

# ADVANCED COMPOSITE REPAIR TECHNICIAN -EQF LEVEL 5

## SAS Week 46 – 14-18 November

Day	1	2	3	4	5
Time	0800-1600	0800-1600	0800-1600	0800-1600	0800-1500
Class room	<p>Presentation of the 5 Days:</p> <ul style="list-style-type: none"> <li>Skillman</li> <li>New in Composite</li> </ul> <p>Theoretical presentation:</p> <ul style="list-style-type: none"> <li>What is composite</li> <li>Composite Structure types</li> <li>Comparing Density and tensile strength</li> <li>Fiber types, Carbon, Glass, Aramid. And other fibers.</li> <li>Dry fibers, prepreg types and adhesive films.</li> <li>Copper and aluminum mesh.</li> <li>Matrix material: Thermoset and thermo plastic. (and deferent types of resins) (Plastic Law)</li> <li>Matrix handling and calculation.</li> <li>Filler materials</li> <li>Core material types.</li> <li>Composite and robotic.</li> </ul>	<p>Feedback from Day 1:</p> <p>Theoretical Presentation:</p> <ul style="list-style-type: none"> <li>Vacuum bagging layup and types.</li> <li>Vacuum Bagging material.</li> <li>Step sanding and taper sanding, or not.</li> <li>Heating devices and molding.</li> <li>Tool.</li> <li>Hot bonder with accessories.</li> <li>Composite Structure build up: <ul style="list-style-type: none"> <li>Monolithic Structure</li> <li>Sandwich structure.</li> </ul> </li> <li>Cure cycle</li> <li>Failure awareness during layup and cure cycle.</li> <li></li> </ul>	<p>Feedback from Day 2:</p> <p>Theoretical Presentation:</p> <ul style="list-style-type: none"> <li>Types of damage.</li> <li>NDI inspection types. <ul style="list-style-type: none"> <li>NDT manual presentation.</li> <li>Visual inspection.</li> <li>Tap test.</li> </ul> </li> <li>Water break test</li> <li>Water, moisture removal.</li> <li>Environmental condition: <ul style="list-style-type: none"> <li>Workshop</li> <li>Workshop build up</li> <li>in situ condition.</li> </ul> </li> <li>Material handling and storage.</li> <li>Tool, cutting drilling, Ect.</li> </ul>	<p>Feedback from Day 3:</p> <p>Theoretical Presentation:</p> <ul style="list-style-type: none"> <li>SRM Build up and task evaluation: <ul style="list-style-type: none"> <li>Vendor SRM</li> <li>IPC, AMM, Ect. (Goodrich)</li> <li>Small talk repair</li> <li>Cat A, B and C</li> </ul> </li> <li>Bolted repair intro: <ul style="list-style-type: none"> <li>SRM Repair and Why</li> <li>Inspection</li> </ul> </li> <li>Lightning strike on fuselage: <ul style="list-style-type: none"> <li>SRM</li> <li>Procedure for Temporary and permanent repair.</li> </ul> </li> <li>SRM Task Evaluation and preparation: <ul style="list-style-type: none"> <li>Individual task evaluation.</li> <li>Flap repair</li> <li>Fairing panel repair.</li> </ul> </li> </ul>	<p>Feedback from Day 4:</p> <p>Theoretical Presentation:</p> <ul style="list-style-type: none"> <li>Fuel Tank Sealant.</li> <li>SRM Task Out of limit: Repair suggestion.</li> <li>SRM Task Evaluation Continue, from day 4.</li> </ul>
Class room	<p>Practical presentation:</p> <ul style="list-style-type: none"> <li>Daily task</li> </ul> <p>Workshop Presentation:</p> <ul style="list-style-type: none"> <li>Workshop Awareness</li> <li>Epoxy safety</li> <li>MSDS, PP, MAL Codes</li> <li>Human factor</li> </ul>	<p>Practical Presentation:</p> <ul style="list-style-type: none"> <li>Daily task</li> </ul>	<p>Practical Presentation:</p> <ul style="list-style-type: none"> <li>Daily task</li> </ul>	<p>Practical Presentation:</p> <ul style="list-style-type: none"> <li>Daily task</li> </ul>	<p>No practical task.</p> <ul style="list-style-type: none"> <li></li> </ul>
Workshop	<p>Practical task 1:</p> <p>Task 1: Wet layup with 4 ea. Plyes:</p> <ul style="list-style-type: none"> <li>4 ea. Ply Carbon</li> </ul> <p>Curing process with hot bonder.</p>	<p>Practical task 2:</p> <p>Task 2: Use task 1 as bottom plate, fabricate honeycomb core and top layer with 4ea. plyes.</p> <p>Fabricate own Prepreg for next day task. Put to freezer.</p> <p>Curing process with hot bonder.</p>	<p>Practical task 3:</p> <p>Task 3: Task 2 found damaged, perform repair layup, with core repair and taper sanding.</p> <p>Curing with hot bonder.</p>	<p><b>Practical task 4:</b></p> <p><b>Task 4: Use task 3 back side.</b></p> <p><b>Perform edge repair</b></p>	<p><b>Practical:</b></p> <p><b>Discussion</b></p>
Class room	Skillman daily training evaluation 1	Skillman daily training evaluation 2	Skillman daily training evaluation 3	Skillman daily training evaluation 4	Skillman End assessment feedback and test.