





Part 66 Basic Practical Experience Logbook User Guide

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This document contains guidance material intended to assist CASA officers, delegates and the aviation industry in understanding the operation of the aviation legislation. However, you should not rely on this document as a legal reference. Refer to the civil aviation legislation including the Civil Aviation Act 1988 (Cth), its related regulations and any other legislative instruments—to ascertain the requirements of, and the obligations imposed by or under, the law.

Preface

As a Commonwealth government authority, CASA must ensure that the decisions we make, and the processes by which we make them, are effective, efficient, fair, timely, transparent, properly documented and otherwise comply with the requirements of the law. At the same time, we are committed to ensuring that all of our actions are consistent with the principles reflected in our Regulatory Philosophy.

Most of the regulatory decisions CASA makes are such that conformity with authoritative policy and established procedures will lead to the achievement of these outcomes. Frequently, however, CASA decision-makers will encounter situations in which the strict application of policy may not be appropriate. In such cases, striking a proper balance between the need for consistency and a corresponding need for flexibility, the responsible exercise of discretion is required.

In conjunction with a clear understanding of the considerations mentioned above, and a thorough knowledge of the relevant provisions of the civil aviation legislation, adherence to the procedures described in this manual will help to guide and inform the decisions you make, with a view to better ensuring the achievement of optimal outcomes in the interest of safety and fairness alike.

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Glossary

Acronyms and abbreviations

Acronym / abbreviation	Description
AMO	Approved Maintenance Organisation
ARN	Aviation Reference Number
АТА	Air Transport Association
BITE	Built In Test Equipment
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
LAME	Licensed Aircraft Maintenance Engineer
LRU	Line Replaceable Unit
MOS	Manual of Standards
МТО	Maintenance Training Organisation
OJT	On-the-job Training

Reference material

Document type	Title
Civil Aviation Safety Regulations	Civil Aviation Safety Regulations 1998 (CASR)
Part 66 of CASR	Continuing airworthiness—aircraft engineer licences and ratings
Part 145 of CASR	Continuing airworthiness—Part 145 approved maintenance organisations
Part 147 of CASR	Continuing airworthiness—Part 147 maintenance training organisations
Part 66 MOS	Part 66 Manual of Standards

Revision history

Revisions to this manual are recorded below in order of most recent first.

Version no.	Date	Parts / sections	Details
1.0	August 2021	All	Initial Issue
1.1	March 2023	All	Minor editorial changes

Section A - Information and Instructions

1 Introduction

This Part 66 Basic Practical Experience Logbook has been developed by the Civil Aviation Safety Authority (CASA) of Australia as the means of recording basic practical experience, to support an application to CASA for the initial issue of, or addition of, a category or subcategory to a Part 66 aircraft engineer licence.

The logbook should be used by applicants who have utilised the Part 66 self-study training pathway. The format and layout of the logbook is designed to enable a progressive recording of personal data and ongoing work experience by the logbook holder, allowing for an accurate assessment by CASA.

There are two sections to the logbook document:

- Section A "The logbook User's Guide" provides the information and instructions about how to compile practical maintenance experience in the logbook.
- Section B contains "The logbook".

When compiling the basic practical experience in the logbook, the information and instructions in Section A (Logbook User's Guide) shall be observed.

Section B – The Logbook, is divided into three parts:

- Part 1 Personal Information
- Part 2 Basic Skills Practical Experience
- Part 3 Practical Maintenance Experience.

All parts of the logbook must be completed to demonstrate attainment of the basic practical experience requirements for the category or subcategory of licence being applied for, in accordance with section 66.A.30 of the Part 66 Manual of Standards (MOS).

Basic practical experience must have been gained by the applicant during the 10-year period before the date of application for the licence, or the addition of a category, or subcategory, to the licence. For requirements of recent experience gained on aircraft, refer to section 66.A.30 of the Part 66 MOS.

This logbook is downloadable from <u>CASA's website</u>.

Applicants are advised to only submit the completed "Section B – The logbook" to CASA with their licence application.

2 Part 1 - Personal Information

Part 1 of the logbook is used to record the personal information of the logbook holder, including history of their employment.

2.1 Personal Data

This section contains provision for recording the logbook holder's name, aviation reference number (ARN), present address, phone number and the licence category or sub-category being applied for.

2.2 Employment Record

This section contains provision for recording the logbook holder's employment history. Employment record entries should be confirmed by a senior member of the employer's organisation holding the appropriate authority.

3 Part 2 - Basic Skills Practical Experience

Part 2 of the logbook is to be used by an applicant to record their achievement of basic skills – task competencies to support an application for the issue of a Part 66 aircraft engineer licence in the appropriate category or subcategory.

