

(h) Maintenance tasks for aging aircraft and sampling program, if applicable

(i) Maintenance tasks for other certifications, i.e. Airworthiness Directive (AD), Service Bulletin (SB), Certificate Maintenance Requirement (CMR), Mandatory Life Limitation, etc.

(j) Other Maintenance tasks such as, Airworthiness Directive, Maintenance requirement, as well as other requirements issued by the DCA;

(4.11) The periods for Inspection, Lubrication, Cleaning, Adjustments and testing of various equipments.

(4.12) Detail of LOV (Limit of Validity)

(4.13) Overhaul or Replacement period for Life Limited Parts

(4.14) Aircraft Structure Inspection Program, where applicable, such as

(a) Supplement Structure Inspection Programs (SSIP);

(b) Corrosion Prevention and Control (CPCP);

(c) Repair Assessment Program (RAP);

(d) Widespread Fatigue Damage (WFD);

(e) Structure Maintenance Program resulting from SB;

(4.15) Other details as required by the DCA.

Article 5. The AOC holder shall submit an Aeroplane Maintenance Program to the DCA for approval together with following evidences:

(5.1) Checklist (per Appendix A of this announcement). AOC holder shall review that Airplane Maintenance Program fully meets requirement, bear in mind some items in the checklist is not applicable to all aircrafts, depending on the aircraft type, engine type, installed equipment, its operations, and the ways it's being utilised.

(5.2) Documents issued by a TC holder, as well as requirement from State of design or State of manufacturer, such as Type Certificate Data Sheet (TCDS), Maintenance Review Board Report (MRB Report), Maintenance Planning Document (MPD), Aircraft Maintenance Manual (AMM), Corrosion Prevention and Control (CPCP) Component Maintenance Manual (CMM), Certificate Maintenance Requirement (CMR), and other applicable requirements;

(5.3) Maintenance Manual for Engine, Propeller and Aircraft Auxiliary Power Unit (APU).

(5.4) Documents detailing the aircraft, ie. List of modifications, AD status, List of Life Limited Part, List of installed Equipment, List of Structure Repair.

(5.5) Reliability Programs.

(5.6) Aeroplane Maintenance Program of a previous AOC holder, (if any).

(5.7) Document showing previous special operations approval such as RVSM, RNP, ETOPS.

(5.8) Other documents required by the DCA.

Article 6. The AOC holder shall establish Task Cards/Work Packaging in accordance with Aircraft Maintenance Program, i.e. A-check, B-check or C-check for large aircraft and 50 Hours check, 100 Hours check or 150 Hours check for small aircraft.

Article 7. The AOC holder may establish Reliability Programs as a part of Aeroplane Maintenance Program or as a separate document, which shall contain at least the followings details:

(7.1) Procedures for controlling, monitoring of Engines and other crucial systems needed for operations of an aircraft;

(7.2) Collecting data, Recording and Evaluation data for reliability system, i.e. the inspection of Technical Log, Component Failure, Delay, Ground Incident Report, Service Difficulty Report, etc.

(7.3) List of Maintenance for Reliability system, shall includes

(a) Maintenance tasks for engine, components or equipment which are Condition monitoring or On condition;

(b) Maintenance tasks for important components or systems which do not identify periods for overhaul;

(c) Maintenance tasks that required to use Reliability Program by MPD or MRB;

(d) Maintenance tasks as per Manufacturer's Maintenance Program who are considered as Maintenance Steering Group 3 (MSG3);

however the AOC holder shall evaluate reliability system at least every 6 months and shall be declare to DCA for review.

Article 8. Once the DCA receives an Aeroplane Maintenance Program from an AOC holder together with related evidence. The DCA shall inspect Aeroplane Maintenance Program and facilities, tools, personnel including the actual performance in accordance with Aeroplane Maintenance Program.

The DCA shall issue a certificate letter for the Aeroplane Maintenance Program of the AOC holder when it appears that the Aeroplane Maintenance Program and facilities, tools, personnel and the actual performance in accordance with Aeroplane Maintenance Program is efficiently adequate to maintain the aeroplane of an AOC holder.

The form of an Aeroplane Maintenance Program Certificate shall be in accordance with Appendix B attached to this announcement.

