



e-DEFENCE ELECTRONICS NEWSLETTER

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SEA HUNTING

Members both in the UK and throughout the world will doubtless be contemplating the impact of the UK electorate's vote to exit the EU will have on defence, on defence electronics, and on investment by defence electronics manufacturers in the UK and in other nations worldwide. **eDEN** is not a political journal, thankfully, and this present issue therefore accordingly offers items from several perspectives – *above*, the fact that technology continues to advance, wherever in the world you may be; our leading picture is of **Sea Hunter**, the Autonomous Continuous Trail Unmanned Vessel (ACTUV) christened on April 6 in Portland, Oregon. The initially unarmed prototype is an unmanned self-piloting 132-foot (40 meter)-long trimaran craft with twin screws, powered by two diesel engines with a top speed of 27 knots (31 mph; 50 km/h). Its weight is 135 tons, including 40 tons of fuel, adequate for a 70-day cruise. Cruising range is 10,000 nautical miles (12,000 mi; 19,000 km) at 12 knots (14 mph; 22 km/h); it is potentially another 'shape of things to come', to complement that of the **USS Zumwalt**, featured in an earlier **eDEN**. The same advances are illustrated by a flood of **THALES** announcements in the occasion of the **SATORY 2016** defence extravaganza, and these we print to illustrate both the width of the defence areas where electronics are involved and also the multinational ownership of parts of UK's defence electronics industry; upon that multinational ownership depends investment in the UK or elsewhere. UK 'Home-grown' developments in history are exemplified by **Professor Sir Bernard Lovell's 1944** (note – 1944!) '**Historical Note on H2S**', and the challenges of UK building for research in times of tight finances (the 1950s, in this case) by the third part of **Norman Vidler's 'Story of ASWE'**. Striking a different note, **S/Ldr. Mike Dean** challenges the mathematicians in our midst to look at possible cases of anaprop which might have given an earlier warning in the February 1942 **Channel Dash** of the **Scharnhorst**, **Gneisenau** and **Prinz Eugen**, and **John 'Jacey' Wise** looks in detail at what lies behind 'CEC', just one of the many abbreviations which infest our lives. We also have some answers – which always stimulate more questions! – on last month's queries about **AI 17**, the **R 1619**, and US counterparts **AN/APR-2** and **3**. This month **Tailpiece** features Cold War defence archaeology – the **Fylingdales 'golfballs'** of recent memory, now replaced by the phased array pyramid.

This month also we have an extensive **eDEN Part II** for your holiday reading! Taking our theme from the three Saturdays, **November 12th, 19th, and December 3rd** for the second **Secret Communications** events in Arthur Bauer's amazing museum at **Duivendrecht, Amsterdam** – book now with Arthur if you haven't already! - this Part II takes two documents not previously published side-by-side – the first, an account of the **British Radio Security Service** (RSS, otherwise 'Box 25'), with thanks to **Bill Liles**, and the second, the RSS own assessment of its German counterpart, the **Funkabwehr**; read and compare, and make up your mind to go to Arthur's **Secret Communications 2!**

As we foreshadowed last month, this year's **Autumn Symposium** will be held at **STEAM, Museum of the Great Western Railway, Fire Fly Avenue, Swindon, SN2 2EY** (www.steam-museum.org.uk). For drivers, a map is available on their website; for those who this year may wish to come by train, Swindon is easily reached via the London Paddington to Bristol line, and STEAM is 10 - 20 minutes' walk from Swindon Railway Station. Turn right outside the Station, stay on the right hand side pedestrian path and keep going until you come to a pedestrian sign that directs you through the GWR tunnel that connects to the Churchward site. Your route

will pass English Heritage HQ and Thomas Homes apartments, soon leading to STEAM Museum. Steam has its own café, and there are other eateries close by; near at hand also is a Designer Outlet, and so given our Symposium, a Designer Outlet and other shops and cafes, all tastes should be catered for! The Symposium programme will start with Registration and coffee at 0900-1000 and will end around 17.00. The DEHS Annual Meeting will be held during the day. Presentation topics will include Peter Butcher “*Emergency Radio*”, Wing Cdr. Jeff Jefford “*When All Communications Fail: Blue on Blues*”, Clive Kidd of HMS Collingwood “*Naval Communications from the Boer War onwards*”, Prof Tony Davies “*Manpacks and Mobiles: WW2 and after*”, and Tony Helm “*The End of the Cold War – or Was It?*”.

A further plea to those who have not yet acted, to get out those cheque books and renew your subscriptions! Yes, I know subs are not due for another month, but if your memory is like mine, then don't put the attached renewal form aside and forget it! Our hard-working Treasurer, **Dick Green**, has spent a great deal of time redesigning the form so that it should answer all the concerns raised last year – please read his article, repeated below from last month, and **RENEW!**

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.

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