MAINTENANCE TRAINING PROGRAMME

FOR

GALAXY AEROSPACE (M) SDN BHD

APPROVAL NO.:	ATO/2023/02
MAINTENANCE TRAININIG PROGRAMME TITLE:	LEONARDO AW189 (GE CT7) CAAM PART 66 CATEGORY B1.3 & B2 TYPE TRAINING
DOCUMENT REFERENCE:	GAM/CAAM/MTP/AW189/B1B2
ISSUE NO.:	2
REVISION NO.:	0
DATE:	01 DEC 2023
COPY NUMBER:	01
HOLDER:	PRINCIPAL QUALITY ASSURANCE TRAINING (PQAT)

ADDRESS: A-G-01, A-02-01 & A-03-01, BLOK A
BANGUNAN PERDAGANGAN SIERA
ARA DAMANSARA, JALAN PJU 1A/5A,
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PART 0:

DOCUMENT OVERVIEW

0.1 NAME AND ADDRESS OF THE ORGANISATION

0.1.1 Main Office, Classroom, Examination and Assessment Facility

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

0.1.2 Practical Training Facility

No.	Company Name	Address
1.	Galaxy Aerospace (M) Sdn Bhd	Hangar 2 Universiti Kuala Lumpur, Malaysia Institute of Aviation Technology (UniKL MIAT), Subang Campus, UniKL MIAT, Persiaran A, Off Jalan Lapangan Terbang, 47200 Subang, Selangor, Malaysia.

0.2 DETAIL OF TRAINING COURSE

Description:	Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 & B2 Type Training	
MTP Reference No.:	GAM/CAAM/MTP/AW189/B1B2	
Approved by:	Civil Aviation Authority of Malaysia (CAAM)	
For Type Training Course Only:	Airframe:	Leonardo AW189
	As fitted with Engine:	GE CT7
	Additional avionics system covered by this course (when relevant): 1. N/A 2. N/A	
Material Reference:	1. AW189 Maintenance Publication: Doc. No. 89-A-AMP-00-X 2. General Electric CT7-2E1 Maintenance Manual: Doc. No. GEK112043-02 3. Master Minimum Equipment List (MMEL) Doc. No. 189G0270Q001 Rev D	
Maximum Number of Students:	1. Theoretical training: Shall not exceed twenty-two (22) students per training course. 2. Practical training: Shall not exceed fifteen (15) students per instructor.	
Theoretical Training Duration:	132 Hours : 00 Minutes	
Practical Training Duration (including assessment):	60 Hours : 00 Minutes	
Examination Duration:	3 Hours : 42 Minutes	
Total Training Duration:	195 Hours : 42 Minutes (32.62 Days)	
Theoretical Training Attendance Requirement:	The minimum participation time for the trainee to meet the objectives of the theoretical training and sit for the examination should not be less than 90% of the training hours scheduled per phase.	
Practical Training Attendance Requirement:	The minimum participation time for the trainee to meet the objectives of the practical training and/or sit for the assessments should not be less than 90% of the training hours scheduled.	

0.3 APPROPRIATE REFERENCING FROM THE MTOE PART 1.9

a) The aircraft type training course and examination approved by CAAM shall be as referred to the MTOE Part 1.9.

b) See table below as described in MTOE Part 1.9.

No.	Scope	Rating	Category	Elements	MTP Reference	Issue/Rev/Date
1.	Type Training	Leonardo AW189 (GE CT7)	B1.3 & B2	Theoretical & Practical	GAM/CAAM/MTP/ AW189/B1B2	Issue 2/Rev 0/ 01 Dec 2023

0.4 SIGNED STATEMENT BY THE APPROPRIATE POST HOLDER

a) The undersigned acknowledged that they have reviewed the Maintenance Training Programme (MTP) and agreed with the information presented within this document. Major changes to this MTP will be coordinated with and approved by CAAM.

Certification by	Name	Signature	Date
Developed and compiled by: *(SME/Instructor/Knowledge Examiner/Practical Assessor – B1.3)*	Akmal bin Azhar		15 DEC 2023
Developed and compiled by: *(SME/Instructor/Knowledge Examiner/Practical Assessor – B2)*	Ahmad Zhafri bin Mohd Nor		15 DEC 2023
Examination and practical assessment question verified by: *(Examination Manager)*	Roslina binti Mohd Sobri		15 DEC 2023
Recommended by: *(Training Manager)*	Adam Zafran George bin Abdullah		15 DEC 2023
Accepted by: *(Principal Quality Assurance (Training))*	Ahmad Kushairi bin Yunus		15 DEC 2023
Approved by: *(CAAM)*	MOHAMAD SOFIAN BIN BIYAMIN Senior Assistant Director of Airworthiness Airworthiness Division Civil Aviation Authority of Malaysia (CAAM)		15 FEB 2024

0.5 POLICIES AND PROCEDURES FOR THE AMENDMENT OF MTP

a) All amendments to the Maintenance Training Programme (MTP) will require CAAM approval. All amendments will be submitted to CAAM for approval prior to their incorporation in this MTP.

b) Revised portion will be indicated by a dark vertical line on the left side and a revision number and date printed at the bottom of each page. Summary of amendments will be prepared for easy reference and traceability.

c) MTP will be controlled and each page of the MTP will have following:

   i. Issue number;

   ii. Revision number;

   iii. Date;

   iv. Page number.

d) The MTP shall be controlled by the Training Manager.

e) CAAM approval is not required for any minor changes due to typo errors or cosmetic reasons. An updated copy will be submitted to CAAM after the review.

0.6 LIST OF EFFECTIVE PAGES

PART 0 – DOCUMENT OVERVIEW							
Part	**Page**	**Issue/Rev**	**Dated**	**Part**	**Page**	**Issue/Rev**	**Dated**
0.1	1 of 1	2/0	01/12/2023	0.8	1 of 1	2/0	01/12/2023
0.2	1 of 1	2/0	01/12/2023	0.9	1 of 2	2/0	01/12/2023
0.3	1 of 1	2/0	01/12/2023		2 of 2	2/0	01/12/2023
0.4	1 of 1	2/0	01/12/2023	0.10	1 of 3	2/0	01/12/2023
0.5	1 of 1	2/0	01/12/2023		2 of 3	2/0	01/12/2023
0.6	1 of 2	2/0	01/12/2023		3 of 3	2/0	01/12/2023
	2 of 2	2/0	01/12/2023				
0.7	1 of 4	2/0	01/12/2023				
	2 of 4	2/0	01/12/2023				
	3 of 4	2/0	01/12/2023				
	4 of 4	2/0	01/12/2023				
PART 1 – TRAINING PROGRAMME							
Part	**Page**	**Issue/Rev**	**Dated**	**Part**	**Page**	**Issue/Rev**	**Dated**
1.1	1 of 3	2/0	01/12/2023	1.3	1 of 1	2/0	01/12/2023
	2 of 3	2/0	01/12/2023	1.4	1 of 3	2/0	01/12/2023
	3 of 3	2/0	01/12/2023		2 of 3	2/0	01/12/2023
1.2	1 of 7	2/0	01/12/2023		3 of 3	2/0	01/12/2023
	2 of 7	2/0	01/12/2023				
	3 of 7	2/0	01/12/2023				
	4 of 7	2/0	01/12/2023				
	5 of 7	2/0	01/12/2023				
	6 of 7	2/0	01/12/2023				
	7 of 7	2/0	01/12/2023				

Recommended by: Principal Quality Assurance (Training) Galaxy Aerospace (M) Sdn. Bhd.	Approved by: Civil Aviation Authority of Malaysia
Name: AHMAD KUSHAIRI YUNUS Principal Quality Assurance (Training) Galaxy Aerospace (M) Sdn. Bhd.	Name: MOHAMAD SOFIAN BIN BIYAMIN Senior Assistant Director of Airworthiness Airworthiness Division Civil Aviation Authority of Malaysia (CAAM)
Dated: 15 DEC 2023	Dated: 15 FEB 2024

Recommended by: Principal Quality Assurance (Training) Galaxy Aerospace (M) Sdn. Bhd.	Approved by: Civil Aviation Authority of Malaysia
Name: AHMAD KUSHAIRI YUNUS Principal Quality Assurance (Training) Galaxy Aerospace (M) Sdn. Bhd.	Name: MOHAMAD SOFIAN BIN BIYAMIN Senior Assistant Director of Airworthiness Airworthiness Division Civil Aviation Authority of Malaysia (CAAM)
Dated: 15 DEC 2023	Dated: 15 FEB 2024

0.7 REVISION STATUS AND SUMMARY OF AMENDMENTS

0.7.1 Revision Status

Issue No.	Revision No.	Date	Inserted By
1	0	01 April 2023	Ahmad Kushairi bin Yunus
2	0	01 December 2023	Adam Zafran George bin Abdullah

0.7.2 Summary of Amendments

MTP Reference:	GAM/CAAM/MTP/AW189/B1B2
Issue:	2
Revision:	0
Date:	01 December 2023

Note: For any typo errors or cosmetic reasons, will be indicated as minor changes.

