

Detailed Agenda

2015 FAA/Bombardier/TCCA/EASA/Industry Composite Transport Damage Tolerance and Maintenance Workshop

Tuesday (September 15, 2015)		Wednesday (September 16, 2015)		Thursday (September 17, 2015)	
Regulatory Perspectives (FAA, EASA, TCCA)		Session 3: High Energy, Wide Area, Blunt Impact (HEWABI)		Session 6: Damage Tolerance (Special Subjects)	
8:30-9:00	"Welcome/Introduction/Workshop Objectives" - Bombardier and Larry Ilcewicz (FAA)	8:30-8:50	"HEWABI as Related to Safety and Certification" - Larry Ilcewicz (FAA)	8:30-9:00	"Composite Fatigue & Damage Tolerance Design & Service Experience" - Kevin Davis (Boeing)
9:00-9:30	"FAA Composite Plan" - Cindy Ashforth (FAA)	8:50-9:20	"UCSD FAA Research" - Hyonny Kim (UCSD)	9:00-9:30	"Validation of Thermal Loads for Hybrid Structure" - Jean-Philippe (Bombardier)
9:30-10:00	"EASA Composite Safety Issues" - Simon Waite (EASA)	9:20-9:40	"EASA Research" - Simon Waite (EASA)	9:30-9:45	"Thermal Loads of Horizontal Tail Plane Structure" - Jan Waleson (Fokker)
10:00-10:30	"2015 Industry/Authorities FAA Composite Transport DT and Maintenance Workshop – TCCA Perspectives" - Maurizio Molinari (TCCA)	9:40-10:00	"Airline Experiences" - Eric Chesmar (United), Ray Kaiser (Delta)	9:45-10:00	"Perspectives on Damage Detection and Inspection" - Larry Ilcewicz and Rusty Jones (FAA)
10:30-10:45	Break	10:00-10:30	HEWABI Recap Session	10:00-10:15	Break
Session 1: Sandwich Disbond Assessments		10:30-10:45	Break	10:15-10:45	"Composite Damage Tolerance Special Topics Recap" - Led by Larry Ilcewicz (FAA), D.M. Hoyt (NSE) and Waruna Seneviratne (WSU)
10:45-11:30	"CMH-17 Honeycomb Sandwich Disbond Growth Team Status - Mid 2015" - Ralf Hilgers (Airbus) and Ronald Krueger (NIA)	Session 4A: Composite Fatigue and Damage Tolerance		Session 7A: Smarter Damage Tolerance Testing	
11:30-11:45	"Sandwich Disbond Recap" - Led by Larry Ilcewicz and Ralf Hilgers (Airbus)	10:45-11:00	"Introduction for Sessions 4 through 6" - Larry Ilcewicz (FAA) and D.M. Hoyt (NSE)	10:45-11:00	"Smarter DT Testing - Boeing Perspectives" - Kevin Davis (Boeing)
Session 2A: Bonded Repair 2A (Part 1)		11:00-11:15	"Perspectives on Fatigue and Damage Tolerance Standardization" - Mark Nienhaus (Textron Aviation)	11:00-11:15	"Smarter Testing - Airbus Approach" - J-I Leon Dufour, S. Rabois, and John van Doeselaar (Airbus)
11:45-12:00	"Sessions 2A and 2B - Introduction and Objectives" - Michael Borgman (Spirit AeroSystems, Inc.)	11:15-11:45	"Boeing Composite Fatigue & Damage Tolerance Certification Experiences" - Allen Fawcett (Boeing)	11:15-11:30	"Smart Testing - Bombardier Thoughts" - Salamon Haravan (Bombardier)
12:00-12:30	"Operator Field Experiences and Future Perspectives" - Eric Chesmar (UAL)	11:45-12:15	"Airbus Composite Fatigue and Damage Tolerance Certification Experiences" - L. Ratier and C. Fualdes (Airbus)	11:30-11:45	"Smarter DT Testing - Summary" - Kevin Davis (Boeing)
