

## **CAP 767**

# **Light Aircraft Maintenance Programme – Helicopters**

CAA/LAMP/H/2007 Issue 1

Owner/operator programme ref: CAA/LAMP/H/2007 Reg: G-

Helicopter type/model:

Engine type:

AOC No: (as applicable)

Part M Subpart G Organisation: (as applicable)

Owner/operator name and address:

Applicable to EASA regulated helicopters





**Safety Regulation Group**



## **CAP 767**

# **Light Aircraft Maintenance Programme – Helicopters**

CAA/LAMP/H/2007 Issue 1

---

**October 2008**

© Civil Aviation Authority 2008

All rights reserved. Copies of this publication may be reproduced for personal use, or for use within a company or organisation, but may not otherwise be reproduced for publication.

To use or reference CAA publications for any other purpose, for example within training material for students, please contact the CAA at the address below for formal agreement.

ISBN 978 0 11792 145 0

First Published October 2007

Amendment 2008/01 incorporated January 2008

Amendment 2008/02 incorporated October 2008

Enquiries regarding the content of this publication should be addressed to:

Chief Surveyor's Office, Survey Department, Airworthiness Division, Safety Regulation Group, Civil Aviation Authority, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR.

The latest version of this document is available in electronic format at [www.caa.co.uk/publications](http://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:

TSO, PO Box 29, Norwich NR3 1GN

Telephone orders/General enquiries: 0870 600 5522

Fax orders: 0870 600 5533

[www.tso.co.uk/bookshop](http://www.tso.co.uk/bookshop)

E-mail: [book.orders@tso.co.uk](mailto:book.orders@tso.co.uk)

Textphone: 0870 240 3701

---





## List of Effective Pages

Section	Page	Date	Section	Page	Date	Section	Page	Date
	iii	October 2008						
Contents	1	January 2008						
Section 1	1	October 2008						
Section 2	1	January 2008						
Section 2	2	October 2008						
Section 3	1	January 2008						
Section 3	2	January 2008						
Section 3	3	January 2008						
Section 3	4	October 2007						
Section 4	1	October 2007						
Section 5	1	October 2007						
Section 5	2	October 2007						
Section 5	3	October 2007						
Section 6	1	October 2007						
Section 6	2	January 2008						
Section 6	3	January 2008						
Section 6	4	October 2007						
Section 6	5	October 2007						
Section 6	6	January 2008						
Section 6	7	January 2008						
Section 6	8	January 2008						
Section 6	9	January 2008						
Section 6	10	January 2008						
Section 6	11	January 2008						
Section 6	12	January 2008						
Section 6	13	January 2008						
Section 6	14	January 2008						
Section 6	15	January 2008						

INTENTIONALLY LEFT BLANK

## Contents

<b>Section 1</b>	<b>Amendments to the Programme</b>		<b>Section 4</b>	<b>The Maintenance Check Cycle and Permitted Variations</b>	
	Introduction	1		The Maintenance Check Cycle	1
	Revision History	1		Permitted Variations	1
<b>Section 2</b>	<b>Foreword</b>		<b>Section 5</b>	<b>Pre-Flight</b>	
	Owner/Operator Certification Statement	1		Pilot Pre-Flight Check	1
	Applicability	2		Check A – Prior to First Flight of the Day	1
<b>Section 3</b>	<b>Responsibilities and Standards</b>		<b>Section 6</b>	<b>Scheduled Maintenance</b>	
	Owner/Operator Responsibilities	1		Scheduled Maintenance Worksheets	1
	Certificate of Release to Service	1		Final Checks (include with all checks except for the Pre-Flight Check and Check A)	2
	Certifying Persons' Responsibilities	1		50 Hour Check: Task Nos. 1 – 42	3
	Performance of Maintenance	1		100 Hour Check (include 50 hour check items): Task Nos. 1 – 75	7
	Airworthiness Life Limitations (Retirement/Scrap Lives)	2		Annual Check/Non-Aligned Tasks (include 50 and 100 hour check items): Task Nos. 1 – 116	11
	Airworthiness Directives	2			
	CAA Generic Requirements	2			
	Overhaul, Additional Inspections and Test Periods	2			
	Instructions for Continued Airworthiness	3			
	Changes (Modifications or Repairs)	3			
	Independent Inspections	3			
	Scheduled Maintenance Worksheets	3			
	Definitions	4			

