

EDUCATION & CAMPUS

1996 Bridge Building Contest

The 6th annual light-weight bridge building contest, sponsored by the **New Jersey Science Supervisors Association (NJSSA)** was held in May. Approximately 40 high school students participated, submitting 15 bridges for test.

The contest required teams to build the lightest weight bridge from advanced composite materials such as carbon and glass fibers, honeycomb core, and epoxy resin. As in previous years, the bridge had to support a static loading of 75 pounds over a span of 22 inches. An added requirement this year was for the bridge to first survive a vertical drop load (one kg dropping from a height of 18 inches on to the center of the bridge surface) and a side pendulum impact (one kg on a 18 inch arm rotating through 90 degrees and impacting the side of the bridge.)



Each school could enter two teams and each team could submit two bridges. Scoring was based on satisfying the performance criteria, appropriate use of kit supplied materials, and an oral engineering report.

Prize winners included West Morris, East Brunswick, Cherokee and Buena High Schools. Prizes included cash, fishing rods and reels donated by **Abu Garcia**, and tennis racquets donated by **Prince Sports Group**.

Companies which graciously donated materials for the kits included **Atkins & Pearce Technology, Radcure, BASF, Ball & Allied Signal, Hexcel, Plascor, Mutual Industries, Owens Corning Fiberglas, DuPont, Zoltek, JPS Glass Fabrics, Henkel**. Financial assistance for the contest was received from **Union Carbide Corp., National Starch and Chemical Co** and **Atkins & Pearce Technology**.

Look for the bridges on display at the