FOREWORD

This Guidance Material (GM: Part-145) is interpretative material and provides guidance for the compliance of airworthiness requirement of ANO Part-145 "Approved Maintenance Organisation". Section numbering of this GM is synchronized with that of regulations and AMCs of ANO Part-145.

This GM is effective from the date of publication of the ANO Part-145 Issue 3.

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Guidance Material on

ANO Part-145

Introduction

This Guidance Material (GM: Part-145) is interpretative material and provides guidance for the compliance of airworthiness requirement of ANO Part-145 "Approved Maintenance Organisation" and is effective from the *date of publication of the ANO Part-145 Issue 3*. Section numbering of this GM is synchronized with that of regulations and AMCs of ANO Part-145.

GM 145.A.10 Scope

This Guidance Material (GM) provides guidance on how the smallest organisations satisfy the intent of Part-145:

1. By inference, the smallest maintenance organisation would only be involved in a limited number of light aircraft, or aircraft components, used for commercial air transport. It is therefore a matter of scale; light aircraft do not demand the same level of resources, facilities or complex maintenance procedures as the large organisation.

2. It is recognised that a Part-145 approval may be required by two quite different types of small organisations, the first being the light aircraft maintenance hangar, the second being the component maintenance workshop, e.g. small piston engines, radio equipment, etc.

3. Where only one person is employed (in fact having the certifying function and others), these organisations approved under Part-145 may use the alternatives provided in point 3.1 limited to the following:

   Class A2 Base and Line maintenance of aeroplanes of 5700 kg and below (piston engines only).

   Class A3 Base and Line maintenance of single-engined helicopters of less than 3175 kg.

   Class A4 Aircraft other than A1, A2 and A3

   Class B2 Piston engines with maximum output of less than 450 HP.

   Class C Components.

   Class D1 Non destructive Testing.

   3.1 145.A.30 (b): The minimum requirement is for one full-time person who meets the Part-66 requirements for certifying staff and holds the position of 'accountable manager, maintenance engineer and is also certifying staff'. No other person may issue a certificate of release to service and therefore if absent, no maintenance may be released during such absence.

   3.1.1 The quality monitoring function of 145.A.65(c) may be contracted to an appropriate organisation approved under Part-145 or to a person with appropriate technical knowledge and extensive experience of quality audits employed on a part-time basis, with the agreement of the CAAB.

   Note: Full-time for the purpose of Part-145 means not less than 35 hrs per week except during vacation periods.

   3.1.2 145.A.35. In the case of an approval based on one person using a subcontracted quality monitoring arrangement, the requirement for a record of certifying staff is satisfied by the submission to and acceptance by the CAAB of the CAAB Form 4.

With only one person the requirement for a separate record of authorisation is unnecessary because the CAAB Form 3 approval schedule defines the authorisation. An appropriate statement, to reflect this situation, should be included in the exposition.

3.1.3 145.A.65(c). It is the responsibility of the contracted quality monitoring organisation or person to make a minimum of 2 visits per 12 months and it is the responsibility of this organisation or person to carry out such monitoring on the basis of 1 pre-announced visit and 1 not announced visit to the organisation. It is the responsibility of the organisation to comply with the findings of the contracted quality monitoring organisation or the person.

CAUTION: it should be understood that if the contracted organisation or the above mentioned person loses or gives up its approval, then the organisation's approval will be suspended.

4. Recommended operating procedure for a Part-145 approved maintenance organisation based upon up to 10 persons involved in maintenance.

4.1 145.A.30 (b): The normal minimum requirement is for the employment on a full-time basis of two persons who meet the CAAB's requirements for certifying staff, whereby one holds the position of 'maintenance engineer' and the other holds the position of 'quality audit engineer'.

Either person can assume the responsibilities of the accountable manager providing that they can comply in full with the applicable elements of 145.A.30(a), but the 'maintenance engineer' should be the certifying person to retain the independence of the 'quality audit engineer' to carry out audits. Nothing prevents either engineer from undertaking maintenance tasks providing that the 'maintenance engineer' issues the certificate of release to service.

The 'quality audit engineer' should have similar qualifications and status to the 'maintenance engineer' for reasons of credibility, unless he/she has a proven track-record in aircraft quality assurance, in which case some reduction in the extent of maintenance qualifications may be permitted.

