

**DEFENSE THREAT REDUCTION AGENCY**



*Making the World Safer*

# ***COOPERATIVE THREAT REDUCTION (CTR)***

***NUCLEAR WEAPONS SAFETY & SECURITY  
AND***

***INTERCONTINENTAL BALLISTIC MISSILE ELIMINATION***

**Mr. John Byrd  
Director, CTR  
DTRA**

**G8 Global Partnership Against the Spread of  
Weapons and Materials of Mass Destruction**

# ***OVERVIEW***

- DTRA/CTR Overview
- Nuclear Weapons Safety and Security
- Intercontinental Ballistic Missile (ICBM) Elimination

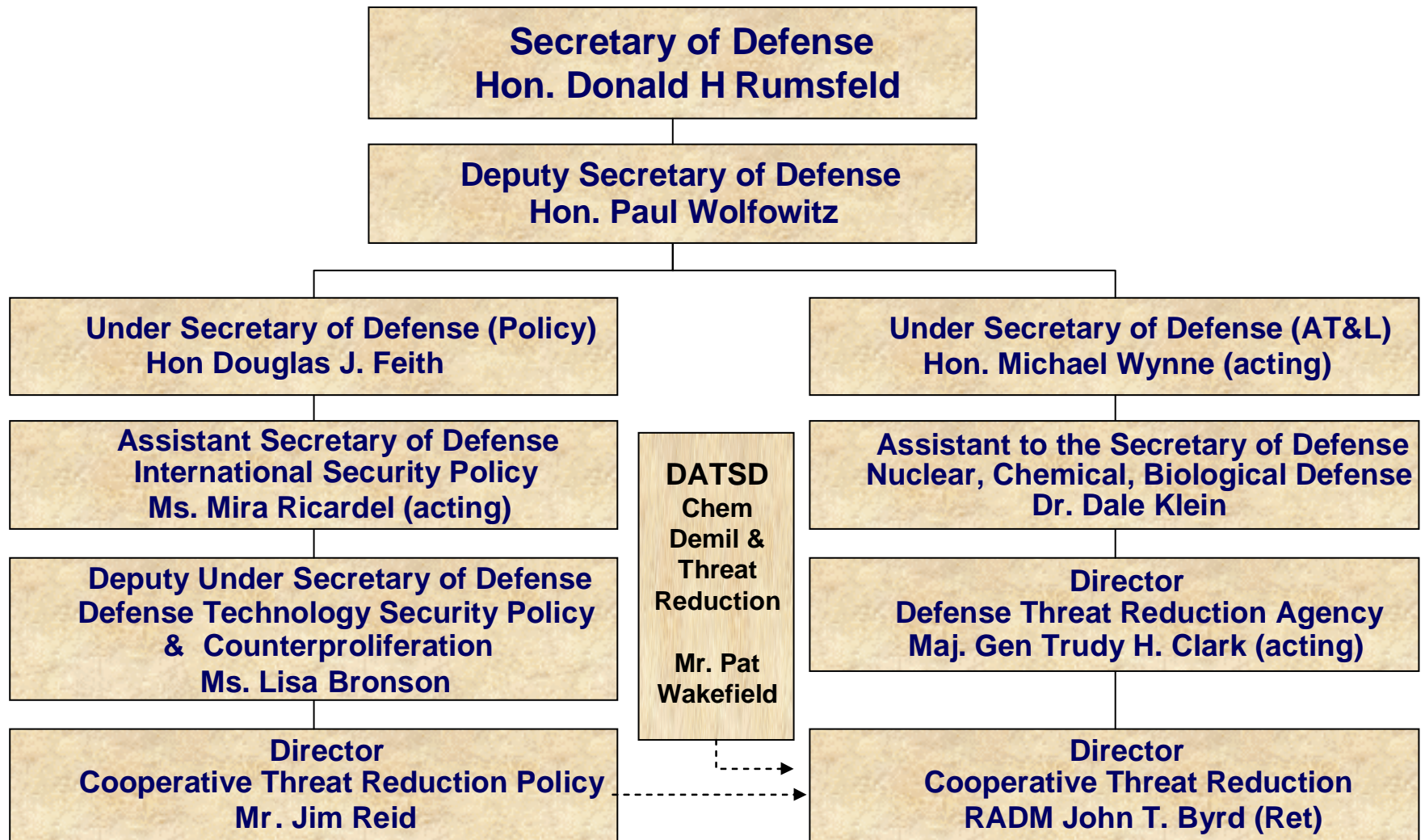
***“The greatest threat before humanity today is the possibility of secret and sudden attack with chemical or biological or radiological or nuclear weapons. ...I propose to expand our efforts to keep weapons from the Cold War and other dangerous materials out of the wrong hands. ...We're dismantling, destroying and securing weapons and materials... We have more work to do there.”***

