

RNARS

NEWSLETTER



Seasons Greetings



Royal Naval
Amateur Radio
Society



Winter 2019



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Front Cover: HMS Mersey

HMS Mersey is a River-class offshore patrol vessel currently in active service. Named after the River Mersey, she was built by Vosper Thornycroft in Southampton, launched in June 2003 and commissioned into the Royal Navy on 28th November 2003 serving as a fishery protection vessel in home waters. Callsign GBSY. She weighs in at 1,700 Tonnes displacement is 260' 10" long, with a 44' 3" beam and a draught of 12' 6." She has two 5,532HP engines with a capable speed of 20kts giving her a range of 5,500nm and an endurance of 21 days. It looks likely that instead of her decommissioning as scheduled this year, she may be refurbished under the EU Exit Preparedness fund to be retained in a fishery protection role in home waters.



RNARS Officers & Committee


www.rnars.org.uk

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SUBSCRIPTIONS INFORMATION

Special Notice Regarding Your Subscription

As much as we would like you to continue being a member of the Society, all subscriptions fall due on April the first. If you have not paid your annual subscription within one month of the due date your membership will lapse. This is unfortunate.

Those members who use automatic banking facilities with dates other than 31st of March or April 1st, please contact your bank to change the date of your subscription payment. In this way you are helping to reduce the workload for our Secretaries and Treasurer. Thank you.

Subscriptions:

Please ensure your name and RNARS number appears on all transactions. **UK:** £15 or £5 per year **due on the first of April** to be sent to the Membership Secretary. Cheques and postal orders to be made payable to "Royal Naval Amateur Radio Society"; bankers orders are available from the treasurer. Subscriptions can also be made via **PayPal** through the RNARS website. Click on the *How to Join* page: www.rnars.org.uk.

Overseas members: Subscriptions via PayPal is preferred, see above for details.

Newsletter by e-mail: If you receive email Newsletters your annual subs are reduced to £5. Contact the Secretary for details.

The society banks with Lloyds 272 London Road, Waterloo, PO7 7HN.

Sort code: 30 99 20 - Account number: 00022643 -

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GDPR: Your details will be held on the society's database by the Membership Secretary. The committee requires your permission with regards to the release of your personal information held on the database to be used only by the Society.

The RNARS is grateful to Phil MØVSE and Wayne G6NGV Taylor of **Shine Systems** for hosting our web site free of charge: www.rnars.org.uk

A gentle reminder to everyone:

When the subscriptions changed to £15, it would appear that a few members may have not changed their annual subscriptions from the old £10 when the change came into effect. Can you please check your payment arrangements and update them to the current subscription of £15 **Thank you.**



CHAIRMAN'S CHAT



David Firth
M0SLL@mail.com



Well, now, we spent some time and effort on getting DMR up and running. The take-up has initially been good, but now we're in the doldrums. My hotspot -on loan, somehow stopped working and I still don't know why. Going over to RF mode the connection to GB7CO made it over the 4 miles. Since then I can press the PTT and all I can see is the transmit light coming on for about half a second before it dies like a wilting flower from the garden. Inexplicably, DMR has gone quiet elsewhere with a subtle move over to that other standard in the scheme of things, 'Fusion,' and people, including myself are asking the question why? It's all too easy to understand; it's because you don't need hours of programming before calling in the experts to do it for you. That is something worth thinking about, yet in the meantime let's not forget that it was setup with the good intention of getting our members to keep in touch. Otherwise, if the Wednesday DMR net at 17:00 is ill-timed can we arrange another time or another day?

Everyone had a good time at the National Field Day and also at the National Hamfest later in Newark which was an eye opener. It is where all the 'Big-Boys' gather to show off their latest products from rigs to aials, sound boxes and everything in between. The reality is that we spend time leafing through the pages of one radio fanzine or another, getting ourselves enthusiastic about all kinds of 'come-in-handies,' when we remember that we have to wait for another pension payout before we can decide... Oh, bother, and the grandchildren are already eyeing up the shop windows of the local toy shop. News from MF Runde looks as though they had a good time too -U995 et al.

On behalf of the Committee, may we wish you all the very best of Season's Greetings. To our small crew of helpers, a special thank you for getting things done over the year -well done! If you know someone who is a member and alone at this time of year give them a call.

Best wishes to you all,

David



MEMBERSHIP MATTERS

A very warm welcome to our new members, and to re-joining members.

New Members		
WO1 Rosemary Dodd (our former ex-officio)	SWL	5080
Lt. Paul Diggle RN	M0PPD	5081
Martin Stokes	G3ZXZ	5082
Ross Bradshaw	G4DTD	5083
Jonathan Kneale	GD0BFN	5084
John Turner	VK6FAAW	5085
Scott Caldwell	SWL	5086
PO Tom Handley	SWL	5087
Re-joiners		
John Mullarkey	2E0BFA	4812
Herman Van den Berg	PA3BFH	2455
David Rowe	G7XJZ	2359
Changes		
Resigned		
Gill Weston	G6ZGK	3677
Silent Keys		
George Miles	G3NIR	0111
Robin Weston	G4XZS	2194
Dave Logan	G4EZF	2761
Tom Logan	VP9V	0121
Brad Bradshaw DSM	G4SKS	1404
Neale Imrie	VK2CNI	3890
Ken Taylor	G3LME	0129
Dave Clemens	G3VXM	0433
Ernie Sweetman	G3UAZ	1962



BREAKING NEWS FOR TOP BAND NET USERS:

Please note that the top band RNARS net time will be changing to **2100 hours local** as from **26th November**. Refer to the RNARS Nets Schedule page.

**MF RUNDE U-995**

Jack & Maren Kempe

News From Laboe***Bob & Kathy**

NEW JERSEY, which has been a museum ship on the Delaware River in Camden, New Jersey, since 2001. Bob N4XAT is a crew member there.

Some visitors rubbed their eyes in amazement at the flag of Schleswig-Holstein flying from the flagpole in front of U-995. The reason why, is that this year the U-995 Friendship Crew was supplemented by those from Enschede in the Netherlands; Jo van Laarschot (78), call sign

PA0VLA, reinforced the radio crew with his characteristic Morse 'hand writing.' Meanwhile, his xl Wil, went off to do a bit of local sightseeing in Laboe, and in the surrounding area -a good excuse for some retail therapy. [Ed]

**Jo PA0VLA**

Several of the visitors to U-995 whose fathers are members of the DMB, were informed about the tasks and goals of the DMB and our hobby too. Of course, we were happy to do this.

From the U-995's original radio room we have been sending radio amateur messages under the call sign DL0DMB for a long time, with RN4865 + MF995, membership recruitment included.

**Harry DL6LV mit xyl
Ulrike DB8LV**



For the first time this year our English radio friend Angelika Barclay (63), call sign 2E1GDC, joined the activity as a radio operator and not only as a guest, using the training call DN1MOS.

In total our radio crew in Laboe this year included eleven people from different nations and Marine Comradeships (MK): Roberto D'Imperio (N4XAT) , RN 4783, from the USA, former member of the US Navy; Angelika Barclay (2E1GDC), William Cross (G0ELZ) MF 969, and Andy J. Forbes (G4UST), RN 3527, from the Royal Naval Association, Jo J.M. van Laarschot (PA0VLA), RN 944, former member of the Royal Dutch Navy, furthermore Harald Joormann (DL5XI), RN 3695 of the MK Wesel, Hans-Juergen Kempe (DK9OS), RN4636, and Maren Lorenz (DK9MOS), RN4946, of the MK Verden/Aller, as well as, Harry Jekel (DL6LV) MF1077 and Jonny Worzeck (DL4HJ) MF581 of the Marinefunkerrunde e.V.

Out of the number of 116 museum ships participating worldwide, we caught three on air, but we also had many other interesting radio contacts. It was a lot of fun again. Besides, Bob and Kathy were in Hamburg afterwards. Bob visited the Russian submarine U 434. Also a harbour and city tour was on the program for our American friends. After another short visit to Buxtehude they went back to the USA.



Angelika 2E1GDC



Maren DK9MOS

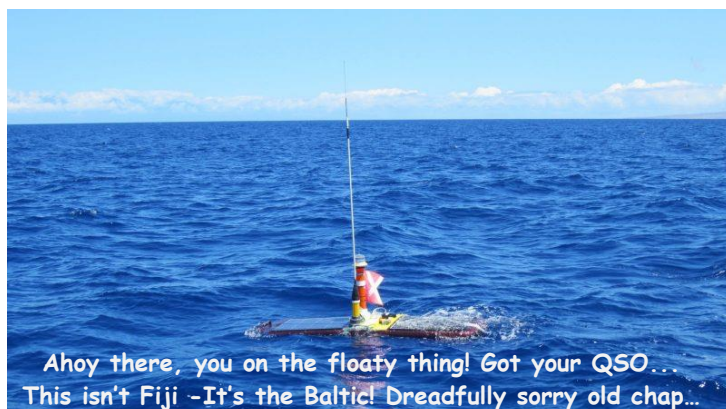


Our radio crew with flagpole in front of U-995



U-995 friendship crew in the Captain's Corner in Admiral Scheer

We are looking forward to seeing all of you again in 2020.



