STATEMENT OF SIGNIFICANCE

ST GEORGE'S BARRACKS, RUTLAND



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1.0 Introduction

This report has been prepared by Peter Fellows, Built Heritage Consultant at RegenCo, on behalf of Rutland County Council and the DIO, in order to assess the significance of the historic built environment at St George's Barracks, Rutland.

There are no World Heritage Sites, Scheduled Ancient Monuments, Historic Landscapes, Parks and Gardens or Historic Battlefields within the proposed application site. Within the 1km study area surrounding the application site, the following heritage assets have been identified:

- Edith Weston Conservation Area
- North Luffenham Conservation Area

• 22 post-medieval and Industrial era listed buildings (the majority of which are within North Luffenham)

• 1 modern listed building (Thor Missile base)

The area also forms part of the Second World War airfield, which is a non-designated heritage asset included on the Leicestershire and Rutland HER (MLE15972).

1.1 Aims and Objectives

The aim of this Heritage Statement is to describe the significance of built heritage assets affected by the proposed development and assess the impacts of the proposal upon their significance, including their settings, as required by the National Planning Policy Framework (NPPF). The objectives of this Heritage Statement are:

- Identify and describe the significance of designated and non-designated built heritage assets affected by the proposed development, including the contribution of their settings to their significance; and
- Assess the impacts of the proposed development upon their significance, including their settings.

1.2 Scope

The NPPF definition of heritage assets has been used in preparing this Heritage Statement:

A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Although this Heritage Statement considers the historic background to the application site, it focuses on the setting of built heritage assets and is not an Archaeological Desk-Based Assessment. A separate Archaeological Desk Based Assessment has been prepared in support of the application and forms part of the submitted planning documents.

The Heritage Statement does not aim to provide a justification for any identified harm to heritage assets.

2.0 Site Description

- 2.1 The site is located upon gently undulating former agricultural land to the south-east of the village of Edith Weston and to the north-east of North Luffenham.
- 2.2 The majority of the Site is currently occupied by an RAF airbase with the eastern two-thirds of the footprint taken up with runways, taxiways and hangers. Large areas of relatively flat and open grass-covered land are located in between these elements. The former launch pads and fuelling facilities for Thor Ballistic Missile Systems are located in the south-eastern corner of the Site. The north-eastern corner of the airbase is occupied by a number of hangers, service and accommodation buildings, surrounded by landscaped lines of trees and grassed areas. The far north-west corner is occupied by a pasture field to the east of Normanton Road, with further buildings associated with the airbase located to the west of this road
- 2.3 Project Background

St George's Barracks is due to be vacated by the Ministry of Defence (MOD) in 2020/21. Currently there is a broad vision for the how the Site may be re-developed although no specific plans have been prepared to date although it is accepted that this re-development would be an opportunity to provide housing an infrastructure for the area and also for the extraction of known mineral deposits.

3.0 Methodology

3.1 Heritage Statement Methodology

This Heritage Statement follows the requirements of the National Planning Policy Framework (NPPF) and has also had regard to:

- Planning Practice Guidance on Conserving and Enhancing the Historic Environment (2014);
- Historic England's Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (2008); and
- Historic England's Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2015).

Professional judgment is used in conjunction with this guidance and methodology in order to undertake the assessments in this Heritage Statement.

3.2 Information Sources Consulted

This Heritage Statement has been prepared taking into consideration the historical background of the proposed development site and wider area. Sources consulted included:

- Heritage Gateway;

- National Heritage List for England (NHLE) and;
- Historic Maps
- Other relevant publications pertaining to the site and its immediate vicinity.

In addition to the above, a site visit was undertaken on 7th March 2018. During this site visit, the application site was inspected, and surrounding assets were viewed. The site visit was used to assist in understanding the significance of built heritage assets and in assessing the impacts of the proposed development.

4.0 Legislation and Planning Policy Context

4.1 Local Policy and Guidance

4.1.1 <u>Rutland Core Strategy</u>

The Core Strategy sets out the vision, objectives, spatial strategy and planning policies for Rutland County Council. It was adopted by the authority on 11th July 2011. The Allocations and Policies DPD allocates sites for development and sets out and planning policies for Rutland. It was adopted by the authority on 13th October 2013. Archaeology and other cultural heritage issues are covered by Policy CS22 of the DPD. This policy is set out in full below.

