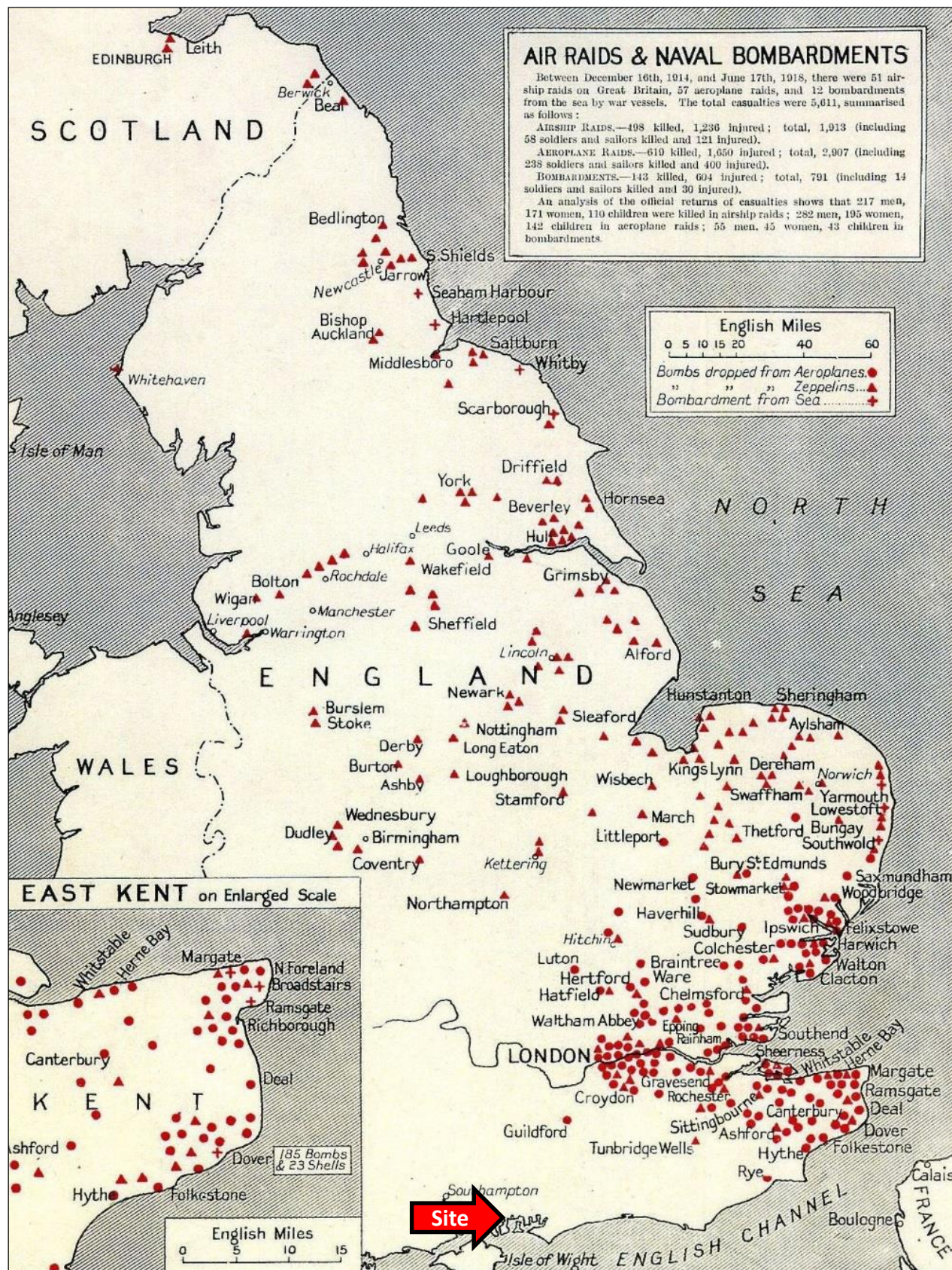



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Project: **Langstone Technology Park**

Ref: **DA8760-00**

Source: J. Morris, *German Air Raids on Britain*

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11th and 12th March, 1941.

