Case Name: Columbine Hangar, former Columbine Works, East Cowes

Case Number: 1431769

Background

Historic England has been asked to consider this building for listing.

The hangar was first assessed for listing in 2002 (when we recommended, and the Department for Culture, Media and Sport agreed, that it was not listable). A further application was received in early 2003 and we initially decided not to reassess the building as no new evidence had been provided. However following the closure of the site and local concern that this raised, a full assessment including a site visit was undertaken. A further 'not listable' outcome was the result.

The present applicant has raised concerns that the Columbine hangar is to be demolished as part of Red Funnel Ferries proposals for a new ferry terminal. However, we have confirmed that the hangar is outside of that proposed development area, that there are no plans for its demolition, and that it remains in active use.

We are in receipt of a report prepared by Montagu Evans on behalf of the owner which opines that the building is not listable.

Asset(s) under Assessment

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

Annex	Name	Heritage Category
1	Columbine Hangar at the	Listing
	former Columbine Works	

Visits

None: Data from other sources.

Annex 1

The factual details are being assessed as the basis for a proposed addition to The National Heritage List for England.

Factual Details

Name: Columbine Hangar at the former Columbine Works

Location

Columbine Works, East Cowes, Isle of Wight,

County	District	District Type	Parish
-	Isle of Wight	Unitary Authority	East Cowes

History

The site which was to become the Columbine Works was acquired by Sam Saunders (formerly a boatbuilder based on the River Thames at Goring, Berkshire) in 1906. Initially working on fast boats the firm soon began to design and manufacture seaplanes occupying a number of sites on the Isle of Wight. In 1929 A V Roe purchased a majority share in the firm - which was thereafter known as Saunders-Roe Ltd – and this led to further expansion including the building in 1935 of the hangar under assessment here.

The history and significance of Saunders-Roe Ltd is outside the scope of this report so some significant milestones only are mentioned briefly below. The first aircraft to be manufactured at the Columbine Works was the A.27 London which was designed in response to an Air Ministry specification for a 'General Purpose Open Sea Patrol Flying Boat'. This and the contemporary Supermarine Stanraer were the last multi-engine bi-plane flying boats used by the RAF. Thirty-one A.27s were built between 1936 and 1938 and in the early years of the Second World War they were used to patrol the North Sea and Mediterranean. During the Second World War the company manufactured a number of different planes including their own Lerwick and London seaplanes but also other firm's designs such as Supermarine's Walrus. Subsequent planes and vessels built in the factory are well documented including the SRA1 (the first jet-propelled seaplane) and the Princess (the world's largest metal flying boat; a transatlantic passenger plane which had its maiden flight in 1952). The 1950s also saw: the design and manufacture of experimental jet fighters; the Black Night rocket (a rocket to test the re-entry heads of missiles such as for the Blue Streak missile programme into the earth's atmosphere) which was test-fired at the firm's facility at High Down at The Needles, Isle of Wight (a scheduled monument: National Heritage List for England 1422839), and also the world's first hovercraft (the SRN1 or Saunders-Roe Nautical 1; of 1959). Westland acquired the Columbine Works in 1959 and continued to manufacture hovercraft here and, from 1966, while still owned by Westland, it was run by the British Hovercraft Corporation. In 1994 the site was bought by GKN and for some years built high tech components for the aerospace industry (under the name GKN Westland Aerospace Ltd) until the works closed in 2003 and were sold to SEEDA. The site is currently (2016) owned by the Homes and Communities Agency and let to tenants.

A Victor Heal, the head of the architectural firm of Victor Heal & Partners, has no buildings designed wholly by him on the National Heritage List for England although in 1931-2 he

completed the west end of the former Church of St Mark, now the New Peckham Mosque, which had been built by Norman Shaw in 1879-80 (Grade II).

Thomas Lacey Bonstow, the structural engineer, was both a member of English and American professional bodies.

Boulton & Paul Ltd, the firm which erected the hangar, is of interest not only as a builder of aircraft/aerodrome buildings but also as a manufacturer of some repute of both civilian and military aircraft.

Much of the steelwork bears the rolling mark of Dorman Long, the era's largest supplier, although some is known to have come from a different north-eastern company: Appleby-Frodingham.

The Columbine hangar is colloquially known as the 'Union Jack hangar' after the large Union Jack painted on the hangar's doors. This is understood to have been added in 1977 for the Queen's Silver Jubilee and then repainted for the 2012 Olympics.

