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TheRNARS



NEWSLETTER

Royal Naval Amateur Radio Society



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Front Cover: Our latest Boat heads for the open sea

For RNARS contact Information: see the back cover for details:

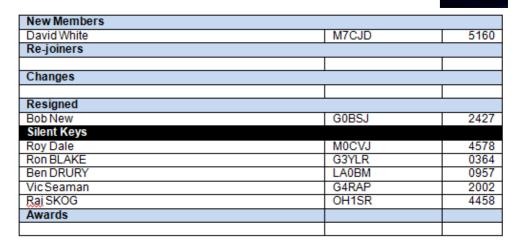
RNARS Officers & Committee

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MEMBERSHIP MATTERS

Joe Kirk G3ZDF

Welcome! To our new members



Members whose Newsletter delivery has bounced and who do not have or have not responded to email or telephone contact

. coponaca con an or to opinone conta		
Len Franklin	G0JKV	0306
BIII STEPHENSON	G3AQB	0486
RegRUBINS	G4HAB	0790
Hans Van Den Berg	PA0HIS	1242
lan Coombe	VA3ICC	1673
Roland Freshwater	G6CNK	1984
Bill BAILEY	G2CHI	2531
Dennis EVANS	GW4VEK	2550
Sid DUNN	GOKHN	2884
Ray EVANS	G0FQT	3139
Paddy O'Keefe	EI6HD	3598

Type Of Membership	Current	Free	Life	Suspended	Under25	Total
Affiliate	13	4				
Associate	121	1	9	2		
Corporate	311	3	52	12	3	
Family	5					
Honorary		2				
TOTALS	450	10	61	14	3	538

MEMBERSHIP MATTERS - SUBSCRIPTIONS

Joe Kirk G3ZDF

PLEASE CHECK THAT YOUR SUBS ARRIVE ON TIME ON OR BEFORE THE FIRST OF APRIL EVERY YEAR.

Subscriptions can be made via **PayPal** through the RNARS website. Click on the *How to Join* page: http://www.rnars.org.uk/Renew.html

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

Newsletter by e-mail: If you want to receive email Newsletters contact the Membership Secretary for details making sure you include your email address.

The society banks with Lloyds 272 London Road, Waterlooville, PO7 7HN. Sort code: 30 99 20 - Account number: 00022643 -

IBAN: GB92 LOYD 3099 2000 0226 43 & BIC: LOYDGB21271

GDPR/A: 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:

If you are 25 years of age or under then you are exempt from paying subs.

RNARS-Newsletter - THE Royal Naval Amateur Radio Society's MEMBERS JOURNAL

Editorial: David Firth, MOSLL Distribution: Joe Kirk, G3ZDF

Proof readers: Joe Kirk, G3ZDF, Mike Moore, M6POY Envelope Stuffers: HQ Shack members / Joe Kirk

Publishing dates and deadlines

Spring: 22nd March, Summer: 22nd June, Autumn: 22nd September, Winter: 22nd of December. Our deadline is usually 3 weeks beforehand. Contributions for the Newsletter are preferred in A5 page sized Word format set with narrow margins all round and with header and footer, using Arial 10pt text, and is a colour document printed on white matt paper inside a gloss cover, converted to a PDF document for printing. Please ensure that your images are sharply focussed. Please send your contributions to the RNARS Newsletter editor via email to M0SLL@mail.com. Personal items sent by post cannot be returned unless accompanied by a SAE.

The RNARS Newsletter is published by the Royal Naval Amateur Radio Society as its official journal to all members of the Society. The expression of views within this newsletter do not necessarily represent the views of the RNARS. The RNARS is affiliated to the RSGB.

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CHAIRMAN'S CHAT





oxo

David Firth Chair-RNARS@mail.com

Welcome back to one and all as this first edition of the year thumps down on your front door mats, or whooshes into your electronic mailbox with the endless power of the mighty electron.

The Turkey/Syria earthquake is having an effect on radio amateurs world-wide who have been asked to steer well clear of emergency frequencies in their bands. Sometimes, it's easy to forget that we share the bands with other users.

There's an article in this edition about RF earthing arrangements for HF antennas. Several years ago I bought a book and on occasion I have dipped into its pages for reference to ideas and the odd background theory. If like me, you are chary of connecting wires to your plumbing or other handy looking metal 'things' around the house, then this is for you. I am looking at the prospect of fitting out my shack in the garden with perhaps a little dalliance with HF from an upper room in the house. Well aware as I am that from upstairs rooms most RF earths adopt the characteristics of aerials with sometimes alarming results; I might change my mind!

2023 brings with it a lot of activity for us because it is a rather special year. Not only do we face the annual event of the HMS Collingwood Summer Fete and our open day to the public, but we also have to think about our 30 years of residency at HMS Collingwood - something worth celebrating! We don't have much time and we have already had one Committee meeting to look at some early ideas about what we should do. All ideas and suggestions will be looked at, so please, if you have something that you think might be worth a try why not give it a whirl and let us know, but please be quick-ish.

Vacancies. Picking up on one item at the AGM, Joe Kirk is standing down from the Committee, and as a result we have a number of vacancies. Not all are on the Committee itself, but others on the management team as well. If you have some spare time please think about what you may be able to do to keep things running.

David

WHAT'S GOING ON...



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VACANCIES COMING UP - THINGS TO BE DONE

Joe Kirk gave us advance notice of his intention not to stand for re-election to the Committee at this year's AGM next October. Joe has worked continuously for 15 years wearing several hats and so we will be looking for volunteers to take on the work that he has been doing:- Vacancies shown in GREEN INK with areas of responsibility given underneath:

Committee:

- Membership Secretary
 Secretarial duties relating to membership matters and to membership database upkeep, etc.
 Almoner
 Call List
- Assistant Secretary (NEW)

Non-Committee:

- Website Manager
- Newsletter Distribution Manager
- Establishment Point of Contact / Liaison

There will be an appropriate handover in each role.

This will be a busy year for the Society, so please, if you have some spare time and can help out you can volunteer.

WHAT'S GOING ON...







As some of our members may appreciate this year is the 30th anniversary of our move to HMS Collingwood on the closure of HMS Mercury in 1993. A small 'sub-committee' has met in the last few days to begin discussions on the planning of a special event to mark the occasion. Should it be a 'Big Event' or a small one, who will be on the guest list and where shall we find a suitable venue, and when will this take place? And so on.

In the mean time this is really a **HEADS UP** for everyone to be ready for future notices regarding the celebration of this unique relationship with HMS Collingwood who have been our hosts for so many years. Among the suggestions is the striking of a commemorative coin (challenge coin) to mark the occasion, as well as, commemorative commodities and memorabilia. While this is being looked into we would like all our members to help us by letting us know if they want to attend. There will be a survey form winging its way to members which will ask whether or not they wish to come, or maybe stay at home and watch via ZOOM conferencing program facilities. We will be considering access to HMS Collingwood, catering, and crucially, how many people will be coming, so please be on the lookout for a questionnaire which will be your opportunity to let us know what number of members we can expect to turn up on the day.

In the meantime, if any of our long-serving members were in HMS Collingwood on the day we began our occupancy, and have photos and memories of our beginnings in building 512b, please share your memories and memorabilia of those times with us. Bearing in mind that the day for this event will be:



An abstract of our entry in the HMS Collingwood 80 year anniversary book is on the following page for interest...



abstract HMS COLLINGWOOD'S 80 YEAR BOOK

Promoting Amateur Radio In The Royal Navy Since 1963

The Royal Naval Amateur Radio Society - A Part of HMS Collingwood

Celebrating 80 years in the life of HMS Collingwood!