***President George W. Bush***



*“The Defense Threat Reduction Agency safeguards America and its friends from Weapons of Mass Destruction (WMD) by reducing the present threat and preparing for the future threat.”*

# DoD CTR Organization



# DoD CTR Process

**Agreement Between USA and**

ARTICLE XXIV  
 This Treaty, including the Annexes, shall remain in force for 15 years unless agreed to be terminated by an instrument of ratification, denunciation, withdrawal, or amendment, signed by both Parties, and which has been deposited with the Secretary of State. If, at any time, either Party at the expiration of a period of five years, upon expiration of five years, the Treaty shall be extended for another five-year period, the Parties shall be deemed to have agreed to extend the Treaty for another five-year period, and it shall remain in force for each agreed five-year period of extension unless it is superseded by a subsequent agreement on the activities of the CTR.

2. A standing body, the Joint Compliance and Reporting Commission, shall periodically review the viability of this treaty in light of changing circumstances. Such reviews shall occur and be reported to each Party every five years thereafter.



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**Umbrella Agreements**

- Russia 07/92
- Belarus 10/92
- Ukraine 10/93
- Kazakhstan 12/93
- Georgia 07/97
- Uzbekistan 06/01
- Azerbaijan

**Implementing Agreements**

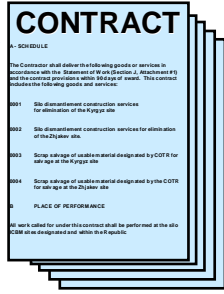
**Request for Assistance**



**Requirements Definition**

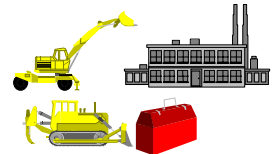
**Contracting Process**

- Announce
- Conference
- Select
- Award
- RFP
- Proposals
- Evaluation



**Execution/Delivery**

- Equipment
- Services
- Training



*Audits and Examinations*



# *NWS&S Program Prioritized Goals & Objectives*

- Ship nuclear warheads to storage and dismantlement sites
- Provide secure protection for all remaining warheads during transportation and storage
- Enhance the safety of storage and transportation activities

## *The Way Ahead*

- Consolidation
- Reduce 11 year site upgrade program to 5-6 years

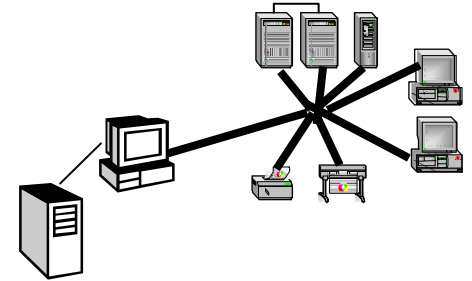
# NWSS & NWTS PROVIDES DEFENSE IN DEPTH



GUARD FORCE TRAINING SYSTEMS



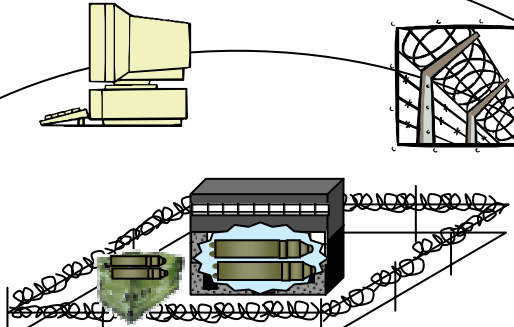
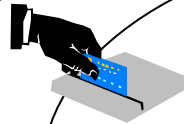
PERSONNEL RELIABILITY PROGRAM