Details

Seaplane hangar, designed in May 1935 by the architect Albert Victor Heal (1887-1975), of Victor Heal and Partners, and the structural engineer Thomas Lacey Bonstow (1877-1975) for Saunders-Roe Ltd at their Columbine Works, Isle of Wight . The building was erected by the firm Boulton & Paul Ltd.

MATERIALS: a steel-framed hangar with brick and concrete cladding/infill which is rendered. Steel-framed hangar doors with corrugated metal sheet coverings.

PLAN: the hangar is almost square in plan with the erecting shop occupying much of its footprint. Its main frontage faces W onto the River Medina (where there is a substantial reinforced concrete apron and slipway into the river). To the N, E and S of the erecting shop are ranges of three-storey offices, those to the N and S are flat-roofed and that to the E is hipped. The offices are entered through a canted bay at the NE corner. At the NW corner of the hangar is an attached two-storey range of offices under a pitched roof.

EXTERIOR: the principal elevation of the hangar is to the W. The massive sliding doors (each in several leaves) are of the vertical type which run on rails and are arranged so that separate leaves can be moved independently in a parallel plane. The doors are boldly painted with a massive Union Jack (added in 1977 and repainted in 2012). The doors are flanked by the end bays of the office ranges which have five four-paned windows to the first and second floors (one to the right has been blocked and an extractor fan inserted) and on the ground floor to

the left of the hangar doors are largely small square windows (modern replacements) and three further four-paned windows and a sliding door to the right. All of the windows are modern uPVC units and the pattern of fenestration is not original either as a view of the main frontage in Flight magazine (August 1936) shows large loading bay doors to the ground floor and a single row of multi-paned windows above. White tile detailing has been applied at ground floor level, to some window cills and flanking the hangar doors, and the building terminates at the corners in Art Deco pylons (which used to support flagpoles) with curved horizontal banding: these project forward of the building line and above the segmental-arched roof profile. A modern sign for 'Venture Quays' and an image and text about the Redjet 6 hovercraft has been added at the apex of the roof (originally here was 'Saunders-Roe' with their winged badge above).

The N elevation is of three storeys stepping up to the NW pylon to the right and also stepping up at the NE corner where the three-storey canted entrance bay is of greater height. The ranks of glazed windows (all the frames are modern replacements) give this office range a strongly horizontal aesthetic. The same is true of the W elevation, also of three storeys but taller than the N range where the ranks of windows are again modern replacements. The hipped roof appears newly clad. The canted bay at the NE corner forms the entrance to the complex where there is a date plaque of '1935' between the ground and first floor.

The S elevation is largely hidden by the neighbouring building, which is built right up against the Columbine hangar, other than at the SE and SW corners. At the former the pattern of horizontal fenestration continues. However at the SW corner can be seen a modern replacement window at second floor level and a fire-escape which links the second and ground floors with a ladder providing access from the second floor to the roof.

The attached NW office block is brick built other than a small area of stone at the ground floor to the S. The upper floor is partly clad in timber board and slightly overhangs on the N elevation. Windows and doors are all modern replacements. The pitched roof is tiled.

INTERIOR: what are now offices (the hangar was originally flanked by workshops, drawing offices, other offices etc) in the NW attached block and the N and E ranges have been part re-configured, fully modernised and contain no features of note. The former range to the S is partly unused and here the construction of the building can be more readily appreciated including the brick and concrete infill panels, the steel-frame and trusses.

The principal space is the massive erecting shop which is $200\text{ft} \times 150\text{ft}$ ($60\text{m} \times 40\text{m}$). When built the roof span was approaching the upper limits for most European hangars. This said the steel roof trusses (there are 16 bays) are not innovatory; nor is their general arrangement (which comprises a series of rigid portal frames). The trusses are a hybrid of Warren and Pratt forms (which originated in North American bridge building in the mid-C19) both of which were commonly used in the C20 particularly for spanning wide spaces.

The interior of the hangar retains a number of original features - including what appear to be the original 'Osira' electric lights (which allowed the factory to operate through the night) and longitudinal- and cross-travelling crane gantries carried by the roof trusses – but also some additions, such as the largest overhead crane which is a late C20/early C21 introduction and is independent of the 1930s structure.

Selected Sources

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National Grid Reference: SZ5023595859



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