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This "Bumper Summer Number", intended for holiday reading in the sun and perhaps by the sea, we hope to have something for all DEHS members from each phase of defence electronics history and each military service.

In terms of the newest threats, consider the vulnerability of such novel giants as the '*Pioneering Spirit*', above, by some measures the largest ship in the world, designed, amongst other tasks, to speed the decommissioning of North Sea oil rigs by simply lifting off their entire superstructures, and carrying them and their support legs back to dry land to dismantle, by Able UK of Hartlepool in the case of the Brent Delta platform. [For a visual of this astounding feat, it is worth spending a couple of minutes on https://allseas.com/videos/removal-of-the-brent-delta-topsides/] *Pioneering Spir*it, with a GRT of 403,000 tonnes and a maximum displacement of 932,000 tonnes, can lift 48,000 tonnes superstructures at its bow plus a further 23,000 tonnes at its stern, as shown above; but even the *Spirit* will be smaller than her sister-ship, *Amazing Grace*, currently building! A 'spectacular' target for aggressors? Discuss…

At the other end of 20th century ship threats and defences, consider the German drone explosive motor-boats – in 1917! - and the Royal Navy's response. These drones were wire-guided, using Siemens technology, from the shore, where their controller followed directions radioed to him by a seaplane spotter aircraft. The Admiralty papers were located by Jonathan Ruffle, the producer of the BBC Radio series 'Tommies', (Jonathan is that rare example of a producer who researches at the National Archives, Kew!) and we thank both Jonathan and also, for his photography, S/Ldr Mike Dean. These remote-controlled drone motor boats damaged the heavily armoured monitor HMS *Erebus* - join the dots for a present-day cheap method of attacking very large targets at sea …..

Following the First World War theme, we pause to compare the RFC's adoption, a year later, of the defensive use of radio-telephony by the experience of 22 Squadron, as described by pilot WFJ Harvey, with thanks both to Professor Laurence Lyons and, once again, to Mike Dean. We next move forward in time and to civilian research, as we examine what the interwar British Radio Research Station, Slough, staff achieved in their development of cathode-ray direction-finding receiver technology after Watson Watt had left them to pursue his radar career with the Air Ministry.

We then return to the sea, with the second of the series of articles charting the history of Radio Warfare in the Royal Navy 1900 – 1945, which John 'Jacey' Wise has most kindly agreed to serialise here in eDEN; and to illuminate the developments to meet the threats of the post-war period, our newest member, Peter Marland, has provided an outstanding article on Royal Navy post-war AIO and Command Systems; this article first appeared in *Warship*, and we are most grateful to Peter for this superb account of the history of the transition into the age of missile threat.

Back to the present day, as a change from Thales, we look at new British Army cadet training radios, bought from Israel, followed by our Publications List. In somewhat lighter mood, but with serious undertones, *Tailpiece* this month is an article in itself, as we look back on the thoughts of Arthur 'Bomber' Harris in 1938 on a visit to the USA to review aeronautical developments there. Harris' comments on US customs and

lifestyle were, as was his custom, forthright with a strong dash of national one-upmanship thrown in – but if we set these aside, the UK reader may note that Harris strongly advocates buying American equipment where he believes this to be better. How accurate his judgements were may well be open to question (!), and hopefully will start a discussion with members which we will happily print in these pages – so warm up your PC!

Part II, as last month, contains nothing naval! Our look at RAF ground communications vehicles continues with the description of the wartime AMES 6 Mk III 'Light Warning Set, the illustrations revealing where those endless R1224s fit in; and then of the AMES 9 MRU, where members who have wondered about useful pictures of the MB3 and RM4/ R3030 transmitter and receiver with both explanatory pictures of the controls and operational / maintenance photos can find these, together with illustrations of how to erect a 105 ft mast (and how not to tie it together for transport!). As against the posed pictures of a manual, *Tailpiece II* considers the reality of life in a light warning radar, AMES 606, in the Desert War, as told in operator Frederick Grice's *War's Nomads*.

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

Dr. Phil Judkins, DEHS Chairman.

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