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Program Document CR BOK

PD 6103

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BODY OF KNOWLEDGE:

ROLE DESCRIPTION: Aerospace Composite Bonded Repair Technician

SPECIAL PROCESS: Composite Repair

METHOD: Bonded Repair

All PRI QualificationSM program examinations are created using the applicable PRI QualificationSM program Body of Knowledge (BoK), which defines the baseline knowledge and experience required to be considered competent to perform the specified job role in aerospace special process manufacturing.

All BoKs are created by subject matter experts who participate in the PRI QualificationSM Body of Knowledge Review Boards. All BoKs are updated periodically according to the latest revision of PRI QualificationSM program documentation (PD6100: Industry Managed Special Process Bodies of Knowledge) to ensure consistency with current industry practice.

1. INTRODUCTION

This document has been created by the PRI QualificationSM program Composite Repair Body of Knowledge Review Board (CR BoKRB) according to the requirements of PD6100.

This document constitutes the PRI QualificationSM program Body of Knowledge (BoK) for Aerospace Composite Bonded Repair Technician. It defines the baseline knowledge and experience required to be considered competent to perform this role.

Unless otherwise stated, the CR BoKRB has followed guidelines as detailed in the current version of International Aerospace Quality Group (IAQG) Guidance PCAP 001 (Competence Management Guideline) to develop this BoK.

The information in this BoK will provide guidance for the following:

- Training providers who wish to develop training courses intended to support PRI QualificationSM program examination candidate preparation.
- Composite Repair Examination Review Board (CR-ERB) for the development of PRI QualificationSM program examinations.
- Candidates taking PRI QualificationSM program examinations who wish to prepare in advance.
- This Body of Knowledge is designed for an aircraft technician desiring to further their knowledge of composite repairs. The Aerospace Composite Bonded Repair Technician BoK in conjunction with the General Composite Repair Technician BoK is for individuals who intend to become qualified as commercial aircraft composite bonded repair technicians. Persons who successfully complete this aircraft structural repair program are considered to be able to perform composite bonded repairs to aircraft structures in compliance with the manufacturers' repair documentation or other acceptable or approved repair data.
- Please see AIR 4938 Part 2 for more detail about Aerospace Composite Bonded Repair Technician.

PRI values your input. To provide feedback on this document, please contact us at PRIQualification@p-r-i.org.

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2. REFERENCES

PRI QualificationSM program documents:

PD6000	Governance & Administration of PRI Qualification SM Program
PD6100	Industry Managed Special Process Bodies of Knowledge
PD6200	Industry Managed Special Process Examinations System
PD6102	Industry Managed Guidance for Approval of Third Party Training Providers
PD6103	Appendices

International Aerospace Quality Group (IAQG) documents:

IAQG Guidance PCAP 001 Competence Management Guideline

3. DEFINITIONS

Definitions described within are specific to the Special Process BoK. For program-specific definitions, please refer to either the PD 6000 or the PRI QualificationSM Dictionary.

BODY OF KNOWLEDGE (BoK): Baseline knowledge and experience required to be considered competent for a target position.

GENERAL EXAMINATION: The General Examination is designed to ascertain the candidate's general knowledge required for a particular job, role or activity. All of the questions will be derived from the corresponding BoK.

EXPERIENCE: The accumulation of knowledge or skill that results from direct participation in events or activities over a period of time.

KNOWLEDGE: Information / understanding acquired over a period of time. Information acquired through study and retained over that period of time (education, training, experience etc.) The combination of data and information, to which is added expert opinion, skills and experience, to result in a valuable asset which can be used to aid decision making and problem solving.

LEVEL: A class or division of a group based on education, training and experience. There are 3 levels: Operator/Technician, Planner and Owner. Please refer to the current version of PD 6000 for definitions.

METHOD: A well-defined division of a SPECIAL PROCESS widely recognised by industry. A specific area of a special process for example anodizing within Chemical Processing.

NON-SPECIAL PROCESS RELATED REQUIREMENTS: Miscellaneous requirements such as Health and Safety, Environmental, etc.

PERSONAL ATTRIBUTES: A quality or characteristic expected and required for a particular job, role or activity.

