Safety Regulation Group Aircraft Maintenance Standards Department

Maintenance Requirements & Policy Section

1 May 2005 Our Ref 9/98/4/102

LETTER TO OWNERS / OPERATORS NO. 2782 AEROPLANES & HELICOPTERS (PISTON ENGINED) NOT EXCEEDING 2730 KG MTWA LIGHT AIRCRAFT MAINTENANCE SCHEDULE (LAMS)

1. Purpose

The purpose of this LTO is to advise light aircraft aeroplane and helicopter owners of the publication of Edition 5 of the Light Aircraft Maintenance Schedule CAP 411 and CAP 412.

2. Content

The Fourth edition of the Light Aircraft Maintenance Schedule was published to account for the implementation of the European Council Regulation (EC) No 1592/2002 and Commission Regulation 2042/2003. This Fifth edition incorporates corrections to errors discovered after publication of the fourth edition, including clarification of cross-references to the Air Navigation Order. To avoid ambiguity with previous editions this Fifth edition changes the approval references to CAA/LAMS/A/1999 Issue 2 and CAA/LAMS/H/1999 Issue 2.

At Edition Four a number of changes were made in sections 1 through 5 and some minor changes to sections 6, 7 and 8.

The changes made were as follows:

- **Section 2** Reference to the applicable European Council requirements.
- Section 3 Addition of Airworthiness Life Limitations issued by EASA. Addition of Airworthiness Directives issued by EASA. Introduction of new 'CAA Generic Requirements', which replace mandatory Airworthiness Notices. General Inspection Standards now include the remaining Airworthiness Notices. Inclusion of 'Additional Inspections Requirements' in CAP 543 'Time limited Tasks, Additional Inspections and Component Change Record'. Introduction of 'Instructions for Continuing Airworthiness' replacing 'Service Information'. 'Modifications' reclassified as 'Changes'. Additional definitions for 'Continuing Airworthiness', 'Commercial Air Transport' and 'Non-Commercial Air Transport'.
 Section 4 Reference to EASA Part 145 requirements for the issue of a Certificate of Release
- Section 4 Reference to EASA Part 145 requirements for the issue of a Certificate of Release to Service (CRS) and Certificate of Maintenance Review (CMR). Additional note for commercial air transport aeroplanes operated in accordance with JAR-OPS.
- Section 5 Reference to EASA Part 145 requirements for CRS and CMR. Acceptance of a Part 66 licence for CRS and CMR
 Certificate of Maintenance Review requirements for aeroplanes with National or EASA Certificates of Airworthiness. Clarification of pilot maintenance for aeroplanes operated for private purposes.

Civil Aviation Authority

Section 6 Reference to generic requirements (GR) in the notes.

- **Section 7** Additional note for non-commercial air transport.
- **Section 8** Task 4 has an additional task description. Task 65 description rearranged.

3. Action

To comply with the European Regulations you are required to replace Edition 3 and 4 of the Light Aircraft Maintenance Schedule (CAA/LAMS/A/1999 Issue 1 and CAA/LAMS/H/1999 Issue 1) with this Edition 5 (CAA/LAMS/A/1999 Issue 2 and CAA/LAMS/H/1999 Issue 2). This becomes effective at the time of the next scheduled maintenance inspection due on your aircraft following receipt of this letter.

Note: Owners are reminded that all overhaul, additional inspections and test periods as specified in paragraph 7 of Section 3 to LAMS shall be recorded in CAP 543 or an appropriate equivalent record system.

Additional Information

The latest version of this document and all applicable amendments are available in electronic format at <u>www.caa.co.uk/publications</u>.

Additional copies of this edition in A4 and A5 may be obtained from:

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Yours faithfully

D LEWIS Head of Maintenance Requirements & Policy Section



CAP 411

Light Aircraft Maintenance Schedule – Aeroplanes

CAA/LAMS/A/1999 Issue 2

Operator's Schedule Ref: Aeroplane Type/Model: Engine Type: Propeller Type: Registration(s): AOC No: Operator's Name and Address:

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Safety Regulation Group

CAP 411

Light Aircraft Maintenance Schedule – Aeroplanes

CAA/LAMS/A/1999 Issue 2

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ISBN 0 11790 406 6

First Published 1978 Second Edition September 1984 Third Edition March 1999 Note: The third edition changed the CAA Approval Reference to CAA/LAMS/A/1999 Issue 1 Fourth Edition January 2005 Fifth Edition April 2005 Note: The fifth edition changed the CAA Approval Reference to CAA/LAMS/A/1999 Issue 2

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The latest version of this document and all applicable amendments are available in electronic format at www.caa.co.uk/publications, where you may also register for email notification of amendments.

Published by TSO (The Stationery Office) on behalf of the UK Civil Aviation Authority.

Printed copy available from:www.tso.co.uk/bookshopTSO, PO Box 29, Norwich NR3 1GNwww.tso.co.uk/bookshopTelephone orders/General enquiries: 0870 600 5522E-mail: book.orders@tso.co.ukFax orders: 0870 600 5533Textphone: 0870 240 3701

Amendment Record

Amendment Number	Amendment Date	Incorporated by	Incorporated on

List of Effective Pages

Section	Page	Date	Section	Page	Date	Section	Page	Date
	iii	April 2005	Section 8	12	April 2005			
	iv	April 2005	Section 8	13	April 2005			
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Section 1 Amendments to the Schedule

1 Introduction

- 1.1 When necessary, amendments to the schedule will be made by the CAA. The owner/operator will be notified in the form of replacement pages bearing the amendment date and page affected. On each page material differences from the previous issue will be indicated by a marginal line.
- 1.2 CAA amendments must be incorporated in the schedule without delay and recorded on the Amendment Record in the front of this book.