Texts: Maren DK9MOS and photos: Jack DK9OS

[*www.marinefreunde.com/eng/willkommen.html](http://www.marinefreunde.com/eng/willkommen.html)



DIVERSE REPORTS

Joe G3ZDF

National Field Day 7th-8th September - G3BZU Down on The Farm

What a weekend!

Catering by Martin M0EHL, aerals by erected Andy 2E0REE, canine operating entertainment by 'Jack,' (and a selection of aerals) by Alan M6LFM, calls on the NHS by Alan M6UIT, operating (in concert with a cracking canvas tent and a Windows logging tablet) by Ian M0LIH, accommodation by the well-placed Hurst View Leisure site and sunny



Photo 1 - The Shack

weather by, well, who knows? What more could we ask for the HF SSB National Field Day?

The bookings were made just a few weeks in advance, but not so far in advance that we could get to grips with the new logging software or check the setup of the rigs and the aerals.

We gathered in the New Forest, close to the shores of the Solent and Ian's Arctic

tent became the centre of operations. The tent is double skinned, treble if one counts the mosquito netting but it is designed for users of a flexible persuasion. I practised my limbo dancing every time I entered into the tent by the main entrance notwithstanding the fact that I am not as supple or as flexible as I once was. However, Ian had a wood burning stove for which there was provision in said tent including an exit point for a the very long chimney and this meant that the tent was toasty when it was cold outside and the triple layers also meant that when the sun was shining the tent got very warm inside.



Photo 2 - Our Turf!

Martin M0EHL, Mike, M6TUI, Andy 2E0REE, Alan M6LFM



DIVERSE REPORTS

Some stayed on the campsite overnight, I chickened out and booked into a local B&B. The campsite was quite busy with a family or street celebration next to us, so neither the erection of the aerials nor the running of the



generator caused any noise problems. During the day we made use of Ian's solar panel in order to charge the batteries allowing us the opportunity to switch off the little generator at the time when campers were going to bed.

We used the G3BZU call sign but many stations had difficulty catching the BZU part of it. In future we should perhaps choose one of our call signs that is easier to hear through heavy QRM or look into the possibility of getting one of the short club competition call signs.

Most of the activity was on 40 and 20m with a few QSOs on 15m. The long wire could not tune up on 80m. The All Asia contest overlapped with Field Day and it meant that some of the Eastern European stations were more interested in calling for that contest than Field Day. Some however were involved with both contests and gave two numbers with each QSO. Those who have taken part will be aware that instead of serial numbers one exchanges one's age in the All Asia contest. I happened to be operating when the Field Day serial number equal to me age was used and I managed to work one of the stations in both contests and gave him the same number as a Field Day serial number and my age for the All Asia contest. On Saturday we have a visit from Steve M6WVV who was passing by. He did not stop to do any operating.



For logging we used SD by Paul EI5DI and this ran very sweetly on Ian's Windows 10 tablet. Everyone had a chance to operate and to try out logging on SD.



DIVERSE REPORTS

The event was so successful that we are already discussing plans for the next Field Day. All in all it was a very satisfying and enjoyable weekend.

Joe G3ZDF



Photo 5 - Alan Having Fun M6LFM

Well done everybody nice to see you out and about enjoying yourselves!
[Ed]



Photo 6 - All Aerials Up -Let's have a brew!

What's that you're saying? Let's have another one.

Absolutely!



LOUISE HOTCHKISS

Sad news from our previous Chairman, **Doug Hotchkiss**. Louise his wife of many years suffered a recent stroke and passed away after a few days in hospital. Louise was a WRNS with the Royal Marines during the war years and they met during a mess party one evening, an event which later sparked into courtship and lifelong marriage. Lou was someone who never raised her voice, but when it was needed, she would give a steely-eyed look of disapproval and that was all that was needed to restore good order and discipline in those around her. They were a huge supporting act for one another; when Doug was away at sea, Lou looked after the family and later, after Lou had a serious accident thirty years ago and was left in pain as a result, Lou became more dependent on Doug as she became less active. She will be greatly missed.



YOTA 2019 AT RNARS HQ

Portsmouth Sea Cadets - YOTA 2019 at the HQ Shack: c/s GB19YOTA

There was planning, preparation and implementation of ideas before our guests arrived at 20:45 on Tuesday the 3rd of December. It is a memorable occasion for at least twelve Sea Cadets from Portsmouth who took part in this special event. Their various activities included soldering mini transmitter-receiver kits, being schooled on how to speak using protocols over the radio - and then actually doing it, and so on. There were several international QSLs around the world including one memorable exchange related to a speeding driver going down the freeway in Chicago! The county was well seeded with members who were on standby at various HF and UHF frequencies. If you were tuned around 3.730 or 3.740 on the night and thought you heard strange goings on; yes, that was us. Conditions drove us onto 20m for a while, but we utilised our local repeater, GB3IW for a time to give them a feel for talking over the Solent to the Isle of Wight and getting messages back from all over the place, including our remote players always on standby to cover unexpected gaps and to keep those important dialogues going. A big thank you to all our members who gave a hand to make this a resounding success for the Sea Cadets. When they left at 21:15 or thereabouts the place was buzzing and by all accounts so was the trip home in the coach!

Youth On The Air 2019 has the hallmarks of a successful night's radio for all!



HMS OTUS - A TRIP TO THE PAST

Joe Kirk G3ZDF

I last served onboard HMS Otus in 1965. When I disembarked after my last 'sneaky' I never imagined I would ever go on board again. But 55 years later here I am onboard Otus, this time in Sassnitz on the island of Rügen on the Baltic coast rather than HMS Dolphin or in the Gareloch. Otus was an Oberon-class diesel-electric submarine launched on the Clyde in 1962. The standard Otus class complement was 68. I joined her as part of a supernumerary group and along with the rest of my other colleagues I was accommodated in the fore ends on a bread tray after one layer of the racked torpedoes had been removed.

This did not make for comfortable sleeping quarters, but it was what we were allocated, and we put up with it.

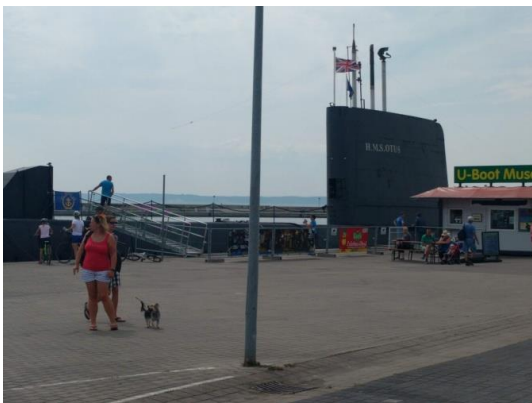
In 2016 I was contacted by Mario, DJ8NU informing me that he and his colleagues, who were mostly members of MF-Runde, our sister society in Germany, would be soon activating DL0MFN from onboard Otus and hoping we could QSO. I don't think he realised at the time that Collingwood was a 'stone frigate' but I did activate GB3RN and tried to QSO with them, but without any success. Soon afterwards an article appeared in the Portsmouth News by a retired journalist who had been caravanning on holiday in Northern Germany who had come across the Otus having last seen it in Pound's scrap yard on the outskirts of Portsmouth. He spoke to Mario and was able to tell him that HMS Collingwood was a shore establishment.





HMS OTUS - A TRIP TO THE PAST

Scroll forward to 2019 when I decided to take a short railway holiday in Germany making Sassnitz one of my stops. I had timed my visit to coincide with a weekend of radio activities onboard Otus as the boat does not have operators on board all the time. It was only on my last journey from Berlin to Sassnitz that I realised just how close I was to the Polish border when a fellow passenger told me she was going on a cycling holiday along the Polish coast.



I joined the group in the Chiefs' & PO's Mess where they had set up their rig on the mess table, sent a few items on the buzzer they had set up for youngsters to gain a test certificate and proved to my own satisfaction at least that I could still do CW at a very reasonable speed on a straight key. The Mess looked awfully familiar even if it had seemed a lot smaller than I remembered it. The rest of the

boat brought back a lot of memories.

A group of us then went back on the jetty where I was treated to an impromptu and very enjoyable picnic lunch. This was followed by a period of operating VHF where I used the DK/G3ZDF callsign to QSO with all the members of the Group, most of whom were no more than 10 metres from me. I would like to thank Mario and all the members of the group for their hospitality and their very friendly welcome.

