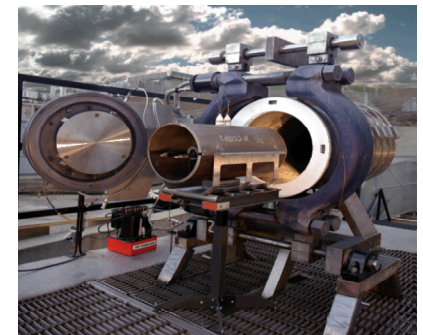


*Exceptional service in the national interest*

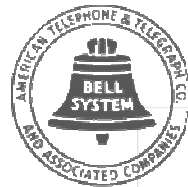


## Homeland Defense & Force Protection

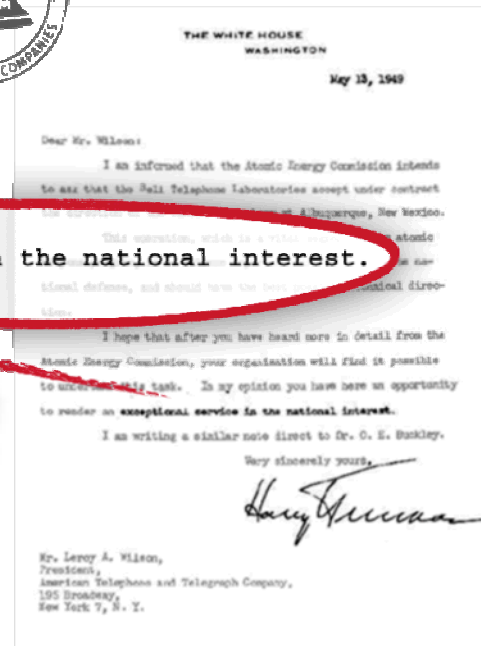
David W. Corbett  
Director, Weapon and Force Protection



# Sandia's history



exceptional service in the national interest.





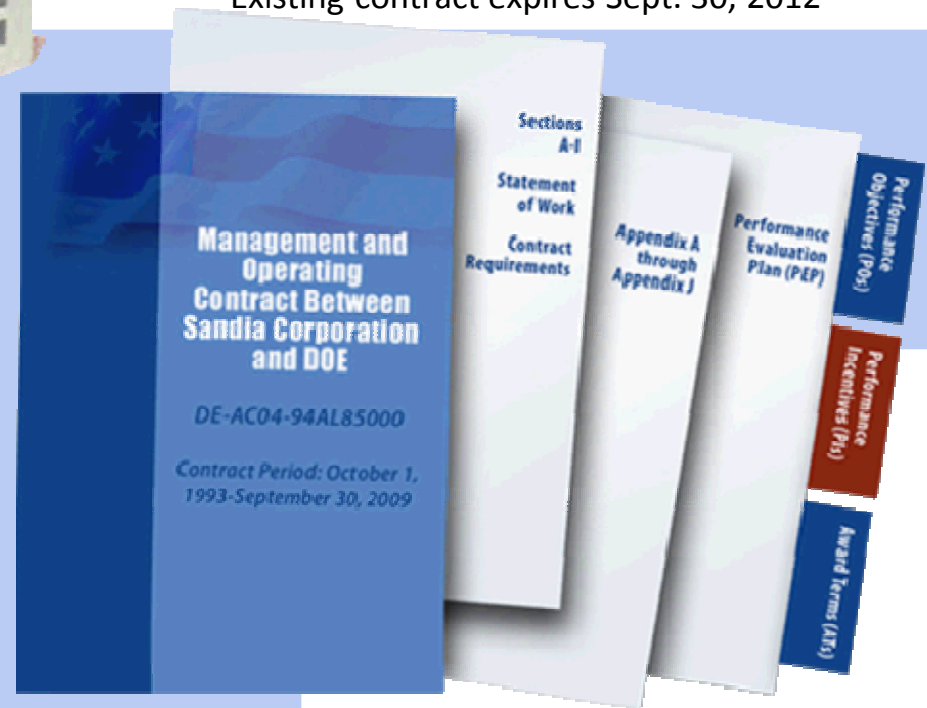
# Sandia's governance structure



## Sandia Corporation

- AT&T: 1949–1993
- Martin Marietta: 1993–1995
- Lockheed Martin: 1995–present
- Existing contract expires Sept. 30, 2012

