Once again I’ve been probing into a bit of local history. Such ideas are usually prompted by seeing something whilst driving or a chance comment by a friend or neighbour. On this occasion I was stuck in a queue at road-works traffic lights near RAF Barnham on my way to Thetford on the A134. I was idly peering through the fence at the motley collection of buildings - and stored caravans - and whilst I have seen military vehicles enter or leave the Camp from time to time, there never seemed to be anything ‘going on’. Time for a bit of research!

According to official documentation, the site is known as “Barnham Training Area” and is extensively used by the RAF Regiment Training Wing, the RAF Force Protection Centre and various other units including Air Defence squadrons and cadets as an extension of RAF Honington. The equipment in use ranges from small arms infantry weapons to Rapier anti-aircraft systems. There are also driver-training tracks and off-road facilities for the use of military vehicles. That’s ‘today’, but what about ‘yesterday’?

From what I can discover, there has been a military establishment at Barnham since the First World War but it is the eras of the Second World War and the so-called Cold War when things really happened there.

94 Maintenance Unit was formed only a few days after the outbreak of WWII and on 22nd August 1939 an advance party moved into Barnham Camp to set up a munitions storage area - probably better known as a ‘bomb dump’. Its task was to supply bombs and ammunition to a number of local bomber airfields. In addition to the usual high-explosive
and incendiary bombs, Barnham also prepared, stored and maintained ‘mustard gas’ bombs using chemicals brought in by rail from a large ICI chemical factory in Cheshire. In those days there was a railway line linking Bury St. Edmunds with Thetford and there was a Barnham station - in Station Road! (This is the road from the Barnham traffic lights to Elveden.) This railway line cut across the south-eastern corner of the Camp and a number of additional sidings were built into the storage area to move the munitions. To give some idea of the increase in rail traffic, in 1938 Barnham station handled 2,000 loaded wagons with 7,000 tons of freight. Between September 1939 and December 1945 Barnham handled 139,729 wagons with 721,000 tons! Three J15 steam locomotives were fitted with spark arrestors on their chimneys to enable them to work in the bomb store. With the end of hostilities, the Camp was wound down and much of the munitions were dumped at sea(!).

The detonation of two atom bombs over Japan at the end of the war heralded a new phase in world tensions and Britain joined the race to develop nuclear weapons. The first of these was the free-fall Mark 1 Atom Bomb - code-named “Blue Danube”.

To store and maintain these weapons, two purpose-built bomb stores were built. One at Faldingworth in Lincolnshire and the other at Barnham Camp. New facilities were constructed in 1954-5 in the extreme south-western corner of the Camp and 94MU was reactivated to handle the weapons and the unit became operational in September 1956 although some sources report that the first bombs may have arrived somewhat earlier. Barnham was to support East Anglian V-bomber bases at Honington, Marham, Watton, Wyton, Upwood and Bassingbourne. Some bombs would have been stored at the airfields with Barnham holding reserve stocks for ‘secondary strikes’.

The new site was, of course, a high security area and was surrounded by a series of wire and concrete fences between which were guard dog runs, trip-wires and flares - many being activated by the rabbit population! The whole area was pentagonal in shape with high watch towers at each corner. The unit was self-sufficient with its own administrative buildings, canteen and even a football pitch! The ‘working’ area had three large maintenance and storage units equipped with gantries for the loading/unloading of the weapons from transport vehicles. For safety reasons, the high-explosive ‘shells’ were stored separately from the ‘fissile’ cores. The latter were stored in a series of ‘igloos’ or ‘hutches’ which resembled small concrete sheds and had either one or two stainless steel containers sunk into the floor inside to store the cores. It is believed that the ‘2-hole’ sheds were for cobalt cores and the ‘1-hole’ sheds for plutonium cores, There were as many as 54 of these
‘igloos’ on site but it is doubtful if they were ever all in use at the same time - this overcapacity being partly to make the Soviet Union think that we had more bombs than was really the case! The new storage area was usually known as ‘top site’ to the Barnham garrison to differentiate it from the ‘main site’ although in Ministry terms it was generally known as “RAF Barnham, No. 4 Maintenance Unit, Special Storage Site.” ‘Top site’ rolls off the tongue much easier!

The ‘Blue Danube’ bomb was reputed to be a 10-12 kiloton weapon - in other words, each bomb had the explosive capacity of 10,000 - 12,000 tons of TNT. To put that into perspective, two of these would have a greater capacity than all the bombs dropped on London in WWII! Initially there were plans for 800 of these but it would appear that only 58 were ever produced and it is highly unlikely that all 58 were ever operational at the same time. The bomb was 24 ft long, 5 ft diameter and weighed about 10 tons, this being the smallest ‘useable’ device that the technology of the time could produce and the new ‘V-bomber’ force, (Valiant, Victor and Vulcan), had bomb bays sized to accommodate.

As the ‘Cold War’ drew on, newer and more sophisticated weapons were developed and ‘Blue Danube’ was superseded by ‘Red Beard’ - basically the same bomb but in a smaller package. There had been plans for bombs of up to 40 kiloton capacity but, at the time, the necessary fissile material was in very short supply and what was available had to be shared amongst more, smaller bombs. There were also changes brought about by the expansion of storage facilities on the airfields enabling them to stockpile more bombs and this latter point led to the Special Storage Site at Barnham becoming redundant in the early 1960’s with the last bomb probably removed from the site by April 1963.

In 1965 the ‘top site’ nuclear weapon storage part of Barnham Camp was put up for sale by the Ministry and was purchased by a local businessman who started a mushroom farm in the buildings. Subsequently the site has become the Gorse Industrial Estate although still owned by the same person. Much of the original infrastructure is being restored and many of the conifers which had sprung up since the site was active have been cleared thereby restoring much of the area to its original appearance. The site is now a Scheduled Monument with Grade II listed buildings and has links to English Heritage as a unique memorial to the history of Barnham Camp and the Cold War.
RAF BARNHAM 'TOP SITE'
circa mid-1950s

Derived from period & recent aerial imagery, Air Ministry diagram 3001/53, cumulative research and current ground truth
(S.J.Tooley November 2013)

Area-Map Symbols Are To Scale

1. Outer RAF Picket Post
2. Generator/Power Bldg
3. Generator/Power Bldg
4. Small Generator/Power Bldg
5. Possible Generator Fuel Compound
6. Main Administration Bldg
7. Pyrotechnic Storage Building
8. Guardroom / NAAFI / Amenities Bldg
9. Football Pitch
10. Fire Engine Bldg
11. Communications Building
12. Dog Food Preparation Bldg
13. Accommodation Bldg
14. Mess Bldg
15. Dog Kennels
16. Western Core Storage Area
17. Western Explosives Storage Bldg
18. Probable Core Inspection Bldg
19. Northern Core Storage Area
20. Northern Explosives Storage Area
21. Eastern Core Storage Area
22. Eastern Explosives Storage Area
23. Maintenance & Repair Bldg
24. Southern Core Storage Area
25. Component Servicing Bldg
26. WC Block (Moved by 1960)

KEY

- Access Road
- Core Storage Footpath
- Barbed Wire Spools
- Concrete Wall
- Vehicle Gate
- Enclosed Watch Tower
- Observation Point
- Pedestrian Gate
- Emergency Water Supply
- Fissile Core Storage Bldg
- Support Bldg
- Explosives Storage Bldg
- Blast Wall