

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

HISTORIC BUILDING REPORT

RAF Staxton Wold Staxton North Yorkshire

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National Monuments Record Centre, Kemble Drive, Swindon SN2 2GZ Tel: (01793) 414600 Fax: (01793) 420728

ROYAL COMMISSION ON THE HISTORICAL MONUMENTS OF ENGLAND

North Yorkshire NBR No: 96932

Willerby NGR: SE 0226 7795

Staxton

RAF Staxton Wold

SUMMARY

RAF Staxton Wold is situated on the crest of Staxton Wold, approximately 180m above Ordnance Datum, some 500m south of Staxton Brow, the northern limit of the Yorkshire Wolds. The site is located 12km south of Scarborough, and 10km west by southwest of Filey.

The site opened as a 'Chain Home' (CH) radio direction finding (RDF) station in 1939, functioning in the long-range early warning role throughout the Second World War. In 1945, the station was reduced to a state of 'Care and Maintenance', eventually being re-activated on a limited basis in 1951. Thereafter, the site was used in a variety of training roles, and in 1953, a 'Gee H' radar navigation station was established there; however, this role was shortlived, and in 1956 RAF Staxton Wold was returned to a state of 'Care and Maintenance'. Two years later, apart from the semi-detached married quarters, all of the 'Chain Home' buildings were demolished in preparartion for the construction of a new radar station. The new site ultimately formed part of the 'Linesman' system and was equipped with a variety of arrays - a Type 84, a Type 85, two HF200, and a Secondary Surveillance Radar (SSR). This equipment was later'used as a part of the 'United Kingdom Air Defence Ground Environment' (UKADGE), and was not fully replaced by the mobile Type 91 and 93 radars until 1989. At the time of survey (March 1998), RAF Staxton Wold remains a fully active radar station, operating as a part of the 'Improved United Kingdom Air Defence Ground Environment' (IUKADGE).

History

The site has a very long history, stretching back to circa 376AD, when it functioned as a Roman signalling station, probably garrisoned by a detachment of the Supervenientium Petuariensium. The signalling station functioned as a link in a series of posts all along the Yorkshire coast, which provided early warning of maritime attack by Angles, Franks and Saxons. The signalling system appears to have finally succumbed to attack circa 404AD. No up standing features remain of the Roman signalling station today, the last section of earth bank having been removed during the preparation of the 'Chain Home' RDF station in 1938.

- 1937 Site selected for the construction of a 'Chain Home' radio direction finding station.
- 1938 Site preparation and construction work commences.
- 1939 April 1st. Parented by RAF Church Fenton, and maintained by No.4 Radio Servicing Unit, the site acheived initial operational capability as Air Ministry Experimental Station (AMES) 36.
- 1941 January 6th. Cut off by snow.

February 6th. No.4 Radio Servicing Unit became No.73 Signals Wing, No.60 Group.

1942 January. Cut off by snow.

February 10th. 30 hostiles picked up at a range of between 80 and 100 miles.

1942 March 8th. 50 hostile plots recorded.

July. The best garden in No.73 Wing's 'Dig for Victory' campaign was located at Staxton Wold. High power modification carried out to the transmitter, which boosted its output to 760 Kw.

August 23rd. Plotted two hostile aircraft over Norfolk, which were later intercepted and shot down.

September 6th. Enemy aircraft to the east plotted travelling northwards were confirmed as shot down by the Filter Room.

September 24th. A hostile aircraft was detected at a range of 118 miles, it faded at 115 miles, but re-appeared at 108 miles, and was shot down near Easington, near Spurn Point.

September. The establishment of RAF Staxton Wold consisted of - 78 RAF, 55 WRAF, and 108 Army personnel.

November. MkIII Interrogation Friend or Foe (IFF) equipment was installed. RAF Regiment take over the responsibility for the defence of the station.

December 11th. A battle damaged Handley-Page Halifax bomber with its fuselage on fire jettisoned its load of incendiaries and a 1000 lb bomb in an adjacent field. Fortunately no damage was caused to the RDF station.

1943 January. Completion of the calibration of the 'Buried Reserve' equipment.

June 14th. 20+ enemy aircraft observed at 45 - 57 miles range raiding Grimsby and Hull.

