ON THE JOB TRAINING TASK LOGBOOK AW139

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Foreword

This logbook in its current format is the preferred means of recording aircraft practical maintenance training and experience in order to support an application to the Civil Aviation Authority of Malaysia (CAAM) for the issue or variation of an Aircraft Maintenance Licence (AML).

The format and layout of the logbook will enable a methodical and progressive recording of personal data and ongoing work experience by the user, thereby enabling a quicker and more accurate assessment of the user's technical knowledge and experience by CAAM, employer or assessor. For control and traceability purposes, a unique control number will be assigned to the user.

The logbook has been produced in loose-leaf form so that additional pages may be inserted selectively as and when required, in order to accommodate progressive recording of ongoing work experience, and to enable removal of pages containing information, which may be considered redundant or surplus to the user's current needs. The additional pages shall be inserted in progressive sequence for each ATA that require additional maintenance experience.

Used correctly, this logbook should serve as a compact and portable reference document, which would hold a concise history of the holder's training, experience, qualification and employment record, together with a facility to record any ongoing work experience as may be required for the purpose of applying to the CAAM for the issue or variation of an AML.

The design and content of this logbook have been derived from current regulatory requirements. However, please note that completion of this logbook does not preclude the need to produce original documents, such as employment testimonials, training certificates or certified true copies of the same, where these may be required.

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Section 1.1 Instructions for use

General Information

All entries in this logbook shall be made in ink and handwritten. Dates entered shall follow the format DD/MM/YY. Each page shall be identified by the logbook owner's name and signature.

When used in support of an application for a licence, any false entry in the logbook will constitute an offence under the legislation currently in force.

Completion of the logbook

Entries in the logbook are made by 4 categories of persons:

(1) **The Logbook Owner**

It is important to note that engineers may not certify their own entries. However, certain pages require the name and signature of the logbook owner. This is primarily for traceability and identification purposes, particularly when logbook pages are separated from the logbook and used in isolation.

(2) **The Assessor**
(Section 3.1 – Assessment)

The Assessor may be any one of the following:

(a) An appropriately qualified CAAM Part-147 training instructor or person appropriately qualified and authorised by the organisation under the terms of its approval to carry out the assessment.

(b) An appropriately qualified licensed aircraft maintenance engineer employed by a CAAM Part 145 maintenance organisation and authorised by the CAAM Part 145 approval organisation.

The assessor shall also ensure that the logbook holder is able to:

(a) identify the appropriate standards; and

(b) select and use the correct tools for the task/process.

When confirming entries, assessors shall sign and print their names, and also quote their position within the organisation on behalf of which the assessment has been carried out.

(3) **The Validator**
(Section 2.1 – Maintenance experience (on-the-job training) task record)

The Validator may be any one of the following:

(a) An appropriately qualified CAAM Part-147 training instructor authorised by the organisation under the terms of its approval to conduct practical training or OJT (on the job training).

(b) An appropriately qualified licensed aircraft maintenance engineer employed by a CAAM Part 145 maintenance organisation and authorised to conduct OJT.

The validator shall confirm the required entries by appending his/her name, signature and licence number in the appropriate column.

(4) **The Supervisor**
(Section 2.2 – Logbook Summary)

The Supervisor may be any one of the following:

(a) An appropriately qualified CAAM Part-147 training instructor authorised by the organisation under the terms of its approval to conduct practical training or OJT (on the job training).

(b) An appropriately qualified licensed aircraft maintenance engineer employed by a CAAM Part 145 maintenance organisation and authorised to conduct OJT.

Section 1.2 Personal Data

This section contains:

(1) Provision for recording the logbook owner's name, nationality, date of birth, licence number and address.

(2) Provision for recording personal training. The training record must be a record of completion for the basic training attended by the applicant.

Section 1.3 Employment Record

This section has been provided for recording the logbook owner's employment history. Employment record entries should be confirmed by a senior member of the employer's organisation holding the appropriate authority.