PRACTICAL EXAMINATION: The Practical Examination shall consist of a demonstration of proficiency in performing tasks that are typical of those to be accomplished in the performance of the candidate's duties. The examination content is derived from the corresponding BoK.

REPAIR: The rebuilding of a rejected assembly to restore its intended form, fit and function (as defined in AIR4844).

SKILL: Ability to perform a particular task. The quality of being able to do something that is acquired or developed through training or experience.

SPECIFIC EXAMINATION: The Specific Examination shall cover requirements and use of the specifications, codes, equipment, operating procedures and test techniques the candidate may use in the performance of his/her duties with the employer. Examination content will be derived from the corresponding BoK where applicable.

WEIGHTING: The “weighting” of each line item, using a scale of 1, 3, 7, 10, (1 being least important; 10 being most important) indicates the relative importance of that aspect of the BoK and will determine the likelihood and frequency of a question on that topic appearing in the examination.

4. GUIDANCE TO EXAMINATION CANDIDATES

All PRI QualificationSM program examination candidates are recommended to read all documents referenced in section 2 of this document.

As stated in PRI QualificationSM program document PD6200, every exam question shall relate directly to and be derived from the information as detailed in the current revision of the BoK.

Re-assessment of candidates to this Body of Knowledge is required every 3 years (ARP 6262) unless otherwise specified; not to exceed 5 years.

Candidates are therefore advised to ensure familiarity with all aspects of the BoK as detailed in Table 1. This can be done through:

- Self-study
- Completion of internal training
- Completion of external training (a list of Approved Training Providers can be found at <https://p-r-i.org/>)

Records of all qualified personnel shall be maintained and include:

- Date of Qualification
- Results of Written Exam
- Results of Practical Exam (if applicable)
- Summary of Experience

5. LEVELS

Descriptors	Level		
	Operator (OP) / Technician (T)	Planner (PL)	Owner (OW)
	<i>For descriptions, please refer to current version of PD6000</i>	<i>For descriptions, please refer to current version of PD6000</i>	<i>For descriptions, please refer to current version of PD6000</i>
Composite Bonded Repair Specific Criteria	<p>Meets the requirements of General Composite Repair Technician.</p> <p>Able to perform composite bonded repairs to aircraft structures in compliance with the manufacturers' repair documentation or other acceptable or approved repair data.</p> <p>Please see AIR 4938 Part 2 for more detail about Aerospace Composite Bonded Repair Technician.</p>	Level N/A for Composite Repair	Level N/A for Composite Repair
Technical Knowledge	Basic knowledge of the special process, its main processes, methods and tools.	<i>Level N/A for Composite Repair</i>	<i>Level N/A for Composite Repair</i>
Experience	Sufficient experience to deal with recurrent activity.	<i>Level N/A for Composite Repair</i>	<i>Level N/A for Composite Repair</i>
Personal Attributes	Takes into consideration behavioral characteristics such as but not limited to: team working, communication, direction and purpose, innovation and problem solving, mutual trust and respect, confidentiality and trustworthiness.		
Skills	Describe the activities necessary to perform each level of job function to comply with the Body of Knowledge.		
Non-Special Process Related Requirements	Health & Safety, Environmental, Quality System Requirements.		

6. TABLE 1

ROLE DESCRIPTION: Technician

SPECIAL PROCESS: Composite Repair

METHOD: Composite Bonded Repair

REFERENCE GUIDELINES: *Addendum 1 is a list of the International Standards applicable to Composite Repair*