Policy CS22 - The historic and cultural environment

The quality and character of the built and historic environment of Rutland will be conserved and enhanced.

Particular protection will be given to the character and special features of:

- a) listed buildings and features;
- b) conservation areas;
- c) scheduled ancient monuments;
- d) historic parks and gardens;
- e) known and potential archaeological sites.

All developments, projects and activities will be expected to protect and where possible enhance historic assets and their settings, maintain local distinctiveness and the character of identified features. Development should respect the historic landscape character and contribute to its conservation, enhancement or restoration, or the creation of appropriate new features. The adaptive re-use of redundant or functionally obsolete listed buildings or important buildings will be supported where this does not harm their essential character.

- 4.2 National Policy and Guidance
- 4.2.1 Planning (Listed Buildings and Conservation Areas) Act 1990

This Act outlines the provisions for designation, control of works and enforcement measures relating to Listed Buildings and Conservation Areas. Of relevance to this development proposal are:

• Section 66 (1) states that special regard to shall be had to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses in considering whether to grant planning permission that affects a listed building or its setting; and

• Section 72 (1) states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of Conservation Areas when exercising planning functions.

4.2.2 National Planning Policy Framework (2018)

The National Planning Policy Framework (NPPF) sets out the Government's national planning policies, including the conservation of the historic environment

The NPPF covers all aspects of the historic environment and heritage assets, including designated assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Conservation Areas, Registered Parks and Gardens and Registered Battlefields) and non-designated assets (local lists and archaeological sites of equivalent significance to scheduled monuments). The NPPF draws attention to the irreplaceable nature of heritage assets and the benefits their conservation can bring to the wider objectives of the NPPF in relation to sustainability, economic benefits and place-making (para 184).

The NPPF states that the significance of heritage assets (including their settings) should be identified, described and the impact of the proposal on the significance of the asset should be assessed. The planning application should include sufficient information to enable the impact of proposals on significance to be assessed. The NPPF sets a minimum information standard and states that the level of detail should be proportionate to the heritage asset's significance and the potential impact on that significance (para 189).

The NPPF sets out the approach that should be taken in assessing development proposals within the context of applications for development of designated assets. Great weight should be given to the conservation of designated heritage assets and the more important the asset, the more the emphasis should be placed on its conservation. Harm or loss to significance through alteration or destruction or development within its setting should require clear and convincing justification (para 193 & 194).

Where there is substantial harm to or total loss of significance of a designated heritage asset, it must be demonstrated that this is necessary to achieve substantial public benefits that outweigh the harm or loss in order for local planning authorities to grant consent. Alternatively, it must be demonstrated that all of a set number of criteria are met (para 195).

Where there is less than substantial harm, the harm should be weighed against the public benefits of the development (para 196).

The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application, A balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset (para. 197).

Additional guidance is given on new development within the settings of heritage assets. Proposals that preserve elements of the setting that make a positive contribution to or better reveal that significance of the heritage asset should be treated favourably (para 137).

Where loss of significance as a result of development is considered justified, the NPPF requires heritage assets to be recorded and understanding of the heritage assets to be advanced before they are partly or wholly lost in a manner proportionate to their importance and impact. The results of these investigations and the archive should be made publicly accessible. The ability to record evidence should not however be a factor in deciding whether loss should be permitted (para 199).

4.2.3 Planning Practice Guidance on Conserving and Enhancing the Historic Environment (2014)

The NPPF is supported by Planning Practice Guidance (PPG) on Conserving and Enhancing the Historic Environment (2014). This provides further information on how to interpret and apply the NPPF in practice and the relationship to the legislative framework for planning and the historic environment. Of particular relevance to the proposed development is the following guidance:

- Heritage assets may be affected by direct physical change or by change in their setting.
 Being able to properly assess the nature, extent and importance of the significance of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals.
- Setting is the surroundings in which an asset is experienced, and may therefore, be more extensive than its curtilage. All heritage assets have a setting, irrespective of the form in which they survive and whether they are designated or not.
- A thorough assessment of the impact on setting needs to take into account, and be proportionate to, the significance of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- Views of and from an asset will play an important part in the way in which we experience an asset; its setting is also influenced by other environmental factors such as noise, dust and vibration from other land uses in the vicinity, and by our understanding of the historic relationship between places.
- Harm to a heritage asset's significance may arise from works to the asset or from development within its setting.
- 4.2.4 Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2015)

Historic England's Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2015) provides more detailed advice on how to approach setting

assessments and expands upon the NPPF and the associated PPG. A five step process is proposed for proportionate setting assessments, of which the first four steps have been taken into account in preparing this Heritage Statement. These are:

- Step 1: identify which heritage assets and their settings are affected;
- Step 2: assess whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s);
- Step 3: assess the effects of the proposed development, whether beneficial or harmful, on that significance; and
- Step 4: explore the way to maximise enhancement and avoid or minimise harm.

The following advice is also of particular relevance to the proposed development:

- The setting of a heritage asset may reflect the character of the wider townscape or landscape in which it is situated, or be quite distinct from it, whether fortuitously or by design.
- The settings of heritage assets change over time. Understanding the history of change will help to determine how further development within the asset's setting is likely to affect the contribution made by setting to the significance of the heritage asset.

5.0 Understanding

5.1 St Georges Barracks

Built initially as a training airfield, RAF North Luffenham opened in December 1940, with new pilots flying mainly Tiger Moth aircraft from grass runways. When the training school moved to Peterborough in 1941, 61 and 144 Squadrons were brought into Luffenham from Hemswell (Lincolnshire), which had been selected as a base for Polish bomber Squadrons. Both squadrons flew Hampdens and were fully operational, much of their work being minelaying.

By 1942 both these Squadrons had transferred to other airfields. North Luffenham then became home to No 29 Operational Training Unit. This was formed to provide the final stage of training for bomber crews and remained on site until 1943.

It was clear that new hard runways and expended facilities were essential for the war effort. This work was carried out by George Wimpey & Co Ltd. New accommodation was also built to house a total of 2,118 males and 311 females. The Station re-opened in March 1944, to be used for the first six months by No21 Heavy Glider Conversion Unit. North Luffenham then went back to number crew training, flying Lancaster's, until the end of the war.

Between 1939-45, Bomber Command lost a total of 60 bombers, missing or crashed in the UK, on operational flights from North Luffenham.

The end of the Second World War and the years of the Cold War brought a change of personnel to North Luffenham. In 1951 the Royal Canadian Air Force, under a NATO directive, established three sabre equipped fighter squadrons at North Luffenham. These

remained for three years, until the RAF resumed control of the station in 1954 for operational training.

RAF North Luffenham 1944

In late 1955, No. 228 Operational Conversion Unit, temporarily renamed No. 238 OCU, was detached to North Luffenham from RAF Leeming which was having its runways extended to 7000ft to accommodate Gloster Javelins. The OCU remained for over a year before returning to Leeming.

From 1959 to 1963, North Luffenham was the base for PGM-17 Thor intermediate range ballistic missiles, operated by No. 144 Squadron RAF. The Thor missile site was listed as a Grade II* building in 2011.

In mid-1964 No. 3 Ground Radio Servicing Squadron was transferred from *RAF Norton*, Sheffield, Yorkshire. No. 3GRSS was responsible for the third-line maintenance repair of all ground radar and radio communication/navigational and landing aids located at airfields throughout Great Britain and Northern Ireland.

In 1963 the RAF Aviation Medical Training Centre (AMTC) moved from its original location at RAF Upwood to RAF North Luffenham. The Centre was commanded by a senior RAF Medical Officer who with his medical and technical team were responsible for fitting and instructing aircrew in the use of flying protective clothing and equipment, including partial pressure suits, which kept the pilot conscious in the event of loss of cabin pressure at high altitude. Instruction in medical aspects of high performance aviation included experience of hypoxia and exposure to sudden explosive decompression of an aircraft cabin. This was carried out in

a complex of RAF Mark V decompression chambers installed on the site for aircrew training and research purposes. Many of the aircrew medical monitoring techniques, oxygen systems and items of aircrew protective flying clothing developed at the RAF Institute of Aviation Medicine, Farnborough, were assessed by staff of AMTC.