Joe G3ZDF

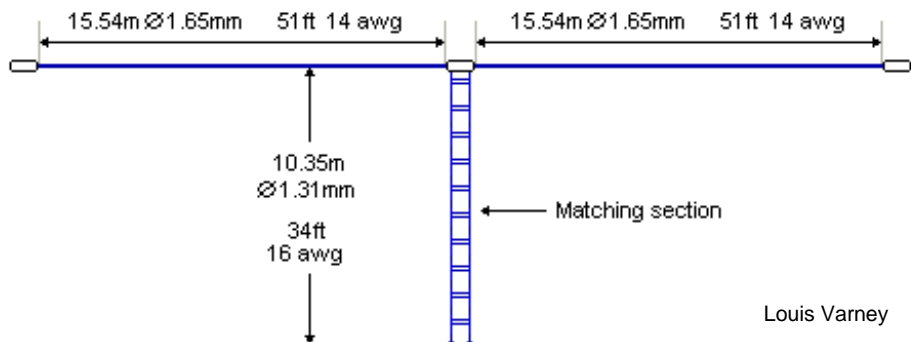


THE G5RV ANTENNA

Doug G4BEQ

My thoughts and experiences over 40 years.

Louis Varney G5RV introduced this antenna to the amateur scene in 1946, since then it has become well known throughout the world to all those interested in radio. I have operated one since my early days in radio, albeit along the way I have tried and played with Verticals, Magnetic Loops and other “pieces of string”. However, the G5RV has always, until recent years, been the main antenna. I say recently as for the last 10 years I have lived in a Flat and my only antenna is a 25 foot length of wire attached to a neighbour’s balcony. Age and health now taking precedence over property with ample ground for antennas, it comes to us all.



I submit this appraisal in the hope that those who have never used one, and in particular for those that “roll their own” will give it a go. I would point out that it is NOT intended as a technical appraisal. For those interested, I can assure you that for successful operation the dimensions which can be found in many publications and on the internet are critical.

There are certain requirements, which I found important in order to get the best from this antenna to obtain acceptable DX results and counteract various EMC problems are as follows:

1. A Low Pass Filter should be incorporated immediately after the TX, in the 50 ohm line.
2. An efficient ATU is a MUST, as is a good earth system. I have used artificial earths to good effect especially when using an upstairs room as a shack.
3. A suitable SWR bridge with preferably a power meter incorporated is VERY NECESSARY.

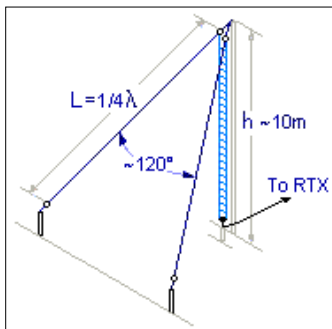


THE G5RV ANTENNA

Note. The earth arrangement referred to earlier should be as short as possible and consist of heavy stranded wire or copper braid.

Anyone who contemplates giving the G5RV a trial run, will, I know, be wondering if their garden provides enough scope to erect such an antenna. It is possible to drop the ends of each leg by $1/16^{\text{th}}$ (8.5ft) at right angles to the "Flat Top". This is permissible by the fact that the antenna is resonant at a distance of $2/3$ of its length from the centre, generally speaking.

The Flat Top should run in a straight line, but if this is impossible a variation can be made. What happens to the lobes remains in doubt, but I have achieved good results doing this. The optimum height for most people would be in the region of 30 to 35 feet. Louis Varney suggests 34 feet as suitable. In my old QTH I used an inverted V configuration at 25 feet to the central feed point and it worked very well, even on Top Band. When using the G5RV as an inverted V, the angle at the apex should not be less than 120 degrees.



I did not use a unbalanced feeder (coax) because my Z Match did not accept that type of feeder and it was not until 1984 that Louis Varney concluded that coax could be satisfactorily used continuously into the ATU without causing any serious misgivings. Should you wish to operate using a coaxial feeder, either 50 or 75 ohms can be used providing it is of good quality and not exceeding 70 foot in length.

Note. The use of unbalanced feeder was originally thought to require a Balun. It is now known that this is not required (G5RV issued an amendment in about 1984 to this effect) because, if a Balun is connected to a reactive load presenting an SWR of 2:1 or more its internal losses increase resulting in the heating of the windings in adverse cases causing the Balun to burn out. THE WHOLE SECRET IS A GOOD ATU.

G5RV also issued a statement in 1984 to the effect that a coax feeder, be it 50 or 75 ohms, could be run direct from the Flat Top to the ATU, providing the ATU had an unbalanced input to unbalanced output.

Although the feeder will have a fairly high SWR, this will not result in insignificant losses, always providing the coax is of high quality and not more than 70 feet.



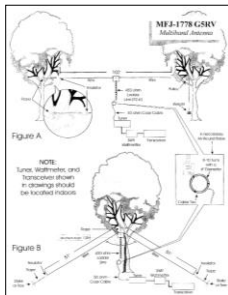
THE G5RV ANTENNA

To return to the subject of feeders, and I have tried most configurations over the years, it is suggested the 3 variations can be used:

- Open feeder to the matching stub, plus 74ohm twin lead in.
- 300ohm ribbon feeder to the matching stub, plus 75ohm twin lead in.
- 300ohm slotted ribbon feeder to matching stub, plus 75ohm twin lead in.

The results have proved without doubt that the open wire feeder has the edge over the others on account of the following observations:

- “Detuning” does not occur with changes in climatic conditions.
- Winds do not inflict violent “flutter” causing breaks.
- Little or no TV problems reported or having to tolerate on one's own equipment.



A major factor against using ribbon feeder, is that high winds cause the ribbon to flutter and try as one may to secure the junction with the Flat Top, sooner or later a break occurs or water infiltrates at the central insulator.

The matching stub, whether it is open wire or ribbon, should be allowed to hang vertically for dome 20 feet. This is not always possible but where it is in variance, I have noticed that there is a variation of SWR. So, if possible, try to stick to the recommendations of G5RV.

The junction at the lower end of the matching stub to the 75ohm twin balanced section of the feeder does not normally present any problems.

The antenna loads quite well on the whole range of bands including the WARC bands and I have never had a greater SWR than 1:1.5. In my own case the 14MHz band certainly gives an excellent match of 1:1 across most of the band. Finally, I would stress this is not a technical description of this antenna, just my experiences with it. I am sure there are better qualified people amongst the readers than I and perhaps they might like to add their knowledge to those of us who only dabble. I have worked some 200 countries over the years with this set up, so, in my book, it is certainly an excellent and easily made antenna. In the last 3 years at my old QTH I concentrated on QRP operations only and had no trouble with this antenna and 5 watts working across the pond and down to ZS land, however, VK has proved out of reach and in an easterly direction my best effort was 9V land. Sill, not bad on 5W, all CW of course.

Doug



SEA STORY - continued

Eric Bray M0HFF

Chapter Seven

The depleted Afternoon watch fell into the EWO, missing one bod, who was too ill to make it onto watch. "What's for lunch?"

"Spew stew!" Daisy grimaced. "The bread's ok, freshly baked." The dining room was sparsely occupied, as I queued briefly at the open hatch. Spew stew it was, or more delicately, 'chuck-it-all-in' (What's open? Chuck it in!). Various veggies, spuds, carrots, peas, broad beans, haricots, corn grains, spaghetti, and cabbage swished around in brown Windsor, keeping diced liver, bacon strips, and other obscure 'edibles' company. After a brief trial of sitting at a table, I found it easier to eat standing up, twined round a stanchion, and tilting my platter as required to keep the contents mostly in, while the other hand wielded a spoon. We suddenly rolled violently, so that I ended up practically lying on the post, with my platter at a visually crazy angle. Three bodies slid down the unexpected hill and crashed into the bulkhead that was now the floor, while the two chefs on the other side of the counter tried to save the tureen of spew stew, and themselves. The tureen slammed into the end plate, upended itself, and emptied its contents up the wall, while a stack of platters crashed across the mess, to join all the knives and forks that were dancing around on the deck/wall.

With a loud groan, Hermes began to right, then rolled the other way, leaving me clinging to my post like a sloth on a branch, while the stew ran up my arm. The p.a. clicked on. "Sorry about that! We had to turn sharply to avoid some debris. Department heads, check and report any damage. Flight deck crews muster in the hangar by the after lift, immediately!" I learned later that the roll had smashed the SAR chopper's tie-downs, and nearly threw it over the side. Two men lurking in the passage, sneaking a quick fag, had managed to get a rope round the undercarriage, as the chopper teetered on the edge of the deck, the tailwheel already hanging in space. When the rest of the team arrived, they dragged it back with a tractor, and took it down into the hangar, to inspect it for damage. I believe it was 'written off', becoming a 'hangar queen', cannibalized for spare parts for the other Wessex's. It joined a Vixen that tried to ram the bulkhead when its securing straps failed, during the same roll. We carried on along the Med, in the general direction of Malta, while 'Fred' beat itself to death against Southern France, then we limped into Gib'. We played at 'daisies' again, in half a of gale. Once we were tied up, and coupled to shoreside power, and some fresh milk, veg, and mail brought aboard, a general 'make and mend' was announced, with all essential watches reduced to minimum staff levels.



The following forenoon, it was 'store ship', hiking up the brow with apples, spuds, carrots, cabbages, cans, zebra's, and everything in between. The greenies, (electricians) were busy repairing all the failed lights, while the stokers (Mechanical Engineers), were busy repairing snapped brackets, failing welds, and such like. Taff the Tiff had the UAZ cabinet drawers open, looking for internal damage, but apart from a cracked Perspex window, and the deep dent and gouge in the fascia, it seemed to have survived. The B40 was scrap, and a replacement was requisitioned.

