

#### **SCHEDULE**

The following buildings have been added to the list:-

502671

**ALCONBURY** 

ALCONBURY AIRFIELD The Avionics Building

113

The Avionics building, constructed c. 1989 by US Air Force, is a two storey, partly sunken reinforced concrete bunker, rectangular in plan. The building accommodates a drive-through access roadway and is capped with a rough concrete buster cap designed to absorb the impact of a missile before penetrating the bunker's roof.

INTERIOR: The purpose of the avionics building was to service the electronic components of reconnaissance aircraft and process the data retrieved. The interior of the building housed life support systems, stainless steel decontamination rooms, electronics workshops, photographic dark rooms, handling and storage areas. It is protected internally by subterranean 'portcullis' type blast doors on a hydraulic release mechanism. By the main doors are a suite of decontamination rooms and male and female toilets. An internal vehicular decontamination facility is also present. Large rooms on the lower floor housed the computers (now removed) where the data was downloaded and analysed. One of these rooms has a painted motto 'Aircrews live by the knowledge, skill, awareness and integrity of their maintenance people' over the door. A unique feature is the system for maintaining air pressure in the case of attack, by the use of compressed air cylinders on the lower floor, still present. All fixtures and fittings apart from the air cylinders and generators, floor surfaces, wall panelling and doors have been removed.

#### HISTORY:

Land for an airfield at Alconbury was first acquired in 1938 as a satellite landing ground for RAF Upwood and when war broke out, the base was used by Blenheims from RAF Wyton. As part of the US 8th Air Force, it fulfilled a variety of roles until being handed back to the RAF in November 1945. In June 1953, the base was reactivated for the US 3rd Air Force and from 1959, Alconbury assumed its principal Cold War role as the home to various reconnaissance squadrons. In 1983, U2/TR-1 spy planes were permanently based at Alconbury, resulting in the construction of a number of hardened structures including the Avionics building and a number of Hardened Aircraft Shelters which have group value. Following the cessation of the Cold War, flying ceased in March 1995 and the base was released for disposal.

### SOURCES:

RCHME/English Heritage 'MPP Cold War Survey' 1999.

Cocroft, W.D and Thomas, R.J.C 'Cold War, Building for Nuclear Confrontation 1946-1989', English Heritage, 2003.

#### SUMMARY OF IMPORTANCE:

The hardened Avionics building at Alconbury airfield was constructed by the US Air Force in 1989. It is a very rare surviving example of this building type, and along with other buildings from this period, represents the physical manifestation of the global division between capitalism and communism that shaped the history of the late 20th century. A building of this date must have outstanding architectural and historic interest and be under serious threat to be designated. The Avionics building is unique amongst the few such buildings in England, because of its size, form and internal survival of the vehicular decontamination unit and compressed air re-pressurising system. It is uniquely associated with the U2/TR1 aircraft, stationed only at Alconbury. As

English Heritage (Listing)

## Adviser's Report

**ADDRESS** 

The Avionics Building, ALCONBURY AIRFIELD, ALCONBURY

Parish ALCONBURY
District HUNTINGDONSHIRE
County CAMBRIDGESHIRE

Case UID: 162879

Date First Listed:

Formerly Listed As:

PPM OPERATIONAL SERVICES TL PLANNING BEVISION ACK
DCM 12 SEP 2007
RECOMMENDATION
OM RECEIVED OFF

Adviser: Ms Gibson

Outcome: Yes, list

Recommended Grade: II\*

15-NOV-2006

11 SEP 2007

Advice Comments/Reason for No Previous Listing:

Reason For Decision: After examining all the papers on this file and other relevant information and having carefully considered the architectural and historic interest of this case, the criteria for listing are fulfilled.

### CONTEXT.

RAF Alconbury ceased operational duties in 1995 and the site currently has commercial and storage uses. A planning inquiry conducted in 2001 granted permission for the redevelopment of the site to provide commercial storage and a rail freight facility which would have resulted in the demolition of most of the structures. A new planning application for the site is due to be submitted in due course, which may have a similar impact on the site. The Cold War MPP survey identified a number of structures including the Avionics Building and a sample of Hardened Aircraft Shelters (HAS) as being of national importance and consequently separate assessments for listing the Avionics building and a pair of HAS are under consideration.

#### HISTORY.

Land for an airfield at Alconbury was first acquired in 1938 as a satellite landing ground for RAF Upwood and when war broke out, the base was used by Blenheims from RAF Wyton. Facilities were rudimentary until 1941 when runways were laid and the base was subsequently used by Stirlings and Wellingtons to mount raids against Germany. In August 1942, Alconbury became an American base for Liberators flying bombing missions. As part of the US 8th Air Force, it fulfilled a variety of roles until being handed back to the RAF in November 1945. In June 1953, the base was reactivated for the US 3rd Air Force and by 1954, major reconstruction was underway to extend the runway and construct hangars and bomb stores. In 1955 the 85th Bomb Squadron arrived, departing in August 1959. From this time, Alconbury assumed its principal Cold War role as the home to various reconnaissance squadrons. In 1976 the airfield was substantially remodelled with the construction of 28 hardened aircraft shelters. In 1983, U2/TR-1 spy planes were permanently based at Alconbury, resulting in the remodelling of the north of the airfield to accommodate these specialised aircraft. The works included the construction of five pre-fab ready sheds, 13 extra wide HAS, a squadron HQ, Avionics and Photography Centre and new concrete aprons and taxi-ways.

Following the cessation of the Cold War, flying ceased in March 1995 and the base was released for disposal. Most of the USAF Cold War and some RAF WWII structures survive as alternative uses for some of the structures have been found. Much of the military topography, comprising runways, concrete aprons, bunds, the perimeter road and bomb dump remain.

