



e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY
No 94: May 2020 Part I



IEEE AWARD: PROFESSOR SIMON WATTS

The prestigious **IEEE Warren D. White Award for Excellence in Radar Engineering**, established in 1999 to recognize a radar engineer for the achievement of a major technical advance, or a series of advances over time, in the art of radar engineering, is this year presented to DEHS member **Professor Simon Watts**, “**For contributions to airborne maritime surveillance radar design and the modelling of radar sea clutter.**” DEHS is delighted that Simon’s ground-breaking (sea-breaking?) research has been honoured in this way and sends Simon our whole-hearted congratulations.

Looking forward, your Editor, following suggestions from members that DEHS organise a ‘**Crypto Day**’ in 2021, floated the idea with readers last month, and it seems that it does have support. We have already two members who independently wrote to suggest themselves as speakers, so clearly a Crypto Day is ‘meant to be’; I would be interested in ideas on venues – nothing too expensive, please! - and will be contacting societies and organisations who are likely to have a common interest in the topic.

In the present ‘lockdown’, Members are likely to have a continuing surplus of ‘time to read’, if only to have a reason to defer jobs around the house/garden/need to tidy collections etc., and so **eDEN #94** is a bumper ‘Second Covid-19 Issue’. Part II comprises a wide range of documents, again contributed by **Mike Dean**, which form a special study of **British Air Defence in its first five post-war years**. Your Editor gives a brief introduction to the background of air defence in 1945-50 in ‘**Changing Enemies**’, whereupon Mike takes up the story with the **Marconi** assessment of the **Radar Ground Control Interception System of RAF Fighter Command**, and gives detail of the **AMES 7 Diver**

Aerial Modifications. We then look at the 'Where', **Trimley Heath** being the chosen radar, and the 'Who', with Marconi's **Louise Taylor's** profile of **Eric Eastwood**, with his own added material on early radar ornithology. There follows **Archibald Stewart's** practical assessment of the **West Beckham radar in Exercise Foil**, supplemented by that station's supervisor's views, and extremely rare screen-prints of **Chain Home's performance in Window/ Chaff jamming**. **Archibald Stewart** then critiques a second exercise, '**Bulldog**', before we move on four decades and **Air Commodore Sismore's** look at **air surveillance**, and finally a modern view of the **AN/FPS 118 OTH Backscatter system**. During those decades, of course, Chain Home was decommissioned, and the **Pillbox Study Group's Roger Carr** takes us on a tour of what remains at **Chain Home Stoke Holy Cross**, which Mike then reminds us was the site of a tragic accident in 1942. A happier aircraft/ tower meeting is recounted in **Tailpiece 2**, where we see a **Mosquito flying through the Eiffel Tower** from the **Aircrew Remembered Website**.

In Part I, **eDEN #94** as usual, spans Army, Navy, Air Force and clandestine applications of military electronics of all vintages, and, after our **AGM papers and 2019 Accounts** (with grateful thanks to **Dick Green**) we begin with **Feedback** on last month's eDEN from **Arthur Bauer, George Bichard and David Robertson** – as Editor, I am keen to encourage this, so please keep your e-mails coming when you spot something which sparks your interest or on which you have useful further information. A **Puzzle Page** gives a chance, we hope, for our **Australian** readers to identify some **Cold War items**. Next, DEHS's 'UK restorer supreme', **Tony Waller**, puts forward his ideas in the second of his series of articles '**To Restore or Not to Restore, THAT is the Question!**', supported by numerous photos of his own restorations-in-progress, and particularly invites comments from members.

We then move on to an episode in **Anglo-American D-Day history**, and its commemoration in a very serious restoration – of a **US Army Transportation Corp 2-8-0 heavy freight locomotive!** Next, we shine a light on one campaign in an almost totally forgotten war, between the Allies and **Vichy France** from 1940-1942, the campaign being '**Operation Exporter**' in **Syria, 1941**. One aspect of that campaign was the need for strategic logistics and transport, a neglected aspect of war, and we mark the **Australian-led construction of the Beirut to Tripoli Railway**, described in a well-illustrated article by **Bill Phippen** reprinted from our Australian friends **EHA Magazine**.

Once more this month, I draw to the attention of members the wealth of information contained in long-ago articles in **Transmission Lines**, many written from personal knowledge by members now sadly no longer with us. This month **eDEN** reproduces several articles from **2004/5**, starting with **Brian Austin's 'Communications and the Battle of Arnhem'** (now there's a subject for controversy!), and continuing with **Michael Coleman's 'The Secret Listeners'**. Our 'Swedish interpreter', **Michael Ellis**, then describes another less well-known aspect of World War 2, in '**Arne Beurling and Swedish Code Breaking in World War Two**', before **Peter Butcher** brings us up to date with more modern '**Training and Simulators**'. Mariners are not forgotten - **Francis Pym**, then a Sub Lieutenant, shows marine radar's rapid progress by 1945 in his '**Preparations for a Fog-Bound Scheldt**'.