Government owned, contractor operated



Federally funded  
research and development center



# Sandia's sites

Albuquerque,  
New Mexico



Livermore,  
California



Tonopah, Nevada



Waste Isolation Pilot Plant,  
Carlsbad, New Mexico



Pantex, Texas

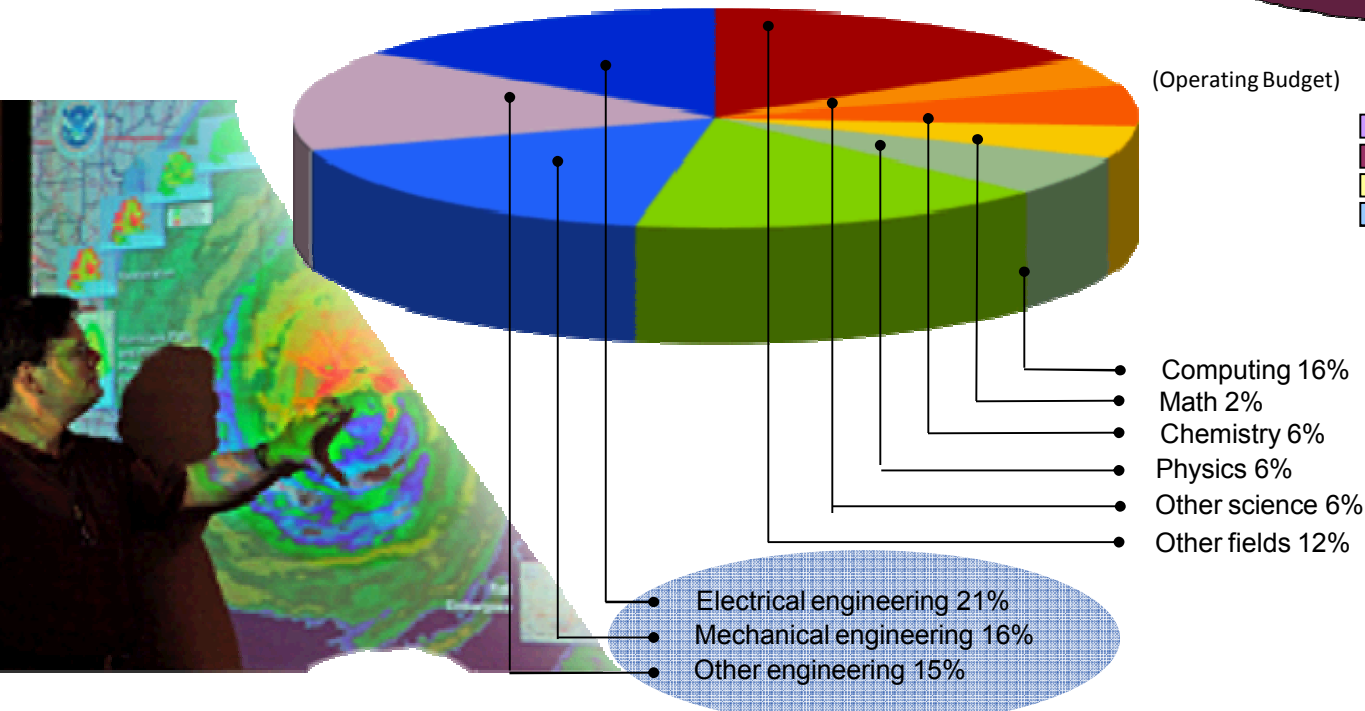