GB80CO IS LIVE!

volunteers coming and going, keeping the aerials nice and warm. The last call from "OSCAR CHARLIE OSCAR," went out at 17:00 on New Year's Eve and the event finally came to a close when the ether remained clear of audio except static. Feeling happy and accomplished the 'last watch' of the year shut up shop and headed home to celebrate the turn of the by holding a special event in the HO shack where we are based (bldg 512B). With special permission from OfCom we used the calision GBSOCO -the last two letters referring to the first two letters of name of Admiral Collingwood. We had asked for GB8OCO, but Ofcom didn't like the two middle numbers. It was a busy, but relaxed time with a fair number of During the month of December last year the RNARS began its own celebration of HMS Collingwood's 80th Anniversary year at home It wouldn't be far wrong to say that the perspective of the hobby is one of a solitary figure sitting in semi-darkness but radio and electronic theory. Our heritage stems from an era of design and build your own! There were no manufacturers, so if you wanted to listen in to what was going on between ships and the shoreline, or to Mr Marconi's twiddling dials and occasionally speaking furtively into a microphone in coded words. Well, there is an element of truth in this. but the reality is much more than that. Part of the hobby of amateur radio is not only learning operating procedures. radio services to Europe and America you had to start from scratch! That usually meant crystal sets with exotic circuitry, a pair of headphones and a very long wire aerial



equipment, sometimes borrowed from other members for feasibility festing the satellite up-link and down-link were established allowing two way voice and visual imagery to be relayed via the satellite. This was quite an achievement ransponder for experimental digital modulation schemes and DVB amateur television. Trials were started and ran the Field Gun Competition live into the RNARS radio shack! Combining all the experimentation and using modularised inear transponder intended for conventional analogue operations and an 8 MHz bandwidth throughout open day in June 2019 which also included a mini-system trial of an on the ground TV system that relayed and the system went live' during a podcast in July this year.









TO HIS MAJESTY THE KING

18th September 2022

May it please Your Majesty,

The members of the Royal Naval Amateur Radio Society are deeply saddened to learn of the death of Her Majesty The Queen. We offer our heartfelt condolences to Your Majesty and to the members of the royal family.

We have been inspired by her dedication to our nation and to your family, by her longstanding and distinguished record of public service. Our thoughts and prayers are with you at this difficult time.

I have the honour to remain your most faithful and obedient servant,

David Firth

Chairman of the Royal Naval Amateur Radio Society

5 Mowhay Gardens Hatherleigh Devon EX20 3FF

HIS MAJESTY THE KING WRITES





It was so very kind of you to send me such a wonderfully generous message following the death of my beloved mother. Your most thoughtful words are enormously comforting, and I cannot tell you how deeply they are appreciated at this time of immense sorrow.

Chanus R

CORONATION NEWS

Coronation of King Charles III and Queen Consort Camilla



Extra bank holiday approved to mark King's coronation

There will be an extra bank holiday across the UK on Monday 8th May.

On the same day, people are being invited to take part in local volunteering projects in their local communities as part of the *Big Help Out* initiative.

Buckingham Palace has announced various events for the weekend, which includes a concert and laser light show at Windsor Castle on the Sunday. Celebrations in 'Big Lunch' street parties are being encouraged for that day.



The official logo for the coronation has been launched and features a rose, a thistle, a daffodil and shamrock emblems from across the United Kingdom.



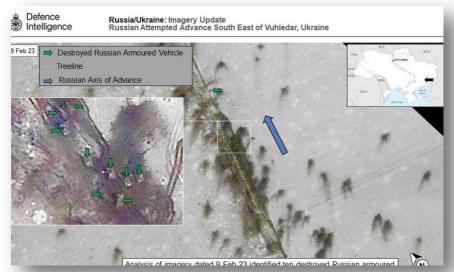
The King's royal cypher is shown on the left.

IN THE NEWS

80m and 40m embargo for Amateurs

Radio amateurs word-wide have been asked to leave 3.777MHz and 7.092MHz clear for emergency traffic relating to the Turkey/Syria earthquake.

Satellite shows destruction of elite Russian unit in Ukraine:



Satellite pictures appear to show an elite Russian unit lost after "concentrated Russian vehicle losses" spotted near Vuhledar.

Crown Copyright 2023

Recent satellite imagery has revealed a concentration of Russian vehicle losses in the Vuhledar area of Donetsk Oblast, believed to be from Russia's elite 155th Naval Infantry Brigade. According to the latest UK Defence Intelligence update on the situation in Ukraine:

"Imagery shows concentrated Russian vehicle losses in the Vuhledar sector of Donetsk Oblast. These vehicles were likely elements of Russia's 155th Naval Infantry (NI) Brigade which has been at the forefront of recent costly offensives. NI is seen as an elite infantry force within the Russian military.

The supposedly enhanced capability of NI brigades has now almost certainly been significantly degraded because it has been backfilled with inexperienced mobilised personnel. This lack of experience is almost certainly exacerbating Russian officers' tendency to micromanage, which in turn reduces operational agility. There is a realistic possibility that degraded NI units will again be committed to new assaults near Vuhledar."

IN THE NEWS

Royal Navy's new experimental ship departs for trials



The successful certification and deployment of XV PATRICK BLACKETT demonstrates Navy X's commitment to developing autonomous and unmanned technology, which will revolutionise naval operations in the future.

Crown Copyright

.XV Patrick Blackett (X01) is a groundbreaking experimental ship employed by the Royal Navy to serve as a testing platform for cutting-edge technologies, including unmanned underwater vehicles and unmanned surface vehicles. The vessel's namesake, Patrick Blackett, was a renowned British physicist who served in the Royal Navy and was a recipient of the Nobel Prize.

George Allison, UKDJ Feb 2023

ROYAL NAVY-Technology and innovation teams

NAVY X

NavyX is the Royal Navy's autonomy and lethality accelerator, tasked with introducing new technology to the frontline in a more agile way. They work with industry and academia to integrate, test, trial and deliver equipment which will increase mass and lethality above the water, on the water, under the water and in the littoral ensuring sailors and Royal Marines have operational advantage.

MOD

MarWorks

Working closely with tactical users, MarWorks are specialists in delivering architectures to support data flow and tactical feeds over secure, agile communications. As the Royal Navy's information warfare technology accelerator, they work alongside the user community by conducting rapid experimentation to exploit leading technologies to provide the naval service with cutting-edge solutions.



MOD

DIVERSE REPORTS

FROM THE RNARS NOTICEBOARD

20 January 2023

HMS Collingwood Open Day will be on Saturday 1st July

10 February 2023 - Announcement

30th July will be the 30th anniversary of the Society's move to HMS Collingwood. The Committee is looking at how best to commemorate the occasion, Challenge Coins*, branded commodities, special call, for example. Suggestions please to Joe G3ZDF. More to come on this topic. See below:

7 February 2023 - RNARS Commodities Back in Action

Mike M6POY has announced that the Commodities Store is now open

23 February 2023

Date set to mark our 30 year residency celebration at HMS Collingwood is 28 th July 2023. More information will be made available.

4 March 2023 - Launch of New RNARS SOTA Group Proposed lan M0LIH is setting up an RNARS SOTA Special Interest Group and planning to activate some peaks. If you are interested in getting involved contact lan QTHR

More Details - 30th Anniversary

The 30th Anniversary of the HQ Shack opening in HMS Collingwood and rededication will take place on Friday 28th July. The Committee is trying to gauge the likely level of support and number of attendees. If you would like to attend please drop Joe G3ZDF an email. Wives/partners and families welcome.

RNARS NET CHANGES

Change No. 3/2022

Be advised all ye Net-trippers

No changes to the Nets List since 03/22 in the last Newsletter



DIVERSE REPORTS

Dave Hamilton, Newbury Radio Rally Manager sends an invitation:

Hello David,



Invitation to the Newbury Radio Rally - Sunday 25th June

On behalf of the Newbury Radio Rally team, I would like to offer RNARS a space at the Newbury Radio Rally on Sunday 25th June 2023.

