

than 2000 US warheads on active duty by 2012 [7]. At American insistence, the treaty doesn't require the destruction of any warheads, and the US plans to store decommissioned warheads as a ready reserve. The Bush Administration wants to keep a reserve because, in the words of a report by nuclear experts close to the administration "There is no basis for expecting that the conditions that may permit deep nuclear reductions today will continue in the future" [8]. Clinging to Cold War fears, however, worsens a threat that is already grave. If the US places its nuclear weapons in storage, instead of destroying them, Russia will be forced to do likewise. "In Russia, plagued for years by security problems, the threat of warhead theft from a warehouse is much greater than the threat of warhead theft from a silo" concludes a UCS backgrounder [7].

Russia is the most likely place in today's world for terrorists to get nuclear materials. The Russian stockpile includes hundreds of thousands of pounds of weapons-grade plutonium and highly enriched uranium. Less than 100 pounds, in the hands of terrorists, could be used to make a simple bomb like the one that destroyed Hiroshima [9]. Russia's nuclear security systems are outdated and the massive workforce running its nuclear weapons complex is underpaid. It has open borders with countries in which terrorists are active [10].

In 1991, the US and Russia launched the Cooperative Threat Reduction (CTR) program to lock up former Soviet nuclear materials and make sure that Russian nuclear workers are well paid or provided with other jobs. This program has progressed slowly because of inadequate funding and political support. When he took office in 2000, Bush actually tried to reduce its funding. Since the September 11 terrorist attacks, funding has been increased to \$1 billion annually. This is only a tiny fraction of the amount so far squandered on the war with Iraq, a country without nuclear weapons or materials [10].

### **New nuclear weapons**

Rather than reducing the role of nuclear weapons in post-cold war US military strategy, the Bush administration seeks significant new roles for them. Bush wants to develop new nuclear weapons with lower explosive yield for roles that would include the destruction of biological and chemical weapons facilities and deeply buried hardened bunkers. A new earth penetrating bomb would burrow into the ground due to the force of impact before detonating. The underground detonation would convey a portion of the force of the explosion through the ground, destroying deep underground bunkers [11]. The new plan may include the use of nuclear weapons against countries that don't have their own nuclear weapons; something which the

US previously promised it wouldn't do [9, 11, 12]. The administration wants to develop a new "modern pit facility" to manufacture the plutonium and enriched uranium cores of new nuclear weapons. Since 1992, the US has maintained a moratorium on nuclear weapons testing. The Bush Administration seeks to reduce the time necessary to resume nuclear testing, as a possible first step towards ending this moratorium [13, 14].

"The barely concealed premise of this emerging nuclear doctrine is a desire to make US nuclear weapons more useable", wrote William Hartung of the World Policy Institute. "This dubious proposition is grounded in the notion that a low yield weapon could more readily be used as a threat, or actually dropped on a target, without sparking nuclear retaliation by another nuclear power" [15]. Independent experts question administration claims that low yield weapons would limit civilian casualties and make the new weapons more usable. No feasible "bunker buster" could penetrate deeply enough to contain a nuclear explosion underground [11, 16]. To destroy deeply buried targets a "bunker buster" might need 25 times the explosive yield of the Hiroshima bomb. Such a bomb would blast a huge crater and hurl millions of cubic feet of radioactive material into the air. This material could be dangerous for years and might be spread over a large area by prevailing winds [13, 14, 17]. Many potential adversaries deliberately establish command bunkers and other sensitive facilities inside, near, or beneath areas heavily populated by civilians. A nuclear bunker buster or other low yield weapon used in such circumstances would kill or injure enormous numbers of civilians. A nuclear explosion would not necessarily render biological or chemical weapons harmless, and might instead release them into the environment, further increasing casualties [13, 18].

