

Course Title: Working with Technical Documentation; SRM Training



Course Code:
TUI-TD-1

Date:
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Developed by:
Rick van Opdorp

Signature:

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke.

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Scope

After successful completion of this training the student is able to:

- Carry out a correct damage assessment and to report this in a clear, accurate and in the required manner by OEM.
- Indicate an exact damage location to the vehicle.
Be able to divide multiple damage, for example, a lightning strike involving multiple panels.
(important here is, to be able to split the damages, and step by step to arrive at a damage report that ultimately describes all damages).
- Making a damage report.
It has been indicated that sometimes too many detailed photographs are attached, so that there are certainly enough photographs, while this causes confusion. Good explanation about the recording of damages (photo, sketch or on blue print) is necessary.
- Proper handling of the paperwork

Each curriculum module is a subpart of this document:

Module 1: Technical Documentation

Module 2: Advanced Composites: Maintenance and Awareness

Module 3: Advanced Composite Inspection

Duration

3 working days, 24 hours

Start 08:00

Break 12:00 / 13:00

End 17:00

Location

In-company customer site

or

ACRATS, Netherlands

Applicable documents

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

SAE Publications

AIR4844	Composites and Metal Bonding Glossary
AIR5719	Teaching Points for an Awareness Class on "Critical Issues in Composite Maintenance and Repair"
AIR6291	Guidelines for Repair Process Evaluation of Aluminum Bonded Structure
ARP6262	Basic Composite Repair Technician Certification Standard

FAA and EASA Publications

Part 147 EASA AMC 20-29	Composite Aircraft Structure
FAA AC 20-107B	Composite Aircraft Structure

Boeing Publications

Embraer Publications

Airbus Publications

Examinations

It will be required to monitor student performance throughout the program. Students will be administered a written exam following lecture classes and practical assessments in classes. The minimum passing grade for all written exams shall be 75% and all grades shall be recorded in the individual's training records.

The examination and assessment will cover the principles of the applicable curriculum and consist of:

Written examination: The written examination shall contain a casus based on a real practical scenario existing of multiple choice and open questions. The examination shall contain questions from each of the Topics listed in the outline for each Part. The examination will be closed book.

Reexamination: If the student fails the written examination, they may request to retake a written examination.

Certification

Certificated covered by EASA 147 approved training school "Aircraft Maintenance and Training School".

Teaching Levels

The following definitions of minimum teaching levels are derived from Title 14 Code of Federal Regulations, Part 147 and may be exceeded.

Level 1

Level 1 requires knowledge of general principles and includes instruction by lecture, demonstration, and discussion, but does not include practical application or development of manipulative skill. This teaching level generally refers to classroom discussion and does not require practical application. Teaching aids or instructional equipment may include charts, books, diagrams, or other visual teaching aids. If a training organization chooses to teach Level 1 courses incorporating actual components, the components do not have to be operational.

Level 2

Level 2 requires knowledge of general principles and includes instruction by lecture, demonstration, discussion, and limited practical application, but does not include development of sufficient manipulative skill to perform basic operations. This teaching level requires some hands-on manipulative skills and their accompanying actual or simulated components/equipment, but still may be taught primarily in the classroom environment.

Level 3

Level 3 requires knowledge of general principles and includes instruction by lecture, demonstration, discussion, and a high degree of practical application to develop sufficient manipulative skill to accomplish return to service (normal operation). This teaching level requires hands-on skill, as well as sufficient and appropriate instructional aids to train the students to develop manipulative skills sufficient to simulate return to service mechanical skill. At this level, the teaching aids must be similar to or be the actual items of equipment on which the student is expected to develop required skill levels. A Level 3 subject cannot be taught solely by lecture in the classroom; the appropriate training aids and hands-on experience must be used.

Overview day 1

Day Schedule

Time	Subject	Teaching Level	Hours Theory minutes	Hours Practical minutes
08:00 – 08:15	Introduction	1	15	
08:15 – 09:45	Practical Casus (competence check)	2	45	
09:45 – 10:00	Coffee Break	-	15	
10:00 – 12:00	Introduction technical documentation	1	60	
12:00 – 13:00	Lunch	-	60	
13:00 – 14:30	Several Casus (working with technical documentation)	2	90	
14:30 – 14:45	Coffee Break	-	15	
14:45 – 17:00	Several Casus (working with technical documentation)	2	135	

Topic:	Level
Introduction technical manuals and introduction SRM	1
Definitions and applications	1
Most common damages and typical inspections	1
Determination of exact damage location	1
Damage mapping and inspection methods	1
Damage assessment metal structure	1
Damage assessment composite structure	1
Required information for damage report (or submittal) per type of damage	1
Damage reporting (to OEM)	1
Quality requirements and evaluation	1
Flight restrictions	1
Traceability	1
Human factors, health, safety and environment	1

Overview day 2

Day Schedule

Time	Subject	Teaching Level	Hours Theory minutes	Hours Practical minutes
08:00 – 08:15	Introduction	1	15	
08:15 – 09:45	Practical Casus (competence check)	2	45	
09:45 – 10:00	Coffee Break	-	15	
10:00 – 12:00	Introduction technical documentation	1	60	
12:00 – 13:00	Lunch	-	60	
13:00 – 14:30	Several Casus (working with technical documentation)	2	90	
14:30 – 14:45	Coffee Break	-	15	
14:45 – 17:00	Several Casus (working with technical documentation)	2	135	

Topic:	Level
New Generation Airframes	1
Materials used on new generation aircraft	1
Bonded versus Bolted	1
Damages on Composites	3
Damage Removal	3
Vacuum bag Procedures	3
DVD Procedures	3
Quick Composite Repairs	3
Perform Monolithic CF Structural Repair	3
Tools and Equipment used for repairs	1
New Generation Airframes	1
Materials used on new generation aircraft	1
Bonded versus Bolted	1

Overview day 3

Day Schedule

Time	Subject	Teaching Level	Hours Theory minutes	Hours Practical minutes
08:00 – 08:15	Introduction	1	15	
08:15 – 09:45	Practical Casus (competence check)	2	45	
09:45 – 10:00	Coffee Break	-	15	
10:00 – 12:00	Introduction technical documentation	1	60	
12:00 – 13:00	Lunch	-	60	
13:00 – 14:30	Several Casus (working with technical documentation)	2	90	
14:30 – 14:45	Coffee Break	-	15	
14:45 – 17:00	Several Casus (working with technical documentation)	2	135	

Topic:	Level
Mapping of Damage including Inspection Rapport	1
Pre- and Post-Repair Inspection	1
Tap-Testing	1
Thermographic Inspection	3
Damage ramp checker	3
Mapping of Damage including Inspection Rapport	3

Examination

Examination	Written	3 hours
The written examination shall contain multiple choice questions. The examination shall contain questions from each of the Topics listed in the outline for each Part. The examination will be closed book.		