In cases where the CAAB agrees that it is not practical for the organisation to nominate a post holder for the quality monitoring function, this function may be contracted in accordance to paragraph 3.1.1.

CLASS	**RATING**	**ATA CHAPTERS**
COMPONENTS OTHER THAN COMPLETE ENGINES OR APUs	C1 Air Cond & Press	21
	C2 Auto Flight	22
	C3 Comms and Nav	23, 34
	C4 Doors - Hatches	52
	C5 Electrical Power & Lights	24, 33, 85
	C6 Equipment	25, 38, 44, 45, 50
	C7 Engine – APU	49,71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83;
	C8 Flight Controls	27, 55, 57.40, 57.50, 57.60, 57.70
	C9 Fuel	28, 47

	C10 Helicopters - Rotors	62, 64, 66, 67
	C11 Helicopter - Trans	63, 65
	C12 Hydraulic Power	29
	C13 Indicating/Recording Systems	31, 42, 46
	C14 Landing Gear	32
	C15 Oxygen	35
	C16 Propellers	61
	C17 Pneumatic & Vacuum	36, 37
	C18 Protection ice/rain/fire	26, 30
	C19 Windows	56
	C20 Structural	53, 54, 57.10, 57.20, 57.30
	C21 Water Ballast	41
	C22 Propulsion Augmentation	84

GM 1 145.A.30(e) Personnel requirements

TRAINING SYLLABUS FOR INITIAL HUMAN FACTORS TRAINING

The training syllabus below identifies the topics and subtopics to be addressed during the human factors training.

The maintenance organisation may combine, divide, change the order of any subject of the syllabus to suit its own needs, as long as all subjects are covered to a level of detail appropriate to the organisation and its personnel.

Some of the topics may be covered in separate training (health and safety, management, supervisory skills, etc.) in which case duplication of training is not necessary.

Where possible, practical illustrations and examples should be used, especially accident and incident reports.

Topics should be related to existing legislation, where relevant. Topics should be related to existing guidance/advisory material, where relevant (e.g. ICAO HF Digests and Training Manual).

Topics should be related to maintenance engineering where possible; too much unrelated theory should be avoided.

1 General/Introduction to human factors

1.1 Need to address human factors

1.2 Statistics

1.3 Incidents

2 Safety Culture/Organisational factors

3 Human Error

3.1 Error models and theories

3.2 Types of errors in maintenance tasks

3.3 Violations

3.4 Implications of errors

3.5 Avoiding and managing errors

3.6 Human reliability

4 Human performance & limitations

4.1 Vision

4.2 Hearing

4.3 Information-processing

4.4 Attention and perception

4.5 Situational awareness

4.6 Memory

4.7 Claustrophobia and physical access

4.8 Motivation

4.9 Fitness/Health

4.10 Stress

4.11 Workload management

4.12 Fatigue

4.13 Alcohol, medication, drugs

4.14 Physical work

4.15 Repetitive tasks/complacency

5 Environment

5.1 Peer pressure

5.2 Stressors

5.3 Time pressure and deadlines

5.4 Workload

5.5 Shift Work

5.6 Noise and fumes

5.7 Illumination

5.8 Climate and temperature

5.9 Motion and vibration

5.10 Complex systems

5.11 Hazards in the workplace

5.12 Lack of manpower

5.13 Distractions and interruptions

6 Procedures, information, tools and practices

6.1 Visual Inspection

6.2 Work logging and recording

6.3 Procedure - practice/mismatch/norms

6.4 Technical documentation - access and quality

7 Communication
- 7.1 Shift/Task handover
- 7.2 Dissemination of information
- 7.3 Cultural differences

8 Teamwork
- 8.1 Responsibility
- 8.2 Management, supervision and leadership
- 8.3 Decision making

9 Professionalism and integrity
- 9.1 Keeping up to date; currency
- 9.2 Error provoking behaviour
- 9.3 Assertiveness

10 Organisation's HF program
- 10.1 Reporting errors
- 10.2 Disciplinary policy
- 10.3 Error investigation
- 10.4 Action to address problems
- 10.5 Feedback

GM 2 145.A.30 (e) Competence assessment procedure

The organisation should develop a procedure describing the process of competence assessment of personnel. The procedure should specify:

- persons responsible for this process,
- when the assessment should take place,
- credits from previous assessments,
- validation of qualification records,
- means and methods for the initial assessment,
- means and methods for the continuous control of competence including feedback on personnel performance,
- competences to be observed during the assessment in relation with each job function,
- actions to be taken when assessment is not satisfactory,
- recording of assessment results.