AUTOMATED INVENTORY CONTROL AND MANAGEMENT



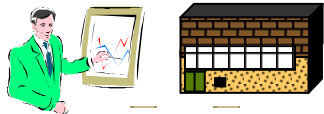
SAFETY ENHANCEMENT CENTER



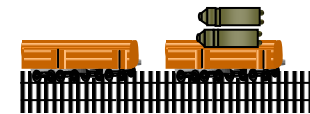
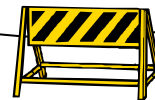
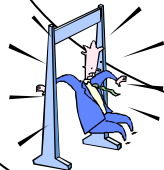
SITE SECURITY ENHANCEMENTS



EMERGENCY RESPONSE CAPABILITIES



SECURITY ASSESSMENT & TRAINING CENTER



WARHEAD TRANSPORT AND RAILCAR MAINTENANCE



SAFETY AND SUPPORT EQUIPMENT



SUPERCONTAINERS



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# *Guard Force Training, Equipment and Personnel Screening*

- 60 Small Arms Training Systems (SATS)
- 12 live fire shooting ranges
- Guard force radios to assist coordination
- Provide capability to screen personnel for nuclear duty
  - Personnel Reliability Program (PRP) Lab capable of evidentiary level testing



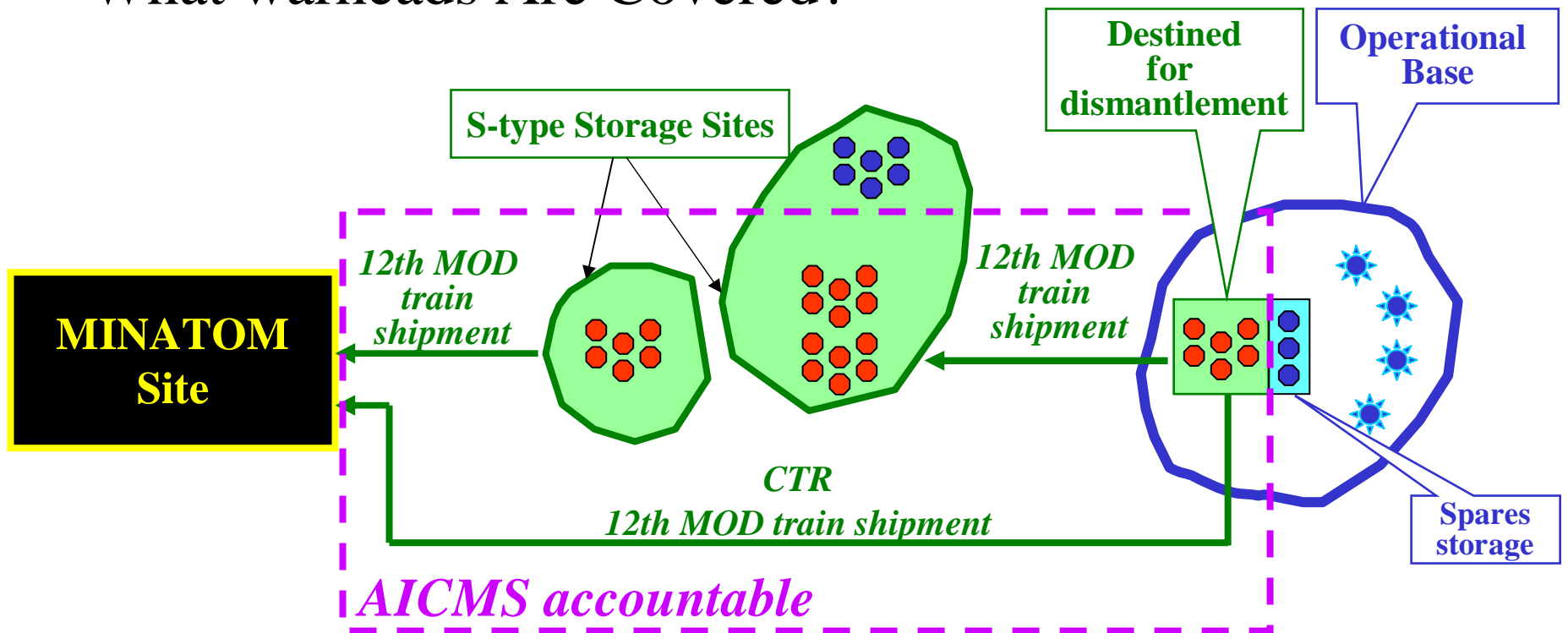
# *Personnel Reliability and Safety*

## *(Personnel Reliability Program)*



# Automated Inventory Control Management System (AICMS)

## What warheads Are Covered?



**Key**

- NW Destined for dismantlement
- Spares for operational delivery system
- ★ Operational delivery system

# *Enhance the Safety of Storage and Transportation Activities*



- **Safety Enhancement Center (SEC):** Field inspection and laboratory material analysis of nuclear weapons handling and storage equipment to support service life extension and safety analysis

- **45 fully equipped Pomoshnik emergency response vehicles**



- **Radiation dosimeters and radon detectors for personnel protection**
- **Information Analysis System (IAS) for managing Emergency Response assets within Russia**