The NADARS Radio Rally has taken place annually since 1987 and is probably the biggest and most popular event of its kind in the south of England, attracting visitors from far and wide, including internationally. Being part of the large number of national organisations and societies at the rally will provide RNARS with a great opportunity to inform everyone about your activities in amateur radio.

As an important national organisation, RNARS would be given space at our rally completely FREE OF CHARGE.

On acceptance, a special entry ticket would be sent to you, in advance, to ensure early site entry without charge. The ticket will provide you with a space (only) in the busy main selling area. It is an outdoor event on grass. If you want, you can bring your own table and power etc. and you are also welcome to bring your own small gazebo to keep the sun off you (nice sunshine is something we have always been blessed with at our rally)

Here is a web link to our Radio Rally web page. If you have not been to a Newbury Radio Rally previously, you will see that it takes place at the huge Newbury Showground, located next to the M4/A34 Junction https://www.nadars.org.uk/rally.asp

For more information (and pictures) I also attach the latest copy of the "Rally Newsletter"

I would be most grateful if you could let me know if RNARS would like to accept our offer of participating at the rally this year.

Conversely, a 'not interested/unavailable' response is absolutely welcome too, so that I know not to unnecessarily send follow-up emails.

I look forward to your reply.

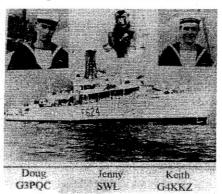
Kind regards and 73, Dave Hamilton M0JOW Nadars Rally Manager

Doug Turk G3PQC

Jenny

Doug Turk G3PQC RNARS 802

W hilst serving on board HMS Morecambe Bay, Far East Commission 1952-1954, Keith Robinson G4KKZ RNARS 1642 and myself decided to spend a few days leave with



delight in performing for the crew of these ships who lined up on their guard-rail to be entertained by the antics of our monkey, and she was well-known by

cause great

the Army in the new territories near the Chinese border while the ship was in dry dock for refit in Hong Kong. We were billeted with the 27th Signals Regiment at Fanling and during our stay we discovered that the Commanding Officer had a monkey that had completely wrecked his office one day and he had decided that the beastly thing had to go! Keith and I enquired if we could have it and the CO was highly delighted to get rid of it, so we took her back to the ship hoping that our Captain (Commander John Hamer DSC) would let us keep her. To our astonishment, he agreed.

the rest of the fleet.

Her sleeping quarters were in the Canteen flat as it was quite warm there plus the fact that the Canteen Manager would feed her with lots of goodies including 'nutty'.

Free To Roam

We named her Jenny after one of the Sideparty girls and she lived on board for about 12 months, free to roam wherever she wished, although we tied her up when we were in harbour in case she jumped ship!

When refuelling at sea, taking on ammunition, or transfer by jack stay to another warship, Jenny would

Well Behaved

Jenny was normally well behaved but if she was ill treated, she would bite you and run away, she also had a habit of putting her paw in your pocket, taking out whatever was in there and if not edible would throw the article overboard.

Now most of you will not believe this, but it is perfectly true as I have personally witnessed the following: Whilst operating off Korea, we fired many rounds of four inch from our twin mountings and immediately before the actual firing a buzzer would sound as a warning followed by an almighty crash. Jenny soon learned what followed the buzzer so when she heard this sound, she actually put her paws over her ears - honest!

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RNARS Newsletter

Summer '95

Jenny.....conf

We believe she picked up this habit from us.

It should be noted here that all broadcast signals were lost when firing and we had to request Hong Kong Wireless to repeat on many occasions - they must have thought our Sparkers were pretty useless as it was always embarrassing to ask for repeats.

As previously mentioned, we had Jenny onboard for about 12 months and unfortunately she disappeared while steaming from Japan to Hong Kong. When it was discovered that she was missing, the captain turned the ship round to look for her, we searched for hours but she could not be found and it remains a mystery to this day what happened as she was too sure-footed to have fallen overboard by herself.

The following is an extract from the magazine HMS Morecambe Bay in which Jenny is mentioned on numerous occasions and will hopefully bring a few smiles to readers.

624th Wanchai Troop

It is not generally known that there existed onboard at one time a troop of Boy Scouts, so for the benefit of those who had the good fortune to know nothing of its existence, here are the base (sic) details:

The Troop was formed by that indefatigable champion of right against might, A.B. Whittle, to attempt to instill into the alcoholic minds of his shipmates that the ship's monkey was not provided as a football.

It happened like this: The Captain, not in the best of humours

due to an incident, kicked the First Lieutenant, The First Lieutenant not knowing the reason, and already in a bad mood owing to a stormy Welfare Meeting about the size and shape of the beans served for Thursday's breakfast, vented his feeling on the Coxswain. That worthy member of the lower deck immediately sought an inferior in order that he too might have the pleasure of seeing someone wilt beneath verbal onslaught. And so it is that fate weaves an intricate pattern around us, for the Coxswain's victim was an OD, who, having received the blast to end all blasts wended his way aft with futile thoughts of vengeance seething in his mind, for was he not the lowest of the low? Alas, no, there was more even lower than he, and that poor innocent jungle dweller received a size nine cockroach crusher in the rear for the unpardonable sin of being tied to the cross passage bulkhead. Now it chanced that our friend Whittle was passing and witnessed the incident. A born lover of animals, he realised that something must be done to protect Jenny from future visitations of this nature and within the hour his nimble brain had hit upon the answer - a Bou Scout movement within the ship to educate the masses on animal protection.

Thus decided he called for volunteers and to his surprise there were many enthusiasts. In fact, six patrols were formed, also a cub pack and a brownie pack. The members are too numerous to mention all...

Unfortunately, in the enthusiasm, the original motive in forming a Troop was lost sight of, and many other schemes too precedence over it. The highlight was the occasion

Jenny....cont

of the presentation to Skeels of his First Aid badge. This was carried out with due ceremony in the Den (For'ard Seaman's Mess) the badge being awarded by the Scout Master, who as you may have guessed, was none other that I-love-animals, gooddeed-a-day Whittle.

You may wonder how we managed to become the 624th Wanchai Troop. Having

progressed so far and with volunteers still clamouring to join, it was decided by the SM to become attached to a better known troop. Application to join the DSRS, the HKST, the SSC. and in fact every known scout troop were turned down. Not daunted by these failures, our worthy SM put out a feelers via Spot Below with a view to joining the Shaukiwan Troop. Spot returned with a negative reply, but said that the Wanchai Troop, who already had 623 troops, would not object to another, particularly if it kept at sea out of the way. Thus we became the 624th Wanchai, the fact that our pennant number is 624 being entirely coincidental.

Application was then made by our ambitious scouts to the Welfare Fund for money to purchase staves. The First Lieutenant's suggestion that broom handles would serve, brought the first signs of discontent. The award of a fireman's badge to Stoker Mechanic Moyle-Keen also met



Jenny giving instructions at half time! Happy Valley, Hong Kong 1952

with disapproval, since the Chief Stoker thought that he should have had his first. A.B. Cox then failed his tenderfoot badge due to his inability to live up to the motto 'Never take sippers if thou canst get gulpers'. he having been observed

numerous occasions to take whole tots. Jenny, for whose welfare the movement was first started, then hammered a nail in her own coffin by biting Scout O'Bee. Eagle-eye Barratt, Sec Munro and Scout Edwards were in attendance, so immediate vengeance was out of the question, but he was caught strangling a pair of cats in Kennedy Town by way of retribution on the animal kingdom and was expelled from the troop on the spot. The Scout Master, who was by then a nervous wreck, with demands for uniforms, knives and badges pouring in, requests for subs from the non-existent funds for runs ashore and complaints from A.B. Baird that the monkey was being over fed, himself set the seal on the Scout movement.