No.	Reference	Subject	Changes
1.	ALL PAGES	Cosmetic	• New GAM logo inserted. • Added Leonardo prior to AW189 in the header.
2.	Cover Page	-	• Add approval page row. • Document title row amended to Maintenance Training Programme title. • Issue/Rev No. amended to new revision. • Date amended to 01 Jan 2024
3.	Part 0.2	Detail Of Training Course	• Add Leonardo in the Description row. • Add Leonardo in the Airframe row.
4.	Part 0.3	Appropriate Referencing From The MTOE Part 1.9	• Add Leonardo in the Rating column. • Amend Issue/Rev/Date column to indicate the latest revision.
5.	Part 0.4	Signed Statement By The Appropriate Post Holder	• Certification latest signature and date.
6.	Part 0.6	List Of Effective Pages	• Amended the latest page, issue/rev and date. • Certification for “recommended by” and “approved by” columns.
7.	Part 0.7	Revision Status And Summary Of Amendments	• 0.7.1 – Revision status amended to indicate latest revision. • 0.7.2 – Summary of amendments updated to indicate all amendments for the latest revision.
8.	Part 0.9	Table Of Contents	• Amended the number of pages.
9.	Part 1.1	Training Specification	▪ (a) (b) – Added to show the theoretical element strycture. • 1.1.1.2 (a) – Added to show the sample of training methods and tools. • 1.1.1.3 (a) – Amended to show the training phases, questions and time. • 1.1.1.3 (b) – Added to show the objective of competency measurement. ▪ (a) (b) (c) – Added to show the structure of practical element.

			• 1.1.2.1 (b) – Added to show the objective of practical assessment.
10.	Part 1.2	Training Milestone / Overview Of Training Course Programme	• 1.2.1 (a) – Add Leonardo prior to AW189. • 1.2.2 – Amended the arrangement of training syllabus for theoretical training to improve trainee's experience.
11.	Part 1.4	Total Training Course Programme Duration	• 1.4.1 – Amended the duration for practical training (including assessment) and total hours. • 1.4.2 – Amended the training course schedule to reflect the changes in the arrangement of training syllabus.
12.	Part 1.5	Training Lesson Plan	• 1.5.1, 1.5.2, 1.5.3, 1.5.4 - Amended the arrangement of ATA Chapters to reflect the changes in the arrangement of training syllabus.
13.	Part 1.6	Training Course Materials	• 1.6.1 – Amended to reflect the latest issue/rev/date of training notes. • 1.6.2 – Amended to reflect the latest issue/rev/date of instructor guide.
14.	Part 1.7	List Of Structured Practical Training And Its Associated Documents	• 1.7.1 – Amended to include the quantity of task required to be carried out.
15.	Part 1.8	Structured Practical Training Logbook / Task Related	• 1.8 (a) – Added Leonardo prior to AW189.
16.	Part 1.10	Cross Referencing Of Structured Practical Training Logbook	• 1.10 (a) – Added Leonardo prior to AW189. • Amended the SPT logbook issue/rev/date to reflect the latest revision.
17.	Part 2.1	Assessment Plan	• 2.1.1 (a) (b) – Added Leonardo prior to AW189. • 2.1.1 (c) (d) (e) – Added to support the practical assessment standard. • 2.1.2.1 (a) – Added Leonardo prior to AW189. • 2.1.2.2 (a) – Added Leonardo prior to AW189. • 2.1.2.3 (a) – Added Leonardo prior to AW189. • 2.1.2.4 (b) – Added Leonardo prior to AW189.
18.	Part 2.2	Examination Plan	• 2.2.1 (a) – Added Leonardo prior to AW189.

			• 2.2.2.1 (a) – Added Leonardo prior to AW189. • 2.2.2.2 (a) – Added Leonardo prior to AW189. • 2.2.2.3 (a) – Added Leonardo prior to AW189. Amended examination paper reference issue/rev/date to reflect the latest revision.
19.	Part 2.3	Re-Examination And Re-Assessment	• 2.3.1 (a) – Added Leonardo prior to AW189. • 2.3.2 (a) (b) – Added Leonardo prior to AW189.
20.	Part 3.2	The Facility For The Structured Practical Training And Associated Agreement With Other Organisation	• 3.2.1.2 (a) – Added Leonardo prior to AW189.
21.	Part 3.3	Facility For Other Activity	• Amended to “reserved”.
22.	Part 4.1	Evaluation and Feedback	• 4.1 (b) (i) (ii) – Amended form name to Training Course Feedback and Evaluation. • 4.1 (c) (i) (ii) – Amended form name to Training Course Feedback and Evaluation.
23.	Part 4.2	Training Course Report	• Added para (b), (c), (d), (e), and (f) to support the training course report.

0.8 DISTRIBUTION LIST

This section is to ensure adequate distribution of the Maintenance Training Programme (MTP) for Galaxy Aerospace (M) Sdn Bhd - Maintenance Training Organisation (GAM-MTO) personnel to have access to the relevant information. This does not mean that all personnel must be in receipt of a complete MTP but that a reasonable number of copies are readily available within the organisation.

The distribution list may be in the following form.

COPY NO.	FORMAT OF COPIES	HOLDER OF THE COPIES
1	Hard Copy	Principal Quality Assurance (Training) **(Master)**
2	Hard Copy	Civil Aviation Authority of Malaysia **(Master)**
1	Soft Copy	Accountable Manager **(Duplicate)**
1	Soft Copy	Training Manager **(Duplicate)**
1	Soft Copy	Examination Manager **(Duplicate)**
1	Soft Copy	Other GAM-MTO Personnel including Associate Instructional Staff **(Duplicate)**

0.9 TABLE OF CONTENTS

0.10 ABBREVIATION, TERMINOLOGY AND DEFINITIONS

0.10.1 Abbreviation

AM	Accountable Manager
AML	Aircraft Maintenance Licence
AMO	Approved Maintenance Organisation
CAAM	Civil Aviation Authority of Malaysia
CAD	Civil Aviation Directive
CAGM	Civil Aviation Guidance Material
COR	Certificate of Recognition
EM	Examination Manager
GAM	Galaxy Aerospace (M) Sdn Bhd
GAM-MTO	Galaxy Aerospace (M) Sdn Bhd - Maintenance Training Organisation
IEA	Independent External Auditor
ISS	Issue
KE	Knowledge Examiner
LEP	List of Effective Pages
MCAR	Malaysia Civil Aviation Regulation 2016
MTO	Maintenance Training Organisation
MTOE	Maintenance Training Organisation Exposition
MTP	Maintenance Training Programme
PA	Practical Assessor
PQAT	Principal Quality Assurance (Training)
QAI	Quality Assurance Inspector
REF	Reference
REV	Revision
SME	Subject Matter Expert
SPT	Structured Practical Training
TE	Training Executive
TM	Training Manager
TP	Training Programme
TPM	Training Procedures Manual
UniKL MIAT	University of Kuala Lumpur - Malaysian Institute of Aviation Technology

0.10.2 Terminology and Definitions

a. **Aircraft Maintenance Licence or AML** means a licence issued by CAAM in accordance with CAD 1801.

b. **AMO** means, an approved maintenance organisation which holds a valid certificate of approval granted under regulation 31(1) (b), or regulation 32 of the MCAR.

c. **Knowledge Examiner** means an appropriately qualified person authorised by the maintenance training organisation to develop theoretical examination question paper and conduct assessment on the performance of the examinations.

d. **Large Aircraft** means

i. an aeroplane with a maximum certificated take-off mass exceeding 5,700 kg;

ii. an aeroplane equipped with turbojet engine(s) or more than one turboprop engine;

iii. a rotorcraft with a maximum certificated take-off mass exceeding 3,175 kg; or

iv. a rotorcraft with more than one engine.

e. **Maintenance** means, in relation an aircraft, the performance of tasks required to ensure the continuing airworthiness of the aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

f. **Maintenance Experience** means experience of being involved in maintenance tasks on operating aircraft and cover a wide range of tasks in length, complexity and variety.

g. **Maintenance Training Organisation Exposition** or MTOE means an approved document that contains the material specifying the scope of work deemed to constitute approval and showing how the organisation intends to comply with this CAD.

h. **MTO or The Organisation** means an approved maintenance training organisation which holds a valid certificate of approval granted under regulation 31(1)(c), or regulation 32 of the MCAR.

i. **Practical Assessor** means an appropriately qualified person authorised by the maintenance training organisation to conduct the practical assessments in determining the level of practical knowledge or skill whether the trainee is competent.

j. **Validator** means licensed personnel or a person authorised by the maintenance training organisation who is responsible to supervise, train and validate the skill training and experience acquisition of aircraft maintenance trainee or personnel.

k. Throughout this MTOE, the use of the male gender should be understood to include male and female persons.

PART 1:

TRAINING PROGRAMME

1.1 TRAINING SPECIFICATION

1.1.1 Theoretical Element

a) This training course is designed to provide comprehensive type training for Leonardo AW189 (GE CT7) aircraft maintenance under CAAM Part 66 Category B1.3 and B2. The training course encompasses theoretical training, examinations, practical training, and practical assessments to ensure a thorough understanding and proficiency in the maintenance and operation of the specified aircraft.

b) Structure:

The theoretical training is divided into four (4) phases to comprehensively cover relevant knowledge areas. The content of each phase is tailored to align with the MTP Part 1.2.2, focusing on the ATA chapters applicable to the Leonardo AW189 (GE CT7) aircraft.

i. Phase 1: 38:00 hours

ii. Phase 2: 25:00 hours

iii. Phase 3: 35:00 hours

iv. Phase 4: 34:00 hours

v. Total (Phase 1 + 2 + 3 + 4); 132:00 hours

c) Objective:

On completion of the theoretical training course the student shall be able to demonstrate, to the levels identified in MTP Part 1.2, the detailed theoretical knowledge of the aircraft's applicable systems, structure, operations, maintenance, repair, and troubleshooting according to approved maintenance data. The student shall be able to demonstrate the use of manuals and approved procedures, including the knowledge of relevant inspections and limitations.

