



# ***e-DEFENCE ELECTRONICS NEWSLETTER***

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY  
No 90: January 2020 Part I



## **WHERE IN THE WORLD?**

January, the New Year in many calendars, is a time for solemn reflection on the past; **eDEN 90** this month accordingly opens with one reminder of the sacrifices of the past, with **Jos de Groot's** account of the loss of **97 Squadron Lancaster OF-C** and its crew over Amsterdam at this time of year (20 December, in 1942); we featured last month Jos' build of a Lancaster cockpit section as a memorial, and repeat our appeal for two key missing parts. Please help if you know of any sources!

Next, an article by **Lt Cdr Clive Kidd**, Curator of HMS Collingwood's Historical Collection, casts light on **Earth Induction Telegraphy**, a subject complementing our President **Keith Thrower's** article on the **Fullerphone** in December's **Transmission Lines**. There is a theme of intercept and clandestine radio this month, with **Arthur Bauer** and the **CryptoMuseum's 'Secret Communications 3'** (last opening 12 January) and the **Science Museum's 'Top Secret: from ciphers to cybersecurity'** (closing 23 February) curated by **Dr Liz Bruton** having 'last chances to see' – don't miss them, be sure to get to both! - and several articles in this eDEN; **Jan Rijnders** visited **Secret Communications 3** and suggested **Ron Clarke's** article '**Cloak and Dagger: Op SUSSEX and ASCENSION**', providing more information on the low-VHF FM communications system **ASCENSION** for an article next month; **Bill Purser's** article on **Moonshine**; **Wing Commander K J Dix OBE AFC** poses the question '**Does Mekoning Work?**' with experience of his own, further amplified by **Ian White**; and the answer to the location of our 'Property Pages' villa (photo above, left; the answer is Ottenby, in Sweden, as shown on the map on the right) - and that of British secret monitoring and radio-navigation stations in

'neutral' Sweden - is provided in an article by **Leif Leifland**, "... **Secret Matters Not So Far Disclosed**", translated by **Mike Dean**, aided, Mike hastens to add, by 'Babylon'.

Mysteries are dispelled as your Editor answers **December's 'Where in the World?' Quiz**, and declares as joint winners **Professors Hugh Griffiths** and **Simon Watts** who will be refunded this year's subscriptions.

We look next at the rich legacy left to us by those of 'New Years Past' in early issues of '**Transmission Lines**', beginning with **Professor Ramsay Shearman** on his own experiences of **Naval Ship to Ship and Point to Point Communications 1945-47**, **Michael Pearson** on **Coast Artillery Radar**, and **Talbot K Green** on **Early Radar Simulators in the 1950s**. **Richard H G Martin** covers in his article the subject of his later book, **Radar Photographic Display System 1498**, while **Brian Edwards** relates his experiences as an **Air Radar Fitter**, and **Derek Jeffrey** his time on the development of **Skynet 2**. **Brian Pegden** returns to the subject of **Radio Trainers and Air Traffic Control Memories**, **Geoff Kebby** takes us afloat with his account of post-war marine radar in '**A Secret Weapon**', and **Colin Latham** tells the story of **Magnetrons for Radar**.

**Michael Ellis** then recounts the problems of how to satisfy many naval customers in '**You Can't Win 'Em All: Allocation of SATCOM Terminals**'; and **Mike Dean** brings to our attention the routing of the microwave Wireless Set 10 across Europe in the **21 Army Group** publication '**The Wireless Set No 10 in North-West Europe**', with the magnificent illustration of a windmill rotated by two 3-ton trucks to provide a steerable tower for the dishes! We look also, with sadness, at the lessons the RAF's '**Tee Emm**' tries to teach from the many aircraft accidents late in World War 2, in '**There's Been an Accident!**' noting how the same errors sadly repeat to this day. We close Part I with **Tailpiece** noting the history of Australian radio astronomy pioneer **Ruby Payne-Scott** - and some of the contemporary prejudice she had to overcome, as illustrated in the pages of the British (as it might now be termed) 'young adult graphic magazine', the '**Eagle!**'

Our main focus in Part II, as foreshadowed last month, is the concluding part of the history of that under-recorded activity of **TRE Malvern**, its '**Post Design Services**' involvement with **navigational aids**, specifically **Lucero**, **BABS**, and **Rebecca/ Eureka**, while in **Tailpiece 2 and below**, **Mike Dean** appeals for any news of **David Pritchard**, author of "**The Radar War**" published in 1988, which remains one of the very few works in English to give due credit to German achievements.