Wearily making his way aft one day, he was an easy target for Jenny, who was by this time enjoying the non-retaliation rule and making every use of it. Woken from his reverie

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RNARS Newsletter

Summer '95

Jenny....cont

by a set of strong teeth fastened round his left ankle, he lassoed Jenny with his lanyard, strangled her with a pair of Scout garters, deposited the body in an old Scout hat, covered it with a neckerchief to hide the enormity of his crime and stole aft to the quarterdeck. Attaching a dozen scout knives (just received from the A.C. Wanchai) by means of a woggle he tossed the inert bundle over the stern. Unfortunately, this was witnessed by A.B. Oakes who swore that he would have taken no notice of the bundle had not a monkey's paw, with three fingers extended in the Scout salute, emerged from it as it hit

the water. This fact being duly reported as Oaks good deed for the day, the SM was closely questioned and despite his protestations that the hat was discarded by the Coxswain after a performance of This old hat of mine and was being ditched as part of his duty as Reg. Office Flat Sweeper, the disappearance of Jenny could not be satisfactorily explained by him, and since there were now no animals left on the ship and no-one would accept the vacant position of SM (Whittle having resigned in protest against the accusations) the 624 Wanchai troop became a thing of the past.

'SCRIBES'

Thanks Doug

Meditation

How is it*

That I who am so wise and knowing

Gifted in the way of language and perception

So understanding

Alert to every nuance and suggestion, And deeply read as well,

Should screw it up with such regularity?

Anon.

(* Insert name of favoured deity. Ed.)

(RNARS Newsletter circa Spring 1993)



Furnished by Edwin Daniels JP, 2E0LLD -who was there on the day...

By Mike Bridges - HMS Bulwark Albion Centaur Association, Spring 2002

The second of a class of two large and powerful Amphibious Assault Ships for the Royal Navy under construction at BAE Systems Marine shipyard, Barrow-in Furness, was launched on the 15th of November 2001 by Lady Victoria Walker, wife of the Chief of the General Staff, General Sir Alan Walker.

The first ship of the class, HMS Albion had been launched on March the 9th 2001 at Barrow by Her Royal Highness, the Princess Royal and is at present fitting out in the yard.



Edwin on the left with Friends

Both of these ships, known as Landing Platform Docks (LPDs) have been designed to transport an embarked military force of around 300 people, plus their equipment, vehicles and stores, across open oceans and land them on hostile shores using landing craft and helicopters. They are also able to coordinate amphibious operations through their integrated command, control and communications systems.

Both Albion and Bulwark are 176m in length, have a deep displacement of 18,400 tonnes. They are being fitted with diesel-electric propulsion and have an estimated operational range of 8,000 nautical miles at a speed of 15 knots. They will both carry a crew of 325.

Albion will be fitting out until March 2002. Her contractor's sea trials are scheduled for May 2002, with a handover to the Ministry of Defence in September. Bulwark will be fitting out until her contractor's sea trials commence in February 2003 with her handover scheduled at the end of March of that year.

These two ships are the latest of a long history of vessels built at the Barrow Yards. There is evidence of small craft being constructed at Barrow from 1667, but the first building of warships commenced in 1877 with the building of two Gunboats, 'Foxhound' and 'Forward'. In 1886 the yard built the first submarines, one for Turkey and the second for Russia. Neither of these were a great success but they were the fore-runners of a long history of submarine construction at Barrow.

In 1888 the yard was taken over by Naval Construction and Armaments Company Limited and secured their first order in 1889 for three cruisers, followed by HMS Powerful, the biggest cruiser in the world. Vickers Sons and Company purchased the yard in 1889 and over the following ten years built such ships as Euryalus, Hogue, Dominion and King Alfred for the Royal Navy. Construction of submarines for the Royal Navy began in 1901 with the launch of



the Holland class of vessels. In the 1930's the aircraft carriers Illustrious, Indomitable and the cruiser Jamaica were ordered. During WW2, 87 submarines and 18 X Craft Midget subs were produced between 1941 & 1945.

Warship production suffered a decline following the end of the war and the yard turned it's skills to building ocean liners that included the Oronsay, Oriana and Chusan. With the emergence of the Cold War, submarine construction once more became essential with the first nuclear submarine HMS Dreadnought being launched in 1960 followed eventually by the Polaris submarines.

Eventually, shipbuilding at Barrow was taken over by VSEL Limited and on the 18" of July 1996, the then Secretary of State for Defence, Michael Portillo announced that due to the need to replace the ageing HMS Fearless and Intrepid, a new class of ship would be needed to enable the Royal Marines to increase their ability to mount amphibious operations. He announced that he was placing a contract with the yard to design and build the two new LPDs which would be named HMS Albion and Bulwark. These names were last used for two Centaur Class Light Fleet Carriers which had been converted to Commando Carriers in the 1960s.

Steel cutting for both ships commenced on November 17th 1997 and Albion was laid down on the 23rd of May 1998 at Barrow with Bulwark being laid down on January 27th 2000. Albion and Bulwark are the largest ships to be built at Barrow since HMS Invincible and when completed will be based at Devonport, together with the Amphibious Carrier HMS Ocean. Albion will carry the pennant number L14 and Bulwark L15. The new vessels will have both a greater troop and greater vehicle capacity than the ships that they will replace. In addition to a ships complement of 325 they will normally be able to carry 305 troops but in emergencies will be a able to accommodate up to 650. They can also carry up

to 67 vehicles, 6 light guns and 9 main battle tanks. The large flight deck will be able to support 2 large helicopters (either Merlin or Sea Kings) or one large Chinook or V22 Osprey. They could also support a Sea Harrier in an emergency. Armaments consist of four 30mm guns and two Goalkeeper weapons, electronics will include the ADAWS 2000 Combat Data System.

Like their predecessors, the new ships will have an internal dock which can be flooded to carry four LCUs, (Landing Craft Utility Mk10s). Albion and Bulwark will also be fitted with side ramps for rapid loading and unloading in port. The new ships have been built in seven 'blocks' constructed in the Ship Hall from about 20 sub units before being assembled on the slipway.

Members of the HMS Bulwark, Albion and Centaur Association were kindly invited to attend the launch of the Bulwark and this offer was gratefully taken up by the Association. Fifty-seven members, coming from all over the UK attended and most arrived either by coach or via their own transport in Barrow on the 14th of November. They were accommodated in a total of eleven hotels and a Campsite with forty-eight of those members attending a Gala Dinner in the White House Hotel that evening. This was a great success and allowed members to become acquainted and share former experiences.



The following morning, bright and early! we mustered at the shipyard gaining our first sight of Bulwark towering on the slipway framed by two ship halls. In addition to ourselves, some 8,000 members of the public, shipyard workers and their families were present for the launch in addition to a large number of local school hildren Union Jacks. waving their contingent of Sea Cadets with Guard and Band marched proudly

into the arena and a Royal Naval Sea King Helicopter appeared and hovered over the new ship.

Following a short service relayed from the launch podium and a speech from the Director of the Shipyard which included a welcome to members of the HMS Bulwark Association to the launch, Lady Walker was invited to name the ship. As the bottle of champagne shattered against the bow, the seventh HMS Bulwark slid gracefully down the slipway and into the Walney Channel to the cheers of the vast crowd and the sirens and water cannons from the waiting

tugs. As the tugs turned the ship broadside on to the slipway, the RN Helicopter returned and made a low pass over the new vessel as if about to land on, before rising up to face the watchers on shore and giving a salute by 'bowing' to the podium. A very emotional moment for us all. We watched as the ship was taken under tow to the fitting out basin which will be her new home for the next few months. Members of the Association then assembled at the rear of the launch podium, resplendent in our blazers bearing badges and medals of

former days and careers now a distant memory. We were there to greet our Association President, Vice Admiral Sir Patrick Symons who had been specially invited as being the last Captain of the last ship to bear the name of HMS Bulwark. We little expected what was to happen next! First, Lady Walker came over to us shook hands and chatted with us, she was followed



in quick succession by the First Sea Lord, Admiral Sir Nigel Essenhigh and several other senior Naval and Royal Marine Officers including the Commandant General Royal Marines as well as our President. They stood talking to us for nearly half an hour and gladly posed for camera shots and local TV Crews who, like us, were having a field day.