INTENTIONALLY LEFT BLANK

## Section 1 Amendments to the Programme

### 1 Introduction

- 1.1 When necessary, amendments to the Light Aircraft Maintenance Programme – Helicopters (the Programme) will be made by the CAA and published on the CAA website at [www.caa.co.uk/CAP767](http://www.caa.co.uk/CAP767). 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 Programme without delay and recorded on the Amendment Record in the front of this book.

### 2 Revision History

- 2.1 Issue 1 of the Programme was published in October 2007 to account for the implementation of the European Council Regulation (EC) No. 1592/2002 and Commission Regulation 2042/2003, Annex 1, Part M M.A.302.
- 2.2 Amendment 1/2008 was published in January 2008 to clarify details within the document.
- 2.3 Amendment 2/2008 was published in October 2008 to replace European Council Regulation (EC) No. 1592/2002 with European Council Regulation (EC) No. 216/2008, as a result of the change to the Regulation.

INTENTIONALLY LEFT BLANK

## Section 2 Foreword

### 1 Owner/Operator Certification Statement

The undersigned undertakes to ensure that the helicopter will continue to be maintained in accordance with the Programme, Section 3 Responsibilities and Standards. It is understood that non compliance with any of these responsibilities and standards will invalidate the Certificate of Airworthiness.

When preparing the Programme to meet the requirements of Part M, recommendations made by the airframe, engine and equipment type certificate holders and any supplementary type certificate holders have been evaluated and where appropriate have been incorporated.

The Programme consists of CAA Log Books CAP 398, CAP 399 and Time Limited Task Record CAP 543 or any alternative documents or systems acceptable to the CAA, which will be customised by completing the required continued airworthiness and maintenance details.

In accordance with Part M M.A.302(a), the data contained in the Programme will be reviewed annually for continued validity, in the light of operating experience.

It is accepted that this Programme does not prevent the necessity for complying with any new or amended regulation published by EASA, or the CAA, where these new or amended regulations may override elements of this Programme.

Name:

Position:

Signed:

For and on behalf of the owner/operator:

Date:

**Note:** Refer to Part M M.A.201(a) and (b) for the owner/operator responsibilities.

## **2      **Applicability****

- 2.1      The basic Programme as published, is approved in accordance with Commission Regulation (EC) No. 2042/2003 Annex 1, and has been compiled by the CAA in accordance with Part M M.A.302 (c)(2).
- 2.2      The Programme addresses the scheduled maintenance requirements for all single piston engine helicopters, with less than 2730kg MTOM, used for commercial and non-commercial air transport and is only applicable to European Aviation Safety Agency (EASA) regulated helicopters as per (EC) No. 216/2008 Article 4.

## **Section 3 Responsibilities and Standards**

### **1 Owner/Operator Responsibilities**

1.1 The owner/operator is responsible for the helicopter's continuing airworthiness in accordance with Part M M.A.201.

### **2 Certificate of Release to Service**

2.1 On completion of any of the Programme maintenance checks, a detailed, referenced entry must be made in the relevant log book(s) with an appropriate certificate of release to service (CRS) by the certifying person.

2.2 CRS for helicopters operated for the purpose of commercial air transport shall be issued by a Part-145 organisation.

2.3 Except for helicopters released by a Part-145 organisation, the CRS shall be issued according to Part M M.A.801.

2.4 For privately operated helicopters of simple design, the pilot-owner may issue CRS in accordance with Part M M.A.803 for maintenance as listed in Part M, Appendix VIII as applicable. A CRS issue is not required subsequent to the completion of the Check A.

### **3 Certifying Persons' Responsibilities**

3.1 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 helicopter.

3.2 Certifying persons are responsible for recording in the appropriate log book or worksheet, any defects, deficiencies or additional maintenance required, resulting from the implementation of the Programme and the issue of the CRS.