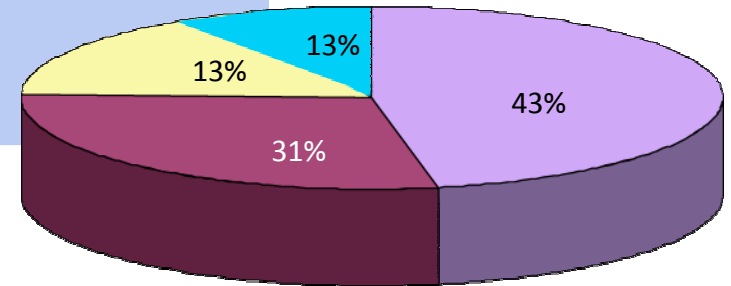
# Workforce and Budget

- On-site workforce: 11,677
- Regular employees: 8,607
- Gross payroll: ~\$900 million

Technical staff (4,277) by discipline:



FY10 operating revenue  
\$2.3 billion



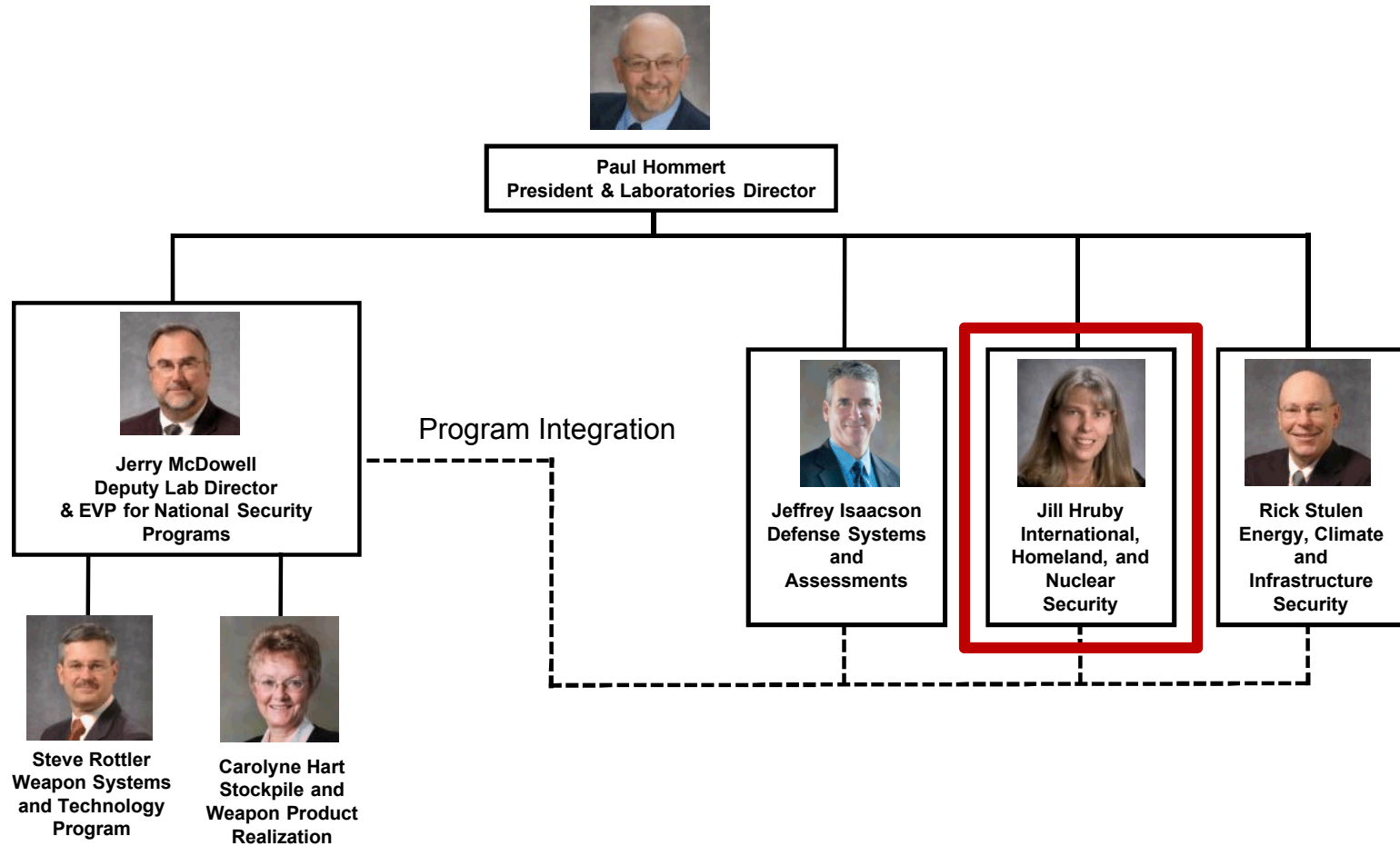
(Operating Budget)

