

20lb FRAGMENTATION BOMBS

The British used three types of 20lb fragmentation bombs and these were:

20lb Mk I

20lb Mk II

United States 20lb modified.

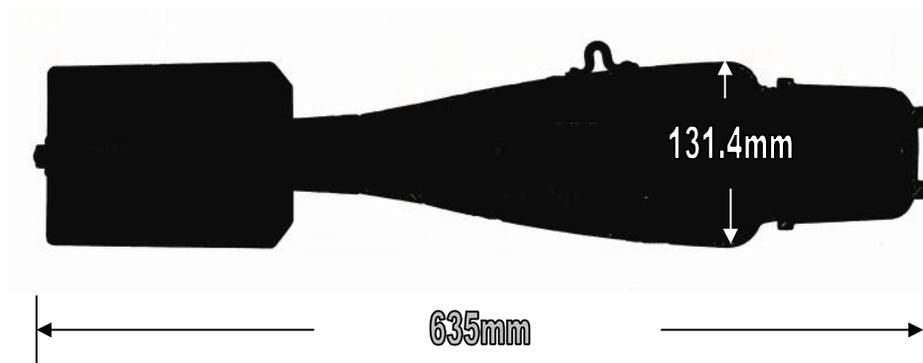
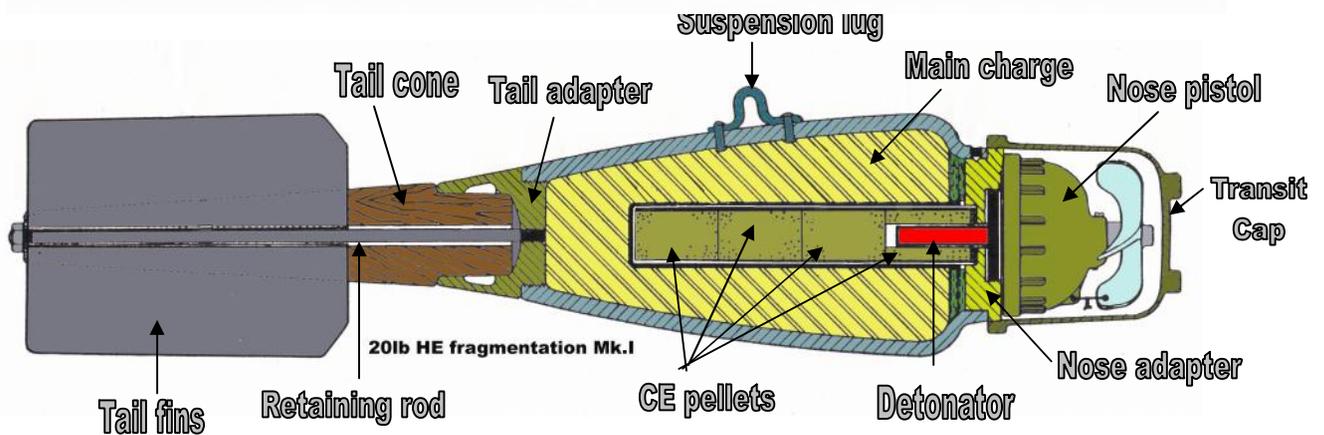
HE 20lb. Mk. I

This bomb was fitted with the nose pistol No.16. The body was made from steel and it was fitted at either end with a tail adapter and nose adapter. It was fitted with a wooden tail cone that was cut in four places to accommodate the four sheet-metal fins. The tail cone was also bored lengthwise to accommodate the tail retaining rod. A suspension lug was riveted to the body.

The detonator was filled with fulminate of mercury and two CE pellets.

The exploder had 3 solid and one perforated CE pellets.