Row #	COMPETENCE	Weight (1,3,7,10)	Exam Type Written / Practical	Reference Guidelines
	KNOWLEDGE: The basic knowledge of the special processes, methods and tools			
	Has a working knowledge and understanding of the following:			
1	Introduction to Aircraft Composite Structure			
2	Advantages / Disadvantages	7	Written	Essentials of Advanced Composite Fabrication & Repair
3	Electrical and Thermal Conductivity	7	Written	Essentials of Advanced Composite Fabrication & Repair
4	Coefficients of Thermal Expansion (CTE)	7	Written	Essentials of Advanced Composite Fabrication & Repair
5	Applications	3	Written	Essentials of Advanced Composite Fabrication & Repair
6	Composite Structure Classification and Repair Categories			
7	Roles and responsibilities: Engineer (degreed), Inspector, Aircraft Maintenance Technician	1	Written	AIR5719
8	Structure classifications: Primary, Principal Structural Elements (PSE), Fatigue Critical Baseline Structure (FCBS), Secondary, Interior	7	Written	Essentials of Advanced Composite Fabrication & Repair; ARP5089
9	Repair Categories: Category A – Permanent, Category B – Interim, Category C – Time Limited	3	Written	Essentials of Advanced Composite Fabrication & Repair
10	Aircraft Specific Repair Material Requirements			
11	Repair material requirements: Aerospace Material Specifications, Material Certification Requirements, Receiving Inspection, Product Identification	7	Written	Essentials of Advanced Composite Fabrication & Repair, AMS2950/1, AMS3970
12	Matrix Systems			
13	Thermoplastics	3	Written	Essentials of Advanced Composite Fabrication & Repair
14	Thermoset	10	Written	Essentials of Advanced Composite Fabrication & Repair
15	Mixing and Mix Ratios: Weight – accuracy of scales, Volume, Mixing Process, Improper Mix Ratios	10	Written	Essentials of Advanced Composite Fabrication & Repair; Nadcap AC7118 Para. 8.4, 18a, 18b
16	Curing of resins: A, B & C stages, Flow vs. Gelation, Glass Transition, Viscosity, curing reactions, Effect of mis-cures (under-cured and over-cured)	10	Written	P. 18; 33; Nadcap AC7118 Para. 8.5, 15a, 15b
17	Safety and Environment			
18	Fumes, Vapors, and Dust	10	Written	Essentials of Advanced Composite Fabrication & Repair
19	Skin Contact	10	Written	Essentials of Advanced Composite Fabrication & Repair
20	Safety Data Sheet (SDS)	10	Written	Essentials of Advanced Composite Fabrication & Repair
21	Personal Protective Equipment (PPE)	10	Written	Essentials of Advanced

				Composite Fabrication & Repair
22	Exothermic Reactions	10	Written	ARP5256, ARP5144, AMS2950/1
23	Waste Disposal	7	Written	AIR5719
24	Flammability	10	Written	Essentials of Advanced Composite Fabrication & Repair
25	Adhesives Review			
26	Film	10	Written	Essentials of Advanced Composite Fabrication & Repair
27	Liquid	10	Written	Essentials of Advanced Composite Fabrication & Repair
28	Paste	10	Written	Essentials of Advanced Composite Fabrication & Repair
29	Supported /Unsupported	10	Written	Essentials of Advanced Composite Fabrication & Repair
30	Surface Preparation Adhesives	10	Written	Essentials of Advanced Composite Fabrication & Repair
31	Bond Line Control: Micro Beads, Carriers (Scrim Cloth, Knit, Veil)	10	Written	Essentials of Advanced Composite Fabrication & Repair
32	Failure Modes: Adhesion, Cohesion	10	Written	AIR 4844
33	Foaming Adhesives	10	Written	Essentials of Advanced Composite Fabrication & Repair
34	Aircraft Design Considerations			
35	Typical Sandwich Design	7	Written	Essentials of Advanced Composite Fabrication & Repair
36	Solid Laminate and Monolithic Design	7	Written	Essentials of Advanced Composite Fabrication & Repair
37	Advantages / Disadvantages of solid laminates versus sandwich structures	3	Written	Essentials of Advanced Composite Fabrication & Repair
38	Joint types: Bolted, Bonded	10	Written	Essentials of Advanced Composite Fabrication & Repair
39	Impact Resistance	7	Written	Essentials of Advanced Composite Fabrication & Repair
40	Balance and Symmetry	10	Written	Essentials of Advanced Composite Fabrication & Repair
41	Electromagnetic Effects (EME)	7	Written	Essentials of Advanced Composite Fabrication & Repair
42	Conductive Layers	7	Written	Essentials of Advanced Composite Fabrication & Repair
43	Sealants	10	Written	Essentials of Advanced Composite Fabrication & Repair
44	Primers	10	Written	Essentials of Advanced Composite Fabrication & Repair
45	Finishes	10	Written	Essentials of Advanced Composite Fabrication & Repair
46	Noise Attenuation	3	Written	Anoshkin, A.N., et al.
47	Sonic Fatigue	1	Written	Armstrong, Keith B., et al.
48	Elevated Surface Temperature Requirements	10	Written	Essentials of Advanced Composite Fabrication & Repair
49	Erosion Protection	7	Written	FAA Handbook – Advanced Composite Materials
50	Galvanic Compatibility	10	Written	Essentials of Advanced Composite Fabrication & Repair
51	Radome Transmissivity	3	Written	RTCA-DO-213; FAA Handbook – Advanced Composite Materials
52	Heat Transfer and Cure Cycle Management			