- Nuclear Weapons
- Defense Systems & Assessments
- Energy, Climate, & Infrastructure Security
- International, Homeland, and Nuclear Security





# Executive Management Programmatic Reporting Structure





# Organizational Structure

## Homeland Defense and Force Protection





**Jill Hruby**

IHNS SMU VP

**Holly Dockery**

IHNS Deputy

**Critical Asset Protection**

**Ron Moya**

Airworthiness and Infrastructure  
Assurance  
Bob Mata

Physical Security & Surety  
Brad Parks

Emergency Response  
Brad Parks

DOE, NNSA, DoD, FAA, FBI

**Global Security**

**Rodney Wilson**

Global Threat Reduction  
Bill Rhodes

International Arms Control &  
International Security  
Billy Marshall

International Weapons &  
Material Protection  
Bill Rhodes

International Border Security  
Erik Webb

International Cooperative  
Threat Reduction  
Ren Salerno

NNSA/NA20, DoS,  
DoD/DTRA

**Homeland Defense &  
Force Protection**

**David Corbett**

Physical Security - AF  
Randy Peterson

Physical Security - Navy  
Jennifer Nelson

Chemical & Biological,  
Warfare Defense  
Duane Lindner

Weapons Remediation  
Duane Lindner

Force Protection  
Systems/Initiatives  
Phil Heermann

DoD/Air Force/Navy

**Homeland Security  
Programs**

**Peter Davies**

Nuclear & Radiological Security  
Jim Lund

Biological & Chemical Security  
Duane Lindner

Aviation & Explosives Security  
Howard Hirano

Borders & Physical Security  
Erik Webb

Preparedness & Decision  
Support  
Pablo Garcia

Foundational Support &  
Partnerships  
Nate Gleason

DHS S&T /CBP/  
TSA/DNDO/ Policy, HHS

**Key Customers**



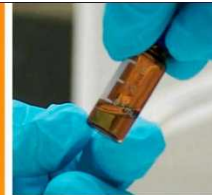
# International, Homeland, and Nuclear Security

## Program Areas

- Critical Asset Protection
- Global Security
- Homeland Defense and Force Protection
- Homeland Security

## Areas of Expertise

- Nonproliferation and Arms Control
- Countering Nuclear, Biological, Chemical, and Radiological Risks
- Nuclear Weapon and Material Safeguards and Security
- Critical System, Asset, and Facility Protection
- National Emergency and Incident Response



Laboratory  
Biosecurity  
Handbook





# Homeland Defense & Force Protection

*We provide...*

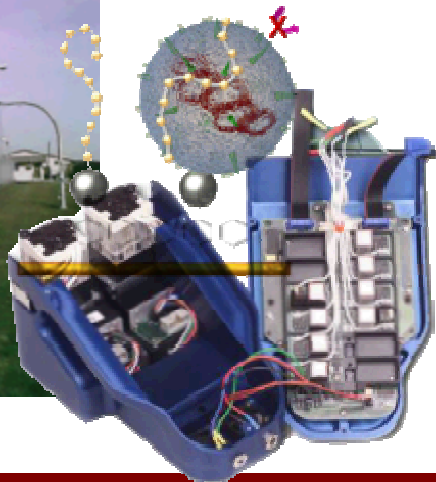
technology and systems solutions to confront continually changing threats at military bases – especially threats to NW security from intruders, explosives, and CBRN threats.