1.1.1.1 Level of Training

a) The three levels listed below define the objectives, the depth of training and the level of knowledge that the training is intended to achieve.

b) Level 1: A brief overview of the airframe, systems and powerplant as outlined in the description section of the AW189 Maintenance Publication.

c) Course objectives: Upon completion of Level 1 training, the student will be able to:

i. provide a simple description of the whole subject, using common words and examples, using typical terms and identify safety precautions related to the airframe, its systems and powerplant;

ii. identify aircraft manuals, maintenance practices important to the airframe, its systems and powerplant;

iii. define the general layout of the aircraft's major systems;

iv. define the general layout and characteristics of the powerplant;

v. identify special tooling and test equipment used with the aircraft.

d) Level 2: Basic system overview of controls, indicators, principal components, including their location and purpose, servicing and minor troubleshooting.

e) Course objectives: In addition to the information contained in the Level 1 training, at the completion of Level 2 training, the student will be able to:

i. understand the theoretical fundamentals; apply knowledge in a practical manner using detailed procedures;

ii. recall the safety precautions to be observed when working on or near the aircraft, powerplant and systems;

iii. describe systems and aircraft handling particularly access, power availability and sources;

iv. identify the locations of the principal components;

v. explain the normal functioning of each major system, including terminology and nomenclature;

vi. perform the procedures for servicing associated with the aircraft for the following systems: Fuel, Power Plants, Hydraulics and Landing Gear, etc.;

vii. demonstrate proficiency in use of crew reports and on-board reporting systems(minor troubleshooting) and determine aircraft airworthiness as per the Minimum Equipment List (MEL);

viii. demonstrate the use, interpretation and application of appropriate documentation including AW189 Maintenance Publication, Fault Isolation Publication, etc.

f) Level 3: Detailed description, operation, component location, removal/ installation and troubleshooting procedures to AW189 Maintenance Publication, Fault Isolation Publication level respectively.

g) Course objectives: In addition to the information contained in Level 1 and Level 2 training, at the completion of Level 3 training, the student will be able to:

i. demonstrate a theoretical knowledge of aircraft systems and structures and interrelationships with other systems, provide a detailed description of the subject using theoretical fundamentals and specific examples and to interpret results from various sources and measurements and apply corrective action where appropriate;

ii. perform system, powerplant, component and functional checks as specified in the AW189 Maintenance Publication;

iii. demonstrate the use, interpret and apply appropriate documentation including AW189 Fault Isolation Publication, etc.;

iv. correlate information for the purpose of making decisions in respect of fault diagnosis and rectification;

v. describe procedures for replacement of components.

1.1.1.2 Training Methods and Tools

a) Refer to the table below for the types of training methods and tools which may be used for the training. Actual training methods and tools or aids used shall be according to MTP Part 1.2.

No.	Training Tools	Description
1	Slideshow / PDF presentation	A structured presentation of slides.
2	Manuals	Comprehensive and controlled publication of a particular topic.
3	Computer (laptop)	An electronic processing device that can hold and display information in various media.
4	Mobile devices (such as, but not limited to, tablets, smart phones, etc.)	A mobile electronic processing device that can hold and display information in various media.
5	Videos	Electronic media for broadcasting moving visual images.
6	MSTD — Maintenance simulation training device	A training device that is intended to be used in maintenance training, examination, and/or assessment for a component, system or entire aircraft. The MSTD may consist of hardware and software elements.
7	Mock-up	A scaled or full-size replica of a component, system or entire aircraft that preserves (i.e., is an exact replica of) the geometrical, operational or functional characteristics of the

No.	Training Tools	Description
		real component, system or entire aircraft for which maintenance training is delivered with the use of such a replica.
8	Virtual reality	A computer-generated three-dimensional (3D) environment which can be explored and possibly interacted with.
9	MTD — Maintenance training device	Maintenance training device is any training device other than an MSTD used for maintenance training and/or examination and/or assessment. It may include mock-ups.
10	Real aircraft	A suitable aircraft whose condition allows teaching a selection of maintenance tasks that are representative of the particular aircraft or of the aircraft category. 'Suitable' means an aircraft of the type or licence (sub) category (if the licence (sub) category aircraft is outfitted with the same equipment subject to the particular lesson module(s) and is sufficiently similar so that the lesson objective(s) can be satisfactorily accomplished) for type training, or an aircraft representative of the licence (sub)category for basic training and excludes 'virtual aircraft'. 'Condition' means that the aircraft is equipped with its main components and that the systems can be activated/operated when this is required by the learning objectives.
11	Aircraft component	A suitable aircraft component used to teach specific maintenance tasks off-the-wing. This may include but is not limited to tasks such as borescope inspections, minor repairs, testing, or the assembly/disassembly of sub-components. 'Suitable' means that the condition of the component should fit the learning objectives of the tasks and, when appropriate, may feature existing defects or damages.
12	Augmented reality	An enhancement (modification, enrichment, alteration or manipulation) of one's current perception of reality elements of a physical, real-world environment following user's inputs picked up by sensors transferred to rapid streaming computer images. By contrast, virtual reality replaces the real world with a simulated one.
13	Embedded training	A maintenance training function that is originally integrated into the aircraft component's design (i.e. a centralised fault display system).
14	Classroom	A physical, appropriate location where learning takes place.
15	Virtual classroom/SDL (Synchronous Distance Learning)	A simulated, not physical, location where synchronous learning takes place. SDL approval is required prior to start the training.

1.1.1.3 Competency Measurement

a) Competency is measured by multi-choice type examination after completion of training for each phase:

   i. Phase 1: 40 questions (0:60 minutes)

   ii. Phase 2: 32 questions (0:48 minutes)

   iii. Phase 3: 40 questions (0:60 minutes)

   iv. Phase 4: 40 questions (0:60 minutes)

b) The objective of this competency measurement is to assess the knowledge and understanding of trainees in a specific subject through a series of multiple-choice questions. By utilizing this assessment method, the aim is to evaluate the trainees' comprehension of theoretical concepts, their ability to apply learned knowledge, and their overall competency in the given subject.

1.1.2 Practical Element

a) Practical training sessions will be conducted to provide hands-on experience with Leonardo AW189 (GE CT7) aircraft systems, components, and maintenance procedures.

b) Trainees will have the opportunity to apply theoretical knowledge in a practical setting under supervised conditions.

c) Structure:

   i. The practical training may include instruction in a classroom or in simulators but part of the practical training should be conducted in a real maintenance environment.

   ii. The tasks should be selected because of their frequency, complexity, variety, safety, criticality, novelty, etc. The selected tasks should cover all the chapters described in the table contained in MTP Part 1.7.1.

   iii. The duration of the practical training is 60:00 hours.

d) Objective:

The objective of practical training is to gain the required competence in performing safe maintenance, inspections, and routine work according to the maintenance manual and other relevant instructions and tasks as appropriate for the type of aircraft, for example identification of location, functional/operational test, servicing and/or ground handling, removal/installation of components, review of Master Minimum Equipment List (MMEL) and trouble shooting. It includes the awareness of the use of all technical literature and documentation for the aircraft, the use of specialist/special tooling and test equipment for performing removal and replacement of components and modules unique to type, including any on-wing maintenance activity.

1.1.2.1 Competency Measurement

a) Practical element competency is measured by a practical assessment during or after the completion of practical training. This shall be conducted by an approved practical assessor as listed in MTP Part 3.1.1.3.

b) The objective of the practical assessment is to evaluate whether the candidate has gained the required competence in performing safe maintenance, inspections, and routine work according to the aircraft documentation and other relevant instructions and tasks as appropriate for the type of aircraft.

1.2 TRAINING MILESTONE / OVERVIEW OF TRAINING COURSE PROGRAMME

1.2.1 Overview of Training Course

a) Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training course consist of theoretical training, examination, practical training and practical assessment.

b) By derogation to above Part 1.2.1 (a), the theoretical training is divided into four (4) phases. The content of each phase consists of relevant ATA chapters applicable to the aircraft as per MTP Part 1.2.2.

c) The theoretical training and examination shall comply with the following requirements:

   i. the relevant elements defined in the standard described in the MTP Part 1.2.2;

   ii. the type training examination standard described in the MTP Part 2.2.1.

d) The practical training shall be conducted in accordance with the MTOE Part 2.5.

e) The practical training should be imparted after the performance of the theoretical portion of the aircraft type training course.

f) The theoretical training, examination, practical training and practical assessment must have been started and completed within the 2 years preceding the application for a type rating endorsement.