53	Heat Transfer Basics	10	Written	Essentials of Advanced Composite Fabrication & Repair
54	Equipment Usage: Autoclave (optional Level 1), Oven (optional Level 1), Hot Bonders, Heat Blankets, Hot Air Blower (optional Level 1), Infrared (optional Level 1), Heat Lamps	10	Written	Essentials of Advanced Composite Fabrication & Repair
55	Thermocouple Placement	10	Written	Essentials of Advanced Composite Fabrication & Repair; Nadcap AC7118 Para. 8.1.2, 15a, 15b, 17.2, 20a & 20b
56	Insulation and Airflow Control	7	Written	Essentials of Advanced Composite Fabrication & Repair, ARP5144
57	Source Documents Review			
58	ATA iSpec 2200/S1000D	3	Written	AIR5719
59	Structural Repair Manuals: Allowable Damage Limits (ADL), Repair Limits	7	Written	Essentials of Advanced Composite Fabrication & Repair, ARP5089, AIR5719
60	Component Maintenance Manual	7	Written	AIR5719
61	Engineering Orders	7	Written	AIR5719
62	Maintenance organization specific documents	7	Written	AIR5719
63	SAE AMS-CACRC ARP's	3	Written	AIR5719
64	Regulatory Documents: Airworthiness Directives; Service Bulletins, Advisory Circulars, Rule Making Task	3	Written	AIR5719
65	Material Processes Specifications: OEM, Vendor, Internal	3	Written	AIR5719, AMS3970
66	Repair Selection Considerations			
67	Repair Design: Prepreg, Wet Lay-up, Support Tooling Requirements, Doubler Overlay, Pre-cured Patch, Bolted, Nonstructural (Cosmetic)	3	Written	Essentials of Advanced Composite Fabrication & Repair
68	Taper Sanding and Step Sanding	3	Written	Essentials of Advanced Composite Fabrication & Repair
69	Part Drying Requirements: Physical Water, Absorbed Moisture	3	Written	Essentials of Advanced Composite Fabrication & Repair
70	Ply Stack Up: Small Ply Down, Large Ply Down (optional)	3	Written	ARP5089
71	Repair Area Limitations	3	Written	Essentials of Advanced Composite Fabrication & Repair
72	Inspection Techniques			
73	Types of Damage	10	Written	Essentials of Advanced Composite Fabrication & Repair
74	Pre & Post-Repair Inspection	10	Written	ARP5089
75	Visual	7	Written	Essentials of Advanced Composite Fabrication & Repair; Nadcap AC7118 Para. 15a, 15b, 16e, 16g, 24a, 24b & 24c
76	Tap testing, this method is to be taught to teaching level 3	7	Written	Essentials of Advanced Composite Fabrication & Repair
77	Low skill inspection instrument, this method is to be taught to teaching level 3	7	Written	Essentials of Advanced Composite Fabrication & Repair
78	Ultrasonic (Pulse-Echo, TTU, Bond testers)	10	Written	Essentials of Advanced Composite Fabrication & Repair
79	Laser Shearography	3	Written	Essentials of Advanced Composite Fabrication & Repair
80	Thermography	3	Written	Essentials of Advanced Composite Fabrication & Repair
81	X-Ray	3	Written	Essentials of Advanced Composite Fabrication & Repair
82	FT-IR (Fourier Transform infrared for heat damage)	1	Written	www.agilent.com
83	Comparison of NDI techniques for metal v. composite structure	3	Written	ARP5089