From 1965 to 1997 part of the Joint Services Language School was based here. Primary languages taught included Russian and Mandarin. Russian-language graduates of the school were employed at radio monitoring stations located close to the USSR border mostly in Gatow, Berlin, in order to monitor Russian air-to-ground radio voice traffic during airborne interception/ border incursion etc. Some also were stationed at Digby, and some were sent on airborne duties, variously stationed including Wyton, Cyprus etc. Most of the Chinese graduates were officers and stationed in Hong-Kong. Most of the teachers were emigres or ex-Russian military. A plaque to commemorate the Language School was unveiled in 2005 by Air Commodore Bruce Benstead, the last Station Commander at RAF North Luffenham.

The station was taken over by the British Army and renamed St George's Barracks in 1998. It then became the home of the Royal Regiment Fusiliers in 1999, of the Kings' Own Royal Border Regiment in 2003 and of the 16th Regiment Royal Artillery in 2007. In July 2014, 16th Regiment Royal Artillery moved to Baker Barracks, Thorney Island.

The 1st Military Working Dog Regiment and the 2nd Medical Regiment recently relocated to St George's Barracks from Germany with approximately 200 service families in accommodation.

5.2 An Overview of the Thor Programme

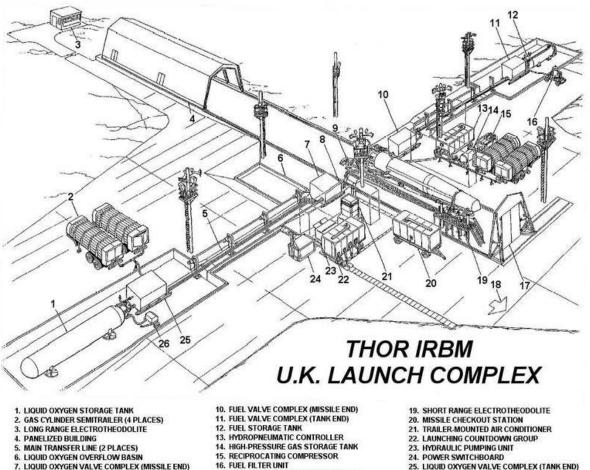
Thor was a single-stage weapon, with a finless, cylindrical airframe fabricated from machined and chemically etched light-alloy panels. It was an intermediate range ballistic missile with a range of 1,500 nautical miles (1,727 statute miles).

5.2.1 Component Parts

In order to save time and keep costs down, the Thor programme cut out the missile leadtime for development and all missiles of this class were produced from a production tooling. To achieve this, it relied on certain components from the Atlas programme which was well under way in 1955. The Thor airframe was the only major component that was peculiar to the missile type as all sub-systems such as the engine were common to that used on Atlas. It also used an almost identical nose cone to the Atlas, and the guidance system was similar to that used in the air-breathing cruise missiles known as Mace and Regulus II. The idea of inter-changeability made it possible for the first Thor to be delivered just eleven months after the signing of the contract to develop the missiles.

5.2.2 Propellant

Thor flew on liquid oxygen (the oxidant) and RP-1 (the fuel). RP-1 is a highly refined kerosene-based fuel developed by rocketdyne.



- 17. PANELIZED BUILDING STANDING WALL
- 18. DOWN RANGE (REFERENCE ONLY)
- 25. LIQUID OXYGEN VALVE COMPLEX (TANK END)
- 26. VACUUM PUMP

5.2.3 Launch Pad

REVETMENT (2 PLACES) 9. ERECTING-LAUNCHING MOUNT

Typical Thor missile complex

The missile, which included the airframe, propulsion system, guidance control and re-entry body, together with the necessary ground support equipment, could be transported by air to give it strategic mobility. Its support equipment included launch control, checkout and maintenance equipment were all mounted on mobile trailers. The missile was transported om a trailer (transporter erector) which also served as the missile erecting arm. The missile was normally housed is a horizontal position in a retractable environmental shelter and was maintained in a ready to launch configuration. In this position it was accessible for routine maintenance and daily instrumental checks. It could also be towed to the receipt inspection and maintenance building.

