MAINTENANCE MANAGEMENT PLAN (MMP)

OF

GALAXY AEROSPACE (M) SDN. BHD. (GAM)

FOR

AW139

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COPY NO. 04 - Directorate General Technical Airworthiness (DGTA)

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Prepared by :

Name	: SALMAN ABU ZARIM
Position	: QUALITY MANAGER
Signature	:
Date	: 1 NOVEMBER 2019

Verified by :

Name	: AZILLAH BIN MATAP
Position	: SENIOR MAINTENANCE MANAGER
Signature	:
Date	: 1 NOVEMBER 2019

PART 0 –

AUTHORISATION

0.2 RECORD OF REVISIONS

COPY NO : _____ MANUAL HOLDER : _____

This record of revisions shall be retained in this MMP. Revisions shall be inserted to replace the superseded pages in this document with the revision date, insertion date and name of person incorporating the revision annotated in the appropriate block below.

ISSUE NO	REVISION NO	AMENDMENT DATE	INSERTION DATE	INSERTED BY (NAME IN BLK)
Issue 1	0	1st JUN 2017	1st JUNE 2017	N/A
Issue 1	1	20th OCT 2017	20th OCT 2017	N/A
Issue 2	0	1st NOV 2019	1st NOV 2019	

0.3 DISTRIBUTIONS LIST

NO	APPOINTMENT	ORGANISATION	COPY NO
1	Accountable Manager	GAM	01
2	Quality Manager	GAM	02
3	Senior Maintenance Manager	GAM	03
4	Director General	Directorate General Technical Airworthiness (DGTA)	04
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MAINTENANCE MANAGEMENT PLAN

0.5 CONDITION OF USE

1. This Maintenance Management Plan (MMP) is the property of the Galaxy Aerospace (M) Sdn. Bhd. (GAM). It is not to be copied or communicated in part or as a whole to any person not employed by the company without the written consent of the Accountable Manager.

2. Distribution List of this MMP is described in MMP 0.3

0.6 NOTIFICATION PROCEDURE TO DIRECTORATE GENERAL TECHNICAL AIRWORTHINESS (DGTA) REGARDING CHANGES TO THE ORGANIZATION'S ACTIVITIES / APPROVAL / LOCATION / PERSONNEL

0.6.1 Purpose

1. GAM as an AMO must notify the DGTA of any proposal to carry out any of the following changes that take place to enable the DGTA to determine continued compliance with the Regulation and to amend, if necessary, the approval certificate, except that in the case of proposed changes in personnel not known to the management beforehand, these changes must be notified at the earliest opportunity.

0.6.2 Field of Application

1. This procedure applies whenever notification is required to be made to the DGTA on the above-mentioned changes.

0.6.3 Policy

1. Notification of changes to the approved maintenance organization

    a. Changes to the following will require notification to the DGTA.

        i. Name of company and location (including any additional location).

        ii. Quality Manager

        iii. Senior Maintenance Manager

        iv. Facilities, equipment, tools, material, procedures, scope and level of work, technical arrangement, maintenance and certifying staff that could affect the maintenance approval.

    b. The notification will be made, as soon as practical via fax, telex or letter, whichever is suitable.

    c. The Quality Manager shall be responsible for notifying the DGTA of any of the above-mentioned changes.

    d. DGTA may prescribe the conditions under which approved maintenance organization may operate during such changes unless determines that the approval should be suspended.

2. Exemption from Compliance with "State Airworthiness Authority" requirements:

    a. Whenever the need to defer compliance with or deviation from DGTA arises, the Quality Manager shall submit such request in writing to the DGTA providing details of the justification.

0.7 EXPOSITION ADMINISTRATION AND AMENDMENT PROCEDURES

0.7.1 Purpose

1. Provide control over any changes to the contents of the Maintenance Management Plan (MMP).

0.7.2 Field of Policy

1. This procedure applies to amendments of MMP.

0.7.3 Policy

1. Amendment request may originate from any Maintenance or Operations personnel using the Publication Discrepancies Notification / Amendment Request Form.

2. The Quality Manager (QM) is responsible for the amendment and approval application process with DGTA for any other amendment of the MMP except for amendments raised to correct typographical errors only which can be approved by QM.

3. Amendment that involves changes in maintenance procedures will be jointly reviewed by the QM and Senior Maintenance Manager (SMM).

4. All pages of MMP shall be controlled. Each page of the manual shall have the following: MMP Document

    a. Reference

    b. Amendment No.

    c. Date

    d. Page Number

5. The contents of the List of Effective pages (LoEP) shall reflect all the pages in the MMP and be certified by the QM. He/she then must forward the revision with new List of Effective Pages and the Transmittal Letter to Technical Publication.

6. Technical Publication shall be responsible for providing constant amendment service to holder of manuals.

7. Technical Publication shall distribute the revision to the MMP holders. To verify whether the amendment has been executed correctly, each batch of revised pages will be accompanied by a new List of Effective Pages.

8. Amendment to the manuals shall be indicated by a dark vertical line running along the left-hand side of the page, highlighting revised portion of the text. A summary of amendments, Document Change History will be prepared for easy reference and traceability.

9. QM shall review the MMP at once every (6) month's intervals to ensure that MMP reflect the latest information.

0.8 CORPORATE COMMITMENT

This Maintenance Management Plan (MMP) and any associated referenced manuals defines the organization and relevant procedures within GAM upon which the Directorate General Technical Airworthiness (DGTA) approval is based. These procedures are approved by the undersigned and shall be complied with, as applicable, when work or instructions are being progressed under the Terms of Approval issued by the DGTA.

It is accepted that where these procedures are in conflict with the DGTA or any new or amended requirements published or adopted by the DGTA from time to time, then these procedures shall not override such regulations or requirements.

I accept and commit that GAM shall provide the highest quality of services in accordance with the PU 2013 – Technical Airworthiness Management Manual (TAMM). I shall ensure all personnel employed in GAM adhere to this plan and shall penalize those personnel who do not conform to this plan in accordance to GAM's company procedures. I shall bear responsibilities and accept all liabilities arising from non-conformities committed by my personnel.

It is understood that the DGTA will continue to approve this Organization so long as the DGTA is satisfied that these procedures are being followed and acceptable standards maintained.

It is further understood that the DGTA reserves the right to suspend, vary or cancel this approval if the DGTA has evidence that said procedures are not followed or acceptable standards not upheld. When a conflict arises between this MMP and TAMM, I shall be committed to ensure that the MMP do not override the necessity of complying with TAMM.

GAM shall assure of technical airworthiness of state registered aircraft and are maintain according to standard and quality.

Signed : ..... Date: 01 NOV 2019

SHAMSUL KAMAR BIN SAMSUDIN
Managing Director/ GAM Accountable Manager
For and behalf of
GALAXY AEROSPACE (M) SDN. BHD.

0.9 LIST OF ABBREVIATIONS

ABDR	Aircraft Battle Damage Repair
AD	Airworthiness Directives
AEO	Authorised Engineering Organisation
AMMACE	Appointed Maintenance, Airworthiness And Contract Enforcer
AM	Accountable Manager (GMD/MD)
AMO	Approved Maintenance Organisation
ARC	Authorised Release Certificate
ASR	Airworthiness Standard Representatives
ATP	Authorised Tradespersons
AVL	Approved Vendors List
BCAR	British Civil Aviation Regulation
CAAM	Civil Aviation Authority of Malaysia
CAESE	Centre of Aerospace Engineering Services Establishment, also known as PUSPEKA
CAR	Corrective Action Request
CFU	Carried Forward Unserviceability's
CI	Configuration Items
CM	Configuration Manager
CMAINT	Contingency Maintenance
COC	Certificate of Conformity
CoG	Center of Gravity
DAR	Design Acceptance Representatives
DGTA	Directorate General Technical Airworthiness
DR	Discrepancy Report
EASA	European Aviation Safety Agency
EIE	Enter in Error
EPM	Engineering Procedure Manual
FAA	Federal Aviation Administration
FOD	Foreign Object Damage
GSE	Ground Support Equipment
HR	Human Resource
ID	Identification Details

IMI	Independent Maintenance Inspectors
IPD	Illustrated Parts Data
IQA	Internal Quality Audit
LAE	License Aircraft Engineer
LMA	Letter of Maintenance Authority
LOA	Letter of Acceptance/Award
MA	Maintenance Authority
MMEL/MEL	Master Minimum Equipment List/Minimum Equipment List
MI/S	Maintenance Inspector/Supervisor
MM	Maintenance Manager
MMEA	Malaysian Maritime Enforcement Agency
MMP	Maintenance Management Plan
MMS	Maintenance Management System
MRO	Maintenance Repair and Overhaul
MSDS	Material Safety Data Sheet
MRB	Management Review Board
MSN	Maintenance Support Network
NAA	National Aviation Authority
NCR	Non Conformance Report
NDT	Non Destructive Testing
NTP	Non-Technical Personnel
OEM	Original Equipment Manufacturer
PPE	Personnel Protective Equipment
QM	Quality Manager
QMS	Quality Management System
SAO	State Aircraft Operators
SMM	Senior Maintenance Manager
SRM	Structural Repair Manual
STI	Special Technical Instruction
TAMM	Technical Airworthiness Management Manual

PART 1 –

AUTHORISATION

1.1 BRIEF DESCRIPTION OF ORGANISATION

1. Galaxy Aerospace (M) Sdn Bhd (Company No: 1040262-D) established in 2015 by experienced License Aircraft Engineer (LAE) & Pilot.

2. GAM is an approved CAAM part 145 Organisation (AMO/2016/02) that provides Maintenance, Repair & Overhaul (MRO), Aviation Design, Continuing Airworthiness Management (CAMO/2016/03) and OEM product after sales support for the civil aviation.

3. Currently, GAM is the maintenance contractor for the Malaysian Maritime Enforcement Agency (MMEA) – 3 x AW139, Royal Malaysian Police (RMP), 2x AW189 The Fire and Rescue Department of Malaysia (JBPM).

4. GAM is the beneficiary holder under MOF for the maintenance of all Leonardo helicopters belongs to the Malaysian Government.

5. GAM is also the Authorised Dealer for Aspen Avionics and Garmin in Malaysia. GAM is approved to sell, promote, perform installation, technical consultancy, warranty and non-warranty support for the two well established OEM.

6. The employees shall have necessary competency and qualification in respect of training, experience and qualifications and form a strong team with quality and customer services as prime objectives.

7. GAM is fully committed to improve the technical skills of locals within the industry when specialist and high technology elements work alongside local personnel providing enhanced training. As expected by the Malaysian Government, extension to additional in-country facilities shall be developed accordingly.

1.2 PURPOSE OF MAINTENANCE MANAGEMENT PLAN

1. The Maintenance Management Plan (MMP) serves to lay down the organizational structure, responsibilities, resources, policies, processes and procedures of Galaxy Aerospace (M) Sdn. Bhd. (GAM) in performing aircraft maintenance in particular for Leonardo Helicopters AW139 helicopters to the standards in compliance with Directorate General Technical Airworthiness (DGTA).

2. All GAM personnel are therefore required to carry out all activities pertaining to aircraft maintenance in accordance with this MMP.

3. This manual also specifies the basic Quality Policy and defines the overall Quality Management System.

4. The MMP covers maintenance policy and procedures to meet the requirements of Directorate General Technical Airworthiness (DGTA).

5. The purpose of this MMP is to define the Maintenance Management System of GAM. It describes the organizational structure, responsibilities, processes and procedures and resources that are applicable for the conduct of maintenance and management to AW139 helicopters.

6. This MMP shall form the basis for certification of GAM to become Approved Maintenance Organization (AMO). Any change to the basis of AMO certification, shall be forwarded to DGTA within seven working days of the change and for approval.

1.3 MANAGEMENT OF MAINTENANCE MANAGEMENT PLAN

1. The Maintenance Management Plan (MMP) serves to lay down the organizational structure, responsibilities, resources, policies, processes and procedures of GAM in performing the AW139 helicopters maintenance to the standards in compliance with Directorate General Technical Airworthiness (DGTA).

2. This MMP is part of GAM Quality Management System (QMS). It is a controlled document and comes under the authority of the Managing Director (MD) as the Accountable Manager.

3. The Quality Manager (QM) is responsible for issuance and administration (including the monitoring management, control and amendment) of this MMP. QM shall submit proposed amendments on the MMP to DGTA for approval.

4. A list containing the manual copy index, location/responsibility and revision status shall be monitored by QM. All master copy shall be kept and registered in Publication Control Master List by Technical Publication and each authorized holder shall be issued with controlled copy. Only controlled copy holder shall receive amendment. The QM shall monitor the list is update accordingly.

5. Any revisions, updates, or changes of this MMP and supporting documents shall require Accountable Manager's (AM) approval and be submitted to DGTA for approval prior to amendment and implementation.

1.4 APPLICATION FOR AMO CERTICIFATION (REGULATION 4.2.1)

1. AMO application is made by the GAM Accountable Manager to DGTA, which is the Technical Airworthiness Authority (TAA) for the state registered aircraft (Leonardo Helicopters AW139) and aeronautical products.

2. The submitted application shall include details of the following:

    a. Company Name and Address

    b. Reason for application

    c. Maintenance Management Plan enlisting the scope and level of maintenance and associated requirement

    d. GAM documented Quality Management System

    e. Exemption required (if any)

    f. A copy of relevant maintenance contract and LOA / Contract for Leonardo Helicopters AW139 helicopter.

1.5 AWARD AND RETENTION OF AMO CERTIFICATION (REGULATION 4.2.2)

1. The award and retention of the AMO certification is subjected to the following requirement are complied with and also subjected to the Compliance Audit and Surveillance Audit carried out by DGTA and the following conditions:

    a. AMO and its Maintenance Management System (MMS) comply and continue to comply with all the applicable regulations in the Regulation 4 and 5 of TAMM.

    b. The maintenance on state registered aircraft (Leonardo Helicopters AW139), its and aeronautical product is carried out to the approved standards, with the sufficient, competent and authorized personnel belong to the organization whose work is certified as correct and accepted by DGTA.

    c. Appropriate and adequate facilities in accordance with the scope and level of the maintenance.

    d. Availability of all the necessary tools, equipment and other material to support the conduct of maintenance within the approved scope and level.

1.6 CHANGES TO AMO CERTIFICATION (REGULATION 4.2.4)

1. AMO shall comply and continue to comply with all the requirements defined in the Regulation 4 and 5 of TAMM and shall ensure that no changes are made that contrary to the regulation.

2. Any changes to the basis of AMO certification, it shall be forwarded by SMM through QM to DGTA within 7 working days of the change and seek approval for that change.

3. QM shall update GAM MMP to reflect all changes and AMO duration approved by DGTA as required by the regulation.

1.7 DURATION OF AMO CERTIFICATION (REGULATION 4.2.5)

1. The AMO certification issued by DGTA with Letter of Maintenance Authority (LMA) shall remain in force and valid up to 3 years or until (the contract to which they relate) expires or it's terminated, surrendered, suspended or superseded. GAM is to surrender its AMO certificate if the contract expires or otherwise stated by DGTA.

2. The period/duration of AMO certification is correlated to the ongoing compliance with regulation.

1.8 EXEMPTIONS (REGULATION 4.3.1)

1.8.1 General

1. Request for exemption, when required, shall be made by QM to DGTA. Whenever the need to defer compliance with or deviation from DGTA arises, the QM shall submit such request in writing to the DGTA providing details of the justification.

2. The Request for Exemption shall contain following information but not limited to:

    a. Basic description of the request

    b. Description of the problem and its origin

    c. Nature and extent of the Exemption required, including expected duration

    d. Impact on aircraft maintenance and maintenance standards (if determinable)

    e. Impact on engineering, aircraft safety and maintenance standards

    f. Details of why the organization is unable to meet the subject regulatory requirement and attempts that have been made to do so

    g. Any other relevant supporting documents

1.8.2 Exemption Request Process:

1. GAM is bound and shall carry out maintenance activities in accordance with regulations stipulated in TAMM PU 2103. Exemption shall be requested by the SMM on the specific regulation that cannot be met to DGTA. Request of exemption is to be submitted to DGTA for approval and state the reason for exemption.

