## Super Light Weight Bridge Building Contest

by Dr. Howard S. Kliger





The third annual super light weight bridge building competition was held at the SAMPE '99 on May 23, 2000. Sixty-four teams registered and 42 teams submitted bridges for testing, a 20 percent increase over the 1999 contest. Teams came from Canada, Japan, New Zealand and the USA. We also had two middle schools enter (with SAMPE advisors).

This year's contest was similar to the first two contests - build a 24x4" composite bridge with the win-

ning entry having the highest ratio of ultimate load to bridge weight. This year, we also asked contestants to predict when their bridge would fail, and we gave prizes for the best predictions.

There were four different classifications based on use of materials and professional or student status. Awards were given for highest load to weight ratio. The first place winners in the professional classes included Paul Childers of Charleston AFB and Lance Smith of Hexcel. The Gregory/Kukay team from Cerritos College and the Robertson/Requa team from UC Santa Barbara placed first in



had the best predicted failure scores.



Prizes consisted of an assortment of composite tennis racquets and fishing rods and a training course at Abaris. We also gave away more than \$1000 in prize money that was donated by sponsors. The support and contributions of the sponsors was critical to the success of the contest. These companies contributed all of the composite materials that went into the kits and also provided the composite items and cash used as prizes in the contest.

The actual load testing was performed at the MTS booth at the Exhibition. All of the data was extracted from the MTS software and transferred onto an Excel® spreadsheet.

Finally, special thanks to Bob Fogg of the SAMPE San Diego Chapter who packaged the kits, organized the entries and generally, managed the conduct of the contest; and to Steve Trout of MTS who supervised the actual testing of the bridges.



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