MAINTENANCE ORGANISATION EXPOSITION

MAINTENANCE ORGANISATION EXPOSITION (MOE)

FOR

CIVIL AVIATION AUTHORITY OF MALAYSIA

AMO/2016/02

Document Reference	**GAM/CAAM/MOE**
Issue Number	**4**
Revision Number	**0**
Date	**10 Jun 2024**
Copy Number	**01**
Holder	**Civil Aviation Authority of Malaysia (CAAM)**

Address: Galaxy Aerospace (M) Sdn Bhd
Suite 11-14, Helicopter Centre,
Malaysia International Aerospace Centre,
Sultan Abdul Aziz Shah Airport
47200, Subang, Selangor Darul Ehsan.
Malaysia

Telephone no.: +603 7734 7226
Fax.: +603 7734 7526

MAINTENANCE ORGANISATION EXPOSITION

FOREWORD

This Maintenance Organisation Exposition defines the organisation and procedures upon which the Civil Aviation Authority of Malaysia (CAAM) approval of GALAXY AEROSPACE (M) SDN. BHD. – MAINTENANCE ORGANISATION (GAM-AMO) under CAAM CAD 8601 is based.

These procedures shall be complied with, as applicable, in order to ensure that all the aircraft and component maintenance activities by Galaxy Aerospace (M) Sdn. Bhd. is carried out on time and to an approved standard.

The exposition shall not override the necessity of complying with any new or amended regulation published by the CAAM from time to time where these new or amended regulations conflict with these procedures and shall be reviewed and updated as required.

MOE has been structured for ease of use, as follows

a)	Part 0	–	Introduction
b)	Part 1	–	Management
c)	Part 2	–	Maintenance Procedures
d)	Part L2	–	Additional Line Maintenance Procedures
e)	Part 3	–	Quality System Procedures
f)	Part 4	–	Contracted Operators
g)	Part 5	–	Appendices

MAINTENANCE ORGANISATION EXPOSITION

RECORD OF REVISIONS

ISSUE NO	REV. NO	REVISION DATE
1	0	1 Feb 2016
1	1	1 Sep 2017
1	2	2 Jan 2018
1	3	11 Jun 2018
1	4	10 Jul 2018
1	5	12 Nov 2018
1	6	2 May 2019
1	7	14 Jun 2019
1	8	24 Jul 2019
1	9	19 Oct 2019
1	10	18 Dec 2019
1	11	14 Jan 2020
2	0	18 Mar 2020
2	01	6 Aug 2020
2	02	22 Oct 2020
2	03	13 Nov 2020
2	04	4 Apr 2021
3	0	15 Jul 2022
3	1	26 Oct 2022
3	2	14 Nov 2023
4	0	10 Jun 2024

ISSUE NO	REV. NO	REVISION DATE

MAINTENANCE ORGANISATION EXPOSITION

REVISION HISTORY RECORDS

ISSUE NO	REV. NO	REV. DATE	DETAILS OF AMENDMENTS
4	0	10 June 2024	All - change of company logo Part 0.7 – Abbreviations amendment Part 1.3 – Inclusion of Deputy Nominated Personnel in the list of management personnel Part 1.5 – Amendment of organization chart Part 1.7 – Amendment of GAM manpower resources Part 1.8 – Amendment of GAM MIAT layout plan Part 1.11 – Addition of additional 1st and 3rd level documents and approval process Part 2.1, 2.2 & 2.3 – Position change from "Warehouse and logistic" to "Supply Chain" Part 2.4 – Wording change i.e Serviceable label & Unserviceable tag Part 2.5 – Add new para for personnel precision tool/equipment policy Part 2.6 – To cross refer to EPM Part 2.15 – To clarify the part 2.15.3 for pre assessment check for aircraft not under GAM CAMO Part 2.16 – to clarify the person signing the maintenance release Part 2.28 – Clarification of GAM & CAMO Coordination meeting during base maintenance and modification Part 3.4 – Addition of component Category for W1.3 – Lithium ion battery, Application process of approval holder, training requirement of approval holder, coordination of training and policy for approval limitation, suspension and revocation. Part 3.5 – Approval holder continuation training record policy

MAINTENANCE ORGANISATION EXPOSITION

REVISION HISTORY RECORDS

ISSUE NO	REV. NO	REV. DATE	DETAILS OF AMENDMENTS
4	0	10 June 2024	Part 3.7 – Amendment of store inspector training requirement and assessment policy Part 3.13 – Amendment of Human Factor Syllabus control Part 3.15 – Amendment of OJT task section Part 3.16 – Inclusion of additional supporting document for submission of application to CAAM and addition of minimum experience requirement for first endorsement of Cat C application. Part 5.5 – Amendment of company approval category W1.3 – Lithium ion battery and clarification of Base Maintenance Release
3	2	14 Nov 2023	All – Wording "Operator/Owner/CAMO" change to "CAMO" throughout the manual. Part 1.4 - Inclusion of Qualification, Training & Experience into Part 1.4.2 for QAM & Part 1.4.3 for Engineering Manager Part 1.7 – Amendment of GAM manpower resource as of 14 Nov 2023 Part 1.8 – Inclusion of additional Line Maintenance location at PLPGU Ipoh for EC120B & AW139 and amendment of layout plan of GAM AMO location Part 1.9 – Amendment of part 1.9.4 Specialized services other than D1 NDT Part 2.5 – Inclusion part 2.5.8 In-house calibration into MOE Part 2.13 – Inclusion of policy for returned documentation from CAMO to AMO for amendment/correction Part 2.27 – Amendment of part 2.27 for notification of maintenance data inaccuracy to CAMO

MAINTENANCE ORGANISATION EXPOSITION

REVISION HISTORY RECORDS

ISSUE NO	REV. NO	REV. DATE	DETAILS OF AMENDMENTS
3	1	26 Oct 2022	Part 1.8 – Inclusion of AW139 line maintenance facility at Polis Gerakan Udara, Pangkalan Sarawak. Part 2.2 Para 2.2.4.1 (2) – Updated sentence ""These parts shall be done in accordance with EPM 3-09 (Incoming Inspection for Components/Materials / Standard Parts Received from External Sources)." Part 2.13 Para 2.13.3 (4) – To add "…enter "-" in the technician column and…" Part 2.18 Para 2.18.1(2) – To add "(d) CAMO". Part 3.4 Para 3.4.5(7) – To replace form GAM/Q-014 to GAM/Q-079.
3	0	15 Jul 2022	Total revision as per CAD 8601 requirements.

MAINTENANCE ORGANISATION EXPOSITION

LIST OF EFFECTIVE PAGES

MOE Part	MOE Subpart	Page No.	Issue No.	Revision No.	Revision Date
0	0.0	1 to 1	4	0	10 Jun 2024
	0.1	1 to 1	4	0	10 Jun 2024
	0.2	1 to 1	4	0	10 Jun 2024
	0.3	1 to 3	4	0	10 Jun 2024
	0.4	1 to 4	4	0	10 Jun 2024
	0.5	1 to 4	4	0	10 Jun 2024
	0.6	1 to 1	4	0	10 Jun 2024
	0.7	1 to 2	4	0	10 Jun 2024
1	1.1	1 to 1	4	0	10 Jun 2024
	1.2	1 to 1	4	0	10 Jun 2024
	1.3	1 to 1	4	0	10 Jun 2024
	1.4	1 to 6	4	0	10 Jun 2024
	1.5	1 to 2	4	0	10 Jun 2024
	1.6	1 to 1	4	0	10 Jun 2024
	1.7	1 to 2	4	0	10 Jun 2024
	1.8	1 to 28	4	0	10 Jun 2024
	1.9	1 to 4	4	0	10 Jun 2024
	1.10	1 to 2	4	0	10 Jun 2024
	1.11	1 to 5	4	0	10 Jun 2024

Quality Assurance Manager Approval:

OMAR BIN AHMAD
Quality Assurance Manager
Galaxy Aerospace (M) Sdn. Bhd
(1040262-D)

Date: 03 JUL 2024

Civil Aviation Authority of Malaysia Approval:

MOHAMAD SOFIAN BIN BIYAMIN
Penolong Pengarah Kanan Airworthiness
Bahagian Airworthiness
Pihak Berkuasa Penerbangan Awam
MALAYSIA

Date: 17 JUL 2024

MAINTENANCE ORGANISATION EXPOSITION

MOE Part	MOE Subpart	Page No.	Issue No.	Revision No.	Revision Date
2	2.1	1 to 3	4	0	10 Jun 2024
	2.2	1 to 6	4	0	10 Jun 2024
	2.3	1 to 3	4	0	10 Jun 2024
	2.4	1 to 2	4	0	10 Jun 2024
	2.5	1 to 4	4	0	10 Jun 2024
	2.6	1 to 3	4	0	10 Jun 2024
	2.7	1 to 2	4	0	10 Jun 2024
	2.8	1 to 2	4	0	10 Jun 2024
	2.9	1 to 4	4	0	10 Jun 2024
	2.10	1 to 1	4	0	10 Jun 2024
	2.11	1 to 1	4	0	10 Jun 2024
	2.12	1 to 1	4	0	10 Jun 2024
	2.13	1 to 4	4	0	10 Jun 2024
	2.14	1 to 2	4	0	10 Jun 2024
	2.15	1 to 2	4	0	10 Jun 2024
	2.16	1 to 9	4	0	10 Jun 2024
	2.17	1 to 1	4	0	10 Jun 2024
	2.18	1 to 2	4	0	10 Jun 2024
	2.19	1 to 2	4	0	10 Jun 2024
	2.20	1 to 1	4	0	10 Jun 2024
	2.21	1 to 1	4	0	10 Jun 2024

Quality Assurance Manager Approval:

Date: 03 JUL 2024

OMAR BIN AHMAD
Quality Assurance Manager
Galaxy Aerospace (M) Sdn. Bhd
(1040262-D)

Civil Aviation Authority of Malaysia Approval:

Date: 17 JUL 2024

MOHAMAD SOFIAN BIN BIYAMIN
Penolong Pengarah Kanan Airworthiness
Bahagian Airworthiness
Pihak Berkuasa Penerbangan Awam
MALAYSIA

MAINTENANCE ORGANISATION EXPOSITION

MOE Part	MOE Subpart	Page No.	Issue No.	Revision No.	Revision Date
	2.22	1 to 3	4	0	10 Jun 2024
	2.23	1 to 4	4	0	10 Jun 2024
	2.24	1 to 6	4	0	10 Jun 2024
	2.25	1 to 3	4	0	10 Jun 2024
	2.26	1 to 1	4	0	10 Jun 2024
	2.27	1 to 2	4	0	10 Jun 2024
	2.28	1 to 3	4	0	10 Jun 2024
L2	L2.1	1 to 2	4	0	10 Jun 2024
	L2.2	1 to 1	4	0	10 Jun 2024
	L2.3	1 to 1	4	0	10 Jun 2024
	L2.4	1 to 1	4	0	10 Jun 2024
	L2.5	1 to 1	4	0	10 Jun 2024
	L2.6	1 to 1	4	0	10 Jun 2024
	L2.7	1 to 1	4	0	10 Jun 2024
3	3.1	1 to 5	4	0	10 Jun 2024
	3.2	1 to 2	4	0	10 Jun 2024
	3.3	1 to 2	4	0	10 Jun 2024
	3.4	1 to 12	4	0	10 Jun 2024
	3.5	1 to 2	4	0	10 Jun 2024
	3.6	1 to 1	4	0	10 Jun 2024
	3.7	1 to 2	4	0	10 Jun 2024

Quality Assurance Manager Approval:	Civil Aviation Authority of Malaysia Approval:
OMAR BIN AHMAD Quality Assurance Manager Galaxy Aerospace (M) Sdn. Bhd (1040262-D) Date: 03 JUL 2024	MOHAMAD SOFIAN BIN BIYAMIN Penolong Pengarah Kanan Airworthiness Bahagian Airworthiness Pihak Berkuasa Penerbangan Awam MALAYSIA Date: 17 JUL 2024

MAINTENANCE ORGANISATION EXPOSITION

MOE Part	MOE Subpart	Page No.	Issue No.	Revision No.	Revision Date
	3.8	1 to 2	4	0	10 Jun 2024
	3.9	1 to 1	4	0	10 Jun 2024
	3.10	1 to 2	4	0	10 Jun 2024
	3.11	1 to 1	4	0	10 Jun 2024
	3.12	1 to 3	4	0	10 Jun 2024
	3.13	1 to 3	4	0	10 Jun 2024
	3.14	1 to 6	4	0	10 Jun 2024
	3.15	1 to 4	4	0	10 Jun 2024
	3.16	1 to 2	4	0	10 Jun 2024
	3.17	1 to 1	4	0	10 Jun 2024
4	4.1	1 to 1	4	0	10 Jun 2024
	4.2	1 to 1	4	0	10 Jun 2024
	4.3	1 to 1	4	0	10 Jun 2024
5	5.1	1 to 1	4	0	10 Jun 2024
	5.2	1 to 1	4	0	10 Jun 2024
	5.3	1 to 1	4	0	10 Jun 2024
	5.4	1 to 1	4	0	10 Jun 2024
	5.5	1 to 3	4	0	10 Jun 2024

Quality Assurance Manager Approval:	Civil Aviation Authority of Malaysia Approval:
OMAR BIN AHMAD Quality Assurance Manager Galaxy Aerospace (M) Sdn. Bhd (1040262-D)	Airworthiness CAAM MOHAMAD SOFIAN BIN BIYAMIN Penolong Pengarah Kanan Airworthiness Bahagian Airworthiness Pihak Berkuasa Penerbangan Awam MALAYSIA
Date: 03 JUL 2024	Date: 17 JUL 2024

MAINTENANCE ORGANISATION EXPOSITION

TABLE OF CONTENTS

MAINTENANCE ORGANISATION EXPOSITION

PART 2 – MAINTENANCE PROCEDURES

Part 2.1	Supplier Evaluation Procedure and Sub-Contract Control Procedures
Part 2.2	Acceptance/Inspection of Aircraft Components and Materials from Outside Contractors
Part 2.3	Storage, Tagging and Release of Aircraft Components and Materials to Aircraft Maintenance
Part 2.4	Acceptance of Tools and Equipment
Part 2.5	Calibration of Tools and Equipment
Part 2.6	Use of Tooling and Equipment by Staff (Including Alternate Tools)
Part 2.7	Cleanliness Standard of Maintenance Facilities
Part 2.8	Maintenance Instruction and Relationship to Aircraft/Aircraft Component Manufacturer's Instruction Including Updating and Availability to Staff
Part 2.9	Repair Procedure
Part 2.10	Aircraft Maintenance Programme Compliance
Part 2.11	Airworthiness Directive Procedure
Part 2.12	Optional Modification Procedure
Part 2.13	Maintenance Documentation in Use and its Completion
Part 2.14	Technical Record Control
Part 2.15	Rectification of Defects Arising During Base Maintenance
Part 2.16	Release to Service Procedure
Part 2.17	Records for the Operator
Part 2.18	Reporting of Defects to the Competent Authority/Operator/ Manufacturer
Part 2.19	Return of Defective Aircraft Components to Store
Part 2.20	Defective Components to Outside Contractors

MAINTENANCE ORGANISATION EXPOSITION

DISTRIBUTION LISTS

Copy Number	Holder	Format
01	Civil Aviation Authority of Malaysia	Hard Copy
02	Quality Assurance Manager (MASTER COPY)	Hard Copy
-	Accountable Manager, Engineering Manager and GAM employees	Soft Copy*

* Soft copy - available via Galaxy Aerospace Management System (GAMS) portal.

MAINTENANCE ORGANISATION EXPOSITION

ABBREVIATIONS

ACRONYM	DEFINITIONS
AAT	Airworthiness Approval Tag
A/C	Aircraft
AD	Airworthiness Directive
AJL	Aircraft Journey Log
AMM	Aircraft Maintenance Manual
AMO	Approved Maintenance Organisation
ARC	Authorised Release Certificate
ATA	Air Transport Association
ATL	Aircraft Technical Log
BMR	Base Maintenance Release
CAAM	Civil Aviation Authority of Malaysia
CAD	Civil Aviation Directives
CAGM	Civil Aviation Guidance Materials
CAMM	Continuing Airworthiness Management Manager
CAMO	Continuing Airworthiness Management Organisation
CDL	Configuration Deviation List
CMM	Component Maintenance Manual
CRS	Certificate of Release to Service
C/S	Certifying Staff
CC/S	Component Certifying Staff
DOA	Design Organisation Approval
EASA	European Union Aviation Safety Agency
EIC	Engineer-In-Charge
EM	Engineering Manager
EPM	Engineering Procedure Manual
ESD	Electrostatic Sensitive Device
FAA	Federal Aviation Administration
FH	Flight Hour
GAM	Galaxy Aerospace (M) Sdn Bhd

GSE	Ground Support Equipment
ICAO	International Civil Aviation Organisation
ISDR	In-service Difficulty report
LAE	Licence Aircraft Engineer
LEP	List of Effective Pages
MEL	Minimum Equipment List
MOC	Management of Change
MOE	Maintenance Organisation Exposition
MOR	Mandatory Occurrence Report
MRO	Maintenance Repair Organisation
MSN	Manufacturer Serial Number
NAA	National Aviation Authority
N/A	Not Applicable
NCR	Non-Compliance Report
NDT	Non-Destructive Testing
OEM	Original Equipment Manufacturer
OJT	On-Job Training
PMA	Parts Manufacturing Approval
PN	Part Number
PPC	Production Planner and Controller
QA	Quality Assurance
QAM	Quality Assurance Manager
QPM	Quality Procedure Manual
QAE	Quality Assurance Executive
QAN	Quality Assurance Notice
QAP	Quality Assurance Personnel
SB	Service Bulletin
SMI	Scheduled Maintenance Inspection
TCAA	Transport Canada Civil Aviation

MAINTENANCE ORGANISATION EXPOSITION

CORPORATE COMMITMENT BY THE ACCOUNTABLE MANAGER

I, the Accountable Manager have the corporate authority to ensure that all maintenance services required by the customer can be financed and provided to the standard required and that all necessary resources are available to enable compliance with this exposition.

I will establish and promote policies for safety management and quality systems for this AMO and its employees in accordance with this exposition.

This exposition and any associated referenced manuals define the organisation and procedures upon which the Civil Aviation Authority of Malaysia (CAAM) Part-145 approval is based on the requirements in Civil Aviation Directive, CAD 8601.

The procedures stated in this exposition are approved by me. They must be complied with at all times, including when work/orders are being progressed under the term of approval.

The procedures and guidelines laid down in this manual do not override the requirement for compliance to the Malaysian Civil Aviation Regulations (MCAR) and Civil Aviation Directives (CAD) for the time being in force, or any new or amended requirements as published by the CAAM from time to time.

It is understood that the CAAM will approve this organisation whilst the CAAM is satisfied that the procedures are being followed and work standards maintained.

It is further understood that the CAAM reserves the right to suspend, limit or revoke the Part-145 approval of the organisation if the CAAM has evidence that procedures are not followed, or standards not upheld.

Signed : .....

Date : 10 JUN 2024

Dato' Shamsul Kamar bin Samsudin
Accountable Manager
Galaxy Aerospace (M) Sdn. Bhd

MAINTENANCE ORGANISATION EXPOSITION

QUALITY AND SAFETY POLICY

Safety is the first priority in all our activities. We are committed to implementing, developing and improving strategies, management systems and processes to ensure that all our aviation activities uphold the highest level of safety performance and meet national and international standards.

GAM objective commitment is to provide and maintain a healthy and safe work environment for all employees and all other person on site.

In order to achieve the objectives, GAM will assure that the following is well documented, implemented and available at all levels of the organization:

1) Apply human factors principle in all maintenance activities.

2) Encourage personnel to report maintenance related errors/incident which may impair the safety and airworthiness of the personnel and aircraft/aircraft parts.

3) Recognise safety as a prime consideration at all times for personnel.

4) Recognise that compliance with procedures, quality standards, safety standards and regulations is the duty of personnel.

5) Recognise the need for all personnel to cooperate with the Quality Auditors.

6) Ensure that safety standards are not reduced by commercial imperatives.

7) Commitment by all staff to carry out correct maintenance at the first attempt. (Do it right the first time)

8) Train the whole GAM staff to be aware of human factors in both an initial training and consequent continuation training programme.

9) Adequate resources in terms of personnel, equipment, tools, and materials are available at all times.

MAINTENANCE ORGANISATION EXPOSITION

MANAGEMENT PERSONNEL

1.3.1 List of Management Personnel

Management personnel approved under CAAM Part-145 Approved Maintenance Organisation.

Position	Nominated Personnel	Deputy Nominated Personnel
Accountable Manager	Dato' Shamsul Kamar bin Samsudin*	Ismail bin Sulaiman Chief Operating Officer (COO)
Quality Assurance Manager	Mr. Omar bin Ahmad *	Dato' Shamsul Kamar bin Samsudin
Engineering Manager	Mr Syafrul Yamani bin Safruddin *	Azilah bin Matap

***NOTE**: All nominated personnel with position marked * must complete CAAM form CAAM/AW/0104-00 (CAAM form 4 – Details of Management Personnel) and be approved by CAAM.*

DUTIES AND RESPONSIBILITIES OF MANAGEMENT PERSONNEL

1.4.1 Accountable Manager

A. Designation

Managing Director (Accountable Manager)

B. Immediate Superior

Board of Directors

C. Duties and Responsibilities

1. Responsible for ensuring that maintenance carried out by the approved organisation meets the standards required by CAAM.
2. Responsible for establishing and promoting the safety and quality policy.
3. Responsible for nominating the management staff.
4. Responsible for ensuring that the necessary finance, manpower resources and facilities are available to enable the company to perform the maintenance to which it is committed for contracted operators and any additional work which may be undertaken.
5. Responsible for the supervision of the progress of the corrective actions/review of the overall results in terms of quality.
6. Responsible for ensuring the competence of all personnel including management personnel has been assessed.
7. Responsible for ensuring that any charges are paid, as prescribed by CAAM i.a.w the Civil Aviation (Fees And Charges) Regulations 2016.
8. Responsible to return the approval to the CAAM in case of surrender or revocation.

In the case of lengthy absence, the regulatory duties and responsibilities will be delegated to the nominated person after the Management of Change is raised and approved. However, such delegations do not relieve Accountable Manager of the overall responsibility.

1.4.2 Quality Assurance Manager (QAM)

A. Designation

Quality Assurance Manager

B. Immediate Superior

Managing Director (Accountable Manager)

C. Qualification, Training & Experience

1. Minimum bachelor degree in any related field or CAAM License Aircraft Engineer
2. More than 10 years' experience in Aviation or minimum 5 years in Quality Management
3. Comprehensive knowledge of the CAAM Regulations, CAD 8601 and other regulation standards relating to the matters for which he or she is responsible
4. Submitted the CAAM Form 4 and accepted by CAAM.

D. Duties and Responsibilities

1. The Quality Assurance Manager is responsible for establishing an independent quality assurance system to monitor compliance of the CAD 8601 requirements.

2. He/she shall have direct access to the Accountable Manager on matters concerning the quality system.

3. Defines the human factors principles to be implemented within organisation.

4. Implementing a quality audit programme in which compliance with all maintenance procedures is reviewed at regular intervals, in relation to each type of aircraft (or component) maintained (including the management and completion of audits and production of audit reports).

5. Ensure that any observed non-compliances or poor standards are brought to the attention of the person concerned via his/her manager.

6. Responsible for follow up and closure of any non-conformance. He/she shall establish regular meetings with the Accountable Manager to appraise the effectiveness of the quality system. This will include details of any reported discrepancy not being adequately addressed by the

relevant person or in respect of any disagreement concerning the nature of a discrepancy.

7. Monitoring the amendment of organisation's procedures and standard practices (MOE, including the associated procedure(s)) and their compliance with the current revision of CAD 8601 and any other applicable regulatory requirement and guidance material issued by CAAM.

8. Submitting of MOE and any associated amendments to the competent authority for approval (which includes completion of and submission of CAAM Form 4 or equivalent).

9. Assessing suppliers of materials, standard parts, components and contracted organisations for satisfactory product quality in relation to the needs of the organisation.

10. Assessing sub-contractors working under the quality system and maintaining the expertise necessary to be able to do so, to the satisfaction of CAAM.

11. Issuing/renewing/revoking of AMO certifying staff individual authorisation.

12. Co-ordinating action on airworthiness occurrences and initiating for any necessary further investigation and following up activity.

13. Establishing feedback from maintenance incidents/issues and feeding these back into the continuation training programme.

14. Responsible for acceptance on temporary or occasional cases base maintenance tasks (AD's, SB's) to be performed by a line maintenance organisation.

15. Notifying CAAM of maintenance activities conducted outside the approved locations.

In the case of lengthy absence, the regulatory duties and responsibilities will be delegated to the nominated person after the Management of Change is raised and approved. However, such delegations do not relieve QAM of the overall responsibility.

1.4.3 Engineering Manager (EM)

A. Designation

Engineering Manager

B. Immediate Superior

Managing Director (Accountable Manager)

C. Qualification, Training & Experience

1. Holding CAAM License Aircraft Engineer
2. Comprehensive knowledge of the CAAM Regulations, CAD 8601 and other regulation standards relating to the matters for which he or she is responsible.
3. More than 10 years' experience in aviation maintenance or minimum 5 years as maintenance release signatory.
4. Submitted the CAAM Form 4 and accepted by CAAM.

D. Duties and Responsibilities

1. He/she is responsible for the satisfactory completion and certification of all work required by contracted operators / customers in accordance with work specification (Work Order and approved MOE procedures).

2. Ensuring the organisation's procedures and standards are complied when carrying out maintenance.

3. Ensuring the competence of all personnel engaged in maintenance.

4. Establishing a programme of training and continuation training using internal and/or external sources.

5. Ensuring that any work for internal workshops or external contracted / sub-contracted organisations are correctly detailed in a work order / contract and that the requirement of the contract / work order are fulfilled in respect of inspection.

6. Providing feedback to the Quality System about the services provided by the contracted / sub-contracted organisations.

7. Responding to quality deficiencies in the area of activity for which he/she is responsible, which arisen from independent quality audits.

8. Ensuring, through the workforce under his/her control that the quality of workmanship in the final product is to a standard acceptable to the organisation and CAAM.

9. Implementing safety policy and human factor issues.

10. Ensure availability of facilities appropriate to the planned work including hangars, workshop office accommodation, stores as applicable for the planned work.

11. Ensuring availability of a working environment appropriate to the tasks being undertaken.

12. Ensuring the incoming inspection of components, parts, materials, tools and equipment, the related classification, segregation and storage according to the manufacturer's recommendations.

13. Developing a production planning system appropriate to the amount and complexity of the maintenance scope of work. He/she is responsible for availability of tools, equipment and materials to perform the planned tasks.

14. Ensuring availability of sufficient competent personnel to plan, perform, supervise, inspect and certify the work being performed. He/she is responsible for availability of all necessary maintenance data.

15. Notifying and recording any inaccurate, incomplete or ambiguous procedure, practice information or maintenance instruction contained in the maintenance data used by maintenance personnel to the author if maintenance data.

16. Providing a common work card or work sheet system to be used throughout relevant parts of the organization and ensuring such documents comply with CAD 8601.

17. Notifying Accountable Manager whenever deficiencies emerge which require his attention in respect of finance and the acceptability of standards (Accountable Manager and Quality Assurance Manager to be informed of any lack of 25% of available man-hours over a calendar month).

18. Supplying the necessary technical documents for customers and storage of the organisation's technical record.

19. Responding to quality deficiencies in the area of activity for which he is responsible, which arise from independent quality audits.

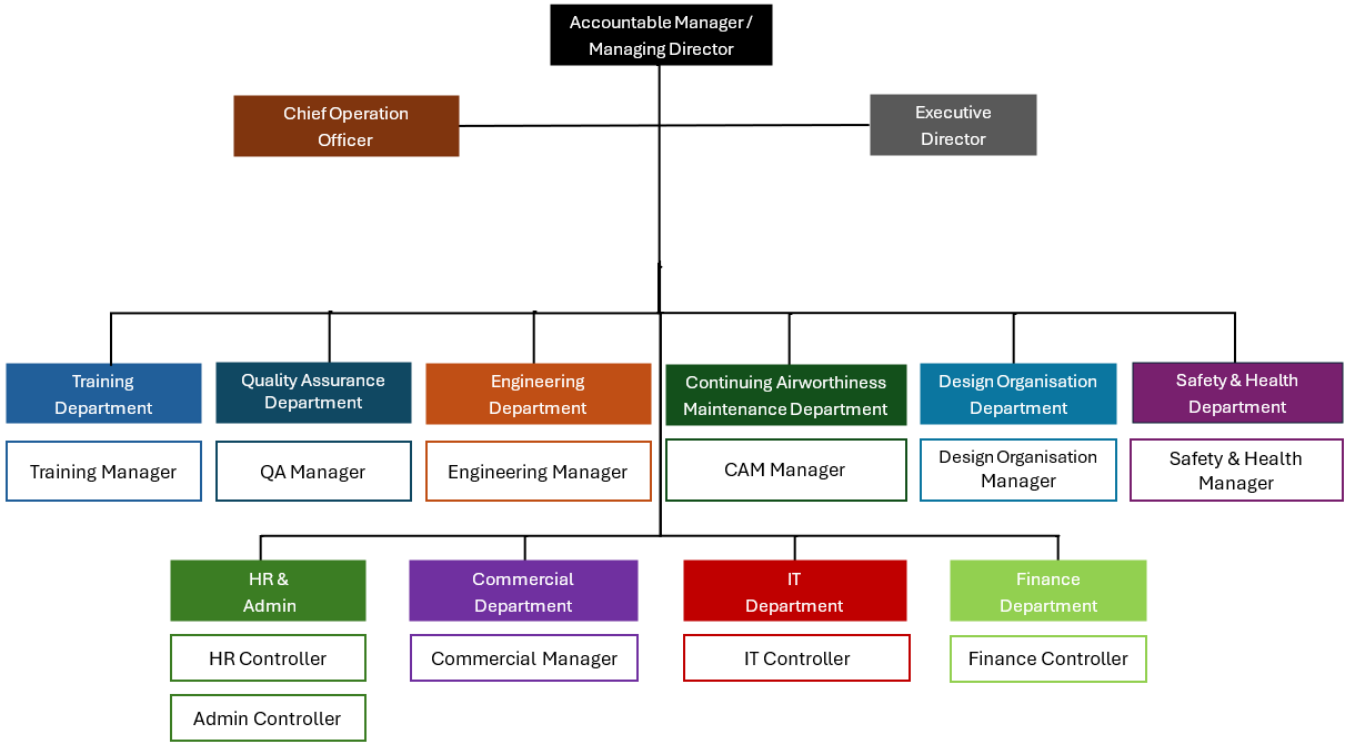
20. Reporting an un-airworthy condition to the Accountable Manager and the Quality Assurance Manager.

Engineering Manager is supported by the Deputy Engineering Manager. In the case of lengthy absence, the regulatory duties and responsibilities will be delegated to the Deputy Engineering Manager through the Management of Change procedure.

MAINTENANCE ORGANISATION EXPOSITION

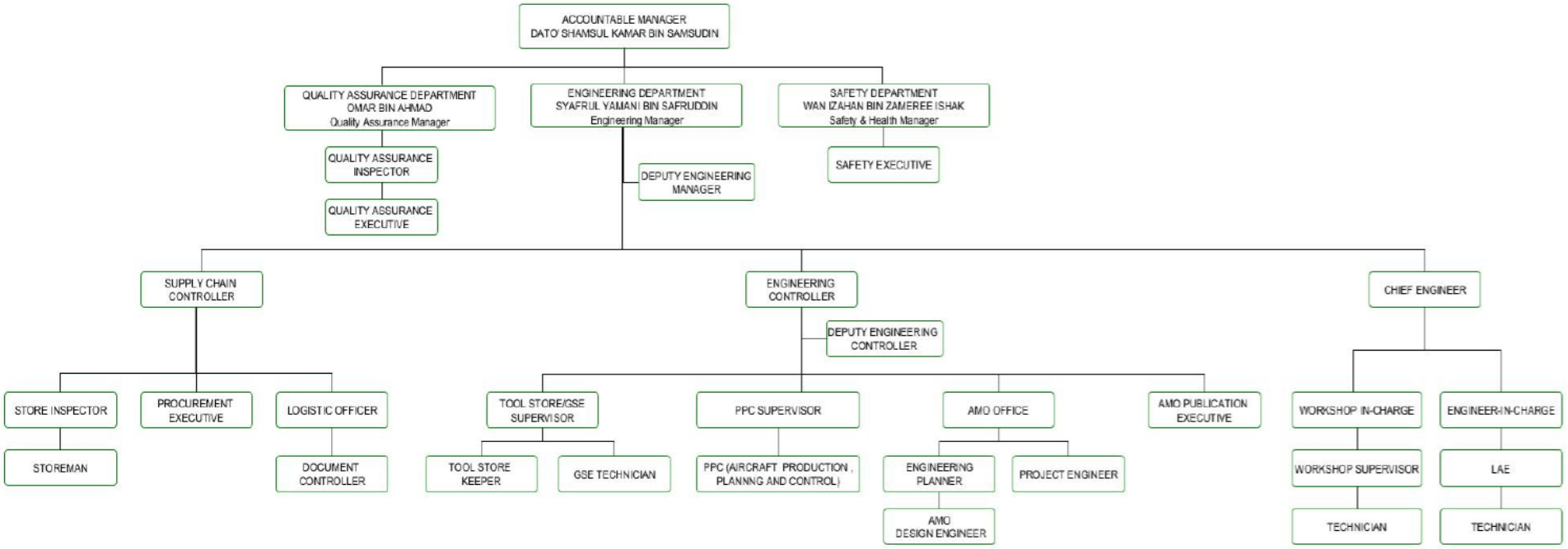
MANAGEMENT ORGANISATION CHART

1.5.1 General Organisation Chart



MAINTENANCE ORGANISATION EXPOSITION

1.5.2 Galaxy Aerospace Maintenance Organisation Chart



MAINTENANCE ORGANISATION EXPOSITION

LIST OF CERTIFYING STAFF

1.6.1 General

1. The list of certifying staff is retained by the Quality Assurance Department; reference should be made to Quality Assurance document reference List of Approval Holder (GAM/Q-001).

2. The list is revised as required when there is a change caused by termination, reassignment, change in duties or scope of assignment, or addition of any personnel.

3. For each personnel listed in this document, a staff record file is managed as detailed in MOE Part 3.5 (Certifying Staff Records).

MAINTENANCE ORGANISATION EXPOSITION

MANPOWER RESOUCES

1.7.1 Manpower Resources

1. For GAM to perform aircraft maintenance and related activities satisfactorily, it is a requirement to list down the number of personnel employed and their functions within the organization.

2. GAM from time to time will engage outside contractor when the need arises.

3. Below table provide the information of GAM manpower as of 01 Jun 2024

DEPARTMENT	NO. OF STAFF
ENGINEERING	234
QUALITY ASSURANCE	8
SAFETY	4
CAMO	38
ADMIN / HR	22
IT	7
FINANCE	6
DESIGN & TECH SERVICE	17
COMMERCIAL	24
TOTAL	**360**

ENGINEERING DEPARTMENT	NO. OF STAFF
LICENSE AIRCRAFT ENGINEERS	63
TECHNICIANS	69
WORKSHOP	7
WAREHOUSE, PROCUREMENT AND LOGISTICS	12
SUPPORT STAFF	39
CONTRACTED STAFF	3

QUALITY ASSURANCE DEPARTMENT	NO. OF STAFF
MANAGER	1
QUALITY ASSURANCE INSPECTOR	4
QUALITY ASSURANCE EXECUTIVE	3

1.7.2 Certifying Staff

1. For the latest list of certifying staff, reference should be made to Quality Assurance document reference List of Approval Holder (GAM/Q-001).

MAINTENANCE ORGANISATION EXPOSITION

FACILITIES

1.8.1 Registered Operation Centre

1. Headquarter Office:

Galaxy Aerospace (M) Sdn. Bhd.,
No. A-01-02, Blok A,
Bangunan Perdagangan Siera,
Jalan PJU 1A/5A, Ara Damansara,
47301 Petaling Jaya, Selangor Darul Ehsan.

2. Operation Centre:

Galaxy Aerospace (M) Sdn. Bhd.,
Lot 11-14, MRO Centre,
Malaysia International Aerospace Centre,
Sultan Abdul Aziz Shah Airport,
47200 Subang, Selangor Darul Ehsan.