Section 2.1 Maintenance experience (on-the-job training) task record

This section is aimed to record maintenance experience on operating aircraft for:

(1) trainees undergoing or completed basic training;

(2) aircraft maintenance personnel undergoing on-the-job training

This section has been ordered as per ATA Chapters and the entries should be entered in the blank blocks on an ordered manner in accordance with the ATA Chapter reference of the task performed.

The type and range of tasks undertaken must reflect the requirements of CAD 1801 in respect of the category and/or type rating applied for. Work task details should be recorded by the logbook holder on completion of the task and countersigned by the validator as soon as practicable after completion of the task. The validator confirming the candidates' experience must ensure that candidate has participated, assisted, or observed the task and all stated data are correct before appending their name, signature, CAAM licence no. and organisation approval stamp. It will be the responsibility of the validator to ensure that the candidates are fully competent on the task before appending their certification in validation section. But in case of renewal of AML work task details should be recorded by the logbook holder on completion of the task. For issuance and amendment of AML a specific task shall only be entered once but for renewal of AML, the holder/s may make multiple entries for similar tasks.

It is expected that candidate will follow CAD 1801 for the Maintenance experience for Basic Licence as a guideline. For Basic Licence all the applicable ATA chapters for the category are to be recorded.

The following activities are considered relevant for maintenance experience:

Servicing;
Inspection;
Operational and Functional Testing;
Troubleshooting;
Repairing;
Modifying;
Changing Component;
Supervising these activities;
Releasing aircraft to service.

Section 2.2 Maintenance Experience Logbook Summary

This section contains

1 Provision for summarizing the ATA Chapter in the logbook by logbook owner's;

2 Declaration by the Logbook Owner; and

3 Verification by the Supervisor.

Section 3.1 Assessment

The assessor must perform the final evaluation of the knowledge, skills and attitude of the trainee following the practical element of the On-the-Job Training (OJT) or maintenance experience.

(a) Objective:

The objective of the assessment is to evaluate whether the candidate has gained the required competence in performing safe maintenance, inspections, and routine work according to the aircraft documentation and other relevant instructions and tasks as appropriate for the type of aircraft. The practical assessment addresses the practical portion of On-the-Job Training (OJT) or maintenance experience. The practical assessor shall utilise Section 3 and may countersigned the task or group of tasks that are considered relevant in Section 2.1.

(b) Assessment:

The assessment shall be performed by appropriately qualified assessors. It means that the assessors should demonstrate training and experience on the assessment process being undertaken and be authorised to do so by the organisation. The assessment may be:

(i) diagnostic (prior to a course)
(ii) formative
(iii) summative (partial or final evaluation)
(iv) performed as a final assessment
(v) performed as a group of tasks
(vi) partly executed on simulation devices
(vii) performed task-by-task

Section 4.1 Typical Maintenance Tasks

This section gives examples of typical maintenance tasks, which may be undertaken. It is not an exhaustive list and may be added to in order to support an application for an AML.

The type and number of tasks undertaken must be representative of the aircraft structure and systems, both in terms of technology and complexity. While relatively simple tasks may be included, other more complex tasks appropriate to the privileges of the licence applied for should also be undertaken and recorded.

Section 4.2 Glossary

This Section contains a Glossary of abbreviations used in Section 3.2. Abbreviations and their meaning may vary between manufacturers, hence excessive use of these in compiling work records is not recommended.

Section 1.2 Personal Data

Title:	**Forename(s):**
Surname:	**Date of Birth:**
Nationality:	**Licence No:**
Permanent Address:	
Post Code:	**(Record changes of address overleaf)**
Logbook Owner's Name:	**Signature: .....**

Changes of permanent address

1:	2:
3:	
Logbook Owner's Name:	**Signature: .....**

Record of Training

Type of Training Completed	Training Organisation	Date		Result
		From	To	

Logbook Owner's Name: ..... Signature: .....

