

Bridge Building Contest

New Jersey SAMPE started a high school bridge building contest using composite materials in 1991. We expanded the contest to the college level at the International SAMPE Symposium in 1998. The contest continues.

How it all started

The very first contest in 1991 grew out of a friendship between Howard Kliger of NJ SAMPE and Michael Kaplan, who was Chairman of the Science Department of JP Stevens High School (named for the founder of JPS Fabrics) and also President of the New Jersey Science Supervisors Association. NJ SAMPE provided the materials, the contest rules and prizes, and NJSSA provided the participation of New Jersey high schools. The first contest had 40 students participating and by 1995, there were 40 schools and more than 100 students involved. Each year the rules changed, and one memorable contest was for a solar powered light weight drawbridge, the solar panels supplied by NJ Public Service Electric and Gas Co.

Unfortunately, the competition for student and faculty extra-curricular time allotment is severe, and by 1996 the contest had run its course. Other contests beckoned.

Fast forward to the ISSE in May 1997 in Anaheim. Howard Kliger, Ben Rasmussen and Malcolm Rosenow of the NJ Chapter were sitting in the lounge of the Marriott Hotel, thinking what could be done to liven up the ISSE in the following year (1998), where NJ SAMPE was a co-sponsor. I think it was Malcolm who said "Lets have a Bridge Building Contest". And so it was born.

The 1998 contest had 30 bridges in both Student and Professional classes. As the contest grew, the Professional entries dropped off and the student portion grew. Finally, we eliminated the Professional class making it only a student contest. Now we usually get about 70 student teams with 150 students competing in three or four Material classes. In addition we have a student poster session tied to the contest on display at the ISSE.

The Wing/Airfoil contest started in 2006. A natural follow-on to the bridge contest, the structure and fabrication is more sophisticated than

most of the bridges. Ray Turcotte of NASA Langley provided the primary financial support for the Wing contest. They can't help with the bridges - they don't fly.

Throughout the years, Howard Kliger was the SAMPE Bridge Building Chairman. Three key assistants included Stan Stawski, Brian Flinn, and Narendra Taly. In 2011, the contests were turned over to a group associated with the Seattle chapter of SAMPE. They continue to thrive.

NJ SAMPE is proud of its leadership and association with the contests. Over the 19 years, we estimate that well over 2000 students were introduced to composite materials.