To our further delight, one of the Senior Naval Officers introduced us to Captain Keith Winstanley, the designated Captain of Bulwark. He stated that he was delighted to see us at the launch and firmly believed that an affiliation between his ship and our Association was an important future development. On leaving the Yard we could not resist the chance of paying our respects to our other named ship, HMS Albion, obtaining a good view of her in the fitting out dock, where she was shortly after joined by Bulwark.

After all this excitement, there was only one thing left for us to do - as expected of old matelots - we adjourned to the nearest pub to toast the new ship and say goodbye to our new friends from the Association before dispersing on the long journey home. Since those heady days, we have accumulated quite a collection of photographs of the occasion, plus a CD Disc kindly donated by BAE illustrating the building stages and launch of the new ship. We hope to display much of this material at the AGM in April in Portsmouth. We have also learned the name of the new C.O of the Albion, Captain P.D. Hudson RN, who will take up his new appointment on the 14*" of May. No doubt that our Secretary John Truscott will be following this one up in the hope that we may also have an affiliation with this ship also. Finally, there cannot be many Associations who have two new ships in the water at the same time - Watch this space!

Yours, aye Mike Bridges

RNARS NEWSLETTER SUMMER 1993

Those were the days...

ROYAL NAVAL AMATEUR RADIO SOCIETY

Affiliated to the Radio Society of Great Britain

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RUSSIAN TANK IS DEFUNCT RELIC OF COLD WAR

From The Wavell Room:

Armata – the story is over

(Russians reported as replacing its tanks destroyed in Ukraine war with the Armata).**Ed**

ABSTRACT:

When the T-14 Armata tank was sensationally unveiled at the Victory Day parade, in 2015, it embarrassingly broke down in front of thousands of onlookers



during rehearsals. This proved an augury. Seven years later it can be stated with confidence the Armata story is over. This article explains its demise and wider implications.

An engine looking for a tank

The origins of T-14 Armata lie in the cancelled T-95 (Object 148). This tank, a casualty of the troubled 1990s, was finally abandoned in 2010. Conceptual vehicles with unmanned turrets had existed since the 1980s (*CIA Top Secret 'Soviet Tank Programs', NI IIM 84-10016, 1 Dec 84*) offers interesting historical perspectives on these designs). However, in the case of T-14 Armata the idea... started with an engine.

Some context is necessary

All Russian tank engines, remarkably, are descended from the highly successful V-2 diesel engine designed in 1931 at the Kharkov Locomotive Plant (now destroyed by Russian forces). The V-84 (T-72s), V-92S2F (T-72B3s, T-90s), the UTD-20 (BMP-1s and BMP-2s), and UTD-29 (BMP-3s) are further upgrades of this engine. The V-2 is the Kalashnikov of tank engines. The exception to this practical Soviet approach is the T-64. This tank was fitted with the 5TDF engine, *a failed attempt to copy a German wartime bomber engine*. It is for this reason that the 2-3,000 T-64s in storage will never return to service.

By http: //vitalykuzmin.net/?q=node/651 – Vitaly V. Kuzmin, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=49017880

T-14 Armata also started with a new engine: a Russian copy of the German X-shaped Simmering SLA 16 engine (also known as the Porsche Tour 212). The Russian engine was designated the A-85-3. However, Transdiesel Design Bureau did not design the engine for a tank but rather as a unit for compressor oil and gas pumping stations. It proved a flop and failed to make any sales despite repeated demonstrations at exhibitions.

RUSSIAN TANK IS DEFUNCT RELIC OF COLD WAR

Designed around the engine

The Wavell Room

By a roundabout and unclear route, Uralvagonzavod (UVZ) — Russia's main tank manufacturer — decided to use the engine as the basis of a novel tank: the T-14 Armata. The tank was designed around the engine and not the other way round. However, this decision had two important and deleterious consequences... The engine needed many more run-hours to refine the design. A quick solution might have been to abandon the A-85-3 and refit T-14 Armata with the proven V-92S2F — except the latter does not fit, it is bigger. The only realistic engineering solution now is to start again. Currently, no authority appears willing to accept this reality.

The problem with all the gizmos is the microelectronics. Russian industry generally has been critically dependent on foreign microelectronics and associated technologies. These are no longer available due to sanctions (hence the joke Russian defence's main supplier has become AliExpress). Captured Russian equipment such as drones reveals components are being sourced from wherever they can be found (including stolen Swedish traffic cameras in the case of the Orlan-10 UAV).

The perennial Russian problem of corruption has only worsened challenges posed by sanctions. The Volgograd *Krasny Oktyabr* ('Red October') plant which makes the armour plates was declared bankrupt in 2018. Millionaire-owner Dmitry Gerasimenko is on the international wanted list for allegedly embezzling a loan of \$65 million and transferring 6.2 billion roubles abroad... A staggering 72,000 officials have appeared before the courts on corruption charges. In 2022 alone (so much for patriotism) 60 defence industry officials and 250 public procurement officials have been prosecuted, 27 of whom were convicted of violations in the implementation of the state defence order.

Lack of an assembly line

The final, practical and mundane reason why T-14 Armata will not become a production tank is because there is no assembly line. All models to date have been assembled by hand (like luxury cars). A sum of 64 million roubles was reportedly allocated to build the assembly line... Western machine tools and other technology were never supplied due to sanctions. As many as 200 suppliers would need to be re-profiled. This will not happen now...

As a final blow T-14 Armata's improved 2A82-IM 125mm cannon — ar undeniable upgrade on comparatively under-gunned Russian tanks — will not serve... *The breech block doesn't fit*.

Sergio Miller, February 10 2023

Sergio Miller is a retired British Army Intelligence Corps officer, and is currently drafting a history of the Russian invasion of Ukraine.

RF GROUND & HF ANTENNAS

The importance of a Good RF Earth

For an end-fed antenna to operate efficiently a good RF earth is required. The resistance of this connection is in series with the radiation resistance of the antenna so it is important to get the ground resistance as low as possible if you want an efficient end-fed antenna. A poor RF earth can result in a high RF potential on the metal cases of radio equipment. Furthermore, the microphone, key or headset leads are also 'hot' with RF so that RF feedback and Broad Cast Interference (BCI) problems occur. Additionally, the circuitry of modern communications equipment can be electrically damaged in these circumstances.

Using Real Earth

In practice a good RF earth connection is hard to find and is only practicable from a ground floor room. The problem with the 'earth stake' is that ground has resistance and the lead connecting the earth stake to the radio has reactance.

Many ways have been tried to reduce the ground resistance. in general, the more copper you can bury in the ground the better. An old copper water tank, connected to the radio with a short length of thick copper wire, makes a very good earth. An RF earth can also be made from about 60 square metres of galvanised chicken wire. This is laid on the lawn early in the year and pegged down with large staples made from hard-drawn copper wire. The grass will grow up through the chicken wire and as if by magic the wire netting will disappear into the ground over a period of about two months. In the early stages, the lawn has to be cut with care with the mower set so that it does not cut too close and chew up the carefully laid wire netting.

Low band DXers tend to use buried multiple radials; many wires radiating out from the earth connection. The rule seems to be the more wires the better. These types of direct connection to earth can also provide an electrical safety earth to the radio equipment in the shack.

Artificial Earths

If you operate from an upstairs shack, engineering a low-impedance earth connection at ground level using the method described above will probably be a waste of time. The reason for this is that the distance up to the shack is a significant fraction of a wavelength on the higher HF bands and above. At frequencies where this length is near one or three quarters of a wavelength, the earth connector will act as an RF insulator, which is just the opposite of what is wanted, see **Fig 15.3(a)**. This is bound to happen in one or more of our nine HF bands.