Section 1.3 Employment Record

Employer:		
From:	**To:**	**Position in Company:**
Nature of Duties:		
Types of aircraft or other products:		
Confirmed by: **Signature:**	**Date:**	**Position in Company:**
Employer:		
From:	**To:**	**Position in Company:**
Nature of Duties:		
Type of aircraft or other products:		
Confirmed by: **Signature:**	**Date:**	**Position in Company:**
Logbook Owner's Name: ..... Signature:		

Section 2.1 On the job training task record

Aircraft Type: ..... ATA Chapter: ....
(Aircraft/Engine combination)

Date	A/C Reg	Worksheet No	Task Detail	Validator's Name, Signature and Licence Number
				*
				*
				*

* The above work has been carried out correctly by the logbook owner under my supervision and in accordance with the appropriate technical documentation.

Logbook Owner's Name: ..... Signature:.....

Section 2.2 Maintenance Experience Logbook Summary

ATA Chapters performed

ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks	ATA	No. of tasks
05		21		27		32A		44		56		61F		67		76	
06		21A		27A		33		45		57		62		70		77	
07		21B		28		34		46		60		62A		70A		78	
08		21C		28A		35		49		60A		63		70B		79	
09		22		29		36		50		61		63A		71		80	
10		23		29A		36A		51		61A		64		72		81	
11		24		30		37		52		61B		64A		73		82	
12		25		31		38		53		61C		65		73A		83	
18		25A		31A		41		54		61D		65A		74		84	
20		26		32		42		55		61E		66		75			

DECLARATION BY THE LOGBOOK OWNER					
CAAM Required Task		Actual task		Percentage	
I declare that the entries in this logbook are complete and true.					
Date Start:		Logbook owner's signature:			
Date Completed:					
VERIFICATION BY THE SUPERVISOR					
I hereby confirm that the information contained in this document have been verified and is genuine at the time of application.					
Name		Signature		*Date*	

Maintenance Experience Duration

Year:																								
Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1													17												
2													18												
3													19												
4													20												
5													21												
6													22												
7													23												
8													24												
9													25												
10													26												
11													27												
12													28												
13													29												
14													30												
15													31												
16																									

Total number of days : _____
Mark with a cross (x) against the date on which work was actively assisted or participated in.

Logbook Owner's Name: ..... Signature:.....

Section 3.1 Assessment

No.	ATA	Task Description and Reference Material	Competent (Y/N)	Logbook Holder's signature	Practical Assessor`s Signature, stamp and date	Practical Assessor's comments or Remarks

Section 3.2 Elements of the Assessment

Assessor to initial/stamp each block as applicable reference the above tasks (as applicable)			
The Candidate:	**Assessment 1**	**Assessment 2**	**Assessment 3**
Reads available reports and observes associated indications			
Interprets report correctly			
Consults the MEL reference			
Correctly interprets the MEL regarding dispatch of the aircraft			
Finds the correct FIM/FIP procedure			
Correctly interprets FIM/FIP in relation to the AMM and other related documentation, as required			
Follows the procedure steps, with correct actions			
Takes into account the working environment			
Interprets and follows safety warnings			
Communicates with other team members			
Reacts accordingly with respect to changes during the task			
Analyses consequences on associated systems			
Takes account of the above analyses during their actions			
Restores aircraft back to initial condition			
Able to make correct decision without jeopardizing safety to work environment, oneself and workmates.			

Section 3.3 Assessors Signatories and Declaration

Assessors Signatories and Declaration

PRACTICAL ASSESSMENT RECORDS

This is to certify that Ms. / Mrs. / Mr _____ *(Student's Name)*

1. has completed the practical element of the (aircraft type rating) On-the-Job Training, for a total duration of _____days, as evidenced in the enclosed logbook records.;

2. has been assessed on the following tasks and successfully passed the practical assessment demonstrating appropriate knowledge, skills and attitude; and

3. that all entries made by the logbook holder and instructor reflect the extent of practical skills and maintenance experience necessary for the holder to submit an application for type endorsement in CAAM Part-66 Aircraft Maintenance Licence in the relevant category.

