

# Sandia Supplier Conference

## *Closing Remarks*

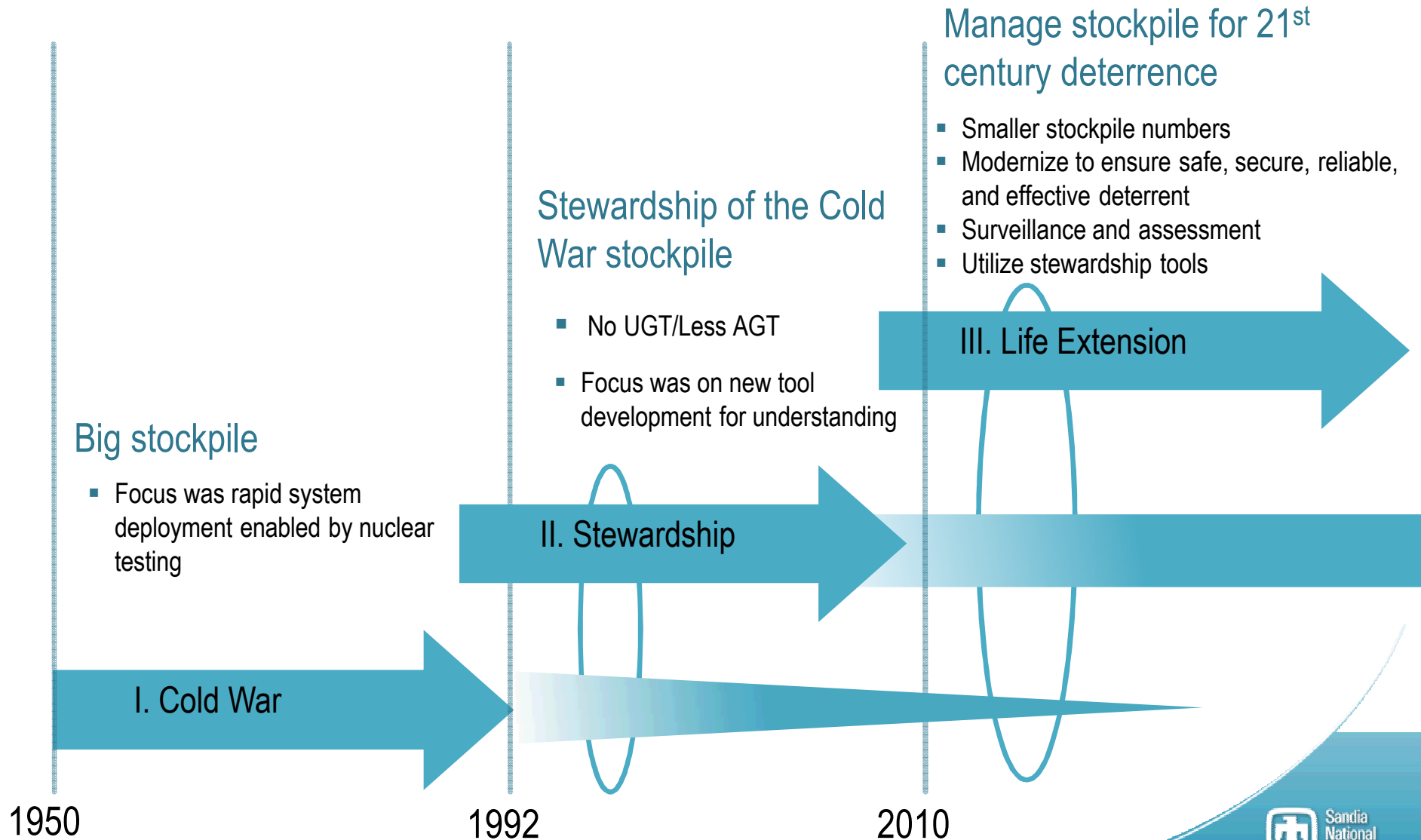
**Anthony Medina**

Center Director  
Energetic Component Center



Sandia National Laboratories is a multi program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

# We are transitioning to a new era for our nuclear deterrent.



# Strategic Dialogue and Global Engagement

Starting in April 2009 with the Obama NW Vision speech in Prague...