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#### DESCRIPTION.

The Avionics building, constructed c. 1989 by the US Air Force, is a two storey, partly sunken, steel, reinforced concrete bunker, rectangular in plan. The building accommodates a drive-through access roadway and is capped with a rough concrete buster cap designed to absorb the impact of a missile before penetrating the bunker's roof. The purpose of the avionics building was to service the electronic components of reconnaissance aircraft and process the data retrieved.

INTERIOR. The interior of the building housed life support systems, stainless steel decontamination rooms, electronics workshops, photographic dark rooms, handling and storage areas. It is protected internally by subterranean 'portcullis' type blast doors on a hydraulic release mechanism. By the main doors are a suite of decontamination rooms and male and female toilets. An internal vehicular decontamination facility is also present. Large rooms on the lower floor housed the computers (now removed) where the data was downloaded and analysed. One of these rooms has a painted motto 'Aircrews live by the knowledge, skill, awareness and integrity of their maintenance people' over the door. A unique feature is the system for maintaining air pressure in the case of attack, by the use of compressed air cylinders on the lower floor, still present. All fixtures and fittings apart from the air cylinders and generators, floor surfaces, wall panelling and doors have been removed.

## ASSESSMENT.

Buildings less than thirty years old are only usually listed if they are of outstanding quality and under serious threat. For military structures high levels of special interest will have to be identified and military, technological and functional interest, architectural quality, rarity, intactness and group value are key considerations. The heritage assets associated with the Cold War are the physical manifestation of the global division between capitalism and communism that shaped the history of the late 20th century. As such, they are representative of a unique, but relatively short-lived period in the country's history, where the threat of nuclear war, and its terrible devastation, was a constant feature of every-day life.

Structures hardened to withstand conventional, biological and chemical attack are found on all NATO (RAF and USAF) main bases in operation during the 1970s and 1980s. They reflect contemporary NATO policy to be able to withstand pre-emptive strike by the Warsaw Pact and to be able to mount a retaliatory attack, without in the first instance escalating the conflict to the use of nuclear weapons. Key structures which were hardened include command and communication centres, telephone exchanges, Squadron Headquarters, fuel tanker shelters, and combat support shelters to house local airfield defence teams. Characteristically they are constructed from reinforced concrete with few openings and are designed to operate independently of the main airfield for a number of days.

Avionics buildings were present at Cold War airfields where reconnaissance was a main role. The only other bases with these facilities are Upper Heyford and Lakenheath and thus they are a very rare building type. They were built to maintain the complex electronics of the specialist reconnaissance aircraft in hostile conditions and included decontamination rooms, electronics workshops, photographic darkrooms and life support systems. The Avionics building at Alconbury is a massive, late 1980s, hardened interpretation bunker, known affectionately as the `magic mountain'. It is the largest of the hardened Avionics buildings constructed in England and as one of the last Cold War bunkers built, it is said to be the most sophisticated hardened structure in the country. It is unique in its form and size, and the only example to have an internal vehicular decontamination facility. These elements distinguish it from the other examples. Crucially, the building retains its compressed air cylinder system for re-establishing overpressure in the building

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when the outer doors were opened. This feature is believed to be unique in England.

Hardened structures are deemed to be of national importance if they survive intact and are part of their original cluster with other contemporary hardened structures, thereby reflecting the facilities required by an operational unit. The Avionics building at Alconbury is part of a group of structures associated with the U2/TR1 reconnaissance from the base, including the HAS and associated infrastructure, with which the Avionics building has group value. The building is under serious threat of demolition as a result of the disposal of the airfield and the proposed redevelopment.

#### CONCLUSION.

The Avionics building at Alconbury airfield is a very rare building type associated with the Cold War. It is intact and considered to have very special architectural and historic interest and should be added to the statutory list at Grade II\*.

## Summary of Importance:

The hardened Avionics building at Alconbury airfield was constructed by the US Air Force in 1989. It is a very rare surviving example of a hardened Cold War Avionics building, and along with other buildings of this period, represents the physical manifestation of the global division between capitalism and communism that shaped the history of the late 20th century. This Avionics building is unique amongst the few such buildings in England, because of its size, form and internal survival of the vehicular decontamination unit and compressed air re-pressurising system. It is uniquely associated with the use of U2/TR1 aircraft, only stationed at Alconbury, and has group value with the planes' widened Hardened Aircraft Shelters (HAS). As one of the last Cold War structures built in the country, it is the most sophisticated hardened structure remaining and as such has very special architectural and historic interest and should be included on the statutory list at Grade II\*.

VISITS

24-FEB-2006

Full inspection

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### COUNTERSIGNING

First Countersigning Adviser: Mr Calladine

Comments: Agreed, yes list,

One of three avionics buildings in the country, this is the largest and most sophisticated. It is an example of a rare building type, of outstanding historic interest as a Cold War structure. It has group value along with the hardened aircraft shelters at Alconbury, also being assessed for listing, and should be listed at Grade II\*. The building is threatened as result of the disposal and redevelopment of the airfield. It is understood that in the event of designation a new use can be found. 15 Jan 2007

Second Countersigning Adviser: Dr R Bowdler

Comments: Agreed also. Alconbury was a highly significant Cold War airbase, and this building has very strong claims to special interest. Our understanding of Cold War sites is based on extensive research, which enables a clear appraisal of significance to be arrived at. Designation at this time will provide clarity to the planning process.

16 February 2007

HP Director:

Comments:

Proposed List Entry

### **ALCONBURY**

ALCONBURY AIRFIELD The Avionics Building

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Case UID: 162879

Proposed LBS UID: 502671

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