2 Revisions in this Edition

- 2.1 The fourth edition of the Light Aircraft Maintenance Schedule was issued in January 2005, to account for the implementation of the European Council Regulation (EC) No. 1592/2002 and Commission Regulation 2042/2003. This fifth edition incorporates corrections to errors discovered after publication of the fourth edition, including clarification of cross-references to the Air Navigation Order and changes the CAA Approval Reference to CAA/LAMS/A/1999 Issue 2.
- The changes incorporated at edition four included a number of changes in Sections 1 through 5 and some minor changes to Sections 6, 7 and 8 as listed below:

Section 2 Reference to the applicable European Council requirements.

Section 3 Addition of Airworthiness Life Limitations issued by EASA.

Addition of Airworthiness Directives issued by EASA.

Introduction of new 'CAA Generic Requirements', which replace mandatory Airworthiness Notices.

General Inspection Standards now include the remaining Airworthiness Notices.

Inclusion of 'Additional Inspections Requirements' in CAP 543 Time Limited Tasks, Additional Inspections and Component Change Record.

Introduction of 'Instructions for Continuing Airworthiness' replacing 'Service Information'.

'Modifications' reclassified as 'Changes'.

Additional definitions for 'Continuing Airworthiness', 'Commercial Air Transport' and 'Non-Commercial Air Transport'.

- Section 4 Reference to EASA Part 145 requirements for the issue of a Certificate of Release to Service (CRS) and Certificate of Maintenance Review (CMR). Additional note for commercial air transport aeroplanes operated in accordance with JAR OPS.
- Section 5 Reference to EASA Part 145 requirements for CRS and CMR. Acceptance of a Part 66 licence for CRS and CMR. Certificate of Maintenance Review requirements for aeroplanes with a National or EASA Certificate of Airworthiness. Clarification of pilot maintenance for aeroplanes operated for private purposes.
- Section 6 Generic Requirements added to Note 1.
- Section 7 Additional note for non-commercial air transport.
- Section 8 Task 4 has an additional task description. Task 63 description rearranged.

Section 2 Foreword

1 Applicability

- 1.1 This schedule, at edition 5, incorporates corrections to edition 4 which was published to address the implementation of the European Parliament and Council Regulation (EC) No. 1592/2002 as required at January 2005. Further amendments may be anticipated as required to address continuing implementation of that Regulation.
- 1.2 This schedule is approved in accordance with Commission Regulation (EC) No. 2042/2003 Annex 1 (Part M), and has been compiled in accordance with M.A.302.(c).(2) by the CAA.
- 1.3 Pursuant to article 10(1)(a) of the Air Navigation Order 2000 (as amended) and Part M, the UK Civil Aviation Authority (CAA) hereby approves, subject to the conditions hereto, the following maintenance schedule (the schedule):

CAA Approval Reference: CAA/LAMS/A/1999 Issue 2

Aircraft Applicability: Piston Engined Aeroplanes not exceeding 2730 kg MTWA

- 1.4 The schedule addresses the scheduled maintenance requirements for aeroplanes used for Commercial Air Transport and Non-Commercial Air Transport and is applicable to EASA regulated aeroplanes as per (EC) No. 1592/2002 article 4 and non EASA regulated aeroplanes as per Annex II of (EC) No. 1592/2002.
- 1.5 Aeroplanes using the schedule must be identified by completing the required details on the Cover Page and must use CAP 543 or an appropriate equivalent to record 'Time Limited Tasks, Additional Inspections and Component Changes'.
- 1.6 Non-compliance with any of the requirements of the schedule will invalidate the Certificate of Airworthiness insofar as it applies to a particular aeroplane.

2 Light Aircraft Maintenance

CAA Publication CAP 520 titled 'Light Aircraft Maintenance', contains guidance material and a more detailed explanation of the intended application of the schedule.

Section 3 Responsibilities and Standards

1 Owner/Operator Responsibilities

Owners/operators are responsible for the accomplishment of the maintenance prescribed in the schedule.

2 Certifying Persons Responsibilities

- 2.1 Certifying persons must use their engineering skill and judgement in determining the depth of inspection needed and other matters which could affect the airworthiness of the aeroplane. In order to claim any alleviation on subsequent inspections, the aeroplane maintenance records must record the extent of previous inspections upon which the alleviation is based.
- 2.2 Certifying persons are responsible for recording in the appropriate log book or worksheet, any defects, deficiencies or additional maintenance required as a result of implementation of the schedule.

3 General Inspection Standards

- 3.1 The general inspection standards applied to individual task inspections must meet the recommended standards and practices of the organisation responsible for the type design and are normally published in maintenance manuals.
- 3.2 In the absence of general inspection standards, refer to CAA CAP 562 Civil Aircraft Airworthiness Information and Procedures (CAAIP) or other CAA recommended standards and practices i.e. Airworthiness Notices.

NOTE: Airworthiness Notices should be assessed for applicability and where necessary included in this Maintenance Programme.

3.3 Inspections may be carried out without component removal or dismantling unless considered necessary or where required by the schedule.

4 Airworthiness Life Limitations (Retirement/Scrap Lives)

- 4.1 Airworthiness life limitations shall be those published by EASA, the CAA and the state of design Type Certificate or Supplementary Type Certificate Holder.
- 4.2 Airworthiness life limitations shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or an appropriate equivalent.

5 Airworthiness Directives

- 5.1 All applicable Airworthiness Directives issued by EASA, the CAA and any applicable Third Country Airworthiness Authority which is responsible for the state of design must be complied with.
- 5.2 Compliance with Airworthiness Directives shall be recorded in the aeroplane log books (Part C of CAPs 398, 399 and 400), or an approved equivalent.