Article 9. The AOC holder shall perform maintenance in accordance with the periods prescribed in an Approved Aeroplane Maintenance Program.

In case of unforeseen circumstances which results in an AOC holder not able to perform maintenance in accordance with the periods prescribed in Aeroplane Maintenance Program. The AOC holder may request the DCA for extension of some maintenance items which do not impact airworthiness of aircraft, i.e. Life Limited Part, Certificate Maintenance Requirement (CMR), Airworthiness Limitation Item (ALI), Airworthiness Directive (AD) or Mandatory Service Bulletin (MSB), falling within following conditions:

(9.1) Maintenance tasks which shall be performed as per Flying Hours;

(a) Maintenance tasks which shall be performed within 5000 Flying Hours can be extended not more than 10% of defined Flying Hours.

(b) Maintenance tasks which shall be performed in excess of 5000 Flying Hours can be extended not more than 500 Flying Hours.

(9.2) Maintenance tasks which shall be performed as per Calendar Time;

(a) Maintenance tasks which shall be performed within 1 year, can be extended not more than 10% or 1 month, whichever less.

(b) Maintenance tasks which shall be performed in excess of 1 year but no greater than 3 years, can be extended not more than 10% or 2 month, whichever less.

(c) Maintenance tasks which shall be performed in excess of 3 years, can be extended not more than 3 months.

(9.3) Maintenance tasks which shall be performed as per Landing/Flight Cycle

(a) Maintenance tasks which shall be performed within 500 Landings / Flight cycles, can be extended not more than 10% or 25 Landings/Flight cycle, whichever less

(b) Maintenance tasks which shall be performed in excess of 500 Landings/Flight cycles, can be extended not more than 10% or 50 Landings/Flight cycle, whichever less

If required Maintenance falls under more than 1 item of (9.1), (9.2) and (9.3), extension shall be as per whichever comes first.

The DCA will consider extension as per (9.1), (9.2) and/or (9.3) based on history, experience, reliability system and a maintenance quality control system of an AOC holder.

Article 10. if AOC holder wish to add more aircrafts to the fleet, of which Aeroplane Maintenance Program has already been approved. The AOC holder shall update Aeroplane Maintenance Program to include the newly added aircrafts, i.e. List of modifications, List of Installed equipment, Engine type, Service Life of the aircraft structure. The updated Aeroplane Maintenance Program shall be submitted for approval prior using of the new aircraft.

Article 11. The AOC holder is responsible for updating of an Aeroplane Maintenance Program, to ensure latest and up to date, and shall review in accordance to an Aircraft Maintenance Program of a TC holder. The reviewed results and amendments shall be submitted to DCA for review at least 1 time a year.

In the event that the operations of an aircraft in accordance with an Aeroplane Maintenance Program of an AOC holder is not align with an Aeroplane Maintenance Program of a TC holder, or when the actual operational duration of an aircraft mismatch to that identified in an Approved Aeroplane Maintenance Program. The AOC holder shall inform to a TC holder for amending an Aeroplane Maintenance Program to be in line with actual operation.

Given on 25 June B.E. 2557

Woradej Hanprasert
Director General
Department of Civil Aviation

Appendix A

ภาคผนวก ก

	กลุ่มวิศวกรรมการบิน (Aircraft Engineering Group) สำนักมาตรฐานการบิน (Flight Standards Bureau)	รายการข้อ/กำหนดสำหรับการรับรอง แผนการบำรุงรักษาเครื่องบิน
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ชื่อบริษัท (Operators Name):

ที่ตั้ง (Address)

MAINTENANCE SCHEDULE COMPLIANCE CHECKLIST

Details of the Maintenance Schedule:

I. General requirements Compliance		Compliance		Reference Page	Notes
1.1	Maintenance Schedule basic information:-	Yes	N/A		
1.1.1	The type/model/and registration number of the aircraft				
	The type/model of the engines				
	The type/model of the propellers, where applicable				
	The type/model of the auxiliary power units, where applicable				
1.1.2	The name and address of the owner, operator, maintenance organization or fleet technical management organisation managing the aircraft airworthiness				
1.1.3	The schedule reference(MPD, AMM), the date of issue and issue number				
1.1.5	Contents list				
	List of effective pages				
	Revision status of the document				
1.1.6	Check periods for anticipated utilization				
1.1.7	Procedures for escalation where applicable and acceptable to the Thai DCA				
1.1.8	Pre-flight maintenance tasks				
1.1.9	The tasks and the periods (intervals / frequencies) at which inspections should be carried out, including type and degree of inspection of the following, together with the				

