

[0]I read this carefully, once; anything not commented upon is either OK as far as I know, or else I don't know about it.

[0]relative significance?

[0]The possibility must also be considered that some of what is in the public domain is not true, in the sense of being "the whole truth and nothing but the truth" or sometimes even in any sense at all. This is not necessarily a great danger in data of a technical/engineering nature such as you cite here, but it is a great danger in the areas of: claimed justification; "data" like the "20-year life" of warheads which costs nothing to fabricate; in the assumed completeness and comprehensive of data available (there may be another program of which we do not know); in the purposes and applicability of engineering products; and so on.

[0]I am not sure if all of them have been replaced. They might have been; I haven't been keeping track.

[0]Usually this is given as 475 kt.

[0]Says who? DOE has retrospectively applied this number. There was no such number in the design period, as far as I know.

[0]I suspect that the dual revalidation timing of the W76 wasn't closely related to warhead aging; it also may have related to the importance of the warhead and prior/ongoing work on in the "submarine warhead protection program" (SWPP).

[0]This seems to be an especially important reference due to this quote.

[0]This decision had been made years earlier, when the SWPP was initiated or perhaps even before. See documents cited in my 2000 article, Bull. Atom. Sci.

[0]ASCI has many drivers, the greatest of which is opportunism. There would be an ASCI program of the same scale without the existence of the W76.

[0]"Safety and reliability" is a code phrase that means nothing or anything related to the warhead in question. It should never be accepted at face value. It has meant, for example, the S & R of a NEW or substitute warhead.

[0]Do you mean radiation case?

[0]With great possible changes in targeting flexibility.

[0]A "Radar Updated Path Length" (RUPL) system was under discussion in the late 1990s in one meeting.

[0]Do you know what these circuits do? I don't.

[0]Cadmium would be Cd, no?

[0]SWPP had near-term, mid-term, and long-term options and was the umbrella for all the W76 work at the time. I am not sure what the precise programmatic and budgetary relationship between the SWPP and the W76 SLEP / W76-1 modification may be. These names and programs change and morph faster than we can track them even when we try.

[0]It's been remarked that using the Mk5 would obviate this problem. The D5 missile can obviously throw it. It's a SWPP option, as I recall.

[0]No; ellipsoidal as far as I know.

[0]May also assist in preventing the initiation of instabilities as the light material (HE gases) hits the heavier one. Not sure.

[0]I think it is very likely that the W76 has only two detonators.

[0]Some use kilogram quantities of Pu, including Pu-242.

[0]Another motivation might be to maintain production capability. Still another would be to replace components with fresher ones (e.g. pits, HE) to delay and soften the impact of any aging problems.

Mu 13 C + 22 A