July 12th - 15th. A number of raids on the Humber area plotted.

July. No.73 Wing Defence School was established at RAF Staxton Wold.

1944 Provision of 'SOS Tracks', radar beacon transmissions to allied bombers.

August. Hosted the Service Driving School.

1945 Long range surface watching watches undertaken to detect U-boats.

Northern Signals Area, based at RAF Sutton Bridge took over the responsibility of parenting RAF Staxton Wold (No.191 Signals Unit).

October 10th. RDF operations cease at RAF Staxton Wold.

- Reduced to a state of 'Care and Maintenance'. Over the next three years, all equipment was removed, the buildings were made secure, and the 'Buried Reserve' transmitter and receiver blocks were bricked-up.
- May. Northern Signals Area was disbanded, and RAF Staxton Wold was officially closed.

October 30th. Re-opened on a 'Care and Maintenance' basis under the parentage of RAF Henlow.

- 1950 November. Parenting responsibilities taken over by RAF Grangemouth.
- 1951 June 9th. RAF Linton-on-Ouse became the parent station.

September - November. 191 Signals Unit brought up to establishment strength for a radar exercise 'Operation Pinnacle'.

December. Parented by RAF Thornaby for three months before being returned to the responsibility of RAF Linton-on-Ouse.

1952 June. Used as a site for training of 'G' and 'H' reservists.

July. Site security was deemed poor, with the result that 6ft coils of Dannert Wire were layed around the interior of the perimeter fence. This work was not completed until December.

October. Training given to advanced radio operators for one month.

1953 February. Station strength - 5 officers, 5 SNCOs and 71 airmen.

March 1st. No.999 Signals Unit, formed to provide 'Gee H' cover for the Luce Bay area using AMES 100 MkIc sets. The site was administered by No.191 Signals Unit, under the operational control of No.1 Group, Bomber Command.

April 27th. RAF Patrington assumed the parenting role from RAF Linton-on-Ouse.

- July 15th. Operational and administrative control of Staxton Wold was assumed by 13 Group, Fighter Command.
- 1956 January 1st. No.191 Signals Unit was disbanded and a 'Care and Maintenance' party was established.

March 6th. No.999 Signals Unit redeployed to RAF Ouston and the station was placed in a state of 'Care and Maintenance' under the control of RAF Patrington.

- Work comenced on the demolition of the wartime 'Chain Home' buildings, in preparation for the construction of a new radar station, as a part of the '1958 Plan'.
- 1959 January. A revised '1958 Plan' received approval of the Air Council.

August. The revised '1958 Plan' was given the code name 'Plan

Ahead'.

The 'Chain Home' transmitter and receiver towers were dismantled.

1960 September. Treasury approval was given to 'Plan Ahead'.

December. Treasury approval was withdrawn.

1961 February 21st. Treasury approval for 'Plan Ahead' was reinstated.

February 22nd. 'Plan Ahead' renamed 'Linesman'.

May 26th. RAF Staxton Wold became operational as apart of the 'Linesman' system. The radar information from the Type 84 radar was transmitted via a broad band radio link to the Master Radar Station (MRS) at RAF Patrington, using a 250ft stayed pencil mast at the southern corner of the site.

Accommodation for 'living-in' personnel provided at the domestic site of RAF Bempton, near Flamborough Head.

1967 Single domestic accommodation provided at RAF Leconfield near Beverley.

August 1st. RAF Staxton Wold became the Engineering Wing of RAF Patrington.

- January 28th. The Air Defence Radar Station (ADRS) was completed when the Type 85 radar became operational. In addition to the height-finding capabilities of the two main radars, further information was provided by two Plessey HF 200 arrays mounted on conical towers. Passive anti-jamming information was obtained by a Secondary Surveillance Radar (SSR).
- March 31st. RAF Patrington closed and RAF Staxton Wold became an autonomus unit of No.11 Group Strike Command. The administrative cover for Staxton Wold was provided by RAF Leconfield. The station became a Control and Reporting Post, under the tactical control of the Sector Operating Centre (SOC) at RAF Boulmer, Northumberland. Due to the fact that the radar pictures were no longer being sent to the MRS at RAF Patrington, a single interim fighter control position was installed at Staxton Wold.