New nuclear weapons would need to be tested. The nuclear Non-Proliferation Treaty (NPT) commits countries without nuclear weapons not to get them, and countries with nuclear weapons to work for nuclear disarmament. All but four countries in the world (India, Israel, Pakistan, and North Korea, which recently withdrew) have ratified the NPT. The treaty forms the basis for the system of inspections, administered by the International Atomic Energy Agency, that insures compliance by non-nuclear countries [19]. Many nations agreed to an indefinite extension of NPT in 1995 on the explicit condition that the US and other nuclear powers would not resume nuclear tests and would fulfill their commitment to work towards nuclear disarmament. A US decision to test new nuclear weapons would dramatically undermine NPT and destroy its companion, the Comprehensive Test Ban Treaty (CTBT) [17]. The CTBT would prohibit all nuclear test explosions. The US

Senate hasn't ratified this treaty despite the fact that France, Germany, the United Kingdom, Japan, Russia and a total of 97 nations had done so by 2003, and China promised it would ratify if the US did. The Bush administration opposes the treaty. A resumption of nuclear testing by the US would likely unleash a new round of testing by China, India, Pakistan, and Russia. Countries seeking to acquire nuclear weapons would feel emboldened to conduct tests of their own [13]. The US doctrine of pre-emptive war, demonstrated in Iraq, provides a powerful incentive for countries that fear US attack, such as North Korea, to seek a nuclear deterrent [9].

### **Ballistic missile defense**

Besides offensive nuclear weapons, deploying a system to protect against nuclear missile attacks is the other cornerstone of Bush nuclear policy [20, 21]. Republicans have been obsessed with missile defense since Ronald Reagan, with only limited scientific advice, called for the development of a "Star Wars" missile shield twenty years ago [22]. The current incarnation of National Missile Defense (NMD) is a more limited ground launched system intended to defend against a few warheads launched by a "rogue state" towards the US. With \$90 billion spent so far, the technical problems involved are still formidable and unsolved [23]. Using just a few minutes of sensor data, an interceptor missile must be launched on a precise trajectory to propel a "kill vehicle" to collide with an incoming warhead moving through outer space ten times faster than a bullet from a gun [23, 24]. Countermeasures that could fool ground based and "kill vehicle" sensors are cheap, simple and numerous. They include launching lightweight decoys along with the warhead, tethering a balloon to it, and many others. The means to defeat such countermeasures would be complicated and expensive, if possible at all [25]. Missile defense is a different sort of problem than some difficult technological problems that Americans take pride in having successfully solved in the past. Landing astronauts on the moon, for example, was a problem of fixed difficulty. The moon wasn't constantly devising new countermeasures to stop the astronauts.

Bush is rushing to operationally deploy the first missile interceptors before the November election, with up to 20 interceptors to be deployed in Alaska and California by the end of 2005 [24]. This is despite the fact that the interceptors have so far undergone only limited testing under highly artificial conditions, and that they nevertheless failed in three of eight such tests. The system has no demonstrated capacity to intercept a warhead under realistic conditions where the characteristics of the warhead, its trajectory, and its time of launch are all unknown [25]. Bush administration

claims that the system would provide an effective defense have no basis in scientific evidence. The long term plan to make the system effective against even a small number of warheads is to add additional layers capable of intercepting the attacking warhead or missile at various stages in its flight. Sea based, air based, and space based interceptors would be added at a cost conservatively estimated at hundreds of billions of dollars [24]. The big four weapons contractors, Lockheed Martin, Boeing, Raytheon, and TRW stand to profit handsomely from this project [15].

The supposed purpose of NMD is to protect the US against missile attacks by “rogue states” such as North Korea, Libya, Iran and, formerly, Iraq [26]. The target readiness date was based on a scenario developed in 1997 in which North Korea was seen as capable of developing an intercontinental missile in eight years. In fact, North Korea abandoned its missile program two years before the scenario was created [23]. It has also expressed willingness to abandon its nuclear weapons program in exchange for a US promise not to attack it, something which the Bush administration refuses to grant. Libya recently abandoned its nuclear weapons program. A recent study concluded that any nation technically capable of developing long range missiles could also develop countermeasures capable of defeating the fully deployed NMD system [26]. China currently has a small nuclear deterrent force consisting of only 20 long range missiles. Were China convinced that the American system posed any threat to its nuclear deterrent, it might seek to overwhelm the system by increasing its number of deployed nuclear missiles. This might, in turn, cause India and Pakistan to do likewise. South Asia is already one of the world’s most unstable areas.

Ballistic missiles are not a likely means for a developing nation or terrorist group to attack the US. Besides being expensive and complicated, ballistic missiles can be tracked. The party guilty of the attack could be readily determined and would face devastating retaliation. A discreet attacker is far more likely to smuggle a nuclear weapon into the US in the hold of a ship or the bed of a truck [23]. Money spent on NMD is money not spent on securing our ports of entry.