1.	*Assessor's name:*	*Signature:*	*Authorisation No. & Stamp and Licence No.:*	*Date:*
2.	*Assessor's name:*	*Signature:*	*Authorisation No. & Stamp and Licence No.:*	*Date:*
3.	*Assessor's name*	*Signature:*	*Authorisation No. & Stamp and Licence No.:*	*Date:*
4.	*Assessor's name*	*Signature:*	*Authorisation No. & Stamp and Licence No.:*	*Date:*

Section 3.4 Final Assessment

ASSESSMENT CRITERIA	COMPETENT		CHECKPOINT	REMARKS / REFERENCES
	YES	NO		
Air Legislation Knowledge and understanding of subject / topics as specified in Module 10 (CAD 1801 Appendix 1).				
Knowledge: Theoretical Knowledge and understanding of subject / topics covered in CAD 1801 Appendix 1.				
Skills: Practical Practical works and tasks assessment on workshop practices and maintenance experience.				
Experience: Technical Ability Applied practical on-the-job training on actual tasks under supervision and job-oriented maintenance experience.				
Attitude: Safety and Situational Awareness Ability to make correct decision without jeopardizing safety to work environment , oneself and workmates.				

(Please mark √ at the competent column to indicate applicant's competency)

I/We hereby confirmed the candidate above-mentioned met the assessment criteria and competent to be recommended for CAAM Part 66 AML issuance.

PANEL OF ASSESSORS

Name	Signature	Approval No.

Section 4.1 Typical Maintenance Tasks

No	Task	B1.1	B1.2	B1.3	B1.4	B2
1	**Time limits/Maintenance checks**					
	100 hour check (general aviation aircraft).			/		/
	'B' or 'C' check (transport category aircraft).					/
	Assist 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			/		/
2	**Dimensions/Areas**					
	Locate component(s) by zone/station number			/		/
	Perform symmetry check.			/		
3	**Lifting & Shoring**					
	Assist in:					
	Jack aircraft nose or tail wheel.			/		
	Jack complete aircraft			/		
	Sling or trestle major component			/		

No	Task	B1.1	B1.2	B1.3	B1.4	B2
4	**Levelling/Weighing**					
	Level aircraft			/		
	Weigh aircraft			/		
	Prepare weight and balance amendment					
	Check aircraft against equipment list			/		/
5	**Towing & Taxiing**					
	Prepare for aircraft towing			/		/
	Tow aircraft			/		
	Be part of aircraft towing team			/		/
6	**Parking & Mooring**					
	Tie down aircraft			/		
	Park, secure and cover aircraft			/		/
	Position aircraft in dock					
	Secure rotor blades			/		
7	**Placard & Marking**					
	Check aircraft for correct placards			/		/
	Check aircraft for correct markings			/		/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
8	**Servicing**					
	Refuel aircraft			/		
	Defuel aircraft			/		
	Carry out tank to tank fuel transfer			/		/
	Check/adjust tire 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			/		/
9	**Vibration and Noise Analysis**					
	Analyse helicopter vibration problem			/		/
	Analyse noise spectrum			/		/
	Analyse engine vibration			/		/
10	**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					
	Deactivate/reactivate cargo isolation valve					/
	Deactivate/reactivate avionics ventilation components					/
	Check operation of air conditioning/heating system			/		/
	Check operation of pressurisation system					/
	Troubleshoot faulty system			/		/
11	**Auto Pilot**					
	Install servos			/		/
	Rig bridle cables					
	Replace controller					/
	Replace amplifier					/
	Replacement of the auto flight system LRUs in case of fly-by-wire aircraft					/
	Check operation of auto-pilot					/
	Check operation of auto-throttle/auto-thrust					/
	Check operation of yaw damper					/
	Check and adjust servo clutch					/
	Perform autopilot gain adjustments					/
	Perform mach trim functional check					/
	Troubleshoot faulty system					/
	Check autoland system					/
	Check flight management systems					/
	Check stability augmentation system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
12	**Communications**					
	Replace VHF COM unit					/
	Replace HF COM unit					/
	Replace existing antenna					/
	Replace static discharge wicks					/
	Check operation of radios					/
	Perform antenna VSWR check					/
	Perform SELCAL operational check					/
	Repair coaxial cable					/
	Troubleshoot faulty system					/
	Check SATCOM					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
13	**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 circuit breakers					/
	Adjust voltage regulator					/
	Change voltage regulator					/
	Amend electrical load analysis report					
	Repair/replace electrical feeder cable					/
	Troubleshoot faulty system					/
	Perform functional check of integrated drive/generator/alternator					/
	Perform functional check of voltage regulator					/
	Perform functional check of emergency generation system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
14	**Equipment & Furnishing**					
	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					
	Remove and install ceiling and sidewall panels			/		
	Repair upholstery			/		
	Change cabin configuration			/		
	Replace cargo loading system actuator					
	Test cargo loading system					
	Replace escape slides/ropes					