1.8.3 Record of Formally Approved Exemptions

1. Once approved (or not-approved) by the DGTA, Record of Exemptions shall be documented, which includes reasons of exemption, duration (if any), and terms and condition. List of Exempted Regulations shall be stated in Annex A of this section. GAM is to update this MMP once the exemption is no longer applied.

1.8.4 List of Not Applicable Regulations:

1. List of not applicable regulations for each division will be listed in Annex B of this section. GAM is to clearly state which regulations do not apply with a brief explanation for each regulation. Upon receive the approval for the exemption from DGTA, GAM shall be able to demonstrate that it has fully complied with any terms and conditions specified by DGTA. All associated records and documentation shall be maintained accordingly.

Annex A to MMP 1.8

RECORD OF FORMALLY APPROVED EXEMPTIONS

No	Regulation No and Description	Reasons for Exemption	Date of Approval	Remarks
		Not Applicable		

Annex B to MMP 1.8

LIST OF NON APPLICABLE REGULATIONS

No	Regulation Reference	Description	Remarks
		Nil	

PART 2 –

ORGANISATION

2.1 ORGANISATION DETAILS (REGULATION 4.4.2)

A. NAME AND ADDRESS OF ORGANISATION:

Name of Company : **Galaxy Aerospace (M) Sdn. Bhd**

Head Quarter Office : Suite 11-14, Helicopter Centre,
Malaysia International Aerospace Centre,
Sultan Abdul Shah Airport,
47200, Subang, Selangor Darul Ehsan,
Malaysia

Telephone No : +603-7734 7226

Fax No : +603-7734 7526

Base Facility : **Stesen Udara Maritim Subang**
Agensi Penguatkuasaan Maritim Subang
Kementerian Dalam Negeri
Jalan TUDM,
40150 Shah Alam ,
Selangor Darul Ehsan.
Malaysia

B. MAINTENANCE AUTHORITY - SCOPE AND LEVEL OF MAINTENANCE (REGULATION 5.1.1)

i. GAM shall be certified by the DGTA and authorized as Approved Maintenance Organisation (AMO) for maintenance of AW139 helicopters and its aeronautical products.

ii. The DGTA AMO scope and level of maintenance activities are as follows:

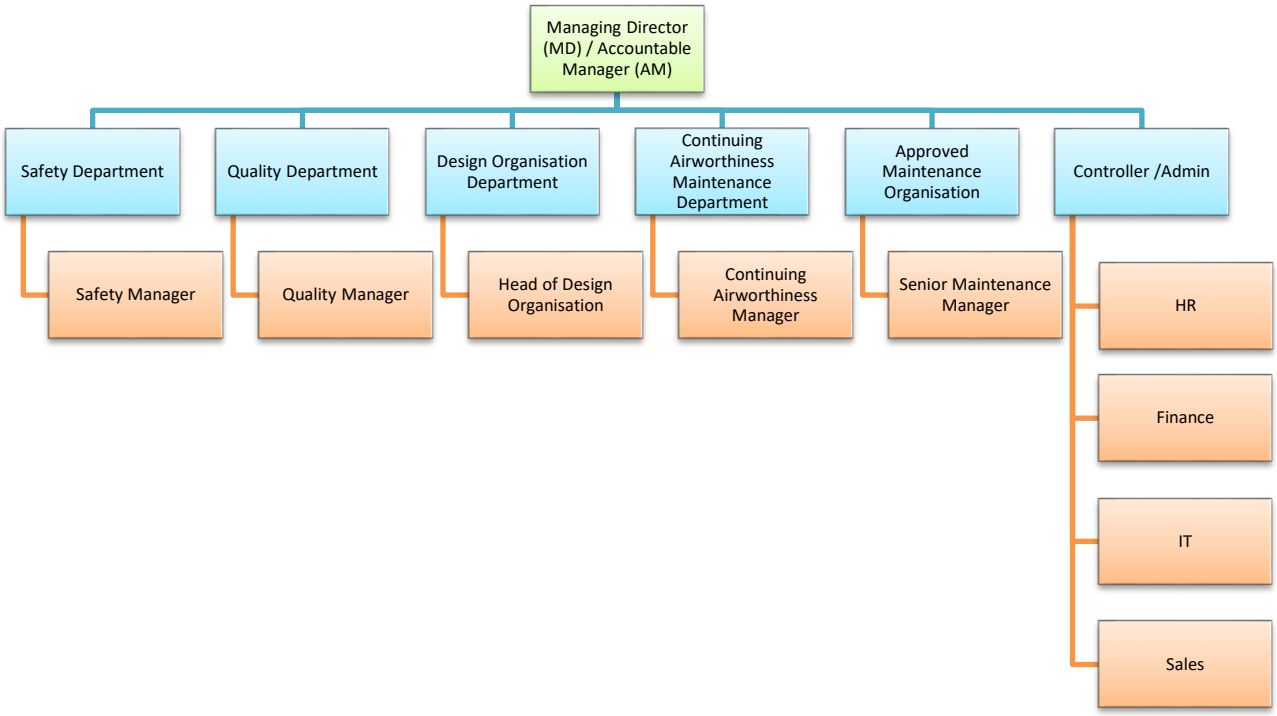
No	Scope	Level
1.	Leonardo AW139 Helicopters	a) 1st Line Maintenance b) Scheduled Base Maintenance for AW139 as per Maintenance Planning Information (AMPI), unscheduled maintenance, defect rectification, troubleshooting, Service Bulletin (SB) and Airworthiness Directive (AD) compliance, modification embodiment, component replacement, repair on the aircraft and its sub system. c) Excluding component overhaul which not included in the scope of Aircraft Maintenance Manual.
2.	Pratt & Whitney Engine – PT6C 67C	a) Maintenance on the PT6C 67C engine as per Chapter 5 of the Engine Maintenance Manual including scheduled & unscheduled maintenance, defect rectification, troubleshooting, Service Bulletins (SB) and Airworthiness Directive (AD) compliance, modification embodiment and component replacement. b) Excluding engine and component overhaul.

C. ORGANISATION STRUCTURE (REGULATION 4.4.2)

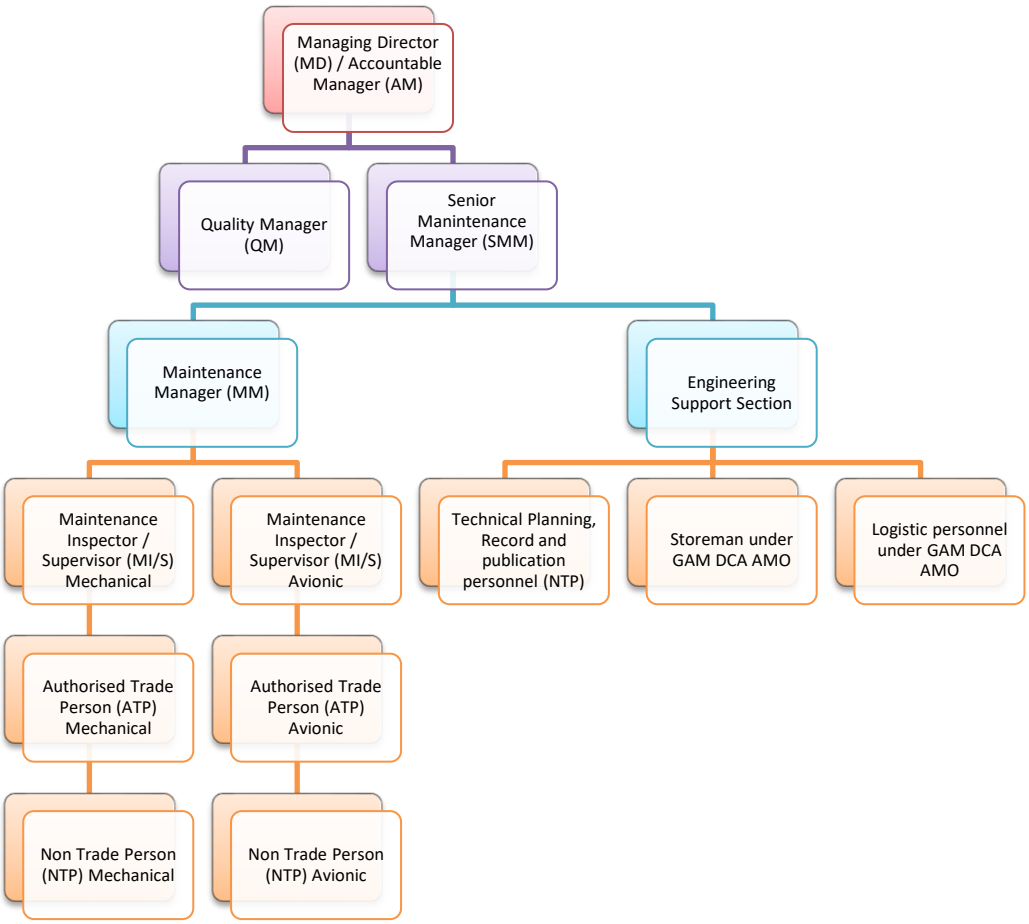
i. GAM is headed by the Managing Director (MD) who acts as the Accountable Manager under TAMM regulation.

ii. SMM who is appointed by the MD is to lead and manage the maintenance for the AMO. SMM is supported by MM, MI/S, ATP and NTP.

GALAXY AEROSPACE (M) ORGANISATION STRUCTURE



AMO ORGANISATION STRUCTURE



2.2 MAINTENANCE SUPPORT NETWORK (REGULATION 4.4.3(a))

2.2.1 General

1. GAM does not have the sufficient internal resources or full capability to conduct the required maintenance activities, therefore, some of the maintenance function will be outsourced to the Original Equipment Manufacturer (OEM) or other approved maintenance facility (vendors)

2. GAM shall provide and control the list of the external organization with the defined scope and level of maintenance that will be outsourced to the applicable vendors.

3. GAM shall ensure and be held accountable to DGTA for the technical integrity of the state registered aircraft and/or ground support equipment whenever maintenance is outsourced to vendors. The assessment and authorization of vendors shall comply with the requirement as set forth in the TAMM regulation.

4. The procedure for outsourcing maintenance of components/parts shall define requirement for vendor assessment/evaluation and authorization which shall include the relevant documentation, what to be done (audit/assessment and etc.) before outsourcing is to take place, documents availability, certificate, validity period of the vendors to become MSN to GAM (whichever is applicable).

5. The Quality Department shall maintain the latest Maintenance Support Network, of all acceptable vendors.

6. GAM is fully supported by the three main OEM of the Leonardo AW139 helicopter and other Maintenance Support Network which are

    a. **AgustaWestland Malaysia** – Airframe and aeronautical product
    b. **Pratt & Whitney** – Engine and aeronautical product
    c. **Honeywell** – Avionics equipment
    d. **List of Maintenance Support Network** – Refer Appendix 2

2.2.2 Control of MSN Working Relationship to Carry Out Maintenance Activity

1. Where applicable, whenever GAM need support from its MSN to carry out maintenance activity, a formal written maintenance contract or Purchase Order (PO) between the GAM and the Contractor shall be executed (whichever is applicable/to be defined once the need is arise). The contract or PO shall clearly specify the maintenance work scope to be carried out.

2. All work undertaken shall be coordinated by the Senior Maintenance Manager (SMM) who will provide the necessary maintenance support including manpower, facility and equipment if required.

3. The MSN shall comprise of appropriately trained and competent personnel. All work must be done in accordance with approved data and other technical publications and using appropriate tools and material.

4. The MSN shall certify for the tasks accomplished in accordance with Aviation Authority requirements in any documents i.e. work package, engineering order, certificate of conformance (C of C), EASA Form 1, FAA Form 8130 or any other equivalent documents. GAM authorized personnel shall sign Certificate of Release to Service after the work is completed.

2.2.3 Approved Sub-contractor List

1. A list to maintain approved sub-contractor which not limited to MSN but all aeronautical product with details of the scope and level subcontracted to.

2. Any sub-contractor which had been identified will be evaluated as per GAM Engineering Procedure Manual (EPM).

2.2.4 One Time Approval

1. In the case of urgency or ad-hoc basis, one-time approval is granted for aeronautical product supplier/service. However, the following condition shall be applied:

    a. Only applicable for one-time product purchase/service. The company has the capability to supply/servicing the product and acknowledge by Quality personnel through at least, company profile or company website

    b. The approved sub-contractor which has the same capability could not respond to the request made due to high cost, longer lead time and demanding company.

    c. Verification from Quality department, approval from Quality Manager and acknowledgment from Accountable Manager is required prior any purchase/service being made

    d. Capable to produce required documentation such as Certificate of Conformity, EASA Form 1 or other relevant documents

    e. The procedure will be defined in the Engineering Procedure Manual.

2.3 QUALITY MANAGEMENT SYSTEM REGULATION 4.4.4)

2.3.1 Gam Quality Policy

1. The basic quality requirements to achieve this standard are laid down in this Maintenance Management Plan. It also set out the Company's Quality Policy by specifying the personnel directly responsible for quality matters and the particular procedures and practices that must be observed. Adherence to this standard also ensures compliance with the airworthiness requirement.

2. Quality is not the sole responsibility of the Quality Manager / Department. It is the duty of all employees to comply with this policy and to strive to improve quality standard at every opportunity.

3. The Quality Department is an independent monitoring department which has the responsibility and authority to monitor the compliance of all policies, procedures, practices and administration system related to airworthiness. The compliance regime shall consist of general surveillance, sampling inspections, planned and unscheduled audits.

4. The Quality standards are set by the Quality Department and monitored by the Quality Manager. The Accountable Manager shall receive a copy of all Audit Report and a copy extended to DGTA upon request.

5. For the purpose of audit, DGTA is allowed to access the necessary record on quality. Accountable Manager shall allow DGTA to access the Quality Management System.

2.3.2 Audits

1. In ensuring the desired quality products and services are achieved, an internal audit is conducted to check the processes and procedures are being followed. The audit findings will be discussed and implemented during the Quality Review Meeting (QRM).

2. All internal / external audit findings and issues related to the quality will be reviewed in 6 months interval meeting known as QRM chaired by Accountable Manager to review not only current quality issue, aircraft maintenance program, processes, procedures, audit findings, internal quality indicators but shall also emphasize on the broad aspect of ongoing compliance with processes, procedures, effectiveness of corrective action and preventive actions as well.

3. The audit system should clearly establish a means by which audit report containing observations about non-compliance or poor standards can be actioned.

4. The detail of audit plan, process and the implementation shall be referred to the related Quality Manual.

2.4 GENERAL DESCRIPTION OF FACILITIES (REGULATION 4.6.1)

1. GAM's facilities are at the:

   a. GAM-HQ (Main office)
   Suite 11-14, Helicopter Centre,
   Malaysia International Aerospace Centre,
   Sultan Abdul Aziz Shah Airport,
   47200, Subang, Selangor Darul Ehsan.
   Malaysia.

   b. GAM-APMM (Hangar)
   Stesen Udara Maritim Subang
   Agensi Penguatkuasaan Maritim Malaysia,
   Kementerian Dalam Negeri,
   Jalan TUDM, 40150, Shah Alam.
   Selangor Darul Ehsan. Malaysia

2. The facility for aircraft maintenance and management offices rendered for:

   a. Maintenance Management

   b. Planning

   c. Quality and Technical Records

   d. Crew rest and Standby Area

3. Hangar and Equipment

   a. The maintenance of the AW139 will be carried out in MMEA's Hangar

   b. GAM designated maintenance office provided by MMEA are located at the middle of the hangar office facilities as per the floor plan provided.