### **4 Performance of Maintenance**

4.1 All maintenance shall be performed following the methods, techniques, standards and instructions specified in Part M M.A.402.

## **5 Airworthiness Life Limitations (Retirement/Scrap Lives)**

- 5.1 Airworthiness life limitations shall be those published by the state of design type certificate holder and supplementary type certificate holders.
- 5.2 Airworthiness life limitations shall be recorded in CAP 543 or any alternative document or system acceptable to the CAA.

## **6 Airworthiness Directives**

- 6.1 Airworthiness directives shall be those issued by EASA, the CAA and the state of design responsible for the type certificate and supplementary type certificates.
- 6.2 Forecasting and compliance with airworthiness directives shall be recorded in CAA log book(s) CAP 398 or CAP 399 or any alternative documents or systems acceptable to the CAA.

## **7 CAA Generic Requirements**

- 7.1 Forecasting and compliance with CAA Generic Requirements published in CAP 747 shall be recorded in CAA log book(s) CAP 398, CAP 399, CAP 543 or any alternative documents or systems acceptable to the CAA.

## **8 Overhaul, Additional Inspections and Test Periods**

- 8.1 Overhaul, additional inspections and test periods shall be those recommended by the type certificate holder or supplementary type certificate holders.
- 8.2 EASA and the CAA may vary or mandate overhaul and test periods and additional inspections by the issue of an airworthiness directive or CAA Generic Requirements.
- 8.3 The forecasting and compliance with overhaul, additional inspections and test periods shall be recorded in CAP 543 or any alternative document or system acceptable to the CAA.

## **9 Instructions for Continued Airworthiness**

- 9.1 Instructions for continued airworthiness consist of in-service data published by the type certificate or supplementary type certificate holder in maintenance manuals, service bulletins, service letters etc.
- 9.2 To ensure operational safety and reliability, instructions for continued airworthiness must be formally technically assessed and adopted as required by the owner/operator or Part M Subpart G continuing airworthiness management organisation.
- 9.3 Continued airworthiness instructions shall be recorded in CAA log book(s) CAP 398, CAP 399, CAP 543 or any alternative documents or systems acceptable to the CAA.

## **10 Changes (Modifications or Repairs)**

- 10.1 EASA approved changes, which have been carried out, must be recorded in the appropriate CAA log book(s) CAP 398, CAP 399, CAP 543 or any alternative documents or systems acceptable to the CAA.
- 10.2 Any additional instructions for continued airworthiness due to the change shall be recorded in CAA log book(s) CAP 398, CAP 399, CAP 543 or any alternative documents or systems acceptable to the CAA.

## **11 Independent Inspections**

- 11.1 The type certificate holder or supplementary type certificate holder's instructions for continued airworthiness should be followed when determining the need for an independent inspection.
- 11.2 In the absence of these inspection standards, an independent inspection must be carried out after any flight safety sensitive maintenance task, in accordance with Part M M.A.402 (a) and AMC M.A.402 (a) 4.

## **12 Scheduled Maintenance Worksheets**

- 12.1 Worksheets shown in Section 6 of the Programme shall be issued and each task signed off. These worksheets become part of the maintenance records required to be kept in accordance with Part M M.A.305(h) by the owner/operator.
- 12.2 All additional maintenance carried out should be certified on suitably referenced worksheets and included in the helicopter records.
- 12.3 Scheduled maintenance worksheets and additional worksheets shall be cross-referenced and recorded in the certification areas of the CAA log book(s) CAP 398, CAP 399 or any alternative documents or systems acceptable to the CAA, giving details of airworthiness directives, component changes, scheduled and any additional maintenance carried out.

## 13 Definitions

13.1 Throughout the Programme 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 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 must be recorded.

### Check (CHK)

A 'check' is the verification of compliance with the type design organisation's instructions for continuing airworthiness.