## What can I do?

### 1. VOTE BUSH OUT!

### 2. Stay informed about nuclear weapons issues

visit the websites of:

The Union of Concerned Scientists [www.ucsusa.org](http://www.ucsusa.org)  
 Friends Committee on National Legislation [www.fcni.org](http://www.fcni.org)  
 Nuclear Notebook of the Bulletin of the Atomic Scientists [www.thebulletin.org/issues/nukenotes/nukenotes.html](http://www.thebulletin.org/issues/nukenotes/nukenotes.html)  
 Nuclear Reduction/Disarmament Initiative [www.nrdi.org/forpeopleoffaith.htm](http://www.nrdi.org/forpeopleoffaith.htm)

## 3. write letters to newspapers, to your senators and representatives, and to the administration

### References

- Husain, K., *Neocons: the men behind the curtain*. Bulletin of Atomic Scientists, 2003. 56(6): p. 62-71.
- Chomsky, N., *Hegemony or Survival: America's Quest for Global Dominance*. 2003, New York: Metropolitan Books. 278.
- Ikenberry, G.J., *America's Imperial Ambition*. Foreign Affairs, 2002. 81(5): p. 44-60.
- Bush, G.W., *The National Security Strategy of the United States of America*. <http://www.whitehouse.gov/nsc/nss.html>, 2002.
- Norris, R.S., et al., *NRDC Nuclear Notebook U. S. Nuclear forces 2002*. Bulletin of Atomic Scientists, 2002(May/June): p. 70-75.
- Blair, B.G., et al., *Toward True Security: A US Nuclear Posture for the Next Decade*. 2001: Federation of American Scientists, Natural Resource Defense Council, Union of Concerned Scientists. 42.
- UCS, *Global Security Backgrounder: The Moscow Treaty*. Union of Concerned Scientists website, 2003: p. [www.ucsusa.org/global\\_security/nuclear\\_weapons/page.cfm?pageID=1134](http://www.ucsusa.org/global_security/nuclear_weapons/page.cfm?pageID=1134).
- Ciarrocca, M., *The Nuclear Posture Review: Reading Between the Lines*. Common Dreams News Center, 2002: p. [www.commondreams.org/views/02/0117-10.htm](http://www.commondreams.org/views/02/0117-10.htm).
- Gottfried, K., *President Bush's Nuclear Weapons Policy: Illogical, Ineffective, and Dangerous*. Union of Concerned Scientists website, 2003 [www.ucsusa.org/global\\_security/nuclear\\_weapons/page.cfm?pageID=1106](http://www.ucsusa.org/global_security/nuclear_weapons/page.cfm?pageID=1106).
- Gottfried, K., *A Ticking Nuclear Time Bomb*. Union of Concerned Scientists website [http://www.ucsusa.org/global\\_security/nuclear\\_weapons/page.cfm?pageID=1181](http://www.ucsusa.org/global_security/nuclear_weapons/page.cfm?pageID=1181), 2003.
- Gronlund, L. and D. Wright, *Earth Penetrating Weapons: Union of Concerned Scientists Backgrounder*. [http://www.ucsusa.org/global\\_security/nuclear\\_weapons/page.cfm?pageID=777](http://www.ucsusa.org/global_security/nuclear_weapons/page.cfm?pageID=777).
- Bunn, G., et al., *Experts letter to President Bush: the NPR*. Union of Concerned Scientists website [http://www.ucsusa.org/global\\_security/nuclear\\_weapons/page.cfm?pageID=843](http://www.ucsusa.org/global_security/nuclear_weapons/page.cfm?pageID=843), 2002.
- Briefing Book on Building a New Generation of American Nuclear Weapons*. 2003: Center for Arms Control and Non-Proliferation.
- Kucia, C. and D. Kimball, *Arms Control Association Issue Brief: New Nuclear Policies, New Weapons, New Dangers*. 2003: Arms Control Association [www.armscontrol.org](http://www.armscontrol.org).
- Hartnung, W.D., *Bush's Nuclear Doctrine: From MAD to NUTS*. Foreign Policy in Focus <http://www.foreignpolicy-infocus.org>, 2000.
- Nelson, R., *Low-Yield Earth Penetrating Weapons (Science and Global Security)*. [http://www.princeton.edu/globsec/publications/pdf/10\\_1Nelson.pdf](http://www.princeton.edu/globsec/publications/pdf/10_1Nelson.pdf).
- Drell, S., R. Jeanloz, and Peurifoy, *A Strategic Choice: New Bunker Busters vs. Non-Proliferation (Arms Control Today)*. [http://www.armscontrol.org/act/2003\\_03/drelletal\\_mar03.asp](http://www.armscontrol.org/act/2003_03/drelletal_mar03.asp).
- May, M. and Z. Haldeman, *Effectiveness of Nuclear Weapons Against Buried Biological Agent targets (Center for Security and International Cooperation)*. <http://cisac.stanford.edu/research/inprogress/mayhalderman.html>.
- Non-Proliferation Treaty- Brief background, in United Nations website*. p. <http://www.un.org/Depts/dda/WMD/treaty>.
- Newhouse, J., *The Missile Defense Debate*. Foreign Affairs, 2001. 80(4): p. 97-109.
- Newhouse, J., *Imperial America: The Bush Assault on the World Order*. 2003, New York: Alfred A. Knopf.
- Ball, G.W., *The War for Star Wars*. The New York Review of Books, 1985. 32(6).
- Freeman, R., *National Missile Defense: The Secrets the Pentagon Doesn't Want You to Know*. Common Dreams News Center <http://www.commondreams.org/views/04/0520-11.htm>, 2004.
- Twenty years of "Star Wars": Big Budgets but Little Progress*. Global Security Backgrounder, Union of Concerned Scientists website [http://www.ucsusa.org/global\\_security/missile\\_defense/page.cfm?pageID=1140](http://www.ucsusa.org/global_security/missile_defense/page.cfm?pageID=1140).
- Technical Realities: An Analysis of the 2004 deployment of a U. S. National Missile Defense System*. Union of Concerned Scientists report [http://www.ucsusa.org/global\\_security/missile\\_defense/page.cfm?pageID=1403](http://www.ucsusa.org/global_security/missile_defense/page.cfm?pageID=1403).
- Wright, D.C. *An Assessment of Ballistic Missile Threats*. in *The Missile Threat and Plans for Ballistic Missile Defense: Technology, Strategic Stability, and Impact on Global Security*. 2001. Rome, Italy: Union of Concerned Scientists report <http://www.mi.inf.it/~landnet/NMD/wright.pdf>.