America's Strategic Posture Report  
- Perry, Schlesinger, 05/2009



How to Protect Nuclear Deterrent  
- Schultz, Perry, Kissinger, Nunn, 01/2010  
The President's Nuclear Vision  
- VP Biden, 01/2010

Department of Energy  
FY 2011 Congressional  
Budget Request

DOE FY11 Congressional Budget Request  
- NNSA, 02/2010



Nuclear Posture Review  
- DoD, 04/2010

Los Angeles Times

A Comprehensive Nuclear Arms Strategy  
- VP Biden, 04/2010

Government pensions in

New START  
- 04/2010

TREATY WITH RUSSIA ON MEASURES FOR FURTHER  
REDUCTION AND LIMITATION OF STRATEGIC OF  
FISHERIES

Los Angeles Times

How to build on the START treaty  
- Perry and Shultz, 04/2010

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times

Los Angeles Times



The Case for the New START Treaty  
- Gates, 05/2010

FY11 Stockpile Stewardship and Management Plan  
- NNSA, 05/2010



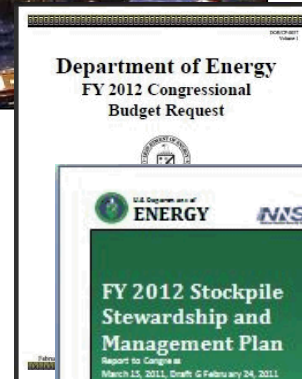
US Senate  
Testimony - 3 Lab  
Directors - 07/2010



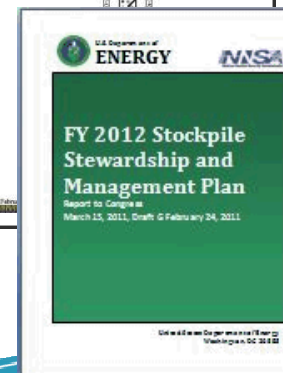
VP Biden memo to  
Senator Kerry  
- 09/2010