## *Securing high-value assets*

**Physical Security**



**Chem/Bio Defense**



**Weapons Remediation**



**Force Protection**





A Venn diagram with three overlapping circles. The top circle is purple and labeled "Research and Development". The bottom-left circle is brown and labeled "Experienced Physical Security Specialists". The bottom-right circle is light blue and labeled "Proven Methodology". The circles overlap in various combinations, and there is a central area where all three overlap. To the right of the diagram, the text "DE" is visible, likely part of "DESIGN".

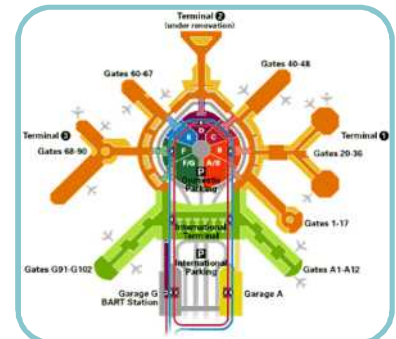
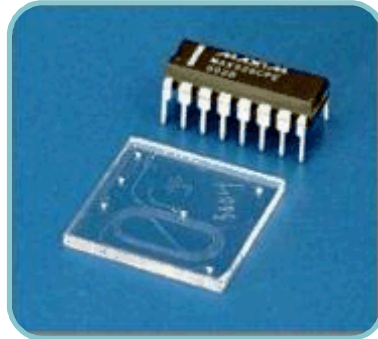
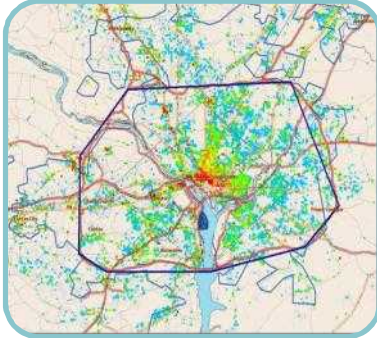


## A photograph of two police officers in tactical gear, including balaclavas and vests, aiming their rifles. They are positioned in a room with a light-colored wall and a doorway visible in the background.





# Chem/Bio Sub-Program



## Systems Analysis

- Urban defense architectures
- Facility warning & response systems
- Virtual training systems
- Wide area restoration
- Next generation detection architectures

## Detection Systems

- Microanalytical, microsensor systems
- Advanced Bioaerosol Triggers
- Sample capture & processing
- Stand-off detection