RF GROUND & HF ANTENNAS

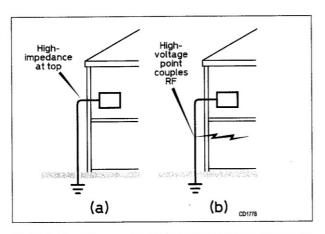


Fig 15.3: Why RF ground leads from upstairs seldom work. (a) Ground lead with quarter-wave resonance (or odd multiple) is ineffective; very little current will flow into it. (b) Ground lead with half-wave resonance (or multiples) will have high-voltage points which couple RF into house wiring

On the other hand, if the lead resonates as a halfwave, (a situation that is likely to arise on any band above 10MHz), it may act as a good RF earth. However, it also has a high-voltage point halfway down which may couple RF into the house wiring, see Fig 15.3(b), because electrical wiring within the wall of a house is, generally speaking, perpendicular, in other words, although an earth wire from the radio in an upstairs shack to an earth stake will provide a safety earth its usefulness as an

RF earth is unpredictable. Generally speaking, the earth wire from an upstairs shack should be located as far from house wiring as possible.

The favoured method of obtaining a good RF earth is to connect a quarter-wave radial for each band to the transceiver and ATU earth connector, then running the free ends outside, away from the transceiver. Because the current at the end of the wire is zero and the impedance is high it follows that at a quarter wave inward, where it connects to the transceiver, the RF potential is zero (the impedance is low). The problem is where to locate all these radials; such an arrangement will require some experimenting to find the best position. Radials can be bent or even folded but the length may have to be altered to maintain resonance.

The radials are best located outside the house in the horizontal plane to reduce coupling into the electrical wiring. If the radial(s) are an end-fed used indoors (say, round the skirting board) use LF bands wire with thick insulation with several additional layers of insulating tape at the ends where the RF voltage can be fairly high when the transmitter is on.

The best way to check resonance of a radial is to connect it to the radio earth, make a loop in the radial and use a dip meter to check resonance. If such an

RF GROUND & HF ANTENNAS

instrument is unavailable then use an RF current meter and adjust the radial length for maximum current.

Alternatively, one single length radial can be tuned to place a zero RF potential at the transceiver on any band by inserting an LC series tuning circuit between the transmitter and the radial. Such units are commercially available, which have, in addition to the LC circuit, a through-current RF indicator which helps tuning the radial or earth lead to resonance (maximum current).

Or you can make one yourself. The unit designed by SM6AQR [2] and shown in **Fig 15.4**, uses a 200-300pF air spaced tuning capacitor with at least 1mm plate spacing; the capacitor and its shaft must be insulated from the tuner cabinet. The inductor is a 28µH roller coaster. Alternatively, a multi-tapped fixed coil with as many taps as possible could be used.

The tuning indicator consists of a current transformer, rectifier, smoothing filter, sensitivity potentiometer and DC micro-ammeter. The 'primary' of the current transformer is the artificial earth lead itself; it simply passes through the centre of the T1 ferrite toroid, onto which a secondary of 20 turns of thin enamelled wire has been wound. Rx, the resistor across the T1 secondary, should be non-inductive and between 22 and 100Qs; it is selected such that a convenient meter deflection can be set with the sensitivity control R2 on each required frequency and for the RF power used.

Caution: A separate electrical safety earth should always be used, In addition to the RF earth described above. The Radio Communication Handbook 13th edition 2018

Refer to RSGB Leaflet EMC07 Earthing and the Radio Amateur Advanced © RSGB

Earth rods need to comply with BS7671. These rods should have an approved termination cover and not be left open to the elements and be labelled as shown below.



Mick Puttick Memorial Plaque

ou may remember the short item in last December's edition of the Newsletter into which we managed to fit in with a few other items just before going to press.

Since then there has been time to gather together other materiel from the occasion which has been donated by our members who attended what has

been reported as a moving ceremony.



HMS Collingwood

Plaque Unveiling in Memory of Late Chief Radio Supervisor Michael Puttick G3LIK 1935-2022.

Radio Building

Tuesday 6th December 2022.

Padre Olusegun Balogun RN led the occasion attended by Mick's widow Alison Puttick and Kevin Lamb, G4 BUW gave a short address to our assembled members. Those in attendance were: Neil Richardson G4EMM, Neil Archer M7BXZ, Ray Ezra G3KOJ and his XYL Penny, Mike Moore M6POY, Edwin Daniels, 2EOLLD, Steve Legg M6WVV, LET(CIS) Ian Hutchinson M0LIH, and the Base photographer Keith Woodland.





Mick's Memorial Plaque

Mick's RNARS Membership Certificate

The Address By Kevin Lamb

Good afternoon, ladies and gentlemen.

My name is Kevin Lamb and I am a member of the Royal Naval Amateur Radio Society committee. On behalf of the committee and other members, I would like to say a few words as a further tribute to Mick; indeed it is a great honour to do so.

I did not know Mick as well as many of you here and elsewhere, but I developed a deep admiration for him quite a long time ago, and more recently when I learned about his very long service in the Royal Navy.

In my 50 years of being a licensed radio amateur, I have heard many people doing lots of things on the radio waves. Mick was the only person that I had regularly heard delivering interesting historical information and news about the Royal Navy, Royal Marines, Royal Fleet Auxiliary, Merchant Navy and other services. This was on the Sunday morning RNARS radio nets which Mick ran for many years.

Indeed, I can remember sitting in my radio shack at home and being staggered on numerous occasions, by some of the facts Mick put across, especially on maritime losses during the two World Wars, but also being elated by, for example, history of ship launches and success stories. It was always a wonder to me how Mick researched and compiled his information; maybe I can have a word with you about that Allison.

We will never know the number of times people tuned into Mick's transmissions over the years but I would think it probably ran into many thousands. I haven't known anyone in the maritime amateur radio world who's delivered so much information that's benefited so many people!

Mick's passion for Morse code communications was very well known. This passion is often mis-understood. I would say that it's driven by using tones and rhythm to communicate with people in a somewhat musical fashion. It can be addictive, but in a positive way!

When I last saw Mick here in the HQ radio shack, he had an ear virtually glued to a radio with his hand on a Morse key, and I often heard him on the air enthusiastically tapping away.

On my first attendance of an RNARS AGM, Mick had procured the raffle prizes and he sold me some tickets. The raffle draw was held at the end of the AGM and I won a bottle of rum. I felt somewhat embarrassed that I, the 'new boy' had won what was probably the most popular prize.

Mick handed me the bottle with a wry smile on his face.

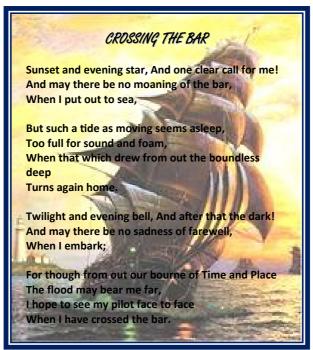
The situation was just a tad exuberated a week later by Ray asking me on the Sunday morning radio net that Mick was running – "Have you drunk that rum yet?"

We hope that this plaque underlines our sincere thanks to you Mick, for being a founding father of the Royal Naval Amateur Radio Society and for all that you did to enhance people's lives.

It was a privilege to have known you Mick. You will always be fondly remembered by very many people, worldwide.



Row 1: Alison Puttick, LET Ian Hutchinson & Stephen Legg. Neil Archer, Edwin Daniels, Mike Moore Row 2: Ray and Penny Ezra, Neil Richardson, Keith Woodland. Padre Balogun, Kevin Lamb



Lord Alfred Tennyson

From the Chair:

Thank you to the Padre who officiated at the ceremony and who produced the order of the service for the ceremony, and to those members who liaised with the establishment and who also worked in the background to make this happen. BZ!