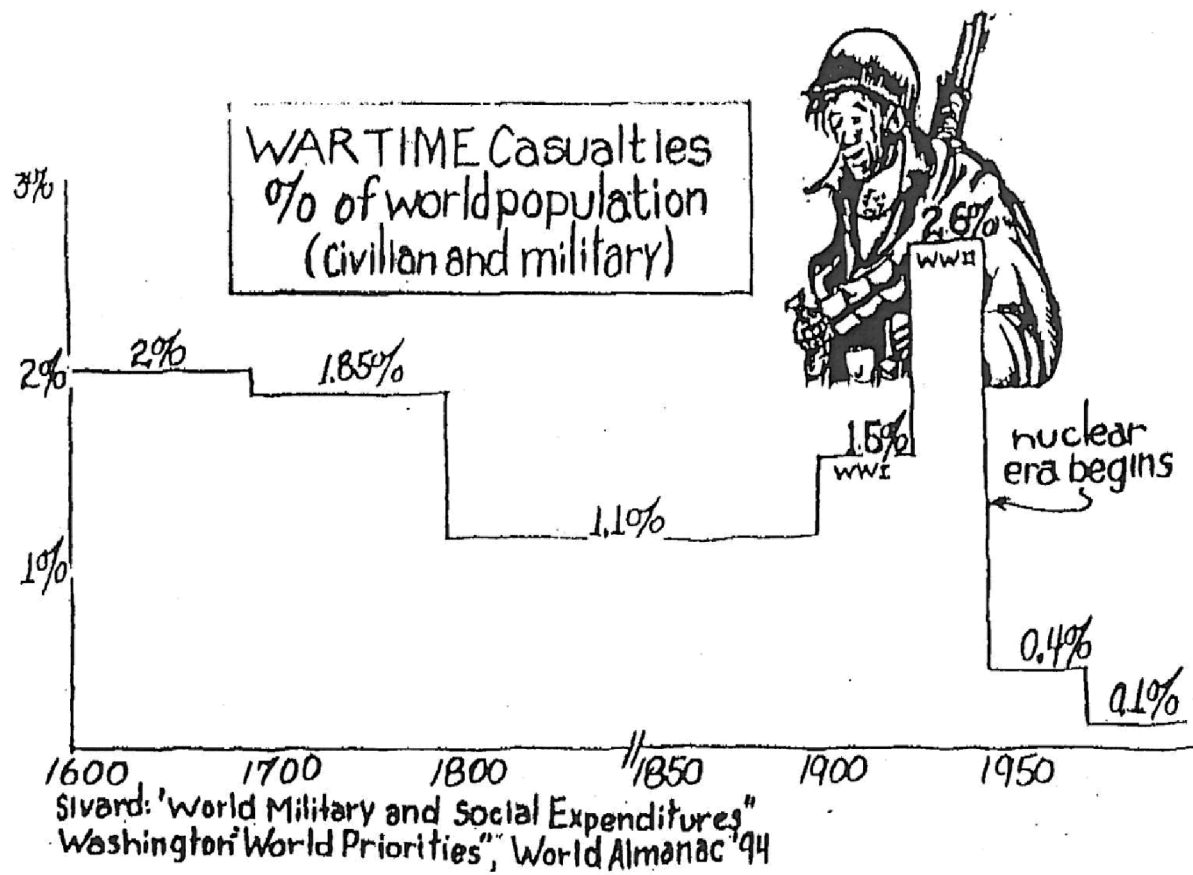
New START  
Ratification  
- US Senate, 12/2010  
- Russian Duma,  
01/2011



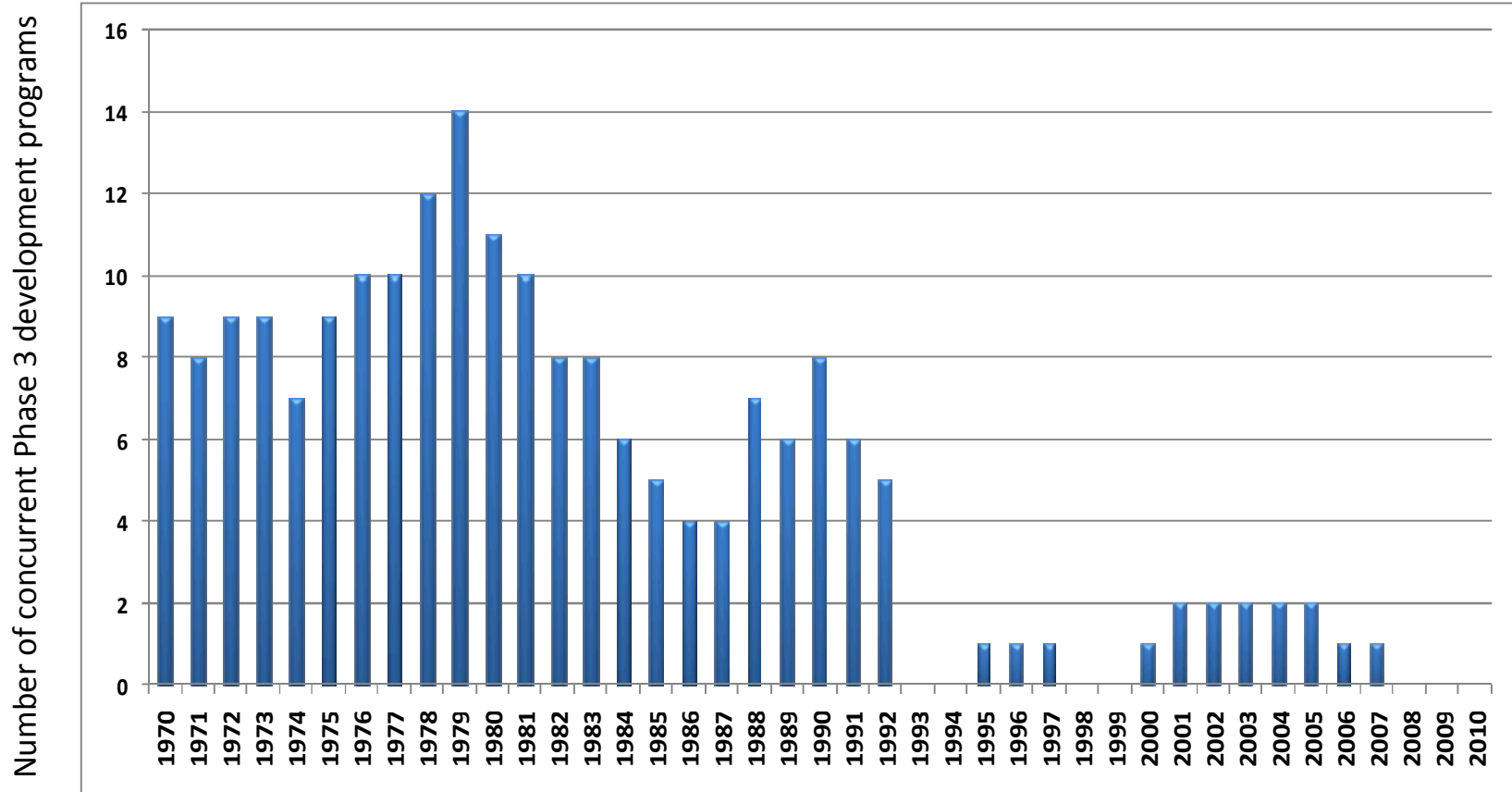
DOE FY12  
Congressional  
Budget Request  
- NNSA, 02/2011