1.8.2 Approved Maintenance Premises

Scope	Address	Limitation	Remark
Line Maintenance	Helioutpost Langkawi Helipad, Jalan Kuala Muda, 07100 Langkawi, Kedah.	1. Robinson R44 fitted with Lycoming Engines O-540-F1B5 engine 2. Robinson R44 II fitted with Lycoming Engines IO-540-AE1A5 engine	N1
Line Maintenance	Hangar Pangkalan Udara JBPM Bertam, Jalan Pinang Tunggal, 13200 Kepala Batas, Pulau Pinang.	1. Leonardo S.p.A. AW189 fitted with General Electric Company CT7-2E1 engines 2. Leonardo S.p.A. A109E fitted with Pratt & Whitney Canada Corp. PW206C engines	N2
Line Maintenance	Pasukan Gerakan Udara, Polis Diraja Malaysia, Pangkalan Sabah, Jalan Airport, Tanjung Aru, 88100 Kota Kinabalu, Sabah.	1. Textron Aviation Inc. Beechcraft King Air Models B300 fitted with Pratt & Whitney Canada Corp. PT6A-60A engines	N3

MAINTENANCE ORGANISATION EXPOSITION

Scope	Address	Limitation	Remark
Line Maintenance	Pangkalan Operasi Udara Miri, JBPM Miri, General Aviation, Hangar 3 MAHB Miri Airport, 98000 Miri, Sarawak.	1. Leonardo S.p.A. AW189 fitted with General Electric Company CT7-2E1 engines 2. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines	N2
Line & Base Maintenance	Hangar 2 Universiti Kuala Lumpur, Malaysia Institute of Aviation Technology (UniKL MIAT), Subang Campus, UniKL MIAT, Persiaran A, Off Jaln Lapangan Terbang, 47200 Subang, Selangor.	1. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engine 2. Leonardo S.p.A. AW189 fitted with General Electric Company CT7-2E1 engines 3. Airbus Helicopters EC120B fitted with Safran Helicopter Engines Arrius 2F engines 4. Robinson R44 fitted with Lycoming Engines O-540-F1B5 engine 5. Robinson R44 II fitted with Lycoming Engines IO-540-AE1A5 engine 6. Robinson R66 fitted with Rolls-Royce Corporation250-C300/A1 engine 7. Leonardo S.p.A. A109E fitted with Pratt & Whitney Canada Corp. PW206C engines 8. Bell Textron Canada Ltd. Bell 429 fitted with Pratt & Whitney Canada Corp. PW207D series engines 9. Airbus Helicopters AS 350 B2 fitted with Safran Helicopter Engines Arriel 1D1 engine 10. Airbus Helicopters AS 350 B3 fitted with Safran Helicopter Engines Arriel 2B/2B1/2D engine 11. Airbus Helicopters EC 155 B fitted with Safran Helicopter Engines Arriel 2C1 engines	-

MAINTENANCE ORGANISATION EXPOSITION

Scope	Address	Limitation	Remark
		12. Airbus Helicopters EC 155 B1 fitted with Safran Helicopter Engines Arriel 2C2 engines 13. Airbus Helicopters AS355 F2 fitted with Rolls-Royce Corporation 250-C20F engines 14. Airbus Helicopters AS355 N fitted with Safran Helicopter Engines Arrius 1A engines 15. Airbus Helicopters AS 365 N3 fitted with Safran Helicopter Engines Arriel 2C engines	
Line & Base Maintenance	Pasukan Gerakan Udara, Polis Diraja Malaysia, Pangkalan Sabah, Jalan Airport, Tanjung Aru, 88100 Kota Kinabalu, Sabah.	1. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines 2. Textron Aviation Inc. 208 fitted with Pratt & Whitney Canada Corp. PT6A-114 engine 3. Pilatus Aircraft Ltd. PC-6/B2-H4 fitted with Pratt & Whitney Canada Corp. PT6A-27 engine	-
Line & Base Maintenance	Pasukan Gerakan Udara, Polis Diraja Malaysia, Pangkalan Subang, Jalan Lapangan Terbang Subang, 40150 Shah Alam, Selangor.	1. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines 2. Textron Aviation Inc. Beechcraft King Air Models B300 fitted with Pratt & Whitney Canada Corp. PT6A-60A engines 3. Textron Aviation Inc. Model 172S fitted with Lycoming IO–360–L2A engine 4. Textron Aviation Inc. 208 fitted with Pratt & Whitney Canada Corp. PT6A-114 engine	-

MAINTENANCE ORGANISATION EXPOSITION

Scope	Address	Limitation	Remark
		5. Pilatus Aircraft Ltd. PC-6/B2-H4 fitted with Pratt & Whitney Canada Corp. PT6A-27 engine	
Line & Base Maintenance	Pangkalan Latihan Pasukan Gerakan Udara PDRM, Institut Latihan Tentera Udara Ipoh, 31350 Ipoh, Perak.	1. Textron Aviation Inc. Model 172S fitted with Lycoming IO–360–L2A engine	-
Line Maintenance	Pangkalan Latihan Pasukan Gerakan Udara PDRM, Institut Latihan Tentera Udara Ipoh, 31350 Ipoh, Perak.	1. Airbus Helicopters EC120B fitted with Safran Helicopter Engines Arrius 2F engines 2. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines	N4 N5
Line & Base Maintenance	Hangar Pangkalan Udara JBPM Bertam, Jalan Pinang Tunggal, 13200 Kepala Batas, Pulau Pinang.	1. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines	-
Line Maintenance	Pasukan Gerakan Udara PDRM, Pangkalan Sarawak, Batalion 11 Pasukan Gerakan Am Batu Kawa 93250 Kuching, Sarawak.	1. Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines	N2
C5	Lot 11-14, MRO Centre, Malaysia International Aerospace Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor.	1. Components as stated in the latest GAM Workshop Capability List reference GAM/CAAM/WCL	-

Scope	Address	Limitation	Remark
C5	Pasukan Gerakan Udara, Polis Diraja Malaysia, Pangkalan Sabah, Jalan Airport, Tanjung Aru, 88100, Kota Kinabalu, Sabah.	1. Components as stated in the latest GAM Workshop Capability List reference GAM/CAAM/WCL	-
C6	Lot 11-14, MRO Centre, Malaysia International Aerospace Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor.	1. Components as stated in the latest GAM Workshop Capability List reference GAM/CAAM/WCL	-

Legends:
N1 - Maintenance limited up to Check 1 in accordance with latest AMP
N2 - Maintenance limited for line maintenance in accordance with latest AMP
N3 - Beechcraft Model B300 fitted with Pratt & Whitney PT6A-60A maintenance limitedup to 400 FH and/or 6 months excluding phase check/inspection.
N4 – EC120B Line Maintenance Inspection except 12M Inspection & 48M Inspection.
N5 – AW139 Line Maintenance up to 25FH Inspection.

1.8.3 Line and Base Maintenance

1. GAM has line and base maintenance capability and activity are described in MOE Part 1.9 (Scope of Work).

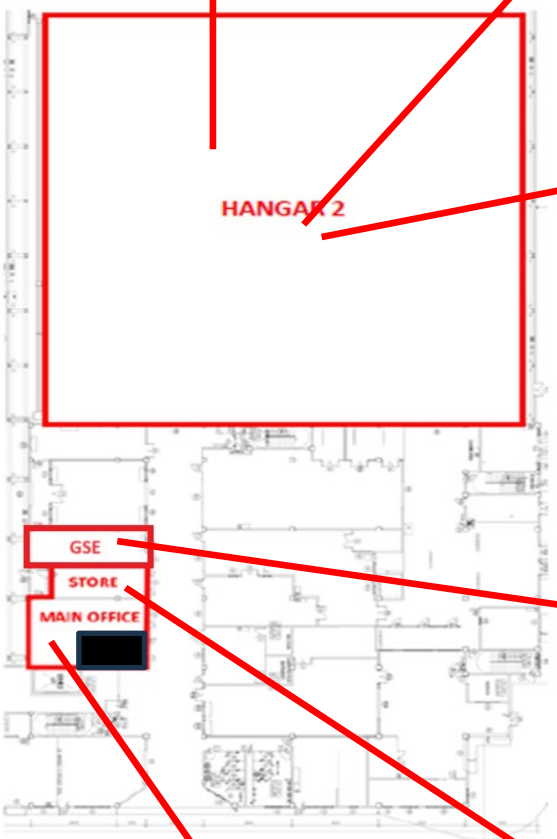
MAINTENANCE ORGANISATION EXPOSITION

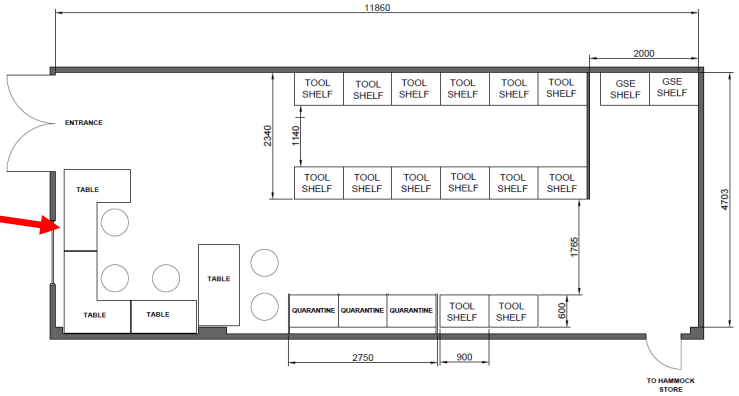
1.8.4 Layout Plans

1. GAM Line & Base Maintenance office at UniKL MIAT

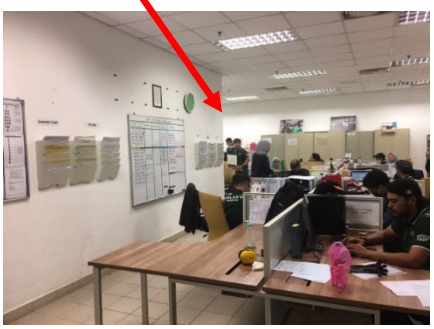
a) GAM-MIAT facilities consist of maintenance area (Hangar 2), office accommodation (Production Planning and LAEs work area), storage area (tool store) and numbers of cabins for crew rest area, meeting room and customer's room.

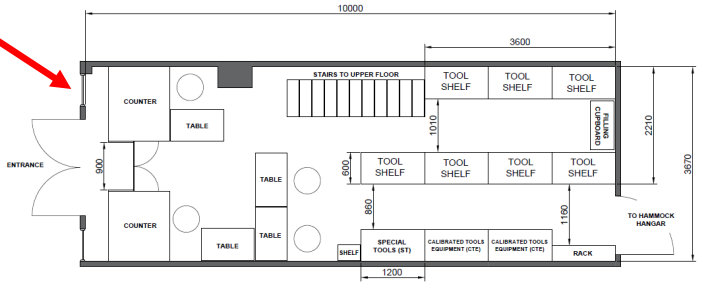
MAINTENANCE ORGANISATION EXPOSITION





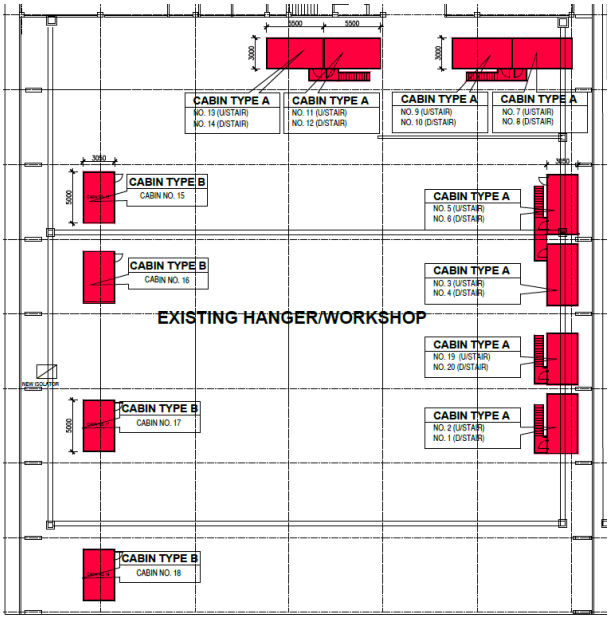
GSE STORE



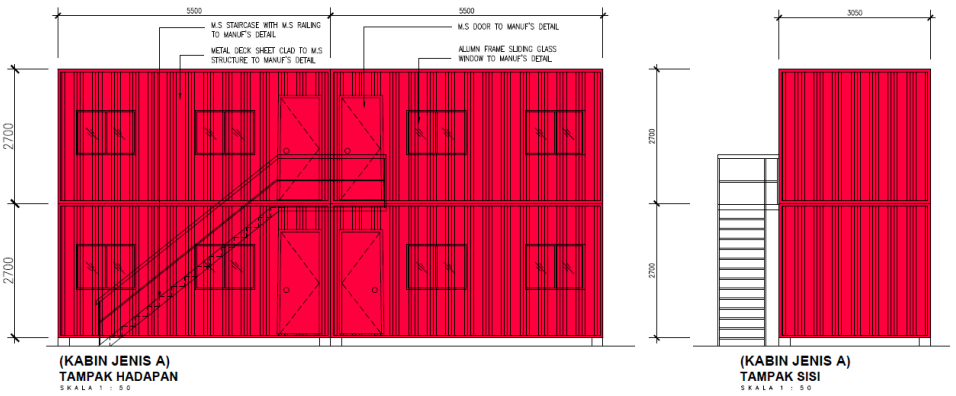


TOOL STORE
GROUND FLOOR

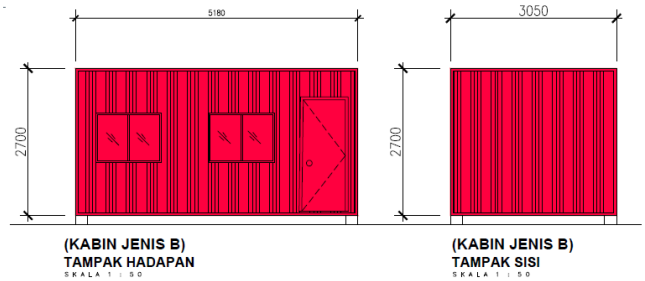
MAINTENANCE ORGANISATION EXPOSITION



Front view of hangar



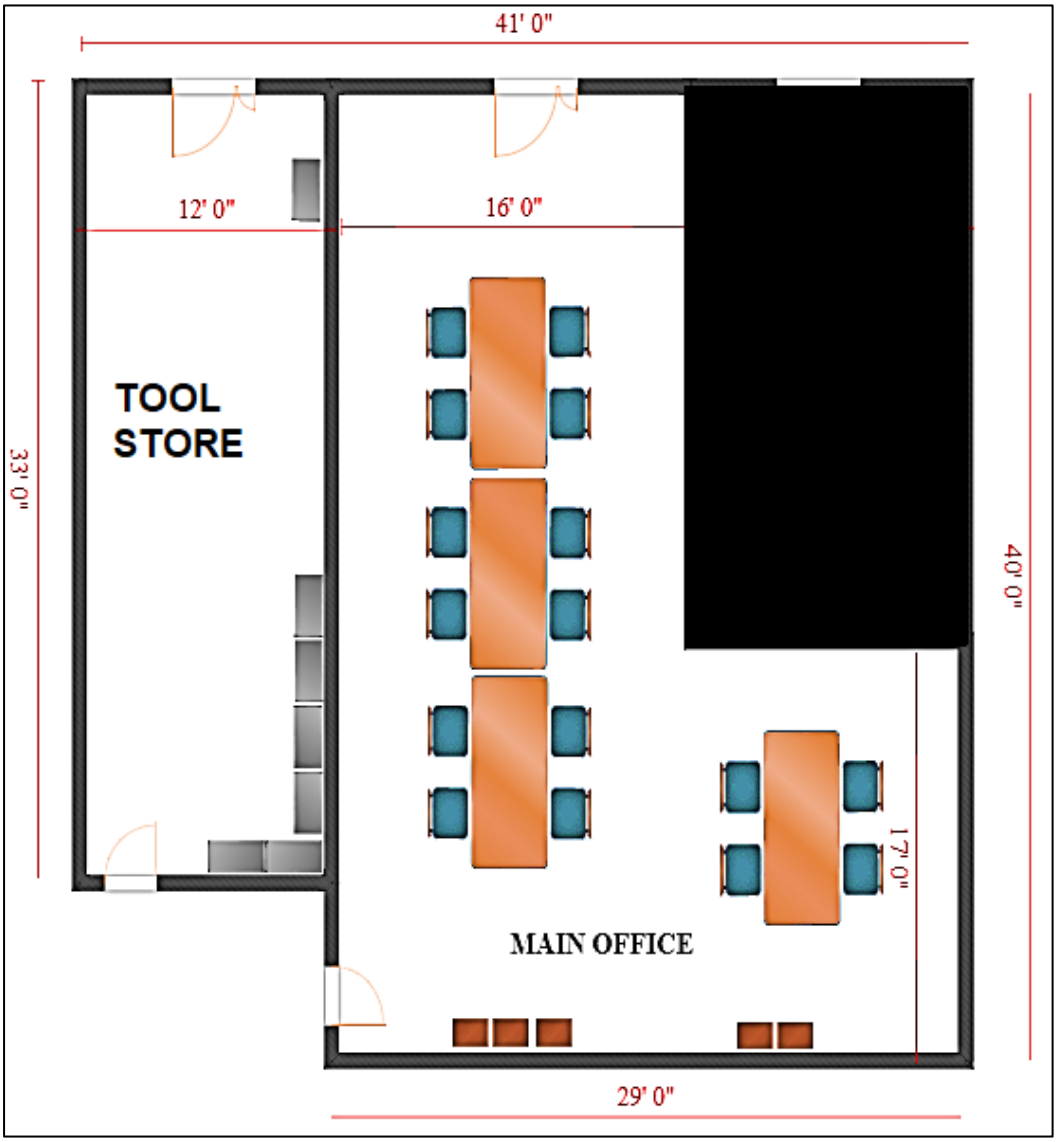
Cabin Type A



Cabin Type B

MAINTENANCE ORGANISATION EXPOSITION

b) GAM Maintenance Office at UniKL MIAT Hangar 2

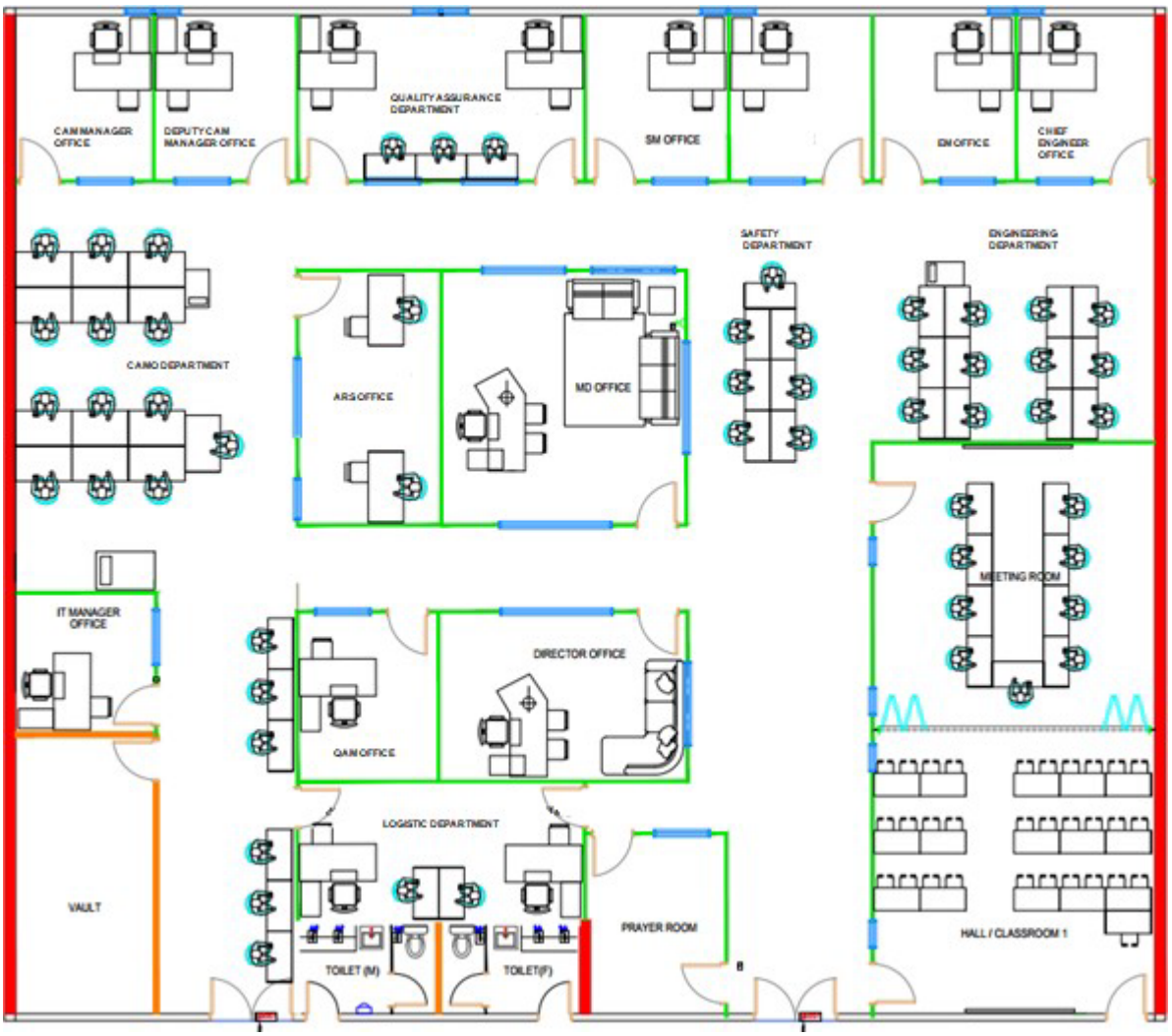


MAINTENANCE ORGANISATION EXPOSITION

2. GAM Operation Centre at Lot 11-14, MRO Centre, Malaysia International Aerospace Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor.

MAINTENANCE ORGANISATION EXPOSITION

a) GAM Operation Centre Office first floor

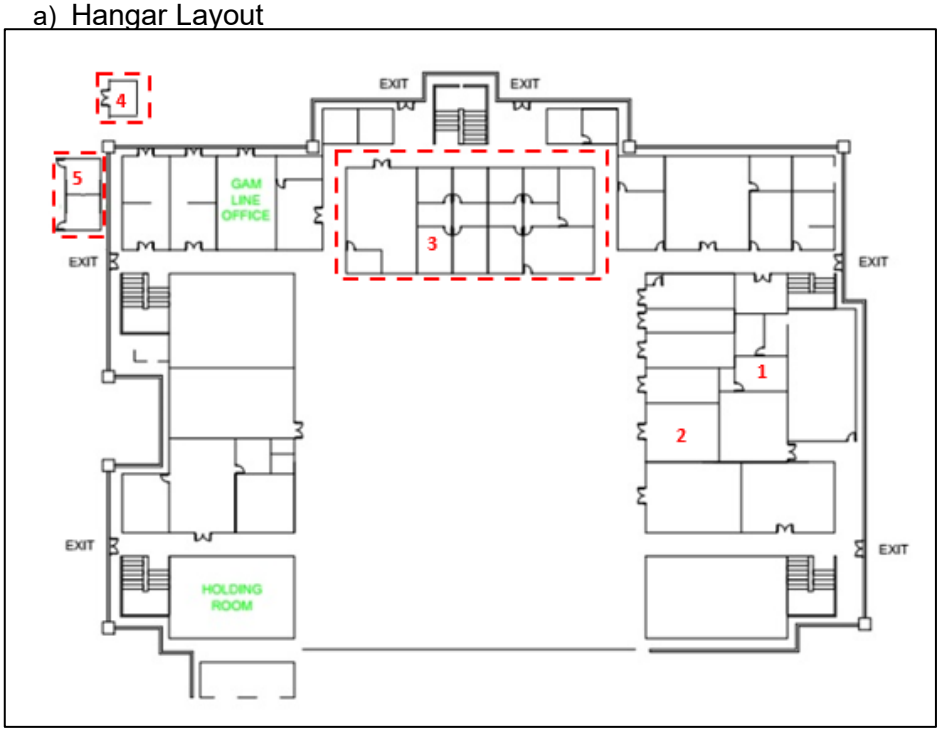


b) GAM Operation Centre Office ground floor

MAINTENANCE ORGANISATION EXPOSITION

3. GAM Line & Base Maintenance facility at Pasukan Gerakan Udara, Pangkalan Kota Kinabalu (PGU KK)

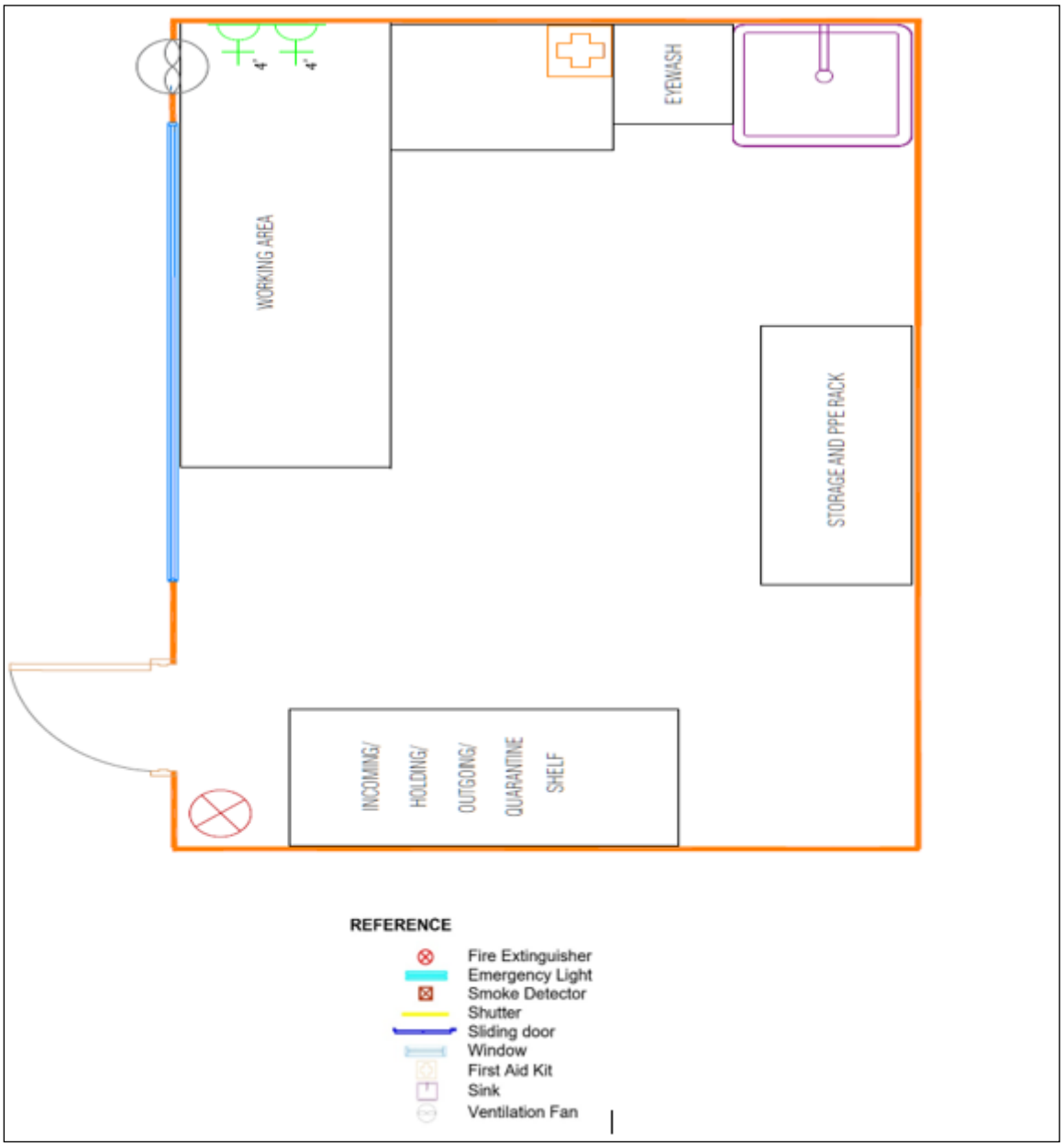
a) Hangar Layout



Legends:

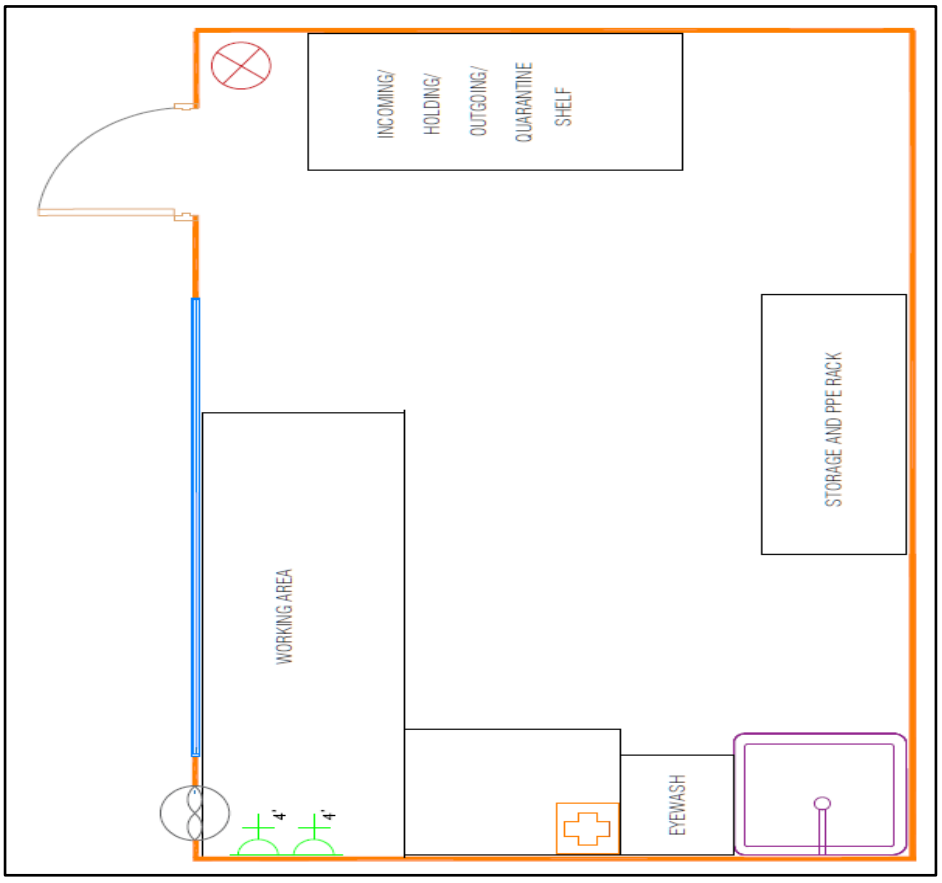
1 – Holding Room
2 – Tools Store
3 – Pejabat Kejuruteraan
4 – POL Store
5 – Ni-Cad & Lead Acid Battery Workshop