6 CAA Generic Requirements (GRs)

All applicable mandatory CAA Generic Requirements (CAP 747) must be complied with. Compliance with CAA GRs shall be recorded in Part C of the relevant log books, reference CAPs 398, 399 and 400, or an approved equivalent.

7 Overhaul, Additional Inspections and Test Periods

- 7.1 Overhaul, additional inspections and test periods shall be those recommended by the organisation responsible for the type design.
- 7.2 EASA and the CAA may vary or mandate overhaul and test periods and additional inspections by the issue of an Airworthiness Directive or CAA GR. (Note: Airworthiness Notice 35 and GR No. 17 relate to engines and propellers respectively).
- 7.3 The overhaul, additional inspections and test periods shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or an appropriate equivalent.

8 Instructions for Continuing Airworthiness

- 8.1 Instructions for continuing airworthiness consist of inservice data published by type design organisations and must be considered by the owner/operator in addition to this maintenance schedule in order to ensure the approved maintenance schedule remains valid for the aeroplane listed.
- 8.2 Instructions for continuing airworthiness (Service Bulletins, Service Letters, etc.) should be formally technically assessed by the owner/ operator and adopted if required to ensure operational safety and reliability.
- 8.3 Instructions for continuing airworthiness applicable to this aeroplane shall be included in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or appropriate equivalent, and form part of this maintenance schedule.

8.4 Compliance with adopted continuing airworthiness information shall be recorded in Part C of CAPs 398, 399 and 400, or an approved equivalent.

9 Changes (Repairs or Modifications)

- 9.1 Approved 'changes' which have been carried out to the aeroplane, engine, propeller, components and radio after original manufacture, must be recorded in the appropriate log book(s).
- 9.2 Any recurring inspection, or maintenance task resulting from approved 'changes', shall be recorded in CAP 543 Time Limited Task, Additional Inspections and Component Change Record, or an appropriate equivalent.

10 Duplicate Inspections

When required to perform a critical task inspection or following initial assembly or disturbance of a control system or vital point, the procedures outlined in British Civil Airworthiness Requirements (BCAR) Section A/B, Chapter A6-2/B6-2 and A5-3/B5-3 shall be applied. Certifications must be recorded in the appropriate worksheet, log book or aeroplane technical log.

11 Certificates of Release to Service

- 11.1 On completion of any check required by the schedule including any additional or out of phase inspections resulting from the review of instructions for continued airworthiness (see Section 3 paragraph 8), except pilot maintenance (see Section 5) and Check A (see Section 7), an entry shall be made in Column 6 of CAP 398 Aircraft Log Book, CAP 399 Engine Log Book or CAP 400 Variable Pitch Propeller Log Book, or an approved equivalent. The certifying person's signature, authority and date must be made in Column 7 against the relevant category (Airframe, Engine/Propeller, Radio).
- 11.2 The following is an example of an entry acceptable to the CAA:

Company Name (if required): Cross refer to workpack ref:	Approval No. (if required):	Airframe
50 hr/150 hr/Annual Check/Sta satisfaction at	ar Inspection (delete as appropriate) has been carried out to my total airframe hours.	Engine/Propeller
Maintenance Schedule Ref.	CAA/LAMS/A/1999 Issue 2	Radio (Annual check only)

- 11.3 A Certificate of Release to Service is required for all tasks accomplished to satisfy the requirements of Section 3 paragraphs 5, 6, 7, 8, 9 and 10.
- 11.4 Where pilot maintenance has been performed, there is a need for assessment and re-certification (the issue of a Certificate of Release to Service) as necessary prior to the aeroplane being operated for the purposes of Commercial Air Transport, Public Transport or Aerial Work.

12 Scheduled Maintenance Worksheets

- 12.1 Worksheets shown in Section 8 must be issued and the tasks certified for all scheduled maintenance checks. These worksheets become part of the maintenance records required to be kept by the owner/operator.
- 12.2 All maintenance carried out in connection with a particular check should be certified on suitably referenced worksheets and included in the aeroplane records. These worksheets must be cross-referenced in the appropriate log book(s) giving general details of the additional maintenance carried out.

13 Definitions

13.1 Throughout the schedule the following terms and abbreviations have the stated definitions;

Service/Lubrication (Service/Lub)

The term 'Service or Lubrication' requires that a component or system should be serviced and/or replenished as necessary with fuel, oil, grease, water, oxygen, etc., to a condition specified in the appropriate maintenance manual. The term 'Service' may also be used to require filter cleaning or replacement.

Inspect (Insp)

An 'Inspection' is a visual check performed externally or internally in suitable lighting conditions from a distance considered necessary to detect unsatisfactory conditions/discrepancies using, where necessary, inspection aids such as mirrors, torches, a magnifying glass etc. Surface cleaning and removal of detachable cowlings, panels, covers and fabric may be required to be able to satisfy the inspection requirements.

Operational Check (OP/C)

An 'Operational Check' is a test used to determine that a system or component or any function thereof is operating normally.

Functional Check (F/C)

A 'Functional Check' is a detailed examination of a complete system, sub-system or component to determine if operating parameters are within limits of range of movement, rate of flow, temperature, pressure, revolutions per minute, degrees of travel, etc., as specified in the appropriate maintenance manual. Measured parameters should be recorded.

Check (CHK)

A 'Check' is the verification of compliance with the type design organisation's recommendations.

Continuing Airworthiness

Means all of the processes ensuring that, at any time in its operating life, the aeroplane complies with the airworthiness requirements in force and is in a condition for safe operation.

Commercial Air Transport

The provisions of this maintenance schedule related to Commercial Air Transport are applicable to aeroplanes operated by licensed air carriers i.e. operators issued with an Air Operator's Certificate (AOC).

