



e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY
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2019: DEHS SPRING AND AUTUMN LECTURE DAYS!

Yes, you did indeed read that correctly – DEHS will this year host ***BOTH*** a **Spring Lecture Day**, including the **Burns Lecture by Jonathan Ayles, on 2 May at STEAM, Swindon**, ***AND*** we are now able to confirm that there will be in late autumn, on **Wednesday 27 November**, a **DEHS Conference on Science and Intelligence** which has been especially created by our President, **Keith Thrower**, and **Dr. Liz Bruton**, the Science Museum's Curator of Technology and Engineering and of course a Committee member of DEHS. Considerable effort and energy have been expended to create these two events, and we are looking to a great turn-out of DEHS members in support. More details of the Science Museum event are, as we promised, available, on page 3, and do please write to Keith to confirm your interest as we do need to know at the earliest opportunity. More details of speakers next month as these become available – and **a big THANK YOU both to Keith and Liz** for their hard work in organising, and to the **Science Museum** for their most generous hospitality.

Meanwhile, don't forget – **this is the last chance you will get to book for the Burns Lecture Day 2019 at STEAM, Swindon**, with the Burns Lecture by Newcomen Society incoming President Jonathan Ayles, and talks by Peter Butcher and your Editor, as well as our ever-changing annual exhibition. **The booking form is attached - DON'T DELAY, BOOK NOW!**

This month, we continue our practice in *eDEN* of a wide range of articles, beginning with the latest researches by the ever-busy **Mike Dean**, this time on the relatively little-known British WW2 intruder night-fighter '**Perfectos**' system, which acted to trigger the IFF sets of German night-fighters. The German response was perhaps the simplest one of all – the German pilots turned off their IFF! But that action of course had consequences ...

We move on to a 'teaser' article, where, with thanks to **Grahame Fraser**, we reprint **Dr Ian Walker's** article on **Graf Spee: Radar at the River Plate** as an introduction to treating the subject at greater length next month, with contributions at that time from **Clive Kidd at HMS Collingwood** and from the late **Fritz Trenkle**. With many thanks to **Gordon Carle**, we next read his account of his considerable researches into the archaeology of the **WWII Direction-Finding Sites in the Shetlands** and admire both his research and his boundless energy! Thank you too for **Mike Dean** for notifying us of Gordon's good work.

A couple of suggestions came this month that we might usefully reprint the '**Rainbow Codes**' information we provided several years ago; this was compiled by **Chris Gibson** and first printed in the excellent Air-Britain Journal *Aeromilitaria*, now sadly demised as a separate publication. This gives rather fuller information than the Wikipedia list, and any and all updates please to your Editor – there will undoubtedly be some! – so that we can print them next month.

Your Editor, on reviewing *eDEN* articles for subjects still not covered (there are many!), spotted that we have so far devoted less attention than we might to the key area of CRT displays during 1935-45, and so we have reprinted the very useful **Survey of Cathode-Ray-Tube Problems in Service Applications with Special Reference to Radar** by **G. Bradfield, J. G. Bartlett and D. Stewart Watson** from the 1946 Radiolocation Convention; expect more on this topic next month also.

We conclude by looking first at **Thales'** new products and new customers – the Royal Netherlands Navy's new frigates; their Omnisys Airspace Surveillance Radar for Brazil, and Coastal Surveillance Radars for the French Procurement Agency and a new 4D member of their Aesa family, the Ground Master 200 Multi Mission. Finally, **Tailpiece** has spotted a very traditional type of solid-state '**Target Marker**' – X marks the spot! [Army colleagues of your Editor's acquaintance might point out that the marker might still not be big enough for some other Services, as some misses are visible!].

Before you sign off from this Editorial and begin to read *eDEN*, **DO NOT FORGET TO BOOK FOR BURNS LECTURE DAY 2019**; details of our (short) DEHS AGM on the same day - **2 May** at STEAM, Swindon, are included in this *eDEN*, with, again, thanks to **Dick Green** for the Accounts and Membership details. A booking form is attached – don't delay, act now while you remember!

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.

Warmest regards

Phil

Dr. Phil Judkins, DEHS Chairman.

DEHS CONFERENCE ON SECURITY & INTELLIGENCE

WEDNESDAY 27 NOVEMBER 2019

The Science Museum will be opening a new exhibition, 'Top Secret: from ciphers to cybersecurity', from 10 July 2019 - 23 February 2020. Tickets are free but can be booked at

<https://www.sciencemuseum.org.uk/see-and-do/top-secret>

From the trenches of the First World War to the latest in cyber security, Top Secret explores over a century's worth of communications intelligence through hand-written documents, declassified files and previously unseen artefacts from the Science Museum Group's and GCHQ's historic collections.

- Trace the evolution of the gadgets and devices used to conceal crucial messages and to decode the secrets of others. Hear from GCHQ staff doing top secret work to defend against terror attacks and serious crime and discover the challenges of maintaining digital security in the 21st century.
- Explore the story of Alan Turing and the team of Bletchley Park codebreakers who broke the Enigma code in 1941, uncover spy-craft from 1960's Cold War espionage and challenge your friends and family to become codebreakers in our interactive puzzle zone.

Top Secret coincides with the 100th anniversary of GCHQ, the UK's Intelligence, Security and Cyber agency.

The exhibition has been curated by Dr Elizabeth (Liz) Bruton, Curator of Technology and Engineering at the Science Museum, and DEHS committee member.

To coincide with this exhibition, Liz and I have been busy organising a DEHS conference with the title 'Security & Intelligence'. The Science Museum has most kindly allowed us to hold the conference in the Dana Centre, located in Queens Gate, which is only a short distance from the main museum building. The only cost will be for refreshments.

The Keynote Address at the conference will be given by Tony Comer, the GCHQ Departmental Historian. Although it is early days, we already have five confirmed speakers and at least three probable speakers. When the programme is finalised, we expect to have eight or ten speakers.

Both the IET History of Technology Committee and the Newcomen Society are co-sponsors.

The conference will conclude at 4 p.m. and Liz will then take us through to the exhibition and give a conducted tour.

I am hopeful that there will be a good turnout of our DEHS members. We are also expecting people from GCHQ, Bletchley Park, the IET, Newcomen Society and several other organisations and colleagues whom we are contacting.

Please make a note of the date and let me know by email if you are thinking of attending.

Keith Thrower (DEHS President). Email: kthrower@waitrose.com