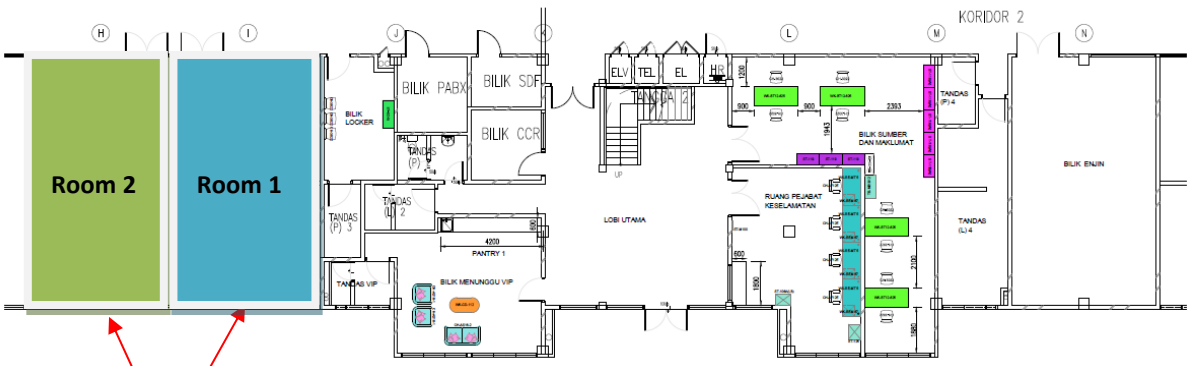
   c. Holding Rooms (aircraft equipment and avionic) temperature and humidity are controlled.

MMEA Hangar (AW139 maintenance and management facilities).	
1. Maintenance Bay	3 X AW139
2. Washing Bay	Outside of the Hangar
3. Aircraft Starting Fire Extinguisher	2
4. Planning, Record and Quality Department.	1
5. SMM Office	1
6. Crew Rest and Standby Area	1
7. POL Room (separate building)	1
8. Tool and Equipment Room	1
9. Holding Room	1
10. Avionic Room	1

MMEA Hangar

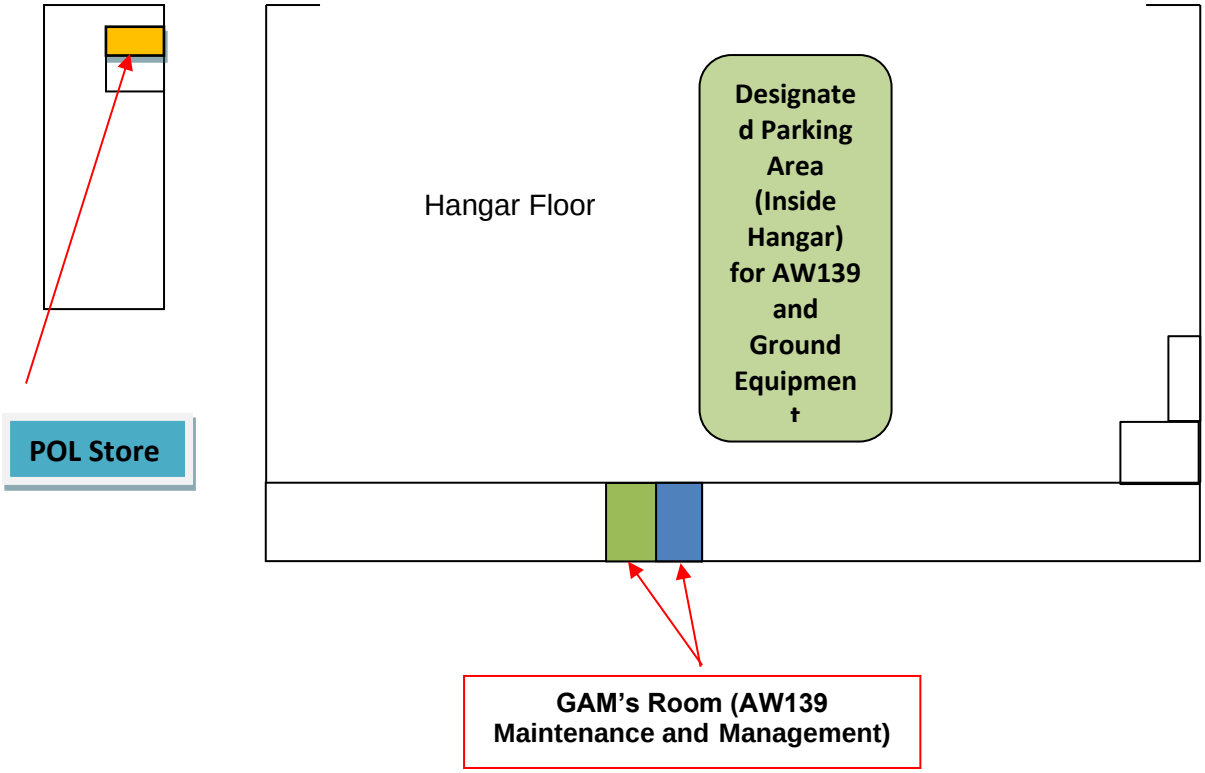
Hangar Floor

Designated Parking Area (Inside Hangar) for AW139 and Ground Equipment

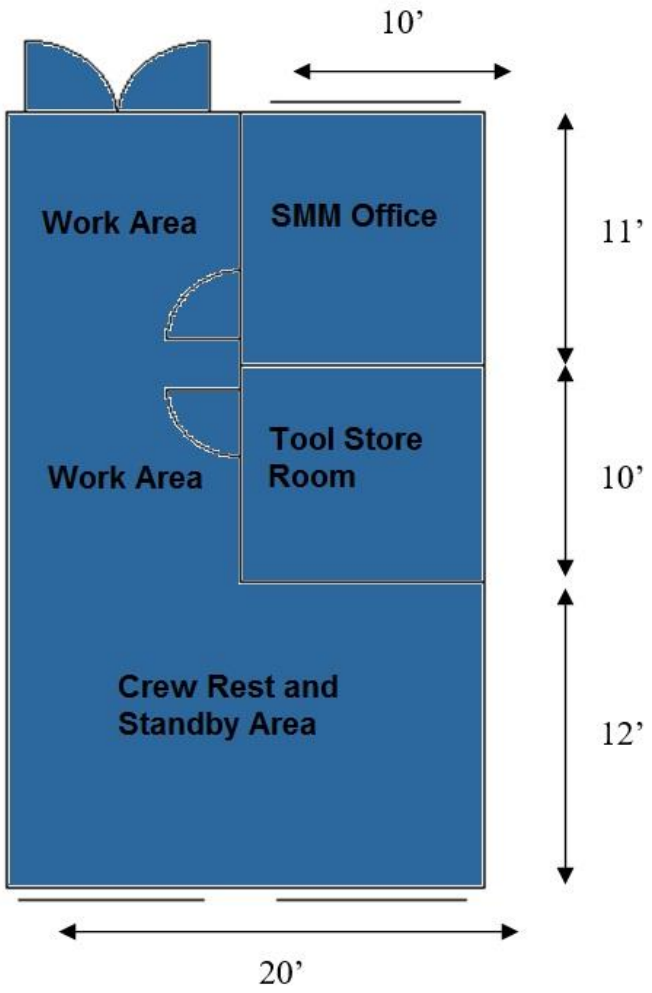


GAM's Designated Room (AW139 Maintenance and Management)

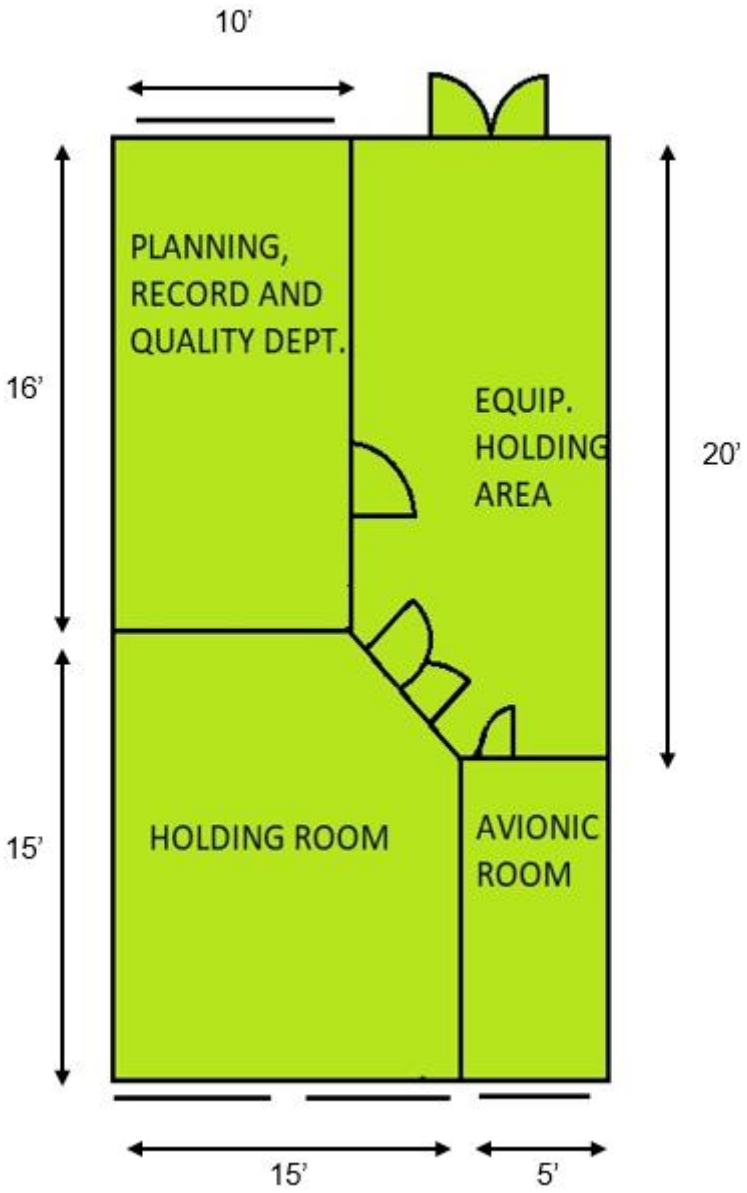
POL Store (separate building)



MMEA Hangar GAM Room 1 (Blue)



MMEA Hangar GAM Room 2 (Green)



4. Store **(REGULATION 4.6.2)**

    a. GAM's aeronautical store located at UniKL MIAT facility Subang Kampus and the store managed, controlled and regulated under GAM Part 145 approved organization by CAAM. The store has been dedicated as a common store for both Civil and Stated registered aircraft

5. Alternative Facilities **(REGULATION 4.6.3)**

    a. Subjected to the maintenance contract, the alternative facilities to conduct maintenance of the AW139 and/or aeronautical products away from the main maintenance facility will be assessed first before being approved.

    b. The maintenance scope, limitation and level of maintenance for the alternative facilities will be based on the audit to be carried out by Quality Department subjected to the approval.

    c. The assessment input shall be followed but not limited to, the following criteria:

        i. Basic facilities requirement such as hangar space, area to carry out compass swing and weight & balance, ground run activities, utilities, compressed air, GSE and etc.

        ii. Storage facilities i.e. unserviceable area, holding rack, tools store, consumable store, POL store & etc.

        iii. Environmental issue i.e. waste disposal, waste storage, waste management

        iv. Safety and security i.e. access to the maintenance area, storage area, fire protection, explosive ordinance requirements & etc.

        v. All findings shall be recorded and if any deficiency detected, facilities owner shall be notified. In the meantime, GAM shall take initiative to propose and provide countermeasure to ensure the maintenance activity could take place at the alternative facilities.

        vi. All records and related documentation for the alternative facilities assessment shall be forwarded to GAM Accountable Manager, facilities owner and shall be maintained accordingly.

PART 3 –

PERSONNEL REQUIREMENT

3.1 MANAGEMENT POSITION AND MAINTENANCE AUTHORITY (REGULATION 4.4.1)

1. In compliance to the TAMM regulations, GAM has listed its organization structure with the key appointment and group to plan, perform, supervise, inspect or certified maintenance as certified by DGTA.

2. GAM has identified the personnel holding management positions: namely as Accountable Manager, Senior Maintenance Manager, Quality Manager and Maintenance Manager and their responsibilities are not limited to the responsibilities as defined in the GAM MMP.

3. The assessment and authorization for the maintenance personnel to the level of authority assigned to each technical personnel in GAM is to ensure that maintenance activities have been performed, supervised and inspected by competent and authorized personnel. The re-assessment and re-authorization to all the maintenance personnel shall be carried out once a year. GAM Engineering Procedure Manual explain in detail on Company Approval System, Issuance, Renewal or extension of Company Approval.

4. The Internal Maintenance Authority (IMA) for GAM that corresponds to the group listed by Regulation 4.4.1 is as per Table A of this chapter.

5. The personnel requirement in term of Qualification, Training and Experience (QTE) for every position are listed in the Appendix 3 of the Annexes.

6. List of key personnel in GAM AMO structure together with their QTE is referred to Appendix 4 of the Annexes as per Quality Assurance Notices no. 005

Table A

TITLE	JOB SCOPE DOCUMENT REFERENCE			
Managing Director (Accountable Manager)	MMP 3.2			
Senior Maintenance Manager (SMM)	MMP 3.3			
Quality Manager	MMP 3.4			
TITLE	**JOB SCOPE DOCUMENT REFERENCE**	**ASSESSMENT CRITERIA**	**ASSESSMENT METHOD**	**AUTHORISATION DURATION**
Maintenance Manager	MMP 3.5	• Technical background and experience • Conversant to company procedure • Management skill	Interview	12 months / as required by SMM
Maintenance Inspector (Approval Holder/ Certifying Staff)	MMP 3.6	• Technical background and experience • Level of conversant with company procedure • Working attitude • Supervisory skill	Written/ Oral Test/ interview	12 months / expiry of Local Authority License / as required by SMM
Authorized Tradespersons (Technician)	MMP 3.7	• Technical background and experience • Familiarization to company procedures • Working attitude	Written/ Oral Test/ interview	12 months / as required by SMM
Non-Technical Personnel • Tools Store Personnel • Store Personnel • Apprentice/Trainee	MMP 3.9	• Suitable qualification and experience background for the job scope • Familiarization to company procedures • Working attitude	Written/ Oral Test/ interview	12 months / as required by SMM

3.2 MANAGING DIRECTOR (ACCOUNTABLE MANAGER) (REGULATION 4.5.2)

3.2.1 Immediate Superior

1. Board of Director

3.2.2 Main Responsibilities

1. Responsible to ensure that maintenance carried out in compliance by the Company with the standard and requirements of DGTA.

3.2.3 Specific Functions

1. Responsible for ensuring that maintenance carried out meets the standards required by DGTA.
2. Responsible for ensuring that the necessary finance, manpower resources and facilities are available to enable the company to perform the maintenance activities within the GAM maintenance scope and level as stated in the AMO authorization and certification.
3. To ensure through a quality management system, that effective management and control systems are established and maintained within the company to monitor and maintaining compliance with approved procedures, standards and practices.
4. Responsible for ensuring the competence of all personnel including management personnel has been assessed.
5. Taking immediate action to resolve any issues which affect the company's ability to provide the required quality of maintenance activities.
6. To ensure that the DGTA is notified immediately, in writing, of any issues that affect the company's ability to provide the required quality of maintenance as stipulated in the AMO certification.
7. He has the authority to appoint Senior Maintenance Manager (SMM) and Quality Manager (QM).

3.3 SENIOR MAINTENANCE MANAGER (REGULATION 4.5.3)

3.3.1 Immediate Superior

1. Accountable Manager (Managing Director)

3.3.2 Main Responsibilities & Specific Functions

1. SMM is a position appointed by the Accountable Manager.

2. Responsible to plan, direct and manage all aircraft maintenance activities to provide safe and airworthy aircraft, meet the requirement of approved AMO and client's requirements.

3. To advise DGTA any changes which affect the company's AMO certification.

4. To ensure that all Engineering organization maintenance, overhaul, and repair of aircraft and components activities and its related supporting program meets the Quality Standards and all requirements for the grant as an Approved Maintenance Organisation.