Non-Commercial Air Transport

The provisions of this maintenance schedule related to Non-Commercial Air Transport are applicable to aeroplanes operated for Private purposes or Public Transport or Aerial Work as defined in article 130 of the Air Navigation Order 2000 (as amended) and not used for Commercial Air Transport.

NOTE: The definition of Public Transport and Aerial Work shall be those specified by articles 129 and 130 of the Air Navigation Order 2000 (as amended). In summary and for guidance the following general rules apply:

• Aerial Work Purposes

A flight is for the purpose of aerial work if payment is made in respect of the flight, unless the flight is in fact for the purposes of Public Transport.

Example: flying training/instruction where a payment is made for the hire of the aeroplane and for the services of the instructor.

• Public Transport Purposes

- a) Where payment is made for the carriage of passengers or cargo; or
- b) Where valuable consideration (hire and reward) is given for a person to fly the aeroplane, then the flight is deemed to be Public Transport for continuing airworthiness purposes. The flight may be considered Private for all other purposes.

Example: A private pilot, not being the owner/group owner of the aeroplane, paying for hire of an aeroplane from an owner or flying club.

• Private Purposes

A flight for Private purposes means a private flight in accordance with article 129 of the Air Navigation Order 2000 (as amended).

Section 4 Certification – Commercial Air Transport

1 Certification of Maintenance - Commercial Air Transport

Maintenance carried out to the schedule requires the following certification:

Certificate of Release to Service (CRS) in accordance with EASA Part 145.A.50

• The signatories for the CRS shall be persons authorised by an organisation appropriately approved in accordance with EASA Part 145.

Certificate of Maintenance Review (CMR) - (See BCAR Section A/B, Chapter A6-2/B6-2)

- The signatories for the CMR shall be persons authorised by an organisation appropriately approved in accordance with EASA Part 145.
- The period of validity of the CMR must not exceed the due date of the next annual check and may be anticipated by up to 62 days to coincide with the annual check.
- **NOTE:** For commercial air transport aeroplanes that are operating in accordance with Joint Aviation Requirements (JAR-OPS 1) the requirement for a Certificate of Maintenance Review may be exempt.

2 Certificate of Airworthiness Renewal - Star Inspection

A Star Inspection (see Section 6) and associated work must be completed before making a recommendation for the renewal of the Certificate of Airworthiness under the supervision of an organisation approved by the CAA in accordance with EASA Part 145 and BCAR Section A, Chapter A8-15.

Section 5 Certification – Non-Commercial Air Transport

1 Certification of Maintenance – Non-Commercial Air Transport

Maintenance carried out to the schedule requires the following certification:

Certificate of Release To Service (CRS) - (See BCAR Section A/B, Chapter A6-2/B6-2) or in accordance with EASA Part 145.

The signatories for the CRS following a maintenance check shall be one of the following:

- The holder of a United Kingdom Aircraft Maintenance Engineers Licence with the appropriate type ratings in categories A (Airframe), C (Engine) and R (Radio);
- 50 hour check The holder of a United Kingdom Aircraft Maintenance Engineers Licence with any aeroplane and engine type rating;
- A person appropriately authorised by an organisation approved by the CAA for that purpose;
- A person appropriately authorised by an organisation approved in accordance with EASA Part 145 for that purpose;
- The holder of an EASA Part 66 licence with the appropriate type or group ratings;
- Any ICAO Annex 1 aircraft maintenance licence holder in accordance with article 12(8)(b) of the Air Navigation Order 2000 (as amended).

Where the radio installation comprises only VHF communication equipment, certification may be made by the holder of a United Kingdom Aircraft Maintenance Licence in Category A (Airframe).

Certificate of Maintenance Review (CMR) for aeroplanes operated for the purpose of Aerial Work or Public Transport when issued with a National Certificate of Airworthiness or an EASA Certificate of Airworthiness.

The signatories for the CMR shall be one of the following:

- The holder of a United Kingdom Aircraft Maintenance Engineers Licence with a type rating valid in at least two categories, each category being appropriate to the aeroplane type;
- A person appropriately authorised by an organisation approved by the CAA for that purpose;
- The holder of an EASA Part 66 B1 or B2 category Aircraft Maintenance Engineers Licence with the appropriate type or group ratings approved in accordance with article 10 of the Air Navigation Order (as amended).

The period of validity of the CMR must not exceed the due date of the next annual check and may be anticipated by up to 62 days to coincide with the annual check.

2 Pilot Maintenance

A licensed pilot who is the owner or operator of the aeroplane may carry out the following:

- 50 hour check if the aeroplane is operated for private purposes;
- Certain maintenance tasks prescribed in Regulation 16 of the Air Navigation (General) Regulations 1993 (as amended), if the aeroplane is operated for private purposes.

The issue of a Certificate of Release to Service is not required. The pilot must include his/her pilot's licence number with his/her signature in the appropriate log book(s).

3 Annual Check

The annual check and all associated work must be accomplished under the supervision of an organisation appropriately approved in accordance with BCAR Section A, Chapter A8-3, A8-15, EASA Part 145, or the holder of a United Kingdom Aircraft Maintenance Engineers Licence with the appropriate type rating or the holder of an EASA Part 66 Category B1 licence with the appropriate type or group rating.

4 Certificate of Airworthiness Renewal - Star Inspection

A Star Inspection (see Section 6) and associated work must be completed before making a recommendation for the renewal of the Certificate of Airworthiness under the supervision of an organisation appropriately approved by the CAA in accordance with BCAR Section A, Chapter A8-15.

