

Making the World Safer

# Making the World Safer: reducing the threat of weapons of mass destruction

# Weapons of mass destruction are the most serious threat to the United States



Nuclear Weapons
...difficult to acquire,
devastating in use



Biological Weapons

. . .use available technology and are potentially catastrophic



Chemical Weapons . . . cheap and easy to make

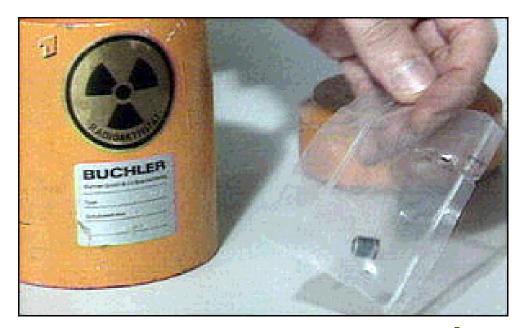
#### DTRA's mission...

Reduce the present threat Prepare for future threats



# Dozens of attempted nuclear smuggling incidents are reported annually

...there are more than 1,500 metric tons of separated plutonium in the world — enough for more than 200,000 nuclear weapons







# Tokyo subway attacks killed twelve and injured more than 5,500

...one milligram of sarin can kill one person



chemical



# Recent anthrax attacks killed five, exposed hundreds, and resulted in costly cleanup activities

...one billionth of a gram of anthrax can kill one person



biological



# Using a full spectrum of tools to reduce the present threat and prepare for future threats

#### Arms Control:

Inspecting threats at the source and stopping them at national borders

#### Threat Reduction:

Dismantling the former Soviet nuclear arsenal in place

#### Technology Development:

Developing, testing and fielding offensive and defensive technologies

### Chemical and Biological Defense:

Assuring operations in hostile environments and consequence management

#### Combat Support:

Assessing vulnerabilities, assuring the nuclear deterrent

➤ Making the World Safer



#### **Arms Control:**

### Taking threat reduction to the source

Implementing intrusive arms control inspections to fulfill U.S. treaty obligations

Successes include the START, INF and CFE treaties



On-Site Inspection

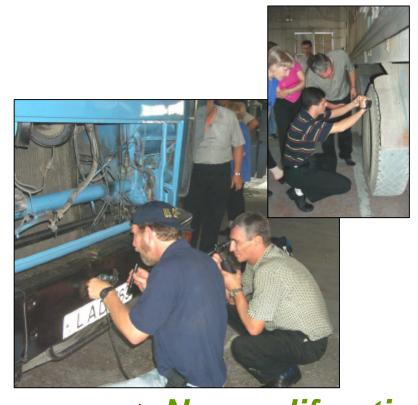


#### **Arms Control:**

# Stopping the spread of weapons of mass destruction

Enhancing border security across the former Soviet Union to prevent WMD smuggling

Currently training and equipping border guards on the proliferation front lines



➤ Nonproliferation

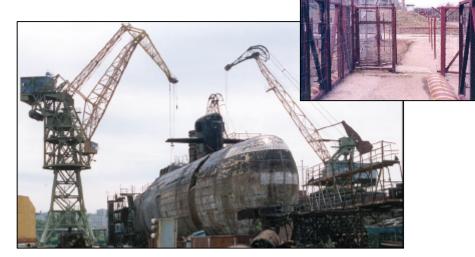


#### **Cooperative Threat Reduction:**

### Securing and dismantling strategic offensive arms

Enhancing Russian nuclear weapon storage and transportation security while eliminating strategic bombers, missiles and submarines

Belarus, Kazakhstan and Ukraine are now nuclear weapon-free



Cooperative Threat Reduction

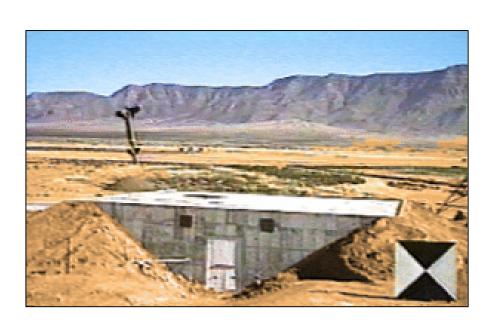


#### **Technology Development:**

# Taking the fight to the enemy

Rapidly developed thermobaric tunnel-busting weapons and cruise missile penetrator warheads

