

Case Name: The 'Bolero' group of Romney and Iris huts, C30 and C31, COD Bicester

Case Number: 472309

Background

We have been asked to assess the 'Bolero' group of Romney huts, C30 and C31, COD Bicester for listing as they fall within the Ministry of Defence disposals programme.

Asset(s) under Assessment

Facts about the asset(s) can be found in the Annex(es) to this report.

Annex	List Entry Number	Name	Heritage Category	EH Recommendation
1	N/A	Bolero Group of Romney and Iris huts C30 and C31	Listing	Do not add to List

Visits

Date	Visit Type
none	No Visit / Data from other sources

Context

In early 2011 we were asked by Cherwell District to give a steer as to whether areas or structures on the former Central Ordnance Depot, Bicester might merit designation, as a proportion of this very large site was to be sold for development under the Ministry of Defence disposals programme. The depot which covered some 12 square miles was split into two main sites at Arncott to the south-east and Graven Hill to the north-west and subdivided into six functional groups, Arncott A, B, C and F Sites and Graven Hill D and E Sites. Outline planning application (Ref. 11/01494/OUT) has been lodged with Cherwell District Council for the construction of a specifically designed Fulfilment Centre on C Site and the sustainable redevelopment of D and E Sites for employment and residential purposes.

English Heritage Investigators (now Assessment Team) and in particular the Military Support Officer assessed the site using the Defence Disposal Assessment Template devised for the MoD disposal sites in Wiltshire. Given the scale of the site and the time constraint, the Assessment reported on the main area for disposal at Graven Hill (Ambrosden - Bicester Central Ordnance Depot (COD) Graven Hill, Sites D and E, December 2011). Within D and E Sites storage hangar D2 and the six air raid shelters associated with it were identified for assessment for designation. These are assessed separately (472309).

However The Military Support Officer also gave a steer on the Arncott site, identifying the group of Bolero huts at C30 and C31 for potential designation.

Assessment

CONSULTATION

We consulted the Ministry of Defence as owners, the local authority who were also the applicants and the Historic Environment Record (HER).

The local authority representative, who had visited the site and discussed potential designation at an early stage in the process, did not respond at this stage. The HER responded that it had not recorded this site on the HER and did not have any further information.

The Ministry of Defence oppose listing, citing *Army Camps: history and development, 1858-2000*, p 26 (http://ads.ahds.ac.uk/catalogue/adsdata/arch-460-1/dissemination/pdf/Stage_1/), which notes the development of the Romney hut from the unsatisfactory Iris hut. The Iris hut was a variant of the extremely successful but smaller Nissen hut, but proved to be structurally unsound. MoD commented that whilst the development from the Iris hut to the Romney hut is of interest, it lacks significant national interest to merit listing. Furthermore, the design faults mean that in terms of future use the huts are a potential liability. They suggested therefore that the buildings should be thoroughly recorded rather than listed. They also noted that Romney huts are very common and indeed are still being constructed, and that there is nothing unique or significant in this group at C30. Assessing the significance of Operation Bolero they noted that the name simply refers to the American military troop build up during the Second World War and in itself has little significance other than to signify a timeframe of construction.

MoD also asked that the tea hut, gantry and siding should be removed from the List entry. In response we note that they were intentionally not included in the Details, which denote designation, but were described in the History, which sets out background, as their survival helps to illustrate how this unit operated within the larger site. Other points are addressed in the discussion that follows.

DISCUSSION

The two groups of storage huts at C30 and C31, Arcott Site, COD Bicester are assessed against the Principles of Selection for Listing Buildings (March 2010) and the English Heritage Listing Selection Guide: Military Structures (April 2011). The Selection Guide states that Britain's military buildings and structures are eloquent witnesses to the impact of world events on our national story. They also represent the importance of the armed forces in the history of the nation. Military sites do not have to be in the front line to be of foremost significance; they are both defensive and offensive and broadly speaking military buildings can be divided into the operational and the ancillary: buildings for fighting, living and working. Some structures are unique and other types, particularly in the C20, were constructed using standard designs, methods of construction and materials. Whilst ordnance depots are not discussed as a specific type, these general rules apply.