May. A four position operations cabin equipped with T64 consoles was brought into use. In addition to its fighter control responsibilities, RAF Staxton Wold also sent its radar pictures to the Air Traffic Control Radar Units at RAF North Luffenham, RAF Lindholme and RAF Watton, and to the London Air Traffic Control Centre at West Drayton.

RAF Staxton Wold became the parent station for RAF Cowden, an air-to-ground gunnery and bombing range on the Holderness coast.

Security improved by the laying of wire entanglements around the perimeter.

1976 Single and married accommodation moved to the domestic site of Alamein Barracks (former RAF Driffield).

December 1st. RAF Staxton Wold became a self-accounting unit.

- 1977 October. Living-in officers and senior NCOs were placed into lodgings in the Scarborough and Driffield areas.
- 1980 A further radar console was added to the operations cabin.
- 1981 September. Administration Squadron moved to Staxton Wold from Alamein Barracks.
- 1989 March. The Type 84 radar was finally turned-off and replaced by a mobile Type 91 array.

March 10th. Comic Relief Appeal 'Red Nose Day'. Anyone appearing at the camp gates improperly dressed, ie without a 'Red Nose' was fined 50p. The Mechanical Engineering Flight (MEF) contribution to the day consisted of painting a face with a red nose on the Type 84 radar. The face was complete with crocodile tears to mark the radar's recent demise.

- October. The control and reporting post (CRP) ceased operations, and the new Improved United Kingdom Air Defence Ground Environment (IUKADGE) reporting post (RP) became fully operational using data provided by Type 91 and Type 93 radars.
- 1994 September. Two prefabricated concrete 'Yarnold Sangar' defence posts installed on the roof of the R12 building by a Sea King helicoptor of No.202 Squadron.

DESCRIPTION

RAF Staxton Wold is situated on the crest of Staxton Wold, some 180 m (590 ft) above Ordnance Datum.

LIST OF RCHME PHOTOGRAPHS

Negative No AA98/03636	Description FORMER WWII MARRIED QUARTERS, CURRENTLY FUNCTIONING AS AN OFFICE. VIEW FROM THE SOUTH WEST.
AA98/03637	FORMER WWII MARRIED QUARTERS, CURRENTLY FUNCTIONING AS AN OFFICE. VIEW FROM THE SOUTH EAST.
AA98/03638	GUARD HOUSE AND FIRE SECTION VIEWED FROM THE NORTH EAST.
AA98/03639	STATION HEADQUARTERS VIEWED FROM THE NORTH-EAST.
AA98/03640	STATION HEADQUARTERS VIEWED FROM THE SOUTH-SOUTH-EAST.
AA98/03641	AERIAL PERSPECTIVE OF THE STATION HEADQUARTERS AND FIRE SECTION, VIEWED FROM THE SOUTH EAST.
AA98/03642	GENERAL VIEW OF THE SITE FROM THE SOUTH WEST.
AA98/03643	GENERAL VIEW OF SITE FROM THE NORTH EAST WITH CROPMARK OF A DOFORS' ANTI-AIRCRAFT GUN EMPLACEMENT IN THE FOREGROUND.
AA98/03644	GENERAL VIEW OF THE SITE VIEWED FROM EAST.SOUTH- EAST.
AA98/03645	ADMINISTRATION FLIGHT BUILDING VIEWED FROM THE NORTH-WEST.
AA98/03646	AERIAL PERSPECTIVE OF THE ADMINISTRATION FLIGHT VIEWED FROM THE NORTH-WEST.
AA98/03647	MOTOR TRANSPORT (M/T) SECTION AND ADMINISTRATION FLIGHT. VIEWED FROM THE SOUTH-EAST.
AA98/03648	MOTOR TRANSPORT (M/T) SECTION, AERIAL PERSPECTIVE VIEWED FROM THE NORTH.