That afternoon, half of the off watch was allowed shore leave. Gibraltar isn't that big a place, and five hundred thirsty Matelots take up a lot of space! The same applied to Thursday, Friday, and Saturday. On Sunday we were worked for two hours, then a make and mend was called, but no leave was allowed, not that I cared, I had seen all that there was to see! From the airport, down the west coast, round the southern edge, to the hotels, through the tunnel, to the enormous sheet of concrete that was the rain-water catchment area, the only source of fresh water, on the eastern side. I had worked my way up to the fort perched on the top of the 'rock', seen the apes, then walked down the seemingly endless flight of steps, which were in a pretty dilapidated condition, to the town again, then part-way back up, looking at the remains of the war-time gun emplacements, pill boxes, and the remains of huts. From there, I had gone back into the town again, window shopping, and saying 'NO' to all the street vendors intent on selling me genuine Rolex watches for ten dollars, or "feelthy pictures, Johnny?" The ones I had looked at, from curiosity, were filthy from handling, not from content. Later, as dusk fell, the sales pitch changed to "Want a girl, Johnny? Jig-a-jig?" There was a small queue outside the Doc's place, on Monday, and for several weeks after, where those who had tried the girls now tried to get rid of the diseases they had contracted.

We sailed again at ten, and in weak sunshine, we joined the Med fleet for more exercises and war-games. We cheated by logging all their radar signatures, and ship's identities, as we approached, our extra antenna height giving us a range advantage, then when we had them all 'tagged', we quietly faded away again, then made a fuss about approaching and joining them. As we came within twenty miles, they all shut down their radar sets, but it was too late! Following C in C Fleet's orders, we split into two groups, nominally 'red' and 'white', and prepared to go our separate ways. Our remaining Wessex SAR, and one of the Wasp's off a frigate shuttled back and to, carrying mail we had collected from Gib, and delivering it to the appropriate ships, then collecting their outgoing, and bringing it back to Hermes, where it was tossed into the COD Gannet, ready for transferring to Gib.



When the two groups had separated, we worked up to flying speed, then tossed the COD into the air with a gentle 'phut' from the cat. Shortly after, a section of Buccaneers and their covering Vixens were fired up, ready for launching. The first two off were Buccaneers, loaded with concrete dummy bombs, intended for the enemy's 'splash' target, a device towed astern that threw a fountain of water up into the air, acting as the 'bulls-eye'. When we were ready to begin the war with the 'Reds', the first pair of Bucc's waddled onto the cats, and unfolded their wings, ready. They were hooked up and sat waiting for the green light from Flyco. Finally, the green light came on, the Cat man made the wind-up sign, then fell into a crouch, pointing at the green house. There was a momentary delay, then the greenhouse slid down into the deck and with the Bucc's engines bellowing full power, the cat fired, with a tremendous whoosh! The Bucc disappeared in a cloud of steam, but there was no recoil jolt. The 'plane trickled down the deck, its brakes howling as the engines wound down, and it came to a halt about ten feet from the edge of the deck. The strop was still hooked around the shuttle. After a pregnant pause, the other Bucc was given the 'hold everything!' sign. A swarm of deckies ran about, trying to work out what had happened, while the crew of the first Bucc opened the canopy, shut everything off, unstrapped, climbed down, and sat on the deck, shaking. After a discussion, and then some telephoning, the other Buccaneer was rechecked, then the engines run up. It was launched successfully, as were all the other aircraft due to go, just using the one cat. When there was room to manoeuvre, the stranded aircraft was carefully towed back, using a deck tractor on each of the main wheels, as there was no room left to couple one to the nose leg. It was repositioned onto the working cat, the crew re-inserted, the engines started, and it was fired off to catch up with the party. As soon as the deck was clear, the crew began testing the faulty cat by launching a pallet of scrap attached to the part-used strop. With a huge poof of steam, nothing happened, so they had to disassemble the whole mechanism. It was later announced that the piston seal had failed. The Vixen crews said their thanks to the Maker, because if one of them had been on the cat first, it might have given the lighter aircraft enough impetus to go over the deck end, but not sufficient to fly.

The two fleets waged a casual war against one another for a week, but the 'reds' failed to make a decisive thrust. With our greater height, our radar detectors, i.e., us lot in the EWO, could 'see' further than they could around the curvature of the earth's surface, so our Bucc's repeatedly 'bombed' them into submission, screaming in at wave-top height, giving any local fishermen heart-attacks, as they blasted past, dragging the shockwave of spray lifted from the surface by the pressure wave.



The 'reds' finally borrowed an AEW Shackleton and two Phantoms from the RAF based on Gib, which then blew through our non-supersonic Vixen screen. In return, our Bucc's made an unofficial 'raid' on RAF Gib, which made us most unpopular with the civil side of the airfield, as they shared the one and only runway. Many angry messages winged back and forth, from the Civil Aviation Authority, RAF Gib, and the C in C Med Fleet. What made the matter even more complicated was a pilot in a freighter Viscount that had been in the process of landing, broke off his approach, and made a 'fighter pass' on the Bucc's as they screamed down the runway, his co-pilot shouting 'Dagga-dagga' over the radio, then claimed to have shot them down! As the argument went around and round, tempers cooled, and frayed nerves relaxed. After calling each other Mad Bastards, or Dozy old Coots, depending on whether they were civil or military, it was forgotten. A note was circulated, originating from the office of the Senior Flying Officer, advising that the stunt not be repeated, until next time.

The Senior Officer, RAF Gib asked that we return his television aerial, if we dared make a return visit. So, on the next COD flight, a package was dispatched for him, containing a bent wire coat-hanger, and some sticky tape, along with an M.o.D. issue toilet roll, with usage instructions. A few days later, a packet came back. In it was a length of fishing line, and a mackerel lure. A covering note advised our Supply Officer to arrange to provide his own stores in future! While this was going on, we were heading south-west, into the Atlantic, and the tropics. One morning, we found that the 'rig of the day' was to be 8AR's, the same cotton working shirt, but with shorts below. The 'shorts' legs came down to our knees and looked ridiculous. Instead of No 2's for evening dress, we had to wear the usual 'white front' square necked tee shirt, and white shorts. Most of us found that our previously sunless legs were whiter than the white cotton shorts! Before too long, when there was no flying, the flight deck became a steel beach for the sun worshippers.

We battled our way southward with various NATO flotillas, most of the battle being the attempts to understand each other's version of English. A Geordie, trying to pass a message to a Dutchman caused many requests for repeats. (Vat iss a Wayeye mon?) One day, a canvas 'swimming' pool was created on the flight deck, then as we reached the Equator, Hermes drifted to a stop, while a 'Royal Guest' payed us a visit. One by one, all the crew who hadn't crossed the line previously were rounded up, and brought before the court of King Neptune, and made to confess all kinds of sins, after which they were plastered with multi-coloured gunk, then dunked in the pool to wash away their sins. I was on watch, so managed to escape until about 2 pm, giving me time



to change into my bathing costume, and my oldest limp hat. When I was captured in a bedding bag, and dragged before King Nep, I was questioned until I was found guilty of being not guilty of anything that they could prove with the vaguest of evidence. I was then painted with yellow flour and water paste, before being stuffed back into the bag and tossed into the pool with all the other floundering bodies. It would have helped if they had let me out of the bag first! The session developed into a free-for-all, with anyone and everyone who hadn't been painted being dunked. It made no matter how many gold rings were on the sleeves. When the pool collapsed irreparably, the boarding ladder was lowered, and everyone got heaved over the side, into the sea. The port side aircraft lift was going up and down like a yo-yo on elastic, as when fully lowered, it was only about six feet above the water. A fire hose was also pressed into use, by the 'court', which helped to remove some of the yellow muck from the flight deck. A few seamen were pottering about in one of the sea boats, watching for anyone in difficulty, backed up by a couple of the ship's divers, who were drifting nearby in a 'Gemini' inflatable dinghy. When we finally prepared to move again, everyone was instructed to muster at their place of work, and a roll call was held, to make sure we hadn't lost anybody, then we loitered on southwards. The position on the chart and in the log changing from 0.01N to 0.01S. We ambled on, down the coast of Africa, while the 'Waffoos' scrubbed at the yellow blotches on the deck, then conceded defeat, and repainted the deck, as that was the only way to conceal it!

On Thursday, mid-afternoon, we sailed into the harbour at Cape Town, and tied up to the wharf below the towering mountain with its famed cloud cap. We then set about storing ship. This continued all Friday, while local dignitaries visited the Wardroom, and on Saturday, while the Officers prepared for a party on the Quarterdeck, which was declared more out of bounds than normal to us ordinary peons. That evening, the Royal Marine Band began playing, while the Officers, and any of their wives who had flown out, plus the local Nobs, got not so quietly stoned. Sometime after midnight, the final couples drifted off to find places to be where the doors would lock from the inside, and the band gave up.

