

Woofferton

70 Years on the Air

*The first HF relay station in the world is still going strong. Here **Dave Porter**, G4OYX, one time Senior Transmitter Engineer at the site, outlines its history and current status*



Woofferton Sender Hall in the period 1981 to 2006 (Photo by the late Lee Davison)

Straddling the English Shropshire/Herefordshire border on a 320 acre site, Woofferton HF Transmitting Station celebrated 70 years of broadcasting in October 2013.

Known at first by its second world war code-name of OSE-10 (Overseas Station Extension 10), it was the last of the four BBC UK Shortwave sites to be built and was very much of a utility construction. It was not as grand as its predecessors having initially only six 50kW senders (the others having up to 100kW). Moreover, due to UK supply difficulties during the war these RCA MI-7330 units were made in the USA and supplied on the Lend-Lease programme.

The installation started badly because as a result of enemy submarine action not all the consignment of transmitters arrived and more units had to be sent. Then, soon after broadcasts started, an RAF team arrived with orders to remove essential parts from four of the six transmitters, and transport them to Crowborough. There they became part of a radio jamming sys-

tem against the threat posed by the Nazi V2 rockets. At the end of the war, in 1945, nearly all the parts were returned and the six senders were eventually back in use.

But not for long, as Woofferton was closed in 1948 as a result of financial constraints at the BBC. The station's future might have been in doubt had the Soviet army not blockaded Berlin. Within a few weeks the staff, dispersed far and wide, were recalled and Woofferton returned to broadcasting, although now the programmes came from Voice of America. Woofferton was documented and announced as "The Voice of America Relay Station in the United Kingdom" and as such was the first HF relay station in the world. The rental of the site from the BBC meant that Voice of America (VoA) could broadcast to the USSR and its European satellite states with a single HF hop over the Iron Curtain.

During this period WOF was to a large extent disowned by the BBC, especially when it came to spending money, as the Corporation felt that the



A winter's day in the Antenna Field (Photo by Jeff Cant)
 site virtually belonged to the VoA.

The 1950s continued to see an increase in both the effects of Communism in Europe and in the jamming of broadcasts from the free world. That, coupled with the construction of the Berlin Wall and The Bay of Pigs debacle in 1961, followed by the Cuban Missile Crisis in 1962, persuaded VoA to invest further funds in WOF. In 1963 four of the RCA 50kW transmitters were replaced by six Marconi BD272 250kW senders with upgraded antennas.

Further VoA investment happened in 1980 when four Marconi B6124 300kW senders took the station's complement to ten, along with the construction of four wide-band TCI antennas and an automatic control system of BBC design.

The fall of communism in the 1990s inevitably

brought about a slow decline in transmission hours but WOF, ever versatile, welcomed new BBC business from the then just-closed site at Daventry, as well as arranging brokered relays for Radio Japan, Radio Canada International, Radio Liberty, Radio Free Europe, Radio Farda, Radio Sawa and Radio Free Asia.

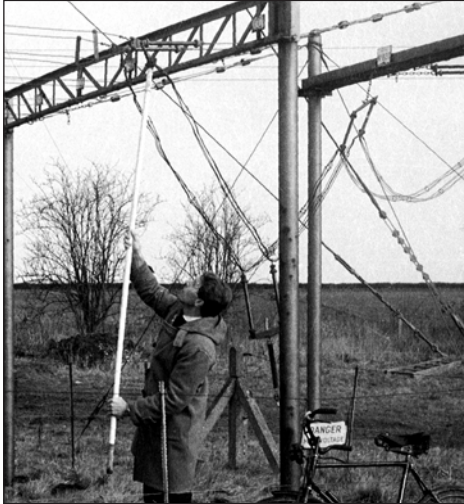
The 1990s also saw the end of BBC/VoA management and a new life under the private commercial ownership of Merlin Communications International. In 1997 WOF also took charge of the former Foreign Office/BBC MW site at Orfordness in Suffolk.

In 1999 the IBB exited WOF as a partially managed facility and Merlin brokered the BBC and other relays including those from the IBB.

In 2003 Vosper Thorneycroft (VT) bought out



Sender 92, one of the first Marconi 250kW senders, during installation in 1963 (Photo from the Jeff Cant archive)



Rod Viveash on manual antenna switching duties in 1964 (Photo by Richard Buckby G3VGW)



The author tuning Sender 96 for its last transmission prior to removal in 2006 (Photo by Martin Goulding 2E1EKX)

Merlin and continued the quest for new relay business. The Educational Development Centre in Africa was one, HCJB another and WYFR, Family Radio, a third.

In 2007 Deutsche Welle centred their UK HF relay operation at WOF. For this, two new wide-band arrays, a new control system as well as four Croatian RIZ 250kW DRM-capable senders were installed, replacing four of the BD272s. The site was now a hub for satellite downlinking of programmes for many other sites.

In the same year Babcock Communications bought out VT. Further relay business for Polski Radio, Radio Taiwan International, KBS World Radio, IBRA and the Voice of Vietnam followed.

In 2012, with the closure of Rampisham and one of the Skelton facilities, WOF was now on 4 MHz for the first time. VoV transmissions to North

America transferred to WOF after the closure of the Canadian Sackville relay.

Besides HF relay, WOF has since 1985 carried local radio on MW, firstly for BBC Radio Shropshire and then BBC Hereford and Worcester and from 2013 a 1kW VHF/FM service for Sunshine 105.9, this being the only Babcock Independent Local Radio outlet in the UK.

Thus OSE-10, the last to be built, has become the first with 250kW senders, an automatic control system, auto-control 300kW senders, wide-band antennas, satellite up/down linking and RIZ DRM-capable senders.

With the ever-changing HF scene let us hope that WOF continues for the next 70 years.

A video tour of WOF by the author is available at <https://www.youtube.com/user/wooffertonuk>.



The UK to Kenya Telephone and VOIP satellite link system for Alldean Networks 2010. (Photo by Jeff Cant)