5. To facilitate Engineering and Maintenance to meet the requirement of AMO with the provision of;

    a. Facilitate appropriate to the planned work

    b. Office accommodation appropriate to the management planned of the planned work

    c. A working environment appropriate to tasks being undertaken

    d. Storage facilities for parts, tools, equipment and materials

    e. Appropriate and sufficient tools, material to perform the planned tasks.

    f. Sufficient personnel to plan, perform, supervise, inspect and certify the work being performed.

    g. Maintenance data from the aircraft manufacturer and airworthiness data from DGTA, necessary to the task being performed.

6. Establish and maintain administration and operation of Maintenance and Engineering Department.

7. Communicate with QM and DGTA on airworthiness matters to ensure that all its operations conform to statuary and legal requirements.

8. Liaise with manufacturers, vendors and approved design organisations in support of aircraft and component maintenance.

9. To ensure that all audit findings carried out internally and by DGTA are attended to and resolved within the agreed time-frame.

10. To monitor the level of service provided to clients and take appropriate steps to achieved desired levels.

11. Cultivate a positive attitude and response in engineering personnel on the compliance of industrial safety, health and environmental regulations, procedures and practices in order to ensure safe working environments in the interest of personnel and the Company

12. To ensure that all Maintenance personnel are provided with appropriate technical, knowledge and skill training.

13. Direct the planning and implementation of training, development, projects and growth related to Engineering.

14. Oversee the Engineering Support Section of their function as Technical Planning, Publication and Record, Store and Logistic.

15. To ensure that maintenance personnel are authorized to perform maintenance activities through an approved and documented system based on the evaluation of formal qualification and experience.

16. Operating a system for the training, assessment, authorization and periodic re-assessment of personnel.

17. To nominate maintenance task to be performed by authorized Non-Technical Personnel and Aircrew.

18. To establish FOD control programs/systems.

19. To set maintenance duty time limits.

20. Responsible to assess and re-assess, authorize and re-authorize the MM, MI/S, ATP, NTP through an authorization system stipulated in EPM.

3.4 QUALITY MANAGER (REGULATION 4.5.4)

3.4.1 Immediate Superior

1. Managing Director (Accountable Manager)

3.4.2 Main Responsibilities &Specific Functions

1. QM is a position appointed by the Accountable Manager.
2. To ensure GAM perform aircraft maintenance and management within the requirement of DGTA on a day-to-day basis. Responsible for all quality activities in order to assure that GAM meets the requirements as an AMO.
3. Responsible on all matters regarding quality and main function is monitoring GAM compliance to the regulatory requirement outline in PU 2103 TAMM.
4. Establish an independent quality system to monitor compliance with TAMM regulations. Formulate and issue instructions to establish and maintain his departments at high standard of efficiency and economy.
5. Responsible for implementing a quality audit programmed in which compliance with all maintenance procedures is reviewed at regular intervals and any observed non-compliance or poor standards are brought to the attention of the person responsible for corrective action.
6. Carry out surveillance, sampling inspection and audit to ensure that engineering maintenance activities are in accordance with the requirement of the company and the DGTA.
7. Liaise, consult and negotiate with DGTA on aircraft airworthiness matter including the implementation of Quality Assurance functions.
8. To manage all audit finding carried out internally and by DGTA to assure they are attended to and resolved within the agreed time-frame.
9. Control, administer and issue Company Approval to qualified personnel.
10. Initiate and co-ordinate aircraft accident/incident investigation work to identify the causes and come up with preventive measures.
11. Evaluation and approval of supplier and sub-contractor.
12. Advice the Accountable Manager in the event of any discrepancies is not being adequately attended to by the relevant person or in respect any disagreement over nature of the discrepancies.

13. Ensuring that the requirement of training, safety program requirements and continuous training of technical staffs are in conformance with the standards and requirement of DGTA, other relevant Airworthiness Authorities and the Company.

14. Review MMP, standard practices and maintenance procedures for use within the Company, derived from approved sources, and keeping them up to date.

15. Preparing standard practices and procedures for use within the organization, derived from approved sources, and keeping them up to date.

16. Coordinating with all departments to ensure they are in compliance with all relevant airworthiness requirements.

3.5 MAINTENANCE MANAGER (REGULATION 4.5.5)

3.5.1 Immediate Superior

1. Senior Maintenance Manager

3.5.2 Main Responsibilities & Specific Functions

1. Carry out aircraft planning, restore and maintain GAM aircraft to a serviceable, safe and airworthy condition in accordance with company and TAMM approved methods and procedures.

2. Daily administration control of Maintenance Department.

3. Ensure correct and efficient execution of maintenance activities and task associated with aircrafts and parts. All maintenance task and procedures must conform to the organization and TAMM standards.

4. Facilitate the provision of adequate facilities, supporting equipment and qualified personnel to perform maintenance on aircraft and equipment.

5. Make available to maintenance personnel the necessary overhaul manual, service bulletins, service letters, airworthiness directives, maintenance manual and any other required technical data.

6. Coordinate with Store and Logistic section for proper up keep of store section and provision of adequate spare and consumable for forecasted maintenance and defect rectification.

7. The Maintenance Manager will allocate and supervise work for personnel under his control.

8. Manage all activities concerned with aircraft status, maintenance forecast and maintenance programs (Approved Maintenance Scheduled) in accordance with statuary and legal requirements to ensure timely availability of aircraft to meet contractual obligation.

9. Ensures the necessary documentations are raised for all works performed on aircraft and its equipment for proper completion and certification.

10. Review relevant Airworthiness Directives, Service Bulletin and any other technical instruction together with other member of AD/SB review board for applicability and compliance.

11. Liaise and consult Quality Manager on airworthiness matter such as Certificate of Airworthiness renewal, approval of Maintenance Schedule

concession or extension etc.

12. Responds to quality deficiencies arising from Quality Audit and DGTA audit findings.

13. Ensures all acceptable deferred defects are monitored and rectified within the stipulated time frame.

14. Ensures that aircraft released to service meets the technical contractual obligation and quality of workmanship is acceptable to the organization and the DGTA.

15. Provides updates to the SMM on technical matters which affect the aircraft delivery status.

16. Ensure that all Maintenance personnel are in possession of correct skills and are given appropriate training.

17. Plan, organize and control the hangar operation to restore and maintain the aircraft serviceability in accordance with company, customer and relevant Aviation Authorities requirements in the most effective and productive manner.

18. Responsible for maintaining a clean and safe working environment at all time.

19. Maintenance Manager is authorized by SMM to manage specific maintenance activities in the AMO.

20. Maintenance Manager (MM) is assessed and authorized by SMM via letter of authorization and is responsible for the maintenance management and functions.

21. MM shall be initially authorized by SMM for duration of 12 months after a formal assessment to determine his competency, knowledge on maintenance, supervision, inspection, and technical administration requirement. MM shall be re-assessed and re-authorized upon completion 12 months tenure/as required by SMM.

22. The authority for the MM may be revoked by SMM if the MM is unable to demonstrate a sound working knowledge of the organization's MMP.

23. Maintenance Manager competency assessment will be conducted by SMM with reference to this MMP and EPM.

3.6 MAINTENANCE INSPECTOR / SUPERVISOR (CERTIFYING STAFF / APPROVAL HOLDER) (REGULATION 4.5.6)

3.6.1 Immediate Superior

1. Maintenance Manager (MM)

3.6.2 Main Responsibilities & Specific Functions

1. To undertake and supervise the maintenance, inspection, repair, replacement, modification, rectification and certification of aircraft in accordance with company and relevant aviation authority's approved methods and procedures.

2. The SMM is responsible for selecting, certifying and authorizing MI/S.

3. The authorized MI/S shall have a sufficient knowledge of maintenance, supervision, verification and inspection process. He is responsible for correctness and quality of specific tasks performed by personnel under his supervision.

4. The SMM shall formally re-assess and re-authorize the MI/S once a year (12 months)/expiry of Authority License/as required by SMM.

5. Maintenance Inspector/Supervisor competency assessment will be conducted by SMM and Quality Department as detailed in GAM EPM. Relevant records and documentation shall be maintained accordingly.

6. Carry out aircraft, components and ground equipment maintenance tasks efficiently.

7. Carry out and certify (as applicable) assigned tasks in accordance with the requirements of the MMP.

8. Organise available manpower and other resources to meet operational requirements.

9. Ensure defects are rectified correctly in an efficient manner.

10. Exhibit high standard and quality of maintenance work and corresponding certification in accordance with company and DGTA requirements.

11. Co-ordinate and liaise with Supervisor or other relevant personnel to effect efficient maintenance action.

12. Ensure high standard of engineering housekeeping and security in the place of work such as aircraft interior/exterior, hangar, workshops and other engineering maintenance areas.

13. Ensure relevant documentation and procedures are in accordance to established practices.

14. Ensure technical instructions, manuals are in good condition and updated to current status when used.

15. Ensure correct inventory of special tool and support equipment are in serviceable condition for proper and safe usage.

16. Ensure personnel under his supervision namely Technicians maintain a high standard or personal and work disciplines.

17. Maintain constant and effective communication with his superior, peers and subordinates.

18. Provide guidance and on-job-training to personnel under his charge to maintain desired quality and standard of work.

19. Act in the capacity of Engineering Maintenance Supervisor when required and/or called upon to do so and ensure proper hand-over is accomplished.

20. Cultivate a positive attitude and general respect for the compliance of industrial safety, health and environmental regulations, procedures and practices for personnel protection as well as company's interest.

21. Carry out any other duties assigned by immediate superior.

3.7 AUTHORIZED TRADESPERSONS (ATP) (REGULATION 4.5.7)

3.7.1 Immediate Superior

1. Maintenance Manager

3.7.2 Main Responsibilities& Specific Functions

1. To perform aircraft maintenance related tasks as assigned to the best quality standards in a specific time frame whilst maintaining conducive working environment and observing safety and discipline in accordance with the company and relevant aviation authorities requirements.

2. All personnel performing 'hands on' maintenance on the state registered aircraft and ground support equipment must have an authorization from the SMM that specify their competency level in the relevant trade.

3. ATP must pass the assessment before considered fit to work on aircraft.

4. The ATP shall be formally re-assessed and re-authorized by the SMM once a year (12 months). The SMM has the authority to revoke ATP or allows ATP to continue performing maintenance works after the re-assessment and re-authorizing process.

5. For those ATP that holds GAM Company Approval, EPM related to Company System, and Issuance, renewal or extension of Company Approval shall be refers.

6. Authorised tradepersons competency assessment will be conducted by SMM or delegated MM with reference to EPM. Relevant records and documentation shall be maintained accordingly.

7. Carry out aircraft components and equipment maintenance tasks efficiently.

8. Carry out and certify as required assigned tasks in accordance with the requirements of the MMP and EPM.

9. Communicate and liaise with MI/S or other relevant personnel to effect efficient maintenance actions.

10. Exhibit high standard and quality of maintenance work and corresponding certification (if applicable) in accordance with company and DGTA requirements.

11. Ensure high standard of engineering housekeeping and security in the place of work such as aircraft interior/exterior, hangar, workshops and other engineering maintenance areas.

12. Ensure technical instructions, manuals are in good condition and updated to current status when used.

13. Carry out any other duties assigned by any duly delegated superior.

3.8 AIRCREW (REGULATION 4.5.8)

1. GAM does not possess any aircrew for this AMO certification as company only provides maintenance for the AW139 helicopters. Aircrew are from the MMEA as State Aircraft Operator (SAO).

3.9 NON-TRADE PERSONNEL (REGULATION 4.5.9)

3.9.1 Scope

1. The SMM is allowed to authorize and employ Non-trade Personnel (NTP) to perform, specific maintenance tasks in GAM but under close supervision by Maintenance Inspector / Supervisor. SMM will define and specified the scope of maintenance work that he / she allows to carry out. Once he / she pass the assessment, he / she is considered fits to work on aircraft. The SMM shall re-assess and re-authorize the NTP every 12 months.

2. Each NTP shall be authorized for maintenance works with proper scope and level in his / her authorization letter. NTP is not authorized to perform any maintenance activities beyond the authorized scope. NTP is to be closely supervised by MM and MI/S.

3. Non-trade Personnel includes but not limited to, the following personnel:

    a. Technical Record Personnel

    b. Technical Planning Personnel

    c. Technical Publication Personnel

    d. Tools Store Personnel

    e. Store Personnel

    f. Apprentice/Trainee

4. The considerations required when selecting maintenance tasks as being suitable for the application of non-trade labour include, but are not limited to, the following:

    a. Task technical complexity

    b. Task training requirements,

    c. Task competencies and currencies required,

    d. Any associated security issues, and

    e. Any environmental considerations

5. Responsibilities and function of the Non-trade Personnel can be referred to EPM.

6. Non-trade Personnel competency assessment will be conducted by Senior Maintenance Manager. Relevant records and documentation shall be maintained accordingly.

7. For any NTP that holds GAM Company Approval, he/she shall refer to related EPM for the scope of work.

3.10 HUMAN FACTOR (REGULATION 4.5.10)

1. GAM management will ensure that all maintenance staff in GAM should adequately understand Human Factors involving aircraft and aeronautical products. Therefore, maintenance related personnel are required to attend Human Factors training as part of human factor awareness program. Other human factor awareness program includes, but not limited to, awareness posters and briefing. This is to create an understanding and appreciation about their relationship with company procedures, with equipment and tools, and working environment, and also about their relationship with the other people in the team.

2. Company Maintenance Inspectors / Supervisor (MI/S) who is constantly involved in making maintenance decisions in the maintenance release and inspection works, must be aware of the human performance, capabilities, and limitations under various environmental conditions.

3. Senior Maintenance Manager (SMM), Maintenance Manager (MM), Maintenance Inspector / Supervisor (MI/S) and Authorized Tradesperson (ATP) shall be required to attend continuation training in Human Factors every two years. This course maybe conducted by company itself to inculcate the human factors awareness among company staff.

4. As a part of compliance to Malaysia Labor Law, working hours for the employees shall not exceed 12 hours per day and any arrangement for shift and duty rosters shall be take into account the rest day or period prior the shift or duty roster assignment. Any requirement for duty period extension shall be identified and authorized by Maintenance Manager. SMM shall ensure the Accountable Manager is aware of the need to work extended hours. All employees must be alcohol and drug free during working hours. This is to avoid performance impairment caused by fatigue, alcohol and drug.

5. All maintenance personnel shall be responsible to notify their immediate superior should they be or suspect any person of to be under influence of drugs or alcohol, physiological or psychological condition that may adversely affect the performance of their duties.

6. It is requirement for supervisors who identify a person whom they believe is impaired to immediately remove the person from the task at hand to ensure correct procedures are implemented for the return of tools, foreign object control and completion of maintenance documentation and to consider any requirement for checking work completed by the person.

7. The SMM has the authority to revoke the authorization for MM, MI/S, ATP and NTP if they are found psychologically and physiologically not suitable to carry out maintenance tasks in accordance with regulation 4.5.10.

PART 4 –

CONDUCT OF MAINTENANCE

4.1 MAINTENANCE TECHNICAL PUBLICATIONS, FOREIGN SOURCE DATA AND MAINTENANCE PROCEDURES (REGULATION 5.1.2, 5.1.3 & 5.1.4)

4.1.1 Purpose

1. To ensure proper administration, procurement and control of maintenance instruction and data (Technical Publications).

2. To ensure availability of maintenance instructions and amendment service to staff.

3. To control all loans of Technical Publications

4.1.2 Field of Application

1. This procedure applies to all aircraft, engine and component manual, test equipment manual, airworthiness data, Service Bulletins, Airworthiness Directives and relevant literature and their revisions controlled by Technical Publication Library, and which are located at different areas, as recorded in the Technical Publication Master List.

