

ROYAL NAVAL
AMATEUR RADIO SOCIETY
ESTABLISHED
FOR
60 YEARS

RNARS NEWSLETTER



Royal Naval Amateur Radio Society



Promoting amateur radio in the Royal Navy since 1960



Amateur
Radio
Society



Autumn 2021

DISCOVERY TX-500

Ultra Compact HF/50MHz Transceiver

A weatherproof radio with true desktop-radio features, like auto-notch, noise reduction, RX/TX EQ and built-in fast Panadapter.



£899
Arriving September
Pre-order now!

RE CE Fully FCC and CE approved

- General Features**
- 160-G-meter beam search
 - Power up to 10W output
 - Receiver coverage 0.5 - 56.0MHz
 - All modes: SSB, CW, DIG, AM, FM
 - Current drain as low as 100 mA
 - On-line firmware updates
 - Only 30mm thick
 - Rear folding kickstands
 - Size: 90mm x 207mm x 27mm
 - Weight: 0.55kg



Dust & liquid protection

A liquid-protected housing, no through-holes, spatter resistant plugs with sealing rings and a special anodizing layer on the case, ensures operation in extreme conditions.



Unique form-factor
The transceiver is only 30mm thick, including leads, weighing only 0.55kg. Kickstands allow use on a desktop or picnic table.



11 discrete RF bandpass filters
This enables rejection of any out-of-band signals and improved reception



Built-in panadapter
See the whole band in an instant - wherever you are listening.



Aluminum alloy body
The transceiver's body is made of durable aluminum by the method of precision milling, to ensure a unique shock protection and provide good heat removal from the output part of the transmitter.



Well shielded inner units
High sensitivity is achieved with high isolation using internal partitioned cells within the aluminum body

Supplied Accessories



nevada

Nevada - UK Exclusive Distributors
Also available from www.hamradiostore.co.uk and other selected UK dealers
023 9231 3090 • www.nevadaradio.co.uk
• Unit 1 • Fitzherbert Spur • Farlington • Portsmouth • Hampshire • PO6 1TT

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Front Cover:

Merlin Mk2s from 820 Naval Air Squadron preparing to join the carrier HMS Queen Elizabeth – their new home for the better part of this year. Working with the UK's allies and NATO partners, she will visit 40 countries on her deployment to the Far East taking all seven Merlin Mk2 aircraft with her. The British Merlin is a medium lift helicopter with the designation AgustaWestland AW101 designed for military and civil use. Maiden flight 9th October 1987; Length 74.8', Wingspan 60.99', Pax 45 people and introduced into service in 2000

MEMBERSHIP MATTERS

Joe Kirk

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

New Members		
Paul Walters	G8JGF	5140
Giuseppe Alberti	I2AZ	5141
Corey Dalton	SWL	5142
Thomas Abbey	SWL	5143
Peter Thomann	SWL	5144
Capt. Jonathon Pearce MN	M7LYF	5145
Kim Darker	M7CIN	5146
Re-joiners		
Jonathan Chapman	G4FMG	4476
Changes		
Austin Vaughan – was 2E0MNV	M0MNE	5133
Resigned		
Silent Keys		
Stan Alston (Life member)	G4VSR	2906
Stan Sheath	M3MUB	4866
Vernon Elliott	G0IGB	4057
Tom Reilly (was lapsed)	G0NSY	4268
John Hughes	G4KGT	1364
Hansjoerg ENGELMANN	DF7QP	4738
Jim Hutchens	GM0SYY	4182
Bill Wright	GM3IBU	0929

RNARS CONTACT NUMBER - 01329-717627 (answer phone)



STOP!

***SOMETHING MISSING IN YOUR LIFE?
NOT RECEIVING YOUR COPY OF THE NEWSLETTER?***

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, Waterloo, PO7 7HN.