We then look at the lethal '**Flensburg**' (**FuG 227**), the German homer on the RAF's Monica tail-warning in **TRE Report #1925**, the cause of so many RAF casualties in the winter 1943/4 'Battle of Berlin', and stay with the theme of the air by reprinting from the now-sadly ended **Aircrew Association magazine 'Intercom'** several interesting articles - the unexpected extra duties of a V-bomber Navrad in '**Blue Steel - The HTP Offload**' by **Geoff Barrell AFC**; **Philip Gurdon** tells of '**A Concatenation of Snags**' which wrecked a Spitfire, while **Francis Leadon** informs us of an Irish would-be defector to Germany who instead became an RAF pilot (!) in '**A Walrus Tale**'. **Australia**

features again in **Raymond Flack's** account of the 'Royal Flying Doctor Service', and **Canada and the USA** in **Syd Burrows'** tale of 'The Mighty Mars' fire-fighting 'borax bomber'. **Tailpiece** closes Part I with an account of an embarrassing taxiing by a **Blackburn Beverley** in **Borneo**, and its impact on the local airport's lighting and radio facilities.

I record once more this month my thanks to **Mike Dean** for his Part II's articles, and for much other support. Suggestions for improvements, offers of articles and all general comments to me please at philjudkins@btinternet.com or info@dehs.org.uk.

Warmest regards all, and keep safe,

Phil

Dr Phil Judkins, DEHS Chairman.

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OPS BOARD

For obvious reasons, there is no OPS BOARD this month, but can we bring to your attention that from our previously-announced events:

- DERK ROUWHORST announces that if his promised display of magnetrons at the Health Center Hoenderdaal, Hoendersteeg 7 in Driebergen near Utrecht is unable to be held on the original date of June 6th, it will be postponed to 29th August at the same location.
- THE NEWCOMEN SOCIETY events are being re-arranged for like dates in 2021, and members are advised to keep track of the latest news at the Newcomen website at www.newcomen.com/

NEWCOMEN SOCIETY LAUNCH E-NEWSLETTER

The Newcomen Society have launched an e-Newsletter which is well worth reading – go to their website (www.newcomen.com/) and read about the Widnes/Runcorn Bridge; ways of finding gas leaks; and useful websites!

BAWDSEY RADAR TRUST LAUNCH PODCASTS

Bawdsey will shortly launch a series of podcasts – watch their website www.bawdseyradar.org.uk/

DEHS AGM 2020 AGENDA

1. **Membership report:** 176 members at end February 2020.
2. **Financial report:** Statement of Account for 1 January to 31 December 2019 is below.
3. **Election of Committee Members** retiring by rotation: To consider election of the following Committee Member retiring by rotation and offering themselves for re-election:
 - Keith Thrower
 - Simon Blumlein
 - Mike Diprose
4. **Any other business**

Dr Phil Judkins, Chairman, DEHS, 25 February 2020.

DEHS members who have attended AGMs in the past are aware that those speaking and proposing ideas at AGMs will immediately be co-opted onto the Committee and put in charge of implementing their proposals; new Committee members prepared to work are also welcome at any time!

I would like to put on record my appreciation of the work of all the Committee members, and in particular Dick Green for his hard work as Treasurer and Membership Secretary and Peter Butcher as Editor of Transmission Lines. Keith Thrower, our President, and Liz Bruton arranged an excellent Lecture Day at the Science Museum on the theme of Security and Intelligence, which theme we follow in this issue of Transmission Lines. Especial thanks are due to our retiring Committee member, Tony Jones, for his hard work in organising our events at Shrivenham and Swindon over many years, and we wish Tony and Yvonne well in their retirement.

DEFENCE ELECTRONICS HISTORY SOCIETY Statement of Accounts 1 Jan - 31 Dec 2019

INCOME	2019	(2018)	EXPENDITURE	2019.00	(2018)
	£	£		£	£
Members' subscriptions	2913.67	2937.48	Transmission Lines: production & distribution	1054.98	1056.37
Members' donations	601.66	436.53	Admin: post & website	142.59	86.26
Bank interest	8.39	3.68	Awards & sponsorship [Note 1]	250.00	400.00
Publications, reprints & Proceedings	138.12	490.18	Publications, reprints & Proceedings	0.00	13.77
Events: bookings	3250.6	735.00	Events: catering, room hire, exhibition materials [Note 2]	1427.34	1169.62
TOTAL INCOME	6912.44	4602.87	TOTAL EXPENDITURE	2874.91	2726.02
	Current	Saver	Total	2019	(2018)
Opening Bank Balances at 01 Jan 2019 (£)	6333.56	4195.10	10528.66		
Closing Bank Balances at 31 Dec 2019 (£)	10362.70	4203.49	14566.19	4037.53	1876.85
				Total Income (£)	2019
				Total Expenditure (£)	2874.91
					4037.53

Notes:

1. The Restoration Award to Mike Dean was brought forward from 2018.
2. Charge for Autumn Conference held at Science Museum (SM) on 27 Nov not yet invoiced, but SM estimated this to be £1818 + VAT, say £2179.

Dick Green
DEHS Treasurer
23 Jan 2020