Section 6 Check Cycle and Variations

1 The Maintenance Check Cycle

Check title	Content	Period
Check A	Check A.	Prior to the first flight of the day.
50 hour check	50 hour check items.	Not exceeding 50 flying hours, or 6 months, whichever is the sooner.
150 hour check	50 and 150 hour check items.	Not exceeding 150 flying hours.
Annual check	50, 150 hour and annual check items.	Not exceeding 12 months (see Note 5).
Star inspection	Annual check and BCAR Section A/B, Chapter A/B 3-4 procedures.	Coincident with the renewal of the Certificate of Airworthiness.

2 Permitted Variations (see Notes)

Tasks controlled by flying hours	Maximum Variation
50 hour and 150 hour	10%
Tasks controlled by calendar time	Maximum Variation
6 months Annual	1 month None
Tasks controlled by more than one limit	
The more restrictive limit shall be applied.	

- **NOTES:** 1 Permitted variations may **not** be applied to applicable airworthiness life limitations, airworthiness directives, Generic Requirements or overhaul and test periods.
 - 2 Permitted variations for tasks controlled by flying hours should not be understood to be a maintenance planning tool, but as an exceptional means to allow the operator to fly for a limited period of time until the required maintenance is performed.
 - 3 Any application of a permitted variation to the maintenance check cycle period must be recorded in the appropriate log book(s) together with the reason for the variation by a person who is authorised to sign the log book entry for that particular check. Details of the permitted variation must be made visible to the pilot.
 - 4 Permitted variations are not required to be deducted from the next scheduled check.
 - 5 The annual check may be anticipated by a maximum period of 62 days without loss of the continuity of the maintenance check cycle. Thus, for example, where the full 62 days is invoked, the following annual check would become due 14 months after the completion of the annual check which was anticipated. The period by which the annual check was anticipated and the date of the next annual check shall be recorded in the appropriate log book(s).

Section 7 Pre-Flight

1 Pilot's Pre-Flight Check

Pre-flight checks are to be carried out in accordance with the Aeroplane Flight Manual, Pilot's Operations Handbook, Pilot's Notes or Operations Manual.

2 Check A - Prior to First Flight of the Day

Commercial Air Transport – requires the issue of a Certificate of Release to Service (see Section 4).

Non-Commercial Air Transport – does not require the issue of a Certificate of Release to Service.

A1	General	Remove frost, snow or ice, if present. Check that the aircraft documents are available and in order. Ensure all loose equipment is correctly stowed and the aircraft is free of extraneous items. If the aeroplane has not been regularly used, ensure before resumption of flying that: a) either (i) the engine has been turned weekly or run fortnightly; or (ii) the manufacturer's recommendations have been complied with; b) compression appears normal when the engine is turned by hand; c) previously reported defects have been addressed.
A2	Powerplant/ Engine	Check - oil level; security of filler cap and dipstick. Inspect - engine, as visible, for leaks, signs of overheating, and security of all items. Inspect - air filter/intake for cleanliness. Check - security of cowlings, access doors and panels.
A3	Propeller	Inspect - blades and spinner for damage and security.
A4	Windscreen	Inspect - for damage and for cleanliness.

A5	Fuel System	Check visually that quantities are compatible with indicator readings. Drain fuel sample from each drain point into a transparent container and check for water, foreign matter and correct colour.
A6	Wings	Inspect - skin/covering, bracing wires, struts and flying control surfaces for damage and security of all items. Inspect - pitot/static vents, fuel vents and drain holes for freedom from obstruction. Test operation of stall warning device.
A7	Landing Gear	Check - shock absorbers, struts for leaks and that extension appears normal. Check - tyres for inflation, damage and creep. Inspect - brake installation for external evidence of leaks, and for damage and security.
A8	Fuselage and Empennage	Inspect - skin/covering, bracing wires, struts, and flying control surfaces for damage and security of all items. Inspect - drain holes and vents for freedom from obstruction. Inspect - radio aerials for damage and security.
A9	Cabin Area	 Check - flying and engine controls, including trimmers and flaps, for full and free movement in the correct sense. Check - brake operation is normal. Check - instrument readings are consistent with ambient conditions. Perform manual override and disengagement check on auto-pilot. Check - avionic equipment operation, using self-test facilities where provided. Inspect - seats, belts and harnesses for satisfactory condition, locking and release. Check - emergency equipment properly stowed and inspection dates valid. Test operation of electrical circuits. Inspect - cabin and baggage doors for damage, security and for correct operation and locking. Check that markings and placards are legible.
A10	Agricultural Operations	Inspect - hopper, hopper lid, tank, pump, boom assemblies, pipe runs, blowers and spreaders for damage and security. Check - emergency dump doors, fan brake and pump control for correct operation.

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- **NOTE:** At the conclusion of agricultural operations the aeroplane shall be completely cleaned to remove chemicals, and an inspection of those parts of the structure which are likely to have been contaminated, e.g. skin/covering and exposed control cables, shall be carried out before the aeroplane is returned to any work other than agricultural operations.
- A11 Marine Aircraft Inspect hull floats, spreaders, struts, bracing wires, water rudders and alighting gear for damage, security and corrosion.

Drain - all bilge compartments.

Check - water rudder system for full and free movement in the correct sense.

Section 8 Scheduled Maintenance

Scheduled Maintenance Worksheets

Maintenance Organisation Name: Site where maintenance was accomplished:				Page 1 of Note: Enter total p	ages issued
A/C Reg: G-	Type:		Serial No:	Workpack Ref:	
	Engine Type:		Serial No(s) [Single]:	[L/H]:	[R/H]:
	Propeller Type	2:	Serial No(s) [Single]:	[L/H]:	[R/H]:
A/C Total Hours:			Check Start Date:	Operator:	
Check Type: [50 FH/6 Months]	[150 FH]	[Annual]	[Annual + Star Inspection	on]	
Note: Delete checks which are no	t being carried ou	it and identify any no	t applicable worksheet tasks as	N/A.	