- AA98/03649 SUPPLY (STORES) SECTION VIEWED FROM THE NORTH WEST.
- AA98/03650 PAINT,OIL AND LUBRICANT (POL) STORE VIEWED FROM THE NORTH-WEST.
- AA98/03651 RAF POLICE DOG SECTION, VIEWED FROM THE SOUTH-EAST.
- AA98/03652 RAF POLICE DOG SECTION AND SUPPLY (STORES) BUILDING VIEWED FROM EAST.NORTH-EAST.
- AA98/03653 COMBINED MESS VIEWED FROM THE SOUTH-WEST
- AA98/03654 BARRACK BLOCK VIEWED FROM THE NORTH-EAST.
- AA98/03655 BARRACK BLOCK VIEWED FROM THE SOUTH-WEST.
- AA98/03656 GYMNASIUM VIEWED FROM THE SOUTH-EAST.
- AA98/03657 R12 BUILDING VIEWED FROM THE NORTH-WEST
- AA98/03658 R12 BUILDING VIEWED FROM THE SOUTH-EAST.
- AA98/03659 R12 BUILDING VIEWED FROM THE SOUTH-WEST.
- AA98/03660 R12 BUILDING, GROUND FLOOR, GUARD POST. VIEWED FROM THE NORTH-EAST.
- AA98/03661 R12 BUILDING, GROUND FLOOR, TRANSFORMERS NOs 1-3.
- AA98/03662 R12 BUILDING, GROUND FLOOR, GENERATOR HALL VIEWED FROM THE NORTH.
- AA98/03663 R12 BUILDING, GROUND FLOOR, DETAIL OF DB' GENERATOR SET.
- AA98/03664 R12 BUILDING, GROUND FLOOR, SWITCH GEAR CABINETS.
- AA98/03665 R12 BUILDING, GROUND FLOOR, SWITCH GEAR CABINETS.
- AA98/03666 R12 BUILDING, GROUND FLOOR, AIR CONDITIONING FANS VIEWED FROM THE NORTH.

- AA98/0366 R12 BUILDING, GROUND FLOOR, AIR CONDITIONING PLANT VIEW FROM THE SOUTH.
- AA98/03668 R12 BUILDING, GROUND FLOOR, T85 TRANSMITTER APPARATUS HALL, VIEWED FROM THE NORTH-WEST.
- AA98/03669 R12 BUILDING, GROUND FLOOR, TRANSMITTER (TX) STORES VIEWED FROM THE NORTH-WEST.
- AA98/03670 R12 BUILDING, BASEMENT, GENERAL VIEW FROM THE SOUTH -EAST.
- AA98/08001 R12 BUILDING, 1ST FLOOR, MAIN T85 RECEIVER AND PASSIVE TRACKING APPARATUS HALL, VIEWED FROM THE NORTH.
- AA98/08002 R12 BUILDING, 1ST FLOOR, LOADING BAY, SHOWING THE OVER-HEAD RUNWAY CRANES. VIEW FROM THE NORTH.
- AA98/08003 R12 BUILDING, 1ST FLOOR, SYNTHETIC RIFLE RANGE LOCATED WITHIN THE FORMER RECEIVER WORKSHOP. VIEW FROM THE SOUTH-EAST.
- AA98/08004 R12 BUILDING, 1ST FLOOR, GPO EQUIPMENT ROOM, GENERAL VIEW.
- AA98/08005 R12 BUILDING, 1ST FLOOR, EQUIPMENT RACKS WITHIN THE GPO EQUIPMENT ROOM.
- AA98/08006 R12 BUILDING, 1ST FLOOR, TELEPHONE RELAYS WITHIN THE GPO EQUIPMENT ROOM.
- AA98/08007 R12 BUILDING, EMERGENCY EXIT FROM 1ST FLOOR LEVEL.
- AA98/08008 R12 BUILDING, ARRAY BASE WITHIN THE ROOF OF THE PRESSURE VESSEL.
- AA98/08009 R12 BUILDING, 1ST FLOOR, INTERIOR OF THE OPERATIONS CABIN. (Colour)
- AA98/08010 R12 BUILDING, 1ST FLOOR, INTERIOR OF THE OPERATIONS CABIN.
- AA98/08011 R12 BUILDING, 1ST FLOOR, INTERIOR OF THE OPERATIONS CABIN. DETAIL OF A T64 CONSOLE.