4.1.3 Policy

1. Technical Publications (REGULATION 5.1.2)

a. The term Technical Publications is interpreted to include all technical information including specifications, drawings and Technical Publications, produced in any format such as hard copy, soft copy, compact disc, microfilm and videotape.

b. All maintenance work performed by GAM on aircraft and related component shall be carried out in accordance with approved and up to date data applicable to authorized scope and level of maintenance.

c. The Technical Library shall be central of receiving, updating and distributing point for all Technical Publications. A Technical Publication Master List shall be maintained where it will record the details for all technical publication available in GAM.

d. A record of literature borrowed from and returned to the Technical Library shall be maintained.

e. Alert/mandatory or technical operational documentation, but not limited to, i.e. AD, BT, SIL, SB, SL will be evaluated by GAM accordingly before incorporation.

f. Technical Library shall retain one copy of documents in and always up-to-date status. Each document shall be known as the ‘Master Copy”.

g. Technical Publications personnel shall ensure that each copy of all documents bears an identity reference.

h. All relevant manufacturers and vendors' manual, notices and other literatures necessary for the satisfactory functioning of the maintenance must be available and in sufficient quantities for the easy reference of all concerned.

i. Aircraft Operators' publications (customer asset) shall be registered in separate numerical registers in the Master List adhering to the same control and updating procedures as above.

j. Respective Departmental Managers/Maintenance Managers are responsible for the following:

   i. Maintain an up-to-date list of all technical references held in their respective section.

   ii. Ensure the receipt of the publications from the Technical Publications Section and perform frequent check for the current status of Technical Publications against the Master List.

   iii. Ensure that necessary and prompt corrective actions are taken for technical references found not current or of latest update.

   iv. For any inaccurate, incomplete or ambiguous procedure, practice, information or maintenance instruction found in maintenance technical publication, Document Controller should be formally informed.

k. All Technical Publication shall be check frequently for availability of revision.

l. An audit to confirm the status of all technical data held by Maintenance Department shall be carried out by Quality Manager

m. Maintenance documentation prepared by Technical Records Department is subjected to Surveillance/Audits in respect of approved capabilities, facilities, equipment, appropriate skills and certification procedures

n. All approved publication and maintenance data for the helicopter AW139 are controlled and updated in Publication Master List.

2. Foreign Source Data (REGULATION 5.1.3)

a. Foreign source data may include, but are not limited to, manufacturer's handbook, user/operator guides, engineering drawings, instructions used by other in-services organization and foreign military forces and government regulations.

b. If there is need to use foreign source data, the data should be identified and controlled according to the company procedures.

c. When there is requirement, Quality Manager shall submit the Foreign Source Data to Authorized Engineering Organization (AEO) or State Airworthiness Authority for approval prior to use by GAM.

3. Maintenance Procedures (REGULATION 5.1.4)

a. GAM shall only use approved and suitable maintenance procedures which are relevant with company's scope of maintenance which shall be in line with AEO requirements (if applicable).

b. Any implemented maintenance policies plans and procedures applicable to the aircraft being maintained shall be approved by DGTA.

c. Any deficiencies and recommendations for changes in approved maintenance policies, plans and procedures shall be reported to DGTA as detailed in MMP 0.7. AEO shall be informed so that necessary assessment and appropriate engineering dispositions regarding the acceptability of proposed changes could be provided.

d. Nevertheless, GAM has established Engineering Procedure Manual (EPM) which is detailing out the locally developed maintenance procedure to ensure the efficiency of maintenance activity.

e. Senior Maintenance Manager (SMM) may authorize local procedures which being generated to clarify the approved maintenance procedures as long as it does not constitute a design change. Any local maintenance orders shall be drafted and reviewed by appropriate person identified by SMM and authorized by SMM prior to use the orders.

f. All maintenance policies, procedures and plan shall be identified and controlled according to company procedures.

4.2 MAINTENANCE CERTIFICATION (REGULATION 5.1.5)

1. Authorized Tradesperson (ATP) shall accurately and progressively document all maintenance work which had been performed i.e. in work order, work sheet and technical log. For the maintenance work which involves a number of steps and take longer time to be completed, progressive certification is required where ATP shall place their initial, staff ID and appropriately dated upon work performed.

2. All entries in the maintenance records shall be made in legible ink, where cursive writing is not allowed.

3. Upon completion of the task, Maintenance Inspector/Supervisor (MI/S) shall certify the work performed by document his initial/sign, approval stamp and appropriately dated.

4. The evaluation and list of ATP and MI/S signature and MI/S stamps had been maintained accordingly by the company.

5. The respective MI/S shall ensure that all certifications had been referred to applicable technical instruction which had been used during maintenance. For any maintenance task which involves tolerance, dimension and test figures, record of the value shall be available in relevant documentation and being certified accordingly.

6. For MI/S responsible to certify aircraft or component to release shall ensure the following:

    a. All required maintenance had been completed and certified accordingly

    b. For any deferred maintenance, it had been complied with the company procedure and PU 2103 TAMM.

    c. The aircraft or aeronautical product is in an approved configuration

    d. All relevant documentation had been completed and compiled including the work package, relevant forms, CoC / EASA Form 1, reports and etc.

    e. All tools and test equipment used during maintenance had been removed from the aircraft or aeronautical product and/or accounted for.

7. Where an authorized person is responsible for supervising a person under training, the authorized person shall accept full responsibility and certify the maintenance performed.

8. Failure by an individual to comply with the requirements and procedures may result in the withdrawal of the approval from the individual.

4.3 FOREIGN OBJECT DAMAGE CONTROL (REGULATION 5.1.8)

4.3.1 Introduction

1. Foreign Object Damage (FOD) is a general term which applies to all loose objects which are a danger to the safety and integrity of an aircraft and which, therefore, must not be left in any area so as to constitute a hazard. The list of FOD items most frequently found on the apron is long and principally includes: -

    a. Plastic and paper bags/sheets, rags, empty oil and hydraulic fluid cans, empty soft drink cans, nuts and bolts, tools and equipment, luggage wheels and tags, metal cutlery, burst ballast bags, broken wooden items and miscellaneous rubbish.

2. The presence of FOD is due mainly to the carelessness of staff and their lack of understanding of the consequences.

4.3.2 Responsibilities

1. GAM maintenance personnel are responsible for taking adequate measures to ensure the safety of aircraft, vehicles and persons using the aprons. A fundamental element of the safety effort is to maintain the aprons in a clean condition and free from obstructions.

2. Foreign objects are regularly deposited on the Movement Area and it is essential that all personnel understand the danger to flight safety that such objects represent. Foreign objects may be ingested into aircraft engines causing damage leading to engine failure, which is especially critical if it occurs in flight, particularly if it occurs during the take-off phase. At best, such damage leads directly to premature engine removal and replacement. In addition, damage caused by foreign objects can occur to tires and undercarriages, control systems and other parts of the airframe. All such damage could lead to in-flight failures and inevitably requires expensive repairs to be made. All foreign objects are a threat to aircraft safety.

3. Every individual has responsibility to ensure that the risk of damage to aircraft from FOD is minimized. Any items of FOD found by a staff member in the course of their work should be removed. An item of FOD seen in an area that a staff member is not authorized to enter should be brought to the attention of Maintenance Manager.

4.3.3 Foreign Object Damage (Fod) Prevention Program

1. Training/Briefing/Awareness

    a. Training/Briefing/Awareness on FOD prevention shall be provided to all employees.

2. Housekeeping

    a. “Clean-As-You-Go” is the on-going practice which removing Damage during modification, operation, maintenance on/in the aircraft, part, component or engine to ensure the product is FOD free. “Clean-As-You-Go” shall be enforced throughout the company.

    b. Maintaining clean and neat working area. Work Damage shall be removed during daily cleanup at the end of each shift. This includes floor sweeping, cleaning work benches, machinery and equipment.

    c. All loose objects either on ramp, maintenance stand and support equipment shall be secured

    d. Proper disposal containers shall be placed near the work area.

    e. All potential FOD or lost items shall be reported to immediate supervisor or management for further action to be taken. For lost items, cease activity in affected area, continue with thorough search until the item is found or adequate assurances are made that the item is not in the area.

3. Material handling, packaging, shipping and storage

    a. Logistic personnel shall perform receiving inspections on all material and parts received. This is to ensure items were not damage during shipping, items are properly packaged, preserved and properly identified. Proper storage, identification and preservation of all material waiting to be issued to maintenance.

    b. Materials to be used in the packaging, shipping, and storage, of the parts shall be clean and free of contamination.

    c. All items, assemblies and components which are subject to foreign object intrusion after removal shall have fittings, ports or opening properly capped or covered with protective devices (caps, plus, protector). Whenever required, these items will be preserved to prevent corrosion or deterioration.

    d. All removed items shall be properly tagged and stored in designated area to prevent damage by physical contact or contamination.

    e. All removed, overhauled or new items shall be inspected prior to installation for FOD and contamination. Removal/installation documentation to track items.

4. Tool control and accountability

    a. Tool loan out/in shall be recorded for traceability.

    b. Personal tools shall be identified by unique marking system.

    c. Easy detection for missing tools i.e. shadow board in tool boxes.

    d. Keeping tool box inventories and practice Daily Tool Check.

    e. Immediate notification to superior upon lost tool or discovery of lost tools.

4.3.4 Reporting and Investigating FOD Incidents

1. Whenever there is an incident which suspected to cause by FOD, Quality Manager shall be immediately informed and all maintenance work related to the aircraft or component shall be stopped. Aircraft or component shall be quarantined until the investigation completed and aircraft or component release for repair/rectification.

2. Thorough FOD incident investigation shall be carried out to prevent recurrence by identifying and eliminating the root causes. The causes of the damage shall be determined and any maintenance practices or procedures which may contribute to the incident shall be highlighted.

3. Findings in the investigation report shall be highlighted to management and shall be followed up accordingly. Necessary changes shall be implemented to FOD Prevention Program if required.

4.4 SAFETY (REGULATION 5.1.9)

4.4.1 Gam Safety Policy

1. GAM is committed to provide and maintain a safe work environment for all employees and all other persons on site. Safety is of primary importance in conducting GAM day-to-day operations. In conducting its activities, process and services, GAM shall:

    a. Regard safety as prime consideration at all times

    b. apply Human Factor principles

    c. encourage personnel to report maintenance related errors/incidents

    d. recognize that the compliance with procedures, quality standards, safety standards and regulation is the duty of all personnel

    e. recognize the need for all personnel to cooperate with Quality Auditors

    f. comply with all applicable Malaysian Health, Safety and Environment legislations

    g. establish and adhere to procedures to identify, evaluate and control or eliminate safety hazards

    h. provide necessary safety training to all employees.

4.4.2 Personnel Protection Equipment (PPE)

1. Company will provide basic PPE such as safety shoe, marshalling vest and ear defender for each maintenance staff. Goggle, mask and glove also being made available to be used.

2. Any specific PPE which to be used for specific maintenance activity shall be provided upon request from maintenance.

4.4.3 Material Safety Data Sheet (MSDS)

1. All chemical, hazardous, flammable materials to be used for maintenance work shall be accompanied with material data sheet.

2. Therefore, all activities involve the materials i.e. storage, handling, usage, precautions, PPE to be used and others shall be carried out according to the information given in Material Data Sheet.

4.4.4 Safety Procedure During Aircraft Maintenance

1. During aircraft maintenance, all maintenance staff shall adhere to the safety precautions highlighted in the Maintenance Manual and other applicable publications or documentations.

4.5 INDEPENDENT MAINTENANCE INSPECTION (REGULATION 5.1.6)

1. Independent Maintenance Inspection is also known as Duplicate Inspection. The Duplicate Inspection is required after initial assembly or disturbance (i.e adjustment, overhaul, repair, modification or replacement of any part of flight or engine control system).

2. Where Vital Points have been identified and listed in maintenance document for the aircraft, such points shall be subjected to Duplicate Inspection following initial assembly or any disturbance.

3. Duplicate inspection shall be recorded and certified by appropriate Approval Holder on maintenance work documents such as Tech Log, Work Cards, Worksheets and etc. After the duplicate inspection is certified, a Certificate of Release to Service shall be signed which relates to the work that required the duplicate inspection.

4. Example of tasks that requires Duplicate Inspection are:

    a. Flying controls and associated equipment.

    b. Engine controls and associated equipment.

    c. Undercarriage controls, brake and steering controls and controls and associated equipment.

    d. Installed airborne oxygen equipment.

    e. Aircrew escape and survival equipment.

    f. Explosive ordnance and associated equipment.

    g. As stipulated in respective approved Aircraft Maintenance Manual/Component Maintenance Manual or any other approved maintenance manual.

5. In this context, duplicate inspection shall include inspection to ensure:

    a. Full, free and correct movement of controls is obtained throughout the system relative to movements of the crew controls.

    b. All items are correctly assembled, adjusted and locked

    c. Free from FOD

6. Control system subject to duplicate inspection must not be disturbed again or re-adjusted after the first part of duplicate inspection has been certified. The second part of duplicate inspection must be carried out immediately after the first part.

7. In some circumstances, due to peculiarities of assembly, it may be necessary for both parts of duplicate inspection to be made simultaneously.

8. If a control system is disturbed after completion of duplicate inspection that part which has been disturbed shall again be inspected in duplicate before flight.

9. Duplicate inspection shall be the final operation to establish integrity of control system when all work has been completed.

10. The procedure for the Independent Maintenance Inspections/ Duplicate Inspection is stipulated in GAM Engineering Procedure Manual. SMM shall specify additional Independent Inspection/Duplicate Inspection as required in the systems that they are maintaining.

4.6 MAINTENANCE OF AIRCRAFT DURING THE PERIOD OF OPERATION (REGULATION 5.1.7)

4.6.1 Purpose

1. To provide guidelines and procedures to carry out maintenance during period of operation.

4.6.2 Scope

1. Maintenance shall only be performed on aircraft after aircraft captain has released the aircraft in which means that when aircraft is no more operating (aircraft captain had signed off for the aircraft).

2. However, minor maintenance is allowed to be performed (during the 'Period of Operation' i.e while aircraft is being operated by aircrew or already accepted by them provided that maintenance procedure is authorized by the SMM or in-service DAR, the maintenance that is to be performed is authorized by the aircraft captain and SMM specify and documents/ the types of maintenance tasks that are permissible during the period of operation.

3. The SMM shall document the maintenance tasks that are permissible during that operation which does not enjoy the safe airworthiness safeguards.

4. Maintenance task that can be carried out during period of operation can include but not limited to:

    a. Minor maintenance tasks identified during aircrew walk around

    b. Minor maintenance tasks that are necessary during operational check prior to, or during flight

    c. Correction of unserviceability identified in flight that can be rectified without adversely affecting technical airworthiness or compromising safety.

    d. Lubrication and servicing which does not involve secondary dismantling other than opening and securing access panel.

    e. Pre-flight and End of Day inspection i.a.w Flight Manual requirement.

    f. Aircraft refueling

    g. Rectification of defect recorded by Flight Crew in Aircraft Technical Log.

    h. Minor maintenance where complexity is straight forward and routine and no secondary dismantling is required other than

i. Opening and securing access panel

ii. Disconnecting and reconnecting of cabling

iii. Unfastening and refastening of standard quick release fittings where incorrect assembly is easily detected or design precludes incorrect assembly.

4.6.3 Reference

1. Aircraft Maintenance Manual

4.6.4 Procedures

1. Every procedure for maintenance that needs to be carried out during period of operation must be prior approved by SMM or DAR.

2. Maintenance is to be carried out by authorized personnel by SMM.

3. The needs of maintenance had been identified and acknowledge by SMM

4.7 CARRIED FORWARD UNSERVICEABILITY (REGULATION 5.1.11)

1. Although an aircraft should be completely serviceable at all times, many systems and structures are duplicated, or have built in redundancy. In the process of maintaining an aircraft or Configuration Item (CI) operational commitments sometimes necessitate maintenance actions or rectification to be deferred/delayed/carry forward for a limited period of time. The Malaysian Civil Aviation Regulation recognizes this, and make provision for an aircraft to fly for limited periods with inoperative system, under strictly defined conditions.

2. Maintenance Carried Forward Unserviceability (CFU), which are recorded and controlled within the maintenance control system at the Maintenance Base.

3. SMM in conducting aircraft and/aeronautical products maintenance is allowed to perform CFU. CFU shall be assessed from both technical and operational perspective/considerations. Defect which considered cannot be cleared shall be entered in front of Technical Log defer defect sheet and filled up Carried Forwards form/Deferred Defect Record.