84	Damage Mapping / Location / Depth			AIR5719
85	Part Identification	10	Written	Essentials of Advanced Composite Fabrication & Repair, ARP5089
86	Material Identification	10	Written	Essentials of Advanced Composite Fabrication & Repair
87	Ply Identification	10	Written	Essentials of Advanced Composite Fabrication & Repair
88	Damage Mapping (sizing)	10	Written	AIR5719
89	Repair manual repair zones	10	Written	Essentials of Advanced Composite Fabrication & Repair, ARP5089
90	Hidden damage identification	10	Written	FAA Handbook – Advanced Composite Materials
SKILLS:				
The expertise required to perform a particular special process task.				
91	Hands-on Exercises:			
92	Damage Assessment	3	Practical	See Addendum 1,2,3
93	Repair to honeycomb sandwich part, skin and core damage, using 121 C (250 F) prepreg materials. This repair is to use two stage repair method and double-sided heat for the first stage. This will be heat blanket and hot bonder cure method.	7	Practical	See Addendum 1,2,3
94	Assessment: <ul style="list-style-type: none"> •Core removed without damage to far side inner skin •Taper sanding meets repair document requirements •Correct material and orientation of original plies identified •Repair plies are positioned and oriented correctly •Cure cycles meet repair document requirements •Repair meets post repair inspection requirements 	3	Practical	See Addendum 1,2,3
95	Repair to honeycomb sandwich part, skin and core damage, using wet layup materials. This repair can use either single sided or double side heating method. The repair can be either a one or two stage repair method. The cure cycle heat application can be any of the listed methods in this document.	7	Practical	See Addendum 1,2,3
96	Assessment: <ul style="list-style-type: none"> • Core removed without damage to far side inner skin • Taper sanding meets repair document requirements • Correct material and orientation of original plies identified • Repair plies are positioned and oriented correctly • Cure cycle(s) meets repair document requirements • Repair meets post repair inspection requirements 	3	Practical	See Addendum 1,2,3
97	Repair to honeycomb sandwich part, with both skins and core damage, using wet layup or prepreg materials. The repair to be performed from one side access. The repair can be either a one or two stage repair method. The cure cycle heat application can be any of the listed methods in this document.	7	Practical	See Addendum 1,2,3
98	Assessment: <ul style="list-style-type: none"> • Core removed without causing additional damage to far side inner skin • Taper sanding meets repair document requirements • Correct material and orientation of original plies identified • Repair plies are positioned and oriented correctly • Cure cycle(s) meets repair document requirements • Repair meets post repair inspection requirements 	3	Practical	See Addendum 1,2,3
99	Repair to the edge band of honeycomb sandwich part, the damage is to extend into the core and have ply drop offs. This repair can use either single sided or double side heating methods. The repair can use either a one or two stage repair method. The cure cycle heat application can be any of the listed methods in this document.		Practical	
100	Assessment:	3	Practical	See Addendum 1,2,3

	<ul style="list-style-type: none"> • Core removed without causing additional damage to far side inner skin • Taper sanding meets repair document requirements • Correct material and orientation of original plies identified • Repair plies are positioned and oriented correctly • Cure cycle(s) meets repair document requirements • Repair meets post repair inspection requirements 			
101	Repair to a solid laminate part with a minimum of 6 plies, using wet layup or prepreg materials. This repair can use either single sided or double side heating method. The cure cycle heat application can be any of the listed methods in this document.	7	Practical	See Addendum 1,2,3
102	Assessment: <ul style="list-style-type: none"> • Taper sanding meets repair document requirements • Correct material and orientation of original plies identified • Repair plies are positioned and oriented correctly • Cure cycle meets repair document requirements • Repair meets post repair inspection requirements 	3	Practical	See Addendum 1,2,3
PERSONAL ATTRIBUTES:				
Are statements that will enable judgment of the person's personal attributes				
103	Must be able to work independently with minimum supervision	3	N/A	General
104	Have a high degree of integrity	3	N/A	General
105	Be attentive to details	3	N/A	General
106	Have safety and environmental consciousness	3	N/A	General
EXPERIENCE:				
Are the minimum experience requirements expected to demonstrate their competence				
107	EDUCATION:	3		
108	Basic technical mathematics	3		AIR 4938 Section 3
109	General shop and hand tool usage	3		AIR 4938 Section 3
110	Use of precision measurement tools	3		AIR 4938 Section 3
111	Read basic technical drawings	3		AIR 4938 Section 3
112	Reading comprehension	3		See Addendum 1,2,3
113	TRAINING / HANDS-ON EXPERIENCE:			
114	Understand criteria required in AIR 4938	3		AIR 4938
NON-SPECIAL PROCESS RELATED REQUIREMENTS:				
Defined within these roles are other general or pre-requisites needed				
115	N/A			

