



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

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## **HAPPY 100<sup>TH</sup> BIRTHDAY, ROYAL AIR FORCE**

eDEN, your Editor, and the DEHS, are resolutely “tri-service and civilian, and international” but it would be massively remiss not to make our opening image that of the UK’s Royal Air Force as it attains its centenary. The Women’s Royal Air Force was founded on the same date, 1<sup>st</sup> April 1918, which your Editor mischievously notes makes the RAF the only UK armed service to have male and female arms founded at the same time. The RAF’s operations over its first century are well-known and do of course include a number of world firsts in the field of defence electronics, most notably in radar – first operational radar station, first airborne radar, first airborne ASV and AI, etc (though it is the Royal Navy which have the first operational centimetric radar). **Happy Birthday, RAF!**

100<sup>th</sup> birthdays are by their nature not a surprise, and so this month we present three surprises – news from Collingwood of a team restoring by simulation the **Decca Navigator on HMS Medusa**; a completely unexpected **photo of the Klein Heidelberg bistatic radar** located by **Arthur Bauer**; and the remarkable story of the military buildings at **Strumble Head**, now apparently the origin of the trials which led to the **Army's No 10 microwave communications system** on which our President **Keith Thrower** lectured to us so well.

At Collingwood, **Lt Cmdr. Clive Kidd** has been updating Collingwood's scanner technology and a first output features this month – an account from a 1949 *Live Wire* magazine of the **earliest days of RN electricians**, even before the ampere was the unit used to measure current! From his archive, **Mike Dean** provides us with the reminiscences of **Eric Amies on siting trials for GEE**, with a copy of the **Cossor** sales leaflet to match. We then look at how the British public were told about the **development of the magnetron and the klystron** through the HMSO publication "**Science at War**", a remarkably useful publication which always leaves your Editor wondering sadly if any Government today would dare to put what might nowadays be thought a "highly technical publication" on UK mass market sale. **Yves Blanchard** contributes another excellent article on radar in France, this time on the **German Atlantikwall radar chain** and **Thales** keeps us up to date on **helicopter missile systems** and on **Goalkeeper**, while we reprint our 2017 Accounts (thanks as ever to **Dick Green**) and AGM Agenda, and **Tailpiece** tells us the **pay rates for those serving with the RAF in World War 2**.

This month's **Operations Board** focusses on the IET, with something for everyone – but note in particular the talks on the **history and potential future of the magnetron**, and on **RAF Halton**. Plenty more history on subjects from computing to the Daresbury Laboratory, Tokamak and Leyland motors!

Don't forget our own events – Part II of *eDEN* reminds us that on **30 May, Professor Simon Watt's Burns Lecture** will take as its subject **Postwar Maritime Reconnaissance**, and remember, in addition to Simon, both **Keith** and **Peter Butcher** will also provide lectures; we look to your full support – **[the booking form is attached, fill it in NOW before 2018 gets in the way!](#)** **Simon** also contributes an article on the **ASV II in the Science Museum**, and **Mike Dean** has unearthed from **Colin Latham's** archive two articles from an unidentified magazine (help, anyone, please!), almost certainly Admiralty/Fleet Air Arm from the subjects, those of an introduction to airborne detection of submarines talking of **MAD and sonobuoys** as new items, and of DMWD's development of **radar target reflectors** (a good excuse for re-reading **Gerald Pawle's The Secret War 1939-45** about DMWD's war contributions). We haven't covered the **Operational Research** (OR) contribution to war in any detail, so a second extract from "**Science at War**" begins to correct this omission – expect more OR articles in the future; note those which concern the Army (tank gunnery and mine-laying) as well as those better-known examples from the Navy and RAF. **Tailpiece II** closes with an action photo of real live **spark transmission!**

Part III moves into landscape format to prevent cricks in the neck (!) as we reprint the **Falklands Sketchbook of Lee Sullivan** (an appropriate charity donation has been sent by your Editor).

Once again, much of this month's information has been provided and/or processed by **Mike Dean**, to whom, as always, my most grateful thanks.

As always, 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)**.

Dr. Phil Judkins, DEHS Chairman.

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