Owing to exceptional disorganisation of normal communications in Portsmouth, Gosport and Fareham no information was received from Group Control on the 11th March and information which would have been transmitted by telephone on the 12th March has been received by post on the 13th. On the night of 10th/11thth considerable damage was done in Portsmouth and Gosport with lesser damage at Fareham from both H.E.'s and Incendiary Bombs. The parts chiefly affected were Broad Street, The Hard and Queen Street, Portsmouth and the waterfront in Gosport. Some damage was caused to Naval Establishments and essential services were considerable interfered with. At 2038 several incendiary bombs were dropped at Widley and Purbrook Heath but were quickly dealt with and a fire at Purbrook Heath was soon got under control. At 2330 four H.E. bombs were dropped inthe open near Mengham, Hayling and one UXB at North Hayling no damage, no casualties. Bombs were also dropped and caused some damage at Selsey, in the Isle of Wight, and in the Hants County Area. On the night of the 11th/12th there was intermittent bombing in Portsmouth, Gosport, Southampton, Isle of Wight and Hants and West Sussex generally damage was slight and casualties few. At 2230 one H.E? bomb was dropped in the searchlight field at Langstone Road, Havant, causing some damage to buildings and telephone wires, but no casualties. At 2240 several incendiary bombs many of the explosive type were dropped at the A.A. Camp, Crookhorn Lane, Purbrook, in the Belmont district of Bedhampton and on Portsdown Hill. six small fires were started but were quickly dealt with by the Police, Wardens and A.F.S. One casualty from burns was treated in Hospital. The known casualties in the Group area on the 12th were 87 killed, approx 400 seriously injured and approx. 200 slight injured.

19. 6. 42. U.X.B. Report Searchlight Post Langstone Rd Havant
19. 6. 42. Ref to H.H. shells Langstone Rd and Newdane Nurseries
19. 6. 42. Report of H.H. Shell and not U.X.B.

Above: ARP incident records relating to bombing incidents at the searchlight emplacement on Longstone Road. This feature can be seen adjacent to the north-eastern border of the site within WWII-era aerial photography.