4. For all CFU which affects the handling and/operational characteristics of an aircraft, the SMM or his authorized personnel shall obtain an operational endorsement from appropriate authorized aircrew representative prior to approving CFU. All CFU shall be approved by the SMM or in the absence of SMM, the personnel formally authorized by him.

5. The SMM/authorized personnel by SMM is responsible for ensuring all defects are rectified or, where rectification action cannot be completed and the defect is suitable, transferred to CFU's prior to completion of the maintenance input. All work carried out to rectify defects will be certified by the issue of CRS in the appropriate categories.

6. In the occasion of insufficient access to technical data and/information pertaining to the technical unserviceability and to ensure the decision made is adequate and correct, the in service DAR and ASR advise shall be obtained before approving any CFU.

7. Control of CFU`s is the responsibility of the SMM responsible for the maintenance will ascertain if the defect is suitable for carrying forward to a future input, and the length of time, within limited boundaries, the deferment may be given. The final authority of the CFU, (the person authorising its issue), will be the person issuing the CRS for the maintenance input.

8. SMM is the person who will co-ordinate with Planning and ensure materials and equipment are available for a prescribed maintenance input.

9. SMM shall perform CFU within the AMO with the defined scope. SMM may also authorize Special Technical Instruction (STI) to be deferred as a CFU (for e.g. in the absence of spares) provided the DAR allows in writing in the STI itself.

10. When deciding to CFU, SMM shall refer to either civil aviation regulation list of permissible un-serviceability known as Minimum Equipment List (MEL)/MEL section of Flight Manual (if any) or other locally developed list which is approved by AEO.

11. For the benefit to aircrew during their acceptance of the aircraft prior to flight, all CFU are to be filled up/recorded and made visible to the aircrews and the decision to defer the said maintenance tasks (CFU) shall be annotated in the respective sections in the aircraft logbook and etc.

12. SMM needs to personally and regularly review all CFU decision to ensure all CFU decision and limitation is correct and appropriate. Then he/she is to ensure that the correct process has been followed and CFU are rectified as soon as possible and within the time period defined in the approved CFU.

13. Work packs are raised for each maintenance input, which include all scheduled maintenance, special checks and any CFUs planned to be action during the input. Work packs have an index sheet, which lists the contents of the pack. Worksheets raised during a maintenance input will be recorded on the maintenance certificate sheet prior to the recording of the defects.

14. On completion of maintenance input the responsible supervisor will ensure all scheduled requirements have been done and that all defects are certified prior to releasing the aircraft for service.

15. Any CFU's are raised on Deferred Defect Record, which is passed to the Chief Engineer for control. When planned for accomplishment the Chief Engineer will ensure the CFU is issued with the relevant work pack.

16. A register is maintained of CFU's raised, which provides a record of all CFU's and enables the issue of a serialized number, which is unique to each CFU.

17. All completed documentation is stored in the technical records and eventually in the archive store.

4.8 MAINTENANCE TEST FLIGHTS (REGULATION 5.1.12)

1. Maintenance Test Flights shall be carried out whenever a flight safety critical item is changed, adjusted or maintained or it is defined in the Aircraft Maintenance Manual and etc. Example: Replacement/installation of new engine, its adjustment which could not be confirmed/proven during the maintenance ground run and etc. The maintenance test flights shall also be carried out if it is called for in the manual.

2. A requirement of maintenance test flights shall only be generated to verify the performance of an aircraft and aircraft system after successfully completion of workshops test, bay tests and maintenance ground run.

3. Upon completion of maintenance task, a CRS shall be signed off by appropriate MI/S. Certificate Fitness for Flight shall be signed off by appointed MI/S. The aircrew shall be provided with the approved maintenance test flight schedule/pro-forma which shall covers all the applicable range of functional tests and checks. Crew notification request shall be submitted to SAO DAR through AMMACE office and to confirm the appropriately qualified pilots are performing the maintenance test flights.

4.9 MAINTENANCE GROUND RUNS (REGULATION 5.1.13)

1. GAM is not authorized to conduct any maintenance ground run on any state registered aircraft. For the purpose of conducting Maintenance Ground Run, the appropriately qualified pilots will be officially requested through AMMACE office.

2. The ground run is required to prove serviceability of a component after replacement, leak check or to perform an adjustment i.e. Rotor Track and Balance. The procedure may then be followed by a test flight is required.

4.10 AIRCRAFT GROUND HANDLING (REGULATION 5.1.14)

1. All maintenance personnel who conduct aircraft ground handling processes are certified by Quality Department. Only qualified and certified personnel are permitted to conduct aircraft ground handling operations.

2. The following are general safety precautions that shall be observed before ground handling aircraft 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.

    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.

NOTE:

Reference should be made to respective Maintenance Manual for specific precaution, permissible towing angles/loads, requirements and limitations.

As for aircraft ground handling processes, all procedures are stipulated in the Engineering Procedure Manual.

4.11 STANDARD REPAIRS (REGULATION 5.1.15)

1. Standards repairs are those standard repairs works of aircraft or Aeronautical Product which are to be carried out are based on approved maintenance publication by Original Equipment Manufacturer (OEM)/respective OEM's, Standard/Structure Repair Manual (SRM).

2. Standard repairs are repairs which were already defined and documented in the SRM. The standard repairs to primary and secondary structures should always need to be notified to the relevant AEO as could potentially affect future changes, modification and any repairs in the adjacent area.

3. Where damage has occurred to an aircraft either due to an accident as a result of wear, corrosion or failure, it may be possible to carry out a repair to the damaged area. All such repairs require investigation into the level of damage and the extent of the required repair.

4. In all cases the repair process should aim to return the aircraft to a serviceable condition by the quickest means, balanced by cost effectiveness.

5. All the standard repair details/information as defined in the regulation shall be forwarded to the AEO.

6. GAM does not hold design approval for any aircraft type. All repairs are certified under the Company's approval by individual engineers under their personal authorisations using manufacturers' Structural Repair Manuals, or Approved Repair Scheme obtained from any other design organisations approved by the CAAM.

7. Approval of repairs rests with the approved source of the repair, and records of all repairs are kept with the aircraft records. Repair manuals are controlled publications under the Technical Library.

8. Worksheets will be completed for all repairs detailing the work carried out, stage by stage, with inspections being certified for each stage and area as completed. The worksheets will cross refer to the repair drawings and detail any special requirements or processes, with certificates attached from any contractors/ subcontractors.

9. Inspection and control of repairs is the same as any other maintenance action.

4.12 MODIFICATIONS (REGULATION 5.1.16)

1. Modifications are changes made to particular aircraft, including its components, engines, propellers, radio apparatus, accessories, instruments, equipment, and their installation. Substitution of one type for another when applied to components, engines propellers, radio apparatus, accessories, instruments, equipment, is also considered to be a modification.

2. All modification and repair scheme shall approve by the DAR with exception of modification contained in Service Bulletins approved by the authority for State of Design.

3. Any modification proposal/details will be submitted to SAO Design Acceptance Representative (DAR) through customer configuration controller for approval or through AEO.

4. Prior to incorporation of any modification, DGTA approval must be obtained. All modifications to aircraft and aircraft component must be performed in accordance with approved documents and data.

4.13 NON STANDARD REPAIRS (REGULATION 5.1.19)

1. In case of any non-standards repair need to be incorporated, SMM shall ensure the necessary forms are raised and then submit to the in-service DAR (with all the information about the design details of non-standard repairs) for approval prior to incorporation. The SMM is to ensure that the non-standard repairs shall not be carried out/incorporated onto the primary and secondary aircraft structures and safety critical items or systems prior to receiving approval from the ASR/AEO.

2. The SMM may design, incorporate a non-standard repair to primary and secondary aircraft structure/flight safety critical system prior to ASR approval ONLY with the following requirements are fully met; in any cases where there is a compelling and justified operational necessity to return the aircraft to service; specific approval to incorporate the said repair from the Operational Commander is granted after consideration on the non-standard repair is fully justified with all the assessment on risks and factors are considered, a precedent/similar repair has been established and approved, and SMM is fully satisfied that he had a competent and capable personnel for designing and conducting the repair.

3. SMM shall ensure all repair documentation is retained accordingly.

4. All approved design package and documentation shall be maintained in accordance with TAMM Regulation 5.2.

4.14 WEIGHT AND BALANCE (REGULATION 5.1.17)

1. Senior Maintenance Manager (SMM) shall ensure that aircraft are weighed in accordance with OEM Maintenance Manual with serviceable and calibrated weighing equipment.

2. SMM shall ensure all the information on aircraft weight and balance is accurate and updated.

3. SMM shall transfer all pertinent weight and balance details in aircraft record.

4. Aircraft shall be re-weighed whenever:

    a. After any maintenance or modification which is significantly alter the aircraft weight and Center of Gravity (C of G)

    b. As requested by DAR

5. The details of information shall be forwarded to DAR accordingly if necessary.

4.15 ADHOC NON-DESTRUCTIVE TEST (REGULATION 5.1.18)

1. GAM only performs dye penetrant method within Maintenance Manual Limitation. For work arises related to Non-Destructive Testing requiring specialized skill and equipment; GAM will request the service through its Maintenance Support Network.

4.16 CONTINGENCY MAINTENANCE AND AIRCRAFT BATTLE DAMAGE REPAIR (REGULATION 5.1.20)

1. Not applicable in the case of MMEA since it is the responsibility of the MMEA. Any requirement arises will be carried out accordingly to the approved design and scope of work by the AEO.

2. In the case of MMEA, where a Contingency Maintenance (CMAINT) and Aircraft Battle Damage Repair (ABDR) capability is required due to nature of aircraft operation, GAM shall:

    a. have documented CMAINT and ABDR procedures which are approved by the DAR.

    b. Ensure that the procedures are completely documented in accordance with the approved maintenance recording system.

    c. Ensure that personnel are authorized, in accordance with Regulation 4.5 Personnel Requirement, to perform ABDR

    d. Have any additional documents and controlled procedure.

    e. Have procedures to be followed after ceasing contingency maintenance to restore the aircraft to peacetime standard (if required)

PART 5 –

MAINTENANCE RECORD AND DOCUMENTATION

5.1 MAINTENANCE RECORD AND DOCUMENTATION (REGULATION 5.2.1)

5.1.1 Maintenance Records and Documentation Requirements

1. All maintenance tasks carried out on aircraft and aeronautical products shall be properly documented and recorded as required by the Regulation 5.2.1 and company procedures.

2. All maintenance entries in maintenance records shall be done by authorized personnel with reference to the approved maintenance data and using correct & serviceable tools and equipment.

3. All the personnel who make entries in any maintenance documentation and records describing unserviceable conditions shall ensure that all entries contain of minimum information such as;

    a. accurate and concise description of defect or unserviceable condition

    b. signature, date and staff identification number.

4. Upon completion of maintenance, it shall describe:

    a. activity, corrective action or rectification taken

    b. Applicable reference for the rectification

    c. Certification had been carried out as specified in MMP 4.2

5.1.2 Retention and Review of Maintenance Documentation & Records

1. Technical Record Department will determine all the aircraft documentation and records. Paper record keeping system are stored in a safe manner with regard to fire, flood and theft, in suitable storage media.

2. All the records shall be kept in company archives and any other department authorized by Quality Department.

3. All the records shall be made available for scrutiny by Government/MMEA or to their authorized representative.

4. All aircraft records are required to be kept for a minimum 2 years before archiving it. It is GAM policy to retain all aircraft records for the life of the aircraft.

5.1.3 Falsification, Reproduction or Alteration of Maintenance Records

1. Alteration of maintenance records shall only be performed by authorized personnel in proper manner:

    a. Legible ink

    b. Crossed out/strike off/circled the false records, signed and/or stamped

    c. There will be also a wording “E.I.E” as “Enter in Error” on top of the “strike off” or “circled” or “crossed out”.

2. No person shall make or be caused to make:
    a. Any intentionally false entry in any maintenance records

    b. Any intentionally reproduction of maintenance records for fraudulent purposes

    c. Alterations in maintenance records for fraudulent purposes

3. Reproduction of any maintenance records or document shall only allowable upon receiving writing request mentioning specific records required and clear and relevant purpose requisition.

4. To ensure information integrity, alteration to completed maintenance records is only allowed to be carried out by the authorized personnel under the authorization of SMM. This is to minimize the risk of inadvertent or fraudulent maintenance records and alteration.

5. SMM shall ensure that no alteration to maintenance records is allowed without his permission. SMM shall ensure that serious action to be taken against those personnel who ignore or try to ignore or breach the above requirement in accordance with company procedures.

5.1.4 Electronic records

1. GAM use hardcopy print-out as a primary maintenance documentation for the AW139 and the documentation will be used as primary record.

2. After completion of maintenance, documentation will be gathered by Technical Record Department and check for correctness of recording and certification. Any error found should be corrected by the personnel making the entry.

3. The maintenance documentation then will be scanned and safe in the Google Drive (an online storage) subscribe by GAM.

4. The maintenance record place in the online storage is a backup for the primary hardcopy record as per para 5.1 (b).

5. The online folder for the scan copies of the documentation is only accessible by Technical Record personnel.

PART 6 –

REPORTING AND INVESTIGATION REQUIREMENT

6.1 REPORTING AND INVESTIGATION OF UNSERVICEABLE CONDITIONS AND UNAIRWORTHY CONDITIONS

6.1.1 Reporting of Unserviceable Conditions

1. Unserviceable condition is defined as a loss in performance compared to the stated limits in approved design of an aircraft or aeronautical products which may include but not limited to damage or cracking due to normal wear.

2. All unserviceable condition or defect found shall be recorded before rectification being carried out including defect found:

    a. During flight servicing
    b. Engine ground run
    c. Aircraft system tests
    d. Leak check
    e. And whenever maintenance personnel leaving the maintenance area

3. For defect highlighted by pilot or aircrew, it will be reflected in technical log. For any straightforward rectification, the rectification process shall be recorded in the same technical log. Otherwise if necessary, aircraft will need to be grounded for further inspection and troubleshooting. In this case, maintenance shall record it in a work pack.

4. Any detected defect during maintenance inspection, new entry shall be raised in the same work pack to annotate the defect and rectification process carried out.

5. For any unserviceable condition which is the result of other than fair wear and tear, DAR shall be informed accordingly. All aircraft or component which is considered as unserviceable under this condition shall be identified, labeled, recorded and keep apart from serviceable aircraft or component.

6. Details of all unserviceable conditions which are reported during operation or maintenance shall be recorded at the first opportunity as required by the Regulation 5.3.1 and company procedures.

7. Reporting shall be done before the next flight or before release to of an aircraft or aeronautical product to service.

8. All the unserviceability / defect / nonconformities shall be documented in the respective maintenance records detailing the type of non- unserviceability / defects / nonconformities, records on how it was rectified and completed.

6.1.2 Reporting of Unairworthy Conditions

1. Un-airworthy condition is known as when an unserviceable condition may adversely affect airworthiness which may cause:

    a. A primary structural failure in aircraft

    b. A control system failure in an aircraft

    c. An engine failure, particularly an engine structural failure

    d. Failure to aircraft safety system

    e. Fire in aircraft

    f. Other adverse effect on technical airworthiness which subject to SMM assessment

2. Unless otherwise specified by the DAR, GAM shall report to the DGTA within 24 hours for any conditions that have the following characteristics:

    a. The condition or failure of an aircraft or aeronautical product that could cause the loss of an aircraft;

    b. Any failure of an emergency system or life support system; or

    c. The condition or failure of an aircraft or aeronautical product that could adversely affect wider fleet operations

6.1.3 Investigation of Reported Unserviceability and Unairworthy Conditions

1. The reporting process shall take place with the immediate action as follows:

    a. Complete report shall be forwarded to respective DAR within 15 working days.

    b. Where GAM is unable to meet the time limits as specified, or where the investigation is beyond the capability, GAM shall seek advice from relevant AEO.

2. When there is an appropriate maintenance activity that adversely affect and impact technical airworthiness has occurred, GAM shall conduct investigation on all unserviceable and un-airworthy conditions that being reported and to submit report to the DAR within 15 working days.