For example, according to the job functions and the scope, size and complexity of the organisation, the assessment may consider the following (the table is not exhaustive):

	Managers	Planners	Supervisor	Certifying staff & support staff	Mechanics	Specialised Service staff	Quality audit staff
Knowledge of applicable officially recognised standards						X	X
Knowledge of auditing techniques: planning, conducting and reporting							X
Knowledge of human factors, human performance and limitations	X	X	X	X	X	X	X
Knowledge of logistics processes	X	X	X				
Knowledge of organisation capabilities, privileges and limitations	X	X	X	X		X	X
Knowledge of Part-M, Part-145 and any other relevant regulations	X	X	X	X			X
Knowledge of relevant parts of the maintenance organisation exposition and procedures	X	X	X	X	X	X	X
Knowledge of occurrence reporting system and understanding of the importance of reporting occurrences, incorrect maintenance data and existing or potential defects		X	X	X	X	X	
Knowledge of safety risks linked to the working environment	X	X	X	X	X	X	X
Knowledge on CDCCL when relevant	X	X	X	X	X	X	X
Knowledge on EWIS when relevant	X	X	X	X	X	X	X
Understanding of professional integrity, behaviour and attitude towards safety	X	X	X	X	X	X	X
Understanding of conditions for ensuring continuing airworthiness of aircraft and components				X			X
Understanding of his/her own human performance and limitations	X	X	X	X	X	X	X
Understanding of personnel authorisations and limitations	X	X	X	X	X	X	X
Understanding critical task		X	X	X	X		X
Ability to compile and control completed work cards		X	X	X			
Ability to consider human performance and limitations.	X	X	X	X			X
Ability to determine required qualifications for task performance		X	X	X			
Ability to identify and rectify existing and potential unsafe conditions			X	X	X	X	X
Ability to manage third parties involved in maintenance activity		X	X				
Ability to confirm proper accomplishment of maintenance tasks			X	X	X	X	
Ability to identify and properly plan performance of critical task		X	X	X			

	Managers	Planners	Supervisor	Certifying staff & support staff	Mechanics	Specialised service staff	Quality audit staff
Ability to prioritise tasks and report discrepancies		X	X	X	X		
Ability to process the work requested by the operator		X	X	X			
Ability to promote the safety and quality policy	X		X				
Ability to properly process removed, uninstalled and rejected parts			X	X	X	X	
Ability to properly record and sign for work accomplished			X	X	X	X	
Ability to recognise the acceptability of parts to be installed prior to fitment				X	X		
Ability to split complex maintenance tasks into clear stages		X					
Ability to understand work orders, work cards and refer to and use applicable maintenance data		X	X	X	X	X	X
Ability to use information systems	X	X	X	X	X	X	X
Ability to use, control and be familiar with required tooling and/or equipment			X	X	X	X	
Adequate communication and literacy skills	X	X	X	X	X	X	X
Analytical and proven auditing skills (for example, objectivity, fairness, open-mindedness, determination,)							X
Maintenance error investigation skills							X
Resources management and production planning skills	X	X	X				
Teamwork, decision-making and leadership skills	X		X				

GM 3 145.A.30 (e) - Template for recording experience/training

The following template may be used to record the professional experience gained in an organisation and the training received and be considered during the competence assessment of the individual in another organisation.

Aviation Maintenance personnel experience credential
Name Given name Address Telephone E-mail
Independent worker ☐ Trade Group: airframe ☐ engine ☐ electric ☐ avionics ☐ other (specify) ☐ ……
Employer's details (when applicable) Name Address Telephone

Maintenance organisation details

Name

Address

Telephone

Approval Number

Period of employment From: To:

Domain of employment

☐ Planning	☐ Engineering	☐ Technical records
☐ Store department	☐ Purchasing	

Mechanics/Technician

☐ Line Maintenance	☐ Base Maintenance	☐ Component Maintenance
☐ Servicing	☐ Removal/installation	☐ Testing/inspection
☐ Scheduled Maintenance	☐ Inspection	☐ Repair
☐ Trouble-shooting	☐ Trouble-shooting	☐ Overhaul
	☐ Repair	☐ Re-treatment
		☐ Reassembly
A/C type	A/C type	Component type