1.2.2 Training Syllabus – Theoretical

SYLLABUS			TRAINING STRUCTURES			
Phase	**ATA**	**Description**	**Training Level****	**Hours : Mins*****	**MCQ******	**Training Aids*******
1	00	Helicopter General	1	1:00	1	1/3/14
	04	Airworthiness Limitation	1	1:00	1	1/3/14
	05	Times Limits / Maintenance Checks	1	0:30	1	1/3/14
	06	Dimensions and Areas	1	0:30	1	1/3/14
	46	System Integration and Display	3	8:00	8	1/3/14
	24	Electrical Power	3	6:00	6	1/3/14
	31	Indicating / Recording Systems	3	3:00	3	1/3/14
	31A*	Instruments System				
	97	Image and Recording System	3	1:00	2	1/3/14
	33	Lights	3	3:00	3	1/3/14
	23	Communications	3	4:00	4	1/3/14
	34	Navigation	3	10:00	10	1/3/14
		Total Training Hours:		38:00	-	-
		Examination Hours:		01:00	40	-
		Total Hours:		**39:00**	-	-

SYLLABUS			TRAINING STRUCTURES			
Phase	**ATA**	**Description**	**Training Level****	**Hours : Mins*****	**MCQ******	**Training Aids*******
2	22	Autoflight	3	5:00	5	1/3/14
	45	Central Maintenance System	3	2:00	3	1/3/14
	25	Equipment / Furnishings	3	3:00	3	1/3/14
	25A*	Electronic Equipment / emergency equipment				
	95	Crew Escape and Safety	3	2:00	2	1/3/14
	30	Ice and Rain Protection	3	2:00	2	1/3/14
	53	Fuselage	3	2:00	2	1/3/14
	55	Stabilizers	3	1:00	2	1/3/14
	52	Doors	3	1:00	2	1/3/14
	56	Windows and Canopies	3	1:00	1	1/3/14
	50	Cargo and Accessory Compartment	3	1:00	1	1/3/14
	07	Lifting, Shoring, Recovering and Transporting	1	0:30	1	1/3/14
	08	Levelling and Weighing	1	0:30	1	1/3/14
	09	Handling and Taxiing	1	0:30	1	1/3/14
	10	Parking, Mooring and Storing	1	0:30	1	1/3/14
	11	Placards and Markings	1	0:30	1	1/3/14
	12	Servicing	1	2:00	3	1/3/14
	20	Standard Practice - Airframe System	1	0:30	1	1/3/14
		Total Training Hours:		25:00	-	-
		Examination Hours:		00:48	32	-
		Total Hours:		**25:48**	-	-

SYLLABUS			TRAINING STRUCTURES			
Phase	**ATA**	**Description**	**Training Level****	**Hours : Mins*****	**MCQ******	**Training Aids*******
3	63	Main Rotors Drives	3	6:00	6	1/3/14
	63A*	Rotors Drives - Monitoring and Indicating				
	62	Main Rotors	3	3:00	4	1/3/14
	65	Tail Rotors Drives	3	4:00	4	1/3/14
	65A*	Tail Rotors Drives - Monitoring and Indicating				
	64	Tail Rotors	3	3:00	3	1/3/14
	60	Air Vehicle Standard Practice – Rotors	3	1:00	2	1/3/14
	18	Vibration and Noise Analysis and Attenuation	3	2:00	3	1/3/14
	29	Hydraulic Power	3	4:00	4	1/3/14
	29A*	Hydraulic Power - Monitoring and Indicating				
	32	Landing Gear	3	3:00	3	1/3/14
	32A*	Landing Gear - Monitoring and Indicating				
	67	Rotors Flight Control	3	3:00	4	1/3/14
	28	Fuel System	3	4:00	4	1/3/14
	28A*	Fuel System - Monitoring and Indicating				
	26	Fire Protection	3	2:00	3	1/3/14
		Total Training Hours:		35:00	-	-
		Examination Hours:		01:00	40	-
		Total Hours:		**36:00**	-	-

SYLLABUS			TRAINING STRUCTURES			
Phase	**ATA**	**Description**	**Training Level****	**Hours : Mins*****	**MCQ******	**Training Aids*******
4	49	Airborne Auxiliary Power	3	5:00	5	1/3/14
	70	Standard Practices - Engine	3	1:00	2	1/3/14
	71	Powerplant	3	2:00	3	1/3/14
	72	Engine	3	3:00	4	1/3/14
	70A*	Constructional arrangement and operation				
	70B*	Engine Performance				
	73	Engine Fuel and Control	3	3:00	3	1/3/14
	73A*	FADEC				
	74	Ignition	3	1:00	2	1/3/14
	75	Air	3	3:00	3	1/3/14
	76	Engine Control	3	3:00	3	1/3/14
	77	Engine Indicating	3	2:00	3	1/3/14
	78	Exhaust	3	1:00	2	1/3/14
	79	Oil	3	3:00	3	1/3/14
	80	Starting	3	2:00	2	1/3/14
	21	Environmental Control	3	5:00	5	1/3/14
	21A*	Air Supply				
		Total Training Hours:		34:00	-	-
		Examination Hours:		01:00	40	-
		Total Hours:		**35:00**	-	-

Note:

*The ATA chapter content is covered in the main ATA chapter.

**Aircraft type training level as described in MTP Part 1.1.1.1.

***Those hours exclude ‘self-study’, aircraft visits, simulator visits, CBT, examination, etc.

****Number of Multi Choice Questions (MCQ) used per examination paper.

*****Training methods and tools may be used to aid training. Training aids used are as illustrated in MTP Part 1.2.1.2.

1.3 TRAINING PREREQUISITE

a) Below is the recommended prerequisite to attend this AW189 (GE CT7) CAAM Part 66 Category B1.3 & B2 type training course:

i. Shall be at least twenty-one (21) years old; and

ii. Holds an Aircraft Maintenance Licence issued by CAAM or other foreign authorities; or

iii. A degree in any field; or

iv. A diploma in any field; or

v. Has at least one (1) year of aircraft maintenance experience.

1.4 TOTAL TRAINING COURSE PROGRAMME DURATION

1.4.1 Duration

	Hours : Minutes	Days
Theoretical Training	132 : 00	22
Practical Training (including assessment)	66 : 00	11
Examination	03 : 48	0.65
Total	201 : 48	33.65

1.4.2 Training Course Schedule

Day 1	Hrs: Mins	Day 2	Hrs: Mins	Day 3	Hrs: Mins	Day 4	Hrs: Mins	Day 5	Hrs: Mins
ATA 00	1:00	ATA 46	5:00	ATA 24	5:00	ATA 31	2:00	ATA 23	4:00
ATA 04	1:00	ATA 24	1:00	ATA 31	1:00	ATA 31A		ATA 34	2:00
ATA 05	0:30			ATA 31A		ATA 97	1:00		
ATA 06	0:30					ATA 33	3:00		
ATA 46	3:00								
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**

Day 6	Hrs: Mins	Day 7	Hrs: Mins	Day 8	Hrs: Mins	Day 9	Hrs: Mins	Day 10	Hrs: Mins
ATA 34	6:00	ATA 34	2:00	ATA 22	1:00	ATA 95	2:00	ATA 55	1:00
		ATA 22	4:00	ATA 45	2:00	ATA 30	2:00	ATA 52	1:00
				ATA 25	3:00	ATA 53	2:00	ATA 56	1:00
				ATA 25A				ATA 50	1:00
								ATA 07	0:30
								ATA 08	0:30
								ATA 09	0:30
								ATA 10	0:30
		Phase 1 Exam							
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**

Day 11	Hrs: Mins	Day 12	Hrs: Mins	Day 13	Hrs: Mins	Day 14	Hrs: Mins	Day 15	Hrs: Mins
ATA 11	0:30	ATA 63	3:00	ATA 65	4:00	ATA 64	1:00	ATA 29	2:00
ATA 12	2:00	ATA 63A		ATA 65A		ATA 60	1:00	ATA 29A	
ATA 20	0:30	ATA 62	3:00	ATA 64	2:00	ATA 18	2:00	ATA 32	3:00
ATA 63	3:00					ATA 29	2:00	ATA 32A	
ATA 63A						ATA 29A		ATA 67	1:00
Phase 2 Exam									
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**

Day 16	Hrs: Mins	Day 17	Hrs: Mins	Day 18	Hrs: Mins	Day 19	Hrs: Mins	Day 20	Hrs: Mins
ATA 67	2:00	ATA 26	2:00	ATA 49	1:00	ATA 72	1:00	ATA 75	2:00
ATA 28	4:00	ATA 49	4:00	ATA 70	1:00	ATA 70A		ATA 76	3:00
ATA 28A				ATA 71	2:00	ATA 70B		ATA 77	1:00
				ATA 72	2:00	ATA 73	3:00		
				ATA 70A		ATA 73A			
				ATA 70B		ATA 74	1:00		
						ATA 75	1:00		
		Phase 3 Exam							
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**

Day 21	Hrs: Mins	Day 22	Hrs: Mins	Day 23	Hrs: Mins	Day 24	Hrs: Mins	Day 25	Hrs: Mins
ATA 77	1:00	ATA 80	1:00	Practical Training	6:00	Practical Training	6:00	Practical Training	6:00
ATA 78	1:00	ATA 21	5:00						
ATA 79	3:00	ATA 21A							
ATA 80	1:00								
		Phase 4 Exam							
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**
Day 26	**Hrs: Mins**	**Day 27**	**Hrs: Mins**	**Day 28**	**Hrs: Mins**	**Day 29**	**Hrs: Mins**	**Day 30**	**Hrs: Mins**
Practical Training	6:00	Practical Training	6:00	Practical Training	6:00	Practical Training	6:00	Practical Training	6:00
Total Hours:	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**	**Total Hours:**	**06:00**
Day 31	**Hrs: Mins**	**Day 32**	**Hrs: Mins**	**Day 33**	**Hrs: Mins**				
Practical Training	6:00	Practical Training	6:00	**Practical Assessment**					
Total Hours:	**06:00**	**Total Hours:**	**06:00**						

1.5 TRAINING LESSON PLAN

1.5.1 Phase No. 1

ATA CHAPTER 00

OBJECTIVES: After completion of ATA CHAPTER 00, the trainee will be able to:

- Provide a simple description of AW189 operating capabilities.
- Identify main systems and components of the AW189.
- Define the general configuration of AW189.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	1:00	1. Aircraft Description 2. Doors and Emergency Exits 3. Fuel System 4. Hydraulic System 5. Electrical System 6. Dynamic Systems 7. Power Plant 8. Avionics System Architecture	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 04

OBJECTIVES: After completion of ATA CHAPTER 04, the trainee will be able to:

- Define the airworthiness limitations of AW189.
- Define the AW189 technical publication used to perform maintenance activities.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	1:00	1. General 2. Civil Crew Information 3. Data Module Code 4. Service Bulletins (SB) 5. Aircrew Publication	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 05

OBJECTIVES: After completion of ATA CHAPTER 05, the trainee will be able to:

- Understand the AW189 instructions for accomplishment of the scheduled and unscheduled inspections.
- Define and understand the AW189 time limits, maintenance tasks overview and conditional inspections.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. General 2. Time Limits 3. Scheduled Maintenance Check	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 06

OBJECTIVES: After completion of ATA CHAPTER 06, the trainee will be able to:

- Define and understand on how to use the AW189 station, butt-line and water-line numbering system.
- Understand the importance of the numbering system and datums.
- Define the primary zones, sub-zones and areas.
- Describe the access provisions.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Helicopter Dimensions Length, Height, Width, Rotor Diameter 2. Reference Lines 3. Zones and Areas 4. Access Provisions	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 46

OBJECTIVES: After completion of ATA CHAPTER 46, the trainee will be able to:

- Define and understand the AW189 system integration and display's architecture and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	8:00	1. Systems Overview 2. Aircraft and Mission Management System (AMMS) 3. Operation of the AMMS AMMC 4. Data Transfer Device (DTD) 5. Cockpit Display System (CDS) 6. Primary Flight Display Bezel Key Menus 7. Multifunction Display Bezel Key Menus 8. Cockpit Display System CDS Panels and Controls 9. CDS Failure Modes 10. Crew Alerting System (CAS)	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 24

OBJECTIVES: After completion of ATA CHAPTER 24, the trainee will be able to:

- Define and understand the AW189 electrical power generation, distribution, operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	6:00	1. System Overview 2. Components Description 3. Starter Generator Control Unit (SGCU) 4. Circuit Breaker Panel (CBP) 5. Controls and Indications 6. AC and DC Ground Power Unit 7. Warning and Caution Flags – Examples 8. Operation 9. ECDU DF and Locked CB List	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 31/31A

OBJECTIVES: After completion of ATA CHAPTER 31/31A, the trainee will be able to:

- Define and understand the AW189 indicating and recording systems architecture, operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Cockpit Voice Flight Data Recorder (CVFDR) 3. Cockpit Voice Flight Data Recorder (CVFDR) Components Description 4. Cockpit Voice Flight Data Recorder (CVFDR) Controls and Indications 5. Cockpit Voice Flight Data Recorder 6. Chronometer 7. Outside Air Temperature Probe	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 97

OBJECTIVES: After completion of ATA CHAPTER 97, the trainee will be able to:

- Define and understand the AW189 image and recording systems operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. Components Description 3. Controls and Indications 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 33

OBJECTIVES: After completion of ATA CHAPTER 33, the trainee will be able to:

- Define and understand the AW189 internal, external and emergency lighting.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Internal Lights 3. Backlight Dimmer Unit Inputs and Outputs 4. External Lights 5. Emergency Lights 6. Helicopter Emergency Egress Lighting System (HEELS)	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 23

OBJECTIVES: After completion of ATA CHAPTER 23, the trainee will be able to:

- Define and understand the AW189 communication system architecture and components identification.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	4:00	1. System Overview 2. Communication System Architecture 3. Communications Components 4. Communication Controls and Indications 5. Communication Operation 6. VHF Components Description 7. VHF Controls and Indications 8. VHF Operation 9. Maintenance Data	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 34

OBJECTIVES: After completion of ATA CHAPTER 34, the trainee will be able to:

- Define and understand the AW189 navigation systems and its operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	10:00	1. System Overview 2. Landing and Taxiing Aids Sub System 3. Independent Position Determining Sub System 4. Dependent Position Determining Sub System 5. Flight Management Computing Sub System 6. Flight Environment Data 7. System Components 8. ADU Location and Functionality 9. OAT Sensors Location and Functionality 10. ADS Miscompare Annunciation 11. ADS Failure Indications and Cas Message 12. Baro Set 13. ADS Operation 14. Attitude and Direction 15. Attitude Heading Reference Unit (AHRU) 16. AHRS Indications On PFD 17. Attitude And Slip/Skid Indications 18. AHRS Heading Indications On PFD 19. AHRS Miscompare Annunciators 20. Independent Standby Instrument 21. Normal Indications 22. VOR/ILS Indications 23. Flags And Annunciators 24. ISIS IBIT Display Pages 25. Configuration Failure Display 26. VOR - ILS – MKRB 27. VOR/LOC Antenna 28. Glide Slope (GS) Antenna 29. Test Pattern 30. Search Modes Operations 31. Automatic Direction Finder (ADF) 32. ADF PFD Control and Indication 33. ADF Test Operation 34. DME Indications on PFD 35. DME MCDU Operation 36. TCAS II Test 37. FMS Nav Source Selection 38. Miscompare and Failure Flags 39. FMS Invalid Data Indications	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

1.5.2 Phase No. 2

ATA CHAPTER 22

OBJECTIVES: After completion of ATA CHAPTER 22, the trainee will be able to:

- Define and understand the AW189 automatic flight control system operation, components, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	5:00	1. System Overview 2. Components Description 3. Controls and Indications 4. Operation 5. Attitude (ATT) Mode 6. Autonomous Approach Mode (NAPP) 7. AFCS CSF and Alert Annunciations	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 45

OBJECTIVES: After completion of ATA CHAPTER 45, the trainee will be able to:

- Define and understand the AW189 central maintenance system architecture, interfaces, components, controls, indications and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Components Description	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 25/25A

OBJECTIVES: After completion of ATA CHAPTER 25/25A, the trainee will be able to:

- Define and understand the AW189 equipment/furnishing and emergency equipment.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Deployable Emergency Locator Transmitter (ADELT) 3. System Interface Unit 4. Automatic Operation 5. Emergency Locator Transmitter (ELT) 6. Emergency Equipment (OFFSHORE) 7. Flight Compartment 8. Passenger Compartment	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 95

OBJECTIVES: After completion of ATA CHAPTER 95, the trainee will be able to:

- Define and understand the AW189 crew escape and safety architecture, operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. Emergency Floatation - System Overview 2. Components Description 3. Controls and Indications 4. Operation 5. Life Raft - System Overview 6. Component Description 7. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 30

OBJECTIVES: After completion of ATA CHAPTER 30, the trainee will be able to:

- Define and understand the AW189 ice and rain protection system mode of operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Pilot Heating 3. ECDU Control 4. Windshield Wiper/Wash 5. Engine Air Intakes	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 53

OBJECTIVES: After completion of ATA CHAPTER 53, the trainee will be able to:

- Define and understand the AW189 fuselage structure.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Fuselage Structure 3. Components Description 4. Fuel Bay 5. Rear Fuselage Overview	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 55

OBJECTIVES: After completion of ATA CHAPTER 55, the trainee will be able to:

- Define and understand the AW189 stabilizer structure.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. General Description 2. Component Description 3. Horizontal Stabilizer 4. Strobe Lights	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 52

OBJECTIVES: After completion of ATA CHAPTER 52, the trainee will be able to:

- Define and understand the AW189 cockpit doors, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. Components Description 3. Controls and Indications 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 56

OBJECTIVES: After completion of ATA CHAPTER 56, the trainee will be able to:

- Define and understand the purpose and type of AW189 windows.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. Component Description 3. Cockpit Door Windows	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 50

OBJECTIVES: After completion of ATA CHAPTER 50, the trainee will be able to:

- Define and understand the AW189 cargo and accessory compartment and baggage limitations.
- Describe the AW189 cargo restraint system.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. System Operation 3. Cargo/Baggage Compartment Doors 4. Baggage Compartment Boxes (BCB)	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 07

OBJECTIVES: After completion of ATA CHAPTER 07, the trainee will be able to:

- Identify the AW189 jacking points and procedure for jacking.
- Understand AW189 slinging maintenance procedure.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Jacking 2. Slinging	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 08

OBJECTIVES: After completion of ATA CHAPTER 08, the trainee will be able to:

- Describe the AW189 mass and balance.
- Define charts and forms used.
- Describe levelling and weighing procedure.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Mass and Balance (C.G. Data) 2. Weight and Center of Gravity Limitations 3. Levelling 4. Weighing 5. Charts	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 09

OBJECTIVES: After completion of ATA CHAPTER 09, the trainee will be able to:

- Describe the handling and taxiing procedure of AW189.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Handling 2. Taxiing	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 10

OBJECTIVES: After completion of ATA CHAPTER 10, the trainee will be able to:

- Describe the AW189 parking and mooring procedure.
- Identify special tooling or equipment.
- Understand the storage condition.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Parking and Mooring 2. Mooring 3. Storage	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 11

OBJECTIVES: After completion of ATA CHAPTER 11, the trainee will be able to:

- Define the AW189 colour schemes, exterior and interior placards.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Colour Schemes 2. Exterior Placards 3. Interior Placards	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 12

OBJECTIVES: After completion of ATA CHAPTER 12, the trainee will be able to:

- Define and understand the AW189 procedure and data for the servicing.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	2:00	1. Introduction 2. Replenishing and Depleting 3. Scheduled Servicing 4. Landing Gears Wheel Tires Inflation 5. Unscheduled Servicing 6. Wheel Brake and Parking Module 7. Support Equipment Connect/Disconnect External	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 20

OBJECTIVES: After completion of ATA CHAPTER 20, the trainee will be able to:

- Define and understand the AW189 air vehicle standard practices and procedures.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 1 (as per MTP Part 1.2.2)	0:30	1. Hydraulic System - Standard Practices 2. Hydraulic System Test	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