Each missile was designed to lift-off its launch pad after 15 minutes. During this time the inertial guidance system was wound up, the shelter retracted, missile erected, RP-1 and liquid oxygen loaded into the missile and the engines ignited. The entire process was controlled and monitored from the launch control trailer which was remotely located on the same airfield. The count-down sequence was fully automatic being started by turning two keys.

5.2.4 Flights

Of 31 flights of Thor up to 28 January 1959, fifteen were completely successful, twelve partially successful and four were complete failures. By the end of November 1959, 77 Thor had been launched.

5.2.5 Personnel

A typical Thor Wing required four men to launch three missiles, as there were three launch pads to a squadron and five squadrons to a wing. There were fifteen missiles in a wing and twenty men were required to fire them. A typical missile was only designed to be kept in the fuelled state for up to two hours, after which certain components became frozen through contact with liquid oxygen.

5.2.6 Dimensions

The missile was approximately 65 feet long with a maximum diameter of 8ft and it weighed 110,000 pounds fully loaded. The re-entry body was a blunt-nosed cone about five feet in diameter and two feet high.

6.0 Assessment of Significance

6.1 Introduction – statutory criteria and other guidance

The following assessment of significance draws on the site visit and asset descriptions, as well as historical background research, in order to inform four key aspects of heritage significance as defined in Historic England's guidance document Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (Historic England 2008), namely:

- evidential value;
- historical value (illustrative or associative);
- aesthetic value; and
- communal value.

The setting of the assets and the contribution that this makes to their significance is also evaluated.

6.2 Former North Luffenham Airfield

The former airfield is classed as a non-designated heritage asset and is outlined as such on the Leicestershire and Rutland HER (ref: MLE15972).

North Luffenham is representative of contemporary bomber bases. It retains two J-type hangars (described further below) as well as a coherent group of contemporary technical and domestic buildings. To further Type 2 hangars were also added on the north side of the site between 1942-43. The runways, perimeter tracks and dispersal platforms were added in 1944 to allow for heavier aircraft. As such these structures form one of the most complete airfield landscapes of that period. The site was further adapted in the Cold War period as a Thor IRBM Headquarters with facilities for two Mark 1 Bloodhound Squadrons."

The airfield was considered for listing in 2014. The report stated that the airfield was of operational importance as part of Bomber Command and during the Cold War when it was

adapted for 'V' bombers and the Thor missile site and Bloodhound TCC were constructed. However, the continuing use of the airfield has resulted in changes to the flying field and the base's buildings, particularly since the Army took over the site in 1998. Because of the extensive alterations it was considered that the airfield should not be listed.

Nonetheless the airfield is considered to have moderate illustrative historic value, architectural value and aesthetic value. It is an important example of a late expansion period aerodrome. A great deal of care was taken in the design of these aerodromes, not just to ensure military efficiency but also, perhaps surprisingly, with much thought given toward creating an attractive working and living environment. The tree lined avenues and inspiration taken from neo-Georgian domestic architecture are examples.

6.3 Thor Missile Site

The Thor missile site lies in an isolated position at the far eastern point of the airfield accessed from the airfield perimeter track. The three launch emplacements are arranged in the typical, broadly triangular configuration within a compound, the inner fence-line of which partially remains to the east, south and south-west of the emplacements. The missiles were located here because of the infrastructure of the RAF Luffenham base and its relatively remote location away from any large areas of population.

All three emplacements retain their blast walls, launcher erector mountings, fuel dump pit footings on either side of the erector and most of the rails to the causeway and the end of the shelter. The fuel pipe conduits from the pits to the launcher remain and the steel fuel pipes surrounding the launcher mounting are apparent as are the platforms for the short-range theodolites.

All emplacements retain their theodolite shed platforms, but only the central and eastern emplacements retain partially standing theodolite sheds and the lower portion of the concrete long-range theodolite pillars.

The Surveillance and Inspection Building: This single-storey, flat-roofed building constructed from pre-fabricated concrete slabs has been extended along its length to the north by a taller structure covered in corrugated metal. The interior was not inspected.