The list of basic skill tasks consists of those general maintenance practices and practical skills considered essential for an applicant to have achieved. The required basic skills practical training and assessment may be carried out on an in-service aircraft, workshops, training equipment or on simulators.

At least 80% of the basic skills tasks (listed in the table under Part 2 of the logbook) in each relevant Part 66 knowledge module reference must be performed.

3.1 Basic skills requirement for initial issue of a licence or for the addition of a category or sub-category to an existing licence

All applicants are to use the following guidelines for the achievement of required basic skills practical experience, when applying for an initial issue of a licence, or for the addition of a category or sub-category to an existing licence.

An applicant:

- who applies for an initial B1 sub-category licence, is required to complete the basic skills tasks listed in the table as category B1 tasks and those other tasks listed that are relevant to the sub-category of licence being applied for
- holding a B1 sub-category licence who applies for the addition of a B1 sub-category to their licence, is required to complete the tasks listed in the table that are relevant to the sub-category of licence being applied for
- holding a B1 sub-category licence who applies for the addition of category B2 to their licence, is required to complete the basic skills tasks listed in the table as category B2 tasks (except those tasks which are common to both the category B1 and category B2 licence)
- who applies for an initial category B2 licence, is required to complete the basic skills tasks listed in the table as category B2 tasks
- holding a category B2 licence who applies for the addition of a B1 sub-category to their licence, is required to complete the basic skills tasks listed in the table that are relevant to the B1 sub-category of licence being applied for (except those tasks which are common to both the category B2 and category B1 licence).

3.2 Requirement for the privileges of exclusion E9, E10 and E12

For applicants seeking a licence in sub-category B1.1 or B1.2, who are unable to achieve the required basic skills task competencies relating to fabric surfaces, wooden structures and propellers; the licence will be issued with the following exclusions:

- E9 excluding fabric surfaces (sub-category B1.1 or B1.2)
- E10— excluding wooden structures (sub-category B1.2)
- E12 excluding propellers (sub-category B1.1).

Note: (Ref; Part 2 – Basic Skill Tasks of the logbook for listing of required task competencies for fabric surfaces, wooden structures and propellers).

3.3 Compilation of Basic Skills Practical Experience

The basic skills practical experience part of the logbook is set out in the following general format. When compiling the basic skills practical experience, the following information and instructions for each column shall be observed:

Index No.	Part 66 Knowledge Module Reference	Task / Competence	Licence Category A B1 B2	A/C Registration or Workshop and WO/TC	Assessor/Supervisor Signature, Name and Licence number	Date (dd/mm/yyyy)					
Index I	No.	Provides a number for each task/competence for	easy refer	ence.							
	6 Knowledge e Reference	•	Provides a reference to the knowledge module found in the Part 66 Manual of Standards (MOS), Appendix 1, Part 3 - Details of modules and levels of knowledge, that relates to the listed task.								
Task / Competence		required to satisfy the Part 66 MOS, section 66.A	Provides a description of the task/competence to be achieved. The basic skills tasks identified in this section are required to satisfy the Part 66 MOS, section 66.A.30 - Basic practical experience requirements and relate directly to the corresponding basic knowledge modules in Part 66 MOS, Appendix 1, Part 3.								
Licenc (A B1	e Category B2)		The references in this column indicate for which licence category or sub-category the task/competence described is required. Circle the relevant category or subcategory of each task accomplished.								
A/C Registration or Workshop and WO/TC			The entries made in this column state where the task has been performed (on the aircraft or in a workshop) with a work order (WO) or task card (TC) reference to allow traceability.								
Assessor/Supervisor Signature, Name and Licence number		signature, licence number. This is to certify that t	Each entry must be signed by an authorised Assessor or Supervisor or a CASA authorised person with their name, signature, licence number. This is to certify that the logbook owner has achieved the required competence on the task and the task has been performed correctly under his/her supervision at the time that the required skill is gained.								
Date (dd/mm/yyyy)		Indicates the date of completion of the supervise	Indicates the date of completion of the supervised task.								

3.4 The logbook holder

3.4.1 Responsibility

The logbook holder is responsible for documenting correctly, evidence of completion of his/her basic skills practical experience competencies on completion of each task. The logbook holder is to ensure that:

- At least 80% of the basic skills tasks (listed in the table under Part 2 of the logbook) in each relevant Part 66 knowledge module reference has been performed.
- Each task has been supervised and signed by either an assessor, supervisor, or an authorised person at the time the basic skills task is performed.

Note: It is important to note that the logbook holder may not certify their own entries in the logbook.

- Each page of the logbook requires the name, signature and ARN of the logbook holder (this is for traceability and identification purposes).
- Not performed tasks should be left open.