## Section 4 The Maintenance Check Cycle and Permitted Variations

### 1 The Maintenance Check Cycle

Check title	Content	Period
Pilot pre-flight	Refer to helicopter flight manual	Prior to every flight
Check A	Check A	Prior to first flight of the day
50 hour check	50 hour check items	Not exceeding 50 flying hours or 6 months, whichever is the sooner
100 hour check	50 and 100 hour check items	Not exceeding 100 flying hours
Annual check	50, 100 hour and annual check items	Not exceeding 12 months

### 2 Permitted Variations

Tasks controlled by flying hours	Maximum Variation
50 hour and 100 hour	10%
Tasks controlled by calendar time	Maximum Variation
6 months	15 days
Annual	1 month

- NOTES:**
- 1 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 check is performed.
  - 2 Permitted variations may not be applied to airworthiness directives, CAA Generic Requirements, airworthiness life limitations or overhaul and test periods.
  - 3 The more restrictive limit shall be applied for tasks controlled by both flying hours and calendar time.
  - 4 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.
  - 5 Permitted variations are not required to be deducted from the next scheduled check.

INTENTIONALLY LEFT BLANK

## Section 5 Pre-Flight

### 1 Pilot Pre-Flight Check

Pre-flight checks shall be carried out in accordance with the Helicopter Flight Manual, Pilot's Operations Handbook, Pilot's Notes or Operations Manual as appropriate.

### 2 Check A – Prior to First Flight of the Day

A1	General	Remove frost, snow or ice, if present. Check – that the helicopter documents are available and in order. Check – moveable ballast weights correctly positioned.  Ensure all loose equipment is correctly stowed and the helicopter is free of extraneous items. If the helicopter 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) Previously reported defects have been addressed.
A2	Transparencies	Inspect – for damage and cleanliness.
A3	Fuselage	Inspect – skin/covering, struts and tubular structure for damage, corrosion and security of all items. Inspect – drain holes and vents for freedom from obstruction.  Remove pitot head cover/static port blanks, and inspect orifices for cleanliness.  Inspect – radio aerials for damage and security.
A4	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. Inspect – landing gear skid and cross tubes for damage, excessive deflection and worn skid shoes. Check – ground handling wheels retracted or removed.

A5	Flying Controls	Inspect	– flying control surfaces for damage and security of all items and for freedom of operation.
		Inspect	– hydraulic cylinders for leakage.
		Check	– hydraulic reservoir fluid level.
A6	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	– fan belts for adequate tension and for condition.
		Inspect	– engine mounts for damage and security.
		Inspect	– controls for security and damage.
		Check	– security of cowlings, access doors and panels.
A7	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.	
A8	Main Transmission and Rotor	Check	– transmission for damage, leaks and correct oil level.
		Check	– freewheel operation.
		Inspect	– rotating controls for damage, security and freedom of operation.
		Check	– levels in oil reservoirs and dampers.
		Inspect	– main rotor blades for damage and security; drain holes for freedom from obstruction.
		Check	– blade inspection monitor.
		Check	– blade tie downs removed.
A9	Tail Transmission and Rotor	Check	– gearbox oil level(s) and for signs of leaks.
		Inspect	– rotor assembly for damage, security and freedom of operation.
		Inspect	– rotor blades for damage and security.
		Check	– strike indicators.
		Inspect	– drain holes for freedom from obstruction.

A10	Cabin Area	Check	– flying and engine controls for full and free movement in the correct sense; friction devices for correct operation.
		Check	– instrument readings are consistent with ambient conditions.
		Perform manual override and disengagement check on auto-stabiliser system.	
		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.
A11	Agricultural Operations	Check	– markings and placards are legible.
		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.
		<b>NOTE:</b>	At the earliest opportunity, the helicopter must 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 helicopter is returned to any work other than agricultural operations.
A12	Marine Helicopters	Inspect	– floats, spreaders, struts, bracing wires for damage, security and corrosion.
		Check	– fixed float inflation bottle pressures.
A13	Special Purpose Equipment	Inspect	– emergency flotation gear, lifting hooks, rescue hoists, stretcher installations and similar equipment for damage and security.
		Check	– lifting hook release operation.