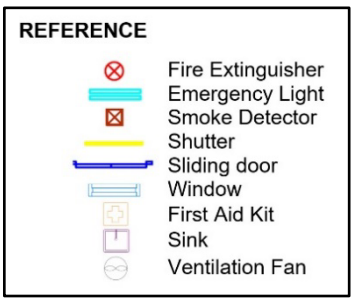
b) Nicad Battery Bay Layout



MAINTENANCE ORGANISATION EXPOSITION

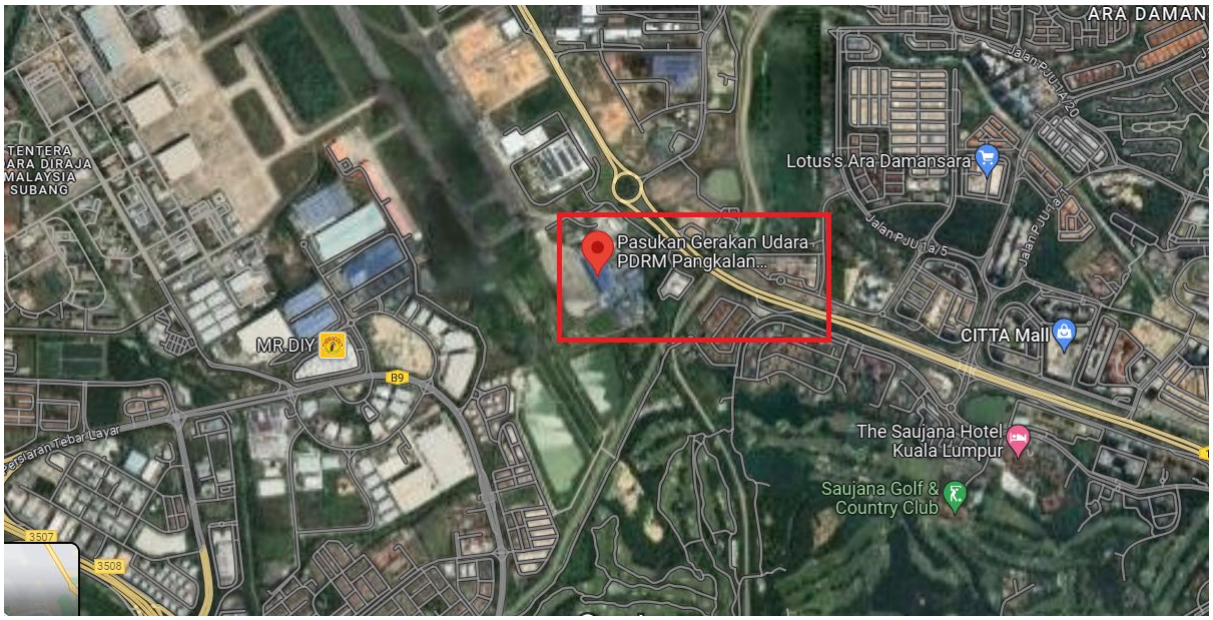
c) Lead Acid Battery Bay Layout





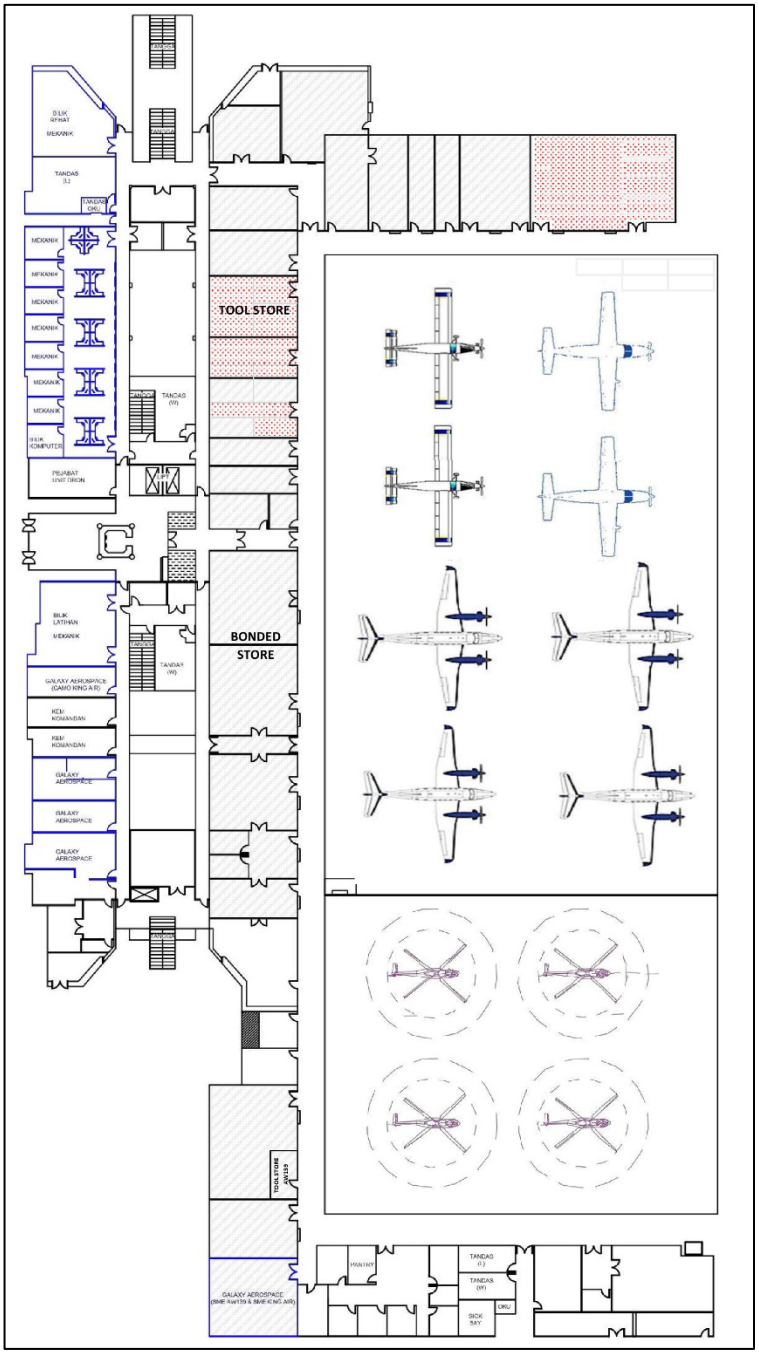
MAINTENANCE ORGANISATION EXPOSITION

4. GAM line and base maintenance facility at Pasukan Gerakan Udara, Pangkalan Subang.

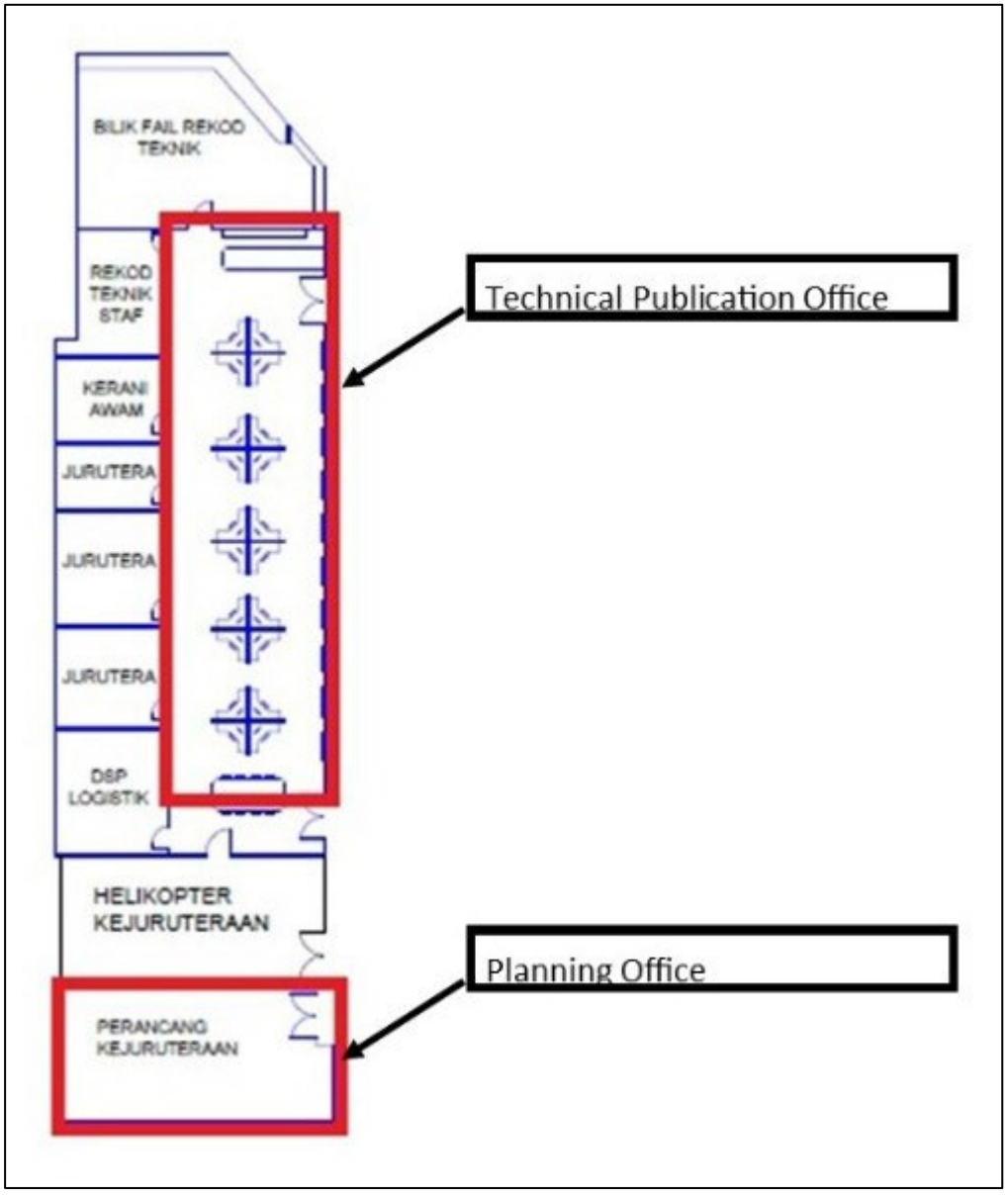


MAINTENANCE ORGANISATION EXPOSITION

a) GAM PGU hangar ground floor

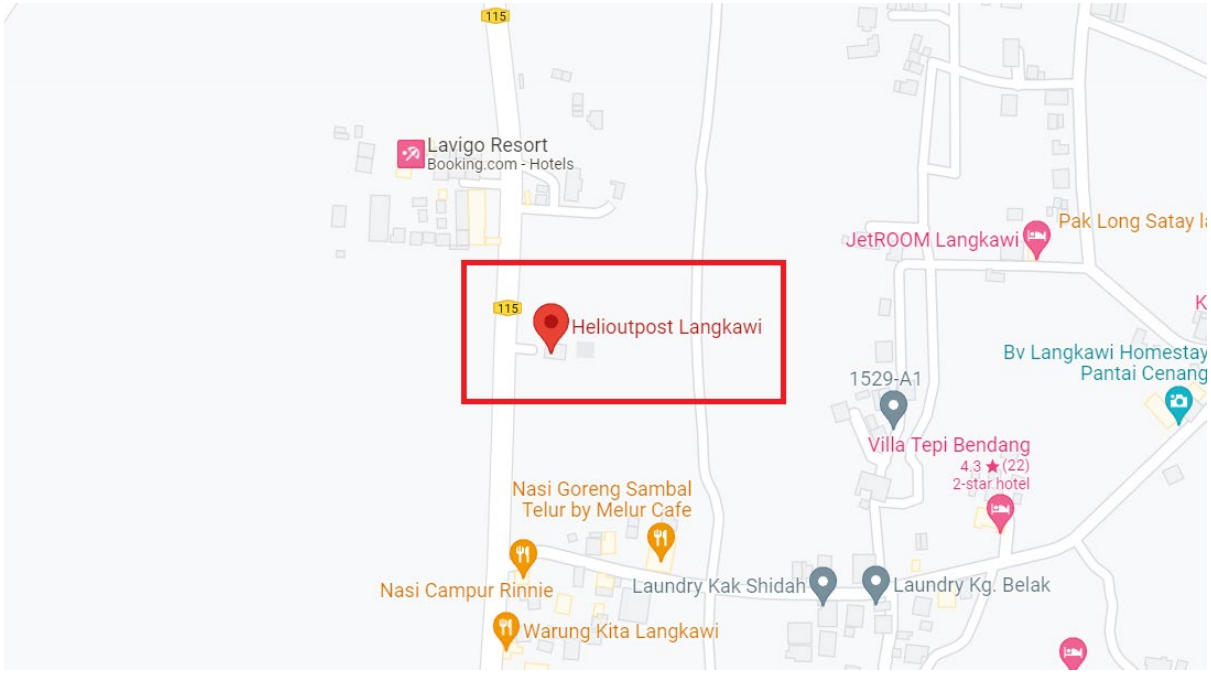


b) GAM PGU hangar first floor

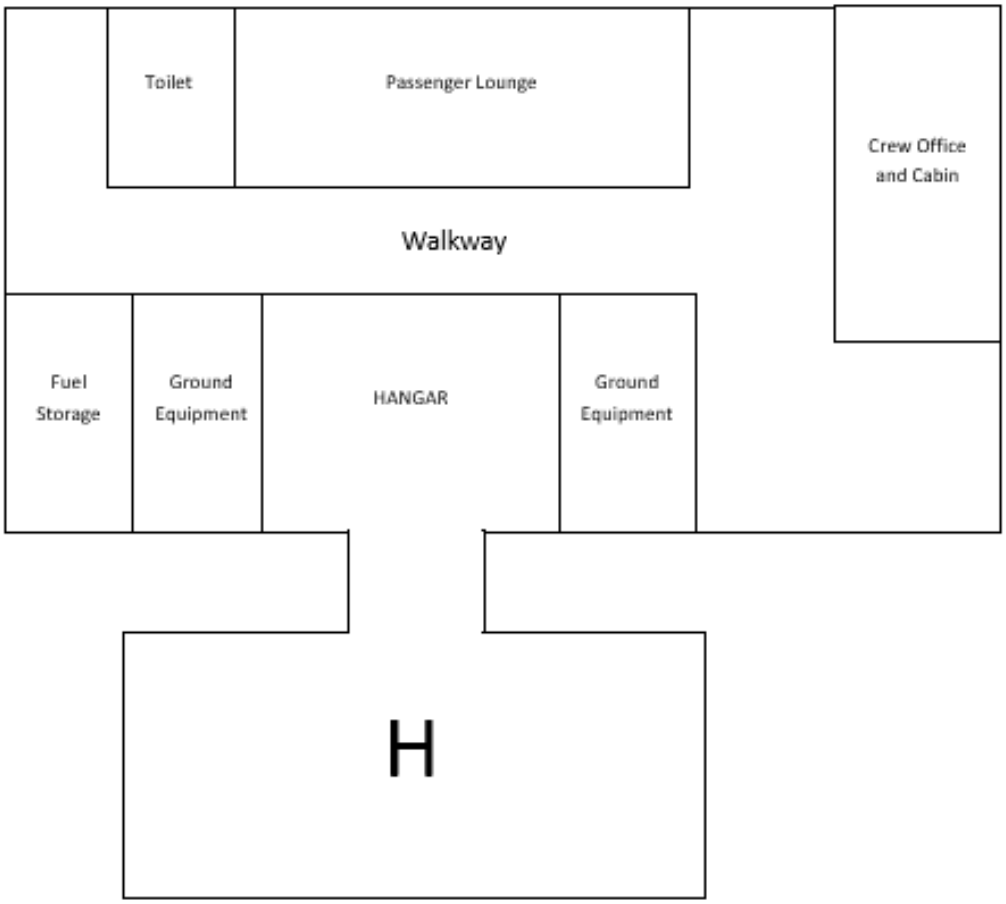


MAINTENANCE ORGANISATION EXPOSITION

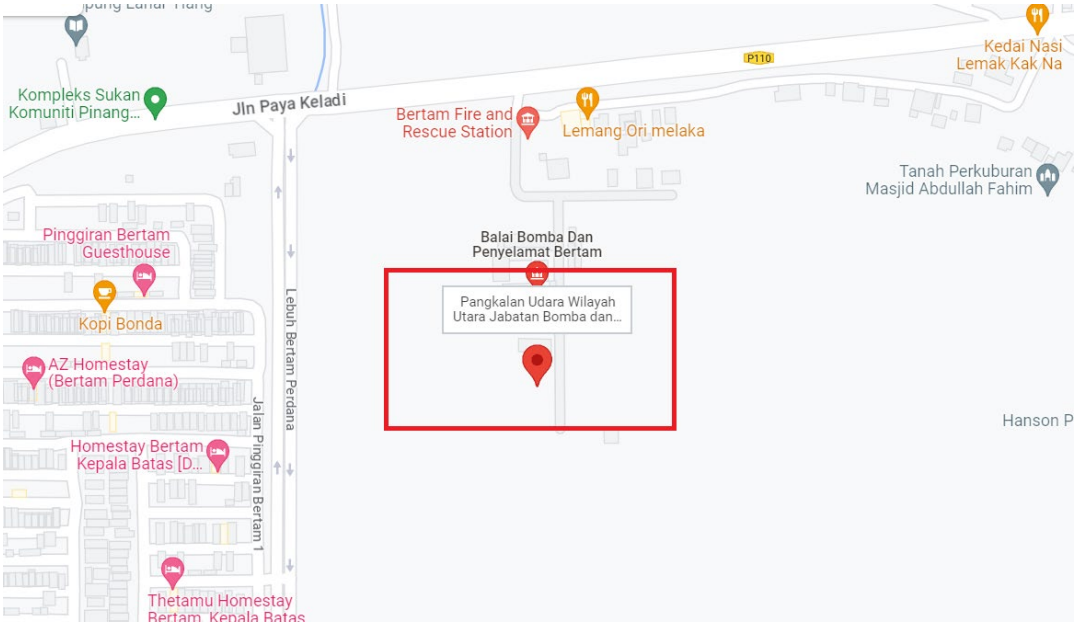
5. GAM line maintenance facility at Helioutpost Langkawi Helipad.



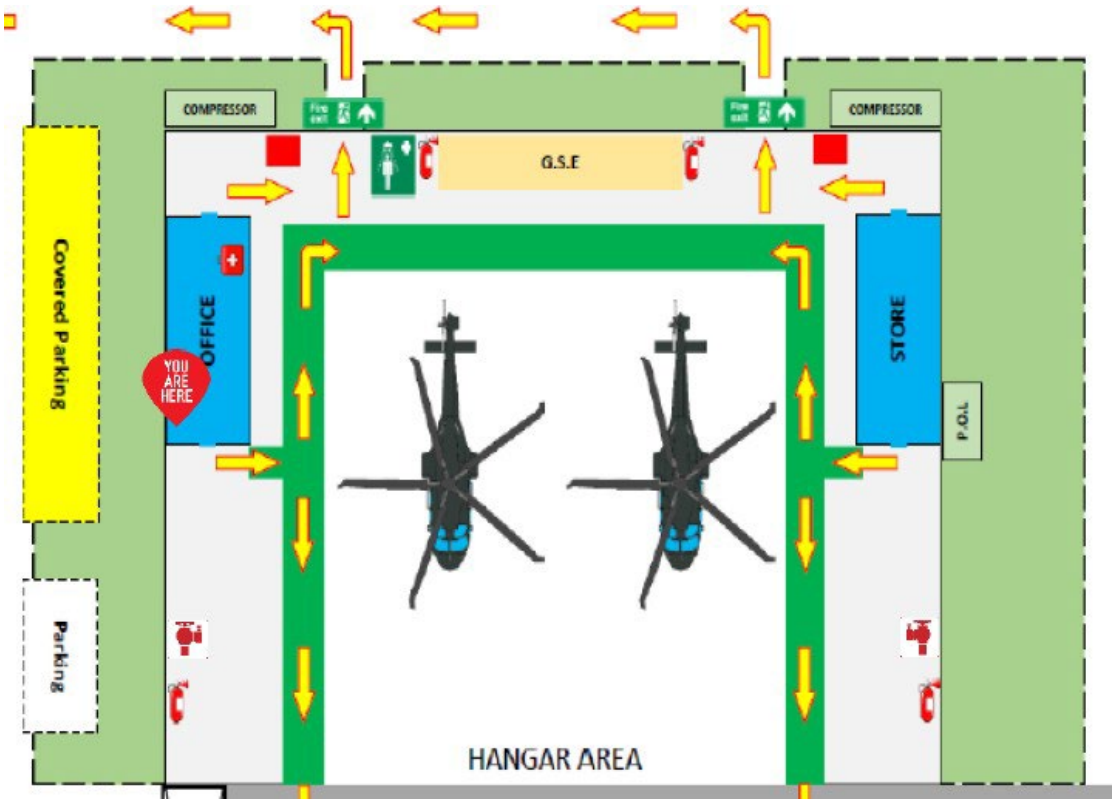
MAINTENANCE ORGANISATION EXPOSITION



6. GAM line & base maintenance facility at Jabatan Bomba dan Penyelamat Malaysia (JBPM) Bertam.



MAINTENANCE ORGANISATION EXPOSITION



LEGEND

EVACUATION ROUTE

FOAM TANK

FIRST AID BOX

EMERGENCY EXIT

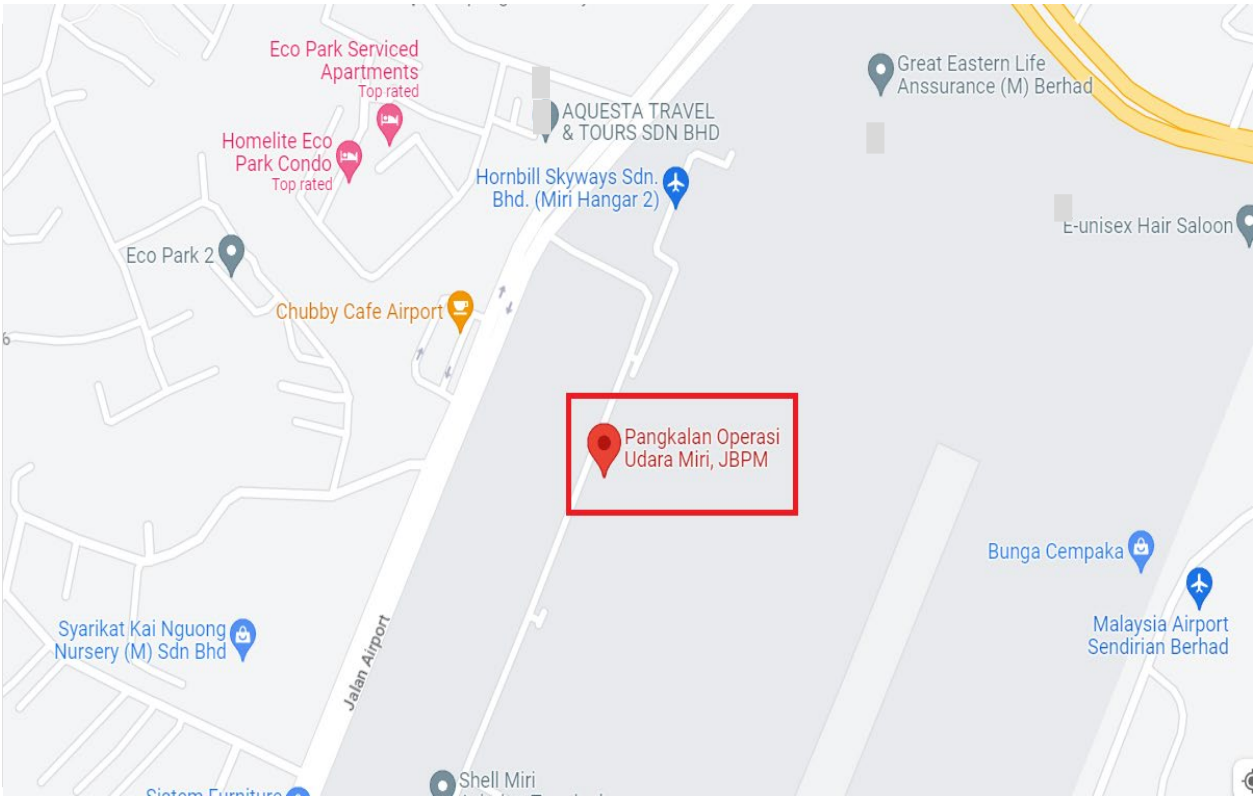
FIRE EXTINGUISHER

FIRE HYDRANT

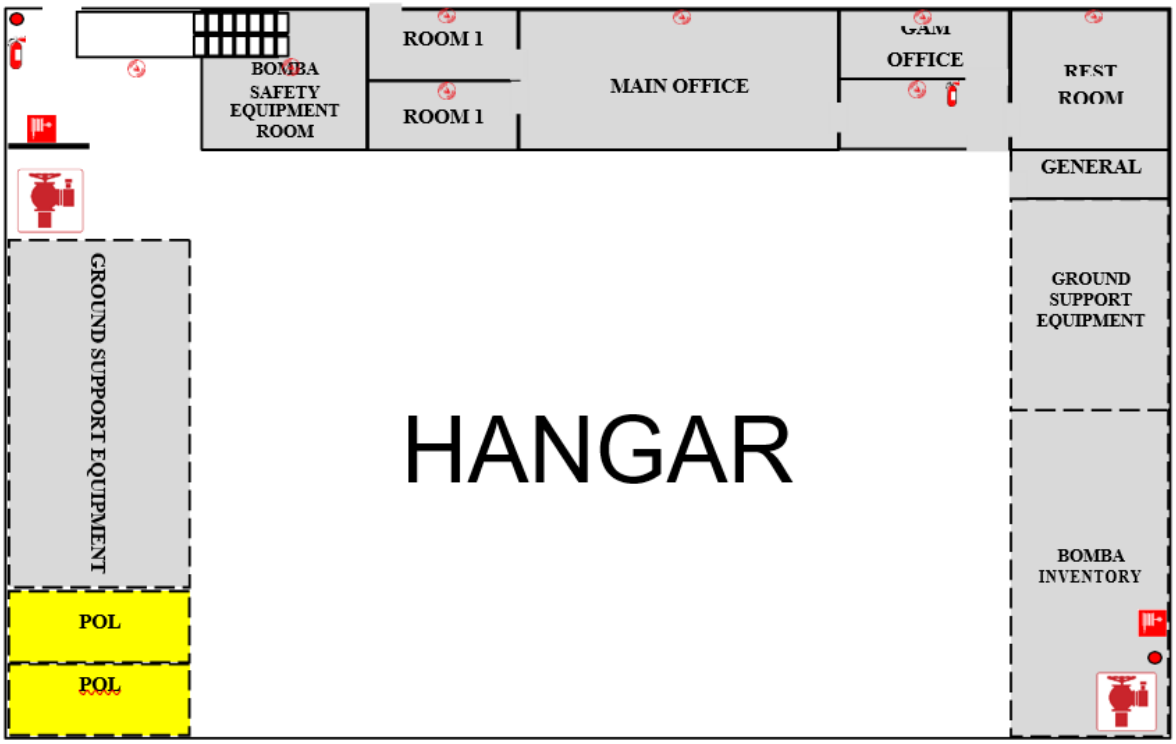
EMERGENCY SHOWER

MAINTENANCE ORGANISATION EXPOSITION

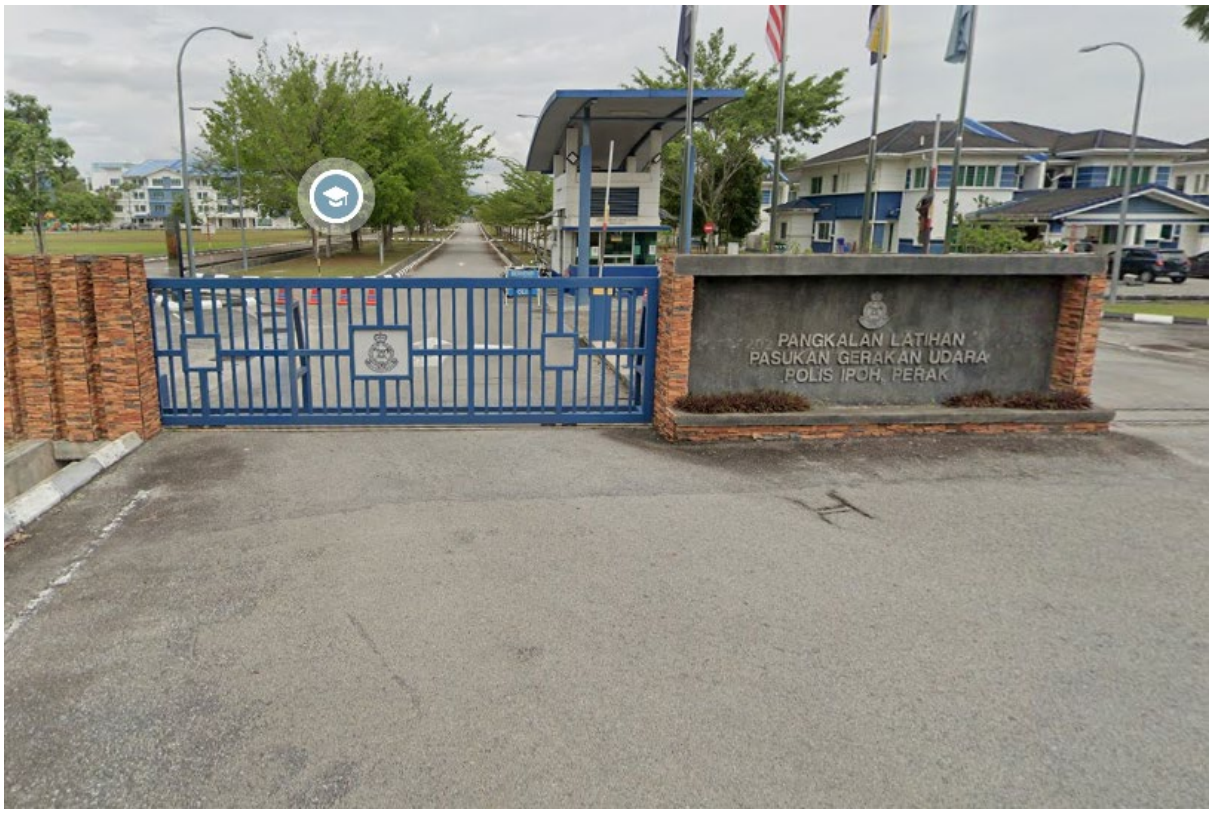
7. GAM line maintenance facility at Jabatan Bomba dan Penyelamat Malaysia JBPM), Miri



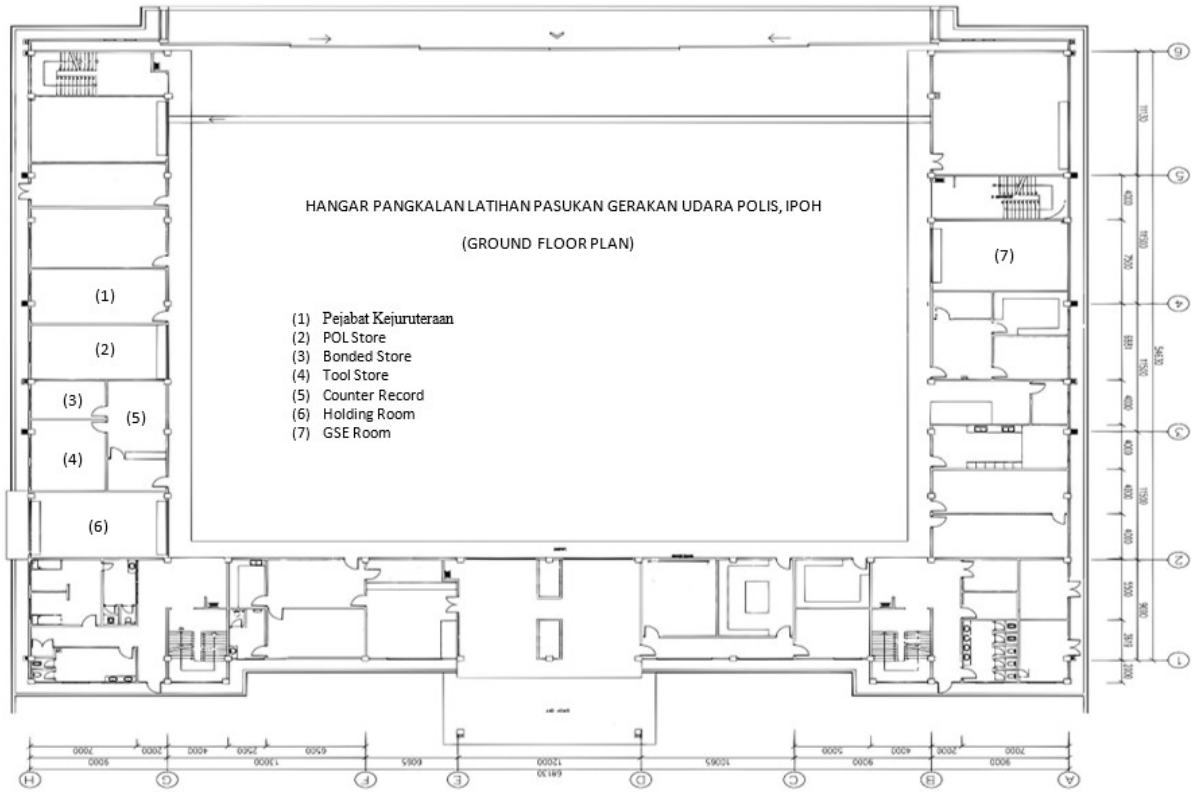
MAINTENANCE ORGANISATION EXPOSITION



8. GAM line and base maintenance facility at Pasukan Gerakan Udara, Pangkalan Ipoh.

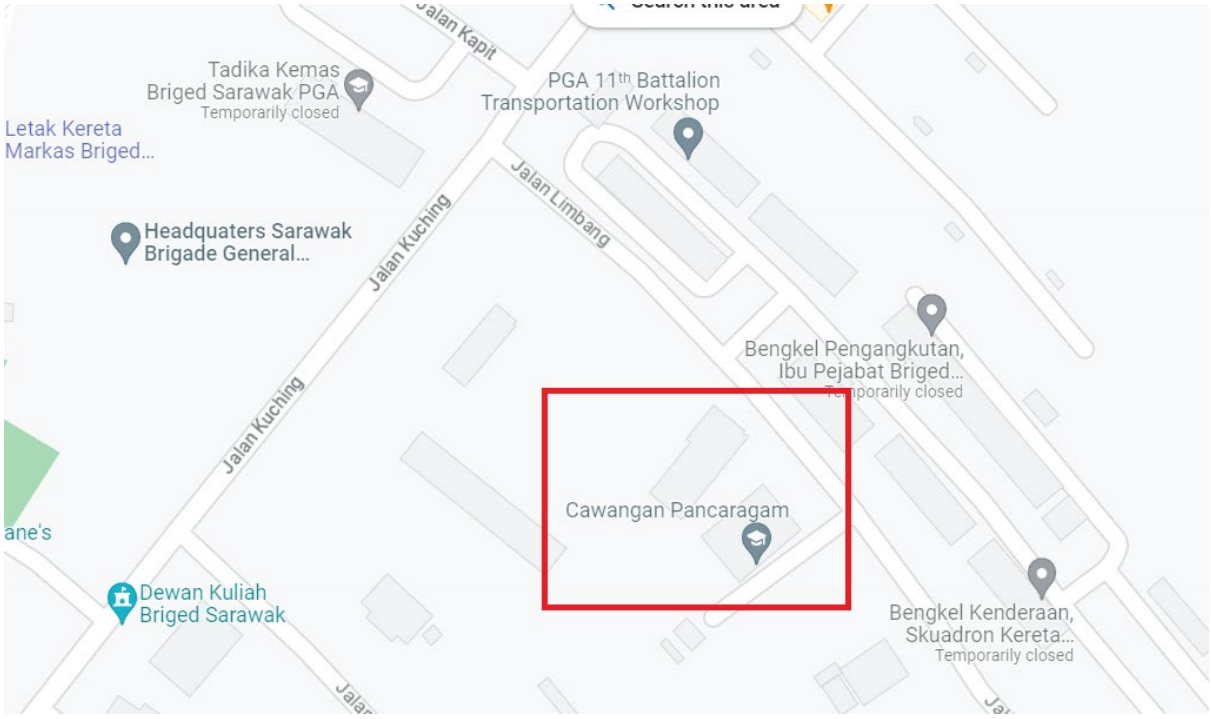


MAINTENANCE ORGANISATION EXPOSITION

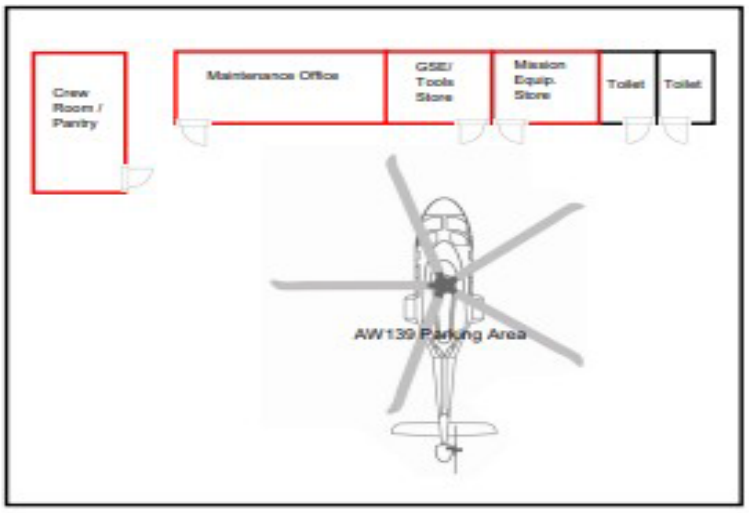


MAINTENANCE ORGANISATION EXPOSITION

9. GAM line maintenance facility at Pasukan Gerakan Udara, Pangkalan Sarawak.



MAINTENANCE ORGANISATION EXPOSITION



Padang Kawad

SCOPE OF WORK

1.9.1 Scope of Work

1. The scope of work undertaken by GAM under the CAAM approvals with its terms of approval, condition of approval or rating is listed and specified in the Approved Organisation Approval issued by the Authority.

2. The company performs maintenance of aircraft and aircraft components described below.

1.9.2 Aircraft Maintenance

1. All aircraft maintained by GAM shall be in accordance with the Maintenance Programme approved by the CAAM.

CLASS	RATING	LIMITATION	BASE	LINE
Aircraft	A1	Textron Aviation Inc. Beechcraft King Air Models B300 fitted with Pratt & Whitney Canada Corp. PT6A-60A engines	Yes	Yes
Aircraft	A2	Textron Aviation Inc. Model 172S fitted with Lycoming IO–360–L2A engine	Yes	Yes
Aircraft	A2	Pilatus Aircraft Ltd. PC-6/B2-H4 fitted with Pratt & Whitney Canada Corp. PT6A-27 engine	Yes	Yes
Aircraft	A2	Textron Aviation Inc. 208 fitted with Pratt & Whitney Canada Corp. PT6A-114 engine	Yes	Yes
Aircraft	A3	Leonardo S.p.A. AW139 fitted with Pratt & Whitney Canada Corp. PT6C-67C engines	Yes	Yes
Aircraft	A3	Leonardo S.p.A. AW189 fitted with General Electric Company CT7-2E1 engines	Yes	Yes
Aircraft	A3	Airbus Helicopters EC120B fitted with Safran Helicopter Engines Arrius 2F Engines	Yes	Yes
Aircraft	A3	Robinson R44 fitted with Lycoming Engines O-540-F1B5 engine	Yes	Yes
Aircraft	A3	Robinson R44 II fitted with Lycoming Engines IO-540-AE1A5 engine	Yes	Yes
Aircraft	A3	Robinson R66 fitted with Rolls-Royce Corporation 250-C300/A1 engine	Yes	Yes
Aircraft	A3	Leonardo S.p.A. A109E fitted with Pratt & Whitney Canada Corp. PW206C engines	Yes	Yes
Aircraft	A3	Bell Textron Canada Ltd. Bell 429 fitted with Pratt & Whitney Canada Corp. PW207D series engines	Yes	Yes

CLASS	RATING	LIMITATION	BASE	LINE
Aircraft	A3	Airbus Helicopters AS 350 B2 fitted with Safran Helicopter Engines Arriel 1D1 engine	Yes	Yes
Aircraft	A3	Airbus Helicopters AS 350 B3 fitted with Safran Helicopter Engines Arriel 2B/2B1/2D engine	Yes	Yes
Aircraft	A3	Airbus Helicopters EC 155 B fitted with Safran Helicopter Engines Arriel 2C1 engines	Yes	Yes
Aircraft	A3	Airbus Helicopters EC 155 B1 fitted with Safran Helicopter Engines Arriel 2C2 engines	Yes	Yes
Aircraft	A3	Airbus Helicopters AS355 F2 fitted with Rolls-Royce Corporation 250-C20F engines	Yes	Yes
Aircraft	A3	Airbus Helicopters AS355 N fitted with Safran Helicopter Engines Arrius 1A engines	Yes	Yes
Aircraft	A3	Airbus Helicopters AS 365 N3 fitted with Safran Helicopter Engines Arriel 2C engines	Yes	Yes

NOTE: *A1 – Aeroplanes above 5700 kg*
A2 – Aeroplanes 5700 kg and below
A3 – Helicopter

1.9.3 Component Maintenance

RATING	ATA	LIMITATION
C5	24	Components as stated in the latest GAM Workshop capability list reference GAM/CAAM/WCL.
C6	25	

1.9.4 Specialised Services other than D1 NDT

Other Specialised Services	***Limitation***
Sheet Metal	*Repairs in accordance with approved maintenance data (e.g SRM, etc.) or accepted by the CAAM.* *Limitations:* *1. Up to and including maintenance of aircraft sheet metal and composite structure to be carried out under the A-Rating (line or base)*
Composite	
Painting/Touch up Activities	*1. Up to and including painting of aircraft structure under repair and aircraft painting under the A-rating* *2. Up to and including component undergoing maintenance or work under specialised services (sheet metal and composite)*
In-house Tool Calibration	*Calibration in accordance with GAM Calibration Laboratory Procedure (GAM/CLP).* *Limited to below methodology* *1. Crimping & Lugging Tools* *2. Pressure Gauge (Pressure)* *3. Caliper & Micrometer (Dimensional)* *4. Hand torque (Torque)*

1.9.5 Line Maintenance

1. The activity consists in carrying-out line maintenance operations, including below:

   a) Scheduled check declared in the applicable Approved Maintenance Programme and approved to be carried out at line maintenance.

   b) Troubleshooting

   c) Rectification of faults

   d) Line approved replacement of components

   e) Defer defect

   f) Minor repairs and modifications which do not require extensive disassembly and can be accomplished by simple means.