3.5 The Assessor/Supervisor

An Assessor or Supervisor may be any one of the following:

- 1. An appropriately qualified CASR Part 147 maintenance training organisation (MTO) employee authorised by the organisation under the terms of its approval to carry out the assessment of basic skills practical experience.
- 2. An appropriately qualified CASR Part 66 aircraft engineer licence holder employed by a CASR Part 145 approved maintenance organisation (AMO) and authorised by a CASR Part 147 MTO to carry out the assessment of basic skills practical experience on behalf of the MTO.
- 3. An appropriately qualified CASR Part 66 aircraft engineer licence holder, holding the category privilege, who may be working as an independent LAME, or who is employed by a CASR Part 145 AMO or other CASA approved maintenance organisation.

3.5.1 Responsibility

When signing for the completion of specific basic skills tasks, the Assessor, Supervisor, or other appropriate individual authorised by CASA, shall ensure that the logbook holder has successfully completed the task and is able to:

- identify the appropriate standards; and
- select and use the correct tools required to accomplish the task/process.

4 Part 3 – Practical Maintenance Experience

Part 3 of the logbook is to be used by an applicant to record their achievement of practical maintenance experience on operating aircraft to support an application for the initial issue of a licence, or the addition of a category or sub-category to an existing licence.

Before submitting an application, the applicant must have acquired the required duration, variety and complexity of practical maintenance experience relevant to the category or subcategory as specified under section 66.A.30 of the Part 66 MOS.

4.1 Duration of Experience and Summary of Tasks

There are two tables provided in this part of the logbook. The information provided in table 1 and table 2 will allow for an overview of an applicant's duration of practical maintenance experience and summary of tasks supported by the actual maintenance tasks recorded in Part 3 of the logbook.

4.2 Relevant ATA Chapters and Typical Maintenance Tasks

Appendix A and Appendix B in the logbook User Guide, provides guidance to an applicant on relevant ATA chapters and suggested maintenance tasks which may be undertaken to demonstrate the required practical maintenance experience in the category or sub-category of licence being applied for.

4.3 Variety and Complexity of Practical Maintenance Experience

The logbook entries within the various related ATA chapters must show a sufficient undertaking of variety and complexity of tasks that would broadly cover all maintenance tasks as documented within maintenance manuals, which could be achieved within a maintenance environment.

Depending on the category or sub-category of the licence application, the following "type of task" activities are considered relevant for practical maintenance experience:

- INSP Inspection
- **REP** Repair
- **R/I** Removal / Installation
- TS Troubleshooting & rectification
- FOT Functional / Operational Test
- SGH Service and Ground Handling
- **MOD** Modification.

Logbook entries must be to the extent that it would be reasonable to consider that the applicant possesses a broad understanding of the relevant ATA chapters maintenance task areas and has gained practical maintenance experience on the relevant category or sub-category of licence, which they are seeking to be granted.

4.4 Compilation of Maintenance Practical Experience

The practical maintenance experience part of this logbook is set out in the following general format. When compiling the practical maintenance experience, the following information and instructions for each column shall be observed:

	1	1	ATA Chapter XX – Title of ATA Chapter			Verificat	tion				
Index No	A/C Type & Registration	Maintenance Task Referenc No. & Date		Task Type	Category	Supervisor name, signature, Licence number	Date (dd/mm/yyyy)				
ATA Chapter			nter the ATA chapter and its title which best describe age.	s most of the	maintenance	e activity carried out o	on top of the				
Inde	x No.	1	lumber each of the maintenance tasks recorded in Pa	rt 3 of the log	gbook for eas	y reference.					
A/C	Type & Registra	ation E	nter the type of aircraft and its registration beside ea	ch maintenar	nce task recor	d.					
	tenance Task rence No. & Da	te a	nter the maintenance task reference number from th ctivity was recorded (i.e Work order, Task card or N arried out.								
Desc out	cription of work	c arried	nter a detailed description of the maintenance task a	ccomplished.							
Task	Task Type		Identify the task type using one or more of the listed terms below. Note: Record the 'task type' information against each listed ATA Chapter in the relevant column of Table 2 - Maintenance Practical Experience – Summary of tasks. Table 2 - Summary of Tasks must accurately reflect the maintenance tasks you have recorded in the logbook pages.								
		I	INSP – Inspection								
		F	REP – Repair								
		F	R/I - Removal / Installation								
		1	TS - Troubleshooting & rectification.								
		F	FOT - Functional / Operational Test.								
		5	SGH - Service and Ground Handling.								
		Γ	MOD – Modification								
Cate	gory	I	Identify the licence category or sub-category being applied for.								
Supervisor name, signature, Licence number		e t	Each task entry must be signed by the Part 66 aircraft engineer licence holder or CASA authorised person, with their name, signature and licence number (if applicable), to verify that the logbook holder has performed the required task correctly under his/her supervision.								
Date	e (dd/mm/yyyy)	E	Enter the date when the maintenance activity was performed.								
Page			nsert a new page number in the footer to show contir	nuity in exper	ience and for	the tracking purpose	!S.				