## Decontamination & Restoration

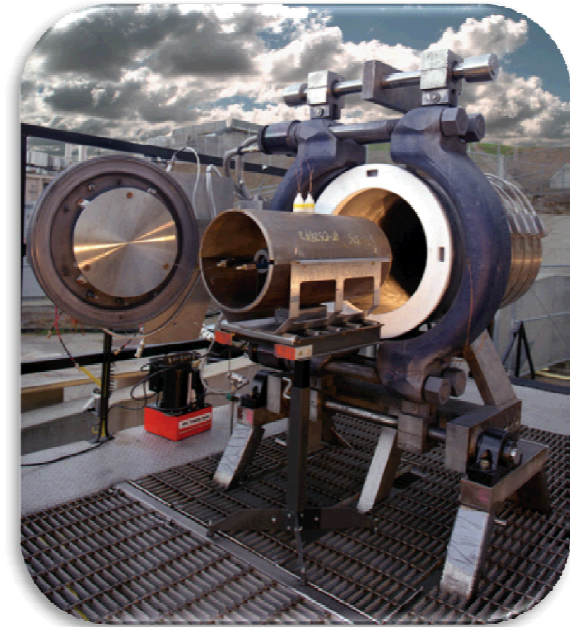
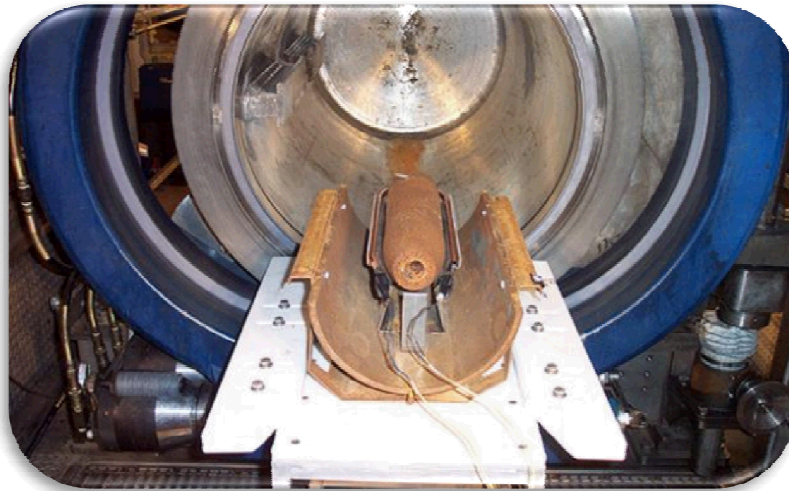
- Decon foam
- Advanced decon formulations
- Sampling & sample handling
- Plume knockdown and neutralization
- Restoration tools
- Restoration standards

## Systems Demonstrations & Deployments

- Warning systems
- Response systems
- Situational awareness
- Integration of military and civilian systems
- Rapid restoration of cities and military bases



# Weapons Remediation Sub-Program



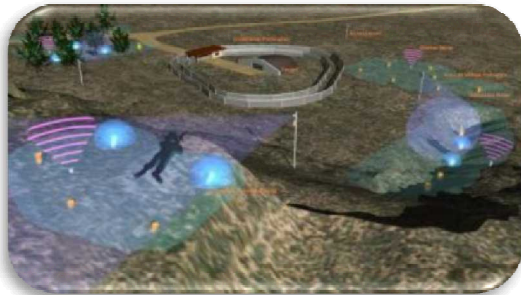
- Explosive Destruction System (EDS) remediates chemical warfare materiel in an environmentally sound manner
- Mobile system able to respond quickly
- Continually upgrading capability to meet the nation's remediation needs



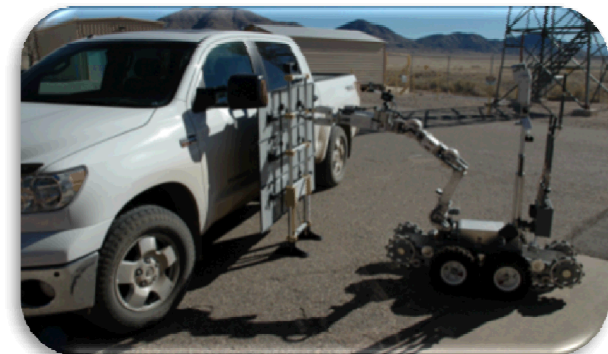


# Force Protection Systems Initiatives

## Sub-Program



- Rapid Extended Defense System (REDS)
- Border Tunnel Technologies
- Lethal Denial Technologies
- Undersea / Unmanned Undersea Vehicles (UUV)
- Disruptive Technologies
- Explosive Ordnance Destruction (EOD) Technologies





# In Conclusion...

- Sandia adapts and responds to changing adversary threats from:
  - Intruders / Terrorists
  - Chemical, biological, radiological, nuclear, and explosive weapons (CBRNE)
  - Cyber, energy, and infrastructure attackers
  - Forces of nature
- Our layered protection solutions integrate personnel, procedures, and technologies for optimal results
- Our continued focus is providing solutions for today, and research and development for next generation threats



