



John Ainslie

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**From:** brian.burnell. [brian.burnell@btinternet.com]  
**Sent:** 03 February 2008 11:19  
**To:** John Ainslie  
**Subject:** TASM and Poseidon inquiry  
**Attachments:** British Nuclear Testing update and correction.htm; British Nuclear Testing update and correction.doc

Hi John

Sorry I took so long to reply to this. Its not specifically about TASM, but answers some of your questions about Poseidon. Its in the form of a few concise notes I made some time ago for my own use, and are the additions in colour fonts to the <http://nuclearweaponsarchive.org> notes on UK nuclear tests. The evidence to support my conclusions is now declassified in the PRO, but the last time I looked at this was early 2007, and there are undoubtedly newer releases since then. The final production decision ref Chevaline was in 1975, and the 30-year rule for releases takes it to 2005. But in practical terms that means Jan 2007. There may be another tranche of docs available from Jan 2008, but I haven't yet got around to looking for them, although with a firm decision taken in 1975, its unlikely that any earth-shattering items will surface.

Regarding the notes at attachment, (in Word and html format), pay particular attention to UGT SERPA. It may have been the device intended for TASM.

BTW, a good account of how, when, where, and on who's advice Roy Mason took the decision on Chevaline can be found in PROSPERO, the journal of the British Rocketry Oral History Project, and Proceedings of their annual conference at Charterhouse School, Vol 1, Spring 2004, pps 122, 123. Pages 91-127 give a fuller account of all the background, including the various Poseidon offers from the US. I have a copy. There is no ISBN. If you have difficulty getting a copy I can scan these pages to a CD for you. Authored by Dr Frank Panton, Asst Chief Scientific Advisor (Nuclear) at the MoD 1969-75.

Some interesting stuff has turned up at the PRO dated 1958 about the Interim Megaton Weapon that might interest your people with an interest in legal issues and the Geneva Convention. AWRE staffers based at RAF airfields were assembling weapons on site and prepping them for flight, in part because the RAF refused to take responsibility for them, except for on-site secure storage. There was a fierce turf-war over who did the maintenance and servicing after AWRE refused the RAF access (on security grounds) to a service manual, needed by maintainers. The RAF invoked the Geneva Convention, claiming that the use of AWRE civilian staff breached the Convention (incorporated into UK domestic law), that specifically forbids the use of civilians in preparing weapons for use. The Convention had this added in 1949 after the Nazi use of captured civilian slave labour for weapons production. The RAF asserted that to comply with the Convention, only uniformed Service personnel should do such work, and that AWRE were in breach. Amazing allegation, and illustrates how bad relations were. Anyone interested may contact me for source details.

Regards  
B.B.

----- Original Message -----

From: "John Ainslie" <John.Ainslie@banthebomb.org>  
To: <brian@nuclear-weapons.info>  
Sent: Thursday, January 10, 2008 7:28 PM  
Subject: British nuclear weapons

Brian

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Updates and corrections made 05 March 2006. All in brown font on blue ground.

Sources: TNA exclusively. (The National Archives, Kew, London) all declassified, some as recently as Jan 2006. For more detailed notes see file 'Raw data'.

DEFE 19/170  
 DEFE 19/180  
 DEFE 19/181  
 DEFE 19/182  
 DEFE 19/191  
 DEFE 25/335  
 AVIA 65/1771  
 WO 32/17069  
 PREM 11/3706  
 PREM 13/1316

B.Burnell.

Email contact: [brianburnell@hotmail.co.uk](mailto:brianburnell@hotmail.co.uk)

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## Britain's Nuclear Weapons

### British Testing Summary

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#### Joint US-UK Tests

**Legend:**NAFR= Nellis Air Force Range (Nevada); NTS= Nevada Test Site

Test Series	Test Name	Date (GCT)	Location	Test Type	Yield (kt)	Purpose
Nougat	Pampas	1-Mar-62	NTS	Shaft	9.5 kt	Accidental release of radioactivity detected off-site. Purpose was test of a new implosion system named 'Super Octopus' later 'Cleo' intended for the UK version of Skybolt ALBM. The US and UK were to use the W-59 warhead although the UK were unhappy with the safety of the primary and chose to fit their own design to be tested at PAMPAS. This was Super Octopus, later

						Source: TNA declassified files. See PREM 13/1316 and several other files.
Flintlock	Charcoal	10-Sep-65	NTS	Shaft	20 - 200 kt	Repeat of failed Courser UGT. 'Economy Test' purpose was to reduce size of the fissile core to economize on use of scarce UK supply of Pu-239 by approx 0.76-1.17kg per warhead. Source: TNA declassified files. See PREM 13/1316 and several other files.
Arbor	Fallon	23-May-74	NTS	Shaft	20 - 200 kt	First test of the Chevaline warhead (TK-100?). <b>YES</b> . Confirmed. Test of the boosted fission primary only. Primary name HARRIET. Secondary Reggie recycled from ET.317 warheads removed from Polaris A3T missiles when they were converted to Chevaline. Source: TNA DEFE 19/182 E61 declassified 2005.
Anvil	Banon	26-Aug-76	NTS	Shaft	20 - 150 kt	Chevaline? <b>YES</b> . Confirmed. Fallon & Banon were the <b>ONLY</b> tests of the warhead fitted in the low-terminal-speed <b>blunt-body RV</b> for Chevaline. Used as a thermonuclear primary with a REGGIE secondary recycled from ET.317 warheads used in Polaris A3T. Unofficial unconfirmed reports claim that the Harriet / Reggie combination of Chevaline resulted in a yield of 225 kT, an increase of 25 kT over the ET.317 warhead fitted in the UK version of Polaris A3T. Source: TNA DEFE 19/182 E61 declassified 2005. <span style="float: right;">W</span>
Cresset	Fondutta	11-Apr-78	NTS	Shaft	20 - 150 kt	Chevaline? <b>NO</b> . Confirmed. Intended for a high-terminal-speed pointy RV with similar characteristics to the Poseidon / Mk.3 RV / W-68 warhead combination, intended to defeat terminal-defence ABMs. This warhead / RV combination intended for Chevaline but could not be readied in time for service entry, and delayed for use with a Chevaline successor system, probably Trident. 47 kT actual yield. 52 kT predicted. First in this test series with Quargel, Nessel, and probably Colwick. Source: TNA DEFE 25/335 several enclosures, declassified 2005.
Quicksilver	Quargel	18-Nov-	NTS	Shaft	20 - 150	Chevaline? <b>NO</b> . Confirmed. See above note. Test Depth 1778 ft (542m). Source: TNA DEFE 25/335