1.9.6 Base Maintenance

1. The activity consists in carrying-out base maintenance operations, including below:

   a) Scheduled Heavy Maintenance

   b) Unscheduled Maintenance

   c) Repair and inspection work

   d) Modifications, Major and Minor

   e) Airworthiness Directive / modification incorporation

   f) Fabrication a restricted range of parts to be used in the course of undergoing work within its own facilities as per MOE Part 1.9.7.

1.9.7 Fabrication in the Course of Maintenance

1. Limited fabrications of parts strictly for use under the A1 & A3 rating.

2. Detailed procedure are in CAAM MOE Part 2.9 (Repair Procedure).

1.9.8 Maintenance Away from Approved Locations

1. GAM may perform works on any aircraft or component for which it is approved at any location subject to the need for such maintenance arising either from the unserviceability of aircraft or from the necessity of supporting occasional line maintenance subject to conditions specified in MOE Part 2.24 (Reference to Specific Maintenance Procedures).

1.9.9 Changes to Scope of Work

1. CAAM approval is based on the management, organisation, resources, facilities and scope of work described in Part 1 of the MOE.

2. When any change affected any of item list in the MOE Part 1.10.2 (Changes to the Organisation), it shall be considered as a Significant Changes.

3. Management of Change adopted by GAM with safety is emphasised as the utmost priority

   Ref: Quality Procedure Manual Part 2-19

MAINTENANCE ORGANISATION EXPOSITION

NOTIFICATION PROCEDURE TO CAAM REGARDING CHANGES TO THE ORGANISATION'S ACTIVITIES / APPROVAL / LOCATION / PERSONNEL

1.10.1 Responsibility

1. QAM is responsible to notify CAAM in all cases that GAM plans to carry out any of the changes listed in MOE Part 1.10.2 (Changes to the Organisation).

1.10.2 Changes to the Organisation

1. Following are changes to the organisation which requires notification and approval by the CAAM.

   a) Name of the organisation.

   b) Approved maintenance locations/bases.

   c) Addition or cancellation of approved maintenance locations/bases.

   d) Change of Accountable Manager.

   e) Change of nominated personnel.

   f) Any changes in company activities that could affect the scope of approval as per Application for Maintenance Organisation Approval Form (CAAM/AW/8601-01) or MOE Part 1.9 (Scope of Work), including capability lists and related to:

      i. Facilities
      ii. Equipment
      iii. Tools
      iv. Materials
      v. Maintenance data
      vi. Procedures
      vii. Work scope
      viii. Certifying staff

1.10.3 Notifications Procedure

1. All notifications will be made in hard copy format and sent to CAAM. However, QAM may decide to send a notification of proposed change first via e-mail, as this may serve to expedite the review process by the CAAM. The necessary amendments to the quality system and pertaining documents will be initiated accordingly.

2. QAM shall notify and advise CAAM of any changes to the organization as defined in MOE Part 1.10.2 (Changes to the Organisation) at the earliest opportunity within a month.

3. QAM shall submit the following documents to CAAM, but not limited to:

   a) A cover letter

   b) Completed CAAM/AW/0104-00 Details of Management Personnel (CAAM Form 4) for change of Accountable Manager and nominated personnel – if applicable

   c) Completed CAAM/AW/860101 Application for Maintenance Organisation Approval for change or addition of location and work scope

   d) Management of Change (GAM/Q-011)

   e) Capability Evaluation Checklist (GAM/Q-066) – if applicable

   f) Internal Audit Report (GAM/Q-009) – if applicable

   g) A revised/draft Maintenance Organisation Exposition

   h) A revised/draft Workshop Capability List – if applicable

EXPOSITION AMENDMENT PROCEDURES (INCLUDING DELEGATED PROCEDURES)

1.11.1 Responsibility

1. QAM is responsible for:

   a) Maintaining and monitoring the amendments to the MOE, including associated procedures.

   b) Submitting the amendment and approval application process to CAAM.

   c) Controlling, updating and distributing of copies of the MOE, including associated procedures.

1.11.2 Sources of Proposed Amendments Within the Organisation

1. Exposition amendments may be initiated from any part of the organisation but must be reviewed for compliance with the CAAM requirements by the QAM, who should also be the focal point for submitting amendments to the CAAM.

1.11.3 Introduction to Galaxy Aerospace (GAM) Documents

1. MOE and its associated procedures are the property of Galaxy Aerospace (Malaysia) Sdn. Bhd (GAM) and their contents shall not be copied or communicated in part or as a whole to any person not employed in the company without the express written consent of the Accountable Manager and/or QAM.

2. The contents of MOE shall not be deleted, added or altered in any way without the approval of the CAAM.

3. It should be noted that the GAM MOE shall not override the CAAM Regulations.

4. GAM is maintaining various internal documents that are further detailing the MOE procedures; these documents cannot be contradictory to the MOE. These documents, and their revisions, are all approved by the QAM after he has verified that they are not contradicting to the MOE. These documents comprise of first, second and third level documents.

   a) First Level Document

      i. Maintenance Organisation Exposition

ii. Safety Management System Manual

iii. Workshop Capability List (WCL)

b) Second Level Documents

i. Engineering Procedure Manual (EPM)

ii. Quality Procedure Manual (QPM)

iii. Workshop Management Procedure (WMP)

iv. Workshop Capability Procedure (WCP)

c) Third level documents

i. Forms

ii. Engineering Circular

iii. Safety Bulletin

iv. Accountable Manager Memo/Directive

v. QA Memo

vi. Quality Assurance Notice (QAN)

vii. Safety Memo

5. The MOE and associated procedures are written in the English language. All GAM personnel shall be able to understand; read and write in English.

1.11.4 Approval Process with CAAM

1. The MOE is controlled through issue and revision numbering. The first issue of this MOE is issue No. 1, revision: 0. Following revisions will be numbered Issue No. 1, revision: 1, followed by Issue No. 1, revision 2 and etc. New issue to the MOE will be done when there are extensive revisions necessitating a complete re-issue, a new issue number will be allocated in numerical order.

2. The full revision history of this MOE is documented in MOE Part 0.1 (Record of Revision).

3. Each page of the manual shall have the chapter number, issue number, revision number and page number. All pages will show the date of issue which can be cross checked with the list of effective pages to ensure that it is current.

4. Amendments to the MOE shall be indicated by a dark vertical line running along the left-hand side of the page with blue colour font, annotates revised portion of the text.

5. The QAM shall submit amendments of MOE to CAAM office with:

   a) A Cover Letter

   b) The revised copy of MOE

   c) The revised List of Effective Pages (LEPs) with signature and dated of QAM (duplicate copy)

6. The CAAM Inspector will either approve or reject the MOE revision. The approval of the MOE may be noted by CAAM Inspector's signature and the approval date on the List of Effective Pages (LEPs) and/or in the form of transmittal documents such as letters or e-mails. QAM is responsible to keep a record of MOE approval by CAAM by inserting in the first page of the MOE.

1.11.5 Revision Acknowledge Receipt Process

1. The CAAM Inspector will either approve or reject the MOE revision. The approval of the MOE may be noted by CAAM Inspector's signature and the approval date on the List of Effective Pages (LEPs) and/or in the form of transmittal documents such as letters or e-mails. QAM is responsible to keep a record of MOE approval by CAAM by inserting in the first page of the MOE.

2. QAE will update the Internal Publication Master List (GAM/Q-067) to identify the latest revisions of the MOE.

1.11.6 Procedure for the Control and Amendment of Capability List

1. When there is a need to add new capabilities or change the existing capabilities, the EM shall make a request to QAM to initiate the addition or change of capability by raising Management of Change (GAM/Q-011).

2. The EM will ensure availability of the necessary facilities, tooling and test equipment, relevant trained and qualified personnel, provision of technical instructions and manuals and any additional requirements to ensure smooth introduction of the capability.

3. QAM shall evaluate and verify on the following aspects using the Capability Evaluation Checklist (GAM/Q-066). In addition, QAM shall arrange an audit to ensure:

   a) Justification for the proposed change or addition to the existing capabilities.

   b) Availability of the approved technical manuals/instructions to perform the task.

   c) Adequate tooling and test equipment required to perform the task and functional test.

   d) Adequate number of trained personnel with the relevant training and qualification to perform the particular task.

4. Once the Capability Evaluation Checklist (GAM/Q-066) and internal audit have been completed satisfactorily, QAM shall submit the following documents to CAAM for approval:

   a) A cover letter

   b) Application for Maintenance Organisation Approval (CAAM/AW/8601-01)

   c) Management of Change (GAM/Q-011)

   d) Capability Evaluation Checklist (GAM/Q-066)

   e) Audit Report (GAM/Q-009)

   f) Draft Workshop Capability List (if component)

   g) Draft Maintenance Organisation Exposition

   h) Copy of payment fees

   i) Hazard Identification Risk Management (HIRM)

   j) Any other supporting documents

1.11.7 Procedure for the Control and Amendment of List of Certifying Staff

1. List of Certifying Staff (GAM/Q-001) are lists of individuals within GAM who are authorized to perform approval for maintenance release and signing off required inspection items.

2. List of Certifying Staff shall be changed and updated within 10 days when there is a change caused by termination, reassignment, change in duties or scope of assignment, or addition of any personnel.

1.11.8 Effective Date of Exposition Amendment

1. QAM shall ensure that the implementation of the new approved or revised exposition no later than 14 days after granting approval from CAAM. This includes uploading the new or revised MOE into GAMS portal.

MAINTENANCE ORGANISATION EXPOSITION

SUPPLIER EVALUATION PROCEDURE AND SUB-CONTRACT CONTROL PROCEDURE

2.1.1 Responsibility

1. QAM is responsible for supplier and sub-contractor evaluation and control.

2. Supply Chain section is responsible for the management of purchase orders.

2.1.2 Suppliers of Materials, Standard Parts and Components.

1. **Supplier** – Any source providing services, components, standard parts or materials to be used for maintenance. Sources include Part-145 organisation, Part-21 Subpart G organization, operators, stockists, distributors, brokers, Part-M Subpart F organisation, Training providers, aircraft owners/lessees.

2. **Contracted Organisation** – A Part-145 maintenance organization that carries out maintenance under its own approval for another approved maintenance organization.

3. **Sub-contracted Organization** – An organization, not itself appropriately approved to Part-145 that carries out aircraft line maintenance or minor engine maintenance or maintenance of another aircraft components or a specialized service as a sub-contractor for an organization appropriately approved under Part-145.

2.1.3 Supplier Company Policy

1. Components & parts are purchased only from sources supplying components, new, repaired/overhaul or serviceable used, accompanied with CAAM Authorised Released Certificate (CAAM Form 1), EASA Form 1, FAA 8130-3, TCCA Form One, or UK CAA Form 1.

2. All aircraft parts, materials, equipment and/or services for aircraft or aircraft component other than critical components (engine and propeller) shall be obtained from an approved source acceptable to the CAAM such as aircraft manufacturer, OEM, or approved distributor by manufacturer. The acceptance of aircraft components and parts for aircraft use shall be in accordance with the requirement of CAAM CAD 8601.

3. All aircraft components that falls under critical components (engine and propeller) shall be obtained from an approved source acceptable to CAAM and shall be releasdqd on a CAAM Form 1. The acceptance of both engine

and propeller shall be in accordance with the requirement of CAAM CAD 8601.

4. Other materials and consumables used in maintenance are purchased from reliable sources who deliver goods with certificate of compliance / certificate of conformity or any other documents acceptable by CAAM.

2.1.4 Monitoring the Suppliers

2.1.4.1 Selection Process of Suppliers, Contractors and Sub-contractors

1. Supplier, contractor and sub-contractor (hereinafter referred as “vendor) intended for maintenance use shall be approved by the QAM.

2. For initial approval of vendor, Vendor Request Form (GAM/E-011) shall first be forwarded to the Quality Assurance Department.

3. For an initial survey, Quality Assurance Vendor Evaluation Questionnaires (GAM/Q-003) shall be sent to the prospective vendor based on the request made. QAM will evaluate the vendor based on the questionnaire and the supporting documents received from the vendor. Onsite audit shall be carried out should there be any validation required on the questionnaire and documents received.

4. All approved vendors will be listed in Approved Vendor List (GAM/Q-002).

5. Vendors are evaluated every 3 years based upon component receiving inspection results. A vendor which has a negative performance during evaluation shall be removed from the Approved Vendor List (GAM/Q-002).

6. Procedure for selection process of suppliers, contractors and sub-contractors is further detailed in QPM Part 2-2 (Vendor Approval).

2.1.4.2 Monitoring of the List of Suppliers, Contractors and Sub-contractors Versus Internal Authorization

1. Procedure for monitoring of list of suppliers, contractors and sub-contractors versus internal authorization is detailed in QPM Part 2-2 (Vendor Approval).

2.1.4.3 Management of the Purchase Orders According to the Approved Suppliers

1. Purchase orders shall only be raised for vendors listed in Approved Vendor List (GAM/Q-002).

2.1.4.4 Records of Suppliers, Contractors and Sub-contractors Information

1. Hardcopy of the records of vendor information shall be kept by the QA Department for a duration of 3 years from the date of internal approval.

2. Procedure for records of supplier, contractors and sub-contractors in further detailed in QPM Part 2-2 (Vendor Approval).

ACCEPTANCE / INSPECTION OF AIRCRAFT COMPONENTS AND MATERIALS FROM OUTSIDE CONTRACTORS

2.2.1 Responsibility

1. The Supply Chain section is responsible for the acceptance of aircraft components and materials.

2.2.2 General

1. All incoming aircraft component and material will be properly handled and stored to prevent damage or deterioration. The components and material are subjected to inspection prior to acceptance into the company inventory.

2.2.3 Component / Material Certification

1. The following are the release documents to be expected/accepted for each type of part/material depending on their status (new/used).

MAINTENANCE ORGANISATION EXPOSITION

Status	Type of Part/Material	Documents to be expected
New Parts	Standard Parts, Raw Materials and/or Consumables	Option 1: When the part/material is purchased directly from the manufacturer, the Certificate of Conformity issued by the manufacturer is expected; Option 2: When the part/material is purchased through a third-party supplier (i.e. distributor, operator, maintenance organisation, etc.) the documentation accompanying the part/material shall contain: ● Conformity certification to the part/material applicable standard/specification, and; ● identification of the manufacturing source, and; ● Identification of the supplier source. For Option 2, the information above may be included in one single Certificate of Conformity issued by the supplier (containing cross reference to the manufacturer CoC) or be composed by more documents, such as the CoC issued by the manufacturer plus a statement from the supplier source. In any case, the manufacturer CoC shall be made available upon request.
	Aircraft Parts	Option 1: CAAM Form 1; Option 2: FAA 8130-3 issued by FAA approved repair station with status 'NEW'; Option 3: TCCA Form One issued by TCCA Canada approved maintenance organization with status 'NEW'; Option 4: EASA Form 1 issued by EASA Part-145 organisation with status 'NEW'; Option 5: UK CAA Form 1 issued by UK CAA Part-145 organisation with status 'NEW'; Option 6: OEM release documents;

Used Parts	Aircraft Parts	Class 1 item (Engine or Propeller) Option 1: CAAM Form 1; Option 2: OEM/Type Certificate Holder release documents.	
		Class 2 item (component other than engine and propeller) Option 1: CAAM Form 1; Option 2: FAA 8130-3 issued by FAA approved repair station; Option 3: TCCA Form One issued by TCCA Canada approved maintenance organization; Option 4: EASA Form 1 issued by EASA Part-145 organisation; Option 5: UK CAA Form 1 issued by UK CAA Part-145 organisation; Option 6: OEM/Type Certificate Holder release documents;	

2.2.4 Receiving Inspection Procedure

1. Incoming parts and materials intended for maintenance operation are subjected to a receiving inspection process.

2. The acceptance inspection will be done by Store Inspector using Acceptance Report form (GAM/E-003). The inspection must ensure the requirements in EPM 3-01 (Acceptance of aircraft component and material), is adhered to.

3. If the components meet the acceptance requirement, the Store Inspector must certify the Acceptance Report form (GAM/E-003).

4. All accepted parts, components and consumable materials will be identified with a Serviceable tag (GAM/E-005) issued by the Store Inspector with GiN reference number.

5. Any component found not satisfactory during receiving inspection shall be quarantined and appropriately tagged using Quarantine Label (GAM/E-007). Logistic Controller shall be responsible for the record of quarantined items.

6. Quarantined parts can only be released when all discrepancies have been rectified.

7. Procedure for receiving inspection is further detailed in EPM 3-01 (Acceptance of aircraft component and material).

***NOTE**: Acceptance of FAA-PMA parts is subject to the approval of CAMO*

2.2.4.1 Incoming Inspection for Components/Materials/Standard Parts Received from External Sources

1. It shall be the responsibility of the Operator/Customer to provide certifications or maintenance release tags as required, with the material/part being supplied.

2. These parts shall be done in accordance with EPM 3-09 (Incoming Inspection for Components/Materials/Standard Parts Received from External Sources).

2.2.4.2 Acceptance and Incoming Inspection of Components from Internal Sources

1. Acceptance and incoming inspection of components from internal sources shall be done in accordance with EPM 3-01 (Acceptance of Aircraft Component and Material).

2.2.4.3 Acceptance and Incoming Inspection of Components removed Serviceable from aircraft

1. Acceptance and Incoming Inspection of components removed serviceable from aircraft shall be done in accordance with MOE Part 2.2.4 (Receiving Inspection Procedure), with the exception of a Purchase Order.

2.2.4.4 Acceptance and Incoming Inspection of Internal Fabricated Parts

1. GAM may fabricate simple parts for use during maintenance. These parts are fabricated as per the requirements laid out in MOE Part 2.9 (Repair Procedure).

2. The internally fabricated parts are inspected and released by the certifying staff.

3. The acceptance of all internally fabricated parts is marked by issue of Serviceable Tags (GAM/E-005) by the certifying staff.

2.2.4.5 Unserviceable Components Received from Customers for Workshop Maintenance, or on AOG

1. Upon receipt of the components the Store Inspector will inspect for the general condition and transit damages.

2. He/She will also verify the quantity, nomenclature, serial numbers, etc., with respect to the repair orders/ repairable tag.

3. On satisfactory completion of incoming inspection of the components, the Supply Chain Section will process for the maintenance at the respective component shops.

2.2.4.6 Suspected Unapproved Parts

1. To identify SUP during the receiving inspection and prevent their acceptance, the following areas will be addressed:

   a) Confirm the packaging of the parts identifies the supplier or distributors name and is free from alteration or damage.

   b) Verify that the actual part and delivery receipt reflect the same information as the purchase order regarding part number, serial number, and historical information (if applicable).

   c) Verify that the identification on the part has not been tampered with (e.g., serial number stamped over, label or part/serial numbers improper or missing, vibro-etch or serial numbers located at other than the normal location.

   d) Ensure shelf life and/or life limit not expired, if applicable.

   e) Conduct visual inspection of the part and supporting documents to the extent necessary to determine if the part is traceable to CAAM – approved sources.

   f) Evaluate any visible irregularities (e.g., altered or unusual surface, absence of required plating, evidence of prior usage, scratches, new paint over old, attempted exterior repair, pitting or corrosion).

   g) Conduct random sampling of standard hardware packaged in large quantities in a manner that corresponds to the type and quantity of the parts.

   h) Segregate parts of questionable nature and attempt to resolve issues regarding the questionable status of part (e.g., obtain necessary documentation if inadvertently not provided, or determine if irregularities are a result of shipping damage and handle accordingly).

i) Any potential SUP detected shall be quarantined and appropriately tagged using Quarantine Label (GAM/E-007), to ensure that the parts are not installed onto aircraft.

j) Supply Chain Controller shall liaise with distributor and/or supplier for further action. If the explanation given by the distributor and/or supplier is not satisfactory and there is potential risk that the bogus SUP may affect other organisation/party, QAM shall raise Mandatory Occurrence Report, in accordance with MOE Part 2.18 (Reporting of Defects to the Competent Authority / Operator / Manufacturer).

STORAGE, TAGGING AND RELEASE OF AIRCRAFT COMPONENTS AND MATERIALS TO AIRCRAFT MAINTENANCE

2.3.1 Responsibility

1. The Supply Chain section is responsible for storage of components and materials in the store.

2.3.2 Procedure for Maintaining Satisfactory Storage Conditions

1. The storage area for rotable, perishable, raw materials, flammable fluids, engines, bulk assemblies, compressed gas cylinders, etc shall be kept clean and dust free. All serviceable aircraft components and materials are stored in Bonded stores and are physically segregated from the unserviceable items.

2. The whole warehouse is to be operated as Bonded Store except for the Quarantine Store.

3. The Bonded Stores are environmentally controlled with respect to temperature and relative humidity.

4. There shall be segregation between serviceable, unserviceable, quarantine and scrap items.

5. All storage instructions prescribed by the manufacturer shall be observed.

6. Storage area must be kept cleaned and suitably enclosed to prevent entry of dust and other contaminants

7. All stores area must be kept tidy with shelving used to store parts and equipment and not on floors

8. No persons are authorized to enter the store area. Any other staff excluding the store personnel who wish to enter the stores must obtain prior permission from the Logistic Controller.

9. Procedure for storage condition of items is further detailed in EPM 3-02 (Storage and Shelf-life Control of Aircraft Component and Material).

2.3.3 System and Procedure to Control Shelf Life/Life Limit and Modification Standard

1. Store inspector shall record the shelf-life details of all shelf life limited items prior to storing them in the bonded store.

2. Store Inspector shall monitor the shelf life and take necessary action for removal from the bonded store.

3. All shelf-life expired items shall be properly identified and segregated by the Store Inspector.

4. Periodical shelf-life notification shall be generated to keep track of item shelf life.

5. Procedure for control of shelf life / life limit is further detailed in EPM 3-02 (Storage and Shelf-life Control of Aircraft Component and Material).

2.3.4 Special Storage Condition.

1. Storage conditions for ESD sensitive device and rubber item shall be stored in accordance with manufacturer requirement.

2. Procedure for storage of ESD sensitive device and rubber item is detailed in EPM 3-02 (Storage and Shelf-life Control of Aircraft Component and Material).

2.3.5 Tagging/Labeling System and Storage Areas

1. On satisfactory completion of receipt inspection and acceptance procedure the Store Inspector shall issue Serviceable label (GAM/E-005) in respect of all items based on the C of C, CAAM Form 1, EASA Form 1, FAA Form 8130-3, Canadian TCCA Form 1 or UK CAA Form 1.

2. During the process of maintenance, the components which are found not suitable for use on aircraft shall be issued with Unserviceable label (GAM/E-006) by the support/certifying staff

3. When the supplies fail to meet the receiving inspection requirements with respect to incoming/release documents, the Store Inspector shall quarantine these items using the Quarantine label (GAM/E-007) and store them in the Quarantine Store pending receipt of information from the suppliers.

4. Batch number of each item are tracked through each item's respective GiN number assigned by the Store Inspector during receiving inspection.

5. All non-repairable, defective or life expired items that were removed from an aircraft, or from store shall be tagged with a Scrap Label (GAM/E-058). Procedure for scrap items is available in EPM 3-08 (Disposition of Scrap Aircraft Component and Material) and MOE Part 2.19 (Return of Defective Aircraft Components to Store).

2.3.6 Issue of Components to the Maintenance Process

1. Components and materials required for maintenance are issued upon request by maintenance personnel.

2. Upon receipt of the requisition, available stock shall always be updated to reflect actual stock available in the warehouse.

3. Serviceability of items released from the store shall be ensured, complete with the necessary documents accompanying the items.

4. Procedure for issue of components to the maintenance is further detailed in EPM 3-03 (Issuance of Aircraft Component and Material from Warehouse).

2.3.7 Segregation of Civil and Military Items

1. The production of supplies for civil and military aircraft runs concurrently in some organizations. There are many cases where supplies for civil and military aircraft are identical but where, in fact, there are important differences in requirements. This may lead to doubt on the conditions to which sub-contracts should be placed and the segregation of civil and military supplies is essential.

2. Civil and military items shall be labeled accordingly and segregated at the stores and at the maintenance areas by storing in separate shelves or cabinets.

ACCEPTANCE OF TOOLS AND EQUIPMENT

2.4.1 Responsibility

1. Tool Store Supervisor shall be responsible for the acceptance and use of tools/equipment in GAM.

2.4.2 Control

1. All tools and equipment to be used should be in proper order as well as condition and comply with the specifications detailed by the manufacturer of the aircraft and components.

2. All tools and equipment shall be subjected to receipt inspection procedure as per EPM 2-01 (Tool Control). It shall be procured from acceptable sources and accompanied with relevant documents.

3. Tools/equipment shall be considered unserviceable and not to be used when:

    a) Defective

    b) Not conforming to specification or obsolete

    c) Calibration due date has exceeded

    d) Calibration decal or tag (if applicable) is missing or not legible.

    An Unserviceable tag (GAM/E-006) shall be attached to the unserviceable tool/equipment, and if the tool/equipment is portable, it shall be placed at a designated quarantine area, until corrective action taken.

4. Tool Store Supervisor, on receipt of new tools/equipment, shall update inventory while placing tools/equipment in tool store and inform Chief Engineer/Engineering Manager concerned for its availability.

5. Tools and equipment storage shall conform to applicable environmental conditions, recommended by the manufacturer. Tool Store Section shall maintain and archive following documents or copies (as applicable)

    a) Serviceable label issued by Tool Store Supervisor

    b) Calibration certificate/test report

    c) Any other data, provided with tools and equipment

6. Tool lists shall be maintained for ensuring proper inventories in the organisation. All tools and equipment shall be stored at designated locations in respective Tool Stores.

7. Procedure for Tool Control is further explained in EPM 2-01 (Tool Control).

2.4.3 Monitoring of Tool Service Providers

1. Tool service providers shall be authorised and monitored in accordance with MOE Part 2.1 (Supplier Evaluation Procedure and Sub-Contract Control Procedure).

MAINTENANCE ORGANISATION EXPOSITION

CALIBRATION OF TOOLS AND EQUIPMENT

2.5.1 Responsibility

1. Tool Store section is responsible for calibration of all calibration tools in GAM

2. Tool Store section is responsible to send all inspection, measuring and test equipment to approved vendor.

3. Calibration of precision tools and test equipment, further called Calibration tools (Mechanical & Avionics) is maintained to ensure that the measurement uncertainty is known and consistent with the required measurement capability.

4. Workshop-in Charge is responsible for calibration of tools under GAM Calibration Laboratory scope of capability.

2.5.2 General

1. Procedure for calibration of tools and equipment is further explained in EPM 2-04 (Procedures for Calibrated Tools).

2.5.3 Inspection, Servicing and Calibration Programme/Equipment and Calibrated Tool Procedure.

1. All calibration tools used in GAM are subjected to periodic checks and calibration to assure the required accuracy.

2. Tools and equipment requiring calibration shall be calibrated at an organisation nationally accredited to carry out such calibration or to original equipment manufacturer.

3. The organisation intended for calibration of tool shall be internally approved by the QA Department in accordance with MOE Part 2.1 (Supplier evaluation procedure) and sub-contract control procedure.

4. GAM may utilize the internal GAM Calibration Laboratory for calibration of tools (for tools covered under GAM Calibration Laboratory scope of capability)

2.5.4 Establishment of Inspection, Servicing, Calibration Time Periods and Frequencies

1. All calibrated tools shall be checked and calibrated at regular intervals to assure accuracy and correct calibration.

2. Tool Store Supervisor shall ensure all calibrated tools is calibrated at regular intervals to ensure correct calibration to a standard provided by the manufacturer, or to a standard provided by the national accreditation body.

3. Frequency for calibration standards may vary for different units. Determination of calibration intervals shall be based on equipment manufacturer's recommendation and shall not exceed 24 months interval unless it is allowed by the equipment manufacturer.

4. Tool Store Section shall keep the calibration records for 3 years after the last date of expiry stated on the calibration certificate.

2.5.5 Person/Department Responsible for the Calibration Programme, the Register the Follow-Up, Time Period and Frequencies.

1. The Tool Store Supervisor is responsible for managing calibration programme for all tools and equipment requiring calibration used for maintenance operation.

2. Supply Chain Controller is responsible for sending all inspection, measuring and test equipment to approved vendor for calibration of tools and equipment.

3. Calibrated tools acceptance shall be carried out in accordance with MOE Part 2.4 (Acceptance of Tools and Procedure).

4. Tool Store Supervisor is responsible to create and maintain a listing of tools and equipment requiring periodical calibration.

5. Tools/equipment requiring calibration shall be sent to approved organisation specified in Paragraph 2.5.3 above.

6. It is the responsibility of the Tool Store Supervisor to ensure that all inspection, measuring and test equipment are tagged with calibration label bearing the identification details, dates of calibration and expiry. Where it is not practical due to the small size of the equipment, the placard or serviceable sticker will be attached on its box.

7. Unserviceable tools found out of range or overdue shall be tagged with Unserviceable label (GAM/E-072).

2.5.6 Procedure for Tools Found Out of Tolerance During Calibration.

1. Aircraft records shall be checked upon finding calibrated tools out of tolerance during calibration.

2. Safer Card shall be raised to further explain the details of the situation, which would include specifics such as frequency of tool use, percentage of tool out of range, or inspections affected as applicable.

3. Crisis management shall be carried out to address the situation.

2.5.7 Management of Personal or Loaned Calibrated Tools.

1. At times, due to non-availability, unserviceability or expiry of calibration etc., certain tools/equipment may not be available. In such cases they can be loaned from other approved organisations/operators.

2. Such items loaned need to satisfy the condition for usage and are subject to receipt inspection as detailed in MOE Part 2.4 (Acceptance of Tools and Equipment).

3. Tool store personnel shall monitor calibration validity and issue callout for such tools as necessary.

4. No personal precision tool / equipment should be used without being calibrated and maintained as part of company's list of controlled tools as per requirement of MOE Part 2.4 (Acceptance of Tools and Equipment) and MOE Part 2.5 (Calibration of Tools and Equipment).

2.5.8 In-house Calibration

1. In-house calibration shall be calibrated in accordance with a known international standard, NIST standard and/or standard provided by the equipment manufacturer (OEM). All calibration standard shall be available for each item calibrated in-house for reference.

2. In-house calibration shall be limited to pressure, torque, force and dimensional parameters.

3. A person who performs the in-house calibration shall have sufficient training and knowledge before performing such activities.

4. Records on the relevant qualifications, skills and experience of the person shall be maintained and updated.

5. The environment in which calibration activities are taken shall be equipped with sufficient lighting, ventilation and humidity and temperature controlled. Care shall be taken when such activities are undertaken on-site other than

the specified laboratory location. The specified laboratory location shall be effectively monitor, control and record environmental conditions as appropriate.

6. The master equipment shall be properly maintained, labeled and documented.

7. The required accuracy of the measuring and test equipment is the accuracy required to evaluate the most precise tolerance of any item to be checked using the tool or equipment. The test and measurement equipment or tool shall be periodically checked and have their accuracy verified by approved calibration agency.

8. Refer to Calibration Laboratory Procedure for further details.

USE OF TOOLING AND EQUIPMENT BY STAFF (INCLUDING ALTERNATE TOOLS)

2.6.1 Responsibility

1. All maintenance personnel are responsible for storage and use of tools and equipment in their area in accordance with this procedure.

2.6.2 Distribution of Tools

1. All tools and equipment are managed by the tool store at GAM MIAT maintenance hangar. The tools are stored in the tool store at their designated place in toolboxes or containers.

2. Tools kept at maintenance facilities other than GAM MIAT are managed by the Engineer-in-Charge. The EIC shall ensure that the tools are properly controlled.

3. Tools booked out shall be recorded with the following details specified:

   a) Record of user.

   b) Location of use.

4. Issued tools shall be returned by the users immediately after their usage. The return of tool shall be recorded, and tool store keeper shall return the tool to its designated location.

5. Aircraft or component shall be clear of tools after completion of maintenance.

6. Procedure for tool control is detailed in EPM Part 2-01 (Tool Control).

2.6.3 Determining Tool Serviceability Prior to Use

1. Maintenance personnel taking tools, or equipment, must inspect the condition of the tool immediately prior to its use and it has a valid calibration sticker as applicable to verify its condition and suitability for the intended application. The user must ensure that all tools/equipment are clean and serviceable prior to and upon completion of use.

2. Tools and equipment that are defective, or discrepant shall not be used, and immediately withdrawn from use and tagged with Unserviceable label. Nature of defect or discrepant shall be raised for the tool and equipment in the label.

3. Tool store personnel shall monitor serviceability of tools and equipment. However, serviceability of tools and equipment located at maintenance locations other than GAM MIAT shall be under each EIC's responsibility.

2.6.4 Personal Tool Control

1. A personal tool listing shall be made for each personnel. Each tool shall be labelled with unique marking to indicate the ownership of the tools. The individual personnel shall keep a copy of their own listing and another copy of the listing shall be kept by EIC at the workplace & Quality Assurance department for copy.

2. A random check shall be carried out at regular intervals to confirm the tool listing status and serviceability.

3. No personal precision tool / equipment should be used without being calibrated and maintained as part of company's list of controlled tools as per requirement of MOE Part 2.4 (Acceptance of Tools and Equipment) and MOE Part 2.5 (Calibration of Tools and Equipment).

2.6.5 Loan Tool Control and Audit.

1. In the event of tools unavailability, it may be loaned from other organisation in possession of said tool. However, the condition of tool storage shall be checked prior to loaning of tools.

2. Tools loaned shall undergo acceptance procedure as stated in MOE part 2.4 (Acceptance of Tools and Equipment). They shall be registered and controlled to ensure their serviceability. Each loaned tools shall be indicated with unique control number.

3. Procedure for loan tool control is further detailed in EPM 2-01 (Tool Control).

2.6.6 Alternative Tools and Equipment

1. Generally, tools and equipment specified or recommended in the relevant AMM and CMM are used. Equivalent tools & equipment conforming to recognized standards may also be utilized.

2. Tools and equipment must be used in accordance with the manufacturer's specifications and tolerances/standards practices or using good basic aircraft engineering principle as applicable to the tools in use.

3. Due regard must be taken of the design specifications to ensure maximum working tolerances are not exceeded.

4. To use the alternative tools and equipment, EIC or EM must consult the QAM first through the Management of Change process.

2.6.7 Control of Alternative Tools

1. In all normal circumstances the original tooling and equipment as prescribed by the manufacturer has to be used for the specific maintenance task. At times there could be a need to locally fabricate tools/equipment, as an alternate to manufacturer's tools/equipment to complete the maintenance tasks due to circumstances beyond the GAM's control.

2. The fabrication of an alternate tool has to be approved on the basis of approved tool/equipment drawing which has been supplied by the Aircraft manufacturer or OEM of the tools. Alternatively, the drawings can be made through reverse engineering process and the risk assessment shall be performed.

3. For further details, refer to Engineering Procedure Manual (EPM) Part 2-05

CLEANLINESS STANDARD OF MAINTENANCE FACILITIES

2.7.1 Responsibility

1. LAEs and Technicians are responsible for the proper protection of aircraft, engines and components in their area of responsibility.

2. Maintenance personnel are also responsible to ensure that all efforts are made to prevent foreign object damages.

3. Each GAM employee is responsible for the cleanliness of his/her working area, office or workshop area.

2.7.2 General House Keeping

1. Working environment shall be as clean, orderly and as practical whenever work is done as well as ensuring that equipment and material is returned to its proper place when the job is completed.

2. Aisles, walkways and exits shall be kept clear and uncluttered by stock or equipment.

3. Proper containers to be used for waste fluids, oily rags, debris and trash at all times.

4. Floors and work areas to be kept clean and free of oil, grease, fuel, water and trash as much a practical.

5. Fluids and greases used in components or other equipment shall be stored in clean identified containers and covered when not in use. Stock shall be kept clean and protected from harmful elements. Equipment and tools are to be kept clean, in good condition and in their proper location when not in use.

6. Waste materials such as paper, masking tape bits, polythene, packing materials, fuel, oil, consumable containers, etc., that are generated during maintenance are to be collected and disposed of in the appropriately designated waste bins.

7. The respective EICs shall ensure that the workplaces are segregated and organized to prevent contamination from other adjoining work areas.

8. General housekeeping procedure is further detailed in EPM Part 1-02 [cleanliness of aircraft (FOD control)].

2.7.3 Cleanliness of the Work Area

1. It is the policy of the company that maintenance personnel are responsible for the cleanliness of their own working area. At the end of each working day the working area will be left in clean condition and any FOD shall be cleared from the workplace for the next day or next shift.

2. Reporting of FOD shall be made via Safer Card or any viable reporting medium in accordance with EPM part 1-02 [Cleanliness of Aircraft (FOD control)].

2.7.4 Hazardous Material Handling

1. Hazardous materials used for special process area such as cleaning and painting will be used and handled as per the manufacturer recommendations.

