# The Divine Strake Nuclear Weapons Simulation: A Bad Signal at a Bad Time

Sometime in 2007, the U.S. Defense Threat Reduction Agency (DTRA) plans to conduct a very large explosive test at either the Nevada Test Site or the White Sands Missile Range in New Mexico. This test will not be a nuclear explosion; it will detonate 700 tons of conventional explosives. One of its main goals, however, will be to study the effects of a low-yield nuclear blast on underground structures.

The 2005 Defense budget request describes Divine Strake as a "Full-Scale tunnel defeat demonstration using high explosives to simulate a low yield nuclear weapon ground shock environment at Department of Energy's Nevada Test Site." The February 2006 Department of Defense budget request states that the program of which the test is a part "will develop a planning tool that will improve the warfighter's confidence in selecting the smallest proper nuclear yield necessary to destroy underground facilities while minimizing collateral damage."

This test, apparently designed to refine the ability of the United States to use low-yield nuclear weapons against underground targets, is going forward against the background of reports that the United States is considering use of nuclear weapons against underground targets in Iran. Faced with a growing furor over the purposes of the test, the Defense Threat Reduction Agency (DTRA) first acknowledged that Divine Strake was the test described in the above budget documents, and then claimed that the data will be used for conventional weapons research and planning purposes. Independent experts questioned DTRA's claims, noting that the Divine Strake explosion will be far larger than any conventional weapon in the U.S. arsenal, while being close to the size of the lowest yield of the earth penetrating B61-11 nuclear bomb. Hans Kristensen of the Federation of American Scientists wrote that

"Contrary to most of the media reports, Divine Strake is not testing a conventional bomb but simply detonates a huge pile (700 tons) of Ammonium Nitrate and Fuel Oil (ANFO). For comparison, the largest conventional weapon in the U.S. inventory is the MOAB (Massive Ordnance Air Blast) bomb, which contains nearly nine tons of explosives with a yield of approximately 0.12 kt TNT.

The explosive power of Divine Strake will be approximately 593 tons of TNT equivalent, or roughly 0.6 kt. This is about double the lowest yield option on the non-strategic B61 nuclear gravity bomb, and suggests that Divine Strake may be intended to fine-tune use of the B61 bomb. There are three modifications of the non-strategic B61 bomb in the U.S. stockpile with yields ranging from 0.3 kt to 170 kt."

DTRA's claims that the data will be used for conventional weapons purposes likely is a half-truth, of the kind intended to mislead. There is considerable overlap between technology development that will allow the use of conventional weapons to more effectively destroy things and

#### **Nuclear Weapons Testing on Indigenous Lands**

The existence of nuclear weapons in the world causes ecological devastation, even if they never are used in warfare. A half century of testing has contaminated vast reaches of the planet, and has resulted in millions of premature deaths by causing birth defects, cancer, and other diseases. Over nine hundred nuclear tests took place at the Nevada Test Site during the Cold War. These tests left millions of curies of strontium, cesium, and plutonium underground. In addition, hundreds of thousands of cubic yards of radioactive waste have been buried at the Nevada Test Site. Above ground nuclear testing, along with plutonium dispersal experiments and depleted uranium ammunition testing, caused additional contamination.

"No Developed nation tests its nuclear weapons on its own lands. All nuclear testing is done on indigenous people's lands... The Western Shoshone are the rightful custodians of this land, affirmed by the Treaty of Ruby Valley in 1863. With over 900 bombs exploded, they are the most bombed nation in the world." Raymond D. Yowell, Chief, Western Shoshone National Council, 1992.

Although the Divine Strake test will not be a nuclear explosion, it continues the practice of environmentally destructive testing on lands taken from indigenous peoples. For more on the impacts of nuclear weapons research, development, testing and production on indigenous peoples world wide, see the the fact sheet and resource links, "Indigenous People and the Nuclear Age: Making the Connections," prepared by the Women's International League for Peace and Freedom, at http://www.reachingcriticalwill.org/technical/factsheets/indigenous.html

#### The Nevada Test Site



technology development that will allow the use of reduced yield nuclear weapons, should conventional weapons be unable to accomplish the desired level of destruction. "Divine Strake" is one of many experiments and studies being conducted by the military aimed at learning how best to combine nuclear and non-nuclear weaponry in the new round of "small" wars that powerful factions in the United States appear determined to fight. A solicitation to contractors for work on Hard and Deeply Buried Target Defeat stated, for example, that "STRATCOM [Strategic Command] needs to consider and evaluate the option of using nuclear weapons against its most difficult targets, and to compare whether such weapons provide an enhanced targeting posture or alternately provide the exclusive means to eliminate some particularly difficult targets." The influential Defense Science Board, in a recent report on future strategic strike forces, recommended continued work on earth penetrators, and noted that the research could be applied to either nuclear or conventional weapons.

Studies on such things as earth penetrators and the effects of ground shock on underground structures inform weapons design and strike planning, including how to determine which targets might require nuclear weapons use to assure their destruction. In a speech to the Air Warfare Symposium last year, Strategic Command's General James Cartwright acknowledged this in connection with the controversial Robust Nuclear Earth Penetrator (or RNEP, now officially discontinued, at least as an explicitly "nuclear" weapons program): about running around into a cement wall on a sled and making sure that the modeling and simulation is accurate. Should we do that? Gosh, yes we should do that. Should we do it in the name of nuclear? Probably not. But to jam into the name of one particular test, one particular characteristic, really misses the point in how we do business today, and anybody in this room that's in the private sector will tell you. ... I've got to cross-pollinate all of my technology. That's what we're trying to do here.

So, from my standpoint, the great value added is that I will get to validate the environment in which my fuses and warheads, whether they be conventional or nuclear, have to live and convince myself so that I don't have to go out and do a whole bunch of testing. Whether I'm testing a conventional weapon or a nuclear weapon."

The Divine Strake test sends a signal to the world that the United States is continuing to refine its own weapons of mass destruction, and considers them an integral part of military forces designed to carry out a policy of preventive war. We will not end the fundamental danger to humanity posed by nuclear weapons by endless rounds of threat and counter-threat. It is time for the United States and the other nuclear-armed states to fulfill their end of the Nuclear Non-Proliferation treaty bargain: to negotiate in good faith for the elimination of their nuclear arsenals.

Information Brief for Western States Legal Foundation by Andrew Lichterman

"RNEP is nothing about anything going bang, it's

## A growing coalition is opposing the Divine Strake test.

For additional information and to get involved, contact one of the following (partial list):

Citizen Alert www.citizenalert.org • Healthy Environment Alliance of Utah www.healutah.org • Los Alamos Study Group www.lasg.org • Nevada Desert Experience www.nevadadesertexperience.org • Shundahai Network www.shundahai.org • Western Shoshone Defense Project www.wsdp.org • Western States Legal Foundation www.wslfweb.org

### For more information and references regarding Divine Strake and related U.S. nuclear weapons programs see

"Divine Strake' and the talk of a nuclear attack on Iran," DisarmamentActivist.org, April 12, 2006, and other entries under the "Divine Strake" category

*The Nevada Test Site: Desert Annex of the Nuclear Weapons Laboratories,* Western States Legal Foundation and Nevada Desert Experience Information Bulletin, August 2005, www.wslfweb.org/docs/nts2005.pdf

War is Peace, Arms Racing is Disarmament: The Non-Proliferation Treaty and the U.S. Quest for Global Military Dominance, Western States Legal Foundation Special Report, May 2005, www.wslfweb.org/docs/warispeace.pdf

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