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

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

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:

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

Editorial: David Firth, M0SLL

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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RNARS Officers & Committee

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QSL Card Print	UX5UO – Website: www.QRZ.com	

CHAIRMAN'S CHAT



David Firth
Chair-RNARS@mail.com



We lurch closer to a second chance of being granted access to HMS Collingwood and to our HQ Shack. Restrictions might, *repeat*, might be lifted after summer leave. A couple of us managed to get onboard as 'guests' to visit the premises and have a look around. One could almost detect the gentle aroma of coffee and the rustle of doughnuts being harvested out of the bag -but it was all gone in a trice... it was nice to be back. However, when we consider the fragile nature of the lifting of the embargo on non-essential personnel, another swift closure could follow should there be a third wave. Nevertheless it was nice to see that the working party led by LCIS Ian Hutchinson last month, had worked some 'magic' with repairs, replacement parts and a good tidying up in and around the shack. The mezzanine above the galley has been cleared and items removed to a small caboosh in another building across the road, aerials replaced, repaired and de-cluttered. I am sure you will join me in congratulating the small team in saying 'Well Done!'

There will be little time before the AGM on October 9th in which to become re-acquainted with our old 'home' if it happens, and if you wish to attend this year I urge you to read the special notice and the instructions on signing-in to the meeting which will be facilitated online for the second time in our history. There will be a bulletin explaining what you need to do in order to sign up and connect to the AGM on the day. Also, be aware that the cut-off date for agenda items and any nominations for offices is 13th September.

I have to inform our members that the HMS Belfast London Group who are affiliated to the RNARS have fallen out of step with constitutional requisites, in as much as, without premises -having earlier been given the push by the Imperial War Museum, they have to decide in the next few days whether or not to wind up the group. This is a great shame that after forty years they are forced to shuffle off across the brow to shore in such an undignified manner. Gentlemen our thoughts are with you as you contemplate your future.

David



ANNUAL GENERAL MEETING

L/S Martin Longbottom, Secretary MOEHL,
Bldg 512, HMS Collingwood, Newgate Lane, Fareham,
Hants, PO14 1AS

Notice is hereby given of the RNARS next Annual General Meeting:

Venue:

The AGM of the RNARS will take place on 9th October 2021 starting promptly at 14:00 using online facilities. Further information about the online facilities will be made available on the RNARS website before the AGM commences ensuring that those who wish to attend can connect to the 'system' in good time. (www.rnars.org.uk).

Apologies:

To be sent to Martin Longbottom, Hon. Secretary, MOEHL, see the committee page for contact details.

Online Attendance Only:

Members attending online must supply their name, call-sign, membership number, and address. Please remember that this is due to the ongoing circumstances beyond our control, and because of the heightened risk of shutting down venue(s) should infection rates increase. Only fully paid up will be entitled to attend and to vote

Voting:

You may vote on resolutions at the AGM either in person or by appointing an appropriate representative or proxy. The Chairman will act as your representative and follow any voting instructions given. If you do not want the Chairman of the AGM to act as your representative and you wish to nominate someone else, complete the voting proxy form and send it to arrive at least one week prior to the AGM. Give clear instructions to your representative for each item on whether you wish to vote "For" or "Against". A proxy voting form is supplied overleaf, photocopies are acceptable.

Cut-Off Date:

The cut-off date for agenda items and any nominations for offices is the 13th September.

Technical requirements:

You simply need a webcam and a microphone. It's not necessary to download Zoom, it can be run through a web browser. A bulletin will be issued nearer the time containing information about how to login to the AGM via the internet. Bear in mind this is a private meeting of the Society where only members can attend through online facilities.

AGM VENUE - SPECIAL NOTICE**THE CORONA VIRUS PANDEMIC & THE AGM**

At the Committee Meeting on 29 July it was agreed that the RNARS AGM on 9th October will be held on Zoom due to uncertainty about access to our usual venue and the level of restrictions likely to apply at the time.

As with last year's AGM the decision has been taken to cancel the usual venue for this event and run an online AGM instead. Attendees must sign up to participate online using name, callsign and RNARS membership number. Further details will follow in sufficient time before the AGM. The maximum numbers allowed by the system is 80. Look for details on the RNARS website

**Royal Naval Amateur Radio Society**

Chairman: David Firth M0SLL

Secretary, Martin Longbottom M0EHL

Tel: 01329-717627

RNARS 2021 AGM Proxy Vote Form

I (PRINT NAME) _____ RNARS Nr _____

being a fully paid-up corporate member of the RNARS hereby nominate the Chairman of the Society (David Firth) or

(PRINT NOMINEE'S NAME) _____

to act as proxy* and vote in my name at the AGM of the Society.