7. DOCUMENT REVISION HISTORY

REVISION DATE	SUMMARY
4 December 2019	Editorial revision to update program name from eQualified to PRI Qualification SM .

ADDENDUM 1

LIST OF INTERNATIONAL STANDARDS FOR COMPOSITE REPAIR

Special Process	DOCUMENT TITLE	DOCUMENT NUMBER
Composite Repair	Nadcap Audit Criteria for Composites	AC7118
Composite Repair	Composite Materials Handbook – SAE International	CMH-17
Composite Repair	Composite Aircraft Structure	EASA AMC 20-29
Composite Repair	Composite Aircraft Structure	FAA AC 20-107
Composite Repair	Repairs and Alterations to Composite and Bonded Aircraft Structure	FAA AC 43-214
Composite Repair	Development of Training / Qualification Programs for Composite Maintenance Technicians	FAA AC 65-33
Composite Repair	Code of Federal Regulations, Part 147 Aviation Maintenance Technician Schools	TITLE 14
Composite Repair	Minimum Operational Performance Standards for Nose-Mounted Radomes	RTCA-DO-213

ADDENDUM 2

ATA/IATA/SAE COMMERCIAL AIRCRAFT COMPOSITE REPAIR COMMITTEE (CACRC) REFERENCE DOCUMENTS

DOCUMENT TITLE	DOCUMENT NUMBER
Composites of Metal Bond Glossary	AIR 4844
Composite and Bonded Structure Technician/Specialist: Training Document	AIR 4938
Composite and Bonded Structure Engineers: Training Document	AIR 5278
Composite and Bonded Structure Inspector: Training Document	AIR 5279
Maintenance Life Cycle Cost Model	AIR 5416
Repair Tooling	AIR 5431
Teaching Points for an Awareness Class on "Critical Issues in Composite Maintenance and Repair"	AIR 5719
Pyrometry	AMS2750
Paste Adhesive for Core Restoration - Part 1 - General Requirements	AMS 2950/1
Technical Specification: Carbon Fiber Fabric and Epoxy Resin Wet Lay-up Repair Material Part 0 – Introduction	AMS 2980
Technical Specification: Carbon Fiber Fabric and Epoxy Resin Wet Lay-Up Repair Material Part 1 - General Requirements	AMS 2980/1
Technical Specification: Carbon Fiber Fabric and Epoxy Resin Wet Lay-Up Repair Material Part 2 - Qualification Program	AMS 2980/2
Technical Specification: Carbon Fiber Fabric and Epoxy Resin Wet Lay-Up Repair Material Purchasing Specification - Fabric	AMS 2980/3
Technical Specification: Carbon Fiber Fabric and Epoxy Resin Wet Lay-Up Repair Material Purchasing Specification - Resin	AMS 2980/4
Carbon Fiber Fabric and Epoxy Resin Wet Lay-Up Repair Material Part 5 - Material Specification: Carbon Fiber Fabrics, Plain Weave, 193 g/m ² , and Epoxy	AMS 2980/5
Carbon Fiber Fabric Repair Prepreg, 125 °C (250 °F) Vacuum Curing Part 0 - Introduction	AMS 3970
Carbon Fiber Fabric Repair Prepreg, 125 °C (250 °F) Vacuum Curing Part 1 - General Requirements	AMS 3970/1
Carbon Fiber Fabric Repair Prepreg, 125 °C (250 °F) Vacuum Curing Part 2 - Qualification Program for Fiber, Fabric	AMS 3970/2
Carbon Fiber Fabric Repair Prepreg, 125 °C (250 °F) Vacuum Curing Part 3 - Purchasing Specification for Epoxy Prepreg	AMS 3970/3
Carbon Fiber Fabric Repair Prepreg, 125 °C (250 °F) Vacuum Curing Part 4 - Purchasing Specification for Film Adhesive	AMS 3970/4
Carbon Fiber Fabric Repair Prepreg, 120 °C (250 °F) Vacuum Curing, Part 5 - Purchasing Specification for Companion Non-Structural Glass Fiber Fabric Prepreg	AMS 3970/5
Carbon Fiber Fabric Repair Prepreg, 120 °C (250 °F) Vacuum Curing, Part 6 - Material Specification: Carbon Fiber Fabric Reinforced Epoxy Prepreg for Repair, Plain Weave Fabric, 193 g/m ² , Adhesive Film for Repair and Non-Structural Glass Fiber Fabric Reinforced Epoxy Prepreg, 105 g/m ²	AMS 3970/6
Masking and Cleaning of Epoxy and Polyester Matrix Thermosetting Composite Materials	ARP 4916