1.5.3 Phase No. 3

ATA CHAPTER 63/63A

OBJECTIVES: After completion of ATA CHAPTER 63/63A, the trainee will be able to:

- Define and understand the AW189 main rotor drives architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	6:00	1. System Overview 2. Component Description MGB 3. Main Gearbox Input Modules 4. MGB Drains 5. Controls and Indications 6. Input Module Indicators 7. Oil Temperature Sensor and Switch 8. Operation 9. Rotor Brake System Overview 10. Components Description 11. Controls and Indications 12. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 62

OBJECTIVES: After completion of ATA CHAPTER 62, the trainee will be able to:

- Define and understand the AW189 main rotor architecture and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. General Architecture 3. Components Description 4. Main Rotor Blade 5. Dynamic Balance Weights 6. Main Rotor Head Assembly 7. Elastomeric Bearing Operation 8. Operation Rotor	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 65/65A

OBJECTIVES: After completion of ATA CHAPTER 65/65A, the trainee will be able to:

- Define and understand the AW189 tail rotor drives architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	4:00	1. System Overview 2. Components Description 3. Flexible Couplings 4. Lubrication 5. Controls and Indications 6. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 64

OBJECTIVES: After completion of ATA CHAPTER 64, the trainee will be able to:

- Define and understand the AW189 tail rotor architecture.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Elastomeric Bearing 4. Tail Rotor Head Introduction 5. Spider and Slider Assembly	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 60

OBJECTIVES: After completion of ATA CHAPTER 60, the trainee will be able to:

- Define and understand the AW189 standard practices related to rotor maintenance requirements.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. General Introduction 2. Cleaning 3. Dye Penetrant	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 18

OBJECTIVES: After completion of ATA CHAPTER 18, the trainee will be able to:

- Define and understand the AW189 vibration and noise analysis and attenuation architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Components Description Transmission Vibration Monitoring 3. Structure Vibration Monitoring 4. Controls and Indications 5. Data Display	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 29/29A

OBJECTIVES: After completion of ATA CHAPTER 29/29A, the trainee will be able to:

- Define and understand the AW189 hydraulic system architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	4:00	1. System Overview 2. Components Description 3. PCM Reservoir 4. Controls and Indications 5. Electrical Control Display Unit 6. Operation 7. Indications in Normal Operations 8. Hydraulic System Pressurisation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 32/32A

OBJECTIVES: After completion of ATA CHAPTER 32/32A, the trainee will be able to:

- Define and understand the AW189 landing gear system layout, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Extension/Retraction Actuator 4. Landing Gear Control Valve 5. Parking Brake Lever 6. Controls and Indications 7. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 67

OBJECTIVES: After completion of ATA CHAPTER 67, the trainee will be able to:

- Define and understand the AW189 rotor flight control architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Collective Trim Actuator 4. Main Rotor Servo Actuator (MRA) General 5. Tail Rotor Actuator 6. Controls and Indications 7. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 28/28A

OBJECTIVES: After completion of ATA CHAPTER 28/28A, the trainee will be able to:

- Define and understand the AW189 fuel system operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	4:00	1. System Overview 2. Components Description 3. Boost Pumps 4. Pressure Switch (Sump) 5. Pressure Refuel/Defuel 6. Controls and Indications 7. Electronic Control Display Unit 8. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 26

OBJECTIVES: After completion of ATA CHAPTER 26, the trainee will be able to:

- Define and understand the AW189 fire protection system architecture.
- Define and understand the AW189 fire extinguishing procedure.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Components Description 3. Controls and Indications 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

1.5.4 Phase No. 4

ATA CHAPTER 49

OBJECTIVES: After completion of ATA CHAPTER 49, the trainee will be able to:

- Define and understand the AW189 airborne auxiliary power architecture, operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	5:00	1. System Overview 2. Components Description 3. Standard and Aero Burners 4. APU Oil Schematic 5. Air/Oil Heat Exchanger 6. Ignition System 7. Controls and Indications 8. Operation 9. Fuel System 10. Maintenance Data – Scheduled Maintenance	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 70

OBJECTIVES: After completion of ATA CHAPTER 70, the trainee will be able to:

- Define and understand the AW189 engine standard practices, safety conditions and general maintenance.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. Standard Practices 2. Maintenance General	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 71

OBJECTIVES: After completion of ATA CHAPTER 71, the trainee will be able to:

- Describe the AW189 powerplant system, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Components Description 3. Controls and Indications	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 72/70A/70B

OBJECTIVES: After completion of ATA CHAPTER 72/70A/70B, the trainee will be able to:

- Define and understand the AW189 engine characteristic, architecture and performance.
- Define and understand the AW189 engine controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Compressor Section 4. Controls and Indications	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 73/73A

OBJECTIVES: After completion of ATA CHAPTER 73/73A, the trainee will be able to:

- Define and understand the AW189 engine fuel and control system architecture and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Fuel Filter and Bypass 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 74

OBJECTIVES: After completion of ATA CHAPTER 74, the trainee will be able to:

- Define and understand the AW189 engine ignition system architecture and components.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. Components Description	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 75

OBJECTIVES: After completion of ATA CHAPTER 75, the trainee will be able to:

- Define and understand the AW189 engine air architecture, components and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Operation 4. Air Flow	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 76

OBJECTIVES: After completion of ATA CHAPTER 76, the trainee will be able to:

- Define and understand the AW189 engine control architecture and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Engine To Cockpit Interfaces 3. AEO and OEI Limit Switches 4. Components Description 5. Operation 6. Overspeed/Shutdown System	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 77

OBJECTIVES: After completion of ATA CHAPTER 77, the trainee will be able to:

- Define and understand the AW189 engine indicating architecture, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Controls and Indications 3. Engine Synoptic Format 4. Typical Engine Scales	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 78

OBJECTIVES: After completion of ATA CHAPTER 78, the trainee will be able to:

- Define and understand the AW189 engine exhaust system overview and components description.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	1:00	1. System Overview 2. Components Description	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 79

OBJECTIVES: After completion of ATA CHAPTER 79, the trainee will be able to:

- Define and understand the AW189 engine oil lubrication architecture, components and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	3:00	1. System Overview 2. Components Description 3. Oil Filter 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 80

OBJECTIVES: After completion of ATA CHAPTER 80, the trainee will be able to:

- Define and understand the AW189 engine starting architecture, components, operation, controls and indications.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	2:00	1. System Overview 2. Components Description 3. Controls and Indications 4. Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

ATA CHAPTER 21/21A

OBJECTIVES: After completion of ATA CHAPTER 21/21A, the trainee will be able to:

- Define and understand the AW189 environmental control system architecture and operation.

CONTENTS:

Training Level	Duration (hrs;mins)	Contents	Method	Materials Used
Level 3 (as per MTP Part 1.2.2)	5:00	1. System Overview 2. Components Description 3. Full ECS Components Description 4. Controls and Indications 5. Control Panel Full ECS (Optional Installation) 6. Control Panel Heating and Ventilation 7. Operation 8. Shutoff Valve Operation	1. PDF presentation 2. Laptop 3. Classroom (as per MTP Part 1.2.2)	1. Training Notes 2. Instructor Guide (as per MTP Part 1.6)

1.6 TRAINING COURSE MATERIALS

1.6.1 Training Notes

Phase No.	Training Notes Reference	Issue No.	Revision No.	Date
1	GAM/CAAM/TN/AW189/B1B2/P1	2	0	01 December 2023
2	GAM/CAAM/TN/AW189/B1B2/P2	2	0	01 December 2023
3	GAM/CAAM/TN/AW189/B1B2/P3	2	0	01 December 2023
4	GAM/CAAM/TN/AW189/B1B2/P4	2	0	01 December 2023

1.6.2 Instructor Guide

No.	Instructor Guide Reference	Issue No.	Revision No.	Date
1.	GAM/CAAM/IG/AW189/B1B2	2	0	01 December 2023

1.7 LIST OF STRUCTURED PRACTICAL TRAINING AND ITS ASSOCIATED DOCUMENTS

a) The list of Structured Practical Training (SPT) tasks that are to be performed by the trainees are described in the SPT logbook.

b) Refer MTP Part 1.7.1 for the SPT syllabus and MTP Part 1.10 for the SPT logbook reference.