DTRA is the near-term interface between R&D and the warfighter



Counterproliferation



#### **Nuclear, Chemical and Biological Defense:**

# Detecting weapons of mass destruction threats

Developing an unconventional nuclear warfare protection system, chemical agent detectors and a prototype biological defense capability

Fielded highly-successful "Smart Building" at 2002 Winter Olympics in Salt Lake City



WMD Detection



#### **Combat Support:**

### Protecting our nation against weapons of terror

Force protection techniques and developing blast mitigation technology



Scenario development and threat modeling and simulation

Pentagon renovation saved lives and DTRA provided critical support to the Salt Lake Winter Olympics





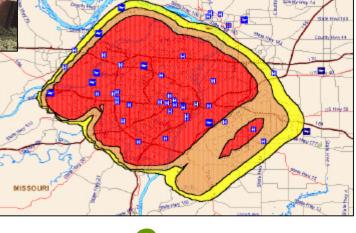
#### **Combat Support:**

### Reducing the impact of unthinkable incidents

WMD incident response

Developed hazard prediction and assessment software

Provided consequence management advice to national exercises, including TOPOFF 2000, Bush Inaugural, 2002 Winter Olympics



Consequence Management

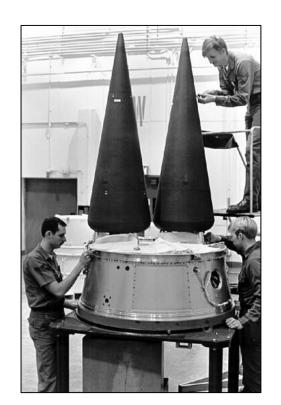


#### **Combat Support:**

# Deterring the use of weapons of mass destruction

Sustaining our nuclear deterrent

Developed the first nuclear weapon management plan for the Department of Defense



➤ Nuclear Deterrence



# Partnerships with the Joint Staff and Services, Combatant Commands and other Federal Agencies













#### Joint Staff and Services















#### **Combatant Commands**







#### Other Federal Agencies

DTRA partners with the Joint Staff and Services, Combatant Commands, and other Federal agencies to ensure that the best operational practices and technologies are delivered to our customers

