

Period Covered: 1/1/04 through 6/30/04 (Quarterly Report +)

KSDOT Progress Report

for the

State Planning and Research Program

PROJECT TITLE: Evaluating Load-Distribution, Fatigue Performance, and Horizontal Shear Transfer Mechanisms in Fiber-Reinforced Composite Honeycomb Bridge Decks		
PROJECT MANAGER: Dave Meggers	Project No: RE-0330-01/RE-0332-01 TPF-5(071)	Project is: _____ PLANNING
Annual Budget \$100,000	Multi Year Project Budget \$223,900 Note: TPF funds are \$124,000	 <u> X </u> RESEARCH & DEVELOPMENT
<p>PROGRESS: The FRP panel producer, Kansas Structural Composites Inc. (KSCI), is now using a new process for the fabrication of the full-scale panels. This new technique results in better interlocking between the flanges and core sections. To quantify this benefit to structural members, three additional double-shear specimens were fabricated and tested during this quarter.</p> <p>The PI has also continued to assist the research team of Dr. Youqi Wang by providing use of testing facilities and personnel to obtain material properties for both the composite and matrix materials.</p> <p>In addition, all of the remaining specimens for the load-distribution study and for the investigation of fatigue performance have been fabricated by KSCI and delivered to Kansas State University for instrumentation and testing. Thus, all of the strain gages that will be used to monitor these panels during testing have also been purchased.</p> <p>PROJECT PERSONNEL FROM KSU CIVIL ENG: Dr. Robert J. Peterman, Mike Stein, Amin Akhnoukh</p> <p>SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:</p> <p>The P.I. hopes to get the distribution-width panels instrumented and the corresponding test-setup completed during the next quarter.</p>		
STATUS AND COMPLETION DATE:		
Percentage of work completed to date for total project: Project is <u>35 %</u> Complete		
_____ on schedule <u> X </u> * behind schedule, explain:		
<p>* During this past quarter Mike Stein, the research engineer working on the project, unexpectedly resigned with very short notice. The loss of this position has resulted in significant delays to many of the research projects that Mike was working on, and especially this one. In addition, because of the current delays and the uncertainty of future schedules, the graduate student working on the project (Amin Akhnoukh) has also decided to discontinue his work on this project effective August 1, 2004.</p>		
Expected Completion Date: <u>8/31/05</u>		