1.7.1 Training Syllabus – Structured Practical Training

Total Hours for Structured Practical Training (SPT) (including assessment) :	66:00 Hours (11 Days)

Chapters		**Tasks for each ATA**	**Category B1.3 & B2**						**Min Tasks Required for Each ATA**
			LOC	**FOT**	**SGH**	**R/I**	**MEL**	**TS**	
Introduction Module:									
5	Times Limits / Maintenance Checks	1	1	—	—	—	—	—	**1**
6	Dimensions and Areas	1	1	—	—	—	—	—	**1**
7	Lifting, Shoring, Recovering and Transporting	1	1	—	—	—	—	—	**1**
8	Levelling and Weighing	2	1	—	1	—	—	—	**1**
9	Handling and Taxiing	2	1	—	1	—	—	—	**2**
10	Parking, Mooring and Storing	2	1	—	1	—	—	—	**1**
11	Placards and Markings	1	1	—	—	—	—	—	**1**
12	Servicing	2	1	—	1	—	—	—	**2**
20	Standard Practice - Airframe System	2	1	—	1	—	—	—	**2**
Introduction Module Total Tasks:		14	9	—	5	—	—	—	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**8**	—	**4**	—	—	—	
									12
Helicopters:									
18	Vibration and Noise Analysis and Attenuation	2	1	—	—	—	—	1	**1**

Chapters		Tasks for each ATA	Category B1.3 & B2						Min Tasks Required for Each ATA
			LOC	FOT	SGH	R/I	MEL	TS	
60	Standard Practice - Rotors	2	1	—	1	—	—	—	**1**
62	Main Rotors	4	1	—	1	1	—	1	**2**
63	Main Rotors Drives	5	1	1	—	1	1	1	**3**
63A	Main Rotor Drives – Monitoring and Indicating								
64	Tail Rotors	4	1	1	1	0	0	1	**2**
65	Tail Rotors Drives	4	1	1	—	1	0	1	**2**
65A	Tail Rotors Drives - Monitoring and Indicating								
67	Rotors Flight Control	4	1	1	1	—	0	1	**2**
95	Crew Escape and Safety	5	1	0	1	1	1	1	**3**
Helicopters Total Tasks:		30	8	4	5	4	2	7	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**4**	**2**	**3**	**2**	**1**	**4**	
									16
53	Fuselage	2	1	—	—	—	—	1	**1**
55	Stabilizers	1	1	—	—	—	—	—	**1**
56	Windows and Canopies	2	1	—	—	—	—	1	**1**
52	Doors	2	1	1	0	—	—	—	**1**
Airframe Structures Total Tasks:		7	4	1	0	—	—	2	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**2**	**1**	**0**	**—**	**—**	**1**	
Total Tasks Performed on Each Task Code:					**0**	**—**	**—**		**4**
Airframe systems:									
21	Environmental Control	4	1	1	0	—	1	1	**2**

Chapters		Tasks for each ATA	Category B1.3 & B2						Min Tasks Required for Each ATA
			LOC	FOT	SGH	R/I	MEL	TS	
21A	Air Supply								
22	Autoflight	5	1	1	1	1	0	1	**3**
23	Communications	6	1	1	1	1	1	1	**4**
24	Electrical Power	5	1	1	1	1	0	1	**3**
25	Equipment / Furnishings	8	2	2	0	2	1	1	**5**
25A	Electronic Equipment / emergency equipment								
26	Fire Protection	6	1	1	1	1	1	1	**4**
28	Fuel System	6	1	1	1	1	1	1	**4**
28A	Fuel System - Monitoring and Indicating								
29	Hydraulic Power	5	1	1	1	1	0	1	**3**
29A	Hydraulic Power - Monitoring and Indicating								
30	Ice and Rain Protection	6	1	1	1	1	1	1	**4**
31	Indicating / Recording Systems	11	2	2	1	2	2	2	**6**
31A	Instruments System								
97	Image and Recording System	3	1	1	—	—	—	1	**2**
32	Landing Gear	6	1	1	1	1	1	1	**4**
32A	Landing Gear - Monitoring and Indicating								
33	Lights	5	1	1	1	1	1	—	**3**
34	Navigation	6	1	1	1	1	1	1	**4**
46	System Integration and Display	5	1	1	—	1	1	1	**3**

Chapters		Tasks for each ATA	Category B1.3 & B2						Min Tasks Required for Each ATA
			LOC	FOT	SGH	R/I	MEL	TS	
50	Cargo and Accessory Compartment	2	1	—	1	—	—	—	**1**
Airframe Systems Total Tasks:		89	18	15	14	15	12	15	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**12**	**9**	**8**	**9**	**8**	**9**	
									55
Turbine/Piston Engine Module:									
70	Standard Practices - Engine	3	1	—	1	—	—	1	**2**
70A	Constructional arrangement and operation								
70B	Engine Performance								
71	Powerplant	3	1	1	1	—	—	—	**2**
72	Engine	1	1	—	—	—	—	—	**1**
73	Engine Fuel and Control	4	1	1	—	1	0	1	**2**
73A	FADEC								
74	Ignition	2	1	1	—	—	—	—	**1**
75	Air	3	1	—	—	1	—	1	**2**
76	Engine Control	3	1	1	—	—	—	1	**2**
77	Engine Indicating	3	1	1	—	—	0	1	**2**
78	Exhaust	2	1	1	—	—	0	—	**1**
79	Oil	3	1	—	1	1	—	—	**2**
Turbine/Piston Engine Module Total Tasks:		27	10	6	3	3	0	5	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**7**	**4**	**2**	**2**	**0**	**3**	
									18

Chapters		Tasks for each ATA	Category B1.3 & B2						Min Tasks Required for Each ATA
			LOC	FOT	SGH	R/I	MEL	TS	
Auxiliary Power Units (APUs):									
49	Airborne Auxiliary Power	4	1	1	1	—	—	1	2
Auxiliary Power Units (APUs) Total Tasks:		4	1	1	1	—	—	1	**Total Min Tasks Required:**
Min Tasks Performed on Each Task Code:			**0**	**1**	**1**	—	—	**0**	
Total Tasks Performed on Each Task Code:						—	—		**2**

Grand Total of Tasks:	171	Category B1 & B2						Grand Total of Min Tasks Required:
		LOC	FOT	SGH	R/I	MEL	TS	
Grand Total of Tasks on Each Task Code:		50	27	28	22	14	30	**107**
Grand Total of Min Tasks Performed on Each Task Code:		**33**	**17**	**18**	**13**	**9**	**17**	

Note:

1/2/3/4/5/6:	Number of Structured Practical Training (SPT) tasks
0:	Task required by CAAM CAD 1801 Appendix 3.1, however unable to meet due to tasks not available as per AW189 Maintenance Publication: Doc. No. 89-A-AMP-00-X
—	Task not required by CAAM CAD 1801 Appendix 3.1

1.8 STRUCTURED PRACTICAL TRAINING LOGBOOK / TASK RELATED

a) The Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 & B2 type training course's Structured Practical Training (SPT) tasks is tailored to the aircraft to meet the requirements for endorsement in the CAAM Part 145 individual authorisation.

b) The SPT tasks are specifically designed for the certifying staff Category B1.3 and B2 as identified in the SPT logbook.

c) The SPT logbook is developed based on the format of CAAM/AW/1801-11 CAAM PART 66 - Aircraft Type Practical Training, Aircraft Maintenance Licence's Logbook.

d) The SPT logbook serves as a record for essential details such as personnel data, SPT tasks performed and practical assessments.

e) Trainees are required to perform at least the minimum tasks required for each ATA and meet the grand total of minimum tasks required as indicated in the SPT logbook Section 2.3 to be able to qualify for the practical assessment.

f) By derogation to above MTP Part 1.8 (e), if the trainee does not meet the requirements, he will not be allowed to sit for the practical assessment.

g) Refer to MTP Part 1.10 for the SPT logbook reference.

1.9 OPERATIONAL SUITABILITY DATA

a) During development of this Maintenance Training Programme these Operational Suitability Data (OSD) are referred to:

i. MMEL - 189G0270Q001 Rev. A dated 12 May 2014, or later EASA approved revisions.

ii. Flight Crew Data - 189G0000N017 Issue B, dated 16 November 2016, EASA approved on 30 November 2018, or later approved revisions.

1.10 CROSS REFERENCING OF STRUCTURED PRACTICAL TRAINING LOGBOOK

a) Refer below for the Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 Structured Practical Training (SPT) logbook reference material:

No.	Structured Practical Training (SPT) Logbook Reference	Issue No.	Revision No.	Date
1.	GAM/CAAM/SPTL/AW189/B1B2	2	0	01 December 2023

PART 2:

ASSESSMENT AND EXAMINATION

2.1 ASSESSMENT PLAN

2.1.1 Practical Assessment Standard

a) The practical assessment standard for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to the MTOE Part 2.13.

b) Disqualification of practical assessment for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to the MTOE Part 2.13 (l).

c) The practical assessor shall assess the trainee on three (3) different practical element tasks based on the approved Practical Assessment Questions and the trainee must pass all to be considered as competent. Refer SPT Logbook Section 3.1.

d) By derogation from above MTP Part 2.1.1 (c), the practical assessment shall include the observable behaviour that require the competency of relevant knowledge, skill and attitude as described in the SPT Logbook Section 3.3.

e) If the trainee does not PASS the assessment, the trainee is allowed to attend a maximum of two (2) re-assessments. Refer MTP Part 2.3.2 for re-assessments.

2.1.2 Document Reference

2.1.2.1 Structured Practical Training Logbook

a) The Structured Practical Training (SPT) logbook of Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to MTP Part 1.10.

2.1.2.2 Practical Assessment Record

a) The practical assessment record of Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to the SPT logbook Section 3.1 as described in MTP Part 1.10.

2.1.2.3 Practical Assessment Schedule

a) The practical assessment schedule for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall be as outlined in MTP Part 1.4.2.

2.1.2.4 Practical Assessment Questions

a) The Practical Assessor (PA) shall refer to the Practical Assessment Questions (PAQ) when conducting the practical assessment.

b) The PAQ reference for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training is as described below:

No.	Practical Assessment Questions (PAQ) Reference	Issue No.	Revision No.	Date
1.	GAM/CAAM/PAQ/AW189/B1B2	1	0	01 April 2023

2.2 EXAMINATION PLAN

2.2.1 Theoretical Examination Standard

a) Theoretical examination standard for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to MTOE Part 2.10.1.

b) Disqualification of exam paper shall make a reference to MTOE Part 2.12 (o) and Part 2.12 (p).

2.2.2 Document Reference

2.2.2.1 Examination Syllabus

a) The examination syllabus, number of questions and total of exam question for each phase of Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to MTP Part 1.2.2.

2.2.2.2 Examination Schedule

a) The examination schedule for Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall be as outlined in MTP Part 1.4.2.

