



e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY
No 67 Part I: February 2018



Picture Credit: Andrew Lewis via Daily Telegraph 13.01.18

PERSPECTIVES

The photograph above, taken by **Andrew Lewis** of a cargo flight landing at Brize Norton, does NOT show impressions of the base of your Editor's coffee mug - those apparent 'stains' are in fact the trailing vortices shown up by water vapour, which makes visible those air currents caused by the aircraft which can throw a following light plane onto its back; considered from this angle, the photo gives a very different perspective to what might otherwise be thought of as an impressive but essentially atmospheric shot of 'aircraft landing at dusk'.

Part I of this month's *eDEN* is similarly devoted to **questioning perspectives**, as we consider how the belligerent nations of World War 2 viewed one another's technologies and scientific developments; we may perhaps remark how nations tend to belittle unfamiliar, or simply different, approaches to tackling similar problems, without giving thought to their potential advantages, an observation which applies with added force to victors who may consider they have little to learn – and may, in after years, live to rue that perception.

We consider first how, in November and December 1943, the **IEE viewed German and Italian airborne radio equipment**, and we reproduce in particular the following discussion between members of IEE audiences in London and Birmingham, and C. J. Edwards, the speaker who described the equipments. We will next month reprint further papers drawing these comparisons for Army equipment – do our colleagues in Collingwood have papers covering naval radio equipment?

We next welcome our colleague **Yves Blanchard**, whose papers on radio and radar history are well-known and respected, who begins a series of papers giving the French perspective on radio and radar advances during this period; **in this first paper, Yves details the French contributions from Branly's coherer to the radars of the present day**. Yves will, in future papers, explore such less well-known areas as research carried out in France when under its period of Occupation, and by the French resistance.

We move on to consider the **Japanese wartime developments** as recounted in a BIOS Report, which includes an **Appendix written by a Japanese scientist, S Watanabe**. The rivalries between Army and Navy reached something of a non-co-operative peak in wartime Japan, but it is as well to bear in mind the Japanese development of the magnetron (very little mentioned in this report) and the extent of Japanese advances without the use of sophisticated technology, a position paralleled by the Viet Cong of a later generation.

A reasonable question to pose would be how, in the post-war years, *Germany, Italy and Japan* assessed *Allied* wartime electronic technologies in the immediate post-war years, and I would be interested in any references colleagues can produce to useful papers in that regard.

Part I's final article introduces the more up-to-the-minute topic of **Side-Channel Attacks**, after which we draw attention this month in Book Review to two very different books. Our member **Dr James Goodchild's *A Most Enigmatic War*** is a meticulous re-assessment of the wartime work of **Dr R V Jones**, has involved James in three full years of working in detail through RVJ's voluminous archive under the watchful eye of **Prof Richard Overy** at Exeter, and is well worth the buying and reading of DEHS members, most of whom will have ***Most Secret War*** and perhaps also ***Reflections on Intelligence*** on their bookshelves; James' work will for the future rightly be read by the side of RVJ as a prime source for the history of science and technological intelligence in World War 2. **Bill Reed's "You're One of Us Now"** is a slim but fascinating account of the **Ekco factory at Malmesbury**, the subject also, as members will recall, of our own **Charles Exton's *The Secret War Factory***, and of the ***War Factory study by Mass Observation*** during WW2 itself. Our **2017 Accounts**, with many thanks to **Dick Green** for their speed and their accuracy, follow. For **Tailpiece**, **Robert Soek** has provided an update on the topic of **flying cars**, as they move ever closer to their wider usage as realistic transport.

As we move towards our **2018 Burns Lecture on postwar RAF maritime surveillance radars by Professor Simon Watts** –**booking form is attached, fill it in NOW before any more of 2018 gets in the way!** - Part II is devoted to the subject of that lecture, ASV radar, as will a further Part II next month.

S/Ldr. Mike Dean MBE has been industriously digging in his archive, and first provides as a pictorial introduction to the early history four panels of display material originally generated for our affiliate **the Purbeck Radar Museum Trust**, who are showing both metric and centimetric ASV displays at the Langton Museum, Langton Matravers, home of Bernard Lovell's centimetric ASV, during 2018.

Mike Dean next has written for us a short note of the work on **Long-Range ASV** as installed (or in some cases nearly installed!) on Coastal Command aircraft, notably of 502 Squadron flying from Limavady, Northern Ireland.

A comprehensive summary article by **Smith, Hanbury Brown, Mould, Ward and Walker** then takes the story through all the wartime Marks of ASV, both British and USA in origin. To provide the summit of the story as it stood in the 1960s, **Professor Simon Watts** has kindly contributed his own article on the **ASV Mk 19A and 19B radars**. Remember, **BOOK NOW FOR SIMON'S BURNS LECTURE!**

On the naval theme, but a lighter note, Part II closes with a **Tailpiece** devoted to a slightly unusual 'HMS' – '**HMS Spurius**'; see if you can guess!

Members will recall from last month that, for 2019, our own **Dr Mike Diprose** is arranging a Conference devoted to very long-term conservation both of our artefacts and of our records of them. This is a subject about which your Editor is asked more than any other – "What will happen to all this after the present generation?" - and Mike is already receiving ideas from colleagues in the Newcomen Society (our featured society in this month's Ops Board), in the Science Museum and in the Computer Conservation Society, so please think about it and ideally, write or present a paper there.

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.



The first unit operational with ASV radar was No.502 Squadron. The extra aerials can be seen mounted on the top of the fuselage of Whitley V, YG-Q, at Limavady early in 1941. (via A.S. Thomas)

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