Certifying Staff and support staff

☐ Cat. A	☐ Cat. B1	☐ Cat. B2	☐ Cat. C	☐ Component	☐ Other (e.g NDT)
A/C Type	A/C Type	A/C Type	A/C Type	Component Type	Specify

Certification privileges: Yes ☐ / No ☐

☐ Specialised services Speciality (NDT, composites, welding, etc.):

☐ Skilled personnel Speciality (sheet metal, structures, wireman, upholstery, etc.):

☐ Ground equipment operation

☐ Quality control ☐ Quality assurance ☐ Training

Total number of check boxes ticked: ☐

Details of employment

Training received from the contracting organisation

Date	Nature of training

Certified by:

Name: Date:

Position: Signature:

Contact details:

Advisory note: A copy of the present credential will be kept for at least 3 years from its issuance by the maintenance organisation.

GM1 145.A.42(a)(ii)

UNSERVICEABLE COMPONENTS

(a) The organisation should ensure the proper identification of any unserviceable components. The unserviceable status of the component should be clearly declared on a tag together with the component identification data and any information that is useful to define actions that are necessary to be taken. Such information should state, as applicable, in-service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected, exposure to adverse environmental conditions, and whether the component is installed on an aircraft that was involved in an accident or incident. Means should be provided to prevent unintentional separation of this tag from the component.

(b) Unserviceable components should typically undergo maintenance due to:

(1) expiry of the service life limit as defined in the aircraft maintenance programme;

(2) non-compliance with the applicable airworthiness directives and other continuing airworthiness requirements mandated by the Agency;

(3) absence of the necessary information to determine the airworthiness status or eligibility for installation;

(4) evidence of defects or malfunctions; or

(5) being installed on an aircraft that was involved in an incident or accident likely to affect the component’s serviceability.

GM1 145.A.42(b)(i) Components

INCOMING PHYSICAL INSPECTION

(a) To ensure that components, standard parts and materials are in satisfactory condition, the organisation should perform incoming physical inspections.

(b) The incoming physical inspection should be performed before the component is installed on the aircraft.

(c) The following list, although not exhaustive, contains typical checks to be performed:

(1) verify the general condition of the components and their packaging in relation to damages that could affect their integrity;

(2) verify that the shelf life of the component has not expired;

(3) verify that items are received in the appropriate package in respect of the type of the component: e.g. correct ATA 300 or electrostatic sensitive devices packaging, when necessary;

(4) verify that the component has all plugs and caps appropriately installed to prevent damage or internal contamination. Care should be taken when tape is used to cover electrical connections or fluid fittings/openings because adhesive residues can insulate electrical connections and contaminate hydraulic or fuel units.

(d) Items (fasteners, etc.) purchased in batches should be supplied in a package. The packaging should state the applicable specification/standard, part number, batch number, and the quantity of the items. The documentation that accompanies the material should contain the applicable specification / standard, part number, batch number, supplied quantity, and the manufacturing sources. If the material is acquired from different batches, acceptance documentation for each batch should be provided.

GM2 145.A.42(b)(i) Components

SUPPLIERS

A supplier could be any source that provides components, standard parts or materials to be used for maintenance. Possible sources could be: Part-145 organisations, Part 21 Subpart G organisations, operators, stockist, distributors, brokers, aircraft owners/lessees, etc.

GM3 145.A.42(b)(i) Components

SUPPLIER EVALUATION

(a) The following elements should be considered for the initial and recurrent evaluation of a supplier’s quality system to ensure that the component and/or material is supplied in satisfactory condition:

(1) availability of appropriate up-to-date regulations, specifications (such as component handling/storage data) and standards;

(2) standards and procedures for the training of personnel and competency assessment;

(3) procedure for shelf-life control;

(4) procedures for identifying the source from which the components and materials were received;

(6) purchasing procedures that identify documentation to accompany components and materials for subsequent use by approved Part-145 maintenance organisations;

(7) procedures for incoming inspection of components and materials;

(8) procedures for control of measuring equipment that provide for appropriate storage, usage, and for calibration when such equipment is required;

