

CORSHAM STONE MINES

Former military use and proposed development

The Central Ammunition Depot at Corsham, since its creation immediately before World War II, has been much more than just an underground munitions store located in disused stone quarries. The government and military presence has created a multi-layered landscape above and below ground with over 60 years of development. The surface features include defensive lines, railways, barracks, housing, laboratories, workshops and offices with attendant ventilation and lift shafts and communication aeries. Underground in the extensive former stone mines, there have been munitions depots, naval stores, aircraft engine and gun barrel factories, centres of regional and national government, a RAF fighter command centre, as well as communications centres. The quarries also had non-military uses in wartime, such as repositories for national art treasures from the British Museum, the Victoria and Albert Museum, the Banqueting House and Westminster Abbey, while in later years they have been used for commercial secure storage. The absorbing saga of government involvement around Corsham has been chronicled in detail in N. J. McCamley's *Secret Underground Cities* (1998) and *Cold War Secret Nuclear Bunkers* (2002), and much of the following detail is taken from these sources.

The move underground

The idea of bomb-proof shelters to protect men and stores is enshrined in much military defence planning since the advent of military explosives, but only with the threat of aerial bombardment did it become necessary to escape the confines of designed fortresses. Thus, immediately prior to World War I with the apparent threat of Zeppelin raids, the Ministry of Munitions sought to protect stockpiles of bulk high explosives by storing them underground. Initially, existing mines and caves were used, such as a salt mine near Northwich adapted to house 1500 tons of explosives for north country filling factories and the Chislehurst caves for the Woolwich Arsenal. Significantly for the present article, a small Bathstone mine at The Ridge near Corsham was converted in 1915 for the storage of TNT and cordite.

Munitions depots

The development of underground munitions depots in the inter-war years is marked by indecision on behalf of government ministries and inter-service rivalry and argument. In 1934 when re-armament was once again on the agenda following Hitler's accession as Chancellor of Germany, the process gained some momentum. In the summer of 1936, the War Office, having decided that the stone mines in the Corsham area was the preferred location for its main underground ammunition depot, completed the purchase of Ridge, Tunnel and Eastlays Quarries at a cost of £47,000. From these rather modest beginnings was to develop the Central Ammunition Depot, Corsham, which by 1943 encompassed some 125 acres of subterranean chambers containing 300,000 tons of explosives and munitions. Its widely dispersed components stretched from Limpley Stoke and Monkton Farleigh (one of the largest single quarries) in the west and Westwood and Bradford-on-Avon in the south to Corsham and Gastard in the north and east. The total cost of the depot was over £4.5 million – a far cry from the £100,000 for six acres originally envisaged. The 50-acre Tunnel Quarry was directly served by a standard gauge branch off the Great Western Railway main line at the eastern portal of Brunel's Box Railway Tunnel. This branch, complete with underground platform and refuge sidings, fed a narrow gauge railway system with diesel locomotives, turntables, engine houses and workshops serving the ammunition 'districts'.

The proposed development of the Barracks Hill military site at Corsham by its present occupant, the Defence Communication Services Agency, has involved English Heritage in photographic recording of some of the underground remains and advising on the management of both the surface and underground structures

Tunnel Quarry Ammunition Depot, Corsham, 2001. General view of a typical 'District'



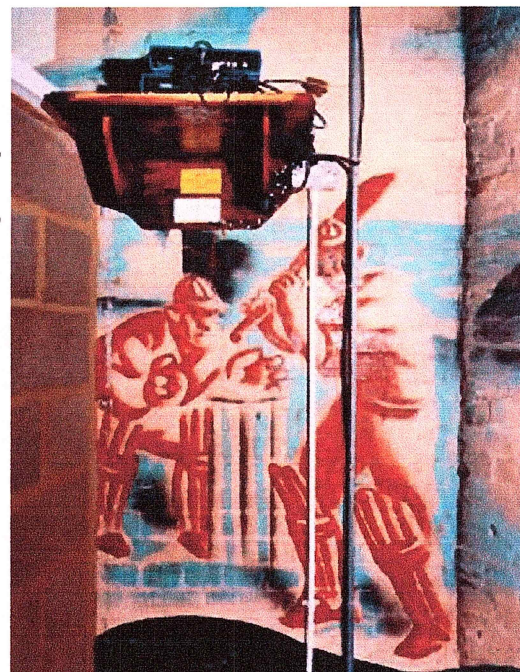


Spring Quarry, Corsham, 2001. The canteens in the underground factories were decorated with floor-to-ceiling murals by Olga Lehmann. They have only survived in one of the former canteens, re-used by the RAF for a variety of purposes with scant regard to the murals