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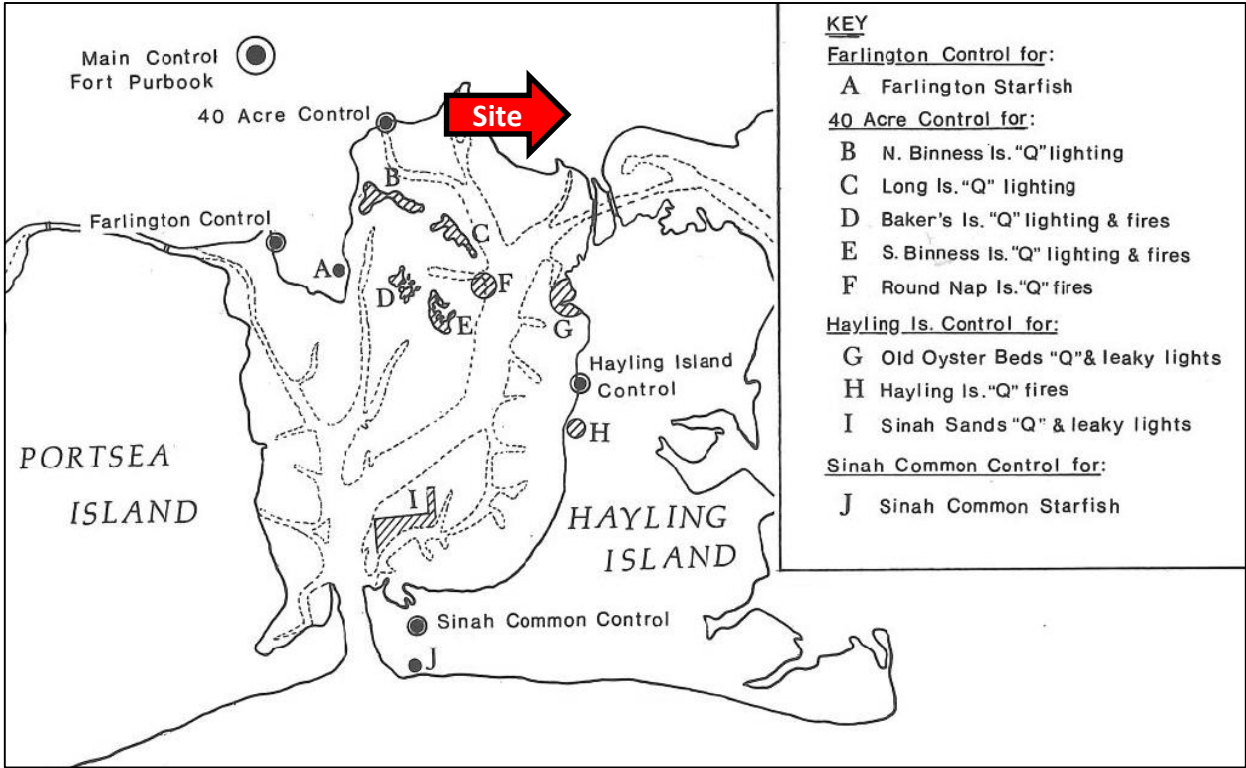
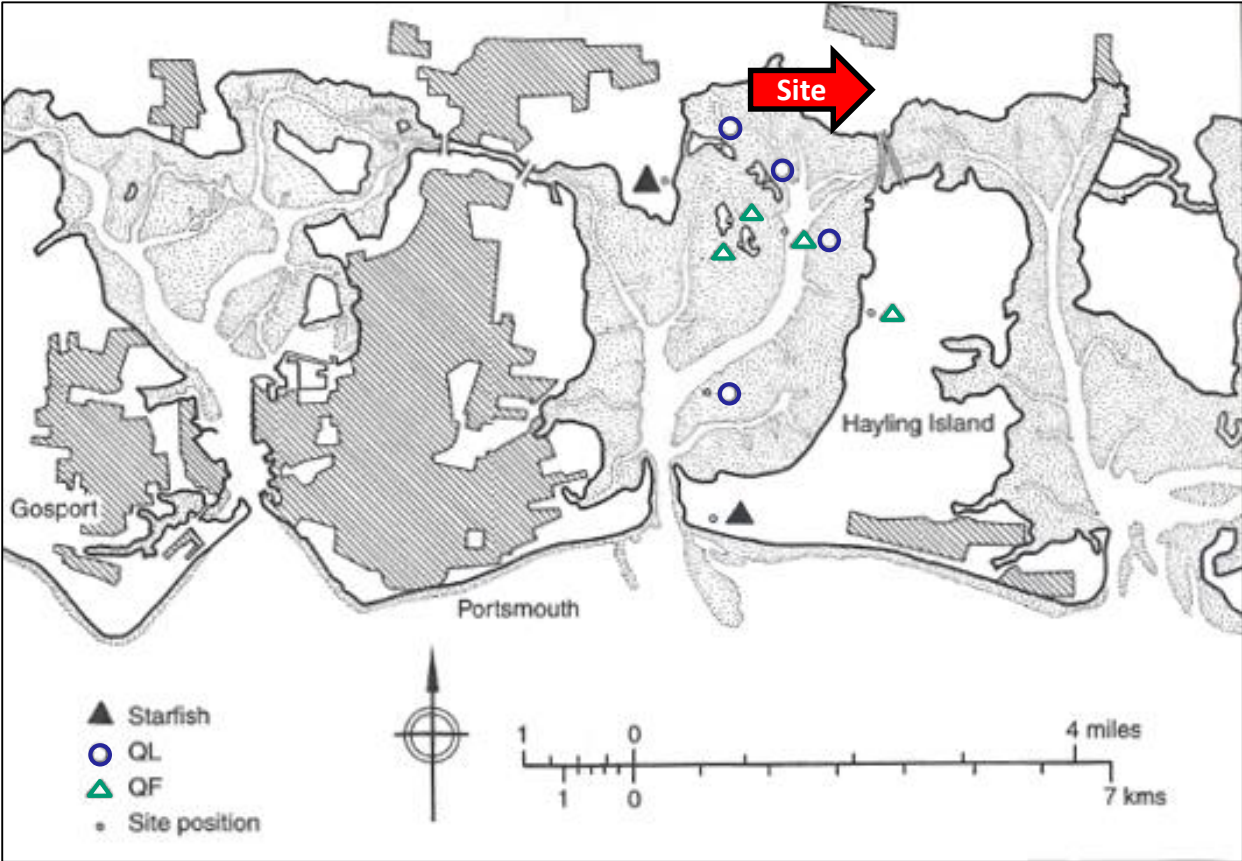
Ref: **DA8760-00**

Source: National Monuments Record Office (Historic England)

 **Approximate site boundary**



The Portsmouth decoy layout, summer 1941.