- **15 Emergency Support Equipment (ESE) module transport vehicles**

# *Nuclear Weapons Transportation Security Supercontainers*



# *Potential Areas For Future G8 Cooperation*

- Funding repairs of locomotive engines
- Repair of Access Rail Tracks
- Physical security enhancements of admin areas at nuclear weapons storage sites
- Personnel Reliability Program (PRP)
- Additional 75 Pomoshnik Emergency Response Vehicles

# *ICBM Elimination*

# *SS-24 Silo Elimination*



**Missile Removal**



**Site Dismantlement**





# *SS-24 Silo Ukraine*



# *After Technical Restoration*



# SS-17/18 ICBMs



Receiving an SS-18 by rail



Storing an SS-17 alongside 2 SS-18s



Neutralizing an SS-18 ICBM



Cutting up an SS-18 nozzle



# *SS-18 Silo Elimination*



SS-18 Launch Silo with cover open



SS-18 Silo explosively eliminated



Elimination debris at Aleysk



Technical Restoration at Aleysk

# RUSSIAN FEDERATION

## SS-18 Elimination Facility and Silo locations



# *SS-24 Launching From Rail-mobile Launcher*



# *SS-24 Missiles and Stages*



# *SS-24 Missile Storage*



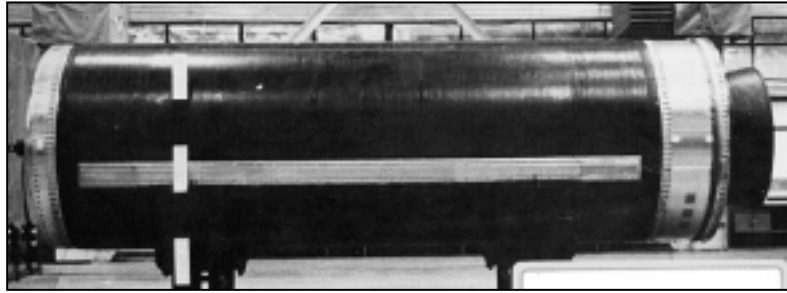
*Making the World Safer*



# *SS-24 ICBM in Rail-mobile Launcher*



# *SS-24 Rail-Mobile ICBMs Stages*



First Stage Solid Rocket Motor (SRM)



Second Stage SRM



Third Stage SRM

# SS-24-associated Locations



# *SS-25 Missile Launch*



# *SS-25 Launch Support Vehicles, Road-mobile Launchers, and Fixed Structures*



# *SS-25 ICBM on Road-mobile Launcher*



# SS-25 Associated Locations



-  Mobile ICBM Base
-  Non-deployed ICBMs/Launchers
-  Major Destruction & Dismantlement Site
-  Solid Rocket Motor Burn Facilities