The Thor missile site at former RAF North Luffenham, Rutland, is designated at Grade II* for the following principal reasons:

Architecture: The Thor structures at North Luffenham fluently express the functionality and distinctive arrangement of a Thor missile main base.

Intactness: The components and infrastructure of the Thor base survive remarkably intact and include a Surveillance and Inspection Building uniquely in this country. At no other British site does the missile base remain within its contemporary military context.

Historic Interest: The Thor missile site has international historic significance because of its association with world events of the Cold War period. Its outstanding level of survival provides a vivid reminder of the Cuban Missile Crisis of 1962.



Thor missile site March 2018

Rarity: Only 20 such sites were established in England of which this example is the most complete.

Context: The functional and tactical association with the World War II airfield, contemporary Bloodhound Mark 1 Tactical Control Centre and satellite Thor missile station at Harrington

adds significantly to the more than special interest of the North Luffenham site.

Due to the above reasons and its association with world events of the Cold War period the Thor missile site has international historic significance.

6.4 Type J Aircraft Hangers

For the purposes of this assessment the two Type 'J' hangars within the application site are identified as non-designated built heritage assets. This relates to the contribution that the buildings make to the character and appearance of the airfield landscape, as well as their contribution to the wider setting within the airfield site.

The type J aircraft hangar were first designed in the late 1930's. Type J's were intended for aircraft maintenance at operational airfields. The hangers at RAF North Luffenham were originally designed in 1939 and became operational in 1940 when it was a grass airfield

The basic framework is a series of steel columns supporting arched steel trusses. Parts of this structure are exposed along the sides of the building. The roof is a covering of mild steel

plates. The gable ends are clad with corrugated iron. The six leaved doors are of steel frame construction clad in steel and open into door frames supported by end frames. Annexes were built along both sides and were typically used for workshops and offices. Typical dimensions are a length of 300ft, clear span of 150ft and clear height of 30ft. The interiors of the hangars comprise one large space, open to the roof structure, with a plain, concrete floor. The hangars featured lattice girders with a curved foot span that were cheaper to produce than the previous Type C aircraft hangars.

The hangars are considered to have moderate illustrative historic value and aesthetic value. They are assessed as assets of medium significance. Their scale, massing, external appearance and recognisable former function makes a positive contribution to the character and appearance of the airfield landscape, as well as their contribution to the wider setting within the airfield site.

Internally their open plan form allows for an appreciation of their former purpose and their visible roof structure demonstrates their technical innovation. However, sections of the buildings have been altered since the war.



One of the J-Type Hangers on site

6.5 Watch Office

As with the two Type 'J' hangars the watch office is identified as non-designated built heritage assets. This relates to the contribution that the building makes to the character and appearance of the airfield landscape, as well as its contribution to the wider setting within the airfield site.

The watch office at North Luffenham is a 'Villa' type, one of two types commonly found at Expansion Period airfields, the other being the 'Fort'. Villa-type watch offices were large buildings with two full stories, designed in an International Modern style, with wrap-around windows, large balconies and a meteorological section. Three versions were built, using

different materials (brick, concrete and timber). North Luffenham gained a brick version. Other examples exist of this type, for example at Newton and Colishall. The watch office as it currently exists has a number of later additions from the Cold War period including the glazed observation tower.

The watch office is considered to have moderate illustrative historic value and aesthetic value. They are assessed as assets of medium significance. Its scale, design, external appearance and recognisable former function makes a positive contribution to the character and appearance of the airfield landscape, as well as their contribution to the wider setting within the airfield site. Internally the building is in a poor state of repair. However, each space can be recognised for its function within the watch office.



Watch Office March 2018

6.6 Blood Hound Tactical Control Centre

The Tactical Control Centre and Tactical Control Radar was built around 1960 to provide tactical control for Bloodhound MKI surface to air missiles, it was one of only three such sites in England, this role ceased in 1963.