On Sunday, we were lectured about local customs, and warned about the Segregation Laws which caused problems for the few of us aboard with built-in suntans. They only went ashore once, then decided it wasn't worth the hassle. I was granted shore leave on.



Monday afternoon, and duly wandered down to the dockyard gate, where I was searched, and my cheap Instamatic camera confiscated until I returned. Once out, I wandered around for a while. Compared against the few Rand I had received in exchange for my £10, prices were high. Having discovered that, I bought a can of coke, and wandered around some more in the baking heat. I was making my way up to the cable-car which ran up to the summit of the mountain, when a Policeman stopped me, saying something in his own language, "Sorry." I said. "I didn't understand that."

"Angliz?"

"English, yes."

"Yo not go pass this place! Is dang-eroos. Distric' six, you know?"

I vaguely remembered something about it in the lecture.

"Oh. I want to go to the cable-car."

"Only in car or bus, not to walk."

"Ok, I'll go back, then."

"Ok. No-go pass here signs." He pointed at a sign I had missed and as he turned, I saw that as well as the usual metal baseball bat, handcuffs, radio and revolver, he had an enormous cleaver in a sheath hanging from his belt. As I turned back, I saw another couple of the lads that I vaguely knew, coming up, so I warned them off. We decided to flag down a taxi and share the fare up to the car. It cost us a Rand each to go about a mile. The cable-car was another two Rand for the round trip up the Rock. The café at the top sold coffee at a Rand a cup, or cans of coke at a Rand and a half.

We wandered around for a while, looking at the view of Cape Town, and the harbour, in between layers of cloud, as the breeze coming off the ocean cooled and condensed the moisture it carried into the mist that was referred to as the Tablecloth. The other two soon tired of that and went back down to find a bar that wouldn't rip them off. I stayed on top a while longer, enjoying the cool breeze, and trying to decide which of the buildings below was the Groot Sheur hospital, where Dr Christian Barnard had performed his pioneering heart transplant surgery. Hermes, in the dockyard, looked like a pale grey postage stamp from up here. As I watched, an RFA Oiler moving slowly into the harbour a Warden began moving around between the scattered groups on the mountain top, warning that the last cable-car would be in thirty minutes, so I duly made my way back down in time to catch a bus back to the town centre, which cost me 25 cents.

As we came down through District Six, the door was locked shut. Ahead, a group of people were blocking the street, watching two teenagers hacking at each other with Machetes. The bus driver drove straight at the crowd, going



through, and possibly over, some of them. A woman in the front of the bus screamed and covered her eyes. When we stopped, in the town centre, he reported it to the first Policeman he saw. Apparently, it was standard practice, in case the crowd decided to turn on the bus and its occupants. (Also, that was standard practice!). A White Policeman boarded the bus, and allowed us to leave, one at a time, after taking our statements. My turn came, and I said my piece, which wasn't much, "English sailor?" He asked.

"Yes."

"Not all Africa is like that. Just the Negro districts. It is best not to go there!" So much for the tourist industry, when the famed sights are not accessible without an armed guard and an armoured car!

Back at the dockyard, I reclaimed my camera, and went back to Hermes. I didn't bother going ashore again. The main topic of conversation on board, for days, was the segregation, and its severity of application, all of which was alien to us.

We sailed again, the following Monday, going straight into a RAS with the RFA. A few days later, we fuelled again, and then went to war with the South Atlantic Fleet. We didn't do very much flying, because there were no friendly land based airfields within range of our aircraft, should an emergency arise.

Eric

**BREAKING NEWS
GB80CO ACTIVE!**

GB80CO IS LIVE!

Celebrating 80 years in the life of HMS Collingwood the RNARS has inaugurated a special event radio station at HMS Collingwood.

The station will be active until the 31st of December on, but limited to the RNARS Tuesday HQ Net frequencies. Listen out on 3.740MHz, 7.068MHz Voice or use 3.528MHz, 7.028MHz CW.

This event station organised by Joe Kirk, G3ZDF went live at 16:00 local time on the 10th of December. The RNARS wishes all those who work and live in the establishment a very merry Christmas and a Happy new year for 2020





BRANCH NEWS - In Brief



HMS Trent to enter Portsmouth



The latest River Class patrol ship designated P-224 will soon appear in Portsmouth after her acceptance and shake-down since leaving her builders on the river Clyde

OPVs at a glance

Spey. They will all be in service by 2021. Designed for a crew of 60, they displace around 2,000 tonnes, have a maximum speed of around 24 knots, and can go 5,500 nautical miles without having to resupply. They are equipped with 30mm cannon and a flight deck capable of accommodating a Merlin helicopter.

The five new ships have been as named HMS Forth, HMS Medway, HMS Trent, HMS Tamar and HMS

mod.uk

New £18M contract to support Royal Navy radar systems



Defence Minister Harriett Baldwin announced the contract, placed by the Maritime and Air Weapon Systems (MAWS) Project Team within DE&S Weapons, when she visited BAE Systems' Great Baddow site in Chelmsford. The contract will ensure the continued availability of the Royal Navy's battle-winning Long Range Radar

(LRR) equipment on the UK's six Type 45 destroyers including maintenance and repairs.

Savetheroyalnavy.org



BRANCH NEWS - In Brief

Royal Marines boarding experts take training to the next level



Royal Marine experts in pirate/drug smuggler take-downs took their training to the next level aboard the nation's flagship.

The marines of Juliet Coy, 42 Commando, are the UK's specialists in board and search operations –they are behind a string of multi-million-pound drugs busts in the Middle East over the past 12 months. The unit, based at Bickleigh just outside Plymouth, is undergoing a transformation as part of the reshaping of the Royal Marines under the Future Commando Force programme, with 42 in general focussing on seagoing operations – and each of its four companies assigned bespoke roles:

- Juliet – board and search
- Kilo – assaults
- Lima – 'Joint Personnel Recovery', rescuing downed aircrew/British military personnel/civilians in a hostile environment
- Mike – additional force protection for deployed Royal Navy/Royal Fleet Auxiliary ships

UK to purchase additional SEAL Delivery Vehicles for Astute submarines



Three MK 11 Shallow Water Combat Submersibles (SWCS) are to be purchased for an estimated cost of \$90 million.

This is a manned submersible, a type of swimmer delivery system vehicle, and is currently used by the US to deliver USN SEALs and their equipment for special operations missions. It is also operated by the Special Boat Service, which operates 3 SDV's which the new systems are replacing. They're used primarily for covert or clandestine missions to denied access areas (either held by hostile forces or where military activity would draw notice and objection).



BRANCH NEWS - In Brief

It is generally deployed from the dry deck shelter on a specially modified submarine, although it can also be launched from surface ships. The system fits inside the CHALFONT dry deck shelter on the Astute class submarines (pictured above), used to deploy special forces.

Ukdj George Allison



BUDDING Naval Trainee is the first to go solo in new training aircraft



Hopeful trainee F-35 Lightning naval pilot Lieutenant Lewis Phillips became the first trainee fast jet flier to 'go solo' in the UK's new trainer just one month after it entered service. He took to Anglesey skies in the Texan T1 on his own – one important milestone on the road to sitting in the cockpit of an F-35 waiting to launch from HMS Queen Elizabeth. Lewis had already learned

the fundamentals of flight with the Fleet Air Arm at Barkston Heath airfield in Lincolnshire. All pilots, be they fast jet or helicopter, plus observers must pass elementary training. From there trainees disperse: Wildcat and Merlin pilots to RAF Shawbury, observers to 750 Naval Air Squadron and potential fast jet fliers to RAF Valley in Anglesey, since October under 72 Squadron equipped with the Texan. The Texan T1 has replaced the (very similar looking) Tucano which has served fast jet pilots well for the past 30 years.

fleetairarmaa.org, Nov 2019





IN THE NEWS

RNARS VICE-PRESIDENT IN THE NEWS!

OUR VERY OWN Mick Puttick G3LIK has been the subject of an article in the Portsmouth local paper - THE NEWS.



Covering this little scamp's early days as a Junior in HMS Ganges and latterly onboard HMS Duke of York; right the way through to his eventual retirement as a mature communicator on his last ship, HMS Scylla in 1975 -spanning a career of 45 years!

THE NEWS informs us that Mick worked in the Careers Office in the centre of London in Holborn for a time before moving off to Ilford. Later, following a job change he found himself working on South Railway Jetty in the Dockyard, showing around Naval Cadets.



Mick at home in his shack

Mick finally retired at the very tender age of 60 years

NICE ONE MICK!

© THE NEWS where applicable



IN THE NEWS

DRM tests from Hungary on 26 MHz for one year



The Budapest University of Technology started a year long **DRM** (Digital Radio Mondiale) test on the 1st of June 2019 and it will run until the end of May 2020. The transmitted content is a 24-hour test loop programme, compiled by the media partner of the project, Radio Maria. What is unusual about this test is that it is being carried out on 26.060 MHz with 100 watts into a 5/8 vertical. Reception reports

from the Netherlands have already been received. More info:

<http://www.southgatearc.org/news>

Ofcom: Spectrum Assurance analysis of BT Openreach VDSL

BT Openreach VDSL has caused pollution of the RF spectrum ruining many people's enjoyment of radio. A new report by Ofcom has just been released. For the 2017 report Ofcom Spectrum Engineering Officers carried out surveys at three locations, where RSGB members had experienced problems that are associated with VDSL deployment and where BT Openreach had previously visited. Ofcom has now issued an update following further technical surveys focusing on the effects of electromagnetic emissions from Openreach cables carrying VDSL (Very high bit rate Digital Subscriber Line) services. This survey was commissioned to assess the efficacy of corrective measures achieved by Openreach intended to ameliorate any impact on radio reception.