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Source: C. Dobson, *Fields of Deception*





- | | |
|--|---|
| 1 Northney Holiday Camp - HMS Northney 1 | 8 Searchlight Battery - Cherrywood Gardens |
| 2 Northney Anti Aircraft Battery | 9 Southleigh Holiday Camp - HMS Northney 2 |
| 3 Landing Craft facilities, Mill Rythe | 10 Royal Hotel - HMS Dragonfly |
| 4 Mill Rythe Holiday Village - HMS Northney 4 | 11 Sinah Common Anti Aircraft Battery |
| 5 Hayling Island Sailing Club - COPPS | 12 Sinah Warren |
| 6 Lakeside/Coronation Holiday Camp - HMS Northney 3 | 13 Phoenix launch site |
| 7 Mobile 3.7" mobile anti aircraft battery site | 14 Broken Mulberry Harbour Phoenix |
| ▲ Pillbox | ● Former Q Decoy site |
| ▲ Lost/demolished pillbox | ■ Q Decoy Fire Control site |



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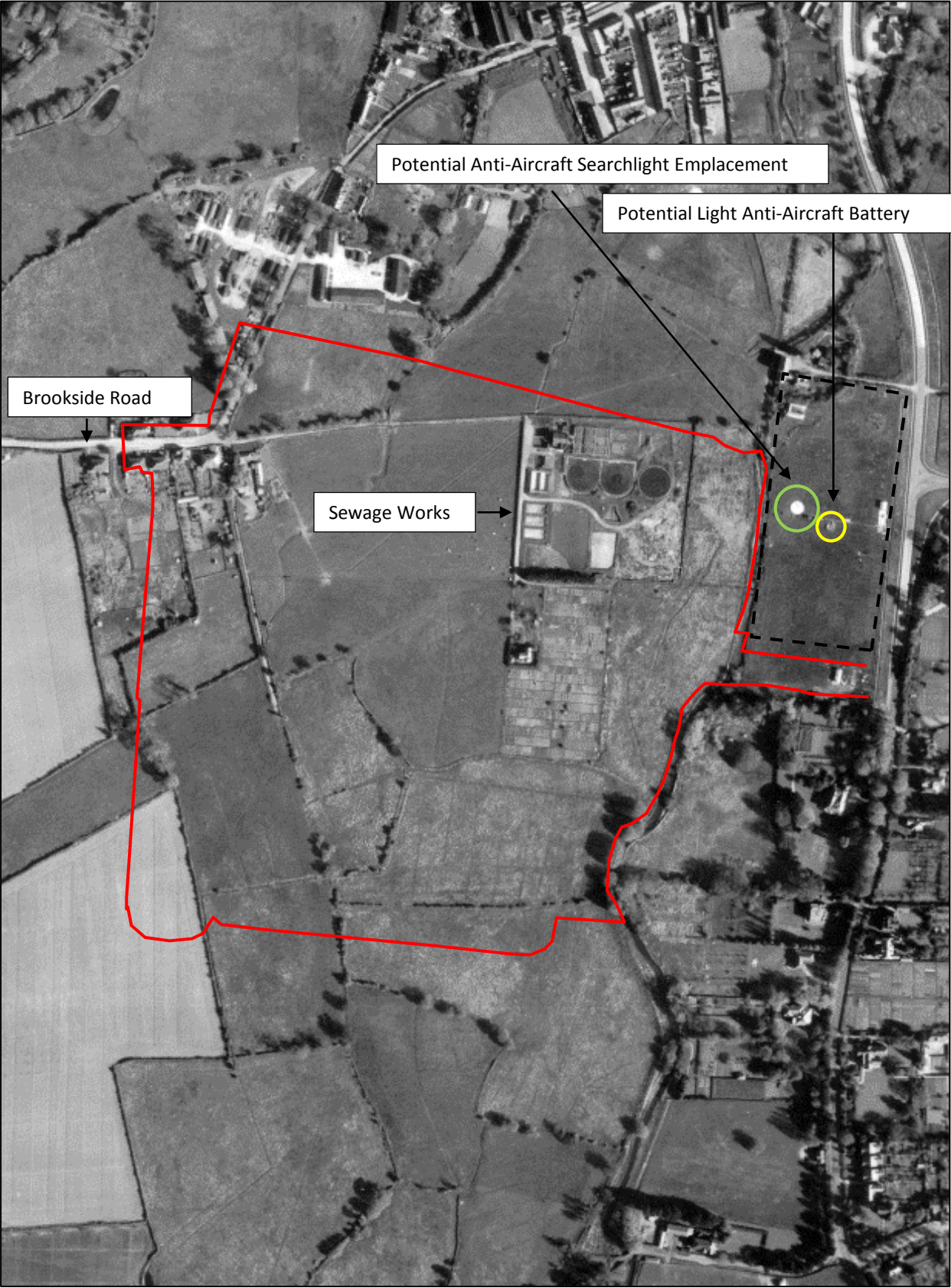
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Source: *Walton, R, An Island at War*





