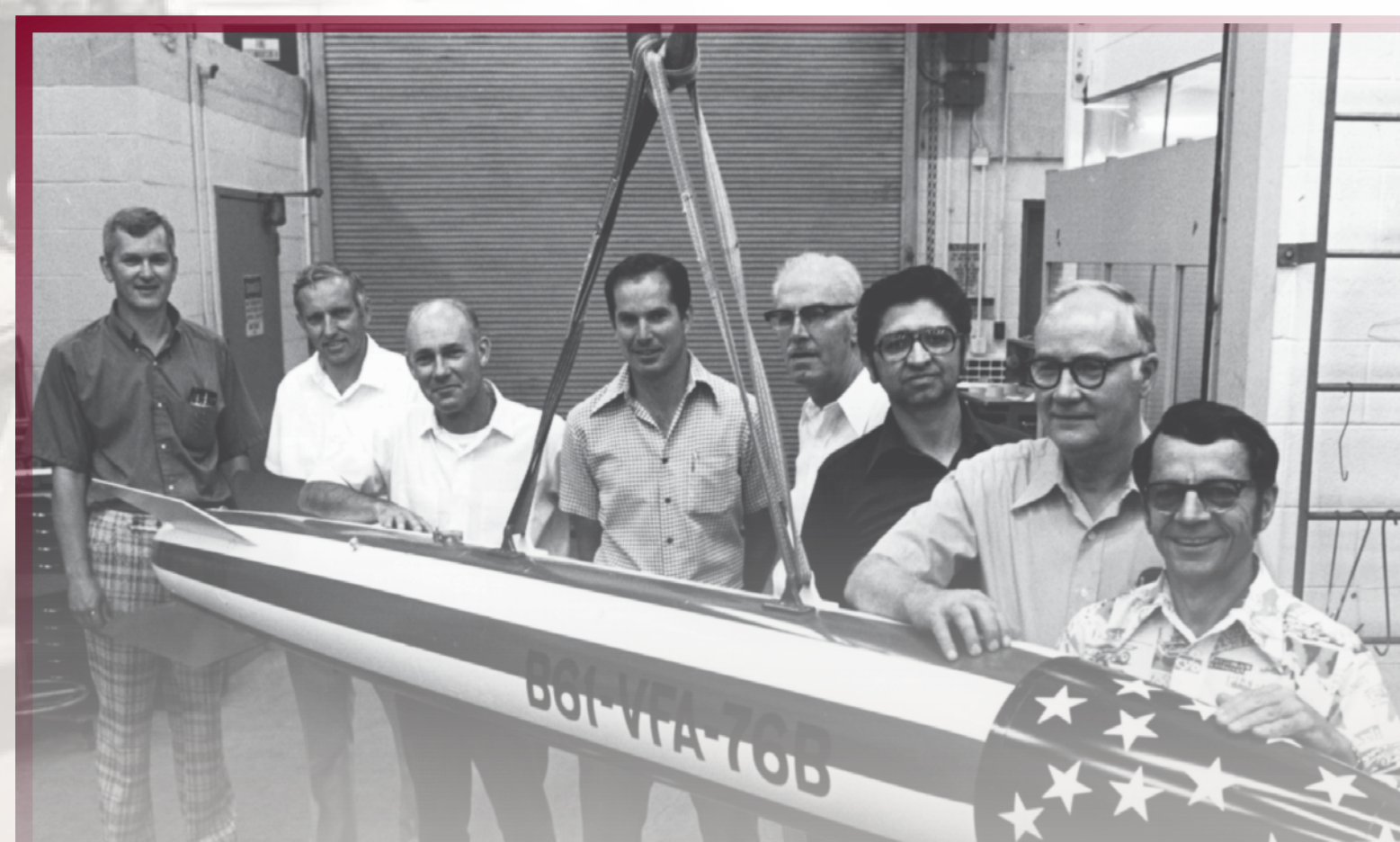


# Nuclear Weapons: History of Exceptional Service in the national interest



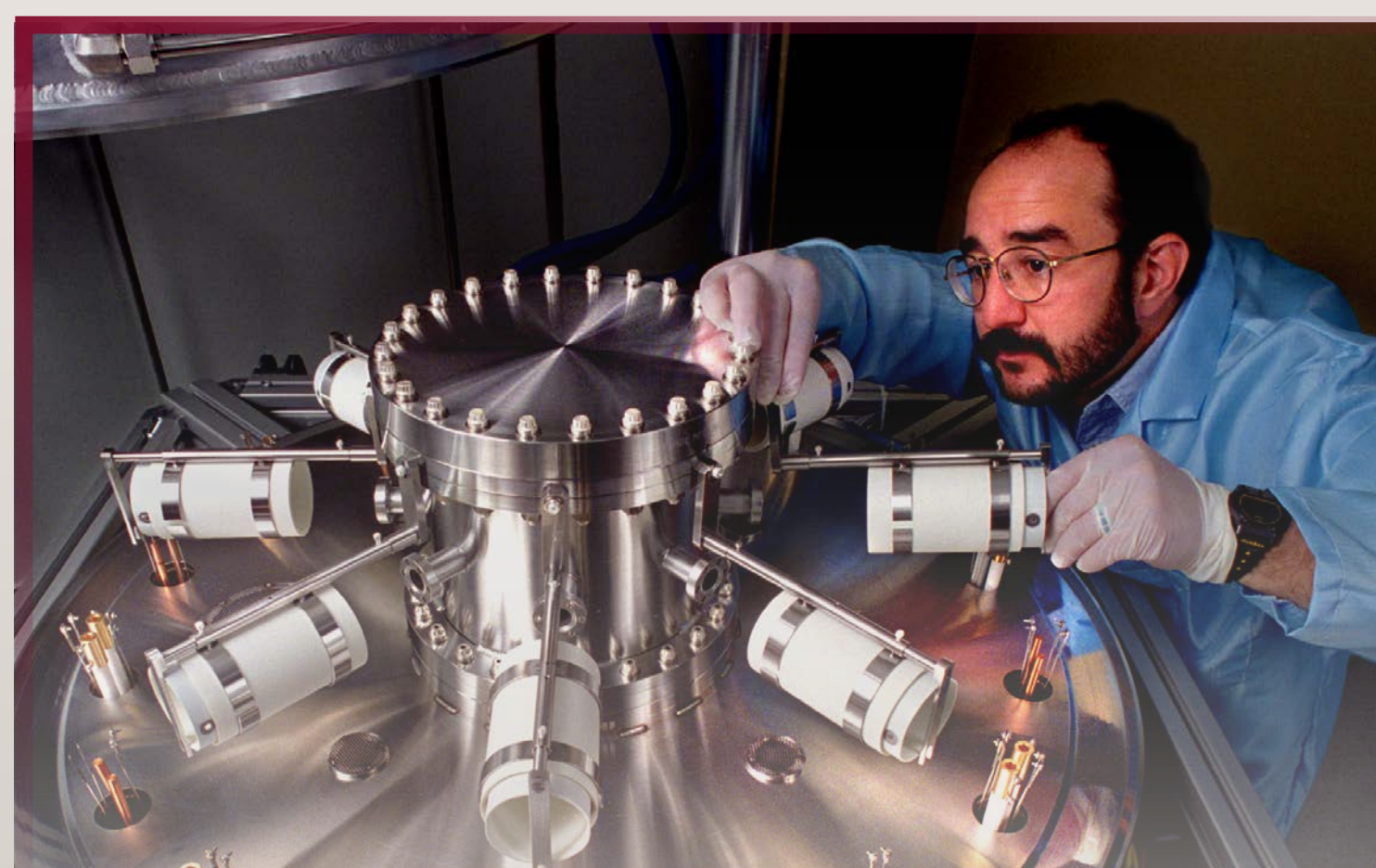
By the mid-1950s, Sandia defined the wooden bomb concept, drastically reducing the maintenance effort and preparation for readiness of all nuclear weapons.



Nuclear weapons incidents in the 1950s and 60s led Sandia to improve nuclear safety design by incorporating strong links and weak links. In 1977, the B61-5 was the first weapon to incorporate Enhanced Nuclear Detonation Safety (ENDS) principles. Sandia applied these enhancements to all subsequent designs.