Maintenance Manual Reference	Issue/Revision No.	Date
Airframe:		
Engine:		
Propeller:		

Final Checks (Include with all checks)

Ground Run:

Task No.	Task Description	Task Nature	Task Interval	Insp		Certifying Person*	
			into va	LH	RH	LH	RH
1	Powerplant, liquid, air and gas systems for leaks during and following ground run.	INSP	All Checks				
2	Instruments, systems and services. Radio for electromagnetic interference.	OP/C	All Checks				
3	Following ground run, ensure all cowlings, access panels and doors are secure.	СНК	All Checks				

Certification:

Task No.	Task Description	Task Nature	Task Interval	Insp	Certifying Person*
4	Workpack and Log Book entries have been completed and certified. Ensure items due in accordance with CAP 543 have been accomplished and certified.	СНК	All Checks	N/A	

Type Certificate and Schedule Review:

5	Aircraft, engine and propeller - compliance with Type Certificate Data Sheet/ Airworthiness Approval Note.	СНК	Annual	N/A	
6	Mandatory placards are installed and legible.	СНК	Annual	N/A	
7	Review the schedule to ensure that the maintenance needs of the aircraft are being met such that continuing safe operation can be assured. Account should be taken of previous maintenance history, operating environment and utilisation.	СНК	Annual	N/A	

* See Sections 4 or 5, as appropriate

50 Hour Check: Task Nos. 1 - 45

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
8	External structure of fuselage, mainplanes, empennage, cowlings, nacelles, control surfaces, flaps and other high lift devices.	INSP	50 FH/ 6 Months		
9	Surface de-icer system.	INSP	50 FH/ 6 Months		
10	Normal and emergency doors and windows, door hinges, door hinge attachment points, required placards and operating instructions.	INSP	50 FH/ 6 Months		
11	Doors, hatches and windows latching and locking.	OP/C	50 FH/ 6 Months		
12	Agricultural Installations: Hopper, hopper lid, tank, pump, fan, boom assemblies, pipe runs, blowers and spreaders.	INSP	50 FH/ 6 Months		
13	Agricultural Installations: Emergency dump doors, fan brake, pump control.	OP/C	50 FH/ 6 Months		
14	Marine Aeroplanes: Hull, floats, spreaders, struts, bracing wires, water rudders, alighting gear, bilge compartments.	INSP	50 FH/ 6 Months		
15	Marine Aeroplanes: Water rudder system.	OP/C	50 FH/ 6 Months		

Landing Gear:

16	Landing gear assemblies, shock-absorber struts/units for leaks and correct extension, brake system, brake linings, drums/discs, wheels, tyres.	INSP	50 FH/ 6 Months	
17	Tyre pressures, hydraulic brake system fluid level.	SERVICE	50 FH/ 6 Months	

Flying Controls:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
18	Primary/secondary flight controls and trim systems for full and free movement in the correct sense. Position indicators agree with surface movement.	OP/C	50 FH/ 6 Months		

Liquid, Air and Gas Systems:

19	Hydraulic, pneumatic, vacuum, other fluid systems.	INSP	50 FH/ 6 Months	
20	Fluid levels in reservoirs, accumulator pressures.	SERVICE	50 FH/ 6 Months	
21	Pitot/static system vents, pitot head, drains clear. Pitot head correctly aligned.	INSP	50 FH/ 6 Months	

Equipment and Environmental:

22	Correct stowage of equipment, validity of date on emergency equipment.	СНК	50 FH/ 6 Months	
23	Seats, belts/harnesses, attachment, locking and release.	INSP	50 FH/ 6 Months	
24	Fire extinguisher for leakage or discharge.	СНК	50 FH/ 6 Months	

Aeroplane Lubrication:

25	Lubricate aeroplane in accordance with type design organisation recommendations.	LUB	50 FH/	
			6 Months	

Powerplant Installation:

Task No.	Task Description	Task	Task Me		Mech		sp
IdSK INU.		Nature	Interval	LH	RH	LH	RH
26	Engine and propeller controls for full and free movement - throttle, mixture, carburettor heat, cowl flaps, propeller.	OP/C	50 FH/ 6 Months				
27	Powerplant installation.	INSP	50 FH/ 6 Months				

Air Induction:

Task No.	Task Description	Task	Task	Mech LH R	ch	In	sp
IdSK NO.		Nature Interval	LH	RH	LH	RH	
28	Air filter, intake and induction system, turbocharger impeller.	INSP	50 FH/ 6 Months				

Exhaust:

29	Exhaust manifold, mufflers.	INSP	50 FH/ 6 Months				
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Engine Lubrication:

30	Magnetic plugs	СНК	50 FH/ 6 Months		
31	Engine oil change. Oil filter. Screens. Next due: Note: In accordance with type design organisation recommendations.	SERVICE	50 FH/ or See Note		

Fuel System:

32 Filters for cleanliness and tank vents unobstructed. Drain samples from all drain points and check for presence of water, foreign matter and correct colour.	СНК	50 FH/ 6 Months					
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Propeller:

	33	Blades, spinner, backplate.	INSP	50 FH/ 6 Months		
ſ	34	Accumulator dome pressure.	СНК	50 FH/ 6 Months		

Electrical System:

35	Battery, stowage/compartment, vents and drains. Electrolyte level.	INSP & SERVICE	50 FH/ 6 Months		
36	Alternator/generator drive belt tension and condition.	INSP	50 FH/ 6 Months		