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Source: National Monuments Record Office (Historic England)

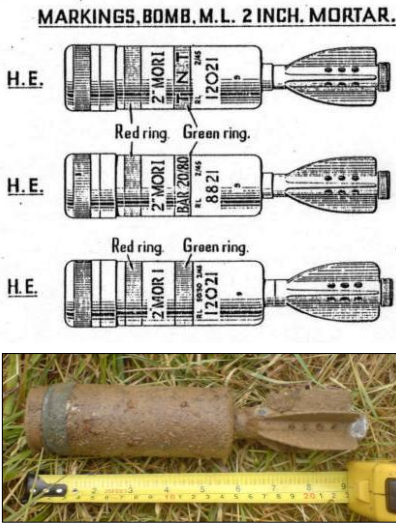
 **Approximate site boundary**



Examples of Land Service Ammunition – Mortars

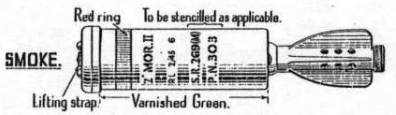
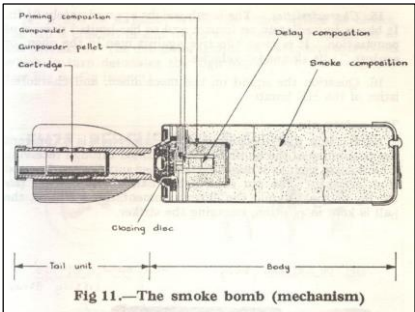
2 inch Mortar High Explosive

Weight	Approx. 1.02kg (2.25lb)
Maximum Range	460m (500yards)
Filling	200g RDX/TNT
Dimensions	51 x 290mm (2in x 11.4 in)
Fuze Type	An impact fuze which detonates the fuze booster charge and in turn the high explosive charge.
Use	It had greater range and firepower over hand and rifle grenades, and was used to attack targets behind cover with high explosive rounds.
Identification	HE has a rounded edge to a flat back. Can either be a black body colour with red and yellow band or dark green with yellow band. Brass cap on top. Practice will have hole all the way through the top.



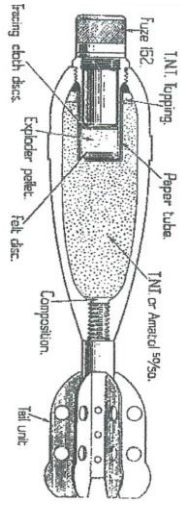
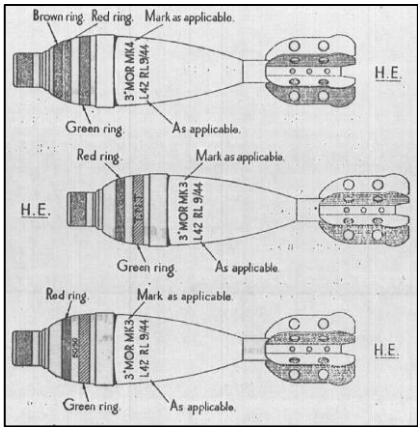
2 inch Mortar Smoke

Weight	Approx. 910g (2lb)
Maximum Range	460m (500yards)
Filling	White phosphorus and smoke fill
Dimensions	51 x 290mm (2in x 11.4 in)
Fuze Type	An impact fuze which initiates a bursting charge. This ruptures the mortar bomb's body and disperses the phosphorus filler
Identification	Smoke mortars have a recess and emission holes. May still see light green body paint. Look for stained ground around munition.
Use	As a screening devices for unit movement or to impair enemy field of vision.



