



e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY
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REMEMBERING

It is our practice at this time of year, when **Remembrance** is a particular theme, to draw attention to groups or individuals connected with military electronics who may be less immediately in mind than those directly engaged in front-line action; so, for example, we have in previous years called to mind SOE radio operators, and those engaged on intercept duties. This year, we feature a group of front-line sailors whose involvement with military electronics was direct and unexpected; the vessel pictured is **HMS Egret**, the first ship to be sunk by guided missile, a **Henschel 293**, on 25 August 1943, with the loss of 194 crew. **HMS Egret** had been built by J. Samuel White at Cowes, Isle of Wight, and launched on 31 May 1938. On the 27th August, 1943, in the Bay of Biscay, she led the 40th Escort Group, comprising the sloop *Pelican* and frigates *Jed*, *Rother*, *Spey* and *Evenlode*, covered by the destroyers *Grenville* and the Canadian *Athabaskan*, and relieved the 1st Escort Group in patrol duty, hearing their unsettling tales of strange bombs used against the 1st two days earlier; **HMS Landguard** had been slightly damaged by a near miss, and one sailor killed on **HMS Bideford**. The results of the next attack, on **Egret** herself, are best described by her senior surviving officer.

Egret's loss was especially serious as, in a tragic irony, there were four RAF Y-Service electronics specialists on board, all of whom died in the attack, bringing the total killed to 198. **Egret** had been fitted with ELINT, electronic intercept equipment, designed to monitor Luftwaffe bomber communications and these Y-Service technicians were aboard to operate this equipment; but the bomber communications were HF and the missile control system (for which they would not, of course, have been searching) low VHF. The story of guided weapons in WW2 has been told previously in **eDEN**; but at this time of remembrance, think for a moment of **Egret's** crew, that day the first naval people to experience the shape of future wars.

The concept behind the German Henschel Hs 293 guided missile originated in the Spanish Civil War, in which Luftwaffe crews under the guise of 'volunteers' took part. They saw how inaccurate unguided bombs could be, and so the German Air Ministry was open to ideas. One of two such ideas came from Dr Herbert Wagner, who left Junkers to join Henschel in 1940, where he proposed a winged version of the SC 500kg bomb, to be fitted with a Walter rocket motor and radio-guided. Flares were fitted in the tail to help the bomb-aimer guide the missile. Its warhead was in the front of a cylindrical fuselage, with the rocket motor suspended underneath, and the radio guidance system behind the warhead. The 293 was usually carried by a Dornier 217 or, later, a Heinkel 177, flying at about 3,000 feet, and releasing the bomb about 7 miles, 12,000 yards, from the target – the launch aircraft would therefore be a difficult target for ships' gunners. The Walter rocket motor gave the 293 a speed of 600 km/hr, nearly 400mph, which, given its small size and sea-skimming height, made it a tricky target – and, being guided from the launch aircraft, it was liable to sudden and unpredictable changes of course.

In **eDEN 40**, we take a look at our extremely successful **2015 Autumn Symposium**, of which a full account will appear in December's **Transmission Lines**, and in particular focus on ERT, the winners of the DEHS 2015 Restoration Award for their work on GEE Mk I. We then try, as usual, to span both the years and the wide interests of DEHS members, seeking in particular to answer some apparently easy – but deceptively difficult – questions! We first ask for your help on the precise

definition of **WW1 sounders, vibrators and buzzers**; then, from the interwar period, we look at **Marconi's airborne transmitters and receivers**; and we move on to consider a query from our colleagues in the **Newcomen Society**, on **Chain Home aerials**, and find that all may not be quite as simple as it seems! An easier time for **Mike Dean** in answering **John Kaesehagen's** query on a test set which resembled that for '**Boozer**' – the set was in fact for '**Green Bottle**'! From the 1950s and 60s rocket tests in Australia, **John Kaesehagen** also provides both questions, and some answers, in identifying **1950s and 60s telemetry equipment** from his collection. Coming up-to-date, **John 'Jacey' Wise** shares his substantial knowledge and wisdom on radars from **Iran**, and a perspective on **DSEi 2015**. For Xmas/ Eid/name your festival presents this year, I review **Max Hastings's 'The Secret War'** and **Gordon Corera's 'Intercept'**, and note that there's excellent material on our own **Publications List**, and **Ops Board** features both Arthur Bauer's Open Day and the extended opening of the **Oxford exhibition on the physicist Henry Moseley**. In **Tailpiece**, which visualizes the naval vessels and operations rooms (holographic, of course) proposed under the **Dreadnought** programme, we go beyond the present day to 2050, and of course a full century beyond the luckless **Egret**, to defences – and attacks – of which her crew could not have dreamed.

As always, suggestions for improvements, offers of articles and all general comments to me at philjudkins@btinternet.com

Dr. Phil Judkins, DEHS Chairman.

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