Effective Partnerships



# Strong enabling directorates are the foundation for everything we do



Resource management: people and money



Information management: tying it all together

# Safe, Secure and Efficient



Acquisition excellence -- better, faster, cheaper

**Mission Success** 



Security and asset protection



Superior logistics and facilities management



#### DTRA delivers mission success



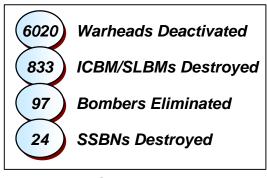
Thermobaric weapons



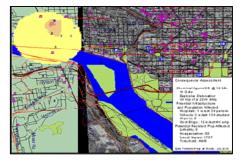
Playbooks of WMD consequence management



Cruise missile penetrator warhead



Former Soviet strategic arms elimination



Models of WMD use in urban areas



Open Skies Treaty entry into force



# DTRA successes in the making



Hellfire thermobaric weapon on UAV



Restoring operations after chemical attacks at airports and seaports



Urban bio-defense initiative



Assuring the viability of the nuclear deterrent



Training the trainers to deal with WMD

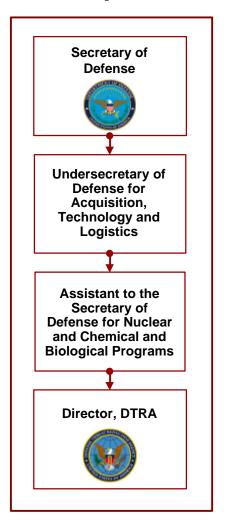


Targeting and analysis in support of the warfighter



### **DTRA** is a defense combat support agency

#### **Leadership Structure**



#### **Headquarters Facilities**



Hybla Valley Federal Building Alexandria, VA

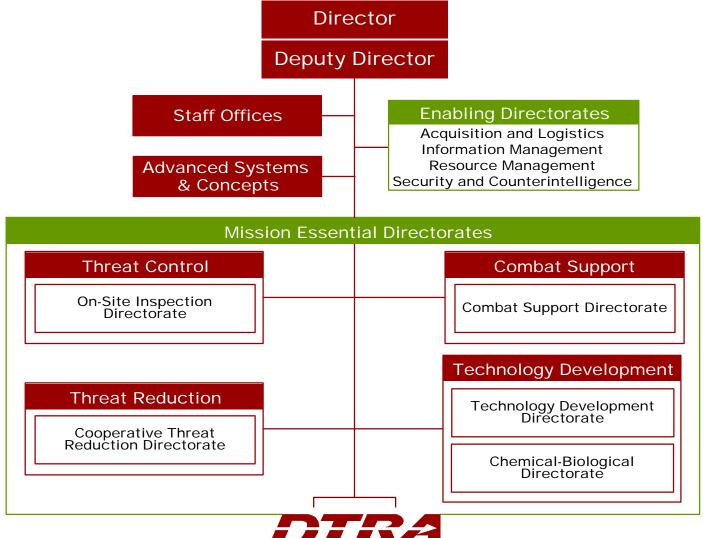




Reporting to the Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Defense Programs

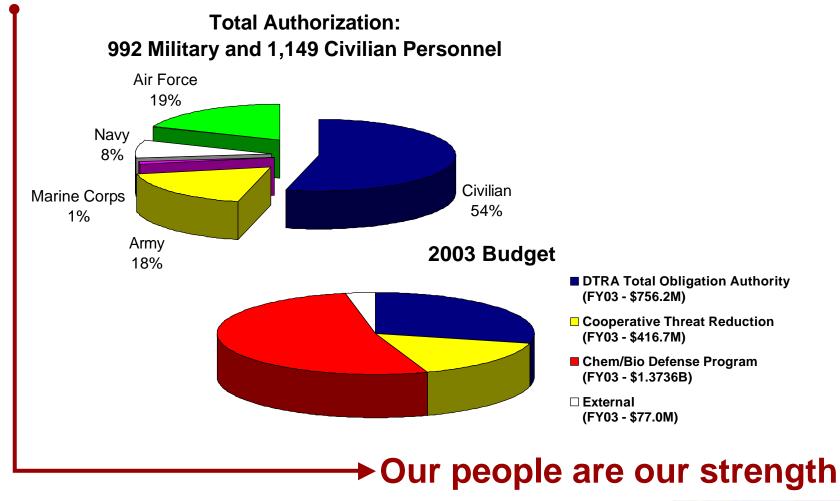


### **DTRA** is organized according to mission functions



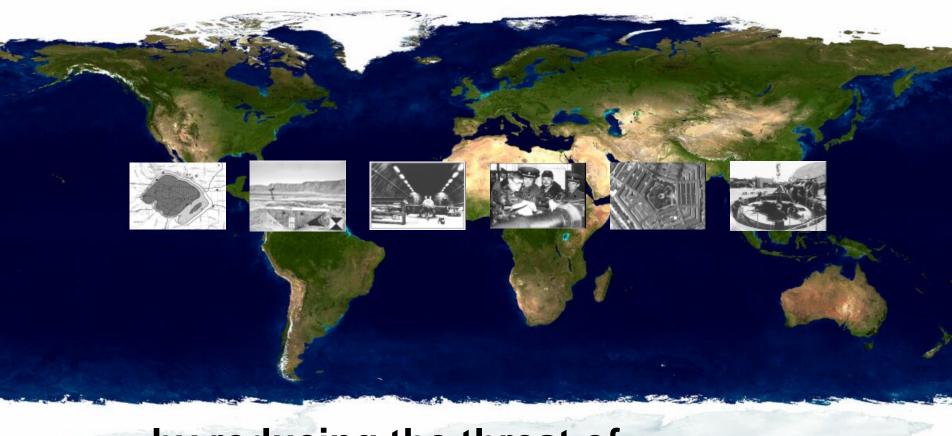


# An equal mix of military and civilian staff ensure a balance of warfighter support and program continuity









...by reducing the threat of weapons of mass destruction