3. GAM shall report to the DAR and DGTA within 24 hours when, during the investigation of the defect becomes aware of the following;

    a. The condition of failure on an aircraft or aeronautical product could cause the loss on an aircraft or,

    b. The condition or any failure/defects/un-airworthy of an aircraft or aeronautical product which directly or indirectly could adversely affect wider fleet operation.

4. GAM is to investigate, inspect the defect that caused un-airworthy condition and submit the report to SAO and OEM.

6.2 MAINTENANCE INCIDENT REPORTING AND OTHER REPORTING REQUIREMENTS

6.2.1 Maintenance Incident Reporting (Regulation 5.3.4)

1. GAM will conduct an investigation when an incorrect or inappropriate maintenance activity that adversely impacts technical airworthiness has occurred. Formal report will be submitted to the DGTA and DAR accordingly.

2. GAM shall conduct an investigation if there is an incident of incorrect or inappropriate maintenance activity that could adversely impact technical airworthiness has occurred.

3. Incident or accident occurred during maintenance activities that have effect to personnel, aircraft or material shall be reported to DGTA, DAR and OEM immediately for subsequent preventive action.

6.2.2 Other Reporting Requirements (Regulation 5.3.5)

1. GAM shall submit a report to the DAR (whenever required) within 24 hours when the following conditions are to be found:

    a. Received unapproved aeronautical products

    b. Aircraft system component that had been installed has been identified as an unapproved aeronautical product

    c. System or component is believed to make the aircraft or aeronautical product substandard for the required system performance

    d. The packaging of an aircraft or aeronautical product compromises technical integrity

    e. Conditions that affect the aircraft that warrant the aircraft to be declared 'un-airworthy' shall be reported to the SAO.

6.2.3 Technical Reporting System (Regulation 5.3.6)

1. Technical reports shall also be used to notify authorities of an organisation's inability to comply with, or to forecast problems in complying with, promulgated maintenance instructions.

2. The technical reporting system shall capture as much information as possible to allow full analysis, investigation and/or corrective action to take place. Systems used to notify authorities of compliance inability, defects, maintenance deficiencies,

and equipment condition and damage or safety issues; should do so in a timely manner to allow for the appraisal of airworthiness impact and intervention if required.

3. SMM to ensure that all technical reporting requirements shall complied with SAO requirement whenever necessary.

PART 7 –

DEVIATION

7.1 DEVIATION CONTROL (REGULATION 5.4.1)

1. Any request for Deviation should be initially assessed by SMM. If the SMM deems the request is justified, then a request for deviation is to be submitted to relevant DAR stating all relevant details pertaining to the deviation being sought. Each request for deviation should be restricted to individual aircraft or individual aeronautical products/parts.

2. Deviation shall be applied whenever:

    a. Temporarily depart from the DAR approved weapon system type design

    b. Incorporate a non-standard repair to aircraft primary or secondary structure and safety critical system

    c. Temporarily depart from aircraft maintenance instruction or publication

3. Upon receiving approval from DAR, GAM shall ensure that:

    a. The work is performed in accordance with the instruction detailed in the deviation documents

    b. A permanent record of the deviation implementation is made in the applicable aircraft or aeronautical product maintenance documentation

    c. A copy of the deviation approval will be retained as aircraft maintenance records.

PART 8 –

TOOLS EQUIPMENT AND AERONAUTICAL PRODUCT

8.1 TOOLS AND SUPPORT EQUIPMENT

8.1.1 Tools and Support Equipment (Regulation 5.5.1)

1. GAM had acquired the appropriate tools and support equipment to carry out the maintenance activity according to GAM maintenance scope and level. The Master List of Tools for AW139 helicopters is controlled, current and updated at all time.

2. It must be ensured that all tools and support equipment are:

    a. Serviceable

    b. Suitable to be used for the maintenance task specified

    c. Calibrated (whenever applicable)

    d. Identified and traceable. In addition, serviceable ground support equipment (GSE) shall be identified with tag/label. Unserviceable tools and GSE shall be tagged with Unserviceable Tag.

    e. Accounted for during maintenance prior to final certification

3. Whenever tools or equipment cannot be located or accounted for, aircraft or component shall not being release from maintenance. Unless the tools or equipment is found, or SMM or nominated delegate is satisfied that the tools or item has not been left in the aircraft or component, then, the aircraft or component shall be released to service.

4. SMM might authorize the usage of equipment during flight whenever:

    a. The aircraft does not need to be modified and no flight critical system affected

    b. DAR approval had been sought

8.1.2 Local Manufacture or Modification of Tooling (Regulation 5.5.2)

1. Whenever there is requirement or urgent needs, SMM may authorize the local manufacturer or modification or usage of standard tools which are not specifically identified in maintenance instruction or publication.

2. SMM shall ensure that:

    a. Manufactured or modified tools had been assessed and ensure to fit the intended purpose and does not compromise the safety aspect of aircraft, component and person who carried out the task

    b. Tools had been registered and identified as in company's procedure

c. All Relevant documents and records regarding the tools design or technical data shall be maintained at least as long as the tools being used.

8.1.3 Maintenance Tools and Material During Period of Operation (Regulation 5.5.3)

1. As specified in MMP 4.4.2, maintenance during period of operation is permissible. It is also applicable to the maintenance tools used during the period of operation which the activities include the following:

    a. Post start leak checks

    b. Opening and closing of access panels as requested by aircrew during pre-flight inspections

    c. Minor maintenance as authorized by Senior Maintenance Manager

    d. In flight maintenance (if necessary)

2. The tools shall be approved by SMM prior to operation of the aircraft and to be accounted for after the maintenance being carried out.

3. Aircrew's tools which are being used for the maintenance during period of operation must also be identified and accounted for.

8.2 AERONAUTICAL PRODUCTS (REGULATION 5.5.4)

1. Aeronautical Products management involves, but not limited to, the procurement, transportation, receipt/inspection, storage, and installation process.

8.2.1 Procurement

1. Procurement personnel shall only purchase the aeronautical product from the approved vendor/supplier upon request. The procurement shall be made with reference to the relevant documentation such as Illustrated Parts Data (IPD).

8.2.2 Receiving and Inspection

1. Once the part had been received, the logistic personnel shall ensure the following:

    a. All received documents are matched to the requirement of purchasing documents and authorized by the respected manufacturer / supplier.

    b. The product is conformed to the details in purchasing documents i.e. manufacturing reference number and part number.

    c. Any sign of damage on the product.

    d. Initial inspection or functional testing specified by authority/publications is to be carried out.

2. If the one of the conditions above is found, logistic personnel shall label, segregate and quarantine the product before liaise with the procurement personnel for further action.

8.2.3 Storage and inventory

1. All aeronautical parts shall be stored appropriately according to the instruction available in the products' descriptions or manuals. GAM Engineering Procedure Manual refers for correct procedure.

8.2.4 Product Identification and Traceability

1. In order to ensure the traceability of the product, Logistic personnel shall trace the product originality up the correct Part Number (P/No), EASA Form is attached with Certificate of Conformity (CoC), signatory of the label and certificates and traceable to the country of the product is originated.

8.2.5 HANDLING

1. Aeronautical parts / products shall be properly handled during receiving, transferring and installation process.

2. Relevant personnel (logistic and maintenance) should refer to the parts/products documentations for handling methods while carry out their task.

3. Aeronautical product that is to be transported is packaged, labeled and transported with all applicable documentation.

8.2.6 INSTALLATION

1. Installation of aeronautical products shall be carried out by authorized maintenance personnel with respect to the authorized documentations or orders. All installation shall be documented in the appropriate maintenance documentations i.e. work package, Aircraft Flight and Component Log Book.

8.3 TRANSFER OF AERONAUTICAL PRODUCTS (REGULATION 5.5.5)

1. Transfer / cannibalization / robbing of parts / components to service other aircraft / engine / system is inevitable in any maintenance process. The process of transfer / cannibalization / robbing of parts / components will occur when:

    a. a bay serviced parts/components which could not be made serviceable

    b. an outside vendor item which could not meet the need date

    c. a part/component which is critical for flight operations and that has become defective during ramp operation which is confirmed as nil stock

    d. customer requirement to support other operational aircraft

2. Procedure for cannibalization/robbing of parts/components can be found in GAM Engineering Procedure Manual.

3. In addition, all cannibalization/robbing of parts/components activities shall be recorded in the Aircraft Flight and Component Log Book.

8.4 LOCAL MANUFACTURE OF AERONAUTICAL PRODUCTS (REGULATION 5.5.6)

1. Local manufacture of aeronautical product may be required when:

    a. an item is no longer available and a suitable substitute has not been identified.

    b. there are excessive lead times for procurement.

    c. there is a need to minimize procurement expense.

2. GAM can only conduct local manufacture in accordance with a certified design provided by a relevant AEO. GAM needs to consider the preservation of engineering and technical integrity when there is a requirement to locally manufacture an aeronautical product.

3. In order to carry out the local manufacturing, GAM shall ensure that:

    a. the manufacturing data package is approved by the AEO and is complete.

    b. the process identified in the package are within GAM capability.

    c. the manufactured product identification, traceability and associated documentation (as detailed in the manufacturing data package) are complied with.

    d. all manufactured product test and evaluation requirements are met.

    e. the provision of a signed CoC attesting that the manufactured item conforms to the AEO certified design detailed in the manufacturing data package.

4. All products locally manufactured in accordance with a manufacturing data package should be uniquely identified and permanently marked with the manufacturer's reference number (MRN) and manufacturer's code (MC) and, where required, a serial number. MRN details will be provided by the AEO as part of the manufacturing data package. If currently issued, then the AMO should use its own MC, else the AEO's can be used under direction.

PART 9 –

AIRCRAFT ACCIDENTS

9.1 AIRCRAFT ACCIDENTS

9.1.1 Initial Requirement (Regulation 5.6.1)

1. Investigation of aircraft accidents involving AW139 helicopters is under responsibilities of Government/MMEA as the helicopters are owned and operated by them.

2. When required, GAM shall provide necessary support for investigation purpose.

3. SMM shall ensure the preservation of evidence in order to facilitate the investigation which includes:

    a. Documentation and records

    b. Sampling of any gasses and fluids if required i.e fuel, hydraulic fluids and oxygen

    c. Tools and equipment

9.1.2 Recovery of Aircraft (Regulation 5.6.2)

1. The recovery of aircrafts shall be the responsibility of Government/MMEA. GAM will provide the necessary support upon request and instruction from the SAO.

9.1.3 Salvage (Regulation 5.6.3)

1. Aircraft and aeronautical product that has been the subject of an aircraft accident shall only be reused following authorization by the relevant AEO.

2. In the case of contingency maintenance, whenever required, aircraft or aeronautical product could be salvage due to SMM consideration for the following:

    a. whether any crash loadings might have been sufficient to take the aeronautical product above proof load

    b. whether there are any residual strains or cracks

    c. whether the aeronautical product was subject to contamination, fire or overheating which may have changed the material characteristics or distorted the product.

PART 10 –

COMPLIANCE MATRIX

10.1 COMPLIANCE MATRIX

TAMM Regulation No.	Regulation Title	MMP Reference No.	Organization/GAM Compliance Reference
4.1	**GENERAL**	Title	N/A
4.1.1	Applicability – Who May Maintain State Aircraft and Aeronautical Product	Info	N/A
4.2	**AUTHORISATIONS**	Title	
4.2.1	Application for AMO Certification	MMP 1.4	N/A
4.2.2	Award and Retention of AMO Certification	MMP 1.5	N/A
4.2.3	Reserved	Reserved	
4.2.4	Changes to AMO Certification	MMP 1.6	N/A
4.2.5	Duration of AMO Certification	MMP 1.7	N/A
4.3	**EXEMPTIONS**	Title	
4.3.1	Exemptions Requirements	MMP 1.8	EPM 3-08
4.4	**MAINTENANCE ORGANISATIONAL STRUCTURE**	Title	
4.4.1	Key Appointments and Groups within an AMO	MMP 3.1 – MMP 3.9	EPM 6-04
4.4.2	Documentation of Organizational Structure	MMP 2.1(A) & (C)	N/A
4.4.3	Maintenance Support Networks	MMP 2.2	EPM 3-11, EPM 3-12, EPM 3-08
4.4.4	Quality Management System	MMP 2.3	EPM 3-13, EPM 3-14, EPM 3-15, EPM 3-16 and EPM 3-17
4.5	**PERSONNEL REQUIREMENTS**	MMP 3.1	
4.5.1	Maintenance Authority	MMP 3.5 – MMP 3.7	EPM 3-01, EPM 3-09 and EPM 3-19
4.5.2	Accountable Manager	MMP 3.2	N/A
4.5.3	Senior Maintenance Manager	MMP 3.3	N/A
4.5.4	Quality Manager	MMP 3.4	N/A
4.5.5	Maintenance Manager	MMP 3.1, MMP 3.5	EPM 6-05
4.5.6	Maintenance Inspector/Supervisor	MMP 3.1, MMP 3.6	EPM 6-04, EPM 6-05, EPM 3-01, EPM 3-09, EPM 3-19
4.5.7	Authorized Tradespersons	MMP 3.1, MMP 3.7	EPM 6-04, EPM 6-05, EPM 3-01, EPM 3-09, EPM 3-19

TAMM Regulation No.	Regulation Title	MMP Reference No.	Organization/GAM Compliance Reference
4.5.8	Aircrew	MMP 3.1, MMP 3.8	EPM 6-05, EPM 3-01, EPM 3-09, EPM 3-19
4.5.9	Non-Technical Personnel	MMP 3.1, MMP 3.9	EPM 6-04, EPM 6-05, EPM 3-01, EPM 3-09, EPM 3-19
4.5.10	Human Factors in Maintenance	MMP 3.10	EPM 3-18
4.6	**FACILITIES**	Title	
4.6.1	AMO Facilities	MMP 2.4	EPM 3-14
4.6.2	Storage Facilities	MMP 2.4	EPM 1-02, EPM 2-01, EPM 2-09
4.6.3	Alternative Facilities	MMP 2.4	EPM 3-11
5.1	**CONDUCT OF MAINTENANCE**	Title	
5.1.1	Maintenance Authority – Scope and Level	MMP 2.1 (B)	EPM 3-01, 3-09, 3-19 and EPM 6-04
5.1.2	Publication, Instructions Orders and Data	MMP 4.1	EPM 1-33, EPM 4-03, EPM 4-04 and EPM 4-06
5.1.3	Foreign Source Data	MMP 4.1	EPM 1-33, EPM 4-03, EPM 4-04 and EPM 4-06
5.1.4	Maintenance Procedures	MMP 4.1	EPM 6-02
5.1.5	Maintenance Certification	MMP 4.2	EPM 1-12, EPM 1-14, EPM 3-01 and EPM 6-04
5.1.6	Independent Maintenance Inspections	MMP 4.5	EPM 1-03
5.1.7	Maintenance of Aircraft During the Period of Operation	MMP 4.6	NA
5.1.8	Foreign Object Control	MMP 4.3	EPM 1-13 and EPM 1-15, EPM 2-01, EPM 2-02, EPM 2-09
5.1.9	Safety	MMP 4.4	EPM 1-31
5.1.10	Reserved	Reserved	
5.1.11	Carried Forward Unserviceability	MMP 4.7	EPM 1-18, EPM 2-10, EPM 3-03, EPM 4-02
5.1.12	Maintenance Test Flights	MMP 4.8	EPM 1-05
5.1.13	Maintenance Ground Runs	MMP 4.9	EPM 1-04
5.1.14	Aircraft Ground Handling	MMP 4.10	EPM 1-06
5.1.15	Standard Repairs	MMP 4.11	EPM 1-07
5.1.16	Modifications	MMP 4.12	EPM 1-08