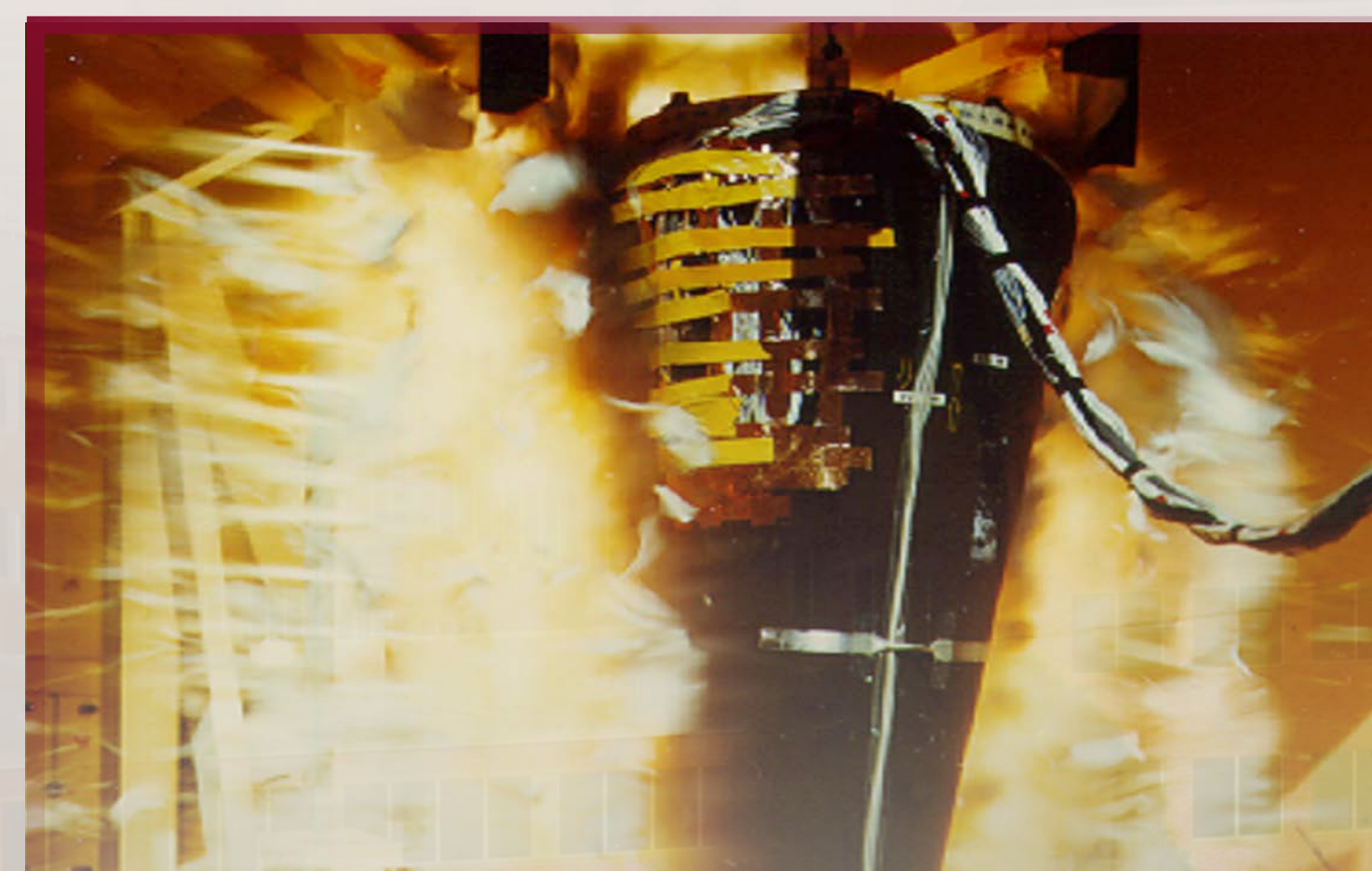
The 1972 release of the fully integrated arming, fuzing, and firing package for the Navy's Poseidon missile set new standards for miniaturization and reentry body design.



The Neutron Generator Facility opened in January 1996, just four years and seven months after project identification, ahead of schedule and under budget.



Since 2000 and the initiation of the W76 Life Extension Program, several ALTs and LEPs have been authorized to ensure the reliability of the enduring stockpile, culminating in the 2014 authorization of the B61-12.



Throughout, Sandia has maintained the depth and breadth of capability to design, test, deploy, and verify the reliability of all non-nuclear elements in all U.S. nuclear weapons.