(9) procedures to ensure appropriate storage conditions for components and materials that are adequate to protect the components and materials from damage and/or deterioration. Such procedures should comply with the manufacturers' recommendations and relevant standards;

(10) procedures for adequate packing and shipping of components and materials to protect them from damage and deterioration, including procedures for proper shipping of dangerous goods (e.g. ICAO and ATA specifications);

(11) procedures for detecting and reporting suspected unapproved components

(12) procedures for handling unsalvageable components in accordance with applicable regulations and standards;

(13) procedures for batch splitting or redistribution of lots and handling of the relevant documents;

(14) procedures for notifying purchasers of any components that have been shipped and have later been identified as not conforming to the applicable technical data or standard;

(15) procedures for recall control to ensure that components and materials shipped can be traced and recalled if necessary;

(16) procedures for monitoring the effectiveness of the quality system; for detecting and reporting of suspected unapproved components;

(b) Suppliers which are certified to officially recognised standards that have a quality system that includes the elements specified in (a) may be acceptable; such standards include:

(1) EN/AS9120

(2) ASA-100;

(3) EASO 2012;

(4) FAA AC 00-56.

The use of such suppliers does not exempt the organisation from its obligations under 145.A.42 to ensure that supplied components and materials are in satisfactory condition and meet the applicable criteria of 145.A.42.

(c) Supplier evaluation may depend on different factors, such as the type of component, whether or not the supplier is the manufacturer of the component, the TC holder or a maintenance organisation, or even specific circumstances such as aircraft on ground. This evaluation may be limited to a questionnaire from the Part145 organisation to its suppliers, a desktop evaluation of the supplier's procedures or an on-site audit, if deemed necessary.

GM1 145.A.42(b)(ii) Components

INSTALLATION OF COMPONENTS

Components, standard parts and materials should only be installed when they are specified in the applicable maintenance data. This could include parts catalogue (IPC), service bulletins (SBs), aircraft maintenance manual (AMM), component maintenance manual (CMM) etc. So, the installation of a component, standard part or material can only be done after checking the applicable maintenance data.

This check should ensure that the part number, modification status, limitations, etc., of the component, standard part or material are the ones specified in the applicable maintenance data of the particular aircraft or component (i.e. IPC, SB, AMM, CMM, etc.) where the component, standard part or material is going to be installed. The organisation should establish procedures to ensure that this check is performed before installation.

GM1 145.A.42(c)(i) Components

MUTILATION OF COMPONENTS

(a) Mutilation should be accomplished in such a manner that the components become permanently unusable for their originally intended use. Mutilated components should not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by replating, shortening and rethreading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.

(b) Mutilation may be accomplished by one or a combination of the following procedures:

(1) grinding;

(2) burning;

(3) removal of a major lug or other integral feature;

(4) permanent distortion of parts;

(5) cutting a hole with cutting torch or saw;

(6) melting;

(7) sawing into many small pieces; and

(8) any other method accepted by the competent authority.

(c) The following procedures are examples of mutilation that are often less successful because they may not be consistently effective:

(1) stamping or vibro-etching;

(2) spraying with paint;

(3) small distortions, incisions, or hammer marks;

(4) identification by tags or markings;

(5) drilling small holes; and

(6) sawing in two pieces only.

GM 145.A.48 Performance of maintenance

AUTHORISED PERSON

An 'authorised person' is a person formally authorised by the maintenance organisation to perform or supervise a maintenance task. An 'authorised person' is not necessarily 'certifying staff'.

SIGN-OFF

A 'sign-off' is a statement issued by the 'authorised person' which indicates that the task or group of tasks has been correctly performed. A 'sign-off' relates to one step in the maintenance process and is, therefore, different to a certificate of release to service.

GM1 145.A.48(c) Performance of maintenance

CRITICAL DESIGN CONFIGURATION CONTROL LIMITATIONS (CDCCL)

The organisation should ensure that when performing maintenance the CDCCL are not compromised. The organisation should pay particular attention to possible adverse effects of any change to the wiring of the aircraft, even of a change not specifically associated with the fuel tank system. For example, it should be common practice to identify the segregation of fuel gauging system wiring as a CDCCL. The organisation can prevent adverse effects associated with changes to the wiring by standardising maintenance practices through training, and not through periodic inspections. Training should be provided to avoid indiscriminate routing and splicing of wires and to provide comprehensive knowledge of critical design features of fuel tank systems that would be controlled by a CDCCL. Guidance on the training of maintenance organisation personnel is provided in Appendix IV to AMC5 145.A.30(e).