No	Task	B1.1	B1.2	B1.3	B1.4	B2
15	**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					/
	Troubleshoot faulty system			/		/
	Inspect engine fire wire detection systems			/		/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Rig primary flight controls					
	Adjust trim tab					
	Adjust control cable tension					
	Check control range and direction of movement					
	Check for correct assembly and locking					
	Troubleshoot faulty system					/
	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					

16	**Flight Controls**					
	Inspect primary flight controls and related components i.a.w. AMM					/
	Extending/retracting flaps & slats					
	Replace horizontal stabilizer					
	Replace spoiler/lift damper					
	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 flat actuator					

17	**Fuel**					
	Water drain system (operation)			/		/
	Replace booster pump			/		/
	Replace fuel selector					/
	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					/
	Check calibration of fuel quantity gauges					/
	Check operation feed/selectors					/
	Check operation of fuel dump/jettison system					
	Fuel transfer between tanks			/		

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Pressure defuel					
	Pressure refuel (manual control)			/		
	Deactivation/reactivation of the fuel valves (transfer defuel, X-feed, refuel)					/
	Troubleshoot faulty system			/		/
18	**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			/		
	Power Transfer Unit (PTU) operation					
	Replacement of PTU					
	Troubleshoot faulty system			/		/
19	**Ice & Rain Protection**					
	Replace pump					
	Replace timer					/
	Inspect repair propeller deice boot					
	Test propeller de-icing system					/
	Inspect/test wing leading edge de-icer boot					

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Replace anti-ice/deice 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					/
	Assistance to the operational test of the engine air-intake ice protection (with engines operating)			/		/
	Troubleshoot faulty system			/		/
20	**Indicating/Recording Systems**					
	Replace flight data recorder					/
	Replace cockpit voice recorder					/
	Replace clock					/
	Replace master caution unit					/
	Replace FDR					/
	Perform FDR data retrieval					/
	Troubleshoot faulty system					/
	Implement ESDS procedures					/
	Inspect for HIRF requirements					/
	Start/stop EIS procedure					/
	Bite test of the CFDIU					/
	Ground scanning of the central warning system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
21	**Landing Gear**					
	Build up wheel			/		
	Replace main wheel			/		
	Replace nose wheel			/		
	Replace steering actuator					
	Replace truck tilt actuator					
	Replace 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					
	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			/		
	Troubleshoot faulty system			/		/
	Test auto-brake system					/
	Replace rotorcraft skids			/		
	Replace rotorcraft skid shoes			/		
	Pack and check floats			/		
	Flotation equipment			/		

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Check/test emergency blowdown (Emergency landing gear extension)			/		
	Operational test of the landing gear doors					
22	**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					/
23	**Instruments**					
	Troubleshoot faulty system					/
	Calibrate magnetic direction indicator					/
	Replace airspeed indicator					/
	Replace altimeter					/
	Replace air-data computer					/
	Replace ADI					/
	Replace HSI					/
	Check pitot static system for leaks					/
	Check operation of directional gyro					/
	Check calibration of pitot static instruments					/
	Compass replacement direct/indirect					/
	Functional check flight director system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
24	**Surveillance**					
	Troubleshoot faulty system					/
	Functional check weather radar					/
	Functional check doppler					/
	Functional check TCAS					/
	Functional check ATC transponder					/
	Check calibration of pressure altitude reporting system					/
25	**Navigation**					
	Functional check inertial navigation system					/
	Complete quadrantal error correction of ADF system					/
	Check GPS					/
	Test AVM					/
	Check marker systems					/
	Functional check DME					/
26	**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					
	Pneumatic systems					
	Replace filter					

