***National Nuclear Security Administration***
***U.S. Department of Energy***
***Los Alamos Site Office***
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**Los Alamos National Laboratory Highlights NNSA Mission Accomplishments for the Year**

Los Alamos, NM --The National Nuclear Security Administration (NNSA) today highlighted program goals met for the year at Los Alamos National Laboratory (LANL).

As part of the National Nuclear Security Administration, LANL is one of the national security science labs responsible for ensuring the safety, security, and effectiveness of the U.S. nuclear stockpile without underground testing. In addition to the work on NNSA's stockpile stewardship, nonproliferation, detection, verification, and forensics missions, the Laboratory also supports efforts related to energy, environment, infrastructure, health, and global security concerns.

"As a premier national security science laboratory, LANL shoulders a very big responsibility to help keep the U.S. safe, and our employees take great deal of pride in that work," said Kevin Smith, NNSA's Los Alamos Site Office Manager. "I want to personally congratulate the men and women of LANL who have worked tirelessly this past year to accomplish this important work."

In just the past year, LANL has made significant progress on a wide range of NNSA-related missions. Some of the achievements include:

- Conducting four data-rich experiments at the Lab's Dual-Axis Radiographic Hydrodynamic Test (DARHT) facility, starting, in late 2009, with the first-ever double-viewpoint hydrodynamic experiment <http://www.lanl.gov/news/releases/nnsa_lanl_announce_successful_first_dual_axis_hydrodynamic_test_nr.html> of a nuclear weapon component mockup
- Completing a subcritical nuclear experiment at the Nevada National Security Site
- Providing production support across the nuclear security enterprise for the W76 nuclear warhead Life-Extension Program <http://nnsa.energy.gov/mediaroom/pressreleases/02.23.09>
- Exceeding the FY10 target for W88 War-Reserve pits <http://www.lanl.gov/news/index.php/fuseaction/1663.article/d/20078/id/11870> for the U.S. Navy
- Meeting or exceeding plutonium-related mission deliverables
- Completing ahead of schedule construction of the Lab's Radiological Laboratory/Utility/Office facility, which earned an Environmental Sustainability (EStar) award <http://nnsa.energy.gov/mediaroom/pressreleases/estar101210> from the Department of Energy.
- Running simulations on the Lab's Roadrunner supercomputer, with unprecedented speed and fidelity, that helped solve a longstanding problem in

weapons physics. Earlier, in its "shakedown" phase, LANL scientists put Roadrunner through its petascale-computing paces with modeling and simulations of unclassified, fundamental science projects <http://www.lanl.gov/news/releases/science_at_the_petascale_roadrunner_results_unveiled_nr.html> . These ranged from the world's largest HIV evolutionary tree to advances in understanding dark matter.

- Conducting seven homemade explosives courses <http://www.youtube.com/watch?v=0vcoLE3JYQM> for U.S. Marines and Army Rangers trained, earning an NNSA Defense Programs Award of Excellence
- Completing the next-generation LANL instrument to detect nuclear detonations, which launched in May aboard the Air Force's IIF-1 Global Positioning System satellite <http://www.afspc.af.mil/news/story.asp?id=123229701>
- Completing a series of proton radiography experiments on key explosives, earning an NNSA Defense Programs Award of Excellence
- Providing instruction for Department of Energy, Department of Defense, FBI, and other personnel on all aspects of radiological and nuclear weapons physics, engineering, and design.
- Conducting the 52nd annual nondestructive assay course for nuclear materials safeguards inspectors in August with the International Atomic Energy Agency
- Providing deployed portal-monitor-system testing, site surveys, site-specific design input, background radiation measurements, and system certifications at more than 50 installations in more than 30 countries on 5 continents, including border crossings, railways, airports, and ocean cargo ports.

About Los Alamos National Laboratory <http://www.lanl.gov>

Los Alamos National Laboratory, a multidisciplinary research institution engaged in strategic science on behalf of national security, is operated by Los Alamos National Security, LLC, a team composed of Bechtel National, the University of California, The Babcock & Wilcox Company, and URS for the Department of Energy's National Nuclear Security Administration.

Los Alamos enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health, and global security concerns.

About National Nuclear Security Administration <http://www.nnsa.energy.gov/>
Established by Congress in 2000, NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science in the nation's national security enterprise. NNSA maintains and enhances the safety, security, reliability, and performance of the U.S. nuclear weapons stockpile without nuclear testing; reduces the global danger from weapons of mass destruction; provides the U.S. Navy with safe and effective nuclear propulsion; and responds to nuclear and radiological emergencies in the U.S. and abroad.

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