

Electron pulse crushes aluminum cylinder

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U.S. scientists in Nevada this week crushed an aluminum cylinder the size of a tuna can using electrons from the 650-ton Atlas pulsed power generator.

It took just a few millionths of a second Wednesday to execute the Nevada Test Site experiment, which was designed to better understand how nuclear weapons perform, the Las Vegas Review-Journal reported Thursday.

A statement from the National Nuclear Security Administration, which operates the test site 65 miles northwest of Las Vegas, said the experiment was the first since the generator was relocated from the Los Alamos, N.M., national laboratory.

"The goal of the inaugural NTS experiment was to demonstrate that Atlas remains capable of the implosion quality obtained in experiments conducted three years ago in Los Alamos," the statement read, noting "significant improvements" were made in the interim.

The 80-foot diameter machine is one of a few devices scientists use to conduct materials tests and simulation experiments on the nation's aging nuclear stockpile, the newspaper said. Those scientists are charged with ensuring U.S. nuclear warheads are safe and reliable as plutonium and other components become older.

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