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Replace air shut off valve					
	Replace pressure regulating valve					
	Replace compressor					
	Recharge dessicator					
	Adjust regulator					
	Check for leaks					/
	Troubleshoot faulty system					
27	**Vacuum Systems**					
	Inspect the vacuum system i.a.w. AMM					
	Replace vacuum pump					
	Check/replace filters					
	Adjust regulator					
	Troubleshoot faulty system					/
28	**Water/Waste**					
	Replace water pump					
	Replace tap					
	Replace toilet pump					
	Perform water heater functional check					
	Troubleshoot faulty system					/
	Inspect waste bin flap closure					
29	**Central Maintenance System**					
	Retrieve data from CMU					/
	Replace CMU					/
	Perform Bite check					/
	Troubleshoot faulty system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
30	**Airborne Auxiliary Power**					
	Install APU			/		
	Inspect hot section			/		
	Troubleshoot faulty system			/		/
31	**Structures**					
	Assessment of damage			/		
	Sheet metal repair			/		
	Fibre glass repair			/		
	Wooden repair					
	Fabric repair					
	Recover fabric control surface					
	Treat corrosion			/		
	Apply protective treatment			/		
32	**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					/
	Troubleshoot faulty 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			/		

No	Task	B1.1	B1.2	B1.3	B1.4	B2
33	**Windows**					
	Replace windshield			/		
	Replace direct vision window			/		
	Replace cabin window			/		
	Repair transparency			/		
34	**Wings**					
	Skin repair					
	Recover fabric wing					
	Replace tip					
	Replace rib					
	Replace integral fuel tank panel					
	Check incidence/rig					
35	**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					/
	Assessment of blade damage i.a.w. AMM					
	Dynamically balance prop					
	Troubleshoot faulty system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
36	**Main Rotors**					
	Install rotor assembly			/		
	Replace blades			/		
	Replace damper assembly			/		
	Check track			/		
	Check static balance					
	Check dynamic balance			/		
	Troubleshoot			/		
37	**Rotor Drive**					
	Replace mast			/		
	Replace drive coupling			/		
	Replace clutch/freewheel unit			/		
	Replace drive belt			/		
	Install main gearbox			/		
	Overhaul main gearbox					
	Check gearbox chip detectors			/		/
38	**Tail Rotors**					
	Install rotor assembly			/		
	Replace blades			/		
	Troubleshoot			/		
39	**Tail Rotor Drive**					
	Replace bevel gearbox					
	Replace universal joints			/		
	Overhaul bevel gearbox					
	Install drive assembly			/		
	Check chip detectors			/		/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
	Check/install bearings and hangers			/		
	Check/service/assemble flexible couplings			/		
	Check alignment of drive shafts			/		
	Install and rig drive shafts			/		
40	**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			/		
41	**Power Plant**					
	Build up ECU					
	Replace engine			/		/
	Repair cooling baffles					
	Repair cowling			/		
	Adjust cowl flaps					
	Repair faulty wiring					/
	Troubleshoot			/		/
	Assist in dry motoring check			/		
	Assist in wet motoring check					
	Assist in engine start (manual mode)					