Underground factories

The onslaught of the German air offensive in 1940 also caused the various supply ministries to seek protected sites for crucial industries such as the manufacture of aircraft engines and weapons. Huge sums were spent constructing underground factories in new tunnels driven into hillsides such as at Drakelow near Kidderminster and converting existing quarries as at Henley-on-Thames, Westwood, near Bradford-on-Avon, and at Corsham itself. Under pressure from Lord Beaverbrook, the vast Spring Quarry, on the other side of Box Railway Tunnel from Tunnel Quarry, was requisitioned late in 1940 and converted by the Ministry of Air Production for factory use at exorbitant cost to become 'the largest underground factory in the world'. It was to be occupied by the Bristol Aircraft Company (BAC) for the production of Centaurus engines while a separate part was occupied by BSA for the manufacture of gun barrels (including half of the country's entire output of Hispano and Polsen barrels).

When Spring Quarry was in BAC occupancy, its chairman, Sir Reginald Verdon Smith, commissioned a professional artist, Olga Lehmann, to decorate some of the canteen areas with vivid floor-to-ceiling murals. Over 40 of these survive in one of the canteen areas despite 60 years of disregard and neglect. They are executed in a distinctive style very much of the pre-war period and mainly depict racing and



attendant show-ground themes interspersed with drinking scenes, cricket matches and even missionary boiling!

The expenditure on the underground depots was to be justified after the war by their continued use as ammunition and naval stores for some 50 years but the factories, as such, were an expensive fiasco. By the time they finally opened early in 1943, German bombing was no longer the threat that it had been when they were first conceived and they were less than satisfactory for their purpose. When they closed just two years later the bill for their construction had exceeded £20 million.

The RAF comes to Corsham

At the onset of World War II, RAF command centres were, whenever possible, located underground. In the case of the RAF No. 10 Fighter Command covering the West Country, this was accomplished in Brown's Quarry, a spur off Tunnel Quarry. At the same time, a communications centre was created and, although the command centre itself has long since been abandoned, the RAF communications presence has continued to this day.

Cold War

For the next 50 years, however, the whole suite of converted quarries achieved a valuable second life as home to a variety of Cold War uses, the chronology of which reflects the course of

strategic thinking throughout this period. Thus in the 1950s, in addition to the burgeoning uses as naval stores, the quarries housed radar and communication centres and, by the end of the decade, the Emergency Government War Headquarters. Code-named originally SUBTERFUGE, this facility developed in the early 1960s under the code-names BURLINGTON (and finally TURNSTILE) into an office for the War Cabinet and Chiefs of Staff to accommodate a standby staff of 1000, equipped with a lavish telephone exchange and bar. The Emergency Government War Headquarters had its final upgrading in the early years of the Thatcher government but, with the end of the Cold War in 1989, these uses have been scaled down or abandoned.

The original *raison d'être* for the military presence has long since gone. The last munitions were shipped out or destroyed by the end of 1962, and the stores function was finally wound down in the 1990s. Much of the complex has now been mothballed or sold, though there is still a significant RAF and military communications presence. Among the decaying evidence of disused offices and stores are poignant and sinister reminders of this fascinating but little heralded chapter in our history.

Future development

The proposal that the Defence Communication Services Agency (DCSA) concentrate most of its southern England operations on the Basil Hill Barracks site at Corsham has opened discussions on the future management of the historic elements of the site both above and below ground. In the late 1930s, the attempt to disguise the real purpose of the surface buildings produced a group of high quality and historically interesting buildings built to resemble a private school set in the Cotswold countryside. While these will continue in sympathetic use and are eminently listable, the underground remains, some of which may be considered for scheduling, present much greater problems. At present, at considerable cost, the largely redundant but extensive underground workings are ventilated and dehumidified. Should this cease, the condition of the historic remains and especially that of the wartime machinery and murals will be at risk. DCSA is very much aware of this, is in close contact with English Heritage and has commissioned consultants to advise on a whole raft of options. The outcome is still uncertain. □

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Spring Quarry, Corsham, 2001.
Shelves of mess kits survive in their
oil paper packaging with signs
providing sinister reminders of Cold
War hazards – GAS, BIO, ATOM