3 inch Mortar High Explosive

Weight	Approx. 4.5kg (10lb)
Maximum Range	1,460 (Mk1) – 2,560m (Mk2) (1,600 – 2,800yds)
Dimensions	81mm (3in)
Filling	Amatol
Firing Mechanism	Drop, fixed striker
Remarks	Fin-stabilised bomb fired by means of a charge consisting of a primary cartridge in the tail and four secondary cartridges
Identification	An old style mortar. No way of telling if HE or practice so treat as HE



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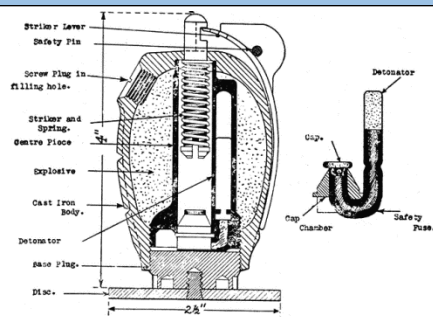
Ref: DA8760-00

Source: Various sources

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No. 36 'Mills' Grenade

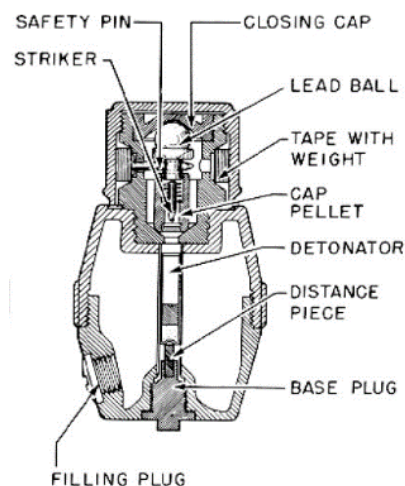
Weight	Approx. 765g filled (1lb 11.25oz)
Explosive Weight	71g (2oz) filling.
Fuze Type	4-7 second delay hand-throwing fuze. No. 6 Detonator
Dimensions	95 x 61mm (4 x 2.4in)
Use	Fragmentation explosive at approx. 30m range 100m range of damage.
Remarks	First introduced in 1915 its classic grooved, cast-iron 'pineapple' design was designed to provide uniform fragmentation. The detonator is inserted before use after removing the base plug.



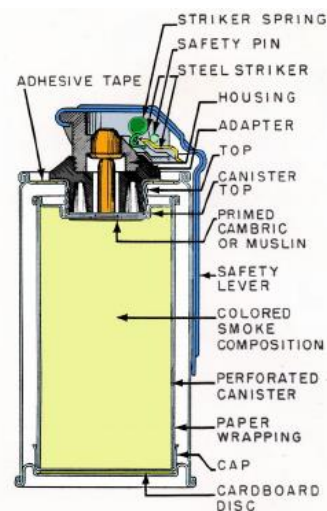
Left: baseplate and detonator removed

No. 69 Grenade

Weight	Approx. 383g (13.5oz)
Fill Weight	93g (3.25 oz) of either Amatol, Baratol or Lyddite
Fuze Type	'All-ways' Fuze. Comprised of a safety cap, a weighted streamer attached to a steel ball bearing and a safety bolt designed to detonate from any point of impact.
Dimensions	115 x 60mm (4.5 x 2.4 in)
Use	A blast grenade for use as an offensive weapon. Detonator was inserted before use.
Remarks	Introduced December 1940 and made from the plastic Bakelite as opposed to conventional metals. Detection is difficult due to this low metal content.

**No. 83 Smoke Grenade**

Weight	Approx. 680g (1.5lb)
Explosive Weight	Approx. 170-200g. (6-7 oz)
Fuze Type	Originally used a friction system using a match head composition. Later developed to a striker lever ignition system.
Dimensions	Approx. 62 x 140mm (2.44 x 5.5 in)
Use	Use as a target or landing zone marking device and as a screening method for troop / unit movement.
Remarks	This basic design stayed relatively unchanged up to the 1980's. The letters CCC were often etched into the body of the grenade in the colour of the smoke.



