



# Extracts from.... **THE VMARS NEWS SHEET**

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## **The Dambusters & the T1154/R1155**

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**VMARS Committee Member Pete Shepherd G7DXV, with the T1154/R1155 at the Pitstone Museum near Tring, Hertfordshire**

Radio-related events are coming thick and fast now as 2013 progresses. Four recent notable events of significant interest to VMARS Members have been the Blackpool Rally at Norbreck Castle Hotel on the Queen's Promenade, The Dambusters Rally at the Thorpe Camp Museum near Woodhall Spa, the NVCF (National Vintage Communications Fair) at the Warwickshire Exhibition Centre and the Dunstable Downs Radio Club Boot Sale at the picturesque Stockwood Park location in Luton. All four events proved to be extremely popular with visitors and were very well attended by our Members. I was able to attend the Dambusters Rally at Thorpe Camp on May 5<sup>th</sup> and was delighted to meet up with recent and long standing Society Members and, in some cases, accompanied by their respective partners. Several of us were able to enjoy the hospitality, the well-kept beer and the excellent food at the Blue Bell Inn adjacent to the museum site, making the weekend very worthwhile.

This year's rally was a commemoration of the extraordinary events that took place 70 years ago in May 1943, culminating in the successful 617 Squadron Lancaster bomber attacks on the Mohne, Eder and Sorpe Dams in the Ruhr Valley at the heart of Germany's industrial belt. Operation Chastise, led by 23 year old Wing Commander Guy Gibson, DSO & Bar, DFC & Bar was launched from 617 Squadron's Lincolnshire base at RAF Scampton and, upon their return, the surviving crews were re-located to RAF Woodall Spa where they celebrated their success. For his dedication, bravery and valour during this operation, Gibson was awarded the Victoria Cross. The Dambusters story, the tragic loss of life and the heroism of those who took an active part in the operation was a huge boost of morale to war-ravaged Britain and is now an established part of Royal Air Force folklore. For those interested in finding out more detail about this epic story, along with fascinating short videos of the early bouncing bomb trials, I can thoroughly recommend the excellent web-site,

[www.thedambusters.org.uk](http://www.thedambusters.org.uk).

During operations over enemy territory, wireless communications between Bomber Command aircraft and their operations rooms were strictly limited, with total wireless silence being enforced at least until the target area had been reached to avoid alerting the enemy. Between aircraft flying in defensive formations en-route to the target, the normal practice was to signal using Aldis lamps for sharing navigational and other essential operational information, although even this basic method of communication was kept to a minimum. Because the dam attacks required close co-ordination of aircraft operating sequentially over the target area, 617 Squadron's Lancasters were fitted with VHF sets in order to provide Gibson with effective command and control of the Squadron during the attack. These wireless sets are believed to have been the TR1143 VHF units fitted to most RAF fighters at that time, but not normally to heavy bombers. They were crystal controlled four channel sets operating at 10 W between 100 Mc/s and 120 Mc/s. Using T1154 transmitters on an HF link and to keep HF wireless transmissions brief, a series of code words were pre-arranged for sending initial target damage assessments the several hundred miles back to the Squadron's operations room located in Grantham, 30 miles south of their Scampton airfield base. There was an extensive list of codes available for the reports. For example, the code "Goner 58A" was designated "weapon released at Mohne Dam, exploded 50 yards from dam with no breach made". A more positive message was "Goner 78A" meaning "weapon released at Mohne Dam, exploded on contact with the dam but no breach made". Morse code reports from the target area were made immediately following each individual attack and the now famous word used to report the successful breaching of the first of the Ruhr dams, the Mohne, was simply "Nigger", the name of Wing Commander Guy Gibson's dog, tapped out on a RAF standard 'bathtub' key by Gibson's wireless operator, Flight Lieutenant Bob Hutchinson. Similar codes were used for each of the six primary and secondary targets designated for the operation, so the W/Op's code sheet would have been quite extensive.

The HF wireless equipment fitted to the Lancaster bomber was the T1154/R1155 developed by a team whose chief designer was Christopher Cockerell, later to become famous for his invention of the Hovercraft. Marconi undertook the designs for the T1154 while a joint Marconi and E.K. Cole team undertook the development of the R1155 at the Ekco works in Southend. Commissioned by the Air Ministry in late 1939, the new wireless sets had been prototype tested, approved and installed in the first Bomber Command aircraft by mid-summer 1940, an astonishing achievement. Production was very quickly ramped up, with E.K. Cole, Mullard, E.M.I and Plessey joining with Marconi in producing in excess of 80,000 sets. Contrary to impressions given by modern day sellers of the T1154/R1155, Lancasters were not the only aircraft type to have these sets installed. They became the standard HF equipment in many RAF aircraft types, air-sea rescue launches, vehicles and ground stations and continued in service until well after the War. The T1154/R1155 continued to be used on Varsity, Hastings and Anson aircraft of the RAF well into the 1970's, probably until the last Handley Page Hastings was finally withdrawn from service in 1977. In the late 1950s and early 1960s the sets were being sold in huge quantities on surplus markets for as little as £5 for the T1154 transmitter and £15 for the R1155 receiver. A good condition, complete, original and working example of the station can today fetch £1000!