Against this background, the assessment considers the following points. To qualify for historical association, buildings should be well-preserved in a form that directly confirms that historical association. Some buildings may be strongly representative of a phase or activity or contribute to understanding defence policy or technological developments. Military structures often do not stand alone and the group value of an ensemble may have a bearing. Intactness in terms of structural integrity and the survival of fixtures and fittings including signage or graffiti is a consideration. Where a structure is a rare example of a type, the case for designation may also be heightened. Some categories of military structures, particularly from the C20, are legion and local significance rather than national designation should not be underestimated as a means of managing a site within the local planning framework.

The former Central Ordnance Depot (COD) at Bicester was commissioned in the late 1930s, with the likelihood of war looming, to augment the limited capability of the five existing depots in the country. The site was chosen for its natural camouflage, where the hills would restrict low flying bombers, for its proximity to the railway network and to towns large enough to provide a workforce and for the relatively poor quality of the land which was less likely to be used for food production. On completion in 1943, the depot covered an area of over 12 square miles, with nearly 50 miles of railway track. It was planned as the main supply base for the British Army's operations during the Second World War and later became an important supply base for the United States forces in Europe, under Operation Bolero. It is the outstanding example in the UK of a bulk storage depot built during the Second World War, designed to be fully integrated into rail and road transport networks and is the precursor of the modern commercial distribution depots dotted around the motorway network. The Bicester Military Railway is one of the most extensive internal rail systems in the British Isles.

Operation Bolero was the code name given to the build-up of the United States armed forces in Great Britain, between 1942 and 1944, and the necessary building and infrastructure project to accommodate and supply it. The scale of Operation Bolero was unprecedented, prodigious and urgent. In four stages, it was intended to accommodate 1,446,000 US servicemen and women in Great Britain by 30 April 1944.

Viewed as a whole, the exceptional scale of the site and role of many of the WWII units within the depot are clear, and numbers of storage hangars and much of the original infrastructure remain despite the continued use of the site. The assessment of the site (2011) has placed it in a national context. Aware of the planned disposal and practicalities of managing designated assets, it however identified only two groups of structures, at D2 and C30 and C31, to be of sufficient rarity or intactness to merit assessment for listing.

The Bolero units built to serve US forces at COD Bicester echoed the British units on the same Sites. The large size of the C30 and C31 huts and the gantry over the railway imply that they were used for handling heavy goods, commensurate with the use of C Site as Motor Transport Sub-Depot. Initially the American stores were held in external open storage at Graven Hill Depot, and as there was insufficient time for the construction of further large storage hangars and transit sheds, the decision was taken to provide Bolero storage in groups of Romney and Iris huts within each of the sub-depots. Work on the construction of these hut groups started in early in 1944, and had been completed by July 1944. They continued in heavy use up until the surrender of Japan in August 1945, at which point demand gradually tailed off until the American staff left in early 1946. After the site was returned to British control, the majority of these huts became surplus to requirement and most were demolished during the 1960s, leaving 8 huts at the Ordnance Support Unit, 1 hut at E Site, 12 huts in two groups at C Site (C30 a-f and C31 a-f), 1 hut at the former tank park, and 24 huts in four groups at A Site. (February 2012).

The Iris hut was a variant of the successful and ubiquitous Nissen hut which had been developed in WWI to accommodate troops. Its lightweight steel frame and semicircular form, clad in corrugated sheeting made it easy to construct and relatively resistant to shrapnel and bomb blast. The larger scale Iris hut proved unequal to the winter weather of 1940-41 however and was quickly replaced by the more robust Romney hut which continues in use and production to this day. The scale and speed of construction at Bicester in 1944 suggest that all available resources including the by then redundant Iris huts were brought into use.