MAINTENANCE INSTRUCTIONS AND RELATIONSHIP TO AIRCRAFT / AIRCRAFT COMPONENT MANUFACTURER'S INSTRUCTION INCLUDING UPDATING AND AVAILABILITY TO STAFF

2.8.1 Responsibility

1. Technical Publication section shall ensure that all necessary maintenance data (AMM, IPC, WDM, SRM, CMM, etc.) is provided from either the manufacturer or the CAMO, and only applicable and current maintenance data is kept by GAM and made available for the use of maintenance personnel during any maintenance work.

2. As a CAAM Part-145 Approved AMO, GAM has to hold and use applicable current maintenance data for the performance of maintenance on aircraft.

3. CAMO shall provide all the maintenance data required to accomplish the work requested. This data can be supplied in any format (hard copy, digital, etc.)

2.8.2 Maintenance Data Coming from External Sources

1. GAM shall ensure that the CAMO furnishes all the technical documents (maintenance data) are current and up to date.

2. Unless provided by the CAMO, the workpack, worksheet and any other assiociated maintenance data necessary for the accomplishment of the work is provided by GAM production planning by using the applicable and current maintenance data.

3. Procedure for Maintenance Data Coming from external sources is further detailed in EPM 4-02 (Publication and Maintenance Data Control).

2.8.3 Documentation/Maintenance Instructions Issued by The Maintenance Organisation

1. GAM does not modify any of the maintenance instructions from the CAMO. However, if there is a need for amendment to the maintenance instructions, GAM shall inform the maintenance instructions provider which is the CAMO for amendment.

2. GAM shall produce maintenance instructions for the use of support shops in accordance with WMP Part 1.9 (Workshop Document Generation).

3. The maintenance instructions should have complex tasks subdivided into clear stages with differentiation of disassembly, accomplishment, reassembly and testing tasks. Reference should be made to the CDCCL and FTS concept, where applicable.

4. Documentation issued for internal information purposes to disseminate information from Manufacturers, Operators, Legislative Authorities and Company Experience/Policy will be in the form of Quality Assurance Notice, Engineering Memo and Engineering Notice.

   a) These documents shall be available on the GAM Online Portal accessible to the authorized staff.

   b) Any amendment or update of the documents will come from the Originator and controlled by Technical Publications.

2.8.4 Control of Information

1. List of all maintenance data, including revision status, location and responsible receiving persons, are kept by Technical Publication section.

2. All revisions to the maintenance documents are received by the Technical Publication section for further distribution within GAM.

3. The whole of the various documentation from the manufacturers are available and can be viewed by the maintenance personnel at every GAM maintenance location.

4. EIC shall ensure that all applicable approved data is readily available for use.

5. This section is further detailed in EPM 4-02 (Publication and Maintenance Data Control).

2.8.5 Technical Information Amendment Procedure

1. Any discrepancy found to maintenance data or instructions shall be reported to the PPC for further action as detailed in EPM 4-02 (Publication and Maintenance Data Control).

2.8.6 Uncontrolled Manual

1. All maintenance data shall be segregated into controlled and uncontrolled data. All uncontrolled data must be identified and marked “UNCONTROLLED”.

REPAIR PROCEDURE

2.9.1 Responsibilities

1. It is the company policy that any aircraft/aircraft component repair, internal/external, shall be carried out in accordance with relevant approved data issued by Original Equipment Manufacturer (OEM) / Design Organisation

2. If applicable the approved data shall be available in workshops and maintenance areas accessible to concerned personnel.

3. The EM is responsible for control of maintenance instructions in accordance with this procedure.

2.9.2 Repairs According to Already Available Maintenance Data

1. GAM shall not generate, issue or use repair procedures on its own. All repair data and procedures used at GAM are in accordance with maintenance data published by the TC holder or STC holder, CAAM Part-21 DOA or sources approved by CAAM.

2. Repair to an aircraft/component shall be carried out in accordance with repair scheme contained in the Manufacturers Manual including Structural Repair Manual.

3. Repair schemes outside the scope specified in the OEM manuals shall either be from CAAM Part-21 organisation or approved by CAAM.

4. All modifications and major structural repair to aircraft and aircraft components which is not covered by Service Bulletin which is issued by OEM/approved by Type Certificate Holder need to be submitted and approved by CAAM.

5. Recording the work shall be in accordance with MOE Part 2.13 (Maintenance Documentation in Use and its Completion).

2.9.3 Repairs Requiring a New Approval (Not already included in the available maintenance data).

1. For repair scheme not covered or beyond the limitations of the already available maintenance data, refer Paragraph 2.9.2 above, the approval from the Type Certificate Holder/Supplemental Type Certificate Holder, CAAM Part-21 Design Organisation (DOA) and CAAM shall be obtained.

2. A written consent to use such repair scheme shall be requested from the CAMO.

3. CAMO shall coordinate with TC/STC Holder, OEM, CAAM Part-21 DOA or CAAM to provide the approved repair documentation.

4. Work sheets may be raised when requested to provide work instructions for the repair in accordance with MOE Part 2.13 (Maintenance Documentation in Use and its Completion).

5. The recording of the work will be in sufficient detail to allow staging of work, clear evidence that all requirements have been met and references to approved data.

6. The specific repair approval is obtained for aircraft with specific serial number only, this repair is not valid for another aircraft.

2.9.4 Control of the Scope of Work Versus the Requested Repair

1. Only repairs which are within the scope of the approved maintenance data, shall be undertaken by GAM after ensuring the availability of facilities, tools and equipment, manpower and support/certifying staff.

2. When there is no capability to carry out the repair in house then the services from the manufacturer or other approved organisations services may be sought. Selection of the service provider shall be in accordance with MOE Part 2.1 (Supplier Evaluation Procedure and Sub-contract Control Procedures).

2.9.5 Fabrication of Parts

1. As a policy, GAM can only fabricate a restricted range of parts to be used in the course of undergoing work within its own facilities.

2. Items fabricated may be only installed on products and/or components undergoing maintenance in GAM, with GAM being the same maintenance organization which is fabricating the parts.

3. GAM may sub-contract special processes but cannot sub-contract the overall fabrication process.

4. The local fabricated parts shall physically be segregated and excluded from any delivery certification and no CAAM Form 1, shall be issued against such fabricated parts. The part may only be used internally by GAM for the purpose of maintenance and not approved to supply externally or sale to other party.

5. Following shall be examples of fabrication that may be carried out in GAM.

   a) Fabrication of bushes / sleeves and shims

   b) Fabrication of secondary structural elements and skin panels.

   c) Fabrication of control cables

   d) Fabrication of flexible and rigid pipes.

   e) Fabrication of electrical cable looms and assemblies

   f) Formed or machined sheet metal panels for repairs.

6. The fabrication of the following type of parts is not permitted:

   a) Critical parts (as defined by the design approval holder)

   b) Complete primary structural elements

   c) Prototype parts (conformity only to non-approved data)

7. The fabrication work shall only be performed in accordance with data approved by the CAAM or Type Certificate holder, or Design Organisation Approval holder or Supplement Type Certificate holder.

8. The item is fabricated under GAM's approved rating as reflected in MOE Part 1.9 (Scope of Work) e.g. as part of the maintenance carried out on aircraft under rating A1, engines under rating B1, components under a C rating.

9. The data may be provided in the overhaul manual or repair manual, service bulletin, modification schemes, drawings or any other form approved by the CAAM. The data shall include details of material (including raw material), dimensions, fabrication process (including special manufacturing techniques), protection method, required inspection and testing as well as part numbering.

10. The locally fabricated part should carry a part number as reflected in the manufacturing data unless the size of the part is not permitted. Additionally, GAM identification should also be marked for traceability purposes.

11. Long-term storage of fabricated parts is not permitted. This means they may be only stored for limited time as justified by the duration of the on-going maintenance for which they have been fabricated.

12. Details of the task performed in fabrication of part shall be recorded and certified in accordance with MOE Part 2.13 (Maintenance Documentation in Use and its Completion).

13. A final inspection shall be performed to establish compliance with the relevant manufacturing data. Part that found to be in compliance with the data, shall be clearly identified as fit for use by stating conformity to the approved data in the worksheet.

14. The final inspection shall be done separately, independently and prior to installation of the part. The final inspection shall cover the elements as per below:

    a) Check for compliance to MOE Part 2.9 (Repair Procedure).

    b) Check completion of the fabrication file

    c) Physical inspection of the part fabricated, to confirm the part conforms to the approved data for fabrication

    The Certifying Staff (CS) authorised for the aircraft / component in need of the fabricated parts shall be the person to perform the final inspection and the signatory to the Worksheet.

15. To support and record the parts fabrication process, a standard “fabrication file” is to be used for each part or batch to be fabricated by GAM, consisting of:

    a) The necessary approved data.

    b) The worksheet and associated documents (if applicable) eg. documents of materials used, test reports, etc.

16. The parts which fulfill all the requirements then will be routed to the store as per MOE Part 2.2 (Acceptance / Inspection of aircraft components and materials from outside contractors).

MAINTENANCE ORGANISATION EXPOSITION

AIRCRAFT MAINTENANCE PROGRAMME COMPLIANCE

2.10.1 Responsibility

1. It is the responsibility of the CAMO to have an Approved Maintenance Programme for the particular aircraft type. The preparation, development, revision and approval of Maintenance Programme are sole responsibility of the CAMO.

2. GAM shall have access to the current revision of Aircraft Maintenance Programme and shall ensure that maintenance release is done in compliance with approved operator's maintenance programme.

3. Deviation from maintenance programme shall be made in accordance with MOE Part 3.9 (Aircraft or Aircraft Component Maintenance Tasks Exemption Process Control) and MOE Part 3.10 (Concession Control for Deviation from Organizations Procedures).

MAINTENANCE ORGANISATION EXPOSITION

AIRWORTHINESS DIRECTIVE PROCEDURE

2.11.1 Responsibility

1. It is the responsibility of the CAMO to list all the required Airworthiness Directives (AD) for embodiment onto the aircraft or equipment.

2. GAM shall demonstrate that a contract is in place, attributing the responsibilities related to the ADs to the CAMO.

3. GAM is responsible for complying with the AD which have been ordered by the CAMO through the work packages.

2.11.2 Airworthiness Directive Procedure

1. When a new Airworthiness Directive must be implemented, the CAMO will send a work order as well as a copy of the AD to GAM.

2. GAM shall ensure that a copy of AD as provided by the CAMO for implementation is available to maintenance staff.

3. Prior to installation on an aircraft, Certifying Staff shall ensure that the component is eligible to be fitted when different AD configuration may be applicable.

4. When GAM carries out the AD as instructed by the CAMO via worksheet, the implementation of the AD will be recorded in the Aircraft Journey Log of the concerned aircraft or stated in the component release document (i.e., CAAM form 1, Workshop Process Report) and archived in the work package.

5. Maintenance release shall not be issued in case of any non-compliance which is known to endanger flight safety.

6. In every case, before initiating any work, certifying staff shall ensure the aircraft/component is included in his scope of certification and in the approval of GAM. He/she shall ensure that all means required to implement the AD are available and thoroughly understands the mandatory requirements reflected in the AD.

OPTIONAL MODIFICATION PROCEDURE

2.12.1 Responsibility

1. As an Approved Maintenance Organisation, GAM is responsible for embodying optional modification which has been ordered by the CAMO through the work order.

2. Only modifications/STCs approved under the Manufacturers' approval/ Design Organisation Approval/CAAM could be performed on an aircraft/aircraft component.

2.12.2 General

1. All modification to aircraft and aircraft components must be performed in accordance with approved documents.

2. All modifications and repair considered approved by CAAM
   a) AD's
   b) SB's
   c) All modifications including STC's approved or validated by CAAM
   d) All modification approved by CAAM DOA

3. Minor changes in a type design shall be classified and approved either
   a) By the CAAMs or
   b) By an appropriately approved design organization (DOA) under a procedure agreed with CAAM

MAINTENANCE DOCUMENTATION IN USE AND ITS COMPLETION

2.13.1 Responsibility

1. All forms or documents used in recording of maintenance work done shall be authorized by the QAM. These work documentations shall be identified with GAM Form Number for the purpose of traceability.

2. Certifying Staffs are responsible to make certification that follows with their respective initial, approval stamp and appropriately dated.

3. Tasks performed by non-certifying staff shall bear their respective initial and staff no for traceability purposes.

4. The fullest possible details of the work/results are to be recorded at all times and must include where necessary, technical data references, batch numbers, serial numbers, test figures achieved, statements on serviceability, details of calibrated equipment/tools used and cross references.

2.13.2 Templates in Use to Record Maintenance

1. This section defines the type of documentation used during the maintenance of the aircraft/component and the procedure to control such documents.

2. All documentation intended to be used for recording maintenance activity of the aircraft/component shall be in accordance with the CAMO requirements. If the CAMO does not have their own work package, then GAM work package will be in use.

3. CAMO shall analyse the Manufacturer data and accurately transcribe the data onto such work cards or worksheets with precise reference to the approved data.

4. Following are the maintenance documentations that is normally in use:

    a) Routine task (Maintenance schedule requirement)

        i. These routine tasks are for the purpose performing routine inspection as identified in CAMO Maintenance Programme/Maintenance Schedule.

ii. PPC Section will compile all required Maintenance Schedule inspection and any other maintenance requirement under a Work Pack for the performance of maintenance task to be accomplished during Hangar check and transferred to GAM worksheet.

iii. All associated worksheets in the Work Packages must be registered in the Work Pack Control sheet (GAM/E-001A) which is placed at front of the work pack.

b) Non-routine task (unscheduled maintenance requirement)

i. For work resulting from non-routine task i.e. defect rectification etc. GAM worksheet will be used to record the details of work carried out. Reference to maintenance instruction shall be recorded.

ii. An additional work sheet maybe utilised for additional documentation required and cross-reference shall be made between the work sheets and originating source document.

c) Schedule Maintenance Inspection

i. At completion of check, (as detailed in respective Aircraft Maintenance Programme) a Base Maintenance Release shall be raised.

d) Component Maintenance Task

i. Maintenance documentation in use for component maintenance is detailed in WMP 1.7.7 (Related Documents) and WPM 1.9 (Workshop Document Generation).

5. GAM work package includes the following as applicable and not limited to:

a) Work Order

b) Work Pack Control Sheet (GAM/E-001A)

c) Worksheet

d) Workshop Worksheet (GAM/E-001C)

e) Part Report (GAM/E-001H)

f) Base Maintenance Release Certificate (GAM/E-009)

However, CAMO work package system shall be utilised if available, in accordance with CAMO requirements.

2.13.3 Completion of Maintenance Documentation

1. All routine cards, non-routine cards and additional worksheets are to be made in indelible ink, bold print and legible text. Instructions for filling are stated in the individual worksheets.

2. Where numerous items are detailed on work cards and not divided by certification lines, each item entry will be required to be stamped, signed and dated. One stamp per page will not be acceptable.

3. Any routine card, non-routine card, additional worksheet or paper log entry made in error must be deleted by a single line through the error and appended with the initial, date and stamp of the personnel. The use of correction fluid or eraser to obliterate text is not permitted under any circumstances.

4. Any section/task/conditional tasks (recording of test results or dimensions) which is not applicable will be annotated with 'N/A' with the reason stated. Certifying staff shall enter "-" in the technician column and annotate his/her signature, stamp and date on the certification column. Corrections shall not be made after issuance of maintenance release.

5. Where work may involve multiple tasks, consideration must be given to raising additional paperwork to require further inspection/work by Certifying Staff.

6. Defects which cannot be rectified due to unforeseen reasons can be deferred if permitted by approved MEL/CDL or other approved data and CAMO acceptance. All deferred defects must be recorded in the Aircraft Journey Log/Worksheet and Aircraft Deferred Defect Record.

7. Requirements for Independent inspection shall be in accordance with MOE Part 2.23 (Control of Critical Tasks)

8. Engineering personnel who have carried out the work/tasks as detailed on the worksheet shall annotate her/his signature and staff number in the "technician" column. Where the person who carried out the work/tasks is also the appropriate Certifying Staff, then the person must sign in both "technician" column and "Eng. maintenance release" column with the Staff Number of the Certifying Staff annotated in the "technician" column and the Approval Number/Stamp in the "Eng. maintenance release" column.

9. The fullest possible details of the work/results are to be recorded at all times in the worksheet/aircraft journey log/parts report and must include where necessary, technical data references, batch numbers/GiN reference, serial numbers, details of calibrated tools/equipment used, test figures achieved, statements on serviceability and cross references.

    a) All Serviceable Tags, Certificate of Conformity and/or Acceptable Airworthiness Release Certificate (e.g. CAAM Form 1, EASA Form 1) are to be retained with the work-pack / Aircraft Journey Log sheet.

10. Work sign-off shall use approval stamps and signature to annotate the completion of a task on a work order, Aircraft Journey Log page, process sheet, inspection work card, or similar document.

    a) The intent of the stamp and signature is to ensure traceability to the name of person who performed or inspected the work.

    b) Signatures: By signing that the work was accomplished, the person assumes responsibility that the work was properly accomplished because that individual personally did the work or checked the work.

    c) Stamps: Certifying Staff must use his/her approval stamps except in special situations as determined by the QAM.

11. EIC shall ensure that all relevant certifying and support staff receive appropriate documentation and procedure training from CAMO.

12. Completed documentation shall be routed back to the PPC where all shall be accounted for in accordance with the Workpack Control sheet. The section shall make copies of all the documentation and handover the originals to the CAMO.

13. The copies of the documentation shall be preserved for future reference and shall be kept for a period of 3 years or more if required per the contractual agreement between GAM and the CAMO.

14. In the case of returned of documentation from CAMO back to AMO for correction/amendment, CAMO Planner shall liaise with Production Planner and Controller (PPC) on the correction/amendment required.

15. PPC shall communicate with the EIC for the correction/amendment. EIC shall liaise with appropriate personnel to make the correction/amendment to the maintenance documentation.

16. After correction/amendment was made, completed documentation shall be routed back to the PPC. Copies of the records in AMO shall be updated with the correction/amended documentation prior to handover the original back to CAMO.

MAINTENANCE ORGANISATION EXPOSITION

TECHNICAL RECORD CONTROL

2.14.1 Responsibility

1. Production Planner and Controller (PPC) is responsible for storing, controlling, and filing of maintenance records.

2.14.2 Control of Records File

1. In coordination with the PPC, the certifying staff shall ensure all applicable documentation is raised and appropriately certified.

2. Prior to handing over to the CAMO, detailed maintenance work record together with all documents used for maintenance will be scanned and stored in electronic media by PPC for recordkeeping. The records include but limited to:

   a) Part report

   b) Worksheet

   c) AD/SB record sheets

   d) Customer purchase order or workscope

   e) Component/material release certificates

   f) Maintenance Release Certificate

3. Release documents of components, standard parts, and consumable / raw materials that are used / installed in the course of maintenance, if they are not made part of the maintenance records, they shall be traceable and available for retrieval at any time.

4. In the case of release documents related to aircraft components, the CAMO agreement is necessary where those documents are only traceable but not included in the maintenance records provided to the CAMO.

5. The scanned maintenance records, which serve as primary record, then will be transferred to the Technical Record folder in the Google Drive. The paper copy is archived in the Technical Record section with restricted access only by the department staff.

6. The maintenance records are stored and identified with proper indexing in relation to customer and aircraft type for ease of accessibility and retrieval.

7. The maintenance records are preserved and protected in a safe manner by the Technical Record personnel preventing their theft, unauthorized alteration, destruction/deterioration due to accidental and other environmental damages.

8. A control register shall be maintained to ensure that all aircraft records, aircraft technical documents and completed maintenance check packages are filed and stored in a proper manner

9. Maintenance records kept in the Technical Record folder are backed up every two weeks in the external hard disc under the custody of the PPC Supervisor and kept at a different place from the main records.

2.14.3 Control of Access to Records.

1. The Technical Records Section shall be responsible for control of access to records. Access to records shall be strictly limited to prevent unauthorized alteration. Access shall be limited to and technical record staff in the course of their duties.

2.14.4 Provision of Records (CRS) to Operator

1. The company shall provide Certificate of Release to Service to the CAMO, together with a copy of any specific approved data used for maintenance/repairs/modifications carried out as applicable.

2. The Technical Record section shall retain a copy of all detailed maintenance records and any associated maintenance data to provide evidence of conformance and quality, per contract requirement.

2.14.5 Retention of Records

1. GAM will keep a copy of all detailed maintenance records and any associated maintenance data for a minimum of 3 years from the date the aircraft or component to which the work relates was release to service.

2. If GAM ceases to be a Maintenance Organisation, all retained maintenance records covering the last three 3 years shall be sent back to the last owner or customer of the respective aircraft or component.

MAINTENANCE ORGANISATION EXPOSITION

RECTIFICATION OF DEFECTS ARISING DURING BASE MAINTENANCE

2.15.1 Responsibilities

1. The Aircraft Technicians and Licensed Aircraft Engineers are responsible for the rectification of defects arising during base maintenance.

2. In the event of any occurrences or defects that are deemed reportable to the CAMO, manufacturer and authority, the procedures stated in MOE Part 2.18 (Reporting of defects to the Competent Authority / Operator / Manufacturer) shall be followed.

2.15.2 Recording of Defects

1. Defects report may be classified as below:

   a) Pilot reported defect, entered in the Aircraft Journey Log and the rectification carried out.

   b) Defects and rectifications recorded in the worksheet during hangar maintenance.

   c) Defects and rectifications recorded in the Workshop Worksheet during component maintenance.

2.15.3 Pre-Assessment Checks – For aircraft not under GAM CAMO

1. On arrival of an aircraft for a maintenance visit, a pre-assessment check of the aircraft should be performed to determine the customer maintenance request as well as reported defects. Aircraft physical condition shall be inspected using Aircraft Acceptance/Handover Inspection Form (GAM/E-077).The finding observed during the physical inspection should be registered in the Aircraft Acceptance/Handover Inspection Form (GAM/E-077). CAMO representative shall be informed on the result of the physical pre-assessment check for acceptance prior to maintenance commencement.

2. Pre-assessment check should also ensure that all outstanding defects reported in CAMO Aircraft Journey Log are included in the work package for the maintenance action. Aircraft physical inspection finding registered in the Aircraft Acceptance/Handover Inspection Form (GAM/E-077) shall be discussed with CAMO for further maintenance action.

2.15.4 Recording and Sign-Off Maintenance Defects

1. The recording and release to service procedures for maintenance defects are stipulated in MOE 2.13 (Maintenance Documentation in Use and its Completion) and MOE 2.16 (Release to Service Procedure).

MAINTENANCE ORGANISATION EXPOSITION

RELEASE TO SERVICE PROCEDURE

2.16.1 Responsibility

1. Certifying Staff is responsible for the maintenance release to service.

2.16.2 Company Policy

1. All accomplished maintenance on aircraft or aircraft components will be released by duly authorized Certifying Staff.

2. Under no circumstances a maintenance release will be issued for any item when it is known that the item is unserviceable or has a defect considered a serious hazard to flight safety.

3. Maintenance in this case means the performance of tasks required to ensure the continuing airworthiness of the aircraft/component, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

2.16.3 Maintenance Release

1. A maintenance release shall be issued by Certifying Staff holding appropriate approval granted in accordance with MOE Part 3.4 (Certifying Staff Qualification and Training Procedures) when it has been verified that all maintenance ordered had been properly carried out in accordance with approved maintenance data and he/she ensure that there is no non-compliance which are known can endanger the flight safety.

2. For tasks as stated in the approved maintenance programme such as Daily Inspection/Pre-flight check that is required before flight, maintenance release shall be issued after the completion of the tasks at the Aircraft Journey Log.

3. Maintenance Release Certificate for work performed on aircraft, either under line maintenance or base maintenance, shall be issued by appropriately rated category B1 or B2 Certifying Staff. Appropriately approved Category A Certifying Staff may issue Maintenance Release for work he/she personally performed under minor scheduled line maintenance and simple defect rectification.

4. Tasks that are declared to be carried out as Base Maintenance check, a base maintenance release (BMR) will be issued by Category C approval holder

   a) Authorisation to sign this certificate of release to service for BMR, shall be granted to qualified persons holding appropriate approval granted in accordance with MOE Part 3.4 (Certifying Staff Qualification and Training Procedures)

   b) Category B1 and Category B2 Certifying Staff shall ensure that all relevant tasks or inspections have been carried out to the required standard before the Category C Certifying Staff issues the BMR.

   c) The Category C Certifying Staff shall ensure that compliance with 4(b) above, has been met and that all work required by the CAMO has been accomplished during the particular Base Maintenance check work package and shall also assess the impact of any work not carried out with a view to either requiring its accomplishment or agreeing with the CAMO to defer such work to another specific check or time limit.

5. The maintenance release statement shall consist of the following statement:

   "Certifies that the work specified, except as otherwise specified, was carried out in accordance with CAA Malaysia Requirements and in respect to that work the aircraft/aircraft component is considered ready for release to service"

6. Maintenance release shall include the following, as applicable:

   a) Cross-reference to work packs, if applicable.

   b) Reference to maintenance data used, including its revision status and date.

   c) Task(s) specified in the (S)TC holder's maintenance data.

   d) Task(s) specified in the operator/owner instructions or AMP.

   e) Date/FH/Cycles/Landings etc. as appropriate when such maintenance was carried out.

   f) CAAM Part-145 approval number.

   g) The identity of the person or persons signing the release (company approval, signature and date)

h) Details of calibrated tools used (serial number/ID Number and calibration due date) if any and details of components/standard parts/consumables used (if any).

7. Engineering personnel who have carried out the work/tasks as detailed on the worksheet shall annotate her/his signature and staff number in the "technician" column. Where the person who carried out the work/tasks is also the appropriate Certifying Staff, then the person must sign in both "technician" column and "Eng. maintenance release" column with the Staff Number of the Certifying Staff annotated in the "technician" column and the Approval Number/Stamp in the "Eng. maintenance release" column.

8. Maintenance release shall be written in capital letters using indelible ink with ball point pen (black or blue) and the use of abbreviations should be limited to a minimum and for technically accepted abbreviations and acronyms, to aid clarity. Abbreviations such as "OK" are not acceptable.

9. The maintenance release shall contain particulars of the work done, the organization, date and place at which the work has been carried out. Depending upon the application of the certificate, details of the aircraft type, registration, component type, part number, serial number shall be recorded as applicable.

10. Maintenance release for incomplete maintenance can only be done within the approved aircraft/component limitations, and with the CAMO agreement. If the customer/operator agrees to the deferment of full compliance, then the maintenance release may be issued subject to details of the deferment. GAM shall detail the deferment in the aircraft/component maintenance release certificate before the issue of such release.

11. Whenever maintenance work is performed or disturbance made to aircraft's system defined as critical, the Independent Inspections required must be certified before the relevant maintenance release is issued. Details of the Critical Tasks and Independent Inspection procedures are contained in MOE Part 2.23 (Control of Critical Task).

12. In the case of deviation from approved procedures in the MOE, One-Off authorisation may be issued. Procedures for One-Off authorization are specified in MOE Part 3.10 (Concession Control for Deviation from Organizations' Procedures)

13. The appropriate company Certifying Staff doing a maintenance release certification must ensure that the work of overhauls, repairs, replacements, modifications, or mandatory inspections has been carried out in accordance with the requirement of the CAAM, and ensuring the following has been complied with:

    a) Up-to-date instructions and approved airworthiness data (including manuals, drawings, specifications, CAAM mandatory modifications/ inspections and where applicable, Company procedures).

    b) Recommended tooling and test equipment which is currently calibrated where applicable.

    c) A working environment appropriate to the work being carried out

    d) Appropriately trained personnel

14. The maintenance release for category A1, A2, A3 & A4 daily inspection/pre-flight shall be completed by making an entry in the Technical Log. The action taken shall be certified by an appropriately authorised Approval Holder in the space provided, by signature, approval number, date, and place at which the work was carried out.

15. Limited certification authorization may be issued to the aircraft commander and/or the flight engineer for:

    a) Repetitive pre-flight Airworthiness Directive which specifically states that the flight crew may carry out such Airworthiness Directive.

    b) Accomplishment of the specified task to the required standard for aircraft operating away from a supported location.

    Limited certification authorization procedures are further detailed in MOE Part 3.14 (Limited Certification Authorisations Control Procedure).

16. In circumstances that could hazard flight safety, the maintenance release certificate shall not be signed. This include but are not limited to:

    a) Airworthiness Directives not enforced.

    b) Work carried out not in accordance with approved data

    c) Discrepancies that may have consequences on the airworthiness of the aircraft and/or component.

2.16.4 Issue of CAAM Form 1 for Component Maintenance

1. The components listed in the approved capability list are eligible for issue of CAAM Form 1.

2. The CAAM form 1 shall be issued by the authorised component certifying staff after completion of maintenance.

3. The tracking number of the CAAM Form 1 shall be controlled by the Engineering Department with a running reference number. The recording system shall allow easy retrieval of all issued CAAM Form 1. When a request has been made for an CAAM Form 1, a tracking number shall be assigned. A copy of the issued CAAM Form 1 shall be kept in the Engineering Department.

4. A record of all cancelled or corrected CAAM Form 1 which were mistakenly completed or issued shall be kept for traceability purposes.

5. If an end-user finds an error(s) on a Certificate, he/she must identify it in writing to the originator. The originator may issue a new Certificate only if the error(s) can be verified and corrected.

6. The new Certificate must have a new tracking number, signature, and date.

7. The request for a new Certificate may be honoured without reverification of the item(s) condition. The new Certificate is not a statement of current condition and should refer to the previous Certificate in block 12 by the following statement: 'This Certificate corrects the error(s) in block(s) [enter block(s) corrected] of the Certificate [enter original tracking number] dated [enter original issuance date] and does not cover conformity/condition/ release to service'. Both Certificates should be retained according to the retention period associated with the first.

2.16.5 Release of Component Removed Serviceable from Aircraft

1. When a serviceable component is removed serviceable from an aircraft for storage, a CAAM Form 1 shall be issued by appropriately rated Certifying Staff.

2. It is essential to obtain clear evidence that the items are serviceable before return to store.

3. The serviceability status of the items must be justified and recorded in Workshop Worksheet (GAM/E-001C) as a form of evidence.

4. Items shall be subjected to competent assessment and inspection, taking into consideration knowledge of the condition of aircraft, subsequent storage and transport conditions and evidence of previous service operation history obtained from valid airworthiness records (i.e. log card) for traceability purpose before return to store as serviceable can be considered.

5. Items which are removed from aircraft must ascertain its serviceability status by appropriate means but not limited to:

   a) Perform functional check on aircraft in accordance with the maintenance data.

   b) Detail examination and physical condition visual check.

   c) Bench test (if required).

   d) Other test or inspection recommended by the OEM/TC Holder.

6. Inspection, testing or means to ensure the serviceability of the items shall be certified by appropriately rated certifying staff.

7. For items which its status is known as serviceable, Workshop Worksheet shall contain the traceability of its operation history, registration of aircraft served (if applicable), serviceability status and task, inspection or test conducted to ascertain the serviceability of the item

8. If the item is found to be unserviceable, it must be return to store with unserviceable label.

9. Once Workshop Worksheet is completed with sufficient detail, the items shall be released with CAAM form 1.

10. Issuance of CAAM form 1 shall be in accordance with Sub-paragraph 2.16.5.5.

11. Procedures detailed in this Paragraph shall be adhered to before releasing component(s) removed serviceable from aircraft/engine using CAAM Form 1.

2.16.5.1 Used Aircraft Components Removed from a Serviceable Aircraft

1. Serviceable aircraft components removed from a Malaysian civil registered aircraft may be issued with a CAAM Form 1 by GAM subject to compliance with this Sub-paragraph.

2. GAM should ensure that the component was removed from the aircraft by an appropriately qualified person who has done company documentation and procedure training.

3. The aircraft component may only be deemed serviceable if the last flight operation with the component fitted revealed no faults on that component/related system.

4. The aircraft component should be inspected for satisfactory condition including in particular damage, corrosion or leakage and compliance with any additional maintenance data.

5. The aircraft record should be researched for any unusual events that could affect the serviceability of the aircraft component such as involvement in accidents, incidents, heavy landings or lightning strikes. Under no circumstances may a CAAM Form 1 be issued if it is suspected that the aircraft component has been subjected to extremes of stress, temperatures or immersion which could affect its operation.

6. A maintenance history record should be available for all used serialised aircraft components.

7. Compliance with known modifications and repairs should be established.

8. The flight hours/cycles/landings as applicable of any service life-limited parts including time since overhaul should be established.

9. Compliance with known applicable Airworthiness Directives should be established.

10. Subject to satisfactory compliance with this Sub-paragraph 2.16.5.1, a CAAM Form 1 may be issued and should contain the information including the aircraft from which the aircraft component was removed.

11. Issuance of CAAM form 1 shall be in accordance with Sub-paragraph 2.16.5.5

2.16.5.2 Issue of CAAM Form 1 for used aircraft components removed from Malaysian civil registered aircraft withdrawn from service.

1. Serviceable aircraft components removed from an aircraft withdrawn from service may be issued with a CAAM Form 1 by GAM subject to compliance with this Sub-paragraph.

   a) Aircraft withdrawn from service are sometimes dismantled for spares. This is considered to be a maintenance activity and should be

accomplished under the control of an organisation approved under CAAM Part-145, employing procedures approved by CAAM.

b) To be eligible for installation, components removed from such aircraft may be issued with a CAAM Form 1 by an appropriately rated organisation following a satisfactory assessment.

c) As a minimum, the assessment will need to satisfy the standards set out in Paragraph 2.16.5.1. This should, where known, include the possible need for the alignment of scheduled maintenance that may be necessary to comply with the maintenance programme applicable to the aircraft on which the component is to be installed.

d) Irrespective of whether the aircraft holds a certificate of airworthiness or not, the organisation responsible for certifying any removed component should ensure that the manner in which the components were removed and stored are compatible with the standards required by Part-145.

e) A structured plan should be formulated to control the aircraft disassembly process. The disassembly is to be carried out by an appropriately rated organisation under the supervision of the appropriate approval holder who will ensure that the aircraft components are removed and documented in a structured manner in accordance with the appropriate maintenance data and disassembly plan.

f) All recorded aircraft defects should be reviewed and the possible effects these may have on both normal and standby functions of removed components are to be considered.

g) Dedicated control documentation is to be used as detailed by the disassembly plan, to facilitate the recording of all maintenance actions and component removals performed during the disassembly process. Components found to be unserviceable are to be identified as such and quarantined pending a decision on the actions to be taken. Records of the maintenance accomplished to establish serviceability are to form part of the component maintenance history.

h) Suitable Part-145 facilities for the removal and storage of removed components are to be used which include suitable environmental conditions, lighting, access equipment, aircraft tooling and storage facilities for the work to be undertaken. While it may be acceptable for components to be removed, given local environmental conditions, without the benefit of an enclosed facility, subsequent disassembly (if required) and storage of the components should be in accordance with the manufacturer's recommendations.

2.16.5.3 Used Aircraft Components Removed from Malaysian Civil Registered Aircraft Involved in an Accident or Incident.

1. Used aircraft components removed from an aircraft involved in an accident or incident. Such components should only be issued with a CAAM Form 1 when processed in accordance with Paragraph 2.16.5.2 and a specific work order including all additional necessary tests and inspections deemed necessary by the accident or incident. Such a work order may require input from the TC holder or original manufacturer as appropriate. This work order should be referenced in block 12.

2.16.5.4 Parts Robbery

1. Parts Robbery is carried out in accordance with Sub-paragraph 2.16.5.1.

2. Procedure for Parts Robbery is further explained in EPM 3-05 (Parts Robbery Procedure)

2.16.5.5 Issuance of CAAM form 1 for Component Removed from Aircraft

1. The CAAM Form 1 issued by signing in block 14b and stating 'Inspected/Tested' in block 11. In addition, block 12 should specify:

   a) When the last maintenance was carried out and by whom.

   b) If the component is unused, when the component was manufactured and by whom with a cross-reference to any original documentation which should be included with the Form.

   c) A list of all Airworthiness Directives, repairs and modifications known to have been incorporated. If no Airworthiness Directives or repairs or modifications are known to be incorporated, then this should be so stated.

   d) Detail of life used for service life-limited parts being any combination of fatigue, overhaul or storage life.

   e) For any aircraft component having its own maintenance history record, reference to the particular maintenance history record as long as the record contains the details that would otherwise be required in block 12. The maintenance history record and acceptance test report or statement, if applicable, should be attached to the CAAM Form 1.

MAINTENANCE ORGANISATION EXPOSITION

RECORDS FOR THE OPERATOR

2.17.1 Transmission of Records to the Operator

1. Maintenance records as described in MOE Part 2.13 (Maintenance Documentation in Use and its Completion) will be transmitted to the concerned departments of the operator when the work has been completed.

2. All original documents related to the maintenance will be sent to the CAMO after completion of maintenance work.

3. The CAMO holds the responsibility of transferring the records to any new party becoming the new operator of the aircraft.