4.5 Practical Maintenance Experience Logbook page(s):

- Print off and add the Practical Maintenance Experience Logbook pages as required.
- Insert ATA number, ATA title of the ATA chapter
- Use a single page per ATA chapter (or additional pages when needed) to document the practical maintenance experience
- Put your name, signature and ARN on each page
- Insert a new page number in the footer of each page to show continuity in experience and for tracking purposes.

The logbook should be kept as whole. No missing or separate pages will be accepted by CASA.

4.6 The Logbook Holder

4.6.1 Responsibility

When compiling practical maintenance experience in the logbook, the applicant must consider the following:

- All entries in this part of the logbook shall be made in black ink.
- Avoid making multiple recordings of the same task as this will not satisfy the total experience requirements.
- The recorded entries in each related ATA chapter must be of sufficient variety and complexity.
- Each task must be performed by the applicant under supervision of a supervisor directly responsible for the task being carried out.

The applicant must continue recording experience in all related ATA chapters until they are ready to make the application for a licence.

4.7 The Supervisor

The person verifying entries in the logbook must be an appropriately qualified CASR Part 66 Aircraft Engineer Licence holder, who has supervised the logbook holder's undertaking of the maintenance task and who also holds the privileges of the licence in the category/sub-category.

4.7.1 Responsibility

Each entry in the practical maintenance experience logbook must be signed by a supervisor directly responsible for the task being carried out.

Each task must be signed on the date when the maintenance activity was carried out.

When verifying the completion of specific tasks, the supervisor's signature is confirmation that the logbook holder has successfully completed the task and is able to:

- subsequently perform the task correctly and in accordance with the approved data; and
- has completed the necessary maintenance documentation for the task correctly.
- **Note:** Applicants, and those verifying the logbook entries, are to note that all entries made in the logbook must be able to be verified by supporting documentation if requested by CASA.

Appendix A. Relevant ATA Chapters

	ТОРІС		CATEGO	RY/SUB-C	ATEGORY	
ΑΤΑ		A1/B1.1	A2/B1.2	A3/B1.3	A4/B1.4	B2
5	Time Limits / Maintenance Checks	x	x	х	х	х
6	Dimensions / Areas, Zonal & Station Identification Systems	х	х	х	х	х
7	Lifting and Shoring	x	х	х	х	-
8	Levelling / Weighing	x	x	х	х	х
9	Towing	х	x	х	х	-
12	Servicing	x	x	х	х	-
21	Air Conditioning & Pressurisation * For B2 Pressurisation only.	x	x	х	х	Х*
22/23/34	Avionics Systems (for category A and B1): LRU replacement of Auto flight, Communication, Radio and Navigation systems where functional checks can be conducted as a simple test.	x	x	x	х	-
22	Auto Flight	-	-	-	-	х
23	Communications	-	-	-	-	х
24	Electrical Power System	x	x	х	х	х
25	Equipment & Furnishing: * For B2 - ELT and underwater locating beacon.	x	x	х	х	*B2
26	Fire Protection Systems	x	x	х	х	х
27	Flight Controls * For B2 - fly by wire.	x	x	х	х	Х*

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	ΤΟΡΙΟ		CATEGORY/SUB-CATEGORY						
ΑΤΑ		A1/B1.1	A2/B1.2	A3/B1.3	A4/B1.4	B2			
28	Fuel Systems	х	x	х	х	х			
29	Hydraulic Power	х	x	х	х	х			
30	Ice & Rain Protection	х	x	х	х	х			
30	Propeller Ice Protection	х	x	-	-	-			
31	Indicating/ Recording Systems (for category A and B1) LRU Replacement where functional checks can be conducted as a simple test	x	x	x	х	-			
31	Indicating/ Recording Systems	-	-	-	-	х			
32	Landing Gear	х	x	x	х	х			
33	Lights	х	x	х	х	х			
34	Navigation	-	-	-	-	х			
35	Oxygen	х	x	x	х	-			
36/37	Pneumatics / Vacuum	х	x	х	х	х			
38	Water / Waste	х	х	-	-	х			
42	Integrated Modular Avionics	-	-	-	-	х			
44	Cabin Systems	х	x	-	-	х			
45	On Board Maintenance System	х	x	-	-	х			
49	Auxiliary Power units (APUs)	х	x	-	-	х			
51	Airframe Structure	х	x	х	х	-			
52/53/56	Doors/ Fuselage/Windows	x	x	-	-	-			