	associated systems and installations:			
	a. Aircraft			
	b. Engine(s)			
	c. APU			
	d. Propeller(s)			
	e. Components			
	f. Accessories			
	g. Equipment			
	h. Instruments			
	i. Electrical and radio apparatus			
1.1.10	The periods at which components should be:			
	a. Checked			
	b. Cleaned			
	c. Lubricated			
	d. Replenished			
	e. Adjusted			
	f. Tested			
1.1.11	Details of ageing aircraft system requirements with any specified Sampling Programmes, if applicable			
1.1.12	Details of specific Structural Maintenance Programmes issued by TCH, if applicable including but not limited to:			
	a. Damage Tolerance and Supplemental Structural Inspection Programmes (SSID)			
	b. Maintenance requirement resulting from Service Bulletin review performed by the TCH			
	c. Corrosion prevention and control			
	d. Repair Assessment			
	e. Widespread Fatigue Damage			
1.1.13	Details of CDCCLs			
1.1.14	Statement of the limit of validity for the Structural Maintenance Programme in 1.1.12, if applicable, in terms of flight cycles / flying hours / calendar time			
1.1.15	The periods at which overhauls should be made The periods at which replacements should be made			

	1.1.16	A cross-reference to other documents related to:			
		a. Mandatory life limitations			
		b. Certification Maintenance Requirements (CMR's), if applicable			
		c. Airworthiness Directives (AD)			
		d. Specific identification of the above items mandatory status			
	1.1.17	Reliability Programme			
	1.1.18	The definition of each inspection type should be provided in a section			
2. Schedule basis. Compliance					
2.1		Is the Maintenance Schedule based upon the MRB report, the TCH's Maintenance Planning Document or Chapter 5 of the Maintenance Manual?			
2.2		For newly type-certificated aircraft / comprehensively appraise the manufacturer's recommendations (MRB report) and other applicable continuing airworthiness information			
2.3		For existing aircraft types, comparisons with Maintenance Schedules previously approved			
2.4		ALIs, CMRs, and CDCCLs, etc			
3. Permitted variations to maintenance periods					
3.1		Vary the periods through a procedure approved by the Thai DCA?			
4. Periodic review of maintenance schedule contents.					
4.1		Periodic review to ensure that the Maintenance Schedule reflects current:			
		a. TCH's recommendations			
		b. Revisions to the MRB report if applicable			
		c. Mandatory requirements			
		d. Maintenance needs of the aircraft			
4.2		Annual review defined			

5. Reliability Programmes. Compliance					
5.1	Applicability				
5.1.1	Developed in the following cases:				
	a. Aircraft Maintenance Schedule is based upon MSG-3 logic				
	b. Aircraft Maintenance Schedule includes condition monitored components				
	c. Aircraft Maintenance Schedule does not contain overhaul time periods for all significant system components				
	d. Specified by the Manufacturer's MPD or MRB				
5.1.2	Need not be developed in the following cases:				
	a. Aircraft Maintenance Schedule is based upon the MSG-1 or 2 logic (only hard times or on condition items)				
	b. Not a large aircraft (- or < 5700 kgs MTWA or single-engine helicopter)				
	c. Aircraft Maintenance Schedule provides overhaul time periods for all significant system components				
5.2	Reliability Programme				
5.2.1	Statement summarising the prime objectives of the programme				
5.2.2	Identification of items. The items controlled by the programme should be stated.				
5.2.3	Terms and definitions. Significant terms and definitions should be clearly identified.				
5.2.4	Information sources and collection. Sources and procedures in the Exposition.				
5.2.5	Are there appropriately qualified personnel (with appropriate engineering experience and understanding of reliability concept) for the reliability programme?				