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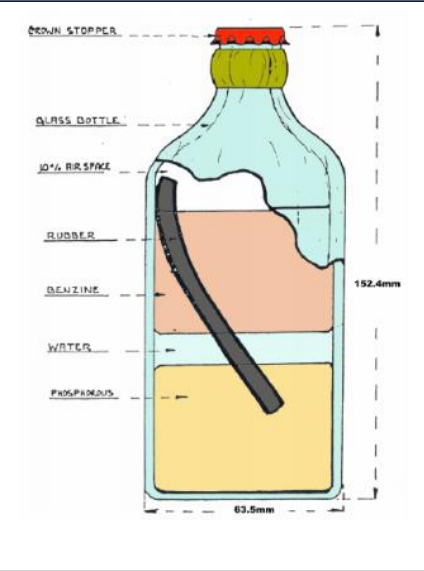
Source: Various sources

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Home Guard

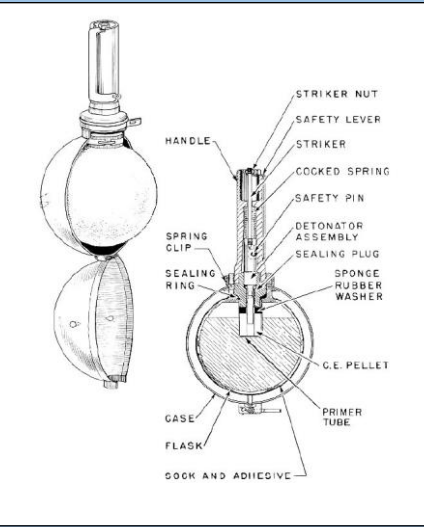
No. 76 Self Igniting Phosphorous (SIP) Grenade

Weight	Approx. 1lb 3oz
Filling	White Phosphorous and Benzene
Design	The filling was contained in a ½ pint sized glass bottle with water and a strip of rubber. Over time the rubber dissolved to create a sticky which would self ignite when the bottle broke.
Use	Originally intended as an anti-tank incendiary weapon deployed by hand. Designed to be produced cheaply without consuming materials needed to produce armaments on the front line.
Remarks	The Home Guard hid caches of these grenades during the war. Not all locations were officially recorded and some caches were lost and encountered post-war. In all cases, the grenades are still found to be dangerous.



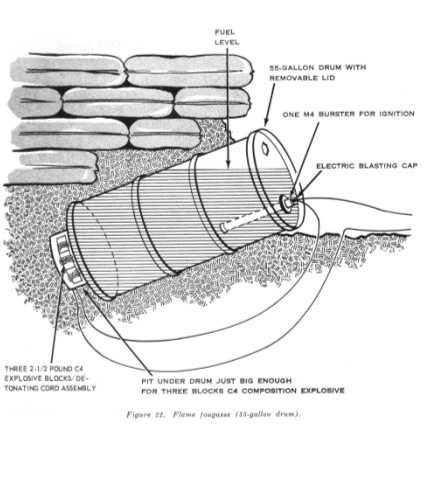
No. 74 Grenade (“Sticky Bomb”) Mk1

Weight	Approx. 1.1kg (2.25lb)
Filling	Approx. 600g Nobel’s No.283 (Nitro-glycerine) (1.33lb)
Design	A glass ball on the end of a Bakelite (plastic) handle. The inside of the ball would contain the explosive filling and the outside a very sticky adhesive coating.
Use	An anti-tank grenade primarily issued to the home guard. It required the user to come in very close proximity with the target and smash the glass explosive container against it.
Remarks	Timer fuze was located in the handle. This would explode after 3-6 secs. 9.5in Long 4.5in Diameter



Flame Fougasse Bomb

Weight	Various
Filling	Initially a mixture of 40% petrol and 60% gas. Ammonal provided the propellant charge.
Design	Usually constructed from a 40-gallon drum dug into a roadside and camouflaged.
Use	As an improvised anti-tank bomb. When triggered the Fougasse could project a beam of burning sticky fuel in a fixed direction from up to 3m (10ft) wide and 27m (30yards) long.
Remarks	A highly unorthodox weapon designed by the Petroleum Warfare Department to address a critical lack of weapons in 1940. 50,000 are estimated to have been distributed around the UK.