No	Task	B1.1	B1.2	B1.3	B1.4	B2
42	**Piston Engines**					
	Remove/install reduction gear					
	Check crankshaft run-out					
	Check tappet clearance					
	Check compression					
	Extract broken stud					
	Install helicoil					
	Perform ground run					
	Establish/check reference RPM					
	Troubleshoot					/
43	**Turbine Engine**					
	Replace module			/		
	Replace fan blade					
	Hot section inspection/boroscope check			/		
	Carry out engine/compressor wash			/		
	Carry out engine dry cycle			/		
	Engine ground run					
	Establish reference power					
	Trend monitoring/gas path analysis					
	Troubleshoot			/		/
44	**Fuel & 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					/
45	**Fuel & 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			/		
	Troubleshoot faulty system			/		/
	Functional test of FADEC			/		/
46	**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					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
47	**Ignition System, 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			/		/
48	**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 direction of movement			/		
	Adjust pedestal micro-switches					/
	Troubleshoot faulty system			/		/
49	**Engine Indicating**					
	Replace engine instruments(s)					/
	Replace oil temperature bulb					/
	Replace thermocouples					/
	Check calibration					/
	Troubleshoot faulty system					/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
50	**Exhaust, Piston**					
	Replace exhaust gasket					
	Inspect welded repair					
	Pressure check cabin heater muff					
	Troubleshoot faulty system					
51	**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					/
52	**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			/		/

No	Task	B1.1	B1.2	B1.3	B1.4	B2
53	**Starting**					
	Replace starter			/		/
	Replace start relay					/
	Replace start control valve					
	Check cranking speed			/		/
	Troubleshoot faulty system			/		/
54	**Turbines, Piston Engines**					
	Replace PRT					
	Replace turbo-blower					
	Replace heat shields					
	Replace waste gate					
	Adjust density controller					
55	**Engine Water Injection**					
	Replace water/methanol pump					
	Flow check water/methanol system					
	Adjust water/methanol control unit					
	Check fluid for quality					
	Troubleshoot faulty system					

No	Task	B1.1	B1.2	B1.3	B1.4	B2
56	**Accessory Gear Boxes**					
	Replace gearbox					
	Replace drive shaft					
	Inspect magnetic chip detector			/		
57	**APU**					
	Removal/installation of the APU			/		/
	Removal/installation of the inlet guide-vane actuator					
	Grand total number of tasks required			**188**		**201**

The list of tasks is in accordance with the CAGM 1801 Appendix 2.

The list of tasks is intended for guideline only. The logbook's owner shall determine the applicability of the task as per the relevant aircraft configuration.

Section 4.2 Glossary

ABC	Automatic Boost Control
ADI	Attitude Direction Indicator
AMC	Automatic Mixture Control
AMM	Aircraft Maintenance Manual
APU	Auxiliary Power Unit
ATC	Air Traffic Control
AVM	Aircraft Vibration Monitor
BITE	Built in Test Equipment
CFDIU	Centralized Fault Display Interface Unit
CMU	Central Monitoring Unit
DME	Distance Measuring Equipment
ECU	Electronic Control Unit
EIS	Electronic Instrument System
ELT	Emergency Locator Transmitter
ESD	Electrostatic Sensitive Device
FADEC	Full Authority Digital Engine Control
FCU	Fuel Control Unit
FDR	Flight Data Recorder
GPS	Global Positioning System
HF	High Frequency
HIRF	High Intensity Radiated Field
HP	High Pressure
HSI	Horizontal Situation Indicator
LRU	Line Replaceable Unit
PRT	Power Recovery Turbine
PTU	Power Transfer Unit
RPM	Revolutions Per Minute
TAT	Total Air Temperature
TCAS	Traffic Collision Avoidance System
THS	Trimmable Horizontal Stabiliser
VHF	Very High Frequency
VOR	Visual Omni Range
VSWR	Voltage Standing Wave Ratio
AML	Aircraft Maintenance Licence

INSTRUCTION FOR COMPLETING GAM/Q-014, ON-THE -JOB TRAINING TASK LOGBOOK

No.	Item	Instructions
1.	Section 1.2 (Title)	Any title logbook owner carries, e.g, Mr/Mrs/Dato/Datin/Tan Sri etc
2.	Section 1.2 (Forename)	Indicates first name or full name before last name
3.	Section 1.2 (Surname)	Indicates last name to complete the full name of logbook owner
4.	Section 1.2 (Date of birth)	Date of birth format shall be DD/MM/YYYY
5.	Section 1.2 (Nationality)	To enter the current nationality
6.	Section 1.2 (Licence No.)	Indicates CAAM licence no. that logbook owner holds
7.	Section 1.2 (Permanent Address)	Self-explanatory
8.	Section 1.2 (Postcode)	Indicate the postcode for permanent address
9.	Section 1.2 (Logbook Owner's Name)	Self-explanatory
10.	Section 1.2 (Signature)	Self-explanatory
11.	Section 1.2 (Changes of permanent address)	Indicates the record of permanent address change if any

