

| |
|---------------------------------|
| About Sandia |
| Capabilities |
| Programs |
| Contacting Us |
| News and Events |
| Search |
| Home |

[Business,
Science and
Technology
Index](#)

Programs



Nuclear Weapons

Sandia's primary mission is ensuring that the U.S. nuclear weapons stockpile, and the expertise that ensures the stockpile, is safe, secure, reliable, affordable, and fully capable of supporting our nation's deterrence policy indefinitely. This means that our nuclear weapons:

- Are not vulnerable
- Are protected
- Are stored
- If needed, will work

Initiatives

- Maintenance and Refurbishment of the Enduring Stockpile
- Assuring National Capabilities in Radiation-Hardened [Microelectronics](#)
- Sustaining Critical Progress in [Model Validation](#)
- Improving [Methods and Practices](#) Supporting the Delivery of Products
- Sustaining Momentum on Advanced Design and Production Technologies (ADAPT)
- [Pulsed Power Technology](#) for Defense Applications
- [Distributed Information Systems](#) for the Nuclear Weapons Complex



The MC2912 is the Arming, Fuzing, and Firing System (AF&F) that was designed by Sandia National Laboratories and is employed on the W76/Mk4 nuclear warhead. The W76/Mk4 is carried on the Trident I C4 and Trident II D5 missiles and on the U.S. Navy's SSBN Trident Submarines — the most powerful and survivable ballistic missile submarine in the world. The AF&F design integrates Navy arming and fuzing sub-systems with the DOE firing sub-system to achieve high performance, minimum weight, and low cost. The AF&F contains safety features to ensure the weapon does not detonate in accidental or other unintended scenarios.

For more information about the Nuclear Weapons Program contact the [Webmaster](#).

[Back to top of page](#) || [Questions and Comments](#) || [Acknowledgment and Disclaimer](#)