	70010	CATEGORY/SUB-CATEGORY					
ATA	ТОРІС		A2/B1.2	A3/B1.3	A4/B1.4	B2	
54	Nacelles / Pylons	x	x	-	-	-	
55/57	Stabilizers/Wings	x	x	-	-	-	
61	Propellers (not required for B1.1 for ono-propeller engines)	x	x	-	-	-	
62/63/64/65 /67	Blade tracking and vibration analysis, Transmissions, Airframe structure, Main Rotor, Tail rotor / rotor drive, Rotor flight control	-	-	x	x	-	
70	Standard Practices Engine - Piston Engines	-	x	-	x	-	
71	Powerplant General - Piston Engines	-	x	-	x	-	
73	Engine Fuel and Control - Piston Engines	-	x	-	х	-	
74	Ignition - Piston Engines	-	x	-	x	х	
77	Engine Indicating - Piston Engines	-	x	-	х	х	
80	Starting - Piston Engines	-	x	-	х	х	
81	Supercharging / Turbocharging - Piston Engines	-	х	-	х	_	
70	Standard Practices Engine - Turbine Engines	x	-	х	-	-	
71	Powerplant General - Turbine Engines	x	-	х	-	-	
72	Engine - Turbine Engines	x	-	х	-	-	
72	Engine - Turbo-prop Engines	х	-	-	-	-	
72	Engines - Turbo-shaft Engines	-	-	х	-	-	
73	Engine Fuel and control - Turbine Engines	x	-	х	-	х	
74	Ignition - Turbine Engines	x	-	х	-	х	

		CATEGORY/SUB-CATEGORY						
ATA	ΤΟΡΙΟ	A1/B1.1	A2/B1.2	A3/B1.3	A4/B1.4	B2		
75	Air - Turbine Engines	x	-	х	-	Х		
76	Engine Controls – Turbine Engines	x	-	х	-	х		
77	Engine Indicating - Turbine Engines	х	-	Х	-	Х		
78	Exhaust - Turbine Engines	x	-	х	-	Х		
79	Oil - Turbine Engines	x	-	х	-	х		
80	Starting - Turbine Engines	х	-	х	-	х		
82	Water Injection - Turbine Engines (if fitted)	x	-	х	-	-		
83	Accessory Gearboxes - Turbine Engines	x	-	х	-	-		
-	Defect Diagnosis and Rectification	х	х	х	х	х		
-	Mandatory Inspection and Modification	х	х	х	х	х		

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Appendix B. Typical Maintenance Tasks

5 Time limits/Maintenance checks

- 100-hour check (general aviation aircraft)
- "B" or "C" check (transport category aircraft)
- Assist in carrying out a scheduled maintenance check i.a.w. AMM
- Review Aircraft Maintenance Log for correct completion
- Review records for compliance with airworthiness directives
- Review records for compliance with component life limits
- Procedure for Inspection following heavy landing
- Procedure for Inspection following lightning strike.

6 Dimensions/Areas

- Locate component(s) by zone/station number
- Perform symmetry check.

7 Lifting and Shoring

Assist in:

- Jack aircraft nose or tail wheel
- Jack complete aircraft
- Sling or trestle major component.

8 Levelling/Weighing

- Level aircraft
- Weigh aircraft
- Prepare weight and balance amendment
- Check aircraft against equipment list.

9 Towing and Taxiing

- Prepare aircraft for towing
- Tow aircraft
- Be part of aircraft towing team.

10 Parking and Mooring

- Tie down aircraft
- Park, secure and cover aircraft
- Position aircraft in maintenance dock
- Secure rotor blades.

11 Placards and Markings

- Check aircraft for correct placards
- Check aircraft for correct markings.

12 Servicing

- Refuel aircraft
- Defuel aircraft
- Carry out tank to tank fuel transfer
- Check/adjust tyre pressures
- Check/replenish oil level
- Check/replenish hydraulic fluid level
- Check/replenish accumulator pressure
- Charge pneumatic system
- Grease aircraft
- Connect ground power
- Service toilet/water system
- Perform pre-flight/daily check.

18 Vibration and Noise Analysis (helicopters only)

- Analyse helicopter vibration problem
- Analyse noise spectrum
- Analyse engine vibration.

21 Air Conditioning

- Replace combustion heater
- Replace flow control valve
- Replace outflow valve
- Replace safety valve
- Replace vapour cycle unit
- Replace air cycle unit
- Replace cabin blower
- Replace heat exchanger
- Replace pressurisation controller
- Clean outflow valves
- Check operation of air conditioning/heating system
- Check operation of pressurisation system
- Troubleshoot faulty system.

22 Autoflight

- Install servos
- Replace controller
- Replace amplifier
- Replacement of auto flight system LRUs in the case of fly-by-wire aircraft
- Check operation of autopilot
- Check operation of auto-throttle/auto-thrust
- Check operation of yaw damper
- Perform autopilot gain adjustments
- Perform mach trim functional check
- Check autoland system

- Check flight management systems
- Check stability augmentation system
- Troubleshoot faulty system.