RSGB NEWS - Club Nights & Nets

RSGB.org

News for England **South West** from GB2RS

CLUB NIGHTS & NETS

GB2RS News Team | February 26, 2023

The **Online Radio Club** has a virtual radio club night at 7.30pm every Thursday via Zoom. It is suitable for all radio enthusiasts regardless of individual skill level. Go to the website for the meeting link.

Ham Radio Network has a talk on the theme of An Evening with... See the website for further details.

On Sundays, *Appledore and District Amateur Radio Club* has a net on 1.860MHz from 9.30am, followed by an SSB net on 144.260MHz at 10.30am. The club has weekday nets taking place from 4pm on 145.450MHz, except Wednesday when the net moves to 144.260MHz between 8 and 9pm. On Monday there is a net via GB3DN at 11am. There is another net on Friday from 11am via GB3DN and on 145.450MHz at 8pm. John, G3JKL.

On Tuesday, *Blackmore Vale Amateur Radio So*ciety will be meeting at The New Remembrance Hall from 7.30pm. On Wednesday, there are club nets on 28.360MHz at 8pm and 70.425MHz at 9pm. Visit the website to find out more.

On Tuesday, *Bristol RSGB Group* will be enjoying an interactive presentation via Zoom by Nick Wood, M0NTV. The presentation will be titled 'Building with blocks: a modular approach to radio construction'

The Cornish Radio Amateur Club will be having a committee meeting on Tuesday and a club meeting on Thursday.

Flight Refuelling Amateur Radio Society in Wimborne holds a Morse Academy every Thursday night from 7pm. Please see the club website or Facebook page for information on how to get to the meetings. Sue,

Guernsey Amateur Radio Society has a net on Tuesday from 8pm on 145.525MHz. On Thursday, the DMR net is from 8pm on GB7GY on Talk Group 23515, time slot 1. All are welcome to join in. On Friday, the club meets at the Bunker, Beau Sejour Leisure Centre from 7.30pm. Everyone is welcome. Phil GU0SUP, on 07781 151 747

Holsworthy Amateur Radio Club has a net on GB3DN at 7.30pm on Mondays. All are welcome to join in. The club will be meeting on Wednesday at Milton Damerel Parish Hall from 7.30pm. Visit the website for details.

RSGB NEWS - Club Nights & Nets

Isle of Avalon Radio Club has a net on 145.475MHz on Wednesday from 9pm. Matt, 0730 554 9614

The Jersey Amateur Radio Society clubroom is now open on Friday evenings from 8pm. An old footpath has been reinstated to gain access from the Meteorological Radar Tower to Mast B. Please be very careful as the ground is uneven. You will need a torch if it is dark. Mike, GJ0PDJ on 07797 718390

On Monday, *Mid Somerset Amateur Radio Cl*ub will be meeting at The Quarter Jack, Wells from 2pm.

Newquay and District Amateur Radio Society has moved premises and now meets at Trevisker Saint Eval Community Centre, 750 Orion Drive, Wadebridge, PL27 7TU at 7pm on Wednesdays. Visit the website.

On Friday, **North Bristol Amateur Radio Club** is having a film night from 8pm. The subject will be Understanding Antennas Made Easy. Dave G7BYN.

The Cornish Poldhu Amateur Radio Club - The club welcomes anyone who has an interest in amateur radio, or those that are already licensed, to join them for the day. In the afternoon there will be a short technical talk on QRSS, which is very, very slow QRP CW that can give worldwide contacts, with only a few milliwatts. The club is going to run a construction project to build some QRSS transmitters, costing less than £10 and based on a Raspberry Pi PICO. There will be an opportunity to operate the club station, have a chat and learn more. The club has a superb site on the cliffs overlooking Poldhu Cove and Mounts Bay, with a triband HF beam and multiple dipoles. The location is close to the Poldhu Cove beach with its café, an ideal location for the family while you indulge your radio passion. Go to Poldhu Cove and follow the signs to the Marconi Centre, where there is a large free car park. For more information, please call Terry, G4CDY on 07764 681 843.

Poole Radio Society has a net on 145.375MHz at 8pm on Monday. The net moves to 70.375MHz at 7pm on Thursday. On Friday there is a Zoom meeting at 7.30pm.

Radio Operators Cornwall - find out more about Radio operators Cornwall. www.g8roc.org.uk

Saltash and District Amateur Radio Club meets on the third Tuesday of each month at the Burraton Community Centre. New members and visitors are welcome. Mark. 07810 548 448.

RSGB NEWS - Club Nights & Nets

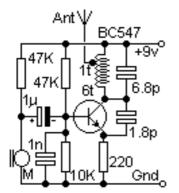
On Thursday, **South Bristol Amateur Radio club** will have an open house and on-the-air night from 7.30pm. enquiries@sbarc.co.uk

On Wednesday, *Torbay Amateur Radio Society* has a net on 14.270MHz at 9.30am. Also on Wednesday, there will be a net on 3.663MHz from 10.30am. The Society will be meeting from 7.30pm on Friday. The 3.663MHz net will continue at 9.15pm on Friday and 10am on Saturday. Next Sunday, there will be nets on 14.270MHz at 9.30am and 145.575MHz at 12pm. website kerry@m0kre.net

On Thursday, **Yeovil Amateur Radio Club** will be meeting at the Parish Room, Yeovil. secretary@yeovil-arc.com

A MINIATURE FM TX

Harry, SM0VPO



The coil is 1/4" (4mm) diameter and wound on a drill bit. A simple piece of insulated wire about 2 feet (60cm) was fine for the antenna, and is connected to a 1-turn tapping of the coil. Use tinned copper wire for the tuning coil and not the enamelled wire for kids to build. It is much easier for them to solder the antenna without "mashing-up" the coil, whilst trying to remove the enamel. If you wish to use it from the headphone socket of an HF rig then delete the first 47K resistor and reverse the 1uf capacitor. The circuit shown is for an Electret condenser microphone. The transmitter

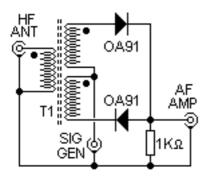
may be received by any VHF FM radio, but the pocket radio I use about the house was free with WEETABIX box- tops a few years ago. It should have a range of at least 250 feet (75 meters) but increase the "220 ohm" emitter resistor to 1K to reduce the range (if you think that little Johnny could plant it in you and your wife's bedroom).

Incidentally, this little transmitter works well on 10 meters FM with a lower (and acceptable) deviation. The coil is 14 turns with a ferrite slug (tuning) and the tuning and feedback capacitors increased by a factor of 3. Take care with the positioning of the tuning coil, as this will alter the frequency. It should not be possible for a user to touch the coil. In the FM version this is of no consequence.

Designed for kids with a little help from adults...

QUICK RECIEVER CIRCUIT

Harry, SM0VPO



How many of you have got loads of test equipment in the shack that is not really doing anything most of the time. I have got a couple of RF signal generators and a stereo amplifier (for music) amongst other things. Thats all I needed to receive SSB and CW on the HF bands.

A Direct Conversion receiver is nothing more than a mixer, an AF amplifer and a stable oscillator. I took one of my standard building

blocks; a two diode mixer and connected it to my stereo amplifier PHONO input then fed the signal generator into the mixer. Connect an antenna to the third port of the mixer and you can receive HF SSB and CW signals.

The mixer I use is a standard "building-block" for nearly all my projects that require a simple mixer and is given above.

T1 is a Triflar wound component on a 1/2" ferrite ring. Twist together 3 lengths of thin enamelled wire and wind 17 turns on the ferrite ring. One winding is for the antenna and the other two are for the mixer. The black blobs by the T1 windings indicate the polarity of the transformer. All of the black blobs are the same end.