No.	Item	Instructions
12.	Section 1.2 (Record of Training)	Self-explanatory
13.	Section 1.3 (Employment Record)	Self-explanatory
14.	Section 1.2/1.3/2.1/3.1/3.2/3.3 Page number	This shall be accurately written by the logbook owner according to their section
15.	Section 2.1 (Aircraft type)	Indicates the model of aircraft & engine relevant to CAAM endorsement for the task performed
16.	Section 2.1 (ATA Chapter)	Indicates the ATA chapter for the performed task, e.g., 34: Navigation
17.	Section 2.1 (Date/AC Reg/Owner's name/Signature)	Self-explanatory
18.	Section 2.1 (Worksheet)	Indicates the workcard/worksheet reference no. related to the task as applicable
19.	Section 2.1 (Task Detail)	Indicates the full task detail that has been performed by the logbook owner together with the relevant AMM reference. Use correct wording, e.g., participated, assisted, observed
20.	Section 2.1 (Validator's Name, Signature, Licence No)	Indicates qualified LAE employed by CAAM Part 145 AMO and authorised to conduct OJT
21.	Section 2.2 (ATA Chapter performed)	Logbook owner shall declare number of tasks of each ATA Chapter performed. Write "N/A" whenever the ATA is not applicable.
22.	Section 2.2 (Declaration by the Logbook Owner)	Logbook Owner shall indicate CAAM Required Task as per Section 4.1 of this logbook, actual task, percentage, date start, date completed and signature.

No.	Item	Instructions
23.	Section 2.2 (Verification by the Supervisor)	Supervisor shall verify the number of tasks and append the name, signature, and date column. Supervisor maybe EIC, CE, Deputy EM or EM and shall be different person from the assessor.
24	Section 2.2 (Maintenance Experience Duration)	Indicates the no. of task carried out by yearly projection
25	Section 2.2 (Logbook Owners name/Signature)	Self-explanatory
26.	Section 3.1 (No/Logbook Holder's Signature)	Self-explanatory and completed by logbook owner.
27.	Section 3.1 (ATA)	Shall be completed by logbook owner. Indicates the ATA Chapter for the relevant task on the task description
28.	Section 3.1 (Task Description and Reference Material)	Shall be completed by logbook owner as instructed by the assessor. Indicates the full task detail that has been performed and required to be assessed together with the relevant reference.
29.	Section 3.1 (Competent Y/N)	Shall be completed by the practical assessor to indicate whether the logbook owner has met the competency requirement.
30.	Section 3.1 (Practical Assessor`s Signature, stamp and date)	Indicates qualified LAE employed by CAAM Part 145 AMO and autorised to assess the competency of student. Practical assessor shall append his/her signature, company approval stamp and date assessment conducted.

No.	Item	Instructions
31.	Section 3.1 (Practical Assessor's comments or Remarks)	Indicates any comments with regards to the conducted assessment
32	Section 3.2 (Assessment 1/2/3)	Assessor to initial/stamp each block as applicable reference the related tasks (as applicable)
33	Section 3.3 (Student's Name)	Logbook owner shall write his full name and strikethrough name title that is not applicable to him/her
34.	Section 3.3 (Duration of days)	Logbook owner shall calculate and write the total duration of days for the maintenance experience performed
35.	Section 3.3 (Assessor's Name/Signature/Stamp/Licence No/Date)	Shall be completed by the practical assessor after the final assessment has been conducted.
36.	Section 3.4 (Final Assessment)	Indicates final assessment carried out by practical assessor before submission of the logbook to CAAM for endorsement
37.	Section 3.4 (Panel of Assessor)	Assessor to indicates the name, signature and company approval no.