INTENTIONALLY LEFT BLANK

## Section 6 Scheduled Maintenance

### Scheduled Maintenance Worksheets

<b>Maintenance Organisation / Pilot-Owner / AME Name:</b>			Workpack Ref:
Approval Reference or AME No:			Page 1 of
Site where maintenance being accomplished:			Note: Enter total pages of workpack issued
A/C Reg: G-	Type:	Serial No:	Total flying hours:
	Engine type:	Serial No:	Hours since new/overhaul:
Check being carried out:	50 Flying Hours / 6 Months	100 Flying Hours	Annual
Check start date:	Check completion date:		
Note: Delete checks that are not being carried out.			

<b>Maintenance Manual References:</b>	<b>Issue/Revision No:</b>	<b>Date:</b>
Note: Maintenance manuals must be to the latest revision		
Airframe:		
Engine:		

## Final Checks (include with all checks except for the Pre-Flight Check and Check A)

Task No.	Task Description	Task Nature	Task Interval	Qualifying Inspector See Note 2	Certifying Person See Note 1
----------	------------------	-------------	---------------	------------------------------------	---------------------------------

### Ground Run:

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.	CHK	All checks		

### Certification:

4	Workpack and Log Book entries have been completed and certified. Ensure items due in accordance with CAP 543 or the alternative document or system acceptable to the CAA, have been accomplished and certified.	CHK	All checks	N/A	
---	---	-----	------------	-----	--

### Type Certificate and Schedule Review:

5	Helicopter complies with the type certificate data sheet.	CHK	Annual	N/A	
6	Mandatory placards are installed and legible.	CHK	Annual	N/A	

### Notes:

- Certifying Person** Refer to Section 3 Paragraph 3.
- Qualifying Inspectors** must be proven competent to ensure that all required maintenance tasks are carried out and where not completed or where it is evident that a particular maintenance task cannot be carried out to the maintenance data, then such problems will be reported to the certifying person for appropriate action.
- Qualifying Mechanics** must be proven competent to carry out maintenance tasks to any standard specified in the maintenance data and will notify supervisors of defects requiring rectification to re-establish required airworthiness standards.

**50 Hour Check: Task Nos. 1 – 42**

<b>Task No.</b>	<b>Task Description</b>	<b>Task Nature</b>	<b>Task Interval</b>	<b>Qualifying Mechanic</b> See Note 3	<b>Qualifying Inspector</b>
-----------------	-------------------------	--------------------	----------------------	--	-----------------------------

## Structural/Zonal:

7	External structure of cabin, centre section, tailboom, cowlings, nacelles and stabilisers.	INSP	50 FH/ 6 months		
8	Normal and emergency doors and windows, door hinges, door hinge attachment points, required placards and operating instructions.	INSP	50 FH/ 6 months		
9	Doors, hatches and windows latching and locking.	OP/C	50 FH/ 6 months		
10	Agricultural Installations: Hopper, hopper lid, tank, pump, fan, boom assemblies, pipe runs, blowers and spreaders.	INSP	50 FH/ 6 months		
11	Agricultural Installations: Emergency dump doors, fan brake, pump control.	OP/C	50 FH/ 6 months		
12	Marine Helicopters: Floats, spreaders, struts and bracing wires.	INSP	50 FH/ 6 months		

## Landing Gear:

13	Landing gear assemblies, shock-absorber struts/units for leaks and correct extension, brake system, brake linings, drums/discs, wheels and tyres.	INSP	50 FH/ 6 months		
14	Tyre pressures, hydraulic brake system fluid level.	SERVICE	50 FH/ 6 months		
15	Cross tubes for excessive deflection and skid shoes.	INSP	50 F/H 6 months		

## Flying Controls:

16	Primary/secondary flight controls and trim systems for full and free movement in the correct sense and friction devices for correct operation. Position indicators agree with surface movement.	OP/C	50 FH/ 6 months		
----	---	------	--------------------	--	--

<b>Task No.</b>	<b>Task Description</b>	<b>Task Nature</b>	<b>Task Interval</b>	<b>Qualifying Mechanic</b>	<b>Qualifying Inspector</b>
-----------------	-------------------------	--------------------	----------------------	----------------------------	-----------------------------