**Explosives detector**



**Portable chem/bio sensors**



**Sandia R&D Winners**



**Lab Directed Research and Development (LDRD)**



# Questions?





# BACK UP SLIDES



# Popular Myths about Sandia Labs

## **Myth 1: Sandia takes 20% “off the top” of every project**

False: Sandia labor averages approximately 20% of total project funding, when serving as system designer and primary for installation

Full Cost Recovery  
vs.  
For Profit Model

## **Myth 2: Sandia labor rates are high**

False: Sandia labor rates are comparable with other large engineering firms

## **Myth 3: Sandia’s travel rates are high**

False: Sandia’s travel load is 13% to offset internal costs

## **Myth 4: Sandia “gold plates” the design**

False: All designs are fully vetted and approved by customer during design phase (35%, 65%, 95%) Cost savings while ensuring system effectiveness is always top priority

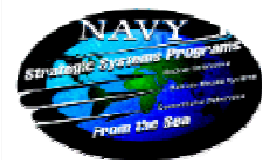
## **Myth 5: Sandia’s procurement/contracting costs are high**

False: Sandia’s procurement and contracting load is 16%  
All loads are waived after first \$1 million



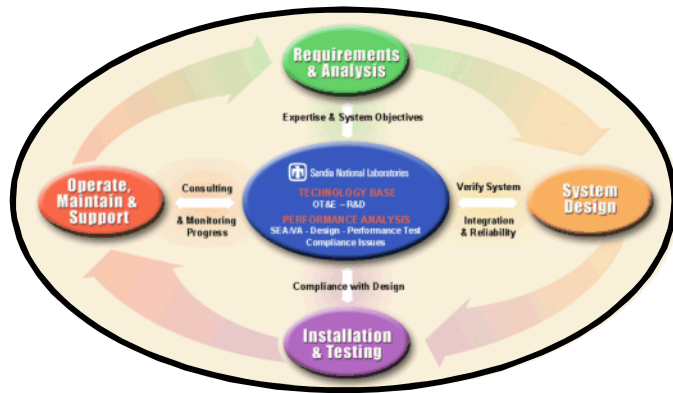
# Major Sponsors

- **Combatant Commands**
  - US European Command (USEUCOM)
  - US Strategic Command (USSTRATCOM)
  - US Northern Command (NORTHCOM)/North American Aerospace Defense Command (NORAD)
- **Air Force**
  - Headquarters Air Force (A7S)
  - Air Force Security Forces Center (AFSFC)
  - Air Force Global Strike Command (AFGSC)
  - United States Air Forces in Europe (USAFE)
  - Air Force Space Command (AFSPC)
  - Air Combat Command (ACC)
  - Air Force Materiel Command (AFMC)
  - Air Force Nuclear Weapons Center (AFNWC)
  - Electronic Systems Center (ESC)
- **Navy (SSP) –SWFLANT/SWFPAC**
- **Missile Defense Agency (MDA)**
  - United States Army Strategic Command
  - Space and Missile Defense Command (ARSTRAT/SMDC)
- **Defense Threat Reduction Agency (DTRA)**
- **Office of the Deputy Assistant to The Secretary of Defense for Nuclear Matters (DATSD-NM)**
- **Pentagon Force Protection Agency (PFPA)**