		5			
5.2.6	If unable to pool data / additional restrictions on the MRB/MPD tasks intervals specified				
5.2.7	Type of information to be collected should be related to the objectives examples of the normal prime sources:				
	a. Pilots Reports				
	b. Technical Logs				
	c. Aircraft Access Terminal / On-board readouts				
	d. Maintenance Worksheets				
	e. Workshop Reports Functional Checks				
	f. Reports on				
	g. Reports on Special Inspections				
	h. Stores Issues/Reports				
	i. Air Safety Reports				
	j. Reports on Delays and Incidents				
	k. Other sources: i.e. ETOPS, RVSM, CAT III				
5.2.8	Evaluation and review Describe procedures and individual responsibilities - continuous monitoring of the effectiveness of the programme				
5.2.9	Procedures for revising the "standards" or "alert levels"				
5.2.10	Criteria to be taken into account during the review includes:				
	a. Utilisation (high / low / seasonal)				
	b. Fleet commonality				
	c. Alert Level adjustment criteria				
	d. Adequacy of data				
	e. Reliability procedure audit				
	f. Staff training				
	g. Operational and maintenance procedures				
5.2.11	Presentation of information to DCA for approval of the Reliability Programme:				
	a. Format and content of routine reports				
	b. Time scales for reports / distribution				
	c. Format and content of reports requesting amendments				

6. Thai DCA Requirements					
6.1	Weight and Balance (DCA Announcement Dated September 8, 2000)				
6.2	Airspeed Indicator, Pitot Static Systems, Compass Systems, ATC Transponder and Fuel Quantity Gauges Test and Calibration (DCA AD 133/2538)				
6.3	CVR, FDR (Chapter 3, § (3), DCA Announcement Dated August 24, 2010)				
6.3.1	CVR and FDR Annual Inspection				
6.3.2	CVR and FDR Calibration				
6.3.3	Daily Test for CVR & FDR and FDRU				

I hereby declare that the particulars set out in this report are complete and true in every respect.

.....
(Date of submit)

.....
(Authorized Signature)

Appendix 1

แบบฟอร์มสำหรับยื่นขอการอนุมัติ/ใบรับรองการแก้ไขการบำรุงรักษาอากาศยานที่ได้รับอนุมัติ
(MAINTENANCE PROGRAMME AMENDMENT APPROVAL SUBMISSION)

TC Holder Programme Ref: _____

Revision No: _____ Aircraft Type: _____

Operators Programme Ref: _____

Issue Date: _____ Amendment No: _____

3. Amendments.	Compliance		NOTE
	YES	INA	
Amendments (revisions) to reflect changes:			
a. In the TCH's new revision			
b. In the TCH's recommendations			
c. Introduced by modifications			
d. Introduced by repairs			
e. Discovered by service experience			
f. As required by Thai DCA			
g. As required by Operator			
h. The other reason			

Item	Action to be taken	Justification	Remarks
1. Introduction page A	Replace with new page dated	Introduction of Aircraft Registration HS-	
2. Introduction page B	Replace with new page dated	Introduction of new check cycle-	
3. Page 45 - Page 46	Add new page dated	Add new Task as per MPD rev. Task number:	
4.			
5.			
6.			
7.			

I hereby declare that the particulars set out in this report are complete and true in every respect.

.....
(Date of submit)

.....
(Authorized Signature)

สำนักงานการบินพลเรือนแห่งประเทศไทย



Flight Standards Bureau
Department of Civil Aviation
71 Soi Ngamduplee, Rama IV Road
Bangkok 10120, THAILAND

MAINTENANCE PROGRAM APPROVAL

Pursuant to the requirements for the time being in force, the Department of Civil Aviation hereby approves, subject to the conditions hereto, the following Maintenance Program:

Operator : (Operator Name)
Program Reference : EMP XXXX, (Operator Name). (Aircraft Type) Maintenance Program Revision: XX Dated XX-XX-XXXX.
Aircraft Type : (Aircraft Type)

Conditions:

1. All amendments/alterations to this Maintenance Program shall be approved by the DCA.
2. It is the responsibility of Operator to ensure that recommendations made by the Aircraft or Equipment design holders are evaluated and, where appropriate, Operator must initiate Maintenance Program amendments.
3. It is the responsibility of Operator to ensure that compliance is accomplished with all appropriate mandatory requirements issued by the DCA and by the state of design of the aircraft.
4. Insert this page in front of (Operator Name). (Aircraft Type) Maintenance Program.

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COMPETENT OFFICIAL

Date of Issue: XX-XX-XXXX
No. 0506/ INT