REPORTING OF DEFECTS TO THE COMPETENT AUTHORITY / OPERATOR / MANUFACTURER

2.18.1 Responsibility

1. All GAM personnel involved in aircraft maintenance is responsible to report any reportable occurrence to Quality Assurance Manager using Safer Card (GAM/SMS/01A) or through GAM online portal – Safety Report and Accident/Incident/Occurrence/ISDR Report form (GAM/Q-038).

2. QAM shall produce and submit such reports as practicable but, in any case, within 48 hours of identifying the condition to which the report relates. Initial reporting may be done by e-mail. The report will be sent to:

   a) CAAM

   b) Type certificate holder of the manufacturer

   c) Operator

   d) CAMO

3. In case of an emergency, reporting should be done by the fastest way including an immediate call.

2.18.2 Occurrence Reporting

1. The occurrence report shall contain all the relevant information and conditions known by GAM. The occurrence report will include the following information:

   a) The GAM name and CAAM approval no.

   b) Aircraft registration or aircraft component serial number

   c) Type, make, and model

   d) Date of the discovery of the failure, malfunction or defect

   e) Nature of the failure, malfunction or defect

   f) Time since last overhaul, if applicable

   g) Cause of the failure, malfunction or defect

h) Other pertinent information that is necessary for more complete identification, determination of seriousness, or corrective action.

2. Generic list of reportable occurrences can be referred to in CAGM 8503 and CAD 1900.

2.18.3 Mandatory Occurrence Reporting

1. The MOR system is an essential part of the overall monitoring function.

2. The detailed objectives of MOR systems are to enable an assessment of the safety implications of each occurrence to be made, including previous similar occurrences, so that any necessary action can be initiated. This includes determining what and why it had occurred and what might prevent a similar occurrence in the future and to ensure that knowledge of occurrences is disseminated so that other persons and organisations may learn from them.

3. The MOR system is complementary to the normal day to day procedures and 'control' systems and is not intended to duplicate or supersede any of them. The MOR system is a tool to identify those occasions where routine procedures have failed.

4. Reference shall be made to current revision of CAD 1900 for detailed guidance on MOR issuance.

5. All MOR shall be reported to CAAM through CAAM website (Safety Reporting Portal: https://safetyreporting.caam.gov.my/safety-reporting-portal/)

6. CAAM shall be notified of all cases where an occurrence originated as a result of maintenance carried out by the organisation, regardless of the registration of the aircraft or customer and besides any other reporting responsibility to the component authority responsible for the approval under which the maintenance was carried out.

7. Maintenance errors identified as a result of the investigations should be used for internal human factors training and for the amendment of the procedure for critical maintenance tasks.

8. Internal procedure for occurrence reporting is further explained in QPM part 2-12 (Mandatory Occurrence).

MAINTENANCE ORGANISATION EXPOSITION

RETURN OF DEFECTIVE AIRCRAFT COMPONENTS TO STORE

2.19.1 Aircraft Component Received in Serviceable Status but Found "Defective" at Installation.

1. An Unserviceable label (GAM/E-006) will be attached to all defective components removed from an aircraft or declare defective during the acceptance procedure then placed it in the unserviceable component rack in the designated area. The tag should include the necessary data of the unit and the reason for removal.

2. When a component or part is removed from the aircraft/engine in order to gain access to other components or parts, a component Holding Tag (GAM/E-018) shall be attached to the removed unit with all relevant information on it.

3. The component or part shall be adequately protected against contamination and damage until re-installation.

4. Any aircraft parts issued from bonded store and is found to be defective, a Quarantine Label (GAM/E-007) must be raised by the approval holder describing the nature of discrepancy/defect and route the part to stores inspection for their investigation

5. The Store Inspector will raise the Component Discrepancy Report form (GAM/E-003A) for further action. A copy of the Component Discrepancy Report shall be made available to QAM.

   a) If parts / components are confirmed to be unapproved, it will be sent back to the supplier and request for warranty / refund will be initiated by the Logistic personnel.
   b) QAM will be notified, for further action to be taken towards the supplier (suspend or terminate).

6. Until the discrepancy is resolved, the discrepancy/defective part shall remain in the quarantine store.

7. The Logistic Controller is responsible for the storage of awaiting/pending disposition and scrap parts in quarantine store area.

8. Scrapped parts are either returned to customer or mutilated in-house once agreed by the customer.

2.19.2 Labeling and Handling of Unserviceable Component

1. Unserviceable component shall be returned to the store complete with Unserviceable tag (GAM/E-006)

2. It is then placed it in the unserviceable component rack in the designated area. The tag should include the necessary data of the unit and the reason for removal.

2.19.3 Labeling and Handling of Unsalvageable Components

1. All non-repairable, defective or life expired articles that were removed from an aircraft, or from store must be tagged with a Scrap Label (GAM/E-058). The Certifying Staff responsible for removing this component must fill in details including the reason for that component rendered scrap.

2. Store Inspector will collect the scrap articles and keep in the scrap room. All items kept in the scrap room will be recorded in the Scrap Log (GAM/E-059).

3. All components for disposal will be accumulated and a report will be raised and sent to the Warehouse and Logistic Manager for his further action and to arrange for a Material Review Board (MRB) to verify and approve the disposal.

4. Store personnel will arrange for disposal as approved by the MRB.

5. All disposed articles shall be recorded.

6. Scrap procedure is further explained in EPM 3-08 (Disposition of Scrap Aircraft Component and Material).

DEFECTIVE COMPONENTS TO OUTSIDE CONTRACTORS

2.20.1 Components to Outside Contractors

1. Components will be sent to outside contractors for repair/overhaul/ medication/calibration only if the outside contractors are on the List of Approve Vendor issued by QAM

2. Sending the components to outside contractors, when instructed by CAMO, Warehouse and Logistic section shall dispatch the defective components to the relevant customer approved repair station.

3. Packaging, including proper labeling with reason for defect and shipping the defective components that are to be repaired at sub-contractor facilities takes place at the warehouse area.

4. Components are properly packaged to prevent damage or deterioration during transport. Where applicable instructions from Material Safety Data Sheet (MSDS), instructions for shipping of hazardous material or other technical data are followed.

5. The same process applies to return of unserviceable loan component to its Owner.

MAINTENANCE ORGANISATION EXPOSITION

CONTROL OF COMPUTER MAINTENANCE RECORD SYSTEM

2.21.1 Maintenance Record System

1. All maintenance related records at the GAM are kept in soft copy format, stored in Google Drive.

2. The maintenance records are stored and identified with proper indexing in relation to customer and aircraft type for ease of accessibility and retrieval.

3. Scanned copies on the Technical Record folder are backed up every two weeks in the external hard disc by the PPC Supervisor and kept at a different place from the main records. Only authorised personnel shall be granted access to the records.

CONTROL OF MAN-HOUR PLANNING VERSUS SCHEDULED MAINTENANCE WORK

2.22.1 Manpower Resources

1. Man-hour planning is to provide evidence that GAM has sufficient staff in place to plan, perform, supervise, inspect, certify and monitor the quality of the aircraft maintenance with regards to its volume of work, and in accordance with CAAM requirements.

2. EM maintains on a continuing basis data regarding his/her personnel in terms of qualifications and number he/she needs to accomplish the estimated workload in his/her area of responsibility.

3. EM uses the data to maintain a total workforce at GAM that is sufficient to carry out the work in hangar, line and workshop operations. He shall monitor that available staff is balanced with the workload at all times.

4. The maintenance man-hour plan shall take into account:

   a) Maintenance activities carried out outside the scope of the Part-145 approval.

   b) Human performance limitations, complexity of works and any maintenance carried out on aircraft/aircraft components from outside organisations.

   c) Particular attention shall be given to the situation when the same person is acting with different roles during a particular maintenance check (e.g. a person who is acting at the same time as Category C certifying staff and B1 support staff during a particular base maintenance check).

   d) Staff on training and on leaves (any form of leave including medical leave) for the actual man-hours calculation.

5. If the manpower available is not sufficient to cover workload content, two possibilities shall be considered:

   a) The hiring of “contracted” staff who shall work under the supervision of GAM qualified personnel. “Contracted” means the person is employed by another organisation and contracted by that organisation to GAM.

   b) The work is sub-contracted to another approved maintenance organisation.

6. Departments employing contract staff, being part time or full time, the contracted staff shall be made aware that they are subjected to compliance with the procedures specified in the MOE and other GAM procedural manuals which are deemed relevant to their duties.

7. At least half (50%) of the staff that performs maintenance in each workshop, hangar or line on any shift shall be directly employed as an individual.

8. Any significant deviation exceeding 25% between the workload and the man hour availability shall be reported through to the Accountable Manager and QAM by the EM. The Accountable Manager shall discuss these significant deviations with the senior management personnel during the Quality Review meetings to bring in the necessary manpower augmentation or readjustments.

2.22.2 Planning Revision Process

1. The man-hour plan shall be reviewed at least once in every 3 months and updated when necessary, by the EM.

2. The effective planning is based on the accurate and established data on planned and achieved performance.

3. These data shall be initially collected for all tasks both scheduled and unscheduled, once established the data collection shall be limited to the tasks performed for the first time and those involving complexities.

4. These data shall be used on a continuous basis for the calculation of the efficiency factors and for the quarterly review of the man-hour planning.

2.22.3 Organisation of Shifts

1. The supervisors/EIC shall liaise with the concerned production planners to check the quantum of work planned and accordingly organise the manpower.

2. In case of any work which is planned for the shift is not completed then it shall be continued during the next shift or by deployment of overtime, if it is not going to interfere the working of other scheduled groups of the next shift.

3. Whenever overtime is resorted to, or manpower is augmented to make up the lost time a feed back to the concerned production planner shall be provided by the supervisors/EIC for administering the efficiency factor.

4. Except in exceptional circumstances, the work planned for the shift shall be completed as planned.

2.22.4 Hangar Visit Plan

1. The hangar visit plan shall be reviewed by the Engineering Controller and made available to the EM and Chief Engineer to demonstrate the sufficiency of hangar space to carry out planned base maintenance.

2. The Chief Engineer shall allocate sufficient manpower to support operations based on the Hangar Visit Plan and Man-hour Plan.

2.22.5 Management System of Company Planning Versus Time Available

1. The man hour planning shall be based on the estimated man-hours gathered from the data available in the respective job cards/task cards with an appropriate usage of efficiency factors.

2. The efficiency factor takes into account the additional man-hours necessary due to factors like mobilising tools and equipment, setting up of dockings, available skill sets, unforeseen delays etc.,

3. The Chief Engineer shall be maintaining the efficiency factors for each type of aircraft/check who shall also revise it periodically based on the available data of planned vs. consumed hours.

4. A similar exercise shall be carried out for gathering data and estimating unscheduled tasks

5. For both planned and unplanned maintenance, the Chief Engineer shall collect and preserve this information in a data base for reference and planning.

6. Based on the above planning, GAM shall make arrangements for the required manpower for the completion of the maintenance on both short term and long-term basis.

2.22.6 Manpower for Aircraft Maintenance

1. For manpower aircraft maintenance reference should be made to MOE Part 1.7 (Manpower Resources).

CONTROL OF CRITICAL TASKS

2.23.1 Critical Maintenance Tasks

1. "Critical maintenance task" is a maintenance task that involves the assembly or any disturbance of a system or any part on an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety. Critical maintenance tasks include but are not limited to:

   a) Tasks that may affect the control of the aircraft flight path and attitude, such as installation, rigging and adjustments of flight controls;

   b) Aircraft stability control systems (autopilot, fuel transfer);

   c) Tasks that may affect the propulsive force of the aircraft, including installation of aircraft engines, propellers and rotors; and

   d) Overhaul, calibration or rigging of engines, propellers, transmissions and gearboxes

2. Maintenance tasks stated in MOE 2.23.1.1 and any other maintenance tasks that are deemed critical will be reviewed to assess their impact on flight safety.

3. The list of critical maintenance tasks shall be maintained by the EM and distributed to the maintenance staff. The list is rather a guideline in identifying the affected systems components. The list is not exhaustive and should be subject to continuous evaluation and when necessary amended as the result of:

   a) Maintenance errors investigations;

   b) Audits;

   c) Type Certificate Holders (TCH) data analysis;

   d) Accident / incident reports;

   e) Feedback from training; or

   f) Information sharing.

4. When the CAMO defines its own list of critical maintenance tasks, the effective list shall be of both GAM and the CAMO.

5. Error-capturing methods are those actions defined by maintenance organisation to detect maintenance errors made when performing maintenance.

6. Engineering Department employ the following error-capturing methods:

   a) Independent inspection.

   b) Reinspection.

2.23.2 Independent Inspection

1. An independent inspection is an inspection performed by an 'independent qualified person' of a task carried out by an 'authorised person', taking into account that:

   a) 'Authorised person' is the person who performs the task or supervises the task and they assume the full responsibility for the completion of the task in accordance with the applicable maintenance data.

   b) 'Independent qualified person' is the person who performs the independent inspection and attests the satisfactory completion of the task and that no deficiencies have been found. The 'independent qualified person' does not issue a maintenance release, therefore they are not required to hold certification privileges.

   c) 'Authorised person' issues the Maintenance Release or signs off the completion of the task after the independent inspection has been carried out satisfactorily.

   d) The work card system used by the organisation should record the identification of both persons and the details of the independent inspection as necessary before the Maintenance Release or sign-off for the completion of the task is issued.

2. Independent inspection shall be the primary error-capturing method used by the Engineering Department for critical maintenance tasks.

3. An independent inspection should ensure correct assembly, locking and sense of operation. When inspecting control systems that have undergone maintenance, the independent qualified person should consider the following points independently:

   a) All those parts of the system that have actually been disconnected or disturbed should be inspected for correct assembly and locking.

   b) The system as a whole should be inspected for full and free movement over the complete range.

   c) Cables should be tensioned correctly with adequate clearance at secondary stops.

   d) The operation of the control system as a whole should be observed to ensure that the controls are operating in the correct sense.

   e) If different control systems are interconnected so that they affect each other, all the interactions should be checked through the full range of the applicable controls.

   f) Software that is part of the critical maintenance task should be checked, for example: version, compatibility with aircraft configuration.

4. Persons authorised to perform and certify the independent inspection are as follows:

   a) Appropriately rated Licensed Aircraft Maintenance Engineer.

   b) Appropriately authorised persons by Quality Assurance Manager (QAM).

   c) Should a minor adjustment of the system be necessary when the aircraft is away from base, the second part of the independent inspection may be completed by a pilot or flight engineer licensed for the type and shall be authorised by QAM.

.

5. An independent inspection shall be recorded and documented on the worksheet.

6. After the independent inspection is certified, a Maintenance Release shall be signed which relates to the work that requires independent inspection.

2.23.3 Re-Inspection

1. Re-inspection method is currently used by Engineering Department as a secondary error-capturing method for identical maintenance task. Refer to MOE Part 2.25 (Procedures to Detect and Rectify Maintenance Errors) for more details.

2. Re-inspection is an inspection performed by the same authorised person who carried out the maintenance task, as though he / she is acting as 'independent authorized inspector'.

3. A separate entry is required in the relevant paperwork to indicate such an inspection has been carried out.

4. The Maintenance Release is issued after the task has been performed by the 'authorised person' and the reinspection has been carried out satisfactorily.

5. Re-inspection method should only be performed in unforeseen circumstances when only one person is available to carry out the identical maintenance task on the same aircraft or component during maintenance work. The request to perform the Re-inspection method shall be made to the QAM via email by the EM with proper justification. Copy of concurrence from QAM shall be attached together with the worksheet.

MAINTENANCE ORGANISATION EXPOSITION

REFERENCE TO SPECIFIC MAINTENANCE PROCEDURE

2.24.1 Responsibility

1. EIC is responsible for work instruction described in this procedure.
2. Specific maintenance procedures outlined below are to be followed by the personnel conversant with the relevant procedures and adequately trained.

2.24.2 Engine Running Procedures

1. Carry out pre-flight inspection and water check
2. Ensure that all work documents including independent inspection have been checked and signed correctly.
3. Ensure that precise requirement of ground run or test flight has been entered in ground run/test flight form at rear of aircraft technical log.
4. Ensure pilot are available through prior arrangement with engineering maintenance supervisor or duty captain.
5. Ensure avionics section is aware of checks required during ground run or test flight.
6. Position and park aircraft correctly.
7. Ensure external power and fire extinguishers are available.
8. Ensure sufficient fuel is on board for required ground run/test flight.
9. Carry out engine wash if required.
10. On completion of ground run, ensure that all checks required during ground run have been carried out and signed for accordingly.

NOTE: *All personnel are reminded that at all times the approved relevant Manual must be referred and adhered to.*

2.24.3 Aircraft Towing Procedures

1. The following instructions are guidelines to be followed by personnel involved in towing of aircraft – as applicable to the particular aircraft type being towed.

2. A minimum crew of three personnel shall be in attendance before any towing operation is initiated within confined spaces such as within the hangar or congested parking apron where tip clearance is at minimum.

3. The crew shall be deployed as follows.

   a) LAE or technician assigned by the EIC shall be in charge of supervising and ensuring that towing is carried out in a correct and safe manner.

   b) A competent tractor driver holding valid Malaysian driving license in class 'D', and if required, Malaysian Airport Bhd. Driving permit or equivalent shall tow the aircraft.

   c) A competent person in flight compartment shall operate aircraft brakes, monitor radio communication and obtain clearance from Control Tower (as applicable).

4. Where visibility, safety or clearance in confined spaces is in doubt, additional personnel shall be stationed at appropriate locations to escort and guide the towing, and to effectively forewarn about potential danger before mishap occurs.

5. Where it is necessary to engage untrained/inexperienced persons for assistance, the person in charge shall brief and instruct these persons adequately before commencement of towing operations.

6. If towing operation is to be carried out in clear and unobstructed area of hangar, apron or taxiway, where tip clearance can be determined by person in charge to be in excess of safe distance during towing manoeuvres, then a minimum of two crew is required, who will be deployed as follows:

   a) A LAE or Technician assigned by the EIC shall be in charge of supervising and ensuring that towing is carried out in correct and safe manner. He is also assigned to function as competent tractor driver holding valid Malaysian driving license in class 'D' or equivalent to tow the aircraft.

   b) A competent person in flight compartment shall operate aircraft brakes, monitor radio communication and obtain clearance from-Control Tower (as applicable).

7. The following safety precautions shall be observed before towing commences:

   a) Towing passage must be clear of any obstructions.

   b) Towing equipment - tractor, tow bar, chocks must be in serviceable condition.

   c) Brake accumulator pressure is to be adequately charged as applicable.

   d) Undercarriage lever is to be in down position and ground lock pins are to be correctly installed (as applicable).

   e) Nose wheel torque links are to be disconnected as applicable.

   f) Nose landing gear self centering lock or tail lock pin is to be released as applicable.

   g) Center of gravity of aircraft should be known to ensure that there is sufficient weight on nose/tail Wheel and ballast installed as applicable.

8. All aircraft doors, panels shall be closed as applicable.

9. Person in charge shall clearly identify himself to towing crew and communicate using standard aural and/or visual marshalling signals during towing operations.

10. The tractor driver must stop towing immediately upon receiving instructions to that effect.

11. Person in charge shall then assess clearance situation and if satisfied, will allow operation to be resumed.

    a) Only person in charge can instruct tractor driver to resume towing operation.

    b) Always connect tow bar to aircraft first before connecting tow bar to tow tractor.

    c) Chocks shall not be removed from aircraft until tractor and tow bar have been connected to aircraft and tractor's brakes applied.

    d) Tractor lights and aircraft navigation lights shall be switched 'ON' under poor visibility condition.

e) Aircraft brakes shall be released before tractor moves and shall only be applied/released under direction of person in charge or in an emergency.

f) In the event of tow bar shear pin bolt shearing, person in charge shall signal flight compartment personnel to apply 'BRAKES ON' while tractor driver shall ensure that tractor is moved away from aircraft so as to provide adequate clearance between aircraft and tow bar.

g) No attempt shall be made to shift tractor gears during towing. Abrupt acceleration or deceleration must be avoided to minimize shock loading on tow bar.

h) Always move aircraft in straight line first before initiating a turn and radii of turn shall be kept as large as possible to prevent distress to aircraft tires and oleo seals.

i) Towing speed shall be kept down to reasonable safe 'walking' speed or up to five miles per hour (eight kilometers per hour). Extra care is to be exercised when towing on sloping ground or when negotiating bends.

j) On arrival at intended parking location, centralise nose gear or tail wheel (as applicable) and tow or push back aircraft in a straight line for a short distance before stopping the aircraft. Avoid parking aircraft with nose gear or tail wheel in twisted positioned.

k) Upon completion of towing operation, upon receiving instructions from person in charge, the person in flight compartment shall apply aircraft wheel brakes 'ON'.

l) Tow bar shall be disconnected at tractor end first before disconnecting it from aircraft where applicable torque links must be reconnected.

NOTE: *Reference Should Be Made to Respective Maintenance Manual Chapter 9 For Specific Precaution, Permissible Towing Angles/Loads, Requirements And Limitations.*

2.24.4 Maintenance Check Flight

1. CAMO procedures for Maintenance Check Flight shall be adhered.

2. Request for Permit To Fly shall be made by the EIC to the CAMO.

2.24.5 Maintenance Away from Approved Locations

1. The purpose of this paragraph is a guideline to specify conditions which allowed GAM to maintain any aircraft or component which GAM is approved as per MOE 1.9 (Scope of Work) at any other locations as specified in the MOE 1.8 (Facilities).

2. Maintenance away from approved location specified in MOE 1.8 Facilities require CAAM acceptance/approval prior commencement of work.

3. It is applied whenever there is a request from CAMO for maintenance work arising from the unserviceability of the aircraft or from the necessity of supporting occasional line maintenance at a location other than CAAM approved locations.

4. The maintenance away from approved locations shall only be performed within the scope of work as specified & must go through the Management of Change Procedure

5. A proper risk management must also be performed as part of the pre-requirement for the works to be done.

6. The request for GAM to perform maintenance away from approved locations shall come from CAMO.

7. This privilege shall only be exercised when the following general conditions are met:

   a) A clear work order / contract exists.

   b) The resources involved (manpower, tools, equipment, maintenance data, etc.) are within the control of GAM and comply with the requirements set in this MOE.

   c) Permissible environmental conditions.

   d) Intended works to be performed is not a major work or work that leads to extensive functional test.

8. If the conditions above are not met CAAM must be consulted before commencement of any work at other locations.

2.24.5.1 Support an unserviceable aircraft

1. The scope of work shall be limited to
   a) Aircraft type or component or engine listed in the MOE 1.9 scope of work and

b) Maintenance activities strictly necessary to recover the aircraft unserviceability condition as limited by the MOE 1.9 maintenance level

2. Work to be performed away form GAM AMO approved facilities is subject to prior approval by the QAM. It is the responsibility of Engineering Manager or his/her delegated personnel to raise a request for extension using Management of Change process in GAMS portal.

3. EM shall also submit the Request for Once Off Authorisation Form (GAM/E-019) to QAM for evaluation based on MOE 3.10 process.

4. Furthermore, the following criteria must be met and satisfied by an evaluation conducted by the Quality Department
   a. The personnel must be trained, qualified as per MOE Part 3.5 with the appropriate rating and GAM authorization
   b. Tools and special tools must be available for the maintenance work
   c. Approved data, GAM worksheet or other specific documents must be available
   d. Work procedure must meet the requirement of this MOE
   e. A proper risk management must also be performed as part of the pre-requirement for the works to be done.
   f. Whenever possible, the work must be performed in suitable facility or environment
   g. The maintenance release must be examined and certifying staff has to ensure that their competency is adequate
   h. In the case of part(s) drop shipment, the certifying staff has to ensure that they made copies of the relevant release certificate prior delivery of the original to owner/customer/support
   i. Signing of work within GAM AMO under approval extension must record the extension approval number.

5. Upon satisfactory of above criteria, QAM shall recommend for CAAM approval for GAM AMO to carry out the required maintenance.

PROCEDURES TO DETECT AND RECTIFY MAINTENANCE ERRORS

2.25.1 Introduction

1. Description of procedures to minimise the risk of multiple errors and errors being repeated in identical maintenance tasks compromising more than one system or function.

2. GAM management encourages an environment where it is common practice for employees to report any error and occurrence observed during the maintenance process to prevent recurrence in the future

2.25.2 Policy and Procedures

1. Procedure to minimize the risk of multiple errors and preventing omissions

   a) All certifications shall only be done after completion of tasks.

   b) The grouping of tasks for the purpose of sign-off allows critical steps to be clearly identified.

   c) Ensure work performed by non-authorised personnel (i.e., temporary staff, trainees) is checked and signed-off by a Certifying Staff.

2. Procedure to minimise the risk of errors being repeated in identical maintenance tasks compromising more than one system or function

   a) Identical maintenance task refers to identical task performed on systems that have redundant design features in keeping with fail-safe design philosophy. Engine driven components for example, are considered identical maintenance task. The replacement of such components in any combination, on more than one engine, is generally regarded as an identical maintenance action.

   b) Performing maintenance task which involve removal / installation or assembly / disassembly of several components of the same type fitted on multiple systems by the same individual or team may lead to an error being repeated (the failure of which could have an impact on safety).

   c) Under normal circumstances no one person or one team should be allowed to perform identical maintenance task on the same aircraft or component during a particular maintenance check.

2.25.3 Identification of Methods in Use to Minimise the Risks.

1. Planning method (only applicable to identical maintenance tasks). Engineering Department employs the following method to minimise the risk of errors being repeated in identical maintenance tasks:

   a) Tasks performed by different authorised persons; or,

   b) Scheduling of the identical task to be performed at separate visits.

2. Error-capturing method(s). Refer to MOE 2.23 (Control of Critical Tasks) for the respective methods' specific accomplishment procedure.

   a) Independent inspection.

   b) Reinspection.

3. Methods in minimising risk of errors and their applications:

Type of Task	Description of Task	Minimising the risk of errors being repeated in identical maintenance tasks and error capturing methods priority	
		Primary	Secondary
Identical Maintenance task	Removal / installation or assembly / disassembly of several components of the same type fitting to more than one system, a failure of which can have an impact on safety, on the same aircraft or component during a particular maintenance check. (e.g. dual engine oil uplift, removal/installation of borescope plugs, replacement of IDGs, etc.)	Performance by different authorised persons of the same task in different systems (planning method)	Re-inspection by the same authorised person who has performed the task (limited to unforeseen cases when only one person is available)
Critical Maintenance Task	A maintenance task that involves the assembly or any disturbance of a 'control system' or any part of an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety. (e.g. engine installation, flight control rigging, etc.)	Independent Inspection.	Re-inspection by the same authorised person who has performed the task (limited to unforeseen cases when only one person is available)

2.25.4 Occurrence Reporting and Investigation

1. The occurrence reporting and investigation procedure is described in MOE Part 2.18 (Reporting of defects to the Competent Authority/Operator/ Manufacturer).

2.25.5 Feedback to Staff

1. QAM is responsible for the feedback of errors and occurrences.

2. In case of serious error or occurrence requiring immediate action and feedback, QAM will issue a Quality Assurance Notice to all concerned departments.

MAINTENANCE ORGANISATION EXPOSITION

SHIFT/TASK HANDOVER PROCEDURES

2.26.1 Handover of Maintenance Work

1. The purpose of this chapter is to explain GAM policy on shift/task handover procedures. Effective communication between the out-going and in-coming personnel in aircraft maintenance is extremely important and can reduce the likelihood of accident/incidents arising from poor shift / task handover.

2. When the maintenance activities require to hand over the continuation or completion of maintenance tasks for reasons of shift or personnel changeover, Daily Maintenance Book (GAM/E-014) shall be used to record current status of the jobs.

3. Outgoing Technician/LAEs in charge of maintenance shall use the Daily maintenance book and to notify the incoming Technician/LAEs.

   a) Status of the facility

   b) Works performed and possible pending works.

   c) Manning status

   d) Outstanding issues

   e) Shall include the date, time and aircraft registration.

   f) Other information may also be included.

4. Each page of the Daily Maintenance Book shall be signed by the outgoing and incoming person in charge of the shift.

5. This formal communication system between shifts can be affected by short clear meeting, but the Daily Maintenance Book must be completed.

***NOTE**: "Daily Maintenance Book" is not a certifying document*

PROCEDURES FOR NOTIFICATION OF MAINTENANCE DATA INACCURACIES AND AMBIGUITIES TO THE TYPE CERTIFICATE HOLDER

2.27.1 Definitions

1. Maintenance data ambiguities can be defined as errors such as wrong or insufficient technical data or work instructions etc. in Aircraft or Component technical publication (AMM, SB, SRM, etc.) and the competent authority Airworthiness Directives (AD) which need to be corrected by TC/STC Holder/Manufacturer/competent authority.

2.27.2 Document Inaccuracies Found

1. Internal reporting of maintenance data ambiguities:

   a) The person identifying the inaccuracy and/or ambiguity shall notify the error to the QA Department. QAM shall notify the author of the maintenance data in a timely manner upon receipt of the Publication Discrepancies Amendment Request form (GAM/Q-005).

   b) The authors are:

      i. Respective departmental heads for GAM document.

      ii. GAM CAMO in the case of organisation worksheet

2. External reporting of maintenance data ambiguities to the authors of that data:

   a) The person identifying the inaccuracy and/or ambiguity shall notify the error to the CAMO CAMM or Deputy CAMM by completing the Publication Discrepancies Amendment Request form (GAM/Q-005) and forwarded to CAMO CAMM or DCAMM via email or signed hardcopy submission of the form. Upon receipt of the form, CAMM or Deputy CAMM shall review the inaccuracy and/or ambiguity before forwarding to the respective CAMO Technical Services personnel. CAMO Technical Services then shall notify the author of the maintenance data in a timely manner for further clarification and/or amendment (if required).

   b) The authors are:

      i. Aircraft / component design organization (AMM, SB, SRM and etc.)

      ii. The competent authority issuing AD.

c) In the case of worksheets issued and furnished by the external CAMO (other than GAM), the person identifying the inaccuracy and/or ambiguity shall notify the error to PPC. PPC shall notify the author of the maintenance data in a timely manner upon receipt of the Publication Discrepancies Amendment Request form (GAM/Q-005).

2.27.3 Feedback to Staff and Implementation of TC Holder / Manufacturer Corrections.

1. A record of such communications to the author of the maintenance data shall be retained by the respective department until such time as the author has clarified the issue.

2. Any amendment, revision and/or corrective action taken to address the ambiguities will be communicated to the relevant staff.

3. Completed copy of Publication Discrepancies Amendment Request Form (GAM/Q-005) shall be retained by CAMO department. AMO may request the copy of the form from CAMO if required.

2.27.4 Impact of Data Ambiguity on the On-going Maintenance Tasks

1. QAM in communication with the EM will determine whether any maintenance work is or was affected by the data ambiguities. The EM will coordinate any rework required with the CAMO.

PRODUCTION PLANNING PROCEDURES

2.28.1 Procedures

1. GAM and CAMO coordination will be conducted to clearly establish the maintenance to be carried out in accordance with the agreed work order and contract (for base maintenance and modification only)

2. GAM and CAMO coordination shall include but not limited to the following:

   a) The work scope is clear and within the GAM approved scope of work as reflected on the Part-145 AMO Approval Certificate.

   b) Training requirements for the work being performed on the CAMO behalf, including who will provide the training.

   c) Manpower requirements and distribution.

   d) When manufacturer manuals should be followed and when CAMO manuals should be followed. If there's any deviation from manufacturer's manual in the CAMO manuals or instructions, PPC shall require documented approval from the CAMO.

   e) The revision status of the relevant customer's manuals.

   f) Which applicable ADs are due and to be accomplished?

   g) Whether CAMO or GAM provided work cards will be used?

   h) Whether the work card package is consistent with the work scope?

   i) Whether any special inspections need to be accomplished, such as hidden damage inspections.

   j) Whether any previous modifications to the Operator/Customer flight equipment might affect the work to be done. Any Special maintenance or alteration instructions per engineering orders, build lists, and other methods, techniques, and practices.

   k) Spare/component and material provision.

   l) Facilities and hangar availability.

   m) Any special tests, tools, or equipment needed to complete the work?

   n) Any special training requirements?

o) Any CAMO defined “Critical Maintenance Tasks”?

p) Any special recordkeeping requirements, including who is responsible for maintaining the files.

q) Any other issue that would require GAM to follow a process special to the Operator/Customer flight equipment.

2.28.2 Verification that the Maintenance Work Package Provided by the Customer is Utilisable by GAM.

1. The next step is the translation of work scope and requirements into a project plan that includes ordering parts as required, scheduling labour, and generating the appropriate work cards (if required) or other instruction and records documents. The work package could be:

   a) Worksheet or job cards issued and furnished by the CAMO in which GAM will require documentation and procedures training on CAMO specific documentation and procedures.

   b) Developed and prepared by GAM based on the CAMO work order. PPC shall prepare these job cards based on the CAMO work package. In any case GAM shall issue an internal work package as detailed in MOE Part 2.13 (Maintenance Documentation in Use and its Completion)

2.28.3 Control of the Availability and Update of Maintenance Data

1. All maintenance is performed in accordance with approved data. Approved data includes as necessary drawings, parts lists, process flow charts including inspection operations, production documents (work order, worksheets), maintenance manuals, and repair manuals must be available. Refer to MOE Part 2.8 (Maintenance Instruction and Relationship to Aircraft/Aircraft Component Manufacturer’s Instructions Including Updating and Availability to Staff) for details.

2.28.4 Procedure for Establishing All Necessary Resources are Available Before Commencement of Work

1. To ensure that there are adequate appropriately qualified and alert personnel, tools, equipment, material, maintenance data and facilities at the right place, at the right time, for the scheduled (and as far as is possible for unscheduled) tasks in order for the safe completion of the maintenance work.

2. Special attention and consideration must be given to the availability of the following:

a) All necessary personnel (manpower as planned).

b) Tools.

c) Equipment.

d) Spare/Component and Material.

e) Maintenance data.

f) Facilities.

g) Maintenance tasks.

h) Organising of shifts.

i) Human performance limitations.

2.28.5 Procedure for Outsourcing Contractors as Necessary

1 Procedures for outsourcing contractors are detailed in MOE Part 2.1 (Supplier Evaluation Procedure and Sub-contract Control Procedures).

2.28.6 Procedure for Organising Maintenance Personnel and Providing All Necessary Support During Maintenance

1. Manpower allocation must be subject to periodic review and it must be ensured that the human performance limitations (e.g. Circadian Rhythm/24 hours body cycle), complexity of work and additional factors are taken into consideration.

2. Control of man-hour planning is further detailed in MOE Part 2.22 (Control of Man-Hour Planning Versus Scheduled Maintenance Work).

2.28.7 Planning of Critical Maintenance Tasks

1. To ensure Critical Tasks are clearly identified and MOE Chapter 2.23 (Control of Critical Task) is adhered to.

MAINTENANCE ORGANISATION EXPOSITION

LINE MAINTENANCE CONTROL OF AIRCRAFT COMPONENTS, TOOLS, EQUIPMENT, ETC

L2.1.1 Responsibility

1. EIC shall ensure that tools and equipment use for the maintenance of aircraft and aircraft component are serviceable and calibrated.

L2.1.2 Tools and Equipment Control

1. Tool Store Supervisor to dispatch the calibrated tools or equipment to the EIC.

2. Tool Store Supervisor must ensure that a copy of the calibration tool master list is issued to the respective EIC for tracking and monitoring.

3. Upon receipt of new or re-calibrated tools or equipment from the main base Stores, the EIC will carry out thorough visual inspection on tools or equipment for general damage, condition and proper documentation.

4. All tools and equipment must be suitably housed, controlled, cleaned and maintained.

5. EIC shall control and monitor the serviceability of the tools and equipment and when the calibration date is due, they shall be sent back to the main base stores for calibration.

6. All tools or equipment used must be registered when taken from tool store to provide traceability by identifying the individual to whom the tools and equipment have been issued and the aircraft, or associated system, on which they are being used. The register is controlled by the Tool Store Supervisor using Tool Control Register (GAM/E-025).

7. Tools and equipment control procedures are detailed in MOE Part 2.5 (Calibration of Tools and Equipment)

L2.1.3 Aircraft Components

1. On received of aircraft components from main base or Warehouse and Logistic section, the item should be checked for:

   a) Damage during transportation and condition

   b) Document attachment such as approved release certification

   c) Serviceable label with correct part number as in IPC and approved certification number as written in the document.

2. If found any discrepancies during the check, the components should be quarantined and segregated from the serviceable components and materials until the above check has been satisfied.

3. Storage of the components and monitoring of shelf life shall be in accordance with EPM 3-02 (Storage and Shelf Life Control of Aircraft Component and Material) where applicable.

L2.1.4 Controls of Component During Maintenance

1. Components removed serviceable awaiting refitment to the same aircraft or pending inspection requirement should be labeled with Holding Tag (GAM/E-018).

2. Components found unserviceable during maintenance should be cleaned and labelled with Unserviceable Tag (GAM/E-006) and placed on rack waiting to be sent to Warehouse and Logistic section for action.