23 Communications

- Replace VHF comm unit
- Replace HF comm unit
- Replace existing antenna
- Replace static discharge wicks
- Check operation of radios
- Perform antenna VSWR check
- Perform Selcal operational check
- Perform operational check of passenger address system
- Functionally check audio integrating system
- Repair co-axial cable
- Troubleshoot faulty system.

24 Electrical Power

- Charge lead acid battery
- Charge Ni-cad battery
- Check battery capacity
- Deep-cycle Ni-cad battery
- Replace integrated drive/generator/alternator
- Replace switches
- Replace Relays
- Replace circuit breakers
- Adjust voltage regulator
- Change voltage regulator
- Amend electrical load analysis report
- Repair/replace electrical feeder cable
- Perform functional check of integrated drive/generator/alternator
- Perform functional check of emergency generator/alternator
- Perform functional check of voltage regulator
- Troubleshoot faulty system.

25 Equipment/Furnishings

- Replace carpets
- Replace crew seats
- Replace passenger seats
- Check inertia reels
- Check seats/belts for security
- Check emergency equipment
- Check ELT for compliance with regulations
- Repair toilet waste container
- Repair upholstery
- Change cabin configuration

- Replace cargo loading system actuator
- Test cargo loading system
- Replace escape slides/ropes.

26 Fire Protection

- Check fire bottle contents
- Check/test operation of fire/smoke detection and warning system
- Check cabin fire extinguisher contents
- Check lavatory smoke detector system
- Check cargo panel sealing
- Install new fire bottle
- Replace fire bottle squib
- Inspect engine fire wire detection systems
- Troubleshoot faulty system.

27 Flight Controls

- Inspect primary flight controls and related components i.a.w. AMM
- Inspect extending/retracting flaps and slats
- Replace horizontal stabiliser
- Replace spoiler/lift dumper
- Replace elevator
- Deactivation/reactivation of aileron servo control
- Replace aileron
- Replace rudder
- Replace trim tabs
- Install control cable and fittings
- Replace slats
- Replace flaps
- Replace powered flying control unit
- Replace flap actuator
- Rig primary flight controls
- Adjust trim tab
- Adjust control cable tension
- Check control range and sense direction of movement
- Check for correct assembly and locking
- Functional test of primary flight controls
- Functional test of flap system
- Operational test of the side stick assembly
- Operational test of the THS
- THS system wear check
- Troubleshoot faulty system.

28 Fuel

- Water drain system (operation)
- Replace booster pump
- Replace fuel selector

Part 66 Basic Practical Experience Logbook User's Guide

- Replace fuel tank cells
- Replace/test fuel control valves
- Replace magnetic fuel level indicators
- Replace water drain valve
- Check/calculate fuel contents manually
- Check filters

- Flow check system
- Fuel quantity indication and calibration
- Check operation feed/selectors
- Check operation of fuel dump/jettison system
- Fuel transfer between tanks
- Pressure de-fuel
- Pressure refuel (auto and manual control)
- Deactivation/reactivation of the fuel valves (transfer defuel, X-feed, refuel)
- Troubleshoot faulty system.

29 Hydraulics

- Replace engine driven pump
- Check/replace case drain filter
- Replace standby pump
- Replace hydraulic motor pump/generator
- Replace accumulator
- Check operation of shut off valve
- Check filters/clog indicators
- Check indicating systems
- Perform functional checks
- Pressurisation/depressurisation of the hydraulic system
- PTU operation
- Troubleshoot faulty system.

30 Ice and Rain Protection

- Replace pump
- Replace timer
- Inspect/repair propeller de-ice boot
- Test propeller de-icing system
- Inspect/test wing leading edge de-icer boot
- Replace anti-ice/de-ice valve
- Install wiper motor
- Check operation of systems
- Operational test of the pitot-probe ice protection
- Operational test of the TAT ice protection
- Operational test of the wing ice protection system
- Operational test of the engine air-intake ice protection (with engines in operation)
- Troubleshoot faulty system.

31 Indicating/recording system

- Replace flight data recorder (FDR)
- Replace cockpit voice recorder
- Replace clock
- Pitot/static components replacement
- Pitot/static components leak test
- Replace Direct Reading compass
- Direct Reading Compass calibrations
- Replace master caution unit
- Perform flight data recorder data retrieval
- Implement ESD procedures
- Inspect for HIRF requirements
- Start/stop EIS procedure
- Bite test of the CFDIU
- Ground scanning of the central warning system
- Troubleshoot faulty system.