AWARE meets Sundays 5-7pm at the Urbana/Champaign Independent Media Center, 218 W. Main St., Urbana, Illinois. All are welcome!



## Bush Nuclear Weapons Policy: A Grave and Gathering Danger

by Paul Patton

*"No problem can be solved by the same consciousness that created it" - Albert Einstein*

*"Put up thy sword, for they that live by the sword shall die by the sword" -Jesus of Nazareth*

### The Choice: Cooperation or Dominance

The very survival of the human species may depend on controlling and eliminating nuclear weapons. The end of the cold war brings new opportunities for nuclear disarmament through cooperative agreements between nations. The Bush administration has chosen another path, which it says will lead to peace: unilateral US military world dominance [1-3]. “Our forces will be strong enough to dissuade potential adversaries from pursuing a military buildup in the hopes of surpassing or equaling the power of the United States”, Bush proclaimed in his “National Security Strategy of the United States” [4]. As Bush pursues this goal, his actions threaten to wreck the delicate framework of international treaties erected to stem the spread of nuclear arms, and could trigger a new global nuclear arms race.

### The cold war's legacy

As of 2002, the United States still maintained a stockpile of more than 10,600 nuclear warheads, including more than 8000 active duty warheads poised for launch towards Russia on a moment’s notice [5]. The Russians likewise maintain a large nuclear arsenal targeting the US. “The greatest nuclear danger to the United States today and in the near future is a Russian attack resulting from an error in Russia’s warning system or a failure in its command-and-control system” concludes a Union of Concerned Scientists (UCS) report [6]. The Bush administration has adopted a “go slow” approach to reducing these arsenals. Bush’s informal agreement with Russia, the Treaty of Moscow, would leave more