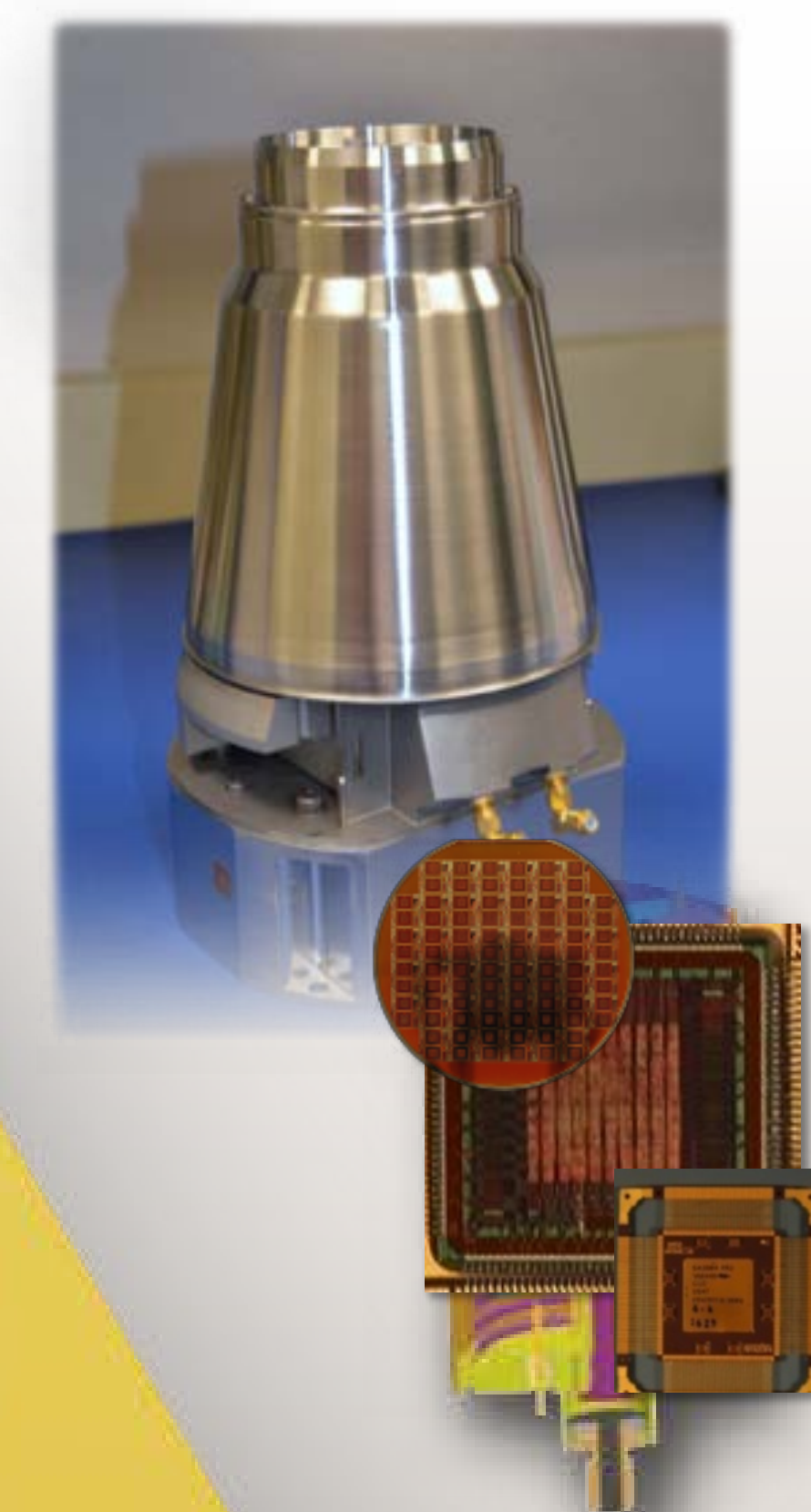
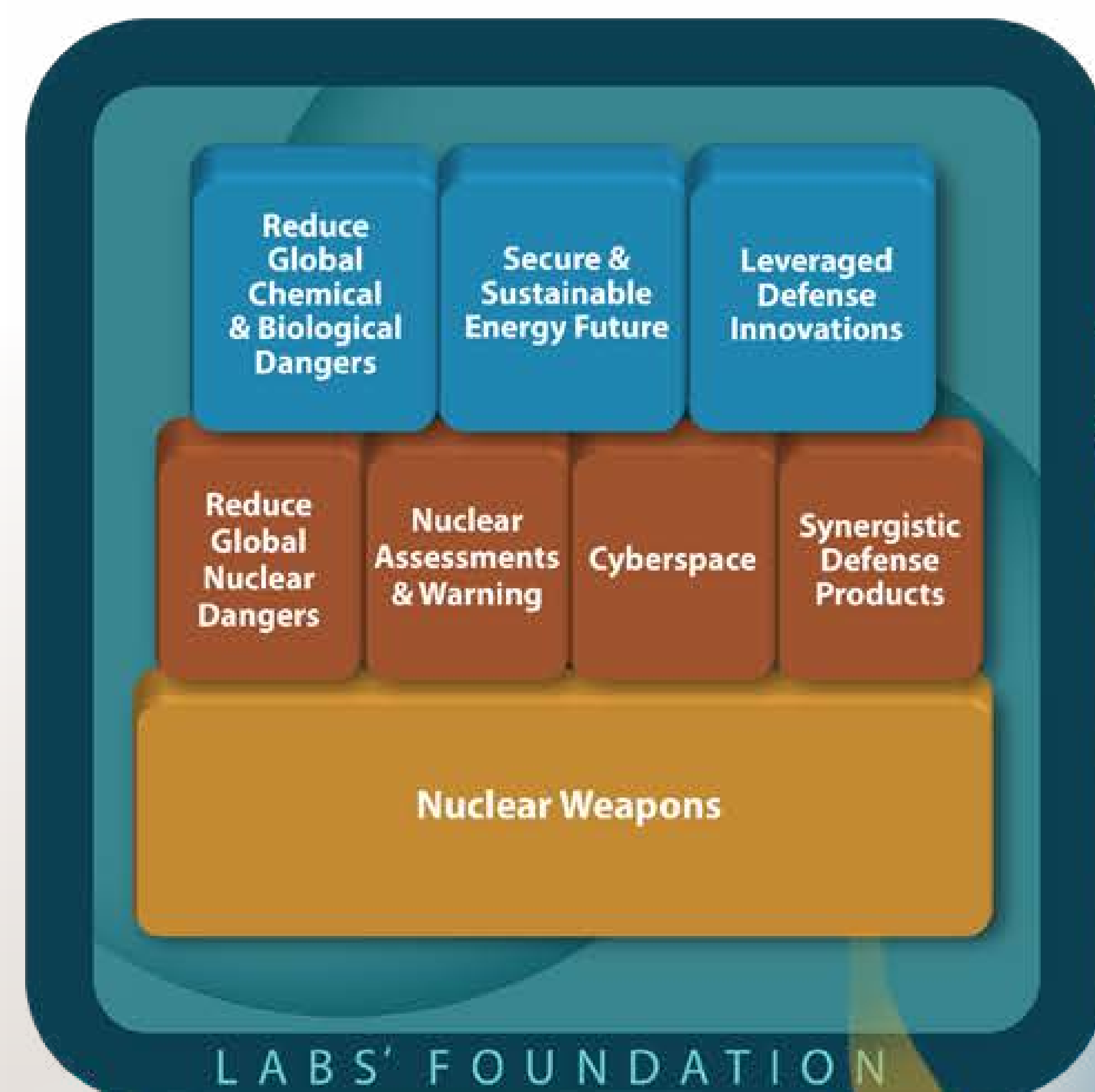


MESA was certified as a trusted foundry by the Department of Defense in 2011. Its state-of-the-art cleanrooms and laboratories are able to deliver custom national security hardware. MESA will produce over 180,000 trusted radiation-hardened semiconductor devices for current stockpile activities.



# Sandia's National Security Mission Areas

*Built upon our core nuclear weapons mission*



**Current  
Stockpile**

**Sustained  
Stockpile**

**Capabilities,  
Infrastructure &  
Operations**





# Shaping National Security Decisions

“Our work is aligned with a clearly defined set of principles, purpose, and policy from the United States government about the importance of nuclear weapons, and their role in our national security.”

— Jerry L. McDowell  
*Deputy Laboratories Director & Executive Vice  
President for National Security Programs*