12:30-1:15	Lunch	12:15-1:00	Lunch	11:45-12:30	Lunch
Session 2A: Bonded Repair 2A (Part 2)		Session 4B: Composite Fatigue and Damage Tolerance		Session 7B: Use of Probabilistic Methods	
1:15-1:45	"Airbus Bonded Repair Applications to Pressurized Fuselage" - J. Charles and C. Fualdes (Airbus)	1:00-1:30	"Rear Pressure Bulkhead Large Damage Capability Demonstration" Jean-Philippe Marouze (Bombardier)	12:30-1:30	Intro (J. van Doeselaar Airbus) 5 min Bombardier thoughts - Salamon Haravan- 10 min with Q&A Boeing thoughts - Alan Fawcett- 15 min with Q&A Airbus thoughts - Emilie Morteau; Chantal Fualdes- 15 min with Q&A WS participant experiences/closing remarks + Q&A (Airbus led) - 15 min
1:45-2:15	"Substantiation Approaches for Bonded Repairs" - Allen Fawcett (Boeing)	1:30-2:00	"Aviation Rulemaking Advisory Committee (ARAC) Tasking on § 25.571" - Walt Sippel (FAA) and Mike Gruber (Boeing)		
Session 2B: Bonded Repair 2B (Part 1)		2:00-2:30	"NIAR Research on Certification of Composite-Metal Hybrid Structures" - Dr. Waruna Seneviratne and Dr. John Tomblin (WSU)		
2:15-2:45	"Lessons Learned from CACRC Depot Bonded Repair Round Robin Exercise" - Dr. John Tomblin & Lamia Salah (WSU)	2:30-3:00	"CMH-17 Durability & Damage Toleranc Roadmap" - D.M. Hoyt, Patrick Enjuto, and Tom Walker (NSE)	Session 7C: Major Structural Modifications, Alterations & Repairs	
2:45-3:15	"Effect of Processing Parameters on Bonded Repair Quality and Strength" Dr. Pascal Hubert (McGill Univ.); Dr. R. Kishabh Kothari, David Wilson, Geoff Walsh (Bombardier)	3:00-3:15	Break	1:30-2:00	"Issues Associated with Modification and Repair of Primary Aircraft Composite Structures" - Steve Forness (Air Flight Technical)
3:15-3:30	Break	Session 5: Damage Tolerance (Special Subjects)		2:00-2:30	"Examples of Substantiation Testing and Documents to Support Large Areas of Composite Repair" - John Welch, Jim Epperson (Spirit Aerosystems)
Session 2B: Bonded Repair 2B (Part 2)		3:15-3:45	"The Aging Composite Airframe" - John Halpin (Consultant)	2:30-2:45	Break
3:30-4:00	"Bonded Repair Service Provider - Service History and Substantiation" - John Welch (Spirit Aero Systems)	3:45-4:15	"Some Thoughts on Strategies for Building Block Approach Development" - Eric Pomerleau and Dr. Isabelle Paris (Bombardier)	2:45-3:45	"Near-Term Emerging Technology Recap" - Led by Boeing (TBD), Airbus (TBD), Bombardier (TBD) and Cindy Ashforth (FAA)
4:00-4:30	"Composite Operational Issues" - Rusty Jones (FAA) and Simon Waite (EASA)	4:15-5:15	"Composite Fatigue and Damage Tolerance Recap" - Led by Larry Ilcewicz (FAA), D.M. Hoyt (NSE) and Waruna Seneviratne (WSU)	3:45-4:00	Recap/Actions/Closure - Larry Ilcewicz (FAA)
4:30-4:45	"Standards for Substantiation of Bonded Repairs" -Michael Borgman (Spirit Aero Systems)				
4:45-5:45	"Bonded Repair Recap" - Led by Larry Ilcewicz & Rusty Jones (FAA) and Mike Borgman (Spirit)				