TAMM Regulation No.	Regulation Title	MMP Reference No.	Organization/GAM Compliance Reference
5.1.17	Weight and Balance	MMP 4.14	EPM 1-09
5.1.18	Adhoc Non-Destructive Testing	MMP 4.15	EPM 1-10
5.1.19	Non Standard Repairs	MMP 4.13	EPM 3-04
5.1.20	Contingency Maintenance and Aircraft Battle Damage Repair	MMP 4.16	N/A
5.2	**MAINTENANCE RECORDS AND DOCUMENTATION**	Title	
5.2.1	Maintenance Records and Documentation Requirements	MMP 5.1, MMP 4.2	EPM 1-14, EPM 4-01 and EPM 4-02
5.2.2	Electronic Records	MMP 5.1	N/A
5.2.3	Retention and Review of Maintenance Documentation and Records	MMP 5.1, MMP 4.2	EPM 4-02
5.2.4	Falsification, Reproduction or Alteration of Maintenance Records	MMP 5.1, MMP 4.2	EPM 4-02
5.3	**REPORTING AND INVESTIGATION REQUIREMENTS**	Title	
5.3.1	Reporting of Unserviceable Conditions	MMP 6.1	EPM 1-17 and EPM 1-32
5.3.2	Reporting of Un-airworthy Conditions	MMP 6.1	EM 1-17 and EPM 1-32
5.3.3	AMO Investigation of Reported Unserviceable and Un-airworthy Conditions	MMP 6.1	EPM 1-17 and EPM -32
5.3.4	Maintenance Incident Reporting	MMP 6.2	EPM 1-32
5.3.5	Other Reporting Requirements	MMP 6.2	N/A
5.3.6	Technical Reporting Systems	MMP 6.2	N/A
5.4	**DEVIATIONS**	Title	
5.4.1	Deviations	MMP 7.1	EPM 3-08
5.5	**TOOLS, EQUIPMENT AND AERONAUTICAL PRODUCT**	Title	
5.5.1	Tools and Support Equipment	MMP 8.1	EPM 1-02 and EPM 2-09
5.5.2	Local Manufacture or Modification of Tooling	MMP 8.1	N/A
5.5.3	Maintenance Tools and Material During Period of Operation	MMP 8.1	EPM 1-02 and EPM 2-09
5.5.4	Aeronautical Products	MMP 8.2	EPM 2-01, EPM 2-02, EPM 2-03, EPM 2-04, EPM 2-05, EPM 2-08 and EPM 2-11
5.5.5	Transfer of Aeronautical Product (Cannibalization/Robbery)	MMP 8.3	EPM 1-16 and EPM 2-12
5.5.6	Local Manufacture of Aeronautical Products	MMP 8.4	N/A

TAMM Regulation No.	Regulation Title	MMP Reference No.	Organization/GAM Compliance Reference
5.6	**AIRCRAFT ACCIDENTS**	Title	
5.6.1	Initial Requirements	MMP 9.1	N/A
5.6.2	Recovery of Aircraft	MMP 9.1	N/A
5.6.3	Salvage	MMP 9.1	N/A

PART 11 –

ANNEXES

DEPARTMENT OF CIVIL AVIATION
MALAYSIA

CERTIFICATE OF APPROVAL

APPROVAL NUMBER : AMO/2016/02

Pursuant to regulation 31 of Civil Aviation Regulations 2016
and subject to the conditions specified below, the following organisation:

GALAXY AEROSPACE (M) SDN BHD

NO 79-1, FLOOR NO 1,
JALAN PJU 1A/41B,
47301, PETALING JAYA,
SELANGOR DARUL EHSAN,
MALAYSIA.

is approved as a **MAINTENANCE ORGANISATION**

in accordance with Airworthiness Notice **6501**

CONDITIONS:

1. The approval is limited to that specified in the enclosed Terms of Approval,
2. This approval requires compliance with the procedures specified in the latest revision of the **Maintenance Organisation Exposition**, as specified in the enclosed Terms of Approval,
3. This approval is valid whilst the approved **Maintenance Organisation** remains in compliance with Airworthiness Notice **6501**, and
4. Subject to compliance with the foregoing conditions, this approval shall remain valid until the expiry date, as specified in the enclosed Terms of Approval, unless surrendered, suspended or revoked.

JABATAN PENERBANGAN AWAM MALAYSIA Airworthiness DCA

Dato' Sri Azharuddin Abdul Rahman
Director General of Civil Aviation
Malaysia

Date of initial issue:	14-Dec-2016
Date of revision:	--
Revision number:	00

TERMS OF APPROVAL

Approval Number: AMO/2016/02

Scope of Approval

The holder of this maintenance organisation approval has been approved to engage in maintenance and to issue maintenance release, in respect of completion of maintenance, for the aeronautical products specified in the following table

CLASS		RATING	SCOPE	
Aircraft	**A1**	**(Aeroplanes above 7500 kg)**	**Line**	**Base**
		Textron B300 fitted with Pratt & Whitney PT6A-60A engines	Yes	Yes
	A3	**(Helicopters)**		
		Leonardo AW139 fitted with Pratt & Whitney PT6C-67C engines	Yes	Yes
		Leonardo AW189 fitted with General Electric CT7-2E1 engines	Yes	Yes
		Airbus EC120B fitted with Turbomeca Arrius 2F engine	Yes	Yes
		Robinson R44 fitted with Lycoming O-540-F1B5 engine	Yes	Yes
		Robinson R44 II fitted with Lycoming IO-540-AE1A5 engine	Yes	Yes
		Robinson R66 fitted with Rolls-Royce 250-C300/AI	Yes	Yes
		Leonardo A109E fitted with Pratt & Whitney PW206C engines	Yes	Yes

Validity of Approval

a) Validity of this approval is subject to the organisation remaining in compliance with its maintenance organisation exposition ref.: **GAM/CAAM/MOE** Issue 1 Amendment 11 dated 14 January 2020 or later approved amendment.

b) The validity of this approval is from **22 January 2020 to 13 December 2020.**

ABDUL RAZAK BIN ABDUL MALIK
for Civil Aviation Authority of Malaysia

CIVIL AVIATION AUTHORITY OF MALAYSIA Airworthiness CAAM

Date of issue: 13-Dec-2019
Date of revision: 22-Jan-20
Revision number: 02

APPENDIX 2

GalaxyAerospace	Maintenance Support Network		Prepared by:		Approved by:	
	Issue No.:	2019-020A	Verified by:			
	Date:	13/12/2019				

Ref. No.	Name	Facility Address	Contact	Scope of service
001A	AgustaWestland Malaysia	AgustaWestland Malaysia Hangar, Lot 1 & 2, Helicopter Centre, Sultan Abdul Aziz Shah Airport, 47200, Subang, Selangor	Name: Firdaus Yaacob (QAM) Email: firdaus.yaacob@leonardocompany.com	1. OEM (AW139)
002A	Pratt & Whitney Canada (SEA) Pte Ltd	c/o Loyang Crescent, Loyang Industrial Estate, Singapore 509010	Name: Rajasegaran Gopalakrishnan Email: Rajasegaran.Gopalakrishnan@pwc.ca	PT6C-67C engines
003A	Honeywell Aerospace	Honeywell Aerospace 4 Avenue Saint- Granier Toulouse, 31024 France	Name: Cesare Basile Email: cesare.basile@honeywell.com	Exchange Program
004A	Systematic Aviation Services Sdn Bhd	DCA Hangar B, LTSAAS, 47200 Subang, Selangor	Name: En. Shahar bin Dato' Hj Khalid Email: shahar@sassb.com.my	MRO, Charter Services, & Spares Provider
006A	Topcast Aviation Supplies Co. Ltd	26/F Metropole Square, 2 On Yiu Street, Shatin, Hong Kong	Name: Ricky Lam Email: ricky.lam@topcast.com	Distributor for aircraft spare parts and materials.
007A	Wiremasters	1788, Nortpointe Road Columbia TN. 38401 USA	Name: Mr. Cassie Adkison Email: cadkison@wiremaster.net	Supplier of cables, connectors, tubing, wire braid, cable ties & etc.
008A	Edmo	12830 E. Mirabeau Parkway Spokane, WA 99216	Name: Tom Fuchs Email: quality@edmo.com	Distributor for aircraft avionics, test equipment
009A	Aviall Pte Ltd	2 Loyang Lane, #05-01/02, Singapore 508913	Name: Tan Teow Khoon Email: tkhoon@aviall.com	Distributor of Aircraft parts and supplies
010A	HRD Aero Systems Sdn Bhd	Lot 16683, Jalan Delima 1, Kawasan Perindustrian Nilai 3, 71800 Nilai, Negeri Sembilan	Name: Mohd Supian bin Hasan Email: supian@hrd-aerosystems.com	Repair and overhaul of helicopter floats and life rafts / aircraft evacuation slides

GalaxyAerospace	Maintenance Support Network		Prepared by:		Approved by:	
	Issue No.:	2019-020A	Verified by:			
	Date:	13/12/2019				

Ref. No.	Name	Facility Address	Contact	Scope of service
011A	Skybase Spares Sdn Bhd	30 Block C, Jalan PJU 1A/3K, Taipan 1, Ara Damansara, 47301 Petaling Jaya, Selangor	Name: Jimmy Peng Email: jim.peng@skybasespares.com	Trading and supply consumable product for aircraft lubricant, grease, chemical & sealant
012A	Aero PB Ltd	Sofia, Bulgaria, Kopenhagen 23 bul	Name: Svetoslav Duchev Email: aero@aeropb.com	Wholesale and exchange of aviation components (spare parts and accessories for civil aviation)
013A	RUAG Aviation Malaysia Sdn Bhd	Lot 1-4, Ex customs building, Malaysia International Aerospace Center, Helicopter Centre, Sultan Abdul Aziz Shah Airport, 47200 Subang, Selangor Darul Ehsan	Name: Jasveer Singh Email: jasveer.ranjitsingh@ruag.com	Component C5 Electrical & Lights
014A	Pyrometro Services (M) Sdn Bhd	Lot 148, No 2A, Jalan U1/19, HICOM Glenmarie Industrial Park, 40150 Shah Alam, Selangor.	Name: Rusmanira binti Mohd Rawi Email: rusmanira.rawi@pyrometro.com	Calibration services
015A	Kesuma Technology Sdn Bhd	C-10-3A, Capital 3 Oasis Square, No 2, Jalan PJU 1A/7a, Ara Damansara, 47301 Petaling Jaya, Selangor Darul Ehsan	Name: Kasim bin Ismail E-mail: kasim@kesumatech.com.my	Aircraft Spares
016A	Epic Aero Sdn Bhd	No.2-1,2-2,2-3, Jalan Tasik Raja Lumu M U4/M, Seksyen 4, 40150 Shah Alam, Selangor	Name: Hj Mohd Abu Bakar bin Kabir Sahib E-mail: mdbakar55@gmail.com	NDT service provider (PT, MT, ET, UT & RT), NDT Level 3 service
017A	Solid Partners Sdn Bhd	31-2, Jalan Kasturi 3, Plaza Kasturi Off Jalan Balakong, 43200 Cheras, Selangor.	Name: Mr. Affendi Ahmad Khaimudin E-mail: affendi@solidpartners.com.my	Distributor for aircraft hoist systems
018A	Vibrotech Aviation (Aces Systems International Pty Ltd)	23 Green Plateau Road, Springfield NSW 2250 Australia.	Name: John Higgins E-mail: john.higgins@acesinternational.com.au	Calibration of ACES vibration equipment

GalaxyAerospace	Maintenance Support Network	Prepared by: QAA	Approved by: AZILLAH BIN MATAP Senior Maintenance Manager (SMM) Galaxy Aerospace (M) Sdn Bhd (1040282-D)
	Issue No.: 2019-020A	Verified by: SALMAH BIN ABU ZARIM Quality Manager Galaxy Aerospace (M) Sdn Bhd (1040282-D)	
	Date: 13/12/2019		

Ref. No.	Name	Facility Address	Contact	Scope of service
019A	Sendi Mahir Sdn Bhd	No.6,8,10 & 12, Jalan Kapar 27/89, Megah Industrial Park, 40400 Shah Alam, Selangor.	Name : Suhaila Ismail E-mail : ih082@sendimahir.com	Calibration service
,020A	Fire Fighter Industry Sdn Bhd	No. 1A, 10th Mile, Federal Highway, 47301 Petaling Jaya, Selangor, Malaysia	Name : Jeffrey Soo E-mail : enquiry@firefighter.com.my	Fire extinguisher service

APPENDIX 3

QUALIFICATION, TRAINING AND EXPERIENCE OF MANAGEMENT & MAINTENANCE PERSONNEL

APPOINTMENT	APPOINTED BY	SELECTION CRITERIA	RESPONSIBILITIES
Accountable Manager	Board of Director	1. Involve in the Aviation Industry 2. Experience in organization management.	MMP 3.2
Senior Maintenance Manager (SMM)	Accountable Manager	1. Possess a DCAM/EASA License and experience for at least 10 years in aircraft maintenance. **OR** 2. Qualified Maintenance Manager or Maintenance Inspector/Supervisor and experience for at least 15 years in aircraft maintenance. **OR** 3. Possess Engineering Degree or Diploma with at least 15 years experiences in aircraft maintenance. **AND** 4. Must have attended AW139 type course training 5. Experience at least 3 years in management position. 6. Have a thorough understanding of the TAMM regulation in maintenance and aeronautical product of state registered aircraft.	MMP 3.3
Quality Manager (QM)	Accountable Manager	1. Possess a DCAM/EASA License and experience for at least 5 years in aircraft maintenance and at least 3 years in Quality Department **OR** 2. Qualified Quality Manager/Quality Inspector in AMO organization with at least 5 years of experience. **OR** 3. Ex-officer from a local authority with at least 5 years of experience. **AND**	MMP 3.4

		4. Attended at least the Understanding, Documenting and Implementing Quality Management System to ISO 9000. 5. Have a thorough understanding of the TAMM regulation in maintenance and aeronautical product of state registered aircraft	
Maintenance Manager (MM)	SMM	1. Possess a DCAM/EASA License and experience for at least 7 years in Aircraft Maintenance. **OR** 2. Qualified Maintenance Inspector/Supervisor and experience for at least 10 years in aircraft maintenance. **OR** 3. Possess Engineering Degree or Diploma with at least 10 years experiences in aircraft maintenance. **AND** 4. Must have attended AW139 type course. 5. Have a thorough understanding of the TAMM regulations in maintenance and aeronautical product of state registered aircraft	MMP 3.5
Maintenance Inspector / Supervisor (MI/S)	SMM	1. Must obtained DCAM/EASA Aircraft Engineer License equivalent to their trade. **OR** 2. Qualified Aircraft Tradesman and experience for at least 5 years in aircraft maintenance. **OR** 3. Possess Engineering Degree or Diploma with at least 5 years experiences in aircraft maintenance. **AND** 4. Must have attended AW139 type course training 5. Understand TAMM regulation in relation to their level of work.	MMP 3.6

Authorized Tradepersons	SMM	1. Possess Engineering Degree or Diploma in Aviation Maintenance. **OR** 2. Qualified Aircraft Tradesman with experience in aircraft maintenance. **AND** 3. Completed all aircraft basic courses and aircraft training to their respective trades 4. Attended at least a AW139 General Familiarization Course 5. Understand TAMM regulation in relation to their level of work.	MMP 3.7
Non Trade Personnel (NTP)	SMM	1. Have relevant working experience in store operation environment (advantage for tools store personnel & store personnel) 2. Have an experience at least 3 years in aviation planning, publication and record for aircraft management personnel. 3. Computer literate. 4. Minimum age of 21 years old	MMP 3.8

APPENDIX 4

LIST OF MANAGEMENT AND MAINTENANCE PERSONNEL FOR AW139

Galaxy Aerospace (M) Sdn Bhd Manpower Resources

1. List of Key Personnel

Positions	Nominated Personnel
Accountable Manager	Shamsul Kamar bin Samsudin
Senior Maintenance Manager	Azillah bin Matap
Quality Manager	Salman bin Abu Zarim
Maintenance Manager	Shuhaimi bin Shahrum
	Hamzah bin Abdul Ghani

2. In order 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. Due to the fact that the number of employees always changing, the latest breakdown on the number of employees and the functions they fill in is laid down in the latest issue of Quality Assurance Notices no. 005.

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

4. For the latest list of certifying staff, reference should be made to Quality Assurance document reference **GAM/Q-001** (List of approval holder).