***The nominated as proxy must also be a fully paid-up corporate member of the RNARS.**

The proxy will be void if I attend the meeting in person.

Nominating Member's signature: _____

RNARS Nr: _____

Callsign: _____

Date: _____

Send the completed form to our Membership Secretary Joe Kirk.

PTO

Impressive Omissions

The whole business of establishing radio contact hangs on the principle of someone making an outgoing call and waiting to hear someone transmitting a reply to the call. Nothing Heard? Change to another frequency and try again...



If you just switch on and tune to a frequency and never make an outgoing call, how can you really expect anyone to get on frequency with you?



These guys didn't hear the whale calling, but neither did they initiate a QSO they just waited for something to happen. "Do something Mutley!"

'Down Chin stays'

Within this edition is a members survey which asks some reasonably basic questions about your operating habits and about your preferences for things such as modes, bands, when and why to a greater or lesser extent. What has prompted this survey by 'Henry' Zae is the apparent absence of members on our nets, and that could mean presumably, elsewhere in the bands -silence apparently. Others have said similar things about the bands being very quiet and they are not talking about propagation, they are talking about the lack of transmissions on our usual frequencies. Why is this happening when the media in general are telling us of a significant uptake in the hobby?

Please respond to Henry's survey and tell us about any reasons you might have had which stopped you from participating in amateur radio activities, and if you have any suggestions for doing other things please let him know.

A few people have noted that a major shift in operations from Morse and digi-modes has come about by the advent of FT8 and other automatic systems that run on computers. If you think that is so, then tell us. If working the nets is becoming a bit passe' then let us know how we can breathe fresh air across our particular hobby and within the spectrum. See the centre pages.

4M DIPOLE AERIAL PROJECT

John M0UKD



AT-588, 66MHz-88MHz

As an object lesson in how to keep things simple, but very effective I stumbled across this webpage of John's in the early stages of starting out in the 4m (70MHz) amateur band. I found it to be very simple to construct and very effective to use when contacting local 4m nets around the S. Coast and inland. All in all, it cost about £15 and when checked out with an IC-7300 at 50W gave a cracking SWR of 1:1.15 which was very satisfying. The coil consists of a few turns of coax used as a choke balun, but essentially as I found out you do not really need it. I have kept it as a safety pre-caution without detriment to the dipole's overall performance, over to M0UKD:

Today, I finally built a $\frac{1}{2} \lambda$ dipole for 4m. I have previously been using a folded $\frac{1}{2} \lambda$ dipole made out of 450 Ω balanced feeder, suspended in the loft, which is not ideal. I still had the coax outside on the roof and the pole which were both used previously for my 2m/70cm co-linear, which has been relocated to the chimney, so once it was built, it was simple enough to put up.



I was thinking about building an end fed half wave dipole, having previously built a 'prototype' which worked well. This requires a matching section at the base, but no boom arm is needed. I also thought about a slim jim / J-pole, but the total length would be 3 metres. So, I decided to go with a trusty $\frac{1}{2} \lambda$ centre fed dipole. I built it using two 1 metre lengths of 6mm aluminium tube, and all terminations are inside a waterproof electrical



4M DIPOLE AERIAL PROJECT

box. Inside, I also placed a coax choke balun, which is built out of a 25mm piece of pipe, with 11 turns of RG58 coax wrapped around it.



Coaxial choke balun

I thought I might have to trim a bit off the 1m elements, but once I put it on the mast, the analyser showed the lowest VSWR of 1:1 at exactly 70MHz, so I left them as they are!

Hope to work you on 70MHz! John.



The only difference in my homebrew kit of parts which I found in one of our larger DIY stores was the use of 'chocolate block' terminals which gave me an easy option to dismantle the aerial in the event that I decided to go DXing up a mountain... This necessitated a judicious bending at one end of each of the 2mm dia. aluminium rods that I used. Each of those rods is 1m long, but I estimated that a standard set of pliers had a nose width of 10 to 15mm with which to grasp the end and turn it over by 90 degrees. The terminal block had three terminations in it where I used the two outer cores and the middle one as a space between the two. Height does matter as does the distance of the dipole from the support pole. As a vertical dipole being supported by a vertical aluminium pole it tended to be directional relying on me going outside to twist the bottom section of the poles to prevent the lower element from being masked -learned that the hard way! however, a suitable cantilever support made from slim line plastic plumbing tube stuffed with a wooden core of dowling just under a meter long soon sorted out the problem without sagging either.

