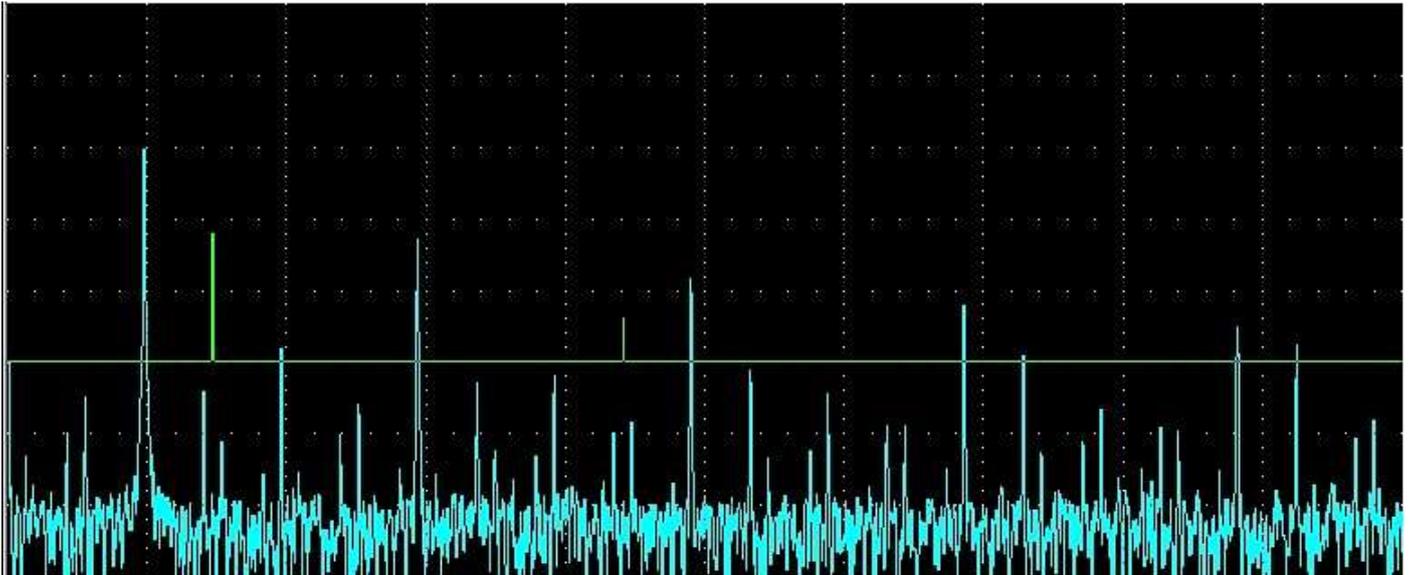




e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY
No 74 Part I: September 2018



SPECTRUM

Welcome to September 2018's eDEN!

Enquirers often express surprise at the breadth and profusion of articles in *eDEN*, and comment on the time it must take to compile each month. Your Editor can of course confirm that the time taken in compilation is certainly not zero (!), but the task is easier than it may seem, simply because of the broad spectrum of interests of the members of DEHS and of the many articles which they produce for *eDEN* or recommend as of interest to others.

These articles put forward by DEHS members certainly reflect our aim – **to cover the defence electronics spectrum “from DC to light, of all nations, of every period in which electronics were used, and of every defence application”**, and the content of this September issue is proof.

Our first article is a short introduction to a three-part series on **ELINT Ferrets**, contributed by **Mike Dean**; this month, the first of the series concentrates on US Ferrets in the Pacific, with further articles in *eDEN* in October and on the RAF's Pacific ELINT in November.

We move to ‘something completely different’ in a description of the **Marconi installation in the Royal Train in South Africa in 1946**, with thanks to **Clive Kidd**; the King, as nominal head of the UK

military, had to have as instant communication as the technology could then afford. **Martin Bolton** then takes us to the career of **Leo Palmer and the British Training Aids Development Unit**. We then return to the microwave research site at **Garn Fawr/ Strumble Head**, with **Kevin Niblett** unearthing more information on the **early-war trials** which preceded the 3,6,9cm series, and description of the Army's **Wireless Set 10** in its developed form which benefitted from the research results. A article by **J Richard Smith** takes us to the sea, with the **Focke-Wulf Condor and its Rostock radar** pictured by **Alfred Price**, after which we read of the **German Army 'speech on light' system** for battlefield communications, again thanks to **Clive Kidd**. An interesting use of the iconic **T1154 transmitter** is described by **Ray Coley**, and the search for the antennae of the **APN-1 altimeter** by **Brian Hawes** (many thanks to **Dr Liz Bruton**); these are located - on 'Enola Gay'! **Clive Kidd** provides a third article – an account of **Sir Stafford Cripps' view of the achievements of the UK radar industry** and its firms, and the opportunities which he thought awaited them.

We then move post-WW2 to **Jeff Jefford's** identification of an early eDEN puzzle – the plane which flew the **Ekco E190 radar** – and to **Jens Boos' history of the Nixie tube**, located by **John Kaesehagen**. **Robert Soek** makes an offer to co-ordinate a visit to the **Dutch flying car**, which he photographed at the Farnborough Airshow, and the **Shetland Times** tells us of yet another link between their desire for a spaceport and the **TPS-77 radar** which we have featured previously.

A series of finds in recent weeks – by **Chris Cooper** of an early **RAF R1619 intercept receiver**, by **Andy Young** of a **Royal Navy decimetric receiver P24** and by **Tony Waller** of an indicator unit from the **anti-V-2 'Big Ben' radar** - will feature in eDEN articles next month. **Thales** tell us of their latest products, and I review **Brian Weller's excellent history of the 'fly-by-wire' Jaguar**, before we have a **competition set by Dr Mike Diprose**, to identify 'where and what' is shown in an enquirer's photo, and round off Part I with the question of **whether the T1154 aircraft transmitter in fact started its service life afloat!**

So, quite a spectrum in Part I! **Part II** is devoted to the subject of **'Big Iron'**, noting the fact that, 80 years ago, the European continent was preparing for war just a year later, and in th UK the **'Big Iron'** of Chain Home formed its chosen early warning system. Uniquely, we have two views of the development of the **'East Coast' huge transmitters – by Dodds and Ludlow**, the scientists in charge at MetroVick, **and by Jim Brown**, the apprentice in their department. As well as much information about Chain Home, there is much humour and social observation in a comparison of the two articles; **Jim Brown's book, 'Radar: How it all Began'** is well worth searching out and reading. We then move to the sibling **transmitters for 'West Coast' Chain Home stations, for the buried reserve, for Chain Home Low and for Mobile Base use**, whose development is well described by **R.V. Whelpton**, before rounding off in **Tailpiece** with a look at **Neatishead's excellent replica**.

Many of the circuits in Part II, though reproduced at original size, are tricky for your Editor's ageing eyes to follow, and so I thought a **Part III with enlarged circuit diagrams** from Part II would be a useful aid to tracing the working of those circuits. Happy reading!

As always, many thanks to **Mike Dean** for his invaluable help, and suggestions for improvements, offers of articles and all general comments to me at philjudkins@btinternet.com or info@dehs.org.uk.

Phil

Dr. Phil Judkins, DEHS Chairman.

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