

Adhesive Bonding Session Breakout Report







The Joint Advanced Materials and Structures Center of Excellence



- System Approach is required
 - Hot bond vs. cold bond
 - Substrate, adhesive and preparation
- Peel ply: important to leave clean surface
- Rapid Adhesion Test useful screening test of adhesion
- Accelerated degradation did not change failure mode
- Successful in accelerating crack growth



- Need quantifiable prebond and postbond litmus test
- Need to improve fundamental and empirical understanding
- Correlation of accelerated aging method to actual service
- What is long term performance/durability of adhesive bond?



- Quantify service environment

 Load, temperature, moisture, solvents
- Make wettability work more quantitative as a predictor compatibility of systems
- Fundamental understanding of surfaces (topography, contamination, functional groups) created and why
- Understand temperature effects on wettability