

~~TOP SECRET~~

Downgrades to

Reference.

Sir William Penney, K.B.E., F.R.S.,
The Director,
Building F6.1,

UK 4c.

28/1/85

Based on
OK 28/1/85 Kittens 1955

Little change has been made in the firing programme since the last discussion with you. At that time the design of the grooving of the beryllium for your turbulent type delayed initiator was uncertain. We now have a design which I have tried to indicate by a sketch on the enclosed sheet.

The firing programme is as shown in the following table :-

Total number of firings - 12 : Maximum quantity of polonium - 1015 curies

Item	Description	No. of rounds		Curies/round
		Minimum	Maximum	
1	Calibration	1	1	15
2	Half-scale Service Urchin (2k II b)	2	3	50
3	Invert jet	1	5	100
4	Boomerang	2	6	100
5	Turbulent Type	1	5	100
6	Thermal Diffusion type	1	5	100

The number shown as the minimum for each item will be made and taken out to Australia initially. These will account for 8 of the 12 firings intended. The programme for the remaining 4 firings will be decided after the results of the earlier firings are known and a signal will be sent back to this country asking for the appropriate items to be polonium filled and despatched to Australia. Variants of the various types will be available and ready for filling.

J. A. T. Dawson

(J. A. T. DAWSON)
D. S. S. R.

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