

posted 20 hours ago under by jeffrey

Here is the Unclassified Executive Summary of the Jason Report on RRW.

As Walter Pincus reported over the weekend (Nuclear Warhead Design Hits Snag) the report basically argues that certification of the design will require more than the current certification plan:

The certification plan presented needs further development. ... Certification for WR1 will require new experiments, enhanced computational tools, and improved scientific understanding of the connection of the results from such experiments and simulations to the existing nuclear explosive test data. We recommend:

- continued investigation and development of quantitative measures that assess the connection of WR1 with the legacy nuclear test data,
- additional hydrodynamic and other (non-nuclear explosive) experiments beyond those indicated in the certification plan presented. Such experiments are intended to extend modeling and simulation capabilities so that future computational tools are predictive not only of device performance, but also of device failure and the limits of validity of the computer simulations. This effort will require the continued availability of hydronamic test facilities;
- that an improved understanding of materials aging and interactions over the proposed multi-decade lifetime of RRW systems be developed.

I would think this is both a short-term blow to RRW and a long term blow to NNSA.

In terms of NNSA's reputation, I read the sentence "The certification plan presented needs further development" to suggest that NNSA's certification plan might have led to the development of a warhead that could not be certified without testing.

But that is just my first impression.

*Update:* NNSA has a press release that says everything is just fine and the Jason "concluded that NNSA's current approach, with additional technical, experimental and peer review enhancements, could determine that RRW can be certified for the stockpile without the need to conduct an underground nuclear test."

I suppose the Hindenburg, with additional technical, experimental and peer review enhancements, would also have been just dandy.

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