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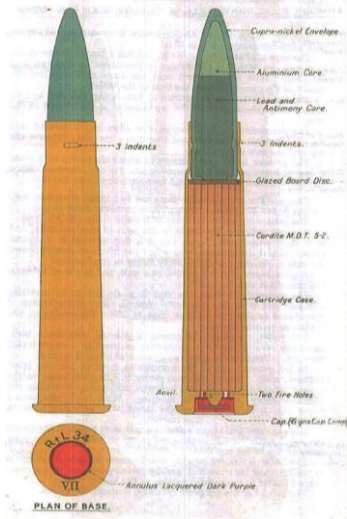
Examples of British Small Arms Ammunition



.303 Rifle

Bullet Diameter	7.92mm
Case length	56.44mm
Overall length	78.11mm
Type	Rifle Ammunition
Propellant	Originally black powder. Later Cordite followed by Nitrocellulose
Remarks	First produced in 1889 and still in use today, the .303inch cartridge has progressed through ten 'marks' which eventually extended to a total of around 26 variations.

Bullet Type	Colour of tip	Colour of Annulus
Armour Piercing	Green	Green
Ball	None	Purple
Incendiary	Blue	Blue
Observing	Black	Black
Proof	None	Yellow
Tracer Short Range	White	Red
Tracer Dark Ignition	Grey	Red



Buried and Decayed Ammunition



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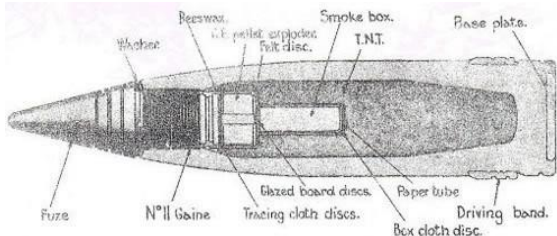
Source: Various sources

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Examples of Anti-Aircraft Projectiles

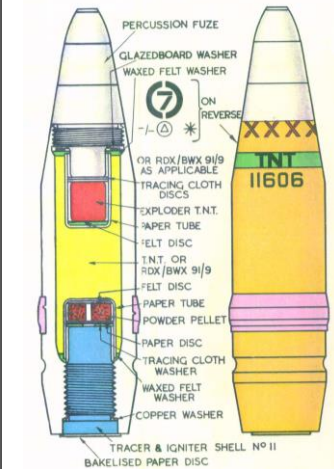
3.7 Inch QF Anti-Aircraft Projectile

Projectile Weight	28lb (12.6 kg)
Explosive Weight	2.52lbs
Fuze Type	Mechanical Time Fuze
Dimensions	3.7in x 14.7in (94mm x 360mm)
Rate of Fire	10 to 20 rounds per minute
Use	The 3.7in AA Mks 1-3 were the standard Heavy Anti-Aircraft guns of the British Army.
Ceiling	30,000ft to 59,000ft



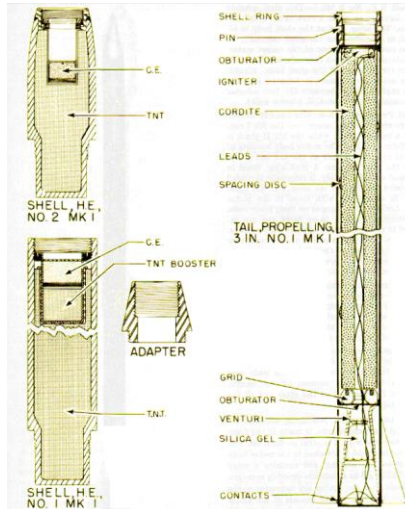
40mm Bofors Projectile

Projectile Weight	1.96lb (0.86kg)
Explosive Weight	300g (0.6lb)
Fuze Type	Impact Fuze
Rate of Fire	120 rounds per minute
Projectile Dimensions	40 x 180mm
Ceiling	23,000ft (7000m)
Remarks	Light quick fire high explosive anti-aircraft projectile. Each projectile fitted with small tracer element. If no target hit, shell would explode when tracer burnt out. Designed to engage aircraft flying below 2,000ft



3in Unrotated Projectile (UP) Anti-Aircraft Rocket ("Z" Battery)

HE Projectile Weight	3.4kg (7.6lb)
Explosive Weight	0.96kg (2.13lb)
Filling	High Explosive – TNT. Fitted with aerial burst fuzing
Dimensions of projectile	236 x 83mm (9.29 x 3.25in)
Remarks	As a short range rocket-firing anti-aircraft weapon developed for the Royal Navy. It was used extensively by British ships during the early days of World War II. The UP was also used in ground-based single and 128-round launchers known as Z Batteries. Shell consists of a steel cylinder reduced in diameter at the base and threaded externally to screw into the shell ring of the rocket motor



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