32 Landing Gear

- Build up wheel
- Replace main wheel
- Replace nose wheel
- Replace steering actuator
- Relace truck tilt actuator
- Relace gear retraction actuator
- Replace uplock/downlock assembly
- Replace shimmy damper
- Rig nose wheel steering
- Functional test of the nose wheel steering system
- Replace shock strut seals
- Servicing of shock strut
- Replace brake unit
- Replace brake control valve
- Bleed brakes
- Replace brake fan
- Test anti-skid unit
- Test gear retraction
- Change bungees
- Adjust micro switches/sensors
- Charge struts with oil and air
- Test autobrake system
- Replace rotorcraft skids.
- Replace rotorcraft skid shoes
- Pack and check floats
- Check/test emergency blowdown
- Landing gear retraction test Normal

- Landing gear emergency extension test
- Operational test of the landing gear doors
- Troubleshoot faulty system.

33 Lights

- Repair/replace rotating beacon
- Repair/replace landing lights
- Repair/replace navigation lights
- Repair/replace interior lights
- Replace ice inspection lights
- Repair/replace logo lights
- Repair/replace emergency lighting system
- Perform emergency lighting system checks
- Troubleshoot faulty system.

34 Navigation

- Calibrate magnetic direction indicator
- Replace airspeed indicator
- Replace altimeter
- Replace air data computer
- Replace VOR unit
- Replace ADI
- Replace HSI
- Check pitot static system for leaks
- Check operation of directional gyro
- Functional check weather radar
- Functional check doppler
- Functional check TCAS
- Functional check DME
- Functional check ATC Transponder
- Functional check flight director system
- Functional check inertial nav system
- Complete quadrantal error correction of ADF system
- Update flight management system database
- Check calibration of pitot static instruments
- Check calibration of pressure altitude reporting system
- Check marker systems
- Compass replacement direct/indirect
- Check Satcom
- Check GPS
- Test AVM
- Troubleshoot faulty system.

35 Oxygen

- Inspect on board oxygen equipment
- Purge and recharge oxygen system

Replace regulator

- Replace oxygen generator
- Test crew oxygen system
- Perform auto oxygen system deployment check
- Troubleshoot faulty system.

36 Pneumatic Systems

- Replace filter
- Replace air shut off valve
- Replace pressure regulating valve
- Replace compressor
- Recharge desiccator
- Adjust regulator
- Check for leaks
- Troubleshoot faulty system.

37 Vacuum Systems

- Inspect the vacuum system i.a.w. AMM
- Replace vacuum pump
- Check/replace filters
- Adjust regulator
- Troubleshoot faulty system.

38 Water/Waste

- Replace water pump
- Replace tap
- Replace toilet pump
- Inspect waste bin flap closure
- Troubleshoot faulty system.

42 Integrated Modular system

- Core system
- Network components
- Perform BITE check
- Troubleshoot faulty system.

44 Cabin System

- Inflight Entertainment System
- Cabin Monitoring System
- Perform BITE check
- Troubleshoot faulty system.

45 Central Maintenance System

- Retrieve data from CMU
- Replace CMU
- Perform BITE check

• Troubleshoot faulty system.

46 Information System

- Airplane Information System
- Flight Deck Information System
- Maintenance Information System
- Perform BITE check
- Troubleshoot faulty system.

47 Inert Gas system

- Generation/Distribution
- Control and Indication
- Perform Operational/BITE check
- Troubleshoot faulty system.

49 Airborne Auxiliary power (APU)

- Install APU
- Inspect hot section
- Troubleshoot faulty system.

50 Cargo and Accessory Compartments

- Cargo Compartments
- Cargo Loading
- Accessory Compartments
- Perform Operational/BITE check
- Troubleshoot faulty system.

51 Structures

- Sheet metal repair
- Fibre glass repair
- Wooden repair
- Fabric repair
- Recover fabric control surface
- Treat corrosion
- Apply protective treatment.

52 Doors

- Inspect passenger door i.a.w. AMM
- Rig/adjust locking mechanism
- Adjust air stair system
- Check operation of emergency exits
- Test door warning system
- Remove and install passenger door i.a.w. AMM
- Remove and install emergency exit i.a.w. AMM
- Inspect cargo door i.a.w. AMM
- Troubleshoot faulty system.

56 Windows

- Replace windshield
- Replace direct vision window
- Replace cabin window
- Repair transparency

57 Wings

- Skin repair
- Recover fabric wing
- Replace tip
- Replace rib
- Replace integral fuel tank panel
- Check incidence/rig.

60 Standard Practices – Propeller/Rotor

• Standard Practices.

61 Propeller

- Assemble prop after transportation
- Replace propeller
- Replace governor
- Adjust governor
- Perform static functional checks
- Check operation during ground run
- Check track
- Check setting of micro switches
- Assess and dress out blade damage i.a.w. AMM
- Dynamically balance prop
- Troubleshoot faulty system.