The Bloodhound was a surface to air missile deployed by the British and several other countries from 1958. It was, at face value, similar to the more conventional Thunderbird SAM used by the British Army, but mounted two Thor ramjet engines above and below a fuselage. The Bloodhound SAM was loosely equivalent to the Soviet SA-2 and American Nike Hercules, deployed from fixed sites to defend against medium and high altitude targets at medium/long range. The Bloodhound system was designed to defend the airbase and Thor missile site during the cold war era. Warning of an incoming raid would be relayed from one of the early warning radars to a tactical control centre. Four TCC's were built at RAF Lindholme, RAF North Coates, **RAF North Luffenham** and RAF Watton in Norfolk. The TCC's were equipped with Type 82 Orange Yeoman radars which would track the hostile aircraft and transmit data to a fire unit once it was within range of its Type 83 target illuminating radars. Target data could then be fed to the launch control post from where the missiles would be launched.

The Tactical Control Centre and Tactical Control Radar Building survive intact (although altered to new uses), ancillary structures also survive. As such it comprises a rare and complete assemblage in association with the Thor missile site. These have a medium significance due to the associated infrastructure of the cold war era airfield and Thor missile complex. These helps define the site as one of the most complete airfield landscapes of that period.



Bloodhound tactical control tower



Bloodhound Tactical Control Centre

6.7 Runway

As a former air base, the runways are one of the most significant structures of the base. The runway at the former RAF Luffenham dates from 1944 but has been overlaid on many occasions (normally every 12 years). The runways have also suffered damage form what appears to be mortar or explosive practice and as such a number of large craters are visible. On that basis, it is the line of the runways, rather than the physical fabric on the runways themselves, that contributes most to the site.

7. Opportunities

The design, layout and urban form of the new development should take account of the retained buildings, spaces, routes and landscape and be developed together with an appropriate layout of new routes through the site. This should be demonstrated through the site analysis information. The Historic England document *Historic Military Aviation Sites – Conservation Management Guidance* identifies RAF North Luffenham as a key site. As part of its general guidance, it states that, "On sites where coherent groups of historic buildings survive, it is desirable to maintain the scale and density of the original development and the visual connection between buildings....". The masterplan may also benefit from appropriate interpretation of the sites significant role during the cold war.

The preservation of history and memory of the site should influence the urban design strategy. Key characteristics which should inform this are the existing 'campus' character which is derives from the open layout of the buildings, together with the organised planting

of avenues of trees. Consideration will also need to be given to retaining the historically significant buildings where appropriate. The influence and relationship of these buildings should also influence the site proposals.

Some of the buildings such as the Watch Office offer the opportunity to be reused and incorporated into the masterplan relatively easily. This would promote its historical associations and provide local points of interest.

Other historically significant buildings such as the J-Type hangers will be more difficult to assimilate into a cohesive scheme. However, consideration should still be given to reusing these buildings if possible. Creative ideas for the use of these buildings would be essential. If the retention of the buildings cannot be achieved strong justification will need to be given in any planning application.

The importance of the runway to interpreting the history of the site may also need to form part of the masterplan. There is a recognition that it is not practical to retain it as it is. However, a landscape scheme that reflects or captures the 'ghost of the Runway' could be considered.

8. Conclusions

The significance of St Georges Barracks lies in the survival of the airfield landscape comprising individual structures, whose importance is amplified by their interconnectivity with one another. The airfield exemplifies the complexity of a late Cold War fast jet operation and how this evolved through time to support evolving strategies and missions. Within the airfield landscape different zones may be isolated, but these are all dependent on central services scattered across the airfield. In operation this would have been a dynamic landscape with aircraft constantly moving. To service the aircraft fuel bowsers would have moved from their parking area to the fuel tanks and then to all parts of the airfield. Munitions were moved to and from the two storage areas and exercises were routinely carried out with practice weapons. Personnel were also continuously on the move between their duty stations.

This presence of the Thor missiles also represented one of the hallmarks of the Cold War, whereby the superpowers projected their power through stationing forces and firepower in the countries of their allied nations. The scale of this landscape and the investment in its defensive architecture speaks of the perceived threats posed by the Cold War and the political will to counter this challenge through nuclear deterrence. Today, to some the disused airbase represents another kind of Cold War victory.

The preservation of the Thor missile sites, and its other surviving features, enhances the significance and value of St George's Barracks as an important educational resource. It's a place to explore the nature of the special relationship, the strategy of missile deterrence, practicalities of maintaining and operating late 20th century high-tech weaponry at a high state of readiness, and its interplay with its host population.

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