

[resources](#)[publications](#)[digital library](#)[policy forum](#)[research kiosk](#)[email services](#)[related links](#)[nautilus home](#)[security](#)[energy](#)[environment](#)[youth](#)[search site](#)

Fuel for the Fire: Tactical Nuclear Weapons and Terrorism

By Alastair Miller

Contents:

[I. Introduction](#)

[II. Essay By Alastair Miller](#)

[III. Nautilus Invites Your Responses](#)

[Return to Special Forum Main Page](#)

I. Introduction

The following essay is by Alistair Millar, vice president and Director of the Washington Office of the Fourth Freedom Forum, a private Research foundation with offices in Indiana, Rhode Island and Washington, DC. Miller discusses the possible use of tactical nuclear weapons in fighting terrorism. He warns that the potential for civilian casualties even by low-yield, earth-penetrating nuclear weapons would be enormous. He cautions that attempts to find a "usable" role for nuclear weapons will undermine nonproliferation goals.

II. Essay By Alastair Miller

Fuel for the Fire: Tactical Nuclear Weapons and Terrorism
By Alistair Millar

In the aftermath of the attacks on the World Trade Center and the Pentagon on September 11th, the United States has been recruiting allies and new-found friends in an effort to formulate options for any retaliatory strikes. U.S. Defense Secretary Donald Rumsfeld has noted that retaliation will be "unconventional," citing the use of special forces and other less traditional means of dealing with a new type of enemy that is characterized by elusiveness. He also refused to rule out the possibility that an arsenal of tactical nuclear weapons could be used as a component in what has been declared as a war against terrorism. Larry Johnson, a former terrorism expert at the State Department, has joined a growing chorus of analysts who have elaborated on that point in the aftermath of this tragedy by noting that "the options are everything from conventional air strikes to cruise missiles up to and including tactical nuclear weapons."

The term tactical nuclear weapon refers to a broad array of atomic explosive weapons. These range from so-called

nuclear landmines and nuclear artillery shells to air-dropped or missile-launched nuclear warheads. The yields of such weapons range from being relatively low (0.1 KT) to being higher than those of the bombs dropped on Hiroshima and Nagasaki. The type of tactical nuclear weapon that has been recommended for optional use as part of the response to the September 2001 terrorist attacks on the United States would be an earth-penetrating, or "bunker buster" weapon.

Any U.S. response involving even the use of tactical nuclear weapons has far-reaching and serious negative consequences and should be rejected.

First, the use of such a weapon is being suggested because it would allow the U.S. to reach Saddam Hussein and Usama bin Laden who are assumed to be hiding in deeply buried underground bunkers. Some outspoken defense analysts that strongly influence US policy incorrectly assert that targeting them with earth-penetrating nuclear weapons with smaller blast yields would not harm innocent civilians.

"The use of any nuclear weapon capable of destroying a buried target that is otherwise immune to conventional attack will necessarily produce enormous numbers of civilian casualties," writes Dr. Robert Nelson, a professor of theoretical science at Princeton University, in a recent study for the Federation of American Scientists. "No earth-burrowing missile can penetrate deep enough in the earth to contain an explosion with a nuclear yield even as small as 1 percent of the 15-kiloton Hiroshima weapon. The explosion simply blows out a crater of radioactive dirt, which rains down on the local region with an especially intense and deadly fallout."

The blast from one of these weapons with even the lowest yield would "knock down nearly all homes and apartments--and kill nearly all the people in them--out to distances of greater than half a mile from the blast," says Greg Mello, director of the Los Alamos Study Group, a nuclear weapons policy research and education group based in Santa Fe. Those within this area who survived the blast would suffer a lethal dose of radiation, he predicts. "To take a specific example," says Mello, "if the target in question were the Iraqi presidential bunker located in south-central Baghdad, there would be very roughly 20,000 people located within one-half mile of this target." Whatever the yield of such weapons, their use would not only cause massive loss of human life, but also long-term contamination of soil, water tables, and atmosphere, and destruction of flora and fauna.

Second, tactical nuclear weapons pose unique dangers as weapons of terror. Their often-smaller size increases their portability and vulnerability to theft by nonnuclear states and potential nuclear terrorists. Characteristics of command unique to TNWs--such as predelegated launch authorization, and often inadequate safeguards, i.e., ineffective permissive action links--add to their potential