# CTR Scorecard

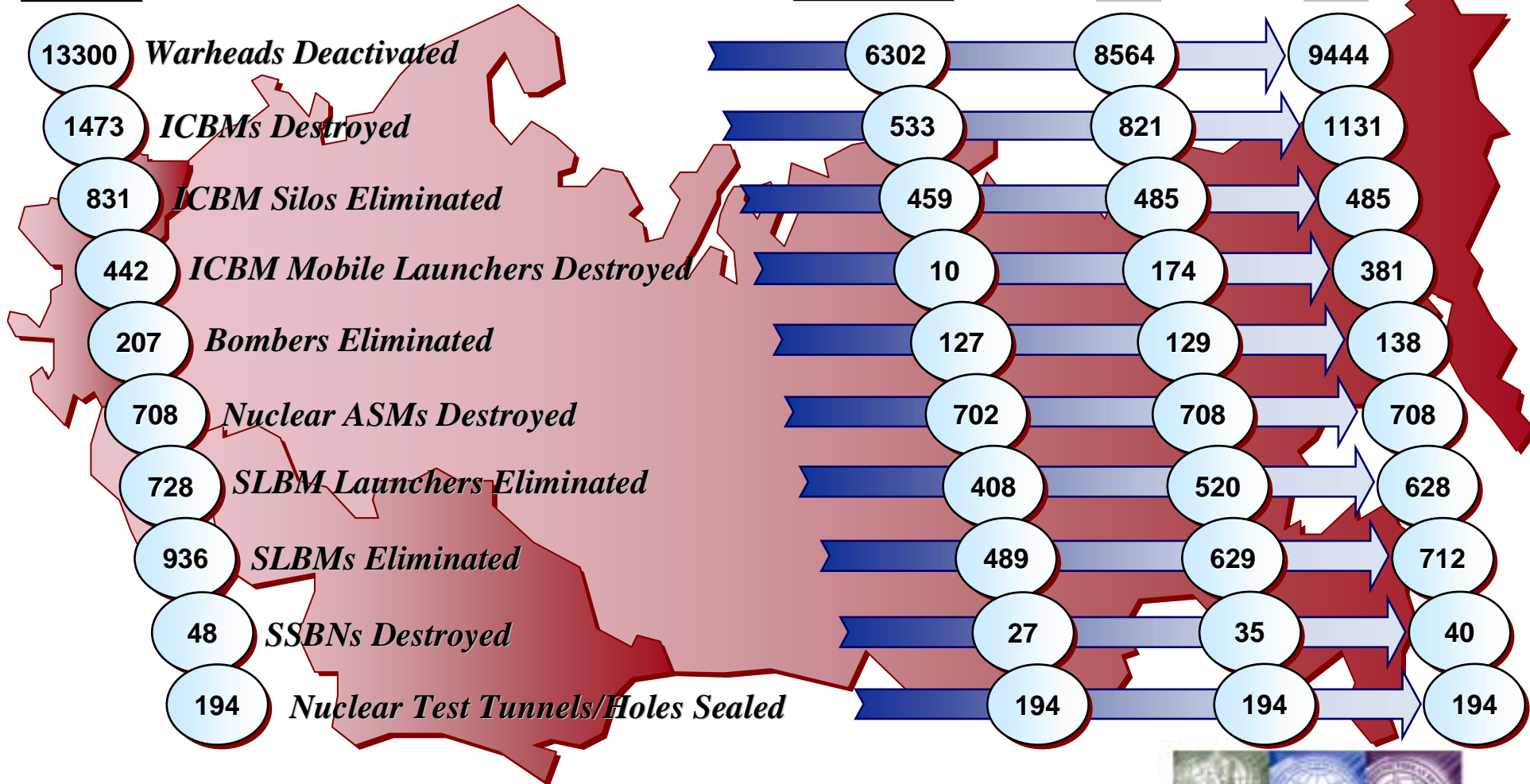
Ukraine, Kazakhstan, & Belarus are Nuclear Weapons Free

**CTR  
Baseline**

**Current  
Cumulative  
Reductions**

**2007**

**2012**



Current numbers as of 12 April 2004; projections as of 31 Dec 2003





# ***CONCLUSION***

***The CTR program enhances US national security as well as international security by providing defense in depth to counter the nuclear proliferation threat at its source***