Radio:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
37	Aerials, insulators, controllers, instruments, displays, microphones, headsets, jackplugs and sockets.	INSP	50 FH/ 6 Months		
38	Placards and markings legible.	INSP	50 FH/ 6 Months		
39	VHF ground function.	OP/C	50 FH/ 6 Months		
40	Cables and terminals, cooling systems, moisture trap areas.	INSP	50 FH/ 6 Months		

Instrument Systems:

41	Instruments. Legibility of markings and associated placards, band ranges and limit markings.	INSP & CHK	50 FH/ 6 Months	
42	Readings consistent with ambient conditions. Stall warning device operation.	СНК	50 FH/ 6 Months	
43	Compass 'deviation' or 'steer by' cards - valid until next check.	СНК	50 FH/ 6 Months	

Auto-Pilot and Flight Director:

44	Displays, instruments, controllers.	INSP	50 FH/ 6 Months	
45	Manual override, disengagement functions.	OP/C	50 FH/ 6 Months	

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150 Hour Check (Include 50 Hour Check Items): Task Nos. 1 - 84

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
46	Internal structure of fuselage, floors, bulkheads, tail booms, mainplanes, nacelles, empennage. Control surfaces, flaps and other high lift devices, structural attachment joint assemblies, struts, bracing wires and their attachments. Note: The need for removal of fabric for detailed inspection of attachments must be assessed when accomplishing this task at the annual check.	INSP	150 FH		
47	Internal corrosion protective treatments, drain holes and paths.	INSP	150 FH		
48	Wooden/Composite Construction: Vent holes, glued joints, bonded assemblies, protective treatments and finishes. Note: The need for removal of fabric for detailed inspection of attachments must be assessed when accomplishing this task at the annual check.	INSP	150 FH		
49	Static discharge wicks and attachment bases.	INSP	150 FH		

Landing Gear:

50	Structural members, attachment fittings, pivot points, shock absorbing devices, bungee rubbers, torque links, shimmy dampers, main wheels, nose/tail wheels, bearings, skids, hoses and lines, hydraulic and electric actuators, jacks, struts, wheel fairing. Note: Carry out with weight off the landing gear.	INSP	150 FH	
51	Main and parking brake systems, anti-skid devices.	OP/C	150 FH	
52	Normal/emergency retraction and extension, locking devices, doors and operating linkages, indicators, warning devices.	OP/C	150 FH	
53	Hydraulic/pneumatic operating system.	СНК	150 FH	

Flying Controls:

54	Hinges, brackets, push-pull rods, bellcranks, control horns, balance weights, cables, pulleys, chains, tubes, guides, fairleads, rollers, tracks, rails, screw jacks/rams, auxiliary gearboxes and other power-operated systems. Note: The need for removal of flying control cables and control system components for detailed inspection must be assessed when accomplishing this task at the annual check.	INSP	150 FH	
55	Turnbuckles, locking devices in safety.	СНК	150 FH	
56	Flap asymmetric protection mechanisms.	INSP	150 FH	

Liquid, Air and Gas Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
57	Tanks, powerpacks, valves, pipelines, hoses, actuators, filters, venturis.	INSP	150 FH		

Equipment and Environmental:

58	Cabin air system, heater, blower.	INSP & OP/C	150 FH	
59	Air conditioner, oil level.	OP/C & SERVICE	150 FH	
60	Outflow valves, pressurisation controller, bleed system, shut-off valves.	INSP	150 FH	

Powerplant Installation:

Task No.	Task Description	Task	Task	М	ech	In	sp
185K INU.		Nature	Interval	LH	RH	LH	RH
61	Crankcase, accessory housings, cylinder assemblies, accessory drive belts, accessories, engine shock mounts, mount frames, bulkheads, firewalls and sealing, cooling baffles, cowlings, breathers and vents, items in engine bay for mutual interference.	INSP	150 FH				
62	Valve operating mechanism. Next due: Note: In accordance with type design organisation recommendations.	СНК	150 FH or See Note				
63	Cylinder compression and leakage. Record results below. Method:	СНК	150 FH				

Eng Cyl	Result						
1		4		1		4	
2		5		2		5	
3		6		3		6	

Air Induction:

Task No.	Task Description	Task	Task Interval	Mech		Insp	
105K INU.		Nature		LH	RH	LH	RH
64	Carburettor heat, alternative air bypass doors, control systems.	INSP & OP/C	150 FH				
65	Flame traps, drains.	INSP	150 FH				

Ignition:

66	Magnetos, harnesses, leads, switches, starting vibrators, contact breakers, cooling system and ventilators.	INSP	150 FH		
67	Magneto internal timing and timing to engine.	СНК	150 FH		
68	Magneto cam. Next due: Note: In accordance with type design organisation recommendations.	LUB	150 FH or See Note		
69	Spark plugs. Next due: Note: In accordance with type design organisation recommendations.	СНК	150 FH or See Note		

Exhaust:

70	Cabin heat exchanger.	INSP	150 FH		
71	Turbocharger, control system, pipelines, hoses.	INSP	150 FH		

Engine Lubrication:

72	Tanks, sumps, coolers, hoses, pipelines, vents.	INSP	150 FH		
73	Engine controls in accordance with type design organisation recommendations.	LUB	150 FH		

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Fuel System:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
74	Tanks, filler caps, selector valves, pumps, pipelines, hoses, carburettor, injector systems, throttle, mixture control, fuel selector control, filler point placard.	INSP	150 FH		

Propeller:

Task No.	Task Description	Task Nature	Task	Mech		Insp	
IASK INU.			Interval	LH	RH	LH	RH
75	Hub, constant speed unit, governor, accumulators, de-icing boots, slip rings and brushes, fluid systems, control systems.	INSP	150 FH				
76	Pitch change mechanism for backlash.	СНК	150 FH				
77	Lubricate propeller in accordance with type design organisation recommendations.	LUB	150 FH				

