

PRECISE DESIGN AND ANALYSIS OF WET LAYUP COMPOSITE REPAIRS

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ABSTRACT

The increasing size and cost of composite structures combined with the increased loading requirements placed on such components has heightened the need for performing durable and thoroughly analyzed composite repairs. Precise applications of composite repairs possess many difficulties from both a maintenance and engineering standpoint. The composite repair engineer is often limited by the repair materials and processing equipment that are available, the data to define the loads placed on the structure, and physical limitations such as the inability to remove a panel from the aircraft, heat sinks, and underlying structure. This presentation describes the repair configuration, materials and analysis techniques for performing the precise design and analysis of wet layup composite repairs.”