GM1 145.A.48(c)(3) Performance of maintenance

To minimise the risk of errors during maintenance and the risk of errors being repeated in identical maintenance tasks, the organisation may implement:

- procedures to plan the performance by different persons of the same task in different systems;
- independent inspection or re-inspection procedures.

GM 145.A.50(d) CAAB Form 1 Block 12 'Remarks'

Examples of data to be entered in this block as appropriate:

- Maintenance documentation used, including the revision status, for all work performed and not limited to the entry made in block 11.
- A statement such as 'in accordance with the CMM' is not acceptable.
- NDT methods with appropriate documentation used when relevant.
- Compliance with airworthiness directives or service bulletins.
- Repairs carried out.
- Modifications carried out.
- Replacement parts installed.
- Life-limited parts status.
- Shelf life limitations.
- Deviations from the customer work order.

- Release statements to satisfy a foreign Civil Aviation Authority maintenance requirement.
- Information needed to support shipment with shortages or re-assembly after delivery.
- References to aid traceability, such as batch numbers.

GM 145.A.55(a) Maintenance records

1. Properly executed and retained records provide owners, operators and maintenance personnel with information essential in controlling unscheduled and scheduled maintenance, and trouble shooting to eliminate the need for re-inspection and rework to establish airworthiness.

   The prime objective is to have secure and easily retrievable records with comprehensive and legible contents. The aircraft record should contain basic details of all serialised aircraft components and all other significant aircraft components installed, to ensure traceability to such installed aircraft component documentation and associated maintenance data as specified in 145.A.45.
2. Some gas turbine engines are assembled from modules and a true total time in service for a total engine is not kept. When owners and operators wish to take advantage of the modular design, then total time in service and maintenance records for each module is to be maintained. The maintenance records as specified are to be kept with the module and should show compliance with any mandatory requirements pertaining to that module.
3. Reconstruction of lost or destroyed records can be done by reference to other records which reflect the time in service, research of records maintained by repair facilities and reference to records maintained by individual mechanics etc. When these things have been done and the record is still incomplete, the owner/operator may make a statement in the new record describing the loss and establishing the time in service based on the research and the best estimate of time in service. The reconstructed records should be submitted to the CAAB for acceptance.

   Note: Additional maintenance may be required.
4. The maintenance record can be either a paper or computer system or any combination of both.
5. Paper systems should use robust material which can withstand normal handling and filing. The record should remain legible throughout the required retention period.

6 Computer systems may be used to control maintenance and/or record details of maintenance work carried out. Computer systems used for maintenance should have at least one backup system which should be updated at least within 24 hours of any maintenance. Each terminal is required to contain programme safeguards against the ability of unauthorised personnel to alter the database.

GM 145.A.60(a) Occurrence reporting

The organisation responsible for the design is normally the TC holder of the aircraft, engine or propeller and/or if known the STC holder.

GM 145.A.60(b) Occurrence reporting

The following examples can be considered occurrence reporting in a Part 145 environment but should not be considered as the only case of occurrence reporting:

a) A defect detected on the aircraft during a maintenance inspection (scheduled or non-scheduled) which may have its origin in a maintenance or design error.

- During routine inspection: Damage found to number 4 engine inlet cowl acoustic lining
- During routine inspection: Rivets found loose on vertical stabiliser
- Found during after flight inspection: Excessive play in tail rotor blade pitch link bearing at the attachment to the tail rotor blade horn due to bearing migration.

b) A deviation of maintenance procedure (company manual or manufacturer documentation)

- Safety pin being left installed in a component, such as an escape slide
- Alleged inappropriate repair carried out with damage outside of SRM limits.
- Torch left in intake causing damage to inlet cowl during engine start
- Part Number of replaced part not properly recorded

GM 145.A.60(c) Occurrence reporting

Each report should contain at least the following information:

(i) Organisation name and approval reference.

(ii) Information necessary to identify the subject aircraft and / or component.

(iii) Date and time relative to any life or overhaul limitation in terms of flying hours/cycles/landings etc. as appropriate.

(iv) Details of the condition as required by 145.A.60 (b).