The mixer works best with a high level of RF input from the Sig-gen, but a "Marconi 995" works well if you take out the impedance matching box and screw the RF LEVEL right up. My Hewlett Packard Sig-gen gives out +7 dBm which is more than adequate. If you do not have a Sig-gen then you can do the job with a GDO. Wind 20-30 turns of wire on the end of a pencil and stuff it in the end of the HF coil.

The final receiver is as stable as the RF Sig-gen and as sensitive as the AF Amplifier. A typical stereo amplifier will give out its full audio if there is one millivolt at the PHONO input. You can hear signals that are less than 1% of this (10uV).

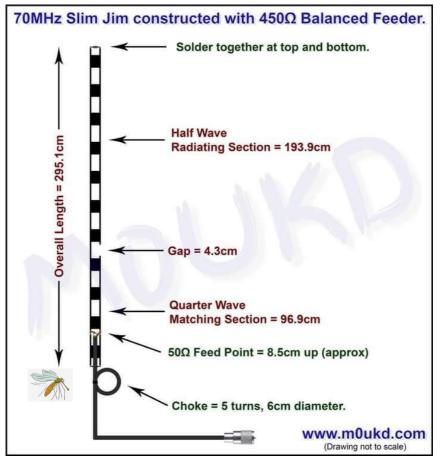
I usually etch a PCB for my mixer modules and these are always 2cm square and masked with "sticky-tape"; i.e.: "SELLOTAPE" in England, "DUREX" in Australia, "SCOTCH" tape in the USA (don't get them mixed up). Now that is what I call a cheap receiver for the HF bands!!

(Email at harold.lythall@era.ericsson.se)

4 Metre SLIM JIM AERIAL

MOUKD.

ccasionally, I stumble across some really good amateur radio web-pages whose authors have published some really simple and effective projects. You have already seen his 4m dipole project in a previous newsletter, which was a superbly efficient design by John, MOUKD that worked like a dream. I came across this simple design from the same author, shown in the diagram below:



Once I have sorted out my shack and unpacked my rigs, my first project will be to make this aerial which looks like an ideal companion for days out in the field - and it only uses a gnat's whisker under 3m of 450 ohm ladder line to boot! I am sure it will work well hung from the top of a fibreglass roach pole!

Ed

RNARS NETS

Contact: Joe Kirk G3ZDF Change:03/2022

UK	K UTC			Frequency			Net			Control		
Daily	0001-0400		145.725		Midnight Nutters			M0WRU				
Sun	0800		3.667			SSB net (news: 0830)			Glenn G0GBI			
Spare						CCD Hot (Hewe: CCCO)			3.3 3332.			
1030			7.085/3.748		RNARS North SSB net			Robin MM6CXJ				
1100			7020		RNARS CW net			G4TNI				
		20							GX3WTP/G0GBI/			
Mon-Sat 1030-1330		30	7.085			The Bubbly Rats Net			G0OKA/M0ZAE			
Mon	1400		3.575			QRS CW Net			G0VCV			
	1900		3.748 (Pri) 7.088 (sec)		N.W. SSB Net (News: 20:00)			G0GBI				
			145.400		RNARS Cornish Net (Falmouth / Lizard)			G4WKW				
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			G0GBI				
	1700		TG 23527		Wednesday DMR Net			MOLIH				
	1900		3.748		Wednesday Net			G0GBI				
Thurs	1900		3.542		Scottish CW Net			???				
	2000		145.575		RNARS Scottish 2m Net			GM0KTJ/P				
	2100 GMT		1.835			RNARS Top Band CW			G4KJD/G0CHV			
Fri	1600		10.118		RNARS 30m CW Net			SM3AHM				
Sat	0800		3.748		G0DLH Memorial Net			G0VIX				
DX	GMT		Frequency		Net			Control				
	0800		7.015/30555			MARAC CW			PA3EBA/PI4MRC			
0	11:00		14.329		SSB - Les			VK2CPC*				
Sun	14:30		21.410 ±QRM		RNARS DX			W1USN/GM7ESM				
	1800		Echolink		Echolink			VE3OZN / K8BBT				
	19:30		14.329		N American			W1USN / GM7ESM				
Mon	0930		3.615		VK SSB			VK1RAN/VK2RAN				
EXP*	19:30		14.329/21.410		19:30 / 19:35			W1USN/GM7ESM				
	0118-0618		7.02		VKCW			VK4RAN				
	0148-0648		10.118		VK CW			VK4RAN				
Wed	0800		3.62		ZL SSB			ZL1BSA				
	0930		7.02		VK SSB			VK5RAN				
	0945		7.09			VK SSB			VK1RAN/VK2RAN			
Thur	14:30		21.410 ±QRM		RNARS DX			W1USN/GM7ESM				
	0400		7.09		VK SSB			VK2CCV				
Sat	1330		7.02		VK CW			VK2CCV				
out	1400		7.09		VK SSB			VK2CCV				
	14:30			21.410 ±QRM		RNARS DX			W1USN/ GM7ESM			
RNARS SCENE OF ACTIVITY												
	145.40											
CW	1.824	3.52		10.11		14.052	18.087		052	24.897	28.052	
SSB	1.965	3.66	3.74	7.088	3	14.294	14.335	18.	15	21.36	28.94	

*EXP = Experimental/Trial

Mike Moore M6POY

Order Form is at the back

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Mike Moore M6POY

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Colour: Navy only	
Sweatshirt , embroidered with the new RNARS logo, your name	£ TBA
and callsign. Colour: Navy only Sizes: S to XXXL	
Fleece jacket embroidered with RNARS logo, name and	£ TBA
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Mug with RNARS logo & your callsign	£ TBA

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Extra Large 42-44 2 Extra Large 44-46 3 Extra Large 46-48

4 Extra Large 48-50

Mike Moore M6POY

PLEASE write clearly and use block CAPITALS

Photocopies of this form are accepted

Item Description	Size	Colour	Qty	Price	P&P	Sub Tota
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-					_	
Address:						
Name:					_	
Call-sign RNARS No:						

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RAFARS & RSARS NETS

RAFARS	Time	Freq	Control		
Daily	1100 A	3.71	GØSYF		
Monday	1830 A 1900 A	3.71 3.7	G3HWQ G3PSG		
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		
Monday	1830 A	3.585	GM3KHH (RTTY)		
Tuesday	1400 A	7.17	MØOIC		
Tuesday	1600 Z	14.18	G4BXQ		
	0600 Z	14.143	Various		
Wednesday	1030 Z	3.615	?		
Wednesday	1830 A	3.565	GM3КНН		
	2030 A	1.946	2EØBDS		
Thursday	1400 A	7.17	GØRGB		
Thursday	1800 A	3.743	G6NHY		
	1830 A	3.583	GM3KHH (PSK31)		
Friday	1830 A	3.565	High speed CW		
	2000 Z	14.055	CW		
Saturday	0600 Z	14.143	SSB		
	1000 A	3.565	G3JRY (Slow speed CW)		
Sunday	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			

How To Contact The RNARS

Membership Secretary

Joe Kirk, G3ZDF 111 Stockbridge Road Chichester, UK PO19 8QR



RNARS Gen. Secretary

Martin Longbottom, MOEHL Building 512, HMS Collingwood Newgate Lane Fareham, Hants, PO14 1AS



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Website: http://www.rnars.org.uk/





By Radio: <u>DMR/Fusion</u>: TG23527 -UK Military & Veterans HF HQ Net:

Tuesday Net: 7.068/3.748@16:00Z±QRM

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Membership of the RNARS is also open to all Radio Amateurs with an interest in maritime radio especially those who have served or who are serving in the:

- Royal Navy
- Royal Marines
- Women's Royal Naval Service
- Royal Naval Reserve
- Royal Naval Auxiliary Service
- Sea Cadet Corps
- Merchant Navy
- The Nautical Training Corps
- The Royal Fleet Auxiliary