## Liquid, Air and Gas Systems:

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

## Equipment and Environmental:

20	Correct stowage of equipment and validity of date on emergency equipment.	CHK	50 FH/ 6 months		
21	Seats, belts/harnesses, attachments, locking and release.	INSP	50 FH/ 6 months		
22	Fire extinguisher for leakage or discharge.	CHK	50 FH/ 6 months		

## Transmission Installation:

23	Gearboxes, driveshafts, flexible couplings, belts, mast assembly, rotor brake, mountings, support bearings, clutch and freewheel.	INSP	50 FH/ 6 months		
24	Magnetic plugs, system hoses and vents.	INSP	50 FH/ 6 months		

## Rotors: :

25	Main rotor head and blades assembly.	INSP	50 FH/ 6 months		
26	Tail rotor hub and blades assembly.	INSP	50 FH/ 6 months		
27	Main and tail rotors freedom of movement in all planes.	CHK	50 FH/ 6 months		

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
Helicopter Lubrication:					
28	Lubricate helicopter in accordance with type design organisation recommendations.	LUB	50 FH/ 6 months		
Powerplant Installation					
29	Engine controls for full and free movement – throttle, mixture and carburettor heat.	OP/C	50 FH/ 6 months		
30	Powerplant installation.	INSP	50 FH/ 6 months		
31	Engine cooling fan installation.	INSP	50 FH/ 6 months		
Air Induction:					
32	Air filter, intake and induction system and turbocharger impeller.	INSP	50 FH/ 6 months		
Exhaust:					
33	Exhaust manifold and mufflers.	INSP	50 FH/ 6 months		
Engine Lubrication:					
34	Magnetic plugs.	CHK	50 FH/ 6 months		
35	Engine oil change. Oil filter. Screens. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	SERVICE	50 FH/ or see Note		
Fuel System:					
36	Filters for cleanliness and tank vents unobstructed. Drain samples from all drain points and check for presence of water, foreign matter and correct colour.	CHK	50 FH/ 6 months		

<b>Task No.</b>	<b>Task Description</b>	<b>Task Nature</b>	<b>Task Interval</b>	<b>Qualifying Mechanic</b>	<b>Qualifying Inspector</b>
Electrical System:					
37	Battery, stowage compartment, vents and drains. Electrolyte level.	INSP & SERVICE	50 FH/ 6 months		
38	Alternator/generator drive belt tension and condition.	INSP	50 FH/ 6 Months		
Radio:					
39	Placards and markings legible.	INSP	50 FH/ 6 Months		
40	VHF ground function.	OP/C	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.	INSP	50 FH/ 6 Months		

**100 Hour Check (include 50 hour check items): Task Nos. 1 – 75**

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

## Structural/Zonal:

43	Internal structure of cabin centre section, tail boom, engine bay and transmission platform. Floors, bulkheads, pylons, structural attachment joint assemblies and ballast weight attachments.	INSP	100 FH		
44	Internal structure of stabiliser and fin assemblies.	INSP	100 FH		
45	Internal corrosion protective treatments, drain holes and paths.	INSP	100 FH		
46	Static discharge wicks and attachment bases.	INSP	100 FH		

## Landing Gear:

47	Structural members, attachment fittings, pivot points, shock absorbing devices, main wheels, nose wheel, bearings, skids, hoses and lines. <b>Note:</b> Carry out with weight off the landing gear.	INSP	100 FH		
48	Parking brake.	OP/C	100 FH		

## Flying Controls:

49	Hinges, brackets, push-pull rods, bellcranks, damper weights, control horns, cables, pulleys, chains, tubes, guides, fairleads and servo-actuators. <b>Note:</b> 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	100 FH		
50	Turnbuckles, locking devices in safety.	CHK	100 FH		
51	Rotating control assemblies, stabiliser bars, dampers and swashplates.	INSP	100 FH		
52	Control locking systems.	OP/C	100 FH		

## Liquid, Air and Gas Systems:

53	Tanks, powerpacks, valves, pipelines, hoses, actuators, filters and venturis.	INSP	100 FH		
----	---	------	--------	--	--

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

Equipment and Environmental:

54	Cabin air system, heater and blower.	INSP & OP/C	100 FH		
55	Air conditioner and oil level.	OP/C & SERVICE	100 FH		

Transmission Installation:

56	Lubrication system, tank, sump, cooler and pipelines.	INSP	100 FH		
----	---	------	--------	--	--

Powerplant Installation:

57	Crankcase, accessory housings, cylinder assemblies, accessory drive belts, accessories, engine shock mounts, mount frames, bulkheads, firewalls and sealing, cooling baffles, cowlings, breathers and vents and items in engine bay for mutual interference.	INSP	100 FH		
58	Valve operating mechanism. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	CHK	100 FH or see Note		
59	Cylinder compression and leakage. Record results below.  Method:	CHK	100 FH		

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

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

## Air Induction:

60	Carburettor heat, alternative air bypass doors and control systems.	INSP & OP/C	100 FH		
61	Flame traps and drains.	INSP	100 FH		

## Ignition:

62	Magnetos, harnesses, leads, switches, starting vibrators, contact breakers, cooling system and ventilators.	INSP	100 FH		
63	Magneto internal timing and timing to engine.	CHK	100 FH		
64	Magneto cam. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	LUB	100 FH or see Note		
65	Spark plugs. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	CHK	100 FH or see Note		

## Exhaust:

66	Cabin heat exchanger.	INSP	100 FH		
67	Turbocharger, control system, pipelines and hoses.	INSP	100 FH		

## Engine Lubrication:

68	Tanks, sumps, coolers, hoses, pipelines and vents.	INSP	100 FH		
69	Engine controls in accordance with type design organisation recommendations.	LUB	100 FH		

## Fuel System:

70	Tanks, filler caps, selector valves, pumps, pipelines, hoses, carburettor, injector systems, throttle, mixture control, fuel selector control and filler point placards.	INSP	100 FH		
----	--	------	--------	--	--

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

## Electrical Systems:

71	Components, wiring, terminals and connectors.	INSP	100 FH		
72	Warning circuits.	OP/C	100 FH		
73	Correct type and rating of fuses and circuit breakers. Correct spare fuses carried.	CHK	100 FH		
74	Lamps and lighting. Correct spare lamps carried.	CHK	100 FH		
75	Brushes in starters, alternators and generators. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	CHK	100 FH or see Note		

**Annual Check/Non-Aligned Tasks (include 50 and 100 hour check items): Task Nos. 1 – 116**

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

Structural/Zonal:

76	Emergency exits by internal and external release methods.	OP/C	Annual		
77	Lightning strike bonding.	CHK	Annual		
78	Internal condition of struts, control tubes and similar hollow members. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	INSP	See Note		

Flying Controls:

79	Control cables for correct tension. Control neutrals and travels. Record results below.	CHK	Annual		
----	---	-----	--------	--	--

Cable Identification	Temperature	Tension		Control and position (neutral, min, max etc.)	Angle/ measurement	
		Required	Actual		Required	Actual

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

## Liquid, Air and Gas Systems:

80	Pitot/static system sense and leak.	F/C	Annual		
81	Hydrostatic test of pressure vessels. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	INSP & CHK	60 months or see Note		
82	Flexible fuel and oil hoses pressure test. <b>Note:</b> In accordance with type design organisation pressure testing recommendations but in either case only until the ultimate service life, if stated, is achieved. Next due:	CHK	72 months from new, then every 36 months or see Note		
83	Internal examination and pressure testing of fluid tanks and reservoirs. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	CHK	See Note		

## Transmission Lubrication:

84	Transmission oil change. Oil filter and screens. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	SERVICE	100 FH or see Note		
----	---	---------	--------------------	--	--

## Equipment and Environmental:

85	Fire extinguisher contents by pressure/weight.	CHK	Annual		
86	Combustion heater. <b>Note:</b> In accordance with GR 11. Next due:	CHK	iaw GR11		

Task No.	Task Description	Task Nature	Task Interval	Qualifying Mechanic	Qualifying Inspector
----------	------------------	-------------	---------------	---------------------	----------------------

## Exhaust:

87	Cabin heat exchanger pressure test. <b>Note:</b> In accordance with type design organisation recommendations. Next due:	CHK	Annual or see Note		
----	--	-----	--------------------	--	--