Because of its inherent design fault the Iris hut is now very rare indeed. This may be the only surviving group in the country, made more remarkable since the huts are considerably longer than the standard size. They differ from the Romney hut which has flanged joints and offset sliding doors as opposed to the clamped joints and centrally-placed side-hung paired doors of the Iris hut. Both sets of huts, C30 and C31, are little altered retaining doors, deadlights and vents. Added to this, the railway track, steel gantry and tea hut between C30 and C31 provide a vivid picture of how one relatively contained unit on this vast site functioned. Although functionally it was not special, this group therefore stands out from the other groups of storage huts at the depot for its completeness and the presence of the rare Iris huts.

Despite the structural and contextual intactness of this group, it is hard to justify a case for listing the common Romney huts and indeed the generically unsound, and thereby rare, Iris huts. The wider Ordnance Depot is not a candidate for designation. Given the likely redevelopment of the site as a whole, C30 and C31 would stand alone, devoid of their wider historic context and site significance retaining only group value with each other. Detailed survey rather than very selective designation would provide a better record of the scale and unquestioned significance of the depot, bringing together this group at C30 and C31 and the separately assessed storage hangar and air raid shelters at D2. Moreover the Selection Guide concludes that many modern defence structures were erected quickly in response to immediate needs and were never intended to be permanent, which creates challenges in terms of their endurance as monuments. It advises that for good examples of short-life structures, such as these huts, the best approach may be to encourage their removal to museum sites where they can receive appropriate care.

In summary, this group of six Romney huts (C30) and six Iris huts (C31) at Arncott C Site, COD Bicester, form a strong coherent group within a very much larger site, where the scale and survival of the infrastructure and sum of the parts, rather the individual components are key to its significance. Given the added lack of rarity of the Romney huts and the design faults of the Iris hut which led to its almost universal replacement, they do not merit designation, and recording as part of a full survey of the depot and removal to a museum site are advocated in preference to designation as best means of recognising their undoubted significance.

CONCLUSION

The Bolero Group of six Romney huts (C30) and six Iris huts (C31) constructed in 1944 at Arncott C Site, COD Bicester are not recommended for listing but at very least should be included in a full survey and inventory of the site.

REASONS FOR DESIGNATION DECISION

The Bolero Group of six Romney huts (C30) and six Iris huts (C31) constructed in 1944 at Arncott C Site, COD Bicester are not recommended for designation for the following principal reasons:

- * Structural interest: standard construction and detail of widely used Iris and Romney huts, although both types are longer than the standard size, probably built to accommodate large vehicles;
- * Intactness and rarity: intact examples of the structurally flawed, and thereby rare, Iris hut, which was of necessity replaced by the successful and very common Romney hut: while the Iris huts are rare, the inherent design flaw counts strongly against them;
- * Historic interest: late use of the Iris hut in 1944, which because of its design faults was redundant by 1941, to accommodate the unprecedented demands of Operation Bolero;
- * Site significance and group value: although C30 and C31 form a small coherent group with their associated structures, they are otherwise isolated within this very large site where the scale and survival of the infrastructure and sum of the parts, rather than the individual components are key to its significance;
- * Historical association: loss of historic context of this very large and highly significant Ordnance Depot, in 1944 extended to accommodate US forces under Operation Bolero, when one component is seen in isolation.

Countersigning comments:

Agreed. While this is good surviving group of Romney and Iris huts, designation is not recommended. Romney huts are not a rare building type nationally. Iris huts are, on the other hand, rare but this is a consequence of an inherent design flaw such that they were rapidly replaced by Romneys. To list such structures would therefore be to celebrate a failed design, rather than to mark a significant development in World War Two architecture. There is no question that the group is of some interest, and the wider site has undisputed significance as a key Operation Bolero development nationally. However, listing is not considered an appropriate response to this discreet group, but rather recording and, if possible, the removal of a hut(s) to a museum location as a more appropriate form of management.

