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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

Britain's Nuclear Weapons

British Testing Summary

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

						known as CLEO, and used HE that was less shock-sensitive than the PBX-9404 used in the W-44. After Skybolt cancellation the warhead development continued for use in an aircraft bomb of 450kT, and later still, scaled down to 200kT for Polaris A3T. Source TNA declassified files, see WO 32/17069, AVIA 65/1771 and PREM 11/3706.
Roller Coaster	Double Tracks	15-May-62	NAFR	Surface	0	Storage-transportation safety experiment, measured plutonium dispersal risk
Roller Coaster	Clean Slate I	25-May-62	NAFR	Surface	0	Storage-transportation safety experiment, measured plutonium dispersal risk
Roller Coaster	Clean Slate II	31-May-62	NAFR	Surface	0	Storage-transportation safety experiment, measured plutonium dispersal risk
Roller Coaster	Clean Slate III	9-Jun-62	NAFR	Surface	0	Storage-transportation safety experiment, measured plutonium dispersal risk
Storax	Tendrac	7-Dec-62	NTS	Shaft	<20 kt	Re-test of the PAMPAS primary device scaled down and adapted for the WE.177B strategic aircraft bomb based on the W-59 secondary with the UK primary based on Super Octopus/Cleo used as a stop-gap between Skybolt cancellation and deployment of the UK Polaris. This primary device re-named as KATIE was also used alone as a tactical aircraft bomb and NDB (nuclear depth bomb) with selectable yields of 10 kT and 0.5kT. Source: TNA declassified files.
Whetstone	Cormorant	17-Jul-64	NTS	Shaft	<20 kt	Accidental release of radioactivity detected on-site only
Whetstone	Courser	25-Sep-64	NTS	Shaft	0	Test of the UK Polaris warhead primary based on the Super Octopus design. Known as a Polaris 'Economy Test'. Purpose was to reduce quantity of Pu-239 by 130-200kg spread over the whole UK Polaris programme, ~ 0.76-1.17kg per warhead, to ease pressure on scarce UK fissile material. UGT failed due to failure of US-supplied neutron-injection equipment. Repeated as Charcoal.

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						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?). YES. 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? YES. Confirmed. Fallon & Banon were the ONLY tests of the warhead fitted in the low-terminal-speed blunt-body RV 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.
Cresset	Fondutta	11-Apr-78	NTS	Shaft	20 - 150 kt	Chevaline? NO. 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? NO. Confirmed. See above note. Test Depth 1778 ft (542m). Source: TNA DEFE 25/335

		78			kt	several enclosures, declassified 2005, DEFE 19/181 declassified 2005, and DEFE 19/191 declassified 2006.
Quicksilver	Nessel	29-Aug-79	NTS	Shaft	20 - 150 kt	Chevaline? NO . Confirmed. See above note. Device name was DICEL. Source: TNA DEFE 25/335 several enclosures, declassified 2005, DEFE 19/181 declassified 2005, and DEFE 19/191 declassified 2006.
Tinderbox	Colwick	26-Apr-80	NTS	Shaft	20 - 150 kt	Chevaline? NO . Confirmed. See above note. Device name probably DINGBAT. Source: TNA DEFE 25/335 several enclosures, declassified 2005, DEFE 19/181 declassified 2005, and DEFE 19/191 declassified 2006.
Guardian	Dutchess	24-Oct-80	NTS	Shaft	<20 kt	
Guardian	Serpa	17-Dec-80	NTS	Shaft	20 - 150 kt	Chevaline? Unlikely , given the note above. May have been for a tactical ASM to replace WE.177 aircraft bombs, but no hard data available yet. What is certain from declassified papers at TNA is that WE.177C aircraft bombs were assembled from REGGIE fusion secondaries re-cycled from redundant ET.317 warheads removed from Polaris A3T SLBMs when these missiles were converted to Chevaline. No hard data yet on the fission primary used with Reggie. Source: DEFE 19/191 declassified 2006.
Praetorian	Rousanne	12-Nov-81	NTS	Shaft	20 - 150 kt	Chevaline? Unlikely , given the note above. But no hard data yet. Source: DEFE 19/191 declassified 2006.
Praetorian	Gibne	25-Apr-82	NTS	Shaft	20 - 150 kt	Chevaline? Unlikely , given the note above. But no hard data yet. Source: DEFE 19/191 declassified 2006.
Phalanx	Armada	22-Apr-83	NTS	Shaft	<20 kt	Trident primary test?
Fusileer	Mundo	1-May-84	NTS	Shaft	20 - 150 kt	Trident?
Grenadier	Egmont	9-Dec-84	NTS	Shaft	20 - 150 kt	Trident?