The RSGB nominated six affected stations operated by their members for the purpose of this survey. Representatives from their EMC Committee acted as observers.

southgatearc.org

In the summary on this subject given on OfCom's webpage, BT Openreach has issued a statement declaring that the problems experienced by radio amateurs is not caused by their (BT Openreach) equipment, but by the home wiring of their customers which (of course) is out of their (BT Openreach) control.

Ed



IN THE NEWS

Improving the Type 45 Destroyer



That the T45 is at the forefront of modern AAW destroyer design is without question. How to maintain its superiority in the face of growing and far more complex threats is now a question which should be addressed by the RN. Particular attention must be given to the number of missiles carried. One possible and

innovative solution comes in the form of the BAES Adaptive Deck Launcher (ADL) which has four Mk 41 cells positioned on a ship's deck in much the same way as any other canister system. The great of the ADL is that it can launch all current RN and USN missiles via its Mk 41 cells. Quad packed into two ADL's Mk 41 cells the T45 could carry thirty-two 'Sea Ceptors' without the need to reduce the complement of Aster missiles. The greatest benefit brought by the ADL is that unlike VSLs it can be replenished at sea. Given this development and other rapidly growing technologies, the future possibilities for the expansion of the T45's armament and sensor systems are considerable hence there remains the probability that the type will indeed be among the world's best air defence destroyers for some time to come.

Ukdj - Kelvin Curnow, Dec 4

NATO AWACS aircraft support London leaders meeting



AWACS aircraft from NATO's Airborne Early Warning & Control Force conducted air surveillance missions in the airspace of the United Kingdom, to provide situational awareness. Two aircraft took off from both home bases of NATO's Airborne Early Warning and Control Force: from Geilenkirchen, Germany and from RAF

Waddington, United Kingdom. AWACS aircraft can constantly monitor the airspace within a radius of several hundred kilometres and can exchange information in near real-time via digital data links, providing a valuable contribution to the security of the event. According to a release:

"Our AWACS aircraft are high value assets for the Alliance, contributing vitally to our vigilance and the ability to detect airborne threats and sometimes also, as in this case, to the security of our Leaders Meetings."

Ukdj - George Allison Dec 5



IN THE NEWS

Portsmouth Naval Base – ready to support two aircraft carriers

This week HMS Queen Elizabeth returned home from the Westlant 19 deployment to the US. She joined her sister HMS Prince of Wales alongside in Portsmouth together for the first time. Here we look at the new facilities that will support both aircraft carriers.



The arrival QEC carriers has driven investment of around £100 Million at Portsmouth Naval Base to create the *Queen Elizabeth Class Centre of Specialisation*. This is the single most complex infrastructure project to support the new vessels and was managed by the Defence Infrastructure Organisation (DIO) in partnership with the main contractor, BAE Systems. More than 3 times the size of the Invincible class CVS they replace, the QEC make considerable demands on the naval base when alongside. Modern facilities were needed to supply electricity, water, waste disposal and sewage services as well as meet modern security, personnel accommodation and health & safety standards.

Savetheroyalnavy.org Dec 3

Back page: **HMS Dragon in lights**

We could not resist publishing this Royal Navy photo of HMS Dragon, decked out in lights off the east coast of the US. It was part of a fun day to mark The Festival of Lights, part of the Diwali religious tradition. The crew were also treated to an Indian meal.



Dragon is currently working with HMS Queen Elizabeth which is continuing fast-jet training operations involving the new F-35 Lightnings.

The Military Times, Oct 19

Could they have been planning ahead for Christmas?



IN THE NEWS

US Navy and Air Force collaborating on new Manhattan Project



The Northrop Grumman
E-2D Hawkeye

The U.S. Navy and Air Force are teaming up to rapidly develop a battle network that can link together Air Force and Navy assets. Chief of Naval Operations Adm. Michael Gilday said the U.S. Navy intends to deploy a distributed network of sensors and weapons in an effort to fortify defences against Chinese threats.

Worlddefencenews.com Dec 9 19

Airbus Supports Grand Prix Abu Dhabi with latest radio technologies

Airbus supplied their range of Tetra radios, including the TH9, Th1n and the THR880i; as well as their RCS- Radio Communication Systems for the race site.



Airbus, is a leading provider of secure communications and collaboration solutions, was chosen as the official secure communications technology provider for the Abu Dhabi Grand Prix. The Formula 1 race security teams and coordinators, used the company's Tetra network solutions to safeguard the venue and secure smooth performance during the event from the 28th of November to the 1st of December. *"The Formula 1 Grand Prix in Abu Dhabi is a major event, drawing in people from different parts of the region, and the world. We are proud to collaborate with the concerned*

security agencies and our priority is to ensure smooth, effective, and secure communications for all the security personnel during such events. Such occasions are central to our efforts to provide secure mission critical communications in the UAE, in order to keep safe, visitors and participants alike." Commented Andrew Forbes, Head of Middle East and North Africa region for Secure Land Communications at Airbus.

The Critical Communications Review



IN THE NEWS

Russian Navy to receive 480 weapon systems in 2019



Russian President Vladimir Putin held a series of meetings on 2-5 December on the development of the navy (VMF). "Under this year's Gosoboronzakaz [State Defence Order], the navy is set to receive more than 480 weapon systems, including two submarines, 23 surface combatants and auxiliary vessels, three aircraft, four mobile coastal defence missile systems, and more than 400 missiles and torpedoes of various types," said Putin.

He also outlined the VMF's priorities, including maintaining current development through co-operation between executive, industrial, military, and scientific bodies; improving combat capabilities through the delivery of destroyers, landing helicopter docks, and Tsirkon-armed frigates and submarines; and closer co-operation between defence and civil industrial branches and manufacturing commercial products.

Nikolai Novichkov, Moscow - Jane's Defence Weekly, 9 Dec

German Sea Lion Radio Equipment



Rohde & Schwarz' airborne radios selected to equip future German Navy Sea Lion helicopters. Eighteen NH90 will replace the Sea King Mk41 starting this year.

The NH90 Sea LION helicopter recently completed a series of demonstrations for the German Navy, covering search and rescue and navy reconnaissance missions, and delivery of Special Forces equipment. The German Navy has 18 Airbus Helicopters NH90 Sea LION aircraft on order to replace the aging Sea KING Mk.41s, with first deliveries scheduled for the end of 2019. Rohde & Schwarz equips the rotorcraft with software defined airborne radios (SDR) of the SOVERON family including national cryptology. Each aircraft is fitted with three VHF/UHF transceivers R&S M3AR MR6000A plus spares.

Helis.com (NH90 NfH in Marineflieger)



THE AGM

From the Chair, David M0SL

Our 59th AGM was held on Saturday 12th October 2019 in the Warrant Officers and Senior Rates' Mess at 14.00, after a good lunch in the lounge and bar. Before then, we mustered in the shack at 10:00 for coffee and to introduce our newly decorated environment to our visiting members. Also, to talk about our recent additions and alterations to our equipment bays. On show were our DMR repeater and our developing satellite communications system. Ian, M0LIH gave a working demonstration of the satellite system, making a few contacts in the process, others gave brief introductions to our new kit -the IC7300 and the YT995A rigs. After the call for 'up spirits,' we made our way slowly to the venue for lunch and our AGM afterwards.

As an observation, I believe the Society is in a better place to become more involved in activities both in the HQ Shack and externally with field events such as the Annual Field Day, and so on. In the latter case it was very noticeable with the huge boost in enthusiasm and morale in concert with the call of '*...let's do this again!*' Nice to see and hear -yes let's do this again and maybe some more. Bearing in mind that next year will be our own sixtieth anniversary!

Over previous months we have seen a few key people stand down from their posts for a variety of reasons, whether it be failing health, a desire to have a break from long time service, or family circumstances, the result is that we have had a number of vacancies to fill. Significantly, Joe Kirk stood down from the post of Secretary of the Society, but he is picking up the reins for Membership Secretary because Marc Litchman has had to withdraw due to illness. To those two individuals I say we all owe you both a deeply felt thank you for the hours of work that you have performed behind the scenes for the Society. Recent changes to other posts have taken place as you will no doubt have noticed in recent months. For example, Doug Bowen, G0MIU has stood down from the Commodities Manager position, with Mike Moore M6POY taking over. At present we have a need for a Secretary of the Society, and if you feel that you might have an interest in this position, along with the time and the skills required for the job then have a chat with Joe Kirk.