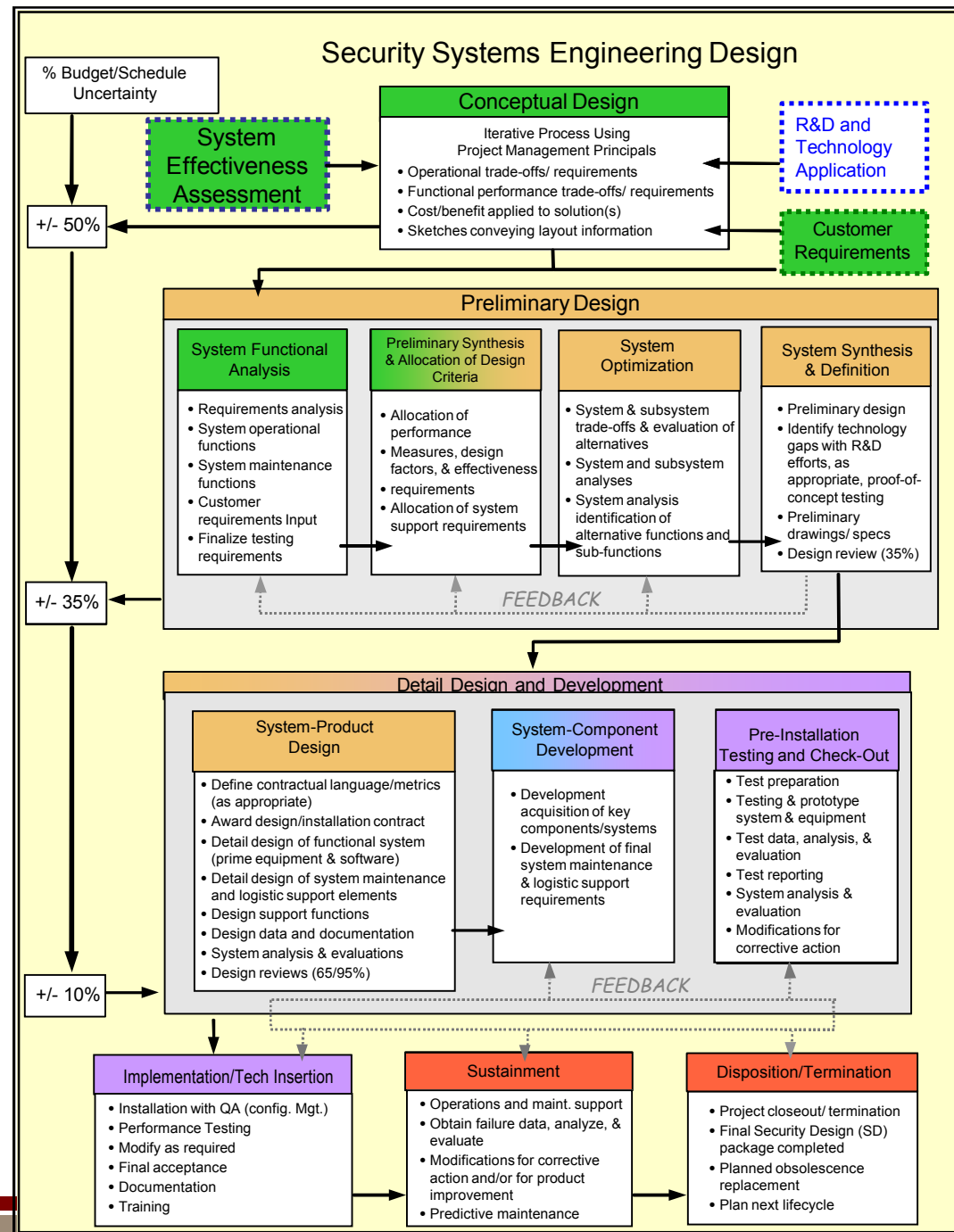




# Mapping the Systems Life-Cycle Process



Proven, Standardized Approach to Mitigate Project Risk





# Key FFRDC Attributes\*

- Meets special long-term research or development needs
- Operates in the public interest with objectivity and independence, is free from organizational conflicts of interest, and fully discloses its affairs to the sponsoring agency
- Does not use privileged information to compete with the private sector but may work for other than the sponsoring agency when the work is not available from the private sector
- Is operated, managed, and/or administered as an autonomous organization or as an identifiable separate operating unit of a parent organization
- Long-term relationships with the government afford the continuity that will attract high-quality personnel to the FFRDC and encourage the FFRDC to maintain currency in its field(s) of expertise

\* Abridged definition from the Federal Acquisition Regulation