62 Rotors

- Install rotor assembly
- Replace blades
- Replace damper assembly
- Check track
- Check static balance
- Check dynamic balance
- Troubleshoot.

63 Rotor Drive

- Replace mast
- Replace drive coupling
- Replace clutch/freewheel unit
- Replace drive belt
- Install main gearbox

- Overhaul main gearbox
- Check gearbox chip detectors.

64 Tail Rotors

- Install rotor assembly
- Replace blades
- Troubleshoot.

65 Tail Rotor Drive

- Replace bevel gearbox
- Replace universal joints
- Overhaul bevel gearbox
- Install drive assembly
- Check chip detectors
- Check/install bearings and hangers
- Check/service/assemble flexible couplings
- Check alignment of drive shafts
- Install and rig drive shafts.

67 Rotorcraft Flight Controls

- Install swash plate
- Install mixing box
- Adjust pitch links
- Rig collective system
- Rig cyclic system
- Rig anti-torque system
- Check controls for assembly and locking
- Check controls for operation and sense
- Troubleshoot faulty system.

71 Power Plant

- Build up ECU
- Replace engine
- Repair cooling baffles
- Repair cowling
- Adjust cowl flaps
- Repair faulty wiring
- Assist in dry monitoring check
- Assist in wet monitoring check
- Assist in engine start (manual mode)
- Troubleshoot.

72 Piston Engines

- Remove/install reduction gear
- Check crankshaft run-out
- Check tappet clearance

- Check compression
- Extract broken stud
- Install Heli coil

- Perform ground run
- Establish/check reference RPM
- Troubleshoot.

72 Turbine Engines

- Replace module.
- Replace fan blade.
- Hot section inspection/borescope check.
- Carry out engine/compressor wash.
- Carry out engine dry cycle.
- Engine ground run.
- Establish reference power.
- Trend monitoring/gas path analysis.
- Troubleshoot.

73 Fuel and Control – Piston

- Replace engine driven pump
- Adjust AMC
- Adjust ABC
- Install carburettor/injector
- Adjust carburettor/injector
- Clean injector nozzles
- Replace primer line
- Check carburettor float setting
- Troubleshoot faulty system.

73 Fuel and Control – Turbine

- Replace FCU
- Replace Engine Electronic Control Unit (FADEC)
- Replace Fuel Metering Unit (FADEC)
- Replace engine driven pump
- Clean/test fuel nozzles
- Clean/replace filters
- Adjust FCU
- Functional test of FADEC
- Troubleshoot faulty system.

74 Ignition Systems – Piston

- Change magneto
- Change ignition vibrator
- Change plugs
- Test plugs
- Check H.T. leads

- Install new leads
- Check timing

- Check system bonding
- Troubleshoot faulty system.

74 Ignition Systems – Turbine

- Perform functional test of the ignition system
- Check glow plugs/ignitors
- Check H.T. leads
- Check ignition unit
- Replace ignition unit
- Troubleshoot faulty system.

76 Engine Controls

- Rig thrust lever
- Rig RPM control
- Rig mixture HP cock lever
- Rig power lever
- Check control sync (multi-eng)
- Check controls for correct assembly and locking
- Check controls for range and sense of operation direction of movement
- Adjust pedestal micro-switches
- Troubleshoot faulty system.

77 Engine Indicating

- Replace engine instrument(s)
- Replace oil temperature bulb
- Replace thermocouples
- Check calibration
- Troubleshoot faulty system.

78 Exhaust – Piston

- Replace exhaust gasket
- Inspect welded repair
- Pressure check cabin heater muff
- Troubleshoot faulty system.

78 Exhaust – Turbine

- Change jet pipe
- Change shroud assembly
- Install trimmers
- Inspect/replace thrust reverser
- Replace thrust reverser component
- Deactivate/reactivate thrust reverser
- Operational test of the thrust reverser system.

79 Oil

- Change oil
- Check filter(s)
- Adjust pressure relief valve
- Replace oil tank
- Replace oil pump
- Replace oil cooler
- Replace firewall shut-off valve
- Perform oil dilution test
- Troubleshoot faulty system.

80 Starting

- Replace starter
- Replace start relay
- Replace start control valve
- Check cranking speed
- Troubleshoot faulty system.

81 Turbines – Piston Engines

- Replace PRT
- Replace turbo-blower
- Replace heat shields
- Replace waste gate
- Adjust density controller.

82 Engine Water Injection

- Replace water/methanol pump
- Flow check water/methanol system
- Adjust water/methanol control unit
- Check fluid for quality
- Troubleshoot faulty system.

83 Accessory Gearboxes

- Replace gearbox
- Replace drive shaft
- Check/inspect magnetic chip detector.