Electrical Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
78	Components, wiring, terminals, connectors.	INSP	150 FH		
79	Warning circuits.	OP/C	150 FH		
80	Correct type and rating of fuses and circuit breakers. Correct spare fuses carried.	СНК	150 FH		
81	Lamps and lighting. Correct spare lamps carried.	СНК	150 FH		
82	Brushes in starters, alternators and generators. Next due: Note: In accordance with type design organisation recommendations.	СНК	150 FH or See Note		

Instrument Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
83	Instruments, displays, controllers, panels, mounts, pipes, hoses, electrical wiring, gyro filters, flux detectors, instrument transmitters.	INSP	150 FH		

Auto-Pilot/Flight Director:

84	Computers, amplifiers, power supplies, servo motors, connections to flying control	INSP	150 FH	
	systems, automatic trim systems, yaw dampers, manometric system inter-			
	connections.			

Annual Check/Non-Aligned Tasks (Include 50 and 150 Hour Check Items): Task Nos. 1 - 120

Structural/Zonal:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
85	Emergency exits by internal and external release methods.	OP/C	Annual		
86	Lightning strike bonding.	СНК	Annual		
87	Internal condition of struts, control tubes and similar hollow members. Next due: Note: In accordance with type design organisation recommendations.	INSP	See Note		

Flying Controls:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
88	Electric flap actuation system, limit switches, pitch trim motors.	INSP & OP/C	Annual		
89	Control cables for correct tension. Control neutrals and travels. Record results below.	СНК	Annual		

Cable Identification	Tomporatura	Tens	sion	Control and Position	Angle/Mea	asurement
	Temperature	Required	Actual	(Neutral, nose up etc.)	Required	Actual

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Liquid, Air and Gas Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
90	Pitot/static system sense and leak.	F/C	Annual		
91	Hydrostatic test of pressure vessels. Next due: Note: In accordance with type design organisation recommendations.	INSP & CHK	60 Months or See Note		
92	Flexible fuel and oil hoses pressure test. Next due: Note: In accordance with type design organisation pressure testing recommendations but in either case only until the ultimate service life, if stated, is achieved.	СНК	72 Months from new, then every 36 Months or See Note		
93	Internal examination and pressure testing of fluid tanks and reservoirs. Next due: Note: In accordance with type design organisation recommendations.	СНК	See Note		

Equipment and Environmental:

94	4	Fire extinguisher contents by pressure/weight.	СНК	Annual	
9!	5	Combustion heater. Next due:	СНК	iaw GR11	
90	6	Ground function pressurisation check. Next due:	F/C	36 Months	

Exhaust:

97	Cabin heat exchanger pressure test. Next due:	СНК	Annual or See Note	
	Note: In accordance with type design organisation recommendations.			

Electrical Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
98	Over/under-volt system, warnings. Load sharing.	OP/C	Annual		
99	All ground operable electrical circuits. Exercise manually operated circuit breakers.	OP/C	Annual		
100	Nickel-cadmium battery capacity test. Next due: Note: In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer.	F/C	12 months or See Note		
101	Lead-acid battery capacity test. Next due: Note: In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer.	F/C	12 months or See Note		

Radio:

102	HF Communication.	OP/C	Annual	
103	ADF - ground function using station(s) of known bearing to establish accuracy. Audio on all bands.	F/C	Annual	
104	ILS Localiser and Glide Slope - with a Field Test Set, including flag warnings of single tone failure, centre-line accuracy, sense, course widths, audio.	F/C	Annual	
105	VOR - with a Field Test Set, including flag warnings, omni-radial resolving, radio- magnetic indicator accuracy at 90° intervals, sense and course width.	F/C	Annual	
106	Marker - with a Field Test Set, including 3-tone operational check, high/low sensitivity.	F/C	Annual	
107	DME - with a Field Test Set, including range accuracy, audio.	F/C	Annual	
108	ATC Transponder - with a Field Test Set, including frequency tolerance, side lobe suppression, mode 'C' and 'S'.	F/C	Annual	

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
109	Airborne Search and Weather Radar - all modes.	OP/C	Annual		
110	Area and Satellite Navigation (GPS).	OP/C	Annual		
111	Audio, including emergency operation.	OP/C	Annual		
112	ELT, including battery. Next due: Note: In accordance with manufacturer's recommendations.	СНК	See Note		
113	VHF Communication - with a Field Test Set, including frequency tolerance of transmitted frequencies. Next due: Note: In accordance with equipment manufacturer's recommendations, only where frequency tolerance checks are recommended by the equipment manufacturer.	F/C	36 Months		
114	HF Communication - with a Field Test Set, including frequency tolerance of transmitted frequencies. Next due: Note: In accordance with equipment manufacturer's recommendations, only where frequency tolerance checks are recommended by the equipment manufacturer.	F/C	36 Months		
115	Aerials and Feeders - VSWR (DME and ATC Transponder), insulation (HF). Next due:	F/C	36 Months		

Instrument Systems:

Task No.	Task Description	Task Nature	Task Interval	Mech	Insp
116	Air Speed Indicator calibration (in situ is permissible).	F/C	Annual		
117	Altimeter calibration (in situ is permissible).	F/C	Annual		
118	Instruments and indicators - satisfactory condition, mounting, marking and operation. Note: This task is applicable to all instruments and indicators that could affect the airworthiness or operating safety of the aircraft.	F/C	Annual		
119	Compass swing. Next due:	F/C	36 Months		

Auto-Pilot/Flight Director:

120	Auto-Pilot/Flight Director - all modes.	OP/C	Annual	
	Note: Refer to Airworthiness Notice No. 3 for limitation of certification privileges.			