

Accomplishments for 2002

continued from page 1

Achieved a 100% rate of data retrieval for five subcritical experiments.

Safely evacuated the NTS following severe windstorms and damage to facilities. All personnel affected by the wind damage were relocated and the facility closed and secured within one week.

Deployed Remote Sensing Laboratory personnel following the 9/11 terrorist attacks for more than 291 days for a total of 4,704 person field days.

Minimized damage to property and the environment and prevented damage to critical Nevada Test Site (NTS) assets near the U12g tunnel complex by successfully managing and containing the Egg Point wildland fire. No recordable injuries occurred during the firefighting effort.

Trained 1,258 first responder students for the Department of Justice, as part of the Weapons of Mass Destruction (WMD) program.

Completed three infrastructure improvement projects (classrooms, video capabilities, and sensor technologies) to further increase WMD training capabilities at the NTS.

Initiated a new safety training program within site services. The training program includes the temporary formation of focus groups to provide solutions to identified problems and improving safety. Results indicate that accident rates are reduced and work is accomplished more efficiently.

Successfully participated in Sundown '02 Exercise, the second full participation exercise for Bechtel Nevada personnel.

Successfully began the relocation of Atlas from Los Alamos National Laboratory to NTS.

Provided technical support to the Federal Bureau of Investigation Collection Team. The FBI requested the use Bechtel Nevada's developed ground penetrating radar (GPR) to assist in the location of the evidence/remains of two teenagers at an Oregon City, Oregon site.

Contributed to the Department of Energy (DOE) complex's accelerated environmental clean up effort by receiving and safely disposing more than two million cubic feet of low-level waste at the Nevada Test Site.

Designed, fabricated, and installed a state-of-the-art video wall at DOE Headquarters and the National Nuclear Security Administration's Emergency Operations Centers.

RSL moved more than 950,000 pounds of cargo, twice the amount from last year, without an accident.

Lawrence Livermore National Laboratory

Los Alamos National Laboratory accomplished four major milestones for Fiscal Year 2002:

Vito, the first subcritical experiment in the STALLION series, was fired successfully on February 14, 2002, in the U1a complex at the Nevada Test Site. The experiment, also known as *Etna*, reestablished a long-standing LANL/AWE collaboration in performing experiments at the NTS. *Vito/Etna* was also a highly successful demonstration of the LANL racklet concept, a much smaller version of the test assembly, or rack, that was used in full-scale underground nuclear tests, that enables the reuse of diagnostic "clean room" areas down-

hole and permits a rapid and a cost-effective turnaround between subcritical experiments. The racklet is lowered into a 35-foot deep augered hole in the drift and stemmed with selected materials to the surface of the drift.

Mario and *Rocco*, the second and third experiments in the STALLION series, were successfully executed on August 29 and September 26, 2002, respectively, in the U1a complex. Both experiments successfully used the racklet concept for deployment and provided physical properties data for plutonium at conditions approaching those found in nuclear weapons. The data from *Mario* and *Rocco* are important both for their significance to the subcritical program and for execution of *Armando*, the fourth experiment in the STALLION series scheduled for early FY04.

Before the execution of *Mario* and *Rocco*, and for the first time in the Los Alamos subcritical experiment program, two confirmatory shots were executed at the Nevada Test Site on July 18 and August 2, 2002, respectively. These shots were identical to *Mario* and *Rocco* except the confirmatory shots were executed in 6-foot diameter containment spheres and used specially designed surrogate alloys instead of plutonium. In the past, confirmatory shots have been conducted in Los Alamos, New Mexico, but because of a compressed schedule, the NTS confirmatory scheme saved time and was a much better match to the preparation schedule.

continued on page 5