V. Fiorato, 19th October 2012

Annex 1

Factual Details

Name: Bolero Group of Romney and Iris huts C30 and C31

Location: The 'Bolero' group of Romney and Iris huts, C30 and C31, C Site, Arncott Hill, COD Bicester, MOD Bicester, Arncott Hill,

County	District	District Type	Parish
Oxfordshire	Cherwell	District Authority	Arncott

History

Operation Bolero was the code name given to the build-up of the United States armed forces in Great Britain, between 1942 and 1944, and the necessary building and infrastructure project to accommodate and supply it. High level control was exercised in London by the Bolero Combined Committee, in liaison with the Bolero Committee in Washington. The implementation and the funding of Bolero was a British responsibility, but because of shortages of manpower and materials in Great Britain, the Americans were expected to make sizable contributions to both. The Army Works Services' Engineer-in Chief's department oversaw all construction projects employing both a military and civilian workforce, later supplemented by US Army Engineer Battalions.

The magnitude of Operation Bolero was unprecedented, prodigious and urgent. By four stages of implementation, it was intended to accommodate 1,446,000 US servicemen and women in Great Britain by 30th April 1944. The first stage of Operation Bolero was the establishment of the Eighth Bomber Command (USAAF) early 1942, with the construction of numerous airfields across East Anglia and the East Midlands to receive them. From that point onwards, the scale of the task grew in immensity, and resulted in the greatest expansion of military infrastructure ever to occur in British history.

Difficulties did occasionally arise between the allies to begin with; the Americans not appreciating the fact that in addition to the demands of Operation Bolero, by early 1942 the British already had to cope with providing accommodation for 2,000,000 servicemen and women and that the majority of its military labour force was already committed to the major depot construction projects at the Central Ordnance Depot Bicester, the Royal Engineer Stores Depot at Long Marston, and the Ordnance Service Depots at Kineton, Chilwell, Nescliffe.

The Bolero construction scheme was divided into three main types of works - accommodation, hospitals, and depots; the latter included maintenance workshops, fuel, ammunition, and general stores depots. Due to its central role in the supply system of the British Army, the Central Ordnance Depot, Bicester was chosen for the site of the American Stores Transit Depot, to fulfil a similar role for their armed forces.

Initially the American stores were held in external open storage at Graven Hill Depot, as there was insufficient time for the construction of further large storage hangars and transit sheds, so the decision was taken to provide Bolero storage in groups of Romney and Iris huts within each of the sub-depots – 5 groups in the Signals and Wireless Sub-Depot (A Site), 7 groups in the Engineering Sub-Depot (B Site), 13 groups in the Tank Park (B Site), 2 groups in the Motor Transport Sub-Depot (C Site), 6 groups in the Armament Sub-Depot (D Site), 3 groups in the Small Arms Sub-Depot (E Site), and 2 groups in the Ordnance Support Unit. The C31 huts are examples of the earlier Iris hut, which was not robust structurally and was replaced by the similar but stronger Romney hut.

Work on the construction of these hut groups commenced early in 1944, and had been completed by July 1944. Depending upon the types of goods being received that ranged in weight and size, up to complete engine assemblies for tanks, the types of handling facilities ranged from simple railway loading docks to gantry cranes. The large size of the C30 and C31 huts and the gantry over the railway imply that they were used for handling heavy goods, commensurate with the use of C site as Motor Transport Sub-Depot.

By the end of May 1945, the Bolero groups had received 14,000 railway trucks containing over 1,200,000 cases of American stores from the Inland Sorting Depot at Kirkby. This sort of work load continued right up until the surrender of Japan in August 1945, at which point it gradually tailed off until the American staff left circa early 1946.

Having been returned to British control, due to their somewhat basic nature, the majority of these huts soon became surplus to requirement and the majority were demolished during the 1960s, leaving 8 huts at the Ordnance Support Unit, 1 hut at E Site, 12 huts in two groups at C Site (C30 a-f and C31 a-f), 1 hut at the former tank park, and 24 huts in four groups at A Site. (February 2012).

Adjacent to C30 and C31 is a standard single-storey MOWP (Ministry of Works Planning) tea break hut. To the north-west of C31 huts is a steel loading gantry, straddling the railway siding. C30 and C31 and its associated tea break hut, gantry and siding capture the scale of operation of one component of this highly efficient organisation.

Details

Two groups, each of six huts, C30 (south-western group) comprising six Romney huts, C31 (north-eastern group) six Iris huts.