3. All components in the racks are suitably blanked, inhibited, labeled and packed (if necessary).

MAINTENANCE ORGANISATION EXPOSITION

LINE MAINTENANCE PROCEDURE RELATED TO SERVICING / FUELLING / DE-ICING ETC

L2.2.1 Responsibility

1. Procedure related to servicing, fueling, deicing, etc. are given in ATA Chapter 12 of the Aircraft Maintenance Manual for each aircraft type and these shall be followed by Line Maintenance personnel and contracted handling agent.

2. CAMO is responsible for providing approved maintenance data including but not limited to AMM, IPC and any relevant procedures of the CAMO which are required for accomplishment of specific maintenance activities such as servicing, fueling, de-icing etc.

3. Line maintenance personnel on site is responsible for using the current approved maintenance data as provided. Management of technical and maintenance documents will be done by Technical Publication section.

4. Maintenance of ground support equipment (GSE) shall be the responsibility of the EIC or Tool Store Supervisor. Procedures for ground support equipment control is further detailed in EPM 2-03 (Ground Support Equipment Control).

5. QA Department shall monitor any contracted/sub-contracted ground handling and servicing services as per MOE Part 2.1 (Supplier Evaluation Procedure and Sub-Contract Control Procedures).

LINE MAINTENANCE CONTROL OF DEFECTS AND REPETITIVE DEFECTS

L2.3.1 Recorded Defect and Rectifications

1. All flight defects will be recorded by the flight crew in the Aircraft Journey Log.

2. Rectification of reported defects shall be carried out by the appropriate Certifying Staff using approved documentation.

3. Defects may be deferred within the scope of the approved operator Minimum Equipment List (MEL). Only an appropriately approved Certifying Staff may defer these defects using the appropriate document. Any repair intervals imposed by the MEL shall be monitored by the CAMO.

4. The documentation and release to service procedures for the recorded defects are stipulated in MOE Part 2.13 (Maintenance Documentation in Use and its Completion) and MOE Part 2.16 (Release to Service Procedure).

5. Where applicable, it may be necessary to inform pilots/engineers of the non-standard configuration or operation of system or component.

6. The EIC shall plan the termination of deferred defects. Opportunity shall be taken to terminate a deferred defect at the earliest convenient time but not to exceed the repair interval. Any concession for repair interval as stipulated in the respective aircraft MEL might be exceeded, CAMO must be consulted for approval from CAAM.

L2.3.2 Repetitive Defects

1. If a defect is of a repetitive nature, EM will inform the CAMO. According to the information communicated, CAMO will decide to have the aircraft return to the main base for additional investigations and rectification or maintain as is.

MAINTENANCE ORGANISATION EXPOSITION

LINE PROCEDURE FOR COMPLETION OF THE AIRCRAFT JOURNEY LOG

L2.4.1 Procedures

1. Completion of Aircraft Journey Log certification shall be as per CAMO approved procedures. All GAM technical staff shall be trained by the CAMO regarding their company procedures before making any entry in the Aircraft Journey Log. Training records shall be kept by QA Department.

2. This is to ensure that aircraft do not have unknown defects and that all defects on aircraft are recorded so that both defects and the corresponding rectifications actions comply with airworthiness requirements.

3. After completion of work, the Certifying Staff is to sign the Maintenance Release by appending his signature, approval stamp number and date.

4. The certifying staff shall ensure the completion of the Aircraft Journey Log page.

5. The release to service confirms that the aircraft concerned is airworthy and ready for service and that:

   a) All maintenance on the aircraft and its components has been carried out in accordance with valid maintenance data.

   b) All technical logbook entries and deficiencies found during maintenance check are rectified.

6. In the case of tasks requiring Independent Inspections. Procedures for independent inspection are in accordance with MOE Part 2.23 (Control of Critical Task).

7. Copy of all maintenance performed by GAM staff shall be kept as described in the MOE Part 2.14 (Technical Record Control).

8. Distribution of other copies will depend on CAMO specific requirements.

MAINTENANCE ORGANISATION EXPOSITION

LINE PROCEDURE FOR POOLED PARTS AND LOANED PARTS

L2.5.1 Loan of Aircraft Spares to Other Operators

1. This procedure is applicable whenever GAM may need a loan of aircraft spares from other operators or maintenance organisations to support the operation.

2. EM shall be informed of the need to loan any spares from other operators or maintenance organization.

3. Before utilizing, loan parts shall be inspected to ensure integrity, compliance to documents provided and availability of appropriate authorized release certificate.

4. The verification of approved sources and determination of acceptable certification is determined by GAM AMO and authorized to fit the part to a particular aircraft from CAMO.

5. It is the responsibility of the Certifying Staff to ultimately verify that the component/part has the proper documentation and compatible modification status before fitment.

6. When the loaned unit is removed from aircraft, it must be attached with Serviceable Tag (GAM/E-005) duly certified by the Certifying Staff for return to the owner

LINE PROCEDURE FOR RETURN OF DEFECTIVE PARTS REMOVED FROM AIRCRAFT

L2.6.1 Responsibility

1. Procedure for returning defective aircraft component, removed from aircraft to store or to the customer, shall be same as stated in MOE Part 2.19 (Return of Defective Aircraft Components to Store) and MOE Part 2.20 (Defective Components to Outside Contractors) respectively. It applies to both Line Maintenance and Base Maintenance.

L2.6.2 Required Documentation Control

1. An Unserviceable Tag (GAM/E-006) will be attached to all defective components removed from an aircraft or declare defective during the acceptance procedure then placed it in the unserviceable component rack in the designated area. The tag should include the necessary data of the unit and the reason for removal.

2. All unserviceable items removed from the aircraft must be protected from damage, with suitable protective covers and blanks.

MAINTENANCE ORGANISATION EXPOSITION

LINE PROCEDURE CONTROL OF CRITICAL TASKS

L2.7.1 Procedure

1. Reference should be made to MOE Part 2.23 (Control of Critical Tasks). Line Maintenance and Base Maintenance shall follow the same procedure.

QUALITY AUDIT OF ORGANISATION PROCEDURES

3.1.1 Responsibility

1. Quality Assurance Manager (QAM) is responsible for establishing and maintaining a quality audit programme. The programme shall cover aircraft maintenance activities, line stations, workshops, aircraft and vendors (suppliers and sub-contractors).

2. The quality internal auditors are responsible for the execution of procedure audits in accordance with this procedure.

3. QAM is responsible to assess, authorise and appoint quality auditors.

3.1.2 Definition of System / Procedure Audit

1. The independent audit is an objective process of routine sample checks of all aspects of the organisation's ability to carry out all maintenance to the required standards and includes some product sampling as this is the end result of the maintenance process.

3.1.3 System / Procedure Audit Programme

1. GAM has an independent Quality system, which monitors compliance of the operation with CAAM Part 145, Maintenance Organisation Procedure, and its associated procedures.

2. A comprehensive quality audit programme is carried out by the Quality Audit Personnel to maintain over continuing CAAM approval compliance.

3. QA Department will prepare the Audit Plan (GAM/Q-007). QAM will review the Audit Plan and submit it to the Accountable Manager for approval. Once the Audit Plan is approved, the QAM shall distribute it to all respective Head of Department.

4. The audit programme shall cover all aspects of the GAM operation, with each operation being audited at least once a year. The programme shall be published as an audit plan annually and shall be updated as required.

5. Follow up of the audit programme, including performance of audit, issuance of audit report and closure of audit finding is detailed in MOE Part 3.3 (Quality Audit Corrective Action Procedure).

3.1.4 Grouping of Audits

1. The quality audit programme will include verification of compliance with the approved procedures. The overall audit programme comprises of the following:

   a) Scheduled audits

      i. Organisation Procedure Audit.

      ii. Audit of aircraft and component, refer to QPM Part 2-1 (Internal Audit Process).

      iii. Vendor Audit, as outlined in MOE 2.1 (Supplier Evaluation Procedure).

   b) Unscheduled audits

      i. Surveillance audit, covering organisation procedure audit and aircraft/component audit.

      ii. Proposed changes to MOE Part 1.8 (Facilities) and 1.9 (Scope of Work), including change to workshop capability list.

3.1.5 Principles of Annual Audit Planning

1. The audit plan is developed by QA Department, verified by the QAM and approved by the Accountable Manager before the year starts.

2. Variance which is referred to as a deviation from an approved audit plan can be defined as:

   a) bringing forward an audit to an earlier date; or

   b) postponing an audit to a later date; or

   c) suspending an audit due to changes in approved work scope or

   d) capabilities; or

   e) any other reasons that may result in audits not being able to be carried out as per approved audit plan.

3. An audit plan variance must be reasonably justifiable and shall be approved by the QAM or his designee.

4. All audits subject to variances must be completed before the end of the audit year except for;

   a) product audits of ratings / types for which there are nil activity being carried out; these audits shall be carried out at the next available opportunity and;

   b) product audits of withdrawn / suspended ratings / types due to changes in approved work scope or capabilities.

5. The audit programme shall comprise of scheduled and unscheduled audits inclusive of night operations and this shall be clearly identified in the audit programme.

6. Departments that are not directly involved in aircraft/components airworthiness requirements need not be audited on annual basis.

7. Preparation and approval of the audit plan is further detailed in QPM Part 2-1 (Internal Audit Process).

3.1.6 Quality Audit Policy

3.1.6.1 General

1. Audits carried out shall be in accordance with the approved annual audit plan for the case of a scheduled audit.

2. Unscheduled audits are not restricted by any pre-determined date. It can be done without any prior notification to the auditee.

3. The allocation of resources for the audits in terms of manpower allocation shall consider the scale and extent of the audit. Auditors can be from departments other than GAM QA department and shall be approved as a quality auditor in accordance with MOE Part 3.6 (Quality Audit Personnel).

4. The policies of the findings and NCR management is further detailed in MOE Part 3.3 (Quality Audit Corrective Action Procedure).

5. When deviation is discovered on a line of product, depending to the level of findings as classified in MOE Part 3.3 (Quality Audit Corrective Action Procedure), the auditee shall present the Risk Assessment to the remaining of the products to establish further deviations for the similar product line especially when the deviation is caused by the similar Certifying Staff or batch of material, out of calibration tools etc.

3.1.6.2 Audit Notification

1. Audit plan shall be made known to all GAM operations at the beginning of every calendar year.

2. Notification of audit shall be made to all concerning sections of the GAM operation prior to conducting a scheduled audit. The respective departments shall be informed within a week prior to the commencement of the audit in the case of a scheduled audit.

3. Surveillance Audit may be carried out without notification to the auditee as it is treated as an unscheduled audit.

3.1.6.3 Audit Report

1. An audit report shall be generated upon completion of scheduled audit, except for surveillance audit.

2. The audit report shall highlight the areas being audited, and any subsequent finding, if any.

3. For unscheduled audits, an internally approved checklist can be utilized for the purpose of recording the audit.

4. The completed audit report is then circulated to the auditee for their attention and further action. Should there be any NCR raised, auditee is required to respond the NCR, complete with an acceptable root cause, corrective and preventive action.

5. Details of procedure for audit report is further explained in QPM Part 2-1 (Internal Audit Procedure).

3.1.7 Quality Audit Reports Retention

1. Quality Assurance Department will maintain an audit file for GAM to be kept under QAM custody. The files will include audit reports and other information related to the audit.

2. All audit reports and their corresponding documents will be kept for 3 years from the date of the finding closure.

3.1.8 Audit of Quality System Procedures by an Independent Auditor

1. The Quality Assurance department shall be audited by an independent auditor to ensure that the Quality System is in compliance with regulatory and organisational requirements.

2. The scope of this Quality System Procedures audit shall be the procedures in this manual, MOE Part 3.

3. The independent auditor shall be either:

   a) A person employed by the organisation and working in another department who is trained in auditing techniques and has knowledge of Part-145 regulatory requirements; or,

   b) A person contracted by the organisation to perform audit, e.g. a person contracted from outside the company that is trained in auditing techniques and has knowledge of Part-145 regulatory requirements.

   Procedures for Quality Assurance system independent audit and independent auditor requirements are further detailed in QPM Part 2-14 (Independent Audit of Quality Assurance System).

QUALITY AUDIT OF AIRCRAFT/COMPONENT

3.2.1 Responsibility

1. Quality Assurance Manager (QAM) is the prime responsible person for the aircraft/component audit programme.

2. Quality audit personnel are responsible for the execution of aircraft/ component audit in accordance with audit plan.

3.2.2 Definition

1. Quality audit of aircraft / components refers to the audit of products maintained by GAM 145, via sampling or trail/investigation method. It shall be defined as to witness any relevant testing and visually inspect the product and associated documentation. The sample check should not involve repeat disassembly or testing unless the sample check identifies findings requiring such action.

3.2.3 Company Product Audit Policy

1. This audit shall be separated by each product lines, in accordance with each product class rating as specified in MOE Part 1.9 (Scope of Work).

2. The product audits carried out shall be independent of the production/ delivery functions by assigning the audit duties to the personnel who are not responsible or directly involved with the production/maintenance functions.

3.2.4 Product Audit Programme

1. Product audit shall be carried out in accordance with approved annual audit plan for the current year.

2. The audit shall be carried out in a period of 12 months, with each line of product (aircraft / component) sampled.

3. Product audit can also be carried out without prior knowledge of the auditee to ensure compliance to applicable regulation and procedures. For this case, it shall be carried out as a surveillance audit.

4. Audit procedures specified in MOE Part 3.1 (Quality Audit Procedure) shall also be applicable for product audit.

3.2.5 Product Audit Methods

1. Audit of aircraft/component may be carried out with either one of the following methods

   a) Sampling

   b) Trail / investigation

2. Sampling method means to witness any relevant testing and visually inspect the product and associated documentation. The sample check shall not involve repeat disassembly or testing unless the sample check identifies findings requiring such action.

3. Trail / investigation audit means to conduct a documentation audit, onto which the detail of the document is checked in detail could include the work being done, tools used when carrying out work, personnel certifying the work, aircraft parts documentation and any other details as applicable. Document in this case would normally refer to worksheet and/or CAAM Form 1 issued by GAM.

3.2.6 Records of Product Audit

1. Record or product audit shall be kept for a duration of at least 3 years from the date of finding closure.

2. Product audit record retention shall be kept in accordance with QPM Part 2-1 (Internal Audit Process).

QUALITY AUDIT CORRECTIVE ACTION PROCEDURE

3.3.1 Responsibility

1. Quality Assurance Manager (QAM) is responsible to monitor the audit implementation, corrective action status and final acceptance of the corrective/preventive actions.

2. The quality auditors are responsible to review and verify corrective and preventive action taken by the auditee/Head of Department.

3. Head of Department is responsible to take necessary corrective/preventive actions within the specified time frame.

3.3.2 Quality Audit Report Feedback System

1. Quality audit report feedback system in GAM comprise of Non-Compliance Report (NCR) to highlight any non-compliance or findings against applicable requirements, procedures and products.

2. Each NCR issued shall be forwarded to person in charge of the operation.

3. Root cause, corrective action and preventive action shall address the non-compliance recorded in the NCR within a pre-determined time frame.

4. Quality Audit Report Feedback System is further detailed in QPM Part 2-1 (Internal Audit Process).

3.3.3 Corrective Action and Timescale

1. Each non-compliance is categorized into 2 levels, in accordance with their severity and effect on flight safety as follows:

   a) Level 1 – Non-compliance with CAAM Part-145 requirements, airworthiness or safety requirements, which lowers the safety standard and seriously hazards the flight safety.

   b) Level 2 – Non-compliance with CAAM Part-145 requirements, airworthiness or safety requirements, which could lower the safety standard and possibly hazard the flight safety.

2. All Level 1 non-compliances shall be addressed immediately by the auditee.

3. All Level 2 findings shall be responded by the auditee / person in charge within 14 days, unless otherwise agreed by the QAM.

4. Corrective action and timescale are further detailed in QPM Part 2-1 (Internal Audit Process)

3.3.4 Management of Finding Due Dates

1. It is the responsibility of auditee to investigate and determine root cause, corrective and preventive action upon received of the NCR.

2. Auditee shall respond NCR corrective and preventive action to the auditor within 14 days of level 2 NCR issuance. Exceedance of this deadline shall warrant a reminder.

3. If no action has been taken to address the corrective or preventive action after reminder has been made, this issue shall be raised in the Quality Review Meeting and/or Management Meeting.

4. Management of finding due dates is further detailed in QPM Part 2-1 (Internal Audit Process).

3.3.5 Review of Quality System Overall Results

1. Quality system review shall be done in Quality Review Meeting, attended by the Accountable Manager or his/her nominated delegate.

2. The result of all audit reports will be discussed in the Quality Review Meeting and/or Management Meeting. This will include the progress of each NCR corrective and preventive actions.

3. Quality Review Meeting Procedure is further detailed in QPM Part 2-11 (Quality Review Meeting).

MAINTENANCE ORGANISATION EXPOSITION

CERTIFYING STAFF QUALIFICATION AND TRAINING PROCEDURES

3.4.1 Responsibility

1. This procedure details the qualifications and training requirements for each Category A, B1, B2, C and Component Certifying Staff authorisation which is intended to enable Certifying Staff to be granted authorisations to issue Maintenance Release.

2. Quality Assurance Manager (QAM) is responsible for the grant of Certifying Staff authorisations.

3.4.2 General

1. As an approved maintenance organisation, the company is authorized to issue company approval to qualified personnel. It shall be controlled and administered by the QAM.

2. GAM approval system is approved by CAAM. Any changes to the system shall be submitted for approval to CAAM.

3. Company approval shall be issued on Company Approval Certificate (GAM/Q-013).

4. Approval holders shall only exercise the approvals authorized onto them as stated on their respective Company Approval Certificate (GAM/Q-013)

5. Approval holder categories are as follows:

AIRCRAFT	
CATEGORY	**DESCRIPTION**
A1	AEROPLANE TURBINE
A2	AEROPLANE PISTON
A3	HELICOPTER TURBINE
A4	HELICOPTER PISTON
B1.1	AEROPLANE TURBINE
B1.2	AEROPLANE PISTON
B1.3	HELICOPTER TURBINE
B1.4	HELICOPTER PISTON
B2	AVIONICS
C	BASE MAINTENANCE

COMPONENT	
CATEGORY	**DESCRIPTION**
W1.1	NI-CAD BATTERY
W1.2	LEAD ACID BATTERY
W1.3	LITHIUM ION BATTERY
W2.1	ELT
W2.2	FLOAT
W2.3	LIFERAFT

3.4.3 Company Approval Certificate and Stamp.

1. All Company approval certificates are issued and controlled by the QAM. QAM maintains a List of Approval Holder (GAM/Q-001) showing list of personnel holding the Company Approval Certificate.

2. On the certificate is clearly printed:

   a) Employee name

   b) Approval number

   c) Approval reference number

   d) Scope of authorization

   e) Signature (certificate holder & QAM)

   f) Date of initial issue

   g) Issue date & expiry date

      i. For aircraft certifying staff, the approval expires with the issued CAAM Part 66 AMEL license validity or 2 years from the date of issuance approval whichever comes first.

      ii. For other categories, the expiry shall be 2 years from the date of issuance of approval.

3. Certifying staff shall produce their certification authorization to any inspector of CAAM upon request, within 24 hours

4. A company approval holder will be issued with an inspection stamp, which will remain the property of the company.

5. The person, to whom stamps are issued, are responsible for the safe keeping of that stamp and must immediately report its loss to the QAM.

6. The stamp may only be used for stamping off the authorized tasks within the company and may only be used by the stamp holder. Lending of stamp to another person is strictly prohibited.

7. If an approval holder leaves the company or changes job position (where applicable), Company approval certificate and the stamp will be returned to the QAM. A returned stamp will be removed from use and kept together with their personal file once resigned.

8. A register of all approval stamps issued will be kept by the Quality Assurance Department under Company Approval Certificate Register form (GAM/Q-027). The register will indicate the reference number, company approval number, date of issue, name of the approval holder, remarks and stamp column.

3.4.4 Initial Issuance of Company Approval

1. Application for company approval shall be submitted to QAM using form Company Approval Application form (GAM/Q-012).

2. EM or Deputy EM or Chief Engineer should recommend and declare that the personnel had been trained and held relevant qualification to be issued with the company approval before submitting to the QAM for approving.

3. QAM will vet the application ensuring all requirements are met.

4. Oral assessment (technical competency) will be carried out by QAM or his delegate using Technical Competency Assessment form (GAM/Q-015).

5. Applicants shall be able to demonstrate a working knowledge of the language in which the maintenance data is published, as well as English language.

6. If the personnel found competent, Approval will be granted by QAM.

7. If found unsatisfactory, a minimum cooling period of 1 month or as determined by the assessor will be given to the applicant before he can resubmit another application.

3.4.5 Company Approval Authorisation Renewal

1. Applicant shall submit Company Approval Application form (GAM/Q-012) at least 30 days before expiry date to Quality Assurance Department. A written justification signed by both the applicant and EM shall be given to the Quality Assurance Department in the event that the renewal application is submitted after the stipulated 30-day period.

2. All certifying personnel applying for company approval authorization renewal shall be involved with 6 months of actual relevant aircraft or component maintenance experience in any consecutive 2-year period.

3. Approval holder other than certifying personnel shall provide a summary of experience for the past 6 months relevant to the scope being applied.

4. For CAAM License holders, applications will be accepted for renewal processing provided evidence (in the form of receipt, etc.) is provided as proof that submission for CAAM License renewal has been made. However, a renewed company approval will not be provided to the holder until a copy of the renewed CAAM license is provided to Quality Assurance.

5. Applicant shall be able to demonstrate that he/she is current in training requirements as stated in MOE Part 3.4.9 (Continuation Training).

6. Each application for renewal of company approval authorization using Application for Company Approval form (GAM/Q-012) shall be recommended, and duly signed by the EM or Deputy Engineering Manager or Chief Engineer.

7. The application shall be accompanied with written evidence of practical experience using Work Experience Logbook form (GAM/Q-079), latest AMEL for aircraft certifying staff and copy of mandatory training certificates

3.4.6 Requirements for Initial Authorisation and Renewal (Aircraft certifyingstaff)

Category A1, A2, A3, A4, B1.1, B1.2, B1.3, B1.4, B2				
Minimum age	21 years' old			
License	CAAM Part-66 License Category A or B (as applicable)			
	INITIAL		**RENEWAL**	
Maintenance Experience	Involved in at least 6 months of actual relevant aircraft maintenance experience in any consecutive 2 years period **(N1)**		Involved in at least 6 months of actual relevant aircraft maintenance experiencein any consecutive 2 years period	
Training	Company procedure (MOE & EPM)	√	Company procedure (MOE & EPM)	√
	Air Legislation	√		
	CAAM Part 145	√		
	Type rating	√	Relevant Technology Updates	√
	Electrical Wiring interconnect system (EWIS)	√	Electrical Wiring interconnect system (EWIS)	√
	Fuel tank safety (initial)	√	Fuel tank safety (Recurrent)	√
	Human Factor	√	Human Factor	√
	Safety Management System	√	Safety Management System	√
	Electrostatic Sensitive Device (ESD) **[Applicable to B1 and B2 only]**	√		
	Dangerous Goods (DG) **[Applicable to B1 and B2 only]**	√		
Assessment	Company procedure	√		
	Aircraft type	√		

MAINTENANCE ORGANISATION EXPOSITION

Category C - Base Maintenance Release				
Minimum age	21 years' old			
License	CAAM Part-66 License Category C			
	INITIAL		**RENEWAL**	
Maintenance Experience	Involved in at least 6 months of actual relevant aircraft maintenance experience in any consecutive 2 years period.		Involved in at least 6 months of actual relevant aircraft maintenance experiencein any consecutive 2 years period.	
Training	Company procedure (MOE & EPM)	√	Company procedure (MOE & EPM	√
	Air Legislation	√		
	CAAM Part 145	√		
			Relevant Technology Updates	√
	Electrical Wiring interconnect system (EWIS)	√	Electrical Wiring interconnect system (EWIS)	√
	Fuel tank safety (initial)	√	Fuel tank safety (Recurrent)	√
	Human Factor	√	Human Factor	√
	Safety Management System	√	Safety Management System	√
Assessment	Company procedure	√		
	Aircraft type	√		

3.4.7 Requirements for Initial Authorisation and Renewal (Component Certifying Staff)

Category W1.1, W1.2 ,W2.1, W2.2, W2.3				
Minimum Age	21 years' old			
Minimum Education	Secondary school			
Basic Requirement	a) An aeronautical school diploma or certificate or; b) A technical school diploma / certificate, if the intended scope of work concerns noncomplex electrical components or instruments and cabin and safety equipment or; c) An aeronautical military school diploma or certificate.			
Aeronautical Experience	a) 2 years of Aeronautical experience in the field of aviation maintenance including at least 12 months of practical experience in the specific component maintenance area/ Workshop. b) 3 years in the field of aviation maintenance for complex components such as engine/ APU and Landing gears including 24 Months of practical experience in the specific component maintenance area / Workshop;			
	INITIAL		**RENEWAL**	
Recent Maintenance Experience	Involved in at least 6 months of actual relevant aircraft maintenance experience in any consecutive 2 years period		Involved in at least 6 months of actual relevant aircraft maintenance experience in any consecutive 2 years period	
Training	Company procedure (MOE & WCP)	√	Company procedure (MOE & WCP)	√
	Air Legislation	√		
	CAAM Part 145	√		
	Safety Management System	√	Safety Management System	√
	Electrical Wiring interconnect system (EWIS)	√	Electrical Wiring interconnect system (EWIS)	√
	Fuel tank safety (initial)	√	Fuel tank safety (Recurrent)	√
	Human Factor	**N6**	Human Factor	√
	Bench Test	**N3**	Relevant Technology Updates	√
	Specific Equipment	**N4**		
	Component Training	**N2**		
	Air Legislation	**N5**		
Assessment	Company procedure	√		
	Component type	√		

MAINTENANCE ORGANISATION EXPOSITION

Legends:

N1 - a) In the event that the applicant is not current on any given type of aircraft being applied, the experience acquired on a specific aircraft / engine type may also be used to demonstrate having or maintaining the experience on a similar aircraft / engine or re-attend a complete aircraft type training.

b) For initial company individual authorisation, the following credit of experience requirement may be considered:

i. Having passed a type training (theoretical and practical) in an approved CAAM Part-147 organisation within the year preceding the issue of the individual authorisation supersedes the need for demonstration of 6/24 months maintenance experience on the specific aircraft type plus any other similar aircraft.

ii. For component certifying staff, having satisfactorily passed a component training within the year preceding the issue of the authorisation supersedes the need for demonstration of 6/24 months maintenance experience for this particular component or a component from the same family and same technology.

N2 - Depending on the complexity and the technology of the component, the CC/S shall be able to demonstrate he/she received appropriate theoretical and practical component training from:

a) The OEM or;
b) The OEM recognised training organisation or
c) An appropriately rated maintenance organisation provided:
   i. The person nominated to carry out the training can demonstrate he/she has received training to an appropriate level for the subject component.
   ii. The person nominated to carry out the training is appropriately authorised by the maintenance organisation and is able to demonstrate a significant experience on the relevant component maintenance.
   iii. The training syllabus has been reviewed by the EM and/or the QAM.
   iv. The component is available for practical training purpose.

For simple component, the maintenance organisation may take credit of the CC/S experience and/or a previous training on a component from the same family and same technology.

N3 - Where there is a need to use Bench test (e.g. engine or ATEC bench test), the CC/S shall be able to demonstrate he/she received appropriate training. This training for the use of specific tools required by the OEM maintenance data shall be received from:

a) The OEM or;
b) The bench test manufacturer or;
c) An appropriately rated maintenance organisation.

N4 - Where there is a need to use specific equipment, the CC/S shall be able to demonstrate he/she received the appropriate training. This training for the use of specific tools required by the OEM maintenance data shall be received from:

a) The OEM or;
b) The specific tool manufacturer or;
c) An appropriately rated maintenance organization

N5 - Aviation Legislation referred to Module 10 of Appendix I to CAD 1801

N6 - Human Factors referred to Module 9 of Appendix I to CAD 1801

***NOTE**: A proposed CC/S is considered compliant with **N5** and/or **N6** without further need of investigation, if one of the following evidences is available:*

a) Examination certificate of recognition (CoR) issued by a CAAM Part-147 Maintenance Training Organisation (MTO) for the relevant module 9 or 10, or;

b) When only a statement issued by a CAAM Part-147 MTO can be provided, stating that the person has attended the relevant module 9 or 10 according to the corresponding CAAM Part-66 syllabus, then the maintenance organisation shall also ensure that that the course is carried out according to a detailed syllabus including level of training as per CAAM Part-66 Module 9 and/ or 10 as applicable (the duration of the course need to be specified to demonstrate the adequacy to cover all subjects).

3.4.8 Aircraft Certifying Staff not qualified in accordance with CAAM Part-66

1. When the organization facilities and/or line station is located outside Malaysia, certifying staff may be qualified in accordance with the national aviation regulations of the State in which the organization facility and/or line station is registered subject to the conditions:

   a) The person shall hold a licence or a certifying staff authorisation issued under the national regulations in full compliance with ICAO Annex 1, unless otherwise agreed;

   b) The scope of work of the person shall not exceed the scope of work defined by the national licence or certifying staff authorisation whichever is the most restrictive;

   c) The person shall demonstrate he/she has received training and been assessed on human factors;

   d) The person shall demonstrate five years maintenance experience for line maintenance certifying staff and eight years for base maintenance certifying staff. However, those person whose authorised tasks do not exceed those of a CAAM Part-66 category A certifying staff, need to demonstrate three years maintenance experience only.

   e) Line maintenance certifying staff shall demonstrate he/she received type training approved by the national authority or by CAAM Part-147 approved training organisation and passed examination at the category B1 or category B2 level of CAD 1801, as applicable, for each aircraft type in the scope of work defined by the national licence or certifying staff authorisation whichever is the most restrictive.

f) Base maintenance certifying staff shall demonstrate he/ she received type training approved by the national authority or by CAAM Part 147 approved training organisation and passed examination at the category C level referred to CAD 1801 for each aircraft type in the scope of work defined by the national licence or certifying staff authorisation whichever is the most restrictive, except that for the first of type, training and examination shall be at the category B1 or category B2 level of CAD 1801.

3.4.9 Continuation Training

1. Training Department shall organise and co-ordinate continuation training. This training shall be held at regular intervals so that all staffs that require this training can attend and are able to submit evidence for renewal of companyauthorisations every 2 years.

2. The training shall be carried out in-house or out-of-house and shall be in the form of on job training, classroom training or web/email-based training, dissemination of information through recurrent training and issuance of technical publications such as Quality Assurance Notices, Engineering Circular or Safety Bulletin or Accountable Manager Memo/Directive or Technical Instruction Compliance (Airworthiness Directive, Advisory Circular, Service Bulletin or Service Letter) as appropriate.

3. Training syllabus shall include feedback from audit findings, incident reporting and investigations as well as lesson learned as part of this training.

3.4.10 Demonstration of 6/24 months maintenance experience.

1. A recording of a total of 180 tasks at different dates in the 2 years period preceding the intended date of issuance of the certification authorisation would be the minimum expected record to demonstrate the “duration” requirement (but not necessarily the “nature of experience” requirement). The 180 tasks may be replaced by a record of 100 working days of maintenance experience in accordance with the privileges. In this case each recorded day is intended to be a full working day, which for example means for base maintenance activity around 7/8 working hours per day. The duration should be recorded in days or half-days.

2. Having recorded 180 tasks or 100 days only during the first year of the 2-year period cannot be considered as acceptable. The experience shall be spread over the period to avoid a too long interval without activity.

3. The experience recorded needs to be:

   a) Related to a combination of activities which is applicable to the scope of Company Licence/Approval (e.g., only recording servicing and ground handling for an aircraft B1 Certifying Staff is not acceptable)

   b) Representative of each category/rating held as applicable to the scope of the individual Company Licence/Approval.

   c) Not limited to simple tasks only (e.g. bulb replacement for Cat B2 and wheel change for Cat B1.1 certifier). In addition, having recorded a majority of identic tasks or tasks not covering the scope of the individual Company Licence/ Approval is NOT acceptable.

4. For every aircraft included in the category B1 and B2 authorisation, the experience should be on that particular aircraft or on a similar aircraft within the same licence (sub)category. Two aircrafts are similar when they have similar technology, construction and similar systems, which means equally equipped with the following (as applicable to the license category):

   a) Propulsion systems (piston, turboprop, turbofan, turboshaft, jet engine or push propellers), and

   b) Flight control systems (only mechanical controls, hydromechanically powered controls or electromechanically powered controls); and

   c) Avionic systems (analogue systems or digital systems); and

   d) Structure (manufactured of metal, composite, or wood).

   Refer to QAN 021 for details on the Aircraft Similarity Matrix and Grouping.

3.4.11 Limitation, Suspension and Revocation of Company Approval

1. Whenever any condition for revalidation of company approval is not met, or for any reason on rationale after due investigation, company approval granted to the approval holder can be limited, suspended, or revoked by QAM.

2. Following conditions may lead to limitation, suspension or revocation of company approval.

   a) Certification has been performed for an aircraft / aircraft component beyond scope / limitation of authorisation.

   b) The aircraft maintenance engineer license for category A, B1, B2, & C are expired.

c) Company approval expired (submission of company approval renewal after expiry (Lapse application))

d) Continuation training has not been provided to certifying staff.

3. Re-issuance of revoked authorization shall be processed in a similar manner as the initial issuance of company approval.

Refer to Quality Procedure Manual Part 2-3

3.4.12 One - off Certification Authorisation

1. Refer to MOE 3.10 (Concession Control for Deviation from the Organization's Procedure) for details.

CERTIFYING STAFF RECORDS

3.5.1 Responsibility

1. Control of List of Certifying Staff [Refer to MOE Part 1.6 (List of Certifying Staff) for details] and management of records for all technical qualifications and authorisation issued in the Company is the responsibility of Quality Assurance Department.

3.5.2 Constitution of Records

1. Details of each certifying staff shall be kept in hard copy, with the following details included:

   a) Identity

   b) Date of Birth

   c) Certifying Staff Company Authorisation

   d) Experience

   e) Copy of AMEL License (if applicable)

   f) Copy of Diplomas (if applicable)

   g) Copy of training certificate

   h) Continuation training record (during company approval application)

   i) Certifying staff assessment record and its associated documents

2. Record shall be kept in hard copy for a minimum 3 years after certifying staff has ceased employment with GAM or the approval has been withdrawn.

3.5.3 Certifying Staff Authorisation

1. Certifying Staff authorisation categories and functions are in accordance with MOE Part 5.5 (Company License and Approval System).

2. Certifying Staff authorisation is issued in Company Approval Certificate (GAME/Q-013)

3. Certifying Staff shall produce their certification authorisation to any Inspector of CAAM upon request, within 24 hours.

3.5.4 Management of Certifying Staff Records

1. Certifying Staff records shall be made available to the authority and are kept in QAM's office. Only personnel approved by the QAM or his/her delegate can access the records.

2. Certifying Staffs shall be given a copy of the individual Certifying Staff authorization in hard copy format with the scope of work detailed, including limitations where applicable.

3. Certifying Staff shall be given access to their personal records on request and a copy of their personal record shall be furnished to them upon leaving the organization.

4. Certifying staff record shall be kept as per QPM Part 2-13 (Quality Assurance Record Keeping).

QUALITY AUDIT PERSONNEL

3.6.1 Responsibility

1. The Quality Assurance Manager (QAM) is responsible for ensuring quality audit personnel are qualified, trained and competence to perform audit.

2. Assigned Quality Auditors are responsible to carry out audits, surveillance of GAM activities and its sub-contractors/suppliers.

3.6.2 General

1. Quality Audit personnel shall be independent of the area being audited. Audits shall always be carried out by personnel not responsible for the function, procedure or products being checked.

2. Quality Auditors may be selected within the organisation, provided that they comply with the requirements in MOE Part 3.6 (Quality Audit Personnel).

3.6.3 Qualification, Training and Experience

1. Qualification, training and experience for authorising a quality auditor is detailed in QPM Part 2-8 (Quality Audit Personnel).

3.6.4 Authorisation Issuance or Withdrawal Procedures.

1. Each nominated auditors will be assessed by the QAM or his/her delegate prior to issuance of approval. Job competency assessment shall be carried out every 2 years

2. Auditors will be provided with an authorisation approval to indicate that he/she is a quality auditor. QAM shall conduct re-assessment on the Auditor on 2 years basis from the date of the last assessment.

3. Auditor authorisation approval may be withdrawn if QAM deems the auditor to be incompetent, or if there are circumstances which prevents the auditor from performing his/her duties as an auditor.

4. Procedure for quality auditor authorisation issuance or withdrawal procedure is further detailed QPM Part 2-8 (Quality Audit Personnel).

QUALIFYING INSPECTOR

3.7.1 Responsibility

1. The Qualifying Inspectors for this policy refers to Store Inspectors (E1). QAM is responsible for the grant of Store Inspector Company Authorisation.