As a tribute to our members it is gratifying to overhear remarks and to be quietly informed that they find the environment at the HQ shack warm and friendly, with a few who have said that they feel at home because of the inviting atmosphere. May I say that you fill the place with your own warmth and laughter and thank you for your help when things needed to be done. Thank you for your faithful attendance each week, and for your ideas -keep them coming! **David**



AGM PRESENTATIONS

The RNARS following members were awarded as shown below:

THE (G3WNJ) MERIT AWARD

Ian Hutchinson	M0LIH
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CERTIFICATE OF MERIT

Marc Litchman	G0TOC
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Martin Longbottom	M0EHL
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Steve Legg	M6WVV
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Joe Kirk	G3ZDF
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VACANCY

Minutes Secretary

The stepping down of our General Secretary has left a vacancy that must be filled. As the job title implies, it comprises a small set of tasks centred around the taking of minutes at our Committee meetings and at the AGM. The post-holder will be responsible for:

1. Posting advance notices and agendas for and when Committee meetings and AGMs take place
2. Taking the minutes on these occasions and sending copies to Committee members.
3. Publishing minutes approved by the committee.
4. This is a Committee position.

It is essential that the post-bearer has good listening and writing skills.



MICROELECTRONICS IN SPACE

Jean-Michel Lege

Summary:

With approximately 1,500 active satellites orbiting Earth, most of them carry highly sophisticated microelectronics that support communication and enable research that was scarcely imaginable a generation ago. Telecom satellites keep people around the world continuously in touch and informed, research satellites monitor global weather, while other missions provide scientists with information on the earth's magnetic field and geomagnetic storms.



Europe's Copernicus environmental programme, which began 20 years ago, manages seven satellites delivering terabytes of data every day being the world's biggest provider of free Earth observation data,

Leti has been designing components and measurement tools, for many years, which have underpinned several European space programmes and provided both emerging and mature technologies for space missions:

SWARM, launched in 2013 this uses a next-generation absolute scalar magnetometer. A European Space Agency (ESA) mission, which put three satellites in different polar orbits to take high-precision and high-resolution measurements of the Earth's magnetic field.

The **Cassini-Huygens Mission**, was a collaboration between NASA, ESA and the Italian Space Agency to send a probe to study the planet Saturn and its system, including its rings and natural satellites.

Herschel Space Observatory, launched in 2009, saw the development of bolometers (detectors used for studying EM radiation) for the PACS installed on the Herschel satellite.

CHAMP Mission, Leti developed a nuclear magnetic resonance magnetometer for this German mission to measure Earth's magnetic field.

Oersted Project, launched in 1999, Leti developed the nuclear magnetic resonance magnetometer. Originally planned to last 14 months, the mission is still transmitting data on the magnetic field to scientists.

Newelectronics.co.uk



BOOKS CORNER

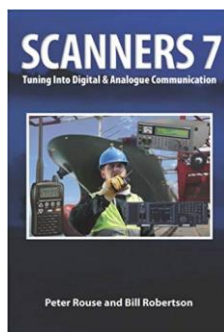


SIGINT – The secret history of signal intelligence

By Peter Matthews

(The History Press)

SIGNALS INTELLIGENCE, or SIGINT, is the interception and evaluation of coded enemy messages. From Enigma to Ultra, Purple to Lorenz, Room 40 to Bletchley, SIGINT has been instrumental in both victory and defeat during the First and Second World War.



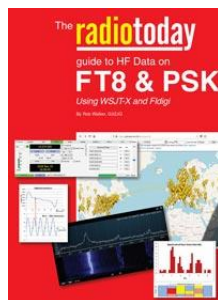
SCANNERS 7

Tuning Into Digital & Analogue Communication

By Peter Rouse & Bill Robertson

(Special Interest Model Books)

The 'Scanners' series of books have been consistent bestsellers, being the UK's leading guides to receiving equipment employed by enthusiasts to monitor the short wave (HF) and VHF/UHF wavebands used by airfields, maritime and rescue services, and analogue and digital two-way private mobile radio systems.



The radiotoday guide to HF data on FT8 & PSK

By Rob Walker, G3ZJQ

(Three Dogs Publishing)

Many radio amateurs who are finding the bands quiet are now turning to HF data on FT8 and PSK and finding lots of activity when using the weak signal modes offered by WSJT-X. There has been an explosion in the popularity of these modes and this new book offers the very latest advice on how to set up your station and operate.

Reduced price for RSGB members.



DETERRENCE THEORY

Deterrence theory and the Royal Navy

If there is one ubiquitous military strategy, it's deterrence. Deterrence is usually spoken of in the context of nuclear weapons. It stirs up old Cold War images of the Cuban Missile Crisis and mutually assured destruction.

Deterrence theory, however, is a well-established phenomenon within international relations theory that applies to all military action, not only nuclear weapons. For example, was the current situation in the Arabian Gulf caused by a failure to deter?

The *'fleet-in-being'* is the cornerstone of naval deterrence. Many are aware of the concept but misuse or misunderstand its meaning and the catch-all phrase *'maintaining the British deterrent'* is used freely. This short-sightedness needs to be addressed for any strategy based on deterrence to work. So, what is this theory, and how does it apply to the Royal Navy?



Deterrence theory first came to prominence in the mid to late 20th century, thanks to academics like Kenneth Waltz and John Mearsheimer. The development of Deterrence theory was driven in part by the concern with nuclear weapons and was the focus of almost all the studies on deterrence. Conventional deterrence works on the same rationale but in some ways is more complex, reliant on the assessment of relative strengths of non-nuclear capabilities. Both sides rest on three main ideas for them to work; rationality, anarchy and self-help. Rationality simply means, for the most part, countries act rationally. An informed country looks at the pros and cons of a situation and chooses whichever one they think brings the most benefit to them. Anarchy has less to do with the lawless hooliganism we typically think of and instead means there is no 'global-policeman' to punish a country like there is for citizens within a country. Finally, self-help means that if a country wants something done, they usually must do it themselves instead of relying on the generosity of other nations.

With these three ideas in mind, the goal of deterrence becomes understandable. As Mearsheimer puts it *"conventional deterrence is about persuading an adversary not to initiate a war because the expected costs and risks outweigh*

Deterrence theory is quite simple to understand, but not knowing it in-depth can often lead to many misconceptions. Where then, do some of the misconceptions of deterrence theory lie? Are these misconceptions a failure of deterrence theory itself or just in the way we use it? Often, misconceptions come from three ideas that are neglected; 1) actors' goals and intentions must be known, 2) actors' capabilities must be known, and 3) 'the unthinkable' is always possible. Analysing these will help not only in understanding deterrence but how to craft both a realistic and reliable deterrence strategy for the Royal Navy.

RNARS HQ CHRISTMAS LUNCH

came along.

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RNARS Nets

Mick Puttick G3LIK

Contact: mick_g3lik@ntlworld.com – 02392 255880 **for all changes**

UK	UTC	Frequency	Net	Control					
Daily	0001-0400	145.725	Midnight Nutters	M0WRU					
Sun	0800	3.667	SSB net (news: 0830)	G3LIK					
	0930	3.715	IOM Net	GD3LSF GD0SFI					
	1030	7.068/3.748	RNARS Northern SSB net	M6LWO					
	1100	7020	RNARS CW net	G4TNI					
Mon-Sat	1030-1330	3.748/7.068	The Bubbly Rats Net	GX3WTP/G0GBI/ G0OKA/M0ZAE					
Mon	1400	3.575	QRS CW Net	G0VCV					
	1900	3.748 (Pri) 7.088 (sec)	N.W. SSB Net (News: 2000)	G0GBI					
	1930	145.400 (S16)	RNARS Cornish Net (Falmouth)	G0GRY					
Tues	1600	7.068/3.740	Tuesday HQ Net	GB3RN					
	1900	7.028/3.528	RNARS CW Net	G3RFH					
Wed	1400	3.748	Stand Easy Net	M6LWO					
	1700	TG 23527	Wednesday DMR Net	M0LIH					
	1900	3.748	Wednesday Net	G0VIX					
Thurs	1900	3.542	Scottish CW Net	???					
new time	2100 GMT	1.835	RNARS Top Band CW Net	G0CHV/G4KJD					
	2000	145.575 (S23)	RNARS Scottish 2m Net	GM0KTJ/P					
Fri	1600	10.118	RNARS 30m CW Net	SM3AHM					
Sat	0800	3.748	G0DLH Memorial Net	G0VIX					
DX	GMT	Frequency	Net	Control					
Sun	0800	7.015/30555	MARAC CW	PA3EBA/PI4MRC					
	1430	14.329 ±QRM	RNARS DX	W1USN/GD0SFI/ GM7ESM					
	1800	Echolink	Echolink	VE3OZN / K8BBT					
	1900	14.33	N American	WA1HMW					
Mon	0930	3.615	VK SSB	VK1RAN/VK2RAN					
Wed	0118-0618	7.02	VK CW	VK4RAN					
	0148-0648	10.118	VK CW	VK4RAN					
	0800	3.62	ZL SSB	ZL1BSA					
	0930	7.02	VK SSB	VK5RAN					
	0945	7.09	VK SSB	VK1RAN/VK2RAN					
Thur	1430	14.329 ±QRM	RNARS DX	W1USN/GD0SFI/ GM7ESM					
Sat	0400	7.09	VK SSB	VK2CCV					
	1330	7.02	VK CW	VK2CCV					
	1400	7.09	VK SSB	VK2CCV					
	1430	14.329 ±QRM	RNARS DX	W1USN/GD0SFI/ GM7ESM					
RNARS SCENE OF ACTIVITY									
FM	145.40								
CW	1.824	3.52	7.02	10.118	14.052	18.087	21.052	24.897	28.052
SSB	1.965	3.66	3.74	7.088	14.294	14.335	18.15	21.36	28.94



COMMODITIES PAGES

Mike Moore M6POY

Hi,

I am Mike Moore, our new Commodities Manager. We have increased the number of items available on the Commodities Page at the back of this newsletter and also on the RNARS website. Although we have had to increase the prices and postage, we do our very best to supply quality items. Please contact me via the email address and I will reply to you as soon as possible. If you have any questions or suggestions, please let me know and I will put them forward to the RNARS Committee for consideration.