FY12 Stockpile  
Stewardship  
and  
Management  
Plan  
- NNSA,  
03/2011



# The end of the Cold War brought a fundamental change to the engineering environment at Sandia.



# Life Extension Programs

Notional Stockpile Workload Activities ---- Planning Schedule is Subject to Change Pending NPR Implementation Strategy																								
		Fiscal Year	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Major Life Extensions at Pantex & Y-12	Submarine Launched Ballistic Missile Warhead (W76)	Nuclear Explosive Package (NEP) / Arming, Fuzing, and Firing (AF&F) Assembly																						
	Tactical/ Strategic Bomb LEP (B61-3/4/7/10)	6.2-6.2A		6.3-6.5						NEP, AF&F, & Surety (Pending Approval)														
	Intercontinental Ballistic Missile Warhead (W78)		6.1	6.2-6.2A		6.3-6.5						NEP, AF&F, & Surety (Pending Approval)												
	Submarine Launched Ballistic Missile Warhead (W88)							6.1	6.2-6.2A		6.3-6.5						NEP & Surety (Pending Approval)							
	Cruise Missile Warhead (W80-1)											6.1	6.2-6.2A		6.3-6.5									
	Air-Delivered Bomb Warhead (B61-11/B83-1)	Startup of design activites for one of these																						
	Intercontinental Ballistic Missile Warhead (W87)	systems is anticipated in mid 2020s.																						
	Limited Life Component Exchange	Minor Refurbishments at Pantex	W80-1							NG														
B83-1									NG & Air 353															
W87					NG																			
W88											NG (AF&F)													
Field Refurbishments (Beyond Tritium Requalifications)		B61-3/4/10	Air 356																					
		B61-11							(NG)															
		W78	(NG & AF)																					
		W87									(Air 360)													
Long Term Schedule for Maintenance Operations To Be Determined																								
Authorized Phases Refurbishments (6.6)																								
6.1 - 6.5 Field Pantex Major Pantex Minor																								
( ) ( ) ( )																								
Drivers are inside boxes																								