2.2.2.3 Examination Paper Reference

a) The examination paper reference for theoretical element of Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training will be as indicated in the table below:

Phase No.	Examination Paper Reference	Issue No.	Revision No.	Date
1	GAM/CAAM/AW189/B1B2/P1/S1	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P1/S2	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P1/S3	2	0	01 December 2023
2	GAM/CAAM/AW189/B1B2/P2/S1	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P2/S2	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P2/S3	2	0	01 December 2023
3	GAM/CAAM/AW189/B1B2/P3/S1	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P3/S2	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P3/S3	2	0	01 December 2023
4	GAM/CAAM/AW189/B1B2/P4/S1	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P4/S2	2	0	01 December 2023
	GAM/CAAM/AW189/B1B2/P4/S3	2	0	01 December 2023

2.3 RE-EXAMINATION AND RE-ASSESSMENT

2.3.1 Re-Examination

a) Re-examination of the Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to MTOE Part 2.14.2.

2.3.2 Re-Assessment

a) Re-assessment of the Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training shall make a reference to MTOE Part 2.13 (j).

b) If trainees encounter particular situations where they're unable to complete the practical assessment of Leonardo AW189 (GE CT7) CAAM Part 66 Category B1.3 and B2 type training according to the training course schedule as outlined in MTP Part 1.4.2, they shall complete the practical assessment within two (2) years from the start date of the type training, under such circumstances.

PART 3:

FACILITY AND PERSONNEL

3.1 INSTRUCTIONAL STAFF AND CAPABILITY MATRIX

3.1.1 Instructor

No.	Name of Instructor	Licence Category	Capability
1.	Akmal bin Azhar	B1.3	ATA Chapter: 00, 04, 05, 06, 07, 08, 09, 10, 11, 12, 20, 53, 55, 52, 56, 50, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 18, 60, 62, 63/63A, 64, 65/65A, 67, 25/25A, 95, 49, 70, 71, 72/70A/70B, 73/73A, 74, 75, 76, 77, 78, 79, 80, 24, 33.
2.	Ahmad Zhafri bin Mohd Nor	B2	ATA Chapter: 00, 04, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 63/63A, 65/65A, 25/25A, 49, 73/73A, 74, 76, 77, 22, 23, 24, 31/31A, 97, 33, 34, 45, 46.
3.	Muhammad bin Mohd Taib*	B1.3	ATA Chapter: 00, 04, 05, 06, 07, 08, 09, 10, 11, 12, 20, 53, 55, 52, 56, 50, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 18, 60, 62, 63/63A, 64, 65/65A, 67, 25/25A, 95, 49, 70, 71, 72/70A/70B, 73/73A, 74, 75, 76, 77, 78, 79, 80, 24, 33.
4.	Mohd Azlan bin Tahir*	B2	ATA Chapter: 00, 04, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 63/63A, 65/65A, 25/25A, 49, 73/73A, 74, 76, 77, 22, 23, 24, 31/31A, 97, 33, 34, 45, 46.

Note:

*Associate Instructor

3.1.2 Knowledge Examiner

No.	Name of Instructor	Licence Category	Capability
1.	Akmal bin Azhar	B1.3	ATA Chapter: 00, 04, 05, 06, 07, 08, 09, 10, 11, 12, 20, 53, 55, 52, 56, 50, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 18, 60, 62, 63/63A, 64, 65/65A, 67, 25/25A, 95, 49, 70, 71, 72/70A/70B, 73/73A, 74, 75, 76, 77, 78, 79, 80, 24, 33.
2.	Ahmad Zhafri bin Mohd Nor	B2	ATA Chapter: 00, 04, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 63/63A, 65/65A, 25/25A, 49, 73/73A, 74, 76, 77, 22, 23, 24, 31/31A, 97, 33, 34, 45, 46.

3.1.3 Practical Assessor

No.	Name of Instructor	Licence Category	Capability
1.	Akmal bin Azhar	B1.3	ATA Chapter: 00, 04, 05, 06, 07, 08, 09, 10, 11, 12, 20, 53, 55, 52, 56, 50, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 18, 60, 62, 63/63A, 64, 65/65A, 67, 25/25A, 95, 49, 70, 71, 72/70A/70B, 73/73A, 74, 75, 76, 77, 78, 79, 80, 24, 33.
2.	Ahmad Zhafri bin Mohd Nor	B2	ATA Chapter: 00, 04, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 63/63A, 65/65A, 25/25A, 49, 73/73A, 74, 76, 77, 22, 23, 24, 31/31A, 97, 33, 34, 45, 46.
3.	Muhammad bin Mohd Taib*	B1.3	ATA Chapter: 00, 04, 05, 06, 07, 08, 09, 10, 11, 12, 20, 53, 55, 52, 56, 50, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 18, 60, 62, 63/63A, 64, 65/65A, 67, 25/25A, 95, 49, 70, 71, 72/70A/70B, 73/73A, 74, 75, 76, 77, 78, 79, 80, 24, 33.
4.	Mohd Azlan bin Tahir*	B2	ATA Chapter: 00, 04, 21/21A, 26, 28/28A, 29/29A, 30, 32/32A, 63/63A, 65/65A, 25/25A, 49, 73/73A, 74, 76, 77, 22, 23, 24, 31/31A, 97, 33, 34, 45, 46.

Note:

*Associate Practical Assessor

3.2 THE FACILITY FOR THE STRUCTURED PRACTICAL TRAINING AND ASSOCIATED AGREEMENT WITH OTHER ORGANISATION

3.2.1 Facilities

3.2.1.1 Practical Training – Address and Location

Galaxy Aerospace (M) Sdn. Bhd,
Hangar 2 Universiti Kuala Lumpur,
Malaysia Institute of Aviation Technology (UniKL MIAT),
Subang Campus, UniKL MIAT,
Persiaran A, Off Jalan Lapangan Terbang,
47200 Subang, Selangor Darul Ehsan.

3.2.1.2 Agreement

a) The practical training will be performed at GAM-AMO and will utilize the AW189 (GE CT7) owned by Fire and Rescue Department of Malaysia:

   i. 9M-BOE (Serial No.: 49045)

   ii. 9M-BOF (Serial No.: 49053)

b) Reference to the agreement:

   i. Refer to GAM-AMO CAAM Certificate of Approval No. AMO/2016/02;

   ii. Letter from Fire and Rescue Department of Malaysia Ref. No JBPM/IP/UDA:300-3/6/1 Jld.3(32) Dated 19 September 2022.

3.3 FACILITY FOR OTHER ACTIVITY

Reserved.

PART 4:

EVALUATION AND FEEDBACK

4.1 EVALUATION AND FEEDBACK

The evaluation of the type training must be a continuous process and should involve data collection by various means such as:

a) Independent audits;

i. An independent audit on training will be carried out to monitor the training and examination standards, compliance with and adequacy of the procedures to ensure GAM-MTO meets and continuously in compliance with the elements of its Maintenance Training Organisation Exposition (MTOE).

ii. The Principal Quality Assurance (Training) (PQAT) will be responsible for the audit of training and examination, including the associated feedback system. He shall have direct access to the Accountable Manager (AM) to ensure that the AM is kept properly informed on quality and compliance matters in a timely manner.

b) Feedback from trainees;

i. Trainees must complete the GAM/F-TPM2.5(03) Training Course Evaluation and Feedback form which is distributed to the on the last day of training.

ii. The GAM/F-TPM2.5(03) Training Course Evaluation and Feedback form will be analysed by the Training Manager (TM) for remedial action as necessary to ensure that the trainees acquire the skills and knowledge that should be gained from the training.

iii. This will help to identify training gaps and even discovers opportunities for improving the training programme.

c) Feedback from instructors and practical assessors;

i. Instructors and practical assessors can provide their feedback on the training or assessment by completing the GAM/F-TPM2.5(03) Evaluation and Feedback form which is distributed to the on the last day of training.

ii. The GAM/F-TPM2.5(03) Training Course Evaluation and Feedback form will be analysed by the Training Manager (TM) for remedial action as necessary to ensure the training provided meets it desired objective.

iii. This will help to identify training gaps and even discovers opportunities for improving the training programme.

d) Training course results;

i. An analysis is carried out on the examination results to ascertain that the training and/or examination was conducted to the predefined standards and to determine the cause if the predefined standards are not met.

ii. The Examination Manager (EM) will be responsible for the analysis of examination.

iii. Once the analysis indicates an unusual trend, the Examination Manager shall proceed for a review of the question/s, training course delivery or students' background to determine the cause.

4.2 TRAINING COURSE REPORT

a) The evaluation data collected must be analysed and improvement actions formulated and implemented. In order to determine the effectiveness of the improvement actions, data should be continuously collected and compared against past data before the implementation of improvement.

b) The aircraft type/task training course Certificate of Recognition (COR) will be issued after having successfully completed the training and passed the examination(s) and completed a practical training and passed the practical assessment.

c) The Examination Manager (EM) shall prepare, control and issue the Examination Report and Practical Assessment Report for the issuance of COR.

d) The Training Manager (TM) shall prepare, control and issue the COR after successful completion of the approved training (theoretical and practical), examination and practical assessment.

e) The issuance of Certificate of Recognition shall be as referred to in the MTOE Part 2.17.

f) A training course report shall be prepared by the Subject Matter Expert (SME) within twenty-one (21) days after the end of the training for data collection and shall include the following details:

i. Introduction

ii. Training Course Objectives

iii. Training Methodology

iv. Training Course Content

v. Participant Feedback

vi. Achievements and Outcomes

vii. Recommendations

viii. Conclusion