Merry Christmas and a Happy New Year!

73 Mike



Cuff Links

Key Rings

Badges

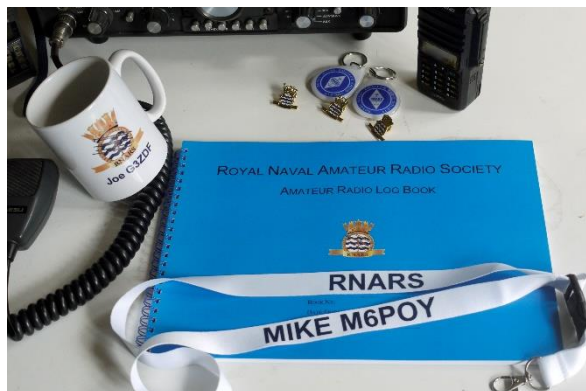
Baseball Caps

Lanyards

Mugs



COMMODITIES PAGES



Logbooks

Polo Shirts

Body Warmers

[Order Form is at the back](#)





COMMODITIES PAGES



And fleeces



Great Caps!

Meet our new Commodities Manager, Mike Moore M6POY

We didn't tell him about the super-glue on the mic...



**RNARS COMMODITIES**

Mike Moore M6POY

Item	Price
Body Warmer , embroidered with the new RNARS logo, your name and callsign. Colour: Black only Sizes: S to XXXL	£30-00 P&P £4-00
Polo shirt , embroidered with new RNARS logo, your name and callsign. Colour: Navy only Sizes: S to XXXL	£16-00 P&P £4-00
Sweatshirt , embroidered with the new RNARS logo, your name and callsign. Colour: Navy only Sizes: S to XXXL	£16.00 P&P £4-00
Fleece jacket , embroidered with new RNARS logo, your name and callsign Colour: Navy only Sizes: S to XXXL	£21-00 P&P £4-00
Gold blazer badge with new RNARS logo	£10-00 P&P £2-00
Lapel badge with new RNARS logo	£2-00 P&P £1-00
RNARS Log Book	£4-00 P&P £3-00
Cap with RNARS (new) logo	£10.00 P&P £4.00

Size in inches:

Small 36-38

Medium 38-40

Large 40-42

Extra Large 42-44

2 Extra Large 44-46

3 Extra Large 46-48

4 Extra Large 48-50

A copy of the Order Form can be downloaded from the Commodities page
<http://www.rnars.org.uk/Commodities.html>



**ORDER FORM**

RNARS| Commodities

PLEASE write clearly and use block CAPITALS**Photocopies of this form are accepted**

Call-sign | RNARS No: _____

Name: _____

Address: _____

Post Code: _____

Telephone: _____

Email: _____

Advisable to check before ordering as to availability in your size

Item Description	Size	Colour	Qty	Price	P&P	Sub Total
Total Payment £						
Enclose cheque payable to: <i>Royal Naval Amateur Radio Society</i>						

Overseas members, please add £5 to cover additional postage.

Send orders to:
Mike Moore M6POY
63 Homewater House, Hulbert Road
Waterlooville, Hants PO77JY
E-mail: Charlie24374@yahoo.com

Please allow fourteen days for delivery and while these prices are correct when going to press, prices do vary and are subject to change



RAFARS & RSARS Nets

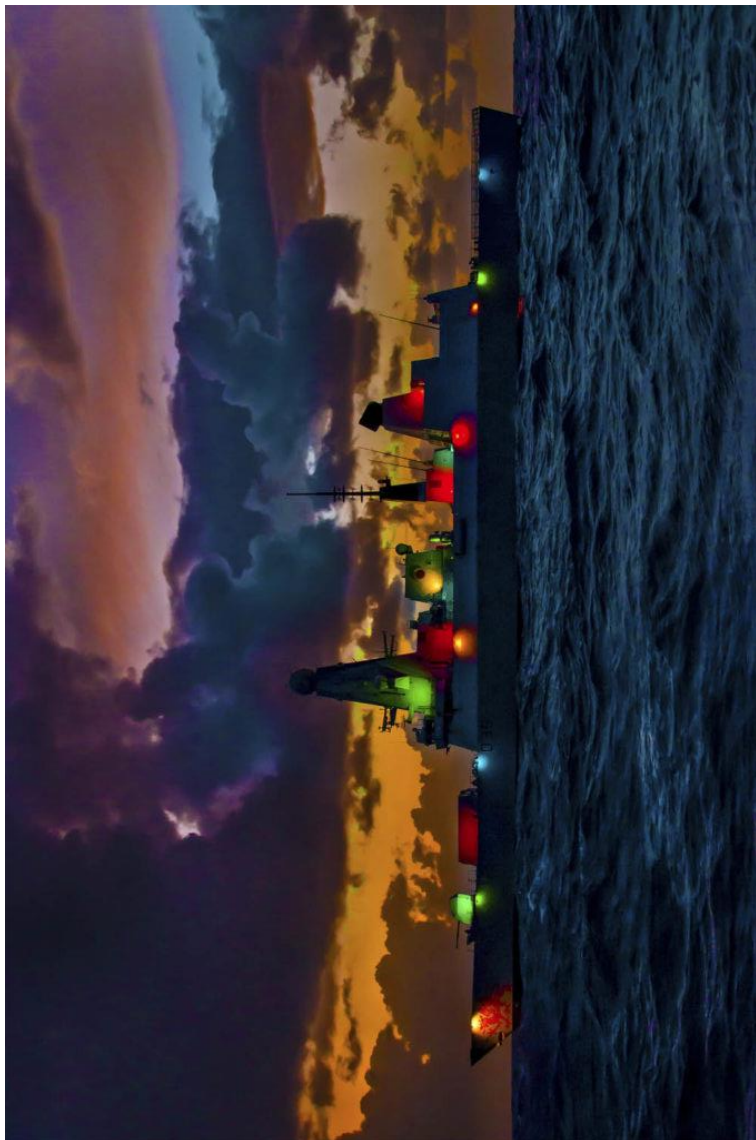
RAFARS	Time	Freq	Control	
Daily	1100 A	3.71	GØSYF	GI4SAM
	1830 A	3.71	G3HWQ	MØRGI
Monday	1900 A	3.7	G3PSG	GØBIA
Tuesday	0730 A 1400 A 1900 A	14.27 7.015 3.567	G4IYC	
Wednesday	1500 Z 1530 Z	14.29 21.29	?	
Thursday	1830 Z	14.17	ZC4RAF	
Friday	0730 A	14.055	CW Net	
Sunday	0900 Z	5.403	?	
1st Monday of the month	1000 A	3.71	?	
RSARS Nets	Time	Freq	Control	
Monday - Friday	1000 A	7.17	GW3KJW	M3VRB
Monday	1830 A	3.585	GM3KHH (RTTY)	
Tuesday	1400 A	7.17	MØOIC	
	1600 Z	14.18	G4BXQ	
Wednesday	0600 Z	14.143	Various	
	1030 Z	3.615	?	
	1830 A	3.565	GM3KHH	
	2030 A	1.946	2EØBDS	
Thursday	1400 A	7.17	GØRGB	
	1800 A	3.743	G6NHV	
Friday	1830 A	3.583	GM3KHH (PSK31)	
	1830 A	3.565	High speed CW	
	2000 Z	14.055	CW	
Saturday	0600 Z	14.143	SSB	
Sunday	1000 A	3.565	G3JRY (Slow speed CW)	
	1100 A	7.17	GW4XKE	
	1100 A	3.745	GM4FOZ	
Joint Service Net	Time	Freq	Control	
Sunday	0900 A	5.4035	G3RAF	
Tuesday	1900 A	5.4035	G3RAF	
Daily 24/7	DMR-TG23527	DMR TG23527		

CQ CQ CQ... GB3RN... QSO...



RNARS: UK Military & Veterans net on DMR TG23527 Wednesdays at 17:00 local

HMS DRAGON IN LIGHTS 2019



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