## Electrical Systems:

88	Over/under-volt system and warnings. Load sharing.	OP/C	Annual		
89	All ground operable electrical circuits. Exercise manually operated circuit breakers.	OP/C	Annual		
90	Nickel-cadmium battery capacity test. <b>Note:</b> In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer. Next due:	F/C	12 months or see Note		
91	Lead-acid battery capacity test. <b>Note:</b> In accordance with equipment manufacturer's recommendations where capacity checks are recommended by the equipment manufacturer. Next due:	F/C	12 months or see Note		

## Avionics Radio:

92	HF Communication.	OP/C	Annual		
93	ADF ground function using station(s) of known bearing to establish accuracy. Audio on all bands.	F/C	Annual		
94	ILS Localiser and Glide Slope using a Field Test Set, including flag warnings of single tone failure, centre-line accuracy, sense, course widths and audio.	F/C	Annual		
95	VOR using a Field Test Set, including flag warnings, omni-radial resolving, radio- magnetic indicator accuracy at 90° intervals and sense and course width.	F/C	Annual		
96	Marker using a Field Test Set, including 3-tone operational check and high/low sensitivity	F/C	Annual		

## Avionics Radio: Contd.

97	DME using a Field Test Set, including frequency tolerance, range accuracy and audio.	F/C	Annual		
98	ATC Transponder using a Field Test Set, including frequency tolerance, side lobe suppression, mode 'C' and 'S'. <b>Note:</b> The Mode 'S' checks should confirm that the aircraft assigned Mode 'S' code is correct and that any declared parameters are correct.	F/C	Annual		
99	Airborne Search and Weather Radar in all modes.	OP/C	Annual		
100	Area and satellite navigation (GPS).	OP/C	Annual		
101	Audio control panel, including emergency operation.	OP/C	Annual		
102	ELT, including battery. <b>Note:</b> In accordance with equipment manufacturer's recommendations. Next due:	CHK	See Note		
103	VHF Communication using a Field Test Set, including frequency tolerance of transmitted frequencies. <b>Note:</b> In accordance with equipment manufacturer's recommendations only where frequency tolerance checks are recommended by the equipment manufacturer. Next due:	F/C	36 Months		
104	HF Communication using a Field Test Set, including frequency tolerance of transmitted frequencies. <b>Note:</b> In accordance with equipment manufacturer's recommendations only where frequency tolerance checks are recommended by the equipment manufacturer. Next due:	F/C	36 Months		
105	Aerials and Feeders – VSWR (DME and ATC Transponder), insulation (HF). Next due:	F/C	36 Months		
106	Aerials, insulators, controllers, instruments, displays, microphones, headsets, jackplugs and sockets.	INSP	Annual		
107	Cables and terminals, cooling systems and moisture trap areas.	INSP	Annual		

## Instrument Systems:

108	Air Speed Indicator calibration (in situ is permissible). <b>Note:</b> Measured parameters must be recorded.	F/C	Annual		
109	Altimeter calibration (in situ is permissible). <b>Note:</b> Measured parameters must be recorded.	F/C	Annual		
110	Instruments and indicators for satisfactory condition, mounting, marking and operation. <b>Note:</b> This task is applicable to all instruments and indicators that could affect the airworthiness or operating safety of the aircraft.	F/C	Annual		
111	Compass 'deviation' or 'steer by' cards – valid until next check.	CHK	Annual		
112	Instruments, displays, controllers, panels, mounts, pipes, hoses, electrical wiring, gyro filters, flux detectors and instrument transmitters.	INSP	Annual		
113	Compass swing. Next due:	F/C	36 months		

## Avionics Auto-Pilot/Stabiliser:

114	Auto-Pilot/Stabiliser in all modes including manual override disengagement functions.	OP/C	Annual		
115	Displays, instruments, controllers.	INSP	Annual		
116	Auto-pilot computer, amplifier, power supply, servo motors, connections to flying control system, automatic trim system, yaw dampers and manometric system inter-connections.	INSP	Annual		

INTENTIONALLY LEFT BLANK