(v) Any other relevant information found during the evaluation or rectification of the condition.

GM145.A.65(b)(1) Safety and quality policy, maintenance procedures and quality system

Appendix XI to AMC M.A.708(c) provides guidance on the elements that need to be considered for the maintenance contract between the CAMO and the maintenance organisation. The Part-145 organisation should take into account these elements to ensure that a clear contract or work order has been concluded before providing maintenance services.

GM 145.A.65(c)(1) Safety and quality policy, maintenance procedures and quality system

1. The purpose of this GM is to give guidance on just one acceptable working audit plan to meet part of the needs of 145.A.65 (c) 1. There is any number of other acceptable working audit plans.
2. The proposed plan lists the subject matter that should be covered by the audit and attempts to indicate applicability in the various types of workshops and aircraft facilities. The list should therefore be tailored for the particular situation and more than one list may be necessary. Each list should be shown against a timetable to indicate when the particular item is scheduled for audit and when the audit was completed.

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
			Workshop	Workshop	Workshop
145.A.25		Yes	Yes	Yes	Yes
145.A.30		Yes	Yes	Yes	Yes

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
145.A.35		Yes	Yes	Yes	Yes
145.A.40		Yes	Yes	Yes	Yes
145.A.42		Yes	Yes	Yes	Yes
145.A.45		Yes	Yes	Yes	Yes
145.A.47		Yes	Yes	Yes	Yes
145.A.48		Yes	Yes	If appl.	If appl.
145.A.50		Yes	Yes	Yes	Yes
145.A.55		Yes	Yes	Yes	Yes
145.A.60		Yes	Yes	Yes	Yes
145.A.65		Yes	Yes	Yes	Yes
2.1	MOE	Yes	Yes	Yes	Yes
2.2	MOE	Yes	Yes	Yes	Yes
2.3	MOE	Yes	Yes	Yes	Yes
2.4	MOE	Yes	Yes	Yes	Yes
2.5	MOE	Yes	Yes	Yes	Yes
2.6	MOE	Yes	Yes	Yes	Yes
2.7	MOE	Yes	Yes	Yes	Yes
2.8	MOE	Yes	Yes	Yes	Yes
2.9	MOE	Yes	Yes	Yes	Yes
2.10	MOE	Yes	No	No	No
2.11	MOE	Yes	Yes	Yes	Yes
2.12	MOE	Yes	Yes	Yes	Yes
2.13	MOE	Yes	Yes	Yes	Yes
2.14	MOE	Yes	Yes	Yes	Yes
2.15	MOE	Yes	No	No	No
2.16	MOE	Yes	Yes	Yes	Yes
2.17	MOE	if appl	if appl	if appl	if appl
2.18	MOE	Yes	Yes	Yes	Yes
2.19	MOE	Yes	Yes	Yes	Yes
2.20	MOE	Yes	Yes	Yes	Yes
2.21	MOE	if appl	if appl	if appl	if appl
2.22	MOE	Yes	Yes	No	No
2.23	MOE	Yes	No	No	No
2.24	MOE	Yes	Yes	Yes	Yes

PARA	Comment	HANGAR	ENGINE	MECH	AVIONIC
2.25	MOE	Yes	Yes	Yes	Yes
2.26	MOE	Yes	Yes	Yes	Yes
2.27	MOE	Yes	Yes	Yes	Yes
2.28	MOE	Yes	Yes	Yes	Yes
L2.1	MOE	if appl	No	No	No
L2.2	MOE	if appl	No	No	No
L2.3	MOE	if appl	No	No	No
L2.4	MOE	if appl	No	No	No
L2.5	MOE	if appl	No	No	No
L2.6	MOE	if appl	No	No	No
L2.7	MOE	if appl	No	No	No
3.9	MOE	if appl	if appl	if appl	if appl
3.10	MOE	if appl	if appl	if appl	if appl
3.11	MOE	if appl	if appl	if appl	No
3.12	MOE	Yes	Yes	No	No
3.13	MOE	Yes	Yes	Yes	Yes
3.14	MOE	Yes	Yes	Yes	Yes
145.A.70		Yes	Yes	Yes	Yes
145.A.75		Yes	Yes	Yes	Yes
145.A.80		Yes	Yes	Yes	Yes
145.A.85		Yes	Yes	Yes	Yes
145.A.95		if appl	if appl	if appl	if appl
M.A. 201(C)		Yes	Yes	Yes	Yes
M.A. 403(b)		Yes	No	No	No

Note 1: ‘if appl’ means if applicable or relevant.