(Colour)

- AA98/08012 R12 BUILDING, 1ST FLOOR, INTERIOR OF THE OPERATIONS CABIN. DETAIL OF A T64 CONSOLE.
- AA98/08013 R12 BUILDING, 1ST FLOOR, INTERIOR OF THE OPERATIONS CABIN. DETAIL OF A T64 CONSOLE PULLED OUT FOR SERVICING.
- AA98/08014 R12 BUILDING, 1ST FLOOR, OPERATIONS CABIN, MUSEUM DISPLAY A T64 RADAR CONSOLE, A TEST SET MONITOR (CYCLOPS) & A VIDEO PROJECTOR.
- AA98/08015 R12 BUILDING, ROOF LEVEL, DETAIL OF T85 RADAR BASE.
- AA98/08016 FUEL TANKS AND CATCHPITS ADJACENT TO EASTERN END OF THE GENERATOR HOUSE.
- AA98/08017 GENERATOR HOUSE VIEWED FROM THE NORTH-EAST.
- AA98/08018 GENERATOR HOUSE VIEWED FROM THE NORTH-WEST.
- AA98/08019 GPO TERMINAL BUILDING, VIEWED FROM THE SOUTH-EAST.
- AA98/08020 BASE OF THE `250FT STAYED RADIO MAST'
 ADJACENT TO THE GPO TERMINAL BUILDING.
- AA98/08021 AERIAL PERSPECTIVE OF THE IUKADGE REPORTING POST (RP) FROM THE SOUTH-SOUTH-WEST.
- AA98/08022 IUKADGE REPORTING POST (RP) VIEWED FROM THE NORTH-WEST.
- AA98/08023 GENERAL VIEW OF THE GEODESIC RADOME AND ASSOCIATED CABINS, WITH THE RADIO MAST IN THE FOREGROUND.
- AA98/08024 GEODISIC RADOME ENCLOSING A TYPE 93 RADAR ARRAY, VIEWED FROM THE EAST.
- AA98/08025 GEODISIC RADOME ENCLOSING A TYPE 93 RADAR ARRAY, VIEWED FROM THE NORTH-WEST.

- AA98/08026 GEODISIC RADOME VIEWED FROM THE NORTH-WEST.
- AA98/08027 GENERAL VIEW OF THE GEODISIC RADOME ENCLOSING THE TYPE 93 RADAR. VIEWED FROM THE SOUTH-WEST.
- AA98/08028 AERIAL PERSPECTIVE OF THE GEODESIC RADOME FROM THE SOUTH-WEST.
- AA98/08029 BT MICROWAVE LINK TOWER VIEWED FROM THE SOUTH.
- AA98/08030 LOW ANGLE VIEW UP THE BOXER TOWER SHOWING SECONDARY SERVICING PLATFORM AND MICROWAVE DISHES.
- AA98/08031 BOXER TOWER VIEWED FROM THE WEST.
- AA98/08032 BOXER TOWER VIEWED FROM THE SOUTH.
- AA98/08033 GENERAL VIEW ALONG ACCESS ROAD FROM THE SOUTH.
- AA98/08034 DEFENCE POST SANGAR LOCATED NEAR THE RE-ENTRANT ANGLE OF THE EASTERN PERIMETER.
- AA98/08035 EASTERN PERIMETER, CONCRETE BLOCK SANGAR. VIEWED FROM THE SOUTH.
- AA98/08036 SOUTHERN PERIMETER, CONCRETE BLOCK SANGAR WITH BT COMMUNICATION TOWER IN THE BACKGROUND.
- AA98/08037 SOUTERN PERIMETER, CONCRETE BLOCK SANGAR, VIEW FROM THE SOUTH-EAST.
- AA98/08038 'YARNOLD' SANGAR LOCATED AT THE SOUTH-EAST CORNER OF THE ROOF OF THE R12 BUILDING.
- AA98/08039 GENERAL VIEW OF THE GEODISIC RADOME ENCLOSING THE TYPE 93 RADAR. VIEWED FROM THE SOUTH-WEST. (Colour)



 $\frac{\text{MATIONAL}}{\text{MONUMENTS}}$ RECORD

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National Monuments Record Centre, Great Western Village, Kemble Drive,

Swindon SN2 2GZ