# Sandia's Unique Nuclear Weapons Role

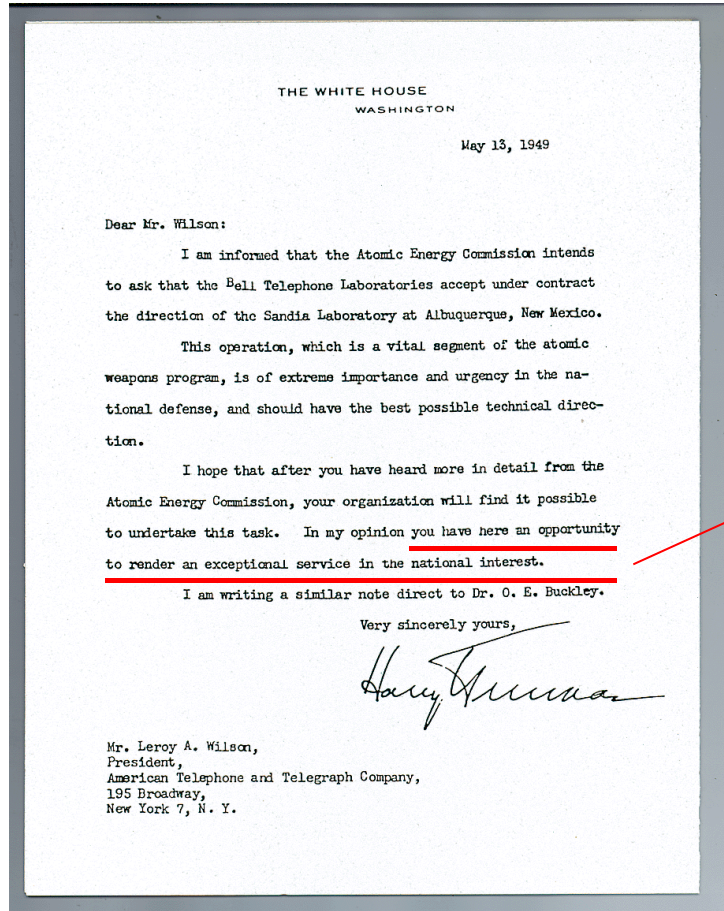
- We weaponize the nuclear explosive package to create a militarily effective and logistically sustainable US Nuclear Deterrent
- We deliver to highest standards of quality, driven by
  - Very high reliability requirements – must always work when authorized by the President
  - Exceptional safety and security requirements – must never work in all other circumstances
  - Extremely complex and often harsh environmental requirements
  - Long dormancy periods (lifetimes of ~ 30 years) coupled with high alert/readiness levels
  - Utmost confidence in the enterprise required for Presidential command and control
- This requires systems engineering underpinned by deep science – together with demonstrated product delivery

# Key Points of Sandia's Mission

- Due to an aging stockpile, we are entering a challenging era of **stockpile modernization**.
- Sandia is uniquely responsible for warhead **systems engineering and integration**, i.e. weaponization of the nuclear explosive package to create a militarily effective and logistically sustainable US nuclear deterrent.
- We have the primary role in modernizing the stockpile, with **responsibilities for five core products**: system engineering and integration (SE&I); arming, fuzing, and firing systems (AF&F); surety systems; gas transfer systems (GTS); and neutron generators (NG).
- We apply an **underpinning science base** to address stockpile issues associated with end-of-life of the existing stockpile as well as to the LEPs and ALTs of the future stockpile.

- **Sandia is committed to its unique role in the Nation's nuclear weapon program**
- **Sandia will continue to partner with its commercial supply base to provide needed component technologies to the NW Program**
- **Sandia needs a strong and committed set of suppliers willing to meet the stringent quality and performance requirements needed for weapon components**

# Sandia: Strategic Intent



“ ... you have here an opportunity to render an exceptional service in the national interest.”

May 13, 1949

Ltr., Pres. Truman to Mr. Wilson, Pres. AT&T