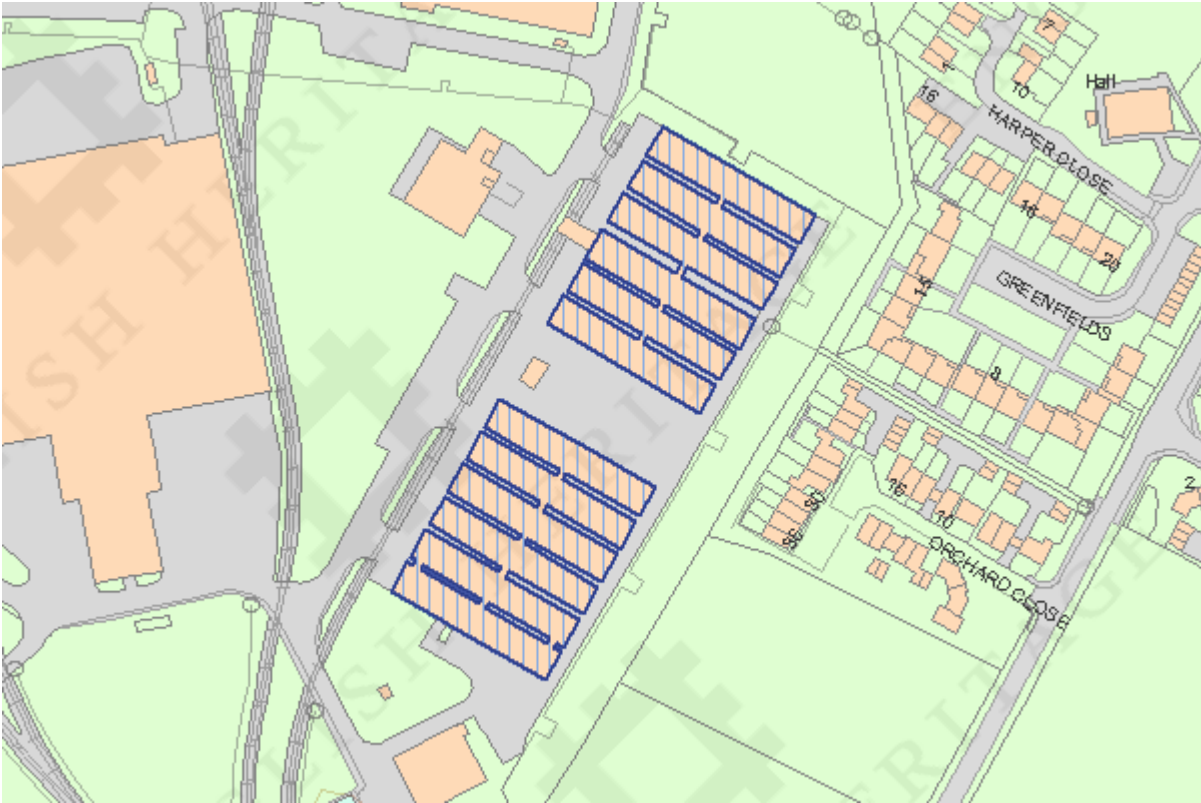
Unusually large, front-opening storage huts served by a single track railway line. Each hut is 35' wide x 240' long made up of thirty 8' units (standard length huts were 96' in length). Both types of hut were built on concrete footings with an integral concrete ramp at the entrance and are clad in corrugated steel sheeting.

The Iris hut was constructed of a clamped, tubular steel frame, with a central entrance, in this case with a pair of doors clad in corrugated steel sheeting. The C31 huts have ventilated panels suggesting they were used to store flammable goods.

The Romney hut was constructed of a more robust tubular steel frame with components with flanged ends. They have an offset entrance with a single sliding door clad in corrugated steel sheeting. Characteristic of the Romney hut, C30 huts also have plastic deadlights; some have roof ventilation units.

Selected Sources

Army Camps: history and development, 1858-2000,
(http://ads.ahds.ac.uk/catalogue/adsdata/arch-460-1/dissemination/pdf/Stage_1/, 21 Sept 2012)

Map**National Grid Reference:** SP6079416971

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