2. Store Inspectors are responsible for the incoming inspection, storage requirements and delivery of component/materials related or indirectly related to aircraft.

3.7.2 Store Inspector Authorisation Initial Issuance

1. Control, issue, and administration of the Approval System are under the responsibility of QAM.

2. Application for company approval shall be submitted to QAM using form Company Approval Application form (GAM/Q-012).

3. EM or his/her delegate should recommend and declare that the personnel had been trained/possesses relevant qualification for holding such approval in the application form before submitting to the QAM.

4. QAM will vet the application, ensuring all requirements are met.

5. Oral assessment (technical competency) will be carried out by Quality Assurance Manager or his appointed assessor using Technical Competency Assessment form (GAM/Q-015).

6. Applicants shall be able to demonstrate a working knowledge of the language in which the maintenance data is published, as well as English language.

7. If the personnel found competent, Approval will be granted by QAM.

8. All qualified inspectors will be issued with Company Approval Certificate (GAM/Q-013) detailing the scope of his/her approval along with the stamp.

9. If found unsatisfactory, a minimum cooling period of 1 month or as determine by the assessor will be given to the applicant before he can resubmit another application.

3.7.3 Store Inspector Authorisation Renewal

1. Applicant shall submit Company Approval Application form (GAM/Q-012) at least 30 days before expiry date to Quality Assurance Department. A written justification signed by both the applicant and EM shall be given to the Quality Assurance Department in the event that the renewal application is submitted after the stipulated 30-day period.

2. All certifying personnel applying for Store Inspector authorization renewal shall be involved with 6 months of actual relevant experience in any consecutive 2-year period.

3. Applicant shall be able to demonstrate that he/she is current in training requirements as stated in MOE part 3.4.9 (Continuation Training)

4. Each application for renewal of company approval authorization using Application for Company Approval form (GAM/Q-012) shall be recommended, and duly signed by the EM.

3.7.4 Store Inspector experience and Training Qualification

Category E1 – Store Inspector				
Minimum age	21 years' old			
	INITIAL		**RENEWAL**	
Maintenance Experience	3 months aviation maintenance experience or holding previous company approval that is still valid		Involved in at least 6 months of actual relevant experience in any consecutive 2 years period	
Training	Company procedure (MOE & EPM)	√	Company procedure (MOE & EPM)	√
	Air Legislation	√		
	CAAM Part 145	√		
	Human Factor	√		
	Safety Management System	√	Safety Management System	√
	Electrostatic Sensitive Device (ESD)	√	Human Factor	√
	Dangerous Goods (DG)	√		
Assessment	Company procedure	√		

3.7.5 Retention of Record

1. Record shall be kept in hard copy format for a minimum of 3 years after the Store Inspector has ceased employment with GAM or approval has been withdrawn.

QUALIFYING TECHNICIAN

3.8.1 Responsibility

1. Training and qualifications of the technician as stated below are the responsibilities of the Engineering Manager (EM).

3.8.2 Introduction

1. GAM Technicians are authorised to work on aircraft and aircraft components as instructed and under supervision by the Certifying staff.

2. The Technician is authorised to sign on the work performed on the maintenance worksheet as a Technician. They sign only for the tasks done.

3. Final acceptance of the works performed by technician on aircraft or aircraft component shall be performed by a Certifying staff.

3.8.3 Technician Recruitment

1. GAM Technician recruitment is based on criteria set by GAM management from time to time. The minimum qualification requirements for Aircraft Technicians are as follows:

   a) Graduate from CAAM Part-147 Approved Training Organization or equivalent.

   b) SPM/V or technical institute Certificate/Diploma or equivalent – minimum 2 years' direct involvement in maintenance of operating aircraft.

   c) Ex-Military aircraft tradesman.

   d) If none of the above, minimum total of 4 years direct involvement in maintenance of operating aircraft not limited to GAM.

2. Technicians shall also possess knowledge of the language in which the maintenance data are written

3.8.4 General Training

1. All technicians shall undergo general training covering the following subjects:

   a) Safety Management System

   b) Human Factor

c) Company Procedure

d) Fuel Tank Safety and CDCCL

e) Electrical Wiring Interconnection System

2. The method of training for technician can be in the form of classroom training, web-based or email-based training, briefing, and etc.

3.8.5 Continuation Training for Technician

1. Each technician shall undergo sufficient continuation training in every two-year period. The trainings shall cover the following subjects:

   a) Human Factor

   b) Company Procedure

   c) Safety Management System

2. The method of training for technician can be in the form of classroom training, web-based or email-based training, briefing, and etc.

3.8.6 Retention of Record

1. Soft copy of Technician Personnel records to be kept by GAM Engineering Department at respective bases for a minimum of 3 years after the Technician has ceased employment with GAM.

MAINTENANCE ORGANISATION EXPOSITION

AIRCRAFT OR AIRCRAFT COMPONENT MAINTENANCE TASKS EXEMPTION PROCESS CONTROL

3.9.1 Responsibility

1. Obtaining an exemption to aircraft maintenance tasks remain the responsibility of the CAMO.

3.9.2 System for control and processing

1. Any deviation from an aircraft or aircraft component maintenance programme or specified maintenance task constitutes a maintenance task exemption.

2. No exemption is permitted from the Aircraft/Component Maintenance Programme unless prior written authority is given by the CAAM.

3. GAM shall support CAMO for one-time extension of task interval due to unavailability of tools, materials, parts, etc. by sharing the related information to support the application.

4. In the event that a Maintenance Release is required to be issued by GAM, Certifying Staff shall include the details of the exemption including approval from the CAMO and CAAM in the Maintenance Release.

5. Before an exemption is requested, all other means of solution must be exhausted.

CONCESSION CONTROL FOR DEVIATION FROM ORGANISATION'S PROCEDURES (ONCE-OFF AUTHORISATION)

3.10.1 Responsibility

1. The QAM is responsible for the assessment and recommendation of Once-Off Authorisation requests to CAAM for approval.

3.10.2 General

1. EM shall make requests to deviate from approved procedures in the MOE using Request for Once Off Authorisation form (GAM/E-019).

2. The request shall include a detailed justification for the request before submission to QAM.

3. The request made to the QAM, must clearly state the procedure and reasons for the requested deviation. The Once Off Authorisation form shall contain details of the deviation, the length of the deviation sought, risk assessment and the interim action taken.

4. Once-Off Authorisation request for alternate means of compliance from approved company procedures shall not contradict any regulatory, OEM and safety requirements.

5. The QAM will consider all the implications having due regard to the compliance with regulatory requirements and ensure that an equivalent level of safety is in place.

6. The QAM shall review the risk assessment and may impose further conditions or limitations to the One-Off Authorisation; prescribing the conditions applied under which the procedure deviated from the approved procedure.

7. Once-Off Authorisation requests shall be assessed by the QAM and recommended to CAAM for approval.

3.10.3 Once-off Authorisation for Person Outside of Organisation

1. For unforeseen cases, where an aircraft is grounded at a location other than the main base where no appropriate certifying staff are available, request for once-off certification authorisation can be made to QAM through the EM. Upon obtaining the full detail of the defect or work to be performed, the EM or his/her designee shall review the request and recommend the issuance of the Once-Off Authorisation provided the person:

   a) Holds an equivalent type GAM company authorisation on aircraft of similar technology, construction and systems; or

   b) Has not less than five years maintenance experience and holding a valid ICAO aircraft maintenance license rated for the aircraft type requiring certification. Only in cases where there is no approved CAAM Part-145 AMO at that location and GAM obtains and holds on file evidence of the experience and the license of that person.

   c) Fully understand the defect / issues at hand and has the access to the relevant maintenance data.

2. QAM may approve the Once-Off Authorisation for the requestor once he/she fulfil the conditions set forth.

3. EM shall ensure that any such maintenance that could affect flight safety is re-checked by an appropriately approved person at next station or when the aircraft is back to main base, whichever comes first.

4. QAM shall report to CAAM within 7 days after issuing such certification authorization.

3.10.4 Record Retention

1. A copy of the Request for Once Off Authorisation form (GAM/E-019) shall be kept by the QA Department. The Once-Off Authorisation record is kept for 3 years from the date of issue.

MAINTENANCE ORGANISATION EXPOSITION

QUALIFICATION PROCEDURES FOR SPECIALISED ACTIVITIES SUCH AS NDT, WELDING AND ETC

3.11.1 General

1. NDT activity will be contracted to CAAM Part-145 organisation approved by CAAM.

2. For other activities when needed, it will be contracted to CAAM approved organization.

3. The contracted organisations shall be selected in accordance with MOE Part 2.1 (Supplier Evaluation procedure and Sub-Contract Control Procedures).

CONTROL OF MANUFACTURER'S AND OTHER MAINTENANCE WORKING TEAMS

3.12.1 Manufacturers Working Team

1. It will be necessary from time to time for the company to engage Original Equipment Manufacturer (OEM) to perform specialized work like major modification, reconfiguration, and repair or defect troubleshooting, etc.

3.12.2 External Team Working Under Their Own CAAM Part-145 Approval

1. The manufacturers' working team shall comprise of appropriately approved certifying personnel. All work must be done in accordance with the approved manuals and other technical publications.

2. All working parties will be briefed on GAM company procedures.

3. Clear work order must be provided by GAM to the external working team prior work starts.

4. The external teams are not authorized to circulate alone in the organization facilities. Their space is limited to the technical office. Any need for materials, equipment, means of access, electric generation, documentations, data processing, archives, is formulated to the EM.

5. All such work undertaken shall be coordinated by GAM who will provide the necessary maintenance support including manpower, facility and equipment, if required.

6. A meeting must be held with the OEM / Working Team to determine:

   a) Scope of work

   b) Maintenance Release Certification/statement

   c) Frequency of meetings of the progress of works

   d) Segregation of Responsibilities between GAM and OEM / Working Team

7. The certification for return to service is signed under the complete responsibility of the manufacturer, or the outside maintenance team, for the work they have performed. GAM only coordinates the scheduling of work with that for which it is responsible.

8. A Certifying Staff assigned by EM will serve as Quality Inspector on behalf of GAM during the project. Where the entire repair or modification is carried out by the manufacturer's working team, the team will provide a release for the work performed and based on that release, the Certifying Staff assigned to the project will issue a Maintenance Release on GAM Worksheet, or in the Aircraft Journey Log as applicable.

3.12.3 External Working Team not holding an CAAM Part 145 Approval

1. For External Working Teams not holding a CAAM Part-145 Approval, the external working team shall be considered as a "Sub-contractor" and the procedures detailed in MOE 2.1 (Supplier Evaluation procedure and Sub-Contract Control Procedures) shall be followed.

2. Sub-contractor is subject to GAM Quality System and shall be audited at interval stipulated in MOE 2.1 to ensure the sub-contractor meet GAM AMO requirement and standard.

3. All work carried out by sub-contractor is under the GAM AMO Quality System.

4. GAM QA maintain the list of sub-contractors using the Approved Vendor List (GAM/E-002)

5. All work must be done in accordance with approved manuals and other technical publications and using approved materials.

6. All external working parties will be briefed/trained on GAM company procedures including GAM security and safety policy. All briefing/training carried out shall be recorded.

7. The external teams are not authorized to circulate alone in the organization facilities. Their space is limited to the technical office. Any need for materials, equipment, means of access, electric generation, documentations, data processing, archives, is formulated to the EM.

8. A meeting must be held with the OEM / Working Team to determine:

   a) Scope of work

   b) Frequency of meetings of the progress of works

   c) Segregation of Responsibilities between GAM and external working team

9. Certifying Staff must oversee the maintenance work such as repair, replacement, modification, overhaul, test or inspection to ensure

compliance to aviation authorities, company procedures and the maintenance contract requirement.

10. A report must be furnished by the sub-contractor on work done to GAM upon completion.

11. Final certification/Maintenance Release will be issued by GAM within its capability.

HUMAN FACTORS TRAINING PROCEDURE

3.13.1 Aims and Objective

1. The purpose of human factors training is to increase safety, quality and efficiency in aircraft maintenance operation by reducing human error and its impact in maintenance activity.

3.13.2 General

1. Human Factor training comprises both initial training and continuation training.

2. All personnel, including personnel being recruited from any other organisation should receive initial human factors training compliant with the GAM's training standards prior to commencing actual job function. Newly directly employed personnel shall receive human factor training within 6 months after joining GAM.

3. This Human Factor training programme is applicable to:

   a. Management

      i. Post holders, managers and supervisors

   b. Maintenance Personnel

      i. Certifying staff

      ii. Technician

      iii. Production Planner and Controller

      iv. Warehouse and Logistic

      v. Support staff

   c. Quality Assurance personnel

      i. Quality Auditor

      ii. Quality assurance department personnel

3.13.3 Training Methods and Syllabus

1. The Human Factors Training Syllabus for GAM personnel shall be in accordance with CAGM 8601 Para 3.9.

2. Training syllabus shall be controlled by GAM Training Manager.

3. Human Factor recurrent training shall be of an appropriate relation to relevant quality audit findings and other internal/external sources of information on human errors in maintenance available to the organisation.

3.13.3.1 Initial

1. The training course duration would be 2 days.

2. Although training courses may be tailored for certain categories of personnel, consideration should also be given to the benefits of having combination of personnel from different functional groups during training sessions.

3. Initial Human Factors training shall cover all the topics of the Training Syllabus in CAGM 8601 Paragraph 3.9

   ***NOTE**: Having completed a Part-66 Module 9 Human Factor (HF) training does not supersede the need to comply with the initial HF training. However, credit may be taken from the module 9 Human Factor training for the topics which are common in both trainings, provided the Module 9 HF training has been completed within the previous two years.*

4. Initial training shall be provided to personnel within 6 months of joining the maintenance organisation, but temporary staff shall be trained shortly after joining the organisation to cope with the duration of employment.

5. Personnel being recruited from another Part-145 approved maintenance organisation and temporary staff shall be assessed for the need to receive any additional Human Factors training to meet the new Part-145 approved maintenance organisation's Human Factors training standard.

3.13.3.2 Continuation Training

1. Human Factors continuation training shall be of sufficient duration in each two-year period in relation to relevant quality audit findings and other internal/external sources of information available to the organisation on human errors in maintenance.

2. Continuation training may take the form of a dedicated course or, alternatively, may be integrated into other training or company processes.

3. Human Factors continuation training course duration shall be a minimum of 8 hours.

4. The aim of the continuation training is to:

   (a) Refresh those topics of the Human Factors Training Syllabus that are most significant for the organisation.

   (b) Further develop skills (communication, teamwork, task management, situational awareness, etc.) as appropriate to the job.

   (c) Ensure staff are aware of human factors issues identified from internal or external analysis of incidents/occurrences, including instances where staff failed to follow procedures and the reasons why particular procedures are not always followed, reinforcement of the need to follow procedures and the need to ensure that incomplete or incorrect procedures are identified to the company in order that they can be corrected. This does not preclude the possible need to carry out a quality audit of such procedures

3.13.4 Human Factors Training Facility/Instructor

1. Human factors training may be conducted by the maintenance organisation itself, independent trainers, CAAM Part-147 Approved Training Organisations or any training organisations acceptable to the CAAM.

2. Procedures for qualifying instructors are stipulated in QPM Part 2-9 (Qualification of Instructors).

3.13.5 Records

1. All maintenance staff training records for Human Factors initial and continuation training shall be kept by the respective departments. A copy of the Certifying Staff Human Factors training records shall be kept by the Quality Assurance Department.

2. The soft copy of Human Factors training records shall be kept for 3 years after the staff has ceased employment with GAM.

COMPETENCY ASSESSMENT OF PERSONNEL

3.14.1 Applicability

1. This policy applies to all maintenance personnel who are involved in GAM activities such as maintenance, supporting staff (logistic, store, tech. publication, etc.), management & quality audit personnel.

2. Competence should be defined as measurable skill or standard of performance, knowledge and understanding, taking into consideration attitude and behaviour of the staff.

3. The job competency assessment of non-certifying staff shall be the responsibility of the relevant Departmental Heads. For certifying staffs, the technical assessment for initial, extension and renewal of an authorisation shall be in accordance with MOE 3.4 (Certifying Staff Qualification and Training Procedures).

3.14.2 Job Competency Assessment

1. Job competency assessment for all maintenance organisation personnel as stated above shall be carried out once in every 2 years basis. Technical competency assessment of Certifying staff and Quality audit personnel with respect to specific function / task shall be performed during process of issuance and renewal of the authorisation.

2. The following should be considered for the competency assessment to be carried out effectively:

   a) Verification that all the applicable qualification requirements for the specific category of staff as detailed in the relevant MOE chapter / job description are met.

   b) All staff shall have relevant knowledge skills and experience on the product / technical area as applicable to the job function.

   c) In accordance with the job function, adequate initial and recurrent training should be provided and recorded to ensure continued competence so that it is maintained throughout the duration of employment/contract.

   d) All staff should be able to demonstrate knowledge of and compliance with the maintenance organisation procedures and regulatory requirements issued by CAAM, as applicable to their duties.

e) All staff should be able to demonstrate an understanding of safety management principles, human factors and human performance issues in relation with their job function.

f) Job descriptions are recommended for each job function in the organization in order to assist the assessment of competence and to establish the training needs analysis. Job descriptions should contain sufficient criteria to enable the required competence assessment.

3. Criteria should allow the assessment to establish that, among others:

a) **Managers** can properly manage the work output, processes, resources and priorities described in their assigned duties and responsibilities in accordance with the safety policy and objectives and in compliance with safe compliant manner in accordance with the applicable requirements regulations and organisation procedures.

b) **Planners** are able to interpret maintenance requirements into maintenance tasks, and have an understanding that they have no authority to deviate from the maintenance data.

c) **Supervisors** are able to ensure that all required maintenance tasks are carried out and, where not completed or where it is evident that a particular maintenance task cannot be carried out to the maintenance data, then such problems will be reported to the QA person for appropriate action. In addition, for those supervisors who also carry out maintenance tasks, that they understand such tasks should not be undertaken when incompatible with their management responsibilities.

d) **Technicians/mechanic** are able to carry out maintenance tasks to any standard specified in the maintenance data and will notify supervisors of defects or mistakes requiring rectification to re-establish required maintenance standards.

e) **Support staff** are able to determine that relevant tasks or inspections have been carried out to the required standard.

f) **Certifying staff** are able to determine when the aircraft or aircraft component is ready for to release to service and when it should not be released to service.

g) **Quality Staff** are able to ensure continuous compliance of GAM AMO with requirement stipulated in the MOE

4. The competency assessment shall be carried out according to the job functions and the scope, size, and complexity of the department. The assessment may consider the following (the table is not exhaustive):

MAINTENANCE ORGANISATION EXPOSITION

	Managers	Supervisors	Certifying staff	Quality Staff	Planners	Technician	Specialised	Tech Records	Tech. Pub	Store	Purchasing
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	X	X	X	X
Knowledge of logistics processes	X	X		X	X					X	X
Knowledge of organisation capabilities, privileges and limitations	X	X	X	X	X			X			
Knowledge of MCAR, CAAM requirement and regulation,	X	X	X	X	X	X	X	X	X	X	X
Knowledge of relevant parts of the MMP and Engineering Procedures Manual	X	X	X	X	X	X	X	X	X	X	X
Knowledge of occurrence reporting systems (mandatory and internal) and understanding of the importance of reporting occurrences, incorrect maintenance data and existing or potential defects	X	X	X	X	X	X	X			X	
Knowledge of safety risks linked to the working environment	X	X	X	X	X	X	X	X	X	X	X
Knowledge of Safety Management Systems and Just Culture	X	X	X	X	X	X	X	X	X	X	X
Knowledge on CDCCL when relevant			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	X	X	X	X
Understanding of conditions for ensuring continuing airworthiness of aircraft and components	X	X	X	X	X	X	X				
Understanding of his/her own human performance and limitations	X	X	X	X	X	X	X	X	X	X	X
Understanding of personnel authorisations and limitations	X	X	X	X	X	X	X	X	X	X	X
Understanding critical task		X	X	X	X	X	X				
Ability to compile and control completed workpack		X	X		X	X	X				
Ability to consider human performance and limitations.	X	X	X	X	X	X	X			X	X
Ability to determine required qualifications for task performance	X	X	X	X							

MAINTENANCE ORGANISATION EXPOSITION

Ability to identify and rectify existing and potential unsafe conditions	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	X				
Ability to identify and properly plan performance of critical task		X	X		X						
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		X							
Ability to properly process removed, uninstalled and rejected parts		X	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, workpacks 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	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	X	X	X	X
Analytical and proven auditing skills (for example, objectivity, fairness, open-mindedness, determination, …)				X			X				
Maintenance error investigation skills	X	X		X			X				
Resources management and production planning skills	X	X									
Teamwork, decision-making and leadership skills	X	X									
Ability to encourage a positive safety culture and apply a just culture	X	X		x							

5. The methods used to gather evidence of competence may be in any of the following:

   a) Observation: An important method of assessment is by working the person under the supervision of another qualified person/assessor for sufficient time to arrive at a conclusion. Observation can be organised in a variety of ways:

      i. Continuously working alongside the candidate.

      ii. Arranging to work alongside at specific times.

      iii. Planning to visit when particularly relevant activities are scheduled.

      iv. Arranging for particular activities to take place.

   b) Product sample: The assessor will evaluate completed tasks for accuracy and standard of workmanship (e.g. checking whether a job has been completed properly, paperwork completed with the necessary details and accurate information.

   c) Testimony: Other people who have been involved in the work of the candidate can be asked to comment on what the candidate did and how well they did it. Also, when the person has been recruited from another approved maintenance organization then the organisation should accept written confirmation from the person responsible for running the quality system about the person.

   d) Review of task: Candidate's explanation of the process/review of task – the assessor will ask the candidate to talk through an activity and ask for the candidate's own view of the process.

   e) Simulations/Role Plays: Where it is not possible for the candidate to demonstrate their competency through ongoing work, then special situations may be set up.

   f) Assessment of prior achievement: Where the candidate has evidence of things they have done in the past, this may be used as evidence, provided it is sufficiently current and relevant to the subject of competence.

   g) Projects/assignments/case studies: The candidate may be asked to undertake a special project or look at an individual case study; this can be used as evidence of competence or knowledge in a particular area.

h) Interview: Here the assessor may ask specific questions about what the candidate has done, why they are doing something in a particular way or what would happen if they did not do something.

i) Review of Personnel Records: The assessor can review the available personnel records such as training records, certificates, resume, work experience logbook or any other related records.

6. Actions to be taken when the assessment is not satisfactory:

a) Nominated for training related to the lacking function; or

b) Briefed and assessed for the lacking function; or

c) Assigned tasks with close supervision for a certain period of time.

d) Re-assessment if required

e) Any recommendation deemed appropriate by the person performing the final review of the assessment.

3.14.3 Competency Assessors

1. The competency assessor should be the relevant Departmental Head or his/her designee who shall be a person in an executive role, who are qualified and experienced, and senior in position to the job / role being assessed. However, he/she may be assisted by a qualified and experience person on individual assessment element.

3.14.4 Assessment Records

1. Each Department is responsible for documenting all the assessment records of its own personnel. Certifying staff assessment records are filed and kept in QA department.

2. The assessment records will be made available to internal/external auditors upon request.

3. Hard copy of the assessment records must be retained for a minimum of 3 years after personnel has left the company.

4. Upon request, any staff leaving the organization shall be furnished with a copy of their personal records of competency assessment.

TRAINING PROCEDURE FOR ON-JOB TRAINING (OJT)

3.15.1 General

1. OJT shall be conducted at and under the control of GAM which is approved for the maintenance of the particular aircraft type covered under its organisation's scope of work and shall be assessed by a practical assessor.

2. It shall have been started and completed within the 3 years preceding the application for a type rating endorsement.

3. The OJT should include one-to-one supervision and should involve actual work task performance on aircraft/components, covering line and/or base maintenance tasks.

4. The use of only simulators for OJT should not be allowed but part of the OJT should be conducted in a real maintenance or manufacturer environment.

5. Performance of tasks will depend on the task's availability.

6. OJT maintenance experience for the First Type Rating Endorsement shall be recorded in (OJT) Task Logbook (GAM/Q-014) which contains the following data:

   a) Name of Trainee

   b) Date of Birth

   c) Approved Maintenance Organisation

   d) Location

   e) Name of validator(s) and practical assessor (including AML number if applicable)

   f) Date of task completion

   g) Description of task and job card/ work order/ technical log, or other means acceptable to CAAM

   h) Aircraft type and aircraft registration

   i) Aircraft rating applied

7. The OJT should cover at least 50% of the tasks contained in OJT Task Logbook (GAM/Q-014 for AW139 and GAM/Q-087 for King Air B300). Selection of the specified task in the OJT Task Logbook based on the aircraft type reflected in the dedicated OJT Task Logbook GAM/Q-014 for AW139 and GAM/Q-087 for King Air B300). Other tasks than those in OJT Task logbook may be considered as a replacement when they are relevant. Typically, in addition to the variety and the complexity, the OJT tasks should be selected because of their frequency, safety, novelty, etc.

8. Up to 50% of the required OJT may be undertaken before the aircraft theoretical type training starts.

9. Production Planner and Controller (PPC), in communication with CAMO shall plan the maintenance task to be performed on the aircraft. Communication between the PPC and the validator to perform the task should involve the students for collection of OJT work experience.

10. Each task shall be signed off by the student and countersigned by a validator. The tasks listed shall refer to an actual work sheet, or any other means that is acceptable to CAAM.

3.15.2 Validator, Practical Assessor and Supervisor

Note: Validator and Supervisor may be the same person signing the OJT Task Logbook (GAM/Q-014).

1. Validator/Supervisor may be any of the following personnel:

   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.

2. Regarding the day-to-day supervision of the OJT in GAM and the role of the validator, the following should be considered:

   a) It is sufficient that the completion of individual OJT tasks is confirmed by the direct validator, without being necessary the direct evaluation of the assessor.

   b) During the day-to-day OJT performance, the supervision aims at overseeing the complete process, including task completion, use of manuals and procedures, observance of safety measures, warnings and

recommendations and adequate behavior in the maintenance environment.

c) The validator should personally observe the work being performed to ensure the safe completeness and should be readily available for consultation, if needed during the OJT performance.

d) The aircraft system and/or component disturbed during the OJT shall be properly recorded, reinspected, tested and Maintenance Release issued by the Certifying Staff.

2. The validator should therefore:

a) Have certifying staff privileges relevant to the OJT tasks

b) Be competent for the selected tasks

c) Be safety-orientated

d) Be capable to coach

e) Be designated by GAM to carry out the supervision.

3. The final assessment of the completed OJT is mandatory and shall be performed by a practical assessor (Refer List of Practical Assessor GAM/Q-078)

4. For qualifying of the practical assessor, refer to Quality Procedure Manual (QPM Part 2.15)

5. Assessments which are not positive shall be re-assessed at an interval deemed suitable by the practical assessor.

6. The practical assessor should therefore be proficient and have sufficient experience or knowledge in:

a) Human performance and safety culture

b) The aircraft type (necessary to have the certifying staff privileges in case of maintenance release issuance)

c) Training/coaching/testing skills

d) Instructional tools to use

e) Understand the objective and the content of the practical elements of the training that is being assessed.

f) Have interpersonal skills to manage the assessment process (professionalism, sincerity, objectivity and neutrality, analysis skills, sense of judgement, flexibility, capability of evaluating the validators or instructor's reports, handling of trainee's reactions to failing assessment with the cultural environment, being constructive, etc.)

g) Be ultimately designated by the organisation to carry out the assessment.

Procedures for qualifying practical assessors are detailed in QPM Part 2-15 (Qualifying Practical Assessor).

PROCEDURE FOR THE ISSUE OF A RECOMMENDATION TO THE CAAM FOR THE ISSUE OF PART-66 LICENCE

3.16.1 Purpose

1. To define GAM policies for the issue of a recommendation to the CAAM for the issue of Part-66 license in accordance with the CAD 1801.

3.16.2 Policy

1. The recommendation to CAAM for the issuance of AML shall be made by QAM.

2. The applicant for CAAM Module 10 practical assessment by GAM for the initial issuance of Part-66 AML shall forward the application to the QAM for review. The application shall include:

   a) CAAM Part-66 Module 10 - Air Legislation Assessment Form (GAM/Q-076A)

   b) Certificate of recognition on CAAM Module 10 with examination result.

   c) Recommendation letter from MTO to GAM AMO

   Upon successful review of the submission including assessment, QAM will issue a recommendation letter to CAAM.

3. The applicant for first type rating endorsement shall forward the application to QAM for review. The application shall include:

   a) CAAM application form CAAM/AW/1801-01.

   b) Certificate of recognition on approved type training course with relevant exam result.

   c) Relevant aircraft type practical experience and in the case of first type endorsement, the On-Job Training as per MOE Part 3.15 [Training Procedure for On-Job Training (OJT)].

   Upon successful review of the submission, QAM will issue a recommendation letter to CAAM.

4. The applicant for Cat C extension shall ensure that he/she fulfils the requirements for the grant of relevant Category C authorisation as per MOE Part 3.4 (Certifying Staff Qualification and Training Procedures) and forward the application to QAM for review. The application shall include:

   a) CAAM application form CAAM/AW/1801-01.

   b) GAM Application for Company Approval Application Form (GAM Q-012) duly signed by Department Head or designee.

   c) Certified true copy of the applicant Company Approval Certificate (GAM/Q-013).

   For first endorsement of Cat C approval to CAAM, GAM shall ensure that the applicant has at minimum 3 years' experience in aircraft type.

   Upon successful review of the submission including assessment, QAM will issue a recommendation letter to CAAM.

MAINTENANCE ORGANISATION EXPOSITION

LIMITED CERTIFICATION AUTHORISATIONS CONTROL PROCEDURE

3.17.1 Purpose

1. To define GAM policies for limited certifications authorisations as per requirement in the CAD 8601 paragraph 5.2.

3.17.2 General

1. Whenever such a case as below arises, the pilot shall submit an application to the QAM and/or EM for limited certification authorisation using form Application for Limited Certification Authorisation (GAM/Q-043), clearly defining specific period of time to facilitate / continue the operation without compromising the safety / airworthiness standards.

3.17.3 Procedure

1. Procedures for the Limited Certification Authorisation are detailed in QPM Part 2-10 (Limited Certification Authorisations Control Procedure)

3.17.4 Limited Authorisations Records, Responsibilities, Retention and Access.

1. Copy of the Limited Certification Authorisation Approval (GAM/Q-044) issued shall be kept by the QA Department for 3 years after the staff has ceased employment with GAM or approval has been withdrawn.

MAINTENANCE ORGANISATION EXPOSITION

CONTRACTED OPERATORS

4.1.1 Policy

1. A formal written maintenance support contract shall be executed between GAM and contracting CAMO for the maintenance service to be provided.

2. In the contracts, the organization shall clearly define the respective responsibilities as per requirement of CAAM CAD 6802.

3. The maintenance contract shall address but not limited to the following issues:

   a) The scope of work, types of aircraft/components, location and contract reference.

   b) Supply of technical information e.g. Manufacturers' Publications, Service Bulletin, Airworthiness Directives etc.

   c) Compilation, control and retention of maintenance records.

   d) Spares provisioning and storage.

   e) Rectification of defects away from base (if not covered by a line maintenance contract).

   f) Accomplishment of all Airworthiness Directive, mandatory modification and inspection.

   g) Documentation and certification requirements.

4. QAM shall maintain a list of contracting operators, providing following information for each operator.

   a) Name of the operator.

   b) Location and address.

   c) Types of aircraft/components.

   d) Period of contract.

   e) Scope/level of work.

MAINTENANCE ORGANISATION EXPOSITION

OPERATOR PROCEDURES AND PAPERWORK

4.2.1 Policy

1. All maintenance, inspection, overhaul, repair and modification of aircraft, engine and associated components shall be carried out in accordance with the CAMO Approved Maintenance Programme and technical publications.

2. All work shall be undertaken by appropriately authorized persons and shall be carried out in manner consistent with good maintenance practices.

3. All Certifying Staff and other affected personnel shall ensure correct completion of CAMO provided worksheets. CAMO shall provide the appropriate documentation and procedure training.

4. For line maintenance activities, including defect rectifications shall be recorded in CAMO Aircraft Journey Log or documents provided by CAMO.

MAINTENANCE ORGANISATION EXPOSITION

OPERATOR RECORD COMPLETION

4.3.1 Policy

1. All details of work carried out must be properly recorded in the form and manner acceptable to the CAMO.

2. Maintenance record keeping for Operator is the responsibility of the CAMO unless it is contracted to GAM. In such cases GAM procedure shall be followed while complying with CAMO requirement and contract.

3. A copy of detailed maintenance records and any associated airworthiness data shall be retained by GAM for 3 years from the date the aircraft or aircraft components to which the work relates, is released from the maintenance organization.

4. Where GAM is contracted to maintain and retain records on behalf of the CAMO, such records shall be kept in accordance with the contractual and airworthiness requirements.

5. Records of maintenance performed by the company are managed in accordance with MOE Part 2.14 (Technical Record Control).

MAINTENANCE ORGANISATION EXPOSITION

SAMPLE OF DOCUMENTS

5.1.1 Sample of Documents, Tags and Forms Used

1. Sample of GAM Engineering forms and Quality Assurance forms are available in GAM Online Portal.

MAINTENANCE ORGANISATION EXPOSITION

LIST OF SUB-CONTRACTORS

1. Reference should be made to Approved Vendor List (GAM/Q-002).

MAINTENANCE ORGANISATION EXPOSITION

LIST OF LINE MAINTENANCE LOCATIONS

1. This section is further defined in MOE Part 1.8 (Facilities) and MOE Part 1.9 (Scope of Work).

MAINTENANCE ORGANISATION EXPOSITION

LIST OF CONTRACTED MAINTENANCE ORGANISATIONS (PART-145)

1. The list of contracted Part-145 maintenance organisation is stated in the Approved Vendor List (GAM/Q-002).

MAINTENANCE ORGANISATION EXPOSITION

COMPANY LICENSE AND APPROVAL SYSTEM

5.5.1 Company Authorisation Categories

CATEGORY	DESCRIPTION
A1	AEROPLANE TURBINE
A2	AEROPLANE PISTON
A3	HELICOPTER TURBINE
A4	HELICOPTER PISTON
B1.1	AEROPLANE TURBINE
B1.2	AEROPLANE PISTON
B1.3	HELICOPTER TURBINE
B1.4	HELICOPTER PISTON
B2	AVIONICS
C	BASE MAINTENANCE

CATEGORY	DESCRIPTION
E1	STORE INSPECTION
W1.1	NI-CAD BATTERIES
W1.2	LEAD ACID BATTERIES
W1.3	LITHIUM-ION BATTERIES
W2.1	ELT
W2.2	FLOAT
W2.3	LIFE RAFT

5.5.2 Aircraft Certifying Staff Functions

Functions		Cat. A1	Cat. A2	Cat. A3	Cat. A4	Cat. B1.1	Cat. B1.2	Cat B1.3	Cat B1.4	Cat B2	Cat C
1	Inspection					√	√	√	√	√	
2	Servicing					√	√	√	√	√	
3	Repair					√	√	√	√	√	
4	Replacement					√	√	√	√	√	
5	Testing					√	√	√	√	√	
6	Function check					√	√	√	√	√	
7	Leak check					√	√	√	√	√	
8	Engine ground run					√	√				
9	Modification					√	√	√	√	√	
10	Independent Inspection					√	√	√	√		
11	Daily inspection/pre-flight	√	√	√	√	√	√	√	√		
12	Maintenance Release	√	√	√	√	√	√	√	√	√	
13	Form 1					√	√	√	√	√	
14	Store Inspection					√	√	√	√	√	
15	Base Maintenance Release (N2)										√
16	Practical Assessor (N1)					√	√	√	√	√	

Legends:

N1 - Practical Assessors are qualified in accordance with the requirements stated in QPM Part 2.15 (Qualifying Practical Assessor).

N2 – Applicable for maintenance release of large aircraft based on the definition of CAD 8601. For other than large aircraft, Certifying Staff without Function 15 may certify the base maintenance release provided he/she is holding the aircraft rating in his/her company approval certificate and subjected to the CAMO requirements

5.5.3 Component Certifying Staff and Store Inspector Functions

Functions		Cat E1	Cat W1.1	Cat W1.2	Cat W1.3	Cat W2.1	Cat W2.2	Cat W2.3
1	Inspection		√	√	√	√	√	√
2	Servicing							
3	Repair		√	√		√	√	√
4	Replacement							
5	Testing		√	√	√	√	√	√
6	Function check		√	√	√	√	√	√
7	Leak check		√	√	√	√	√	√
8	Engine ground run							
9	Modification		√	√		√	√	√
10	Independent Inspection							
11	Daily inspection/pre-flight							
12	Maintenance Release							
13	Form 1		√	√	√	√	√	√
14	Store Inspection	√						
15	Base Maintenance Release							
16	Overhaul		√	√		√	√	√
17	Practical Assessor							