Drying of Thermosetting Composite Materials	ARP 4977
Core Restoration of Thermosetting Composite Components	ARP 4991
Composite Repair NDT/Ndi Handbook	ARP 5089
Vacuum Bagging of Thermosetting Composite Repairs	ARP 5143
Heat Application for Thermosetting Resin Curing	ARP 5144
Mixing Resins, Adhesives and Potting Compounds	ARP 5256
Impregnation of Dry Fabric and Ply Lay-Up	ARP 5319
Solid Composite Laminate NDI Reference Standards	ARP 5605
Composite Honeycomb NDI Reference Standards	ARP 5606
Basic Composite Repair Technician Certification Standard	ARP 6262

ADDENDUM 3**OTHER REFERENCES: ACADEMIC TEXTS / WEBSITES**

DOCUMENT TITLE
AAB Baker. 2004. Composite materials for aircraft structures
AA Baker, LRF Rose, R Jones. 2003. Advances in the bonded composite repair of metallic aircraft structure.
A Katunin, K Dragan, M Dziendzikowski. 2015. Damage identification in aircraft composite structures: A case study using various non-destructive testing techniques. Elsevier.
Anoshkin, A.N. et al, 2015. Repair of damage in aircraft composite sound-absorbing panels. Composite Structures, 120, pp. 153 - 166.
Armstrong, Keith B, et al. Care and Repair of Advanced Composites. Second Edition, Warrendale, PA, SAE International, 2005.
Beukers, A. 2005. Flying Lightness
Blohm, C. (2008, 1 July). Composites Need Standardization.
Burchell, B. (2009, 1 Oct). European perspective
Dorworth, Gardiner, Mellema. 2009. Essentials of Advanced Composite Fabrication & Repair.
Flinn, B.D. Role of surface preparation on durability of bonded composites joints.
KB Katnam, LFM Da Silva, TM Young. 2013. Bonded repair of composite aircraft structures: A review of scientific challenges and opportunities. Progress in Aerospace Sciences. Elsevier.
Marty, P. N., Desai, N., & Andersson, J. 2004. NDT of kissing bond in aeronautical structures
Riseheart, Theodore. 1987. Volume 1 Engineer Materials Handbook Composites. AMS International
http://www.agilent.com
http://www.actechbooks.com/subcategories/37/
https://scholar.google.nl/citations?user=HnpYHgMAAAAJ&hl=nl&oi=sra
Composite Materials – Vkcj
DOT/FAA/AR-99/49, Review of Damage Tolerance for Composite Sandwich Airframe Structures
DOT/FAA/AR-08/54, Guidelines for the Development of a Critical Composite Maintenance and Repair Issues Awareness Course
FAA Handbook – Advanced Composite Materials (Chapter 7)

NOTE: The user should verify that they are using the current version of these documents.