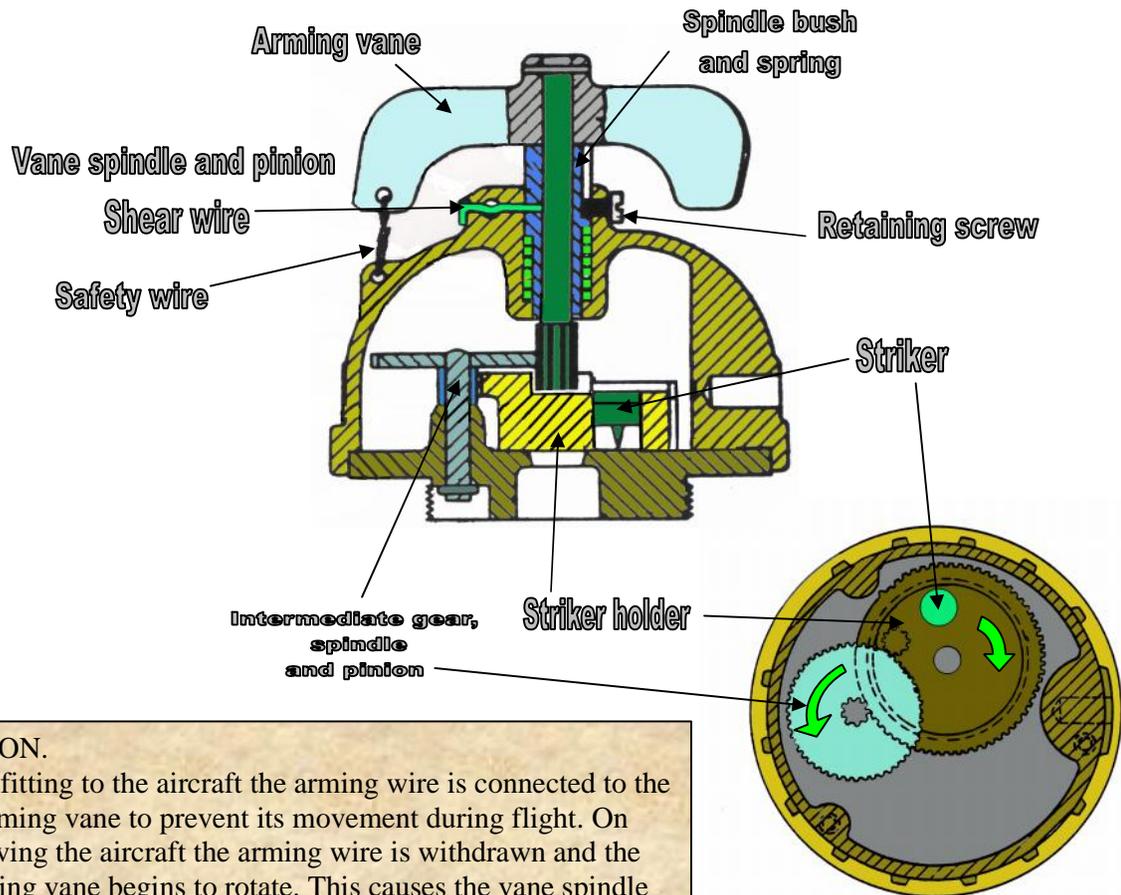
The main charge was 2.26kg of TNT. This loading gave a charge weight ratio of 20%.





20lb fragmentation bombs mounted on a display aircraft in the RAF museum at Hendon.

NOSE PISTOL No. 16 Mk. I



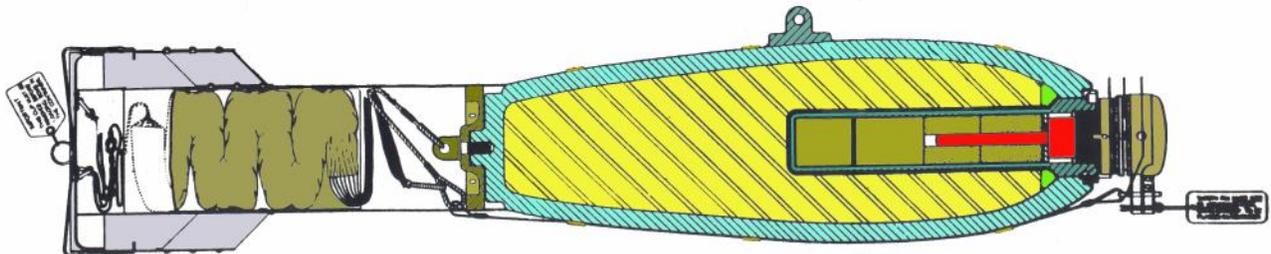
ACTION.
 After fitting to the aircraft the arming wire is connected to the arming vane to prevent its movement during flight. On leaving the aircraft the arming wire is withdrawn and the arming vane begins to rotate. This causes the vane spindle and pinion to drive the intermediate gear in a counter clockwise direction. This action causes the striker holder to rotate in a clockwise direction thus bring the striker underneath the vane spindle. On impact the arming vane spindle and pinion are driven down onto the striker which in turn hits the detonator fitted to the exploder system in the bomb.

20lb. FRAGMENTATION Mk. I & II (STABILIZED)

These bombs were fitted with nose pistols No. 29, 34, 38, or 45. Alternatively they were fitted with Nose fuze No. 873.

Oal was 553.7kg
Body dia 100mm
Tail width 97.2mm
Average weight 9kg.

HE 20lb Mk. II



US 20Lb. FRAGMENTATION (MODIFIED)

Originally this was a US bomb that was modified by the addition of a parachute housing.

The addition was a cast aluminium tray called No.14 parachute housing and containing a 305mm parachute. The housing was closed by a loosely fitted lid to which the parachute was attached. The air stream removes the lid which acts a drogue withdrawing the main chute. The parachute lines passed through the base of the housing to attachments on the bomb.

In the British service these bombs were carried in Cluster bombs No. 23 Mk.I and No. 24 Mk I. In these loadings the bombs were packed nose to tail which served to retain the loose lid until release.

The action of releasing the parachute served to withdraw an arming line that was spliced to the normal arming wire. This action commenced the normal arming procedure for the Nose fuze AN-M 104 or 120.

The body of the bomb was made from cast steel nose and tail sections screwed to a steel tube. Wrapped around this tube was a helically wound steel bar. This provided the fragmentation for the bomb.