This month as always, my thanks to **Mike Dean** for his invaluable help – **please read and respond to Mike's plea for information about David Pritchard, below** - and suggestions for improvements, offers of articles and all general comments to me at [philjudkins@btinternet.com](mailto:philjudkins@btinternet.com) or [info@dehs.org.uk](mailto:info@dehs.org.uk).

Warmest regards, and a healthy and successful New Year to all!

Phil

Phil Judkins, DEHS Chairman.

**APPEAL by Mike Dean: THE RADAR WAR** by **David Pritchard**, some thirty years after its publication, probably still remains the only English-language history exclusively devoted to 'Germany's Pioneering Achievement 1904-45'. Among David's impressive array of eminent participants is **FRITZ TRENKLE**, a leading historian of German radar, a compelling reason to re-read this story. But, for me, there remains another question which I hope that readers of *eDEN* will be able to answer - do we, the collective readership, know anything of **DAVID PRITCHARD**? Neither the dust jacket nor the introduction give any clues as to the author's background. **Help please!**

**Mike Dean**, [MikeSDean@aol.com](mailto:MikeSDean@aol.com)

# INDEX

Editorial: Where in the World? Property Pages	1
Index	3
Ops Board	4
Lancaster Crash in Amsterdam Noord <i>Jos de Groot</i>	5
Earth Induction Telegraphy <i>Lt Cdr Clive Kidd, HMS Collingwood</i>	8
Coast Artillery Radar <i>Michael Pearson</i>	19
Cloak and Dagger: Op SUSSEX and ASCENSION <i>Ron Clarke via Jan Rijnders</i>	22
Moonshine <i>Bill Purser</i>	32
Where in the World? Answers to our December Quiz <i>eDEN Editor</i>	34
Naval Communications 1945-47 <i>Professor Ramsay Shearman</i>	45
Early Radar Simulators in the 1950s <i>Talbot K Green</i>	47
Radar Photographic Display System 1498 <i>Richard H G Martin</i>	48
Air Radar Fitter <i>Brian Edwards</i>	51
Does Mekoning Work? <i>Wing Commander K J Dix OBE AFC; Ian White</i>	54
Flying Skynet 2 <i>Derek Jeffrey</i>	56
Radio Trainers and ATC Memories <i>Brian Pegden</i>	58
A Secret Weapon <i>Geoff Kebby</i>	60
Magnetrons for Radar <i>Colin Latham</i>	62
You Can't Win 'Em All: Allocation of SATCOM Terminals <i>Michael Ellis</i>	65
The Wireless Set No 10 in North-West Europe 21 <i>Army Group via Mike Dean</i>	72
"... Secret Matters Not So Far Disclosed" <i>Leif Leifland</i>	90
There's Been an Accident! <i>Tee Emm</i>	116
Tailpiece: Ruby Payne-Scott, Professor Peabody and Dan Dare <i>Eagle Magazine</i>	120
<b>Part II: Post Design Services</b>	122
TRE Malvern's Post Design Services 5: Navigational Aids <i>Mike Dean</i>	123
Tailpiece 2: Help please! Radar author David Pritchard <i>Mike Dean</i>	151

# OPS BOARD

DEHS members are shown in RED – and we may note how many events involve DEHS members!

**DON'T FORGET - THERE ARE CURRENTLY  
TWO SECURITY AND INTELLIGENCE EVENTS  
ORGANISED BY DEHS MEMBERS**

**Science Museum, London: Exhibition, 'Top Secret: from ciphers to cybersecurity', until 23 February.** Tickets are free but can be booked at <https://www.sciencemuseum.org.uk/see-and-do/top-secret> The exhibition is curated by **Dr Elizabeth (Liz) Bruton**, Curator of Technology and Engineering, Science Museum, committee member, DEHS, and also IET History of Technology Network

**Friday 10 January 2020 @ 7.30pm 'Confusion's Masterpiece' Dr Phil Judkins Sheffield & District Society of Model Engineers**

**Sunday 12 January 2020; 'SECRET COMMUNICATIONS 3' by Arthur Bauer and the CryptoMuseum at Kloosterstraat, Duivendrecht, Amsterdam.**



**Tuesday 14th January 2020 @ 6:30 pm Failures of Marine Medium Speed Diesel Engines Peter Filcek Newcomen Society; Hood Room, The Royal Maritime Club, 78-80 Queen Street, Portsmouth, PO1 3HS**

**Tuesday 14th January 2020 Zeppelin! Dr Phil Judkins, Morley Historical Society**

**Wednesday 15<sup>th</sup> January 2020 ASV radar Professor Simon Watts Malvern Radar and Technology History Society.**