Update: Divine Strake to Strike New Mexico

The “Divine Strake” nuclear weapons effects test has been looking for a home, and has likely found one at the White Sands Missile Range in New Mexico. Divine Strake was kicked out of the Nevada Test Site (NTS) because of popular protest and a lawsuit by citizens and the Western Shoshone Nation. Citizens of Indiana then rejected it when the idea was floated to detonate it there in a limestone quarry. Now, Senator Domenici, always a staunch proponent of New Mexico’s nuclear weapons programs, says, “there are no other likely sites other than White Sands.” This is perhaps perversely fitting for the birthplace of atomic weapons and the key State for nuclear weapons design, production and dumping of bomb-making radioactive wastes.

What is Divine Strake For? 

The federal entity in charge of Divine Strake is the Defense Threat Reduction Agency (DTRA) within the Department of Defense. A 2006 DTRA budget document described the planned test as a “Full scale tunnel defeat demonstration using high explosives to simulate a low yield nuclear weapon ground shock.” The test’s stated purpose was to “improve the warfighter’s confidence in selecting the smallest nuclear yield necessary to destroy underground facilities while minimizing collateral damage.” The destructive ground shock effect on the tunnels and equipment inside would have been measured to perfect computer codes that war planners could use to pick out how big a bomb to use. DTRA now claims the use of the word “nuclear” in the budget language was a mistake.

Is It a Nuclear Weapons Test? 

Originally scheduled for the NTS in June 2006, Divine Strake would have detonated 700 tons of ammonium nitrate-fuel oil (ANFO). Approximately 2.5 tons of ANFO destroyed the Murrah Federal Building in Oklahoma City in 1995. Divine Strake was to be detonated in a 32-foot diameter hole, approximately 100 feet above tunnels. Since no nuclear materials are involved, it would not have been a nuclear weapons test per se. Instead, Divine Strake is meant to study the destructive effects of nuclear weapons on hardened deeply buried targets, and as such it is a warfighting tool. This is significant given that President Bush has said that all options remain on the table while dealing with Iranian nuclear facilities (some of which are known to be buried). Divine Strake’s ANFO charge was to be 20 times heavier than the payload capabilities of the B-52, the U.S.’s heaviest bomber. The only deliverable weapon in the U. S. arsenal with equivalent destructive power is a nuclear weapon.

As configured at the NTS, the center of the ANFO charge for Divine Strake would have been approximately 20 feet below the surface of the ground. This roughly matches the limited burrowing capabilities of the U.S.’s existing earth-penetrating nuclear weapon, the B61-11. Despite that limited penetration, nuclear weapons effects against buried targets increase exponentially because of closer “coupling” of the blast’s shock wave to underground geologic formations.

Why White Sands? 

The White Sands Missile Range (WSMR) in southern New Mexico is now the likely location for Divine Strake. DTRA and its predecessors have operated “test beds” and targets at White Sands since 1976. First established in 1945, WSMR has been the location for thousands of missile tests and bomb drops, including the world’s first atomic test at the Trinity Site on July 16, 1945. Most of the U.S.’s nuclear weapons effects tests have been conducted at White Sands using large amounts of ANFO, some up to four times larger than that planned for Divine Strake. However, the last such test was conducted in 1994, which begs the question of why now? - - perhaps answered by the words “Iran” and “North Korea.” The “Capitol Peak HTD [Hard Target Defeat] Test Bed” was established at White Sands to provide real hardened tunnel targets and will probably be the location of a future Divine Strake Test.

While still scheduled for NTS the public questioned whether there had been sufficient environmental review under the National Environmental Policy Act (NEPA) for Divine Strake to go forward. White Sands’ current NEPA status is that DTRA released a draft programmatic environmental impact statement for all of the Range’s activities, including large ANFO blasts, in January 2006. DTRA now states that the final impact statement is expected in “early 2007,” after which the Agency could argue that the test is ready to go forward.
Are the Nuclear Weapons Design Labs Connected to Divine Strake?

Yes, very much so. The three design labs are the Los Alamos National Laboratory (LANL) and the Sandia and Lawrence Livermore National Laboratories. LANL’s Earth and Environmental Science Division’s “Nuclear Weapons Effects” program obtained DTRA funding for a project with Sandia and Livermore. The project’s purpose was to perfect computer code predictions of the destruction done to buried targets by nuclear weapons and associated collateral damage. This modeling has been calibrated by small-scale lab tests and 3,000-pound ANFO blasts in an Indiana limestone quarry in 2004 and 2005, which the much bigger and more realistic Divine Strake Test was to further improve.

Sandia has been involved in earth-penetrating nuclear weapon research for over 20 years. A subsidiary of Lockheed Martin (Sandia’s manager), the Sandia Corporation, owns a patent for an improved earth penetrating bomb case with “optional payload.” Sandia designed and tested the earth-penetrating nose cone and bomb case for the B61-11 modification (the original B61 is a LANL design to begin with). Sandia is currently conducting cable-pulled “drop tests,” probably to enhance penetrating capabilities. According to Sen. Domenici, the FY2007 defense appropriations bill includes “…$1.95 million for work at Sandia National Laboratories on a non-nuclear, earth-penetrating bomb.” But improved earth-penetrating technologies can be used for both nuclear and nonnuclear payloads.

Finally, there is a revolving door for senior managers between the Labs and DTRA. LANL’s controversial ex-director Pete Nanos is currently employed at DTRA, while still drawing $235,000 a year from the Lab. Senior LANL nuclear weapons scientist Steve Younger was formerly the Director of DTRA. James Tegnelia, a former senior manager at Sandia, is now head of DTRA.

Why Should Citizens Care About Divine Strake?

Divine Strake confirms that U.S. war planners continue to pursue the possible use of nuclear weapons in future wars. As we see in the case of North Korea and perhaps Iran, a global arms race may be renewed as more countries seek nuclear weapons, in some cases because of their perceived need to deter the U.S., in other cases because worrisome neighbors are acquiring them. On our side, the Divine Strake Test could make nuclear weapons seem somehow more “usable” in the minds of U.S. military planners. Finally, the 1970 NonProliferation Treaty (NPT) created a global nonproliferation regime that for the most part has been widely successful. That regime is now unraveling, in large part because the Treaty’s nuclear weapons signatories have refused to abide by its mandate to disarm nuclear stockpiles. Indisputably, the global nonproliferation regime needs vigorous strengthening, not undermining, as the U.S. is currently doing through new nuclear weapons designs and nuclear warfighting tests.

What Can You Do?

Since Divine Strake has not yet been rescheduled, this fact sheet is meant to be a heads-up. But it is important to remember that citizens have already driven Divine Strake out of Nevada and Indiana, and could do the same in New Mexico. Citizens should also be acutely aware of the broader implications of this planned test, which are symptomatic of the Bush Administration’s aggressive nuclear weapons policies. Write letters-to-the-editor and to Congress expressing your views that any thought of potential preemptive nuclear war by anybody is abhorrent. Stay tuned to www.nukewatch.org for Divine Strake Test updates. E-mail info@nukewatch.org to be on our snail-mail newsletter or e-mail alert list.

We are indebted to our colleagues at the Western States Legal Foundation (www.wslfweb.org) for first exposing the connections between Divine Strake and U.S. nuclear weapons.

- John Witham and Jay Coghlan