Note 2: In the line station case all line stations should be audited at the frequency agreed with the CAAB within the limits of AMC 145.A.65(c) (1)

GM 145.A.70(a) Maintenance organisation exposition

1. The purpose of the maintenance organisation exposition (MOE) is to set forth the procedures, means and methods of the organisation.
2. Compliance with its contents will assure compliance with the requirements of Part-145, which is a prerequisite to obtaining and retaining a maintenance organisation approval certificate.
3. 145.A.70 (a)(1) to (a)(11) constitutes the ‘management’ part of the MOE and therefore could be produced as one document and made available to the person(s) specified under 145.A.30

(b) who should be reasonably familiar with its contents. 145.A.70(a) (6) list of certifying staff and B1 and B2 support staff may be produced as a separate document.

4. 145.A.70(a) (12) constitutes the working procedures of the organisation and therefore as stated in the requirement may be produced as any number of separate procedures manuals. It should be remembered that these documents should be cross-referenced from the management MOE.

5. Personnel are expected to be familiar with those parts of the manuals that are relevant to the maintenance work they carry out.

6. The organisation should specify in the MOE who should amend the manual particularly in the case where there are several parts.

7. The quality manager should be responsible for monitoring the amendment of the MOE, unless otherwise agreed by the CAAB, including associated procedures manuals and submission of the proposed amendments to the CAAB. However the CAAB may agree via a procedure stated in the amendment section of the MOE that some defined class of amendments may be incorporated without prior approval by the CAAB.

8. The MOE should cover four main parts:

   (a) The management MOE covering the parts specified earlier.

   (b) The maintenance procedures covering all aspects of how aircraft components may be accepted from outside sources and how aircraft will be maintained to the required standard.

   (c) The quality system procedures including the methods of qualifying mechanics, inspection, certifying staff and quality audit personnel.

   (d) Contracting operator procedures and paperwork.

9. The accountable manager's exposition statement as specified under 145.A.70 (a)(1) should embrace the intent of the following paragraph and in fact this statement may be used without amendment. Any modification to the statement should not alter the intent.

   This exposition and any associated referenced manuals define the organisation and procedures upon which the ANO Part-145 approval is based as required by 145.A.70. These procedures are approved by the undersigned and should be complied with, as applicable, when work orders are being progressed under the terms of the Part-145 approval.

   It is accepted that these procedures do not override the necessity of complying with any new or amended regulation published by the CAAB from time to time where these new or amended regulations are in conflict with these procedures.

   It is understood that the CAAB will approve this organisation whilst the CAAB is satisfied that the procedures are being followed and work standards maintained. It is further understood that the CAAB reserves the right to suspend, limit or revoke the approval of the organisation if the CAAB has evidence that procedures are not followed or standards not upheld.

   Signed .....

   Dated .....

   Accountable Manager and..... (quote position).....

   For and on behalf of..... (quote organisation's name).....

   Whenever the accountable manager changes, it is important to ensure that the new

accountable manager signs the paragraph 9 statement at the earliest opportunity. Failure to carry out this action could invalidate the Part-145 approval.

10. When an organisation is approved against any other Part containing a requirement for an exposition, a supplement covering the differences will suffice to meet the requirements except that the supplement should have an index showing where those parts missing from the supplement are covered.

GM to Appendix I to Part-145 Use of the CAAB Form 1 for Maintenance

CAAB Form 1 Block 12 'Remarks'

Examples of data to be entered in this block as appropriate:-

- Maintenance documentation used, including the revision status, for all work performed and not limited to the entry made in block 11.
- A statement such as 'in accordance with the CMM' is not acceptable.
- NDT methods with appropriate documentation used when relevant.
- Compliance with airworthiness directives or service bulletins.
- Repairs carried out.
- Modifications carried out.
- Replacement parts installed.
- Life-limited parts status.
- Shelf life limitations.
- Deviations from the customer work order.
- Release statements to satisfy a foreign Civil Aviation Authority maintenance requirement.
- Information needed to support shipment with shortages or re-assembly after delivery.
- References to aid traceability, such as batch numbers."