It wasn't long before the mobile bug bit me, and not wanting to take the IC-7300 with me in the car -a no brainer really, I saved up my pennies and paid a visit to our local emporium and in spite my heavy disguise was 'seen' exiting the establishment with a small box under my arm. I found a jolly nice aerial and mag. mount from an up-country emporium and since then I have had a successful time with ranges of over 40 miles well into Salisbury plain and beyond, I even got as far as Swanage from Portsdown Hill... The fact that there is a pub up there and a burger bar is nothing but sheer coincidence.

[Ed, M0SLL]

IN THE NEWS

HODGKINS Commander Jonathan Mark, Royal Navy

It is with great regret that I have to inform you that the Commanding Officer Combined Cadet Force Royal Navy and Royal Marines, Commander Jonathan Hodgkins Royal Navy, has sadly passed away peacefully at home surrounded by his loved ones. Jonathan retired from the RN in 2014 and worked in the railway industry, before returning to the RN as a Full Time Reserve Officer in 2019 as the Commanding Officer for the Combined Cadet Force RN.

Max White MOVNG, 4701

Amateur radio featured in *Yachting Monthly*



In a recent edition of YM magazine, Barry Pickthall considered the best option for communications at sea and looked back at how amateur radio has been an important method of communication in the *round-the-world* races. You can read the article via a line on their website:

<https://www.yachtingmonthly.com/gear/hf-radio-or-sat-comms-communication-at-sea-79067>

YM

UK spending £9.5m on Titania communications satellite

The Defence Science and Technology Laboratory (Dstl) have awarded a £9.5 million contract to In-Space Missions Ltd for the build of the Titania satellite, which will undertake research on the future generation of communications hi-tech. To be launched in 2023 and almost the size of a washing machine, the satellite will support the 'Titania Operational Concept Demonstrator' which explores the military



utility of Low Earth Orbit direct-to-earth free-space optical communications (FSOC).

UKDJ

The search for Flight MH370 - Malaysian Flight 370

John William VK4JJW has an update on how **WSPR**, the Weak Signal Propagation Reporting remains a key source of hope in the search for the wreckage of the missing airliner. WSPR is undergoing some refinements to help in the search for Malaysia Airlines Flight 370, which crashed more than seven years ago in the Indian Ocean while en-route to Beijing. **Southgate ARN**



Home beckons for Brocklesby and Shoreham as 3-year Gulf mission ends. Homeward bound on a 6,000-mile journey from the Gulf after a three year mission to keep sea lanes open are the mine hunters HMS Brocklesby and Shoreham. The pair are the latest ships to complete such an extended stint in Bahrain. Royal Navy mine hunters and their crews have conducted [such work] now for 15 years. Their task: to remain at the top of their game, ready to locate and neutralise underwater devices should anyone try to threaten the safe passage of merchant shipping in a part of the world key to the UK's economy and interests.



Royal Marines from 40 Commando and Lympstone provided pomp, ceremony, and not least the match ball to a one-day cricket clash in Taunton.

Playing to a full house at the town's County Ground, the Band from the Commando Training Centre supplied the music and marching...

And the commandos from just up the road in Norton Manor provided the brawn to entertain the crowd ahead of Somerset's clash with Yorkshire in their Group B Royal London One-Day Cup encounter.



Puma drone comes on 'leaps and bounds' during North Sea / Baltic deployment.

The Puma is just over 4½ft long, with a wingspan of 9ft, and is designed to fly for up to two hours carrying out reconnaissance and intel gathering

missions over sea or land. The drone can monitor an area larger than the size of Greater Manchester during its flights, feeding back real-time footage to help sailors and Royal Marines make accurate tactical decisions. The fixed-wing Remotely Piloted Air System (RPAS) is flown by 700X Naval Air Squadron.

RALLIES & CONVENTIONS

G4RGA

From September 2021 to December 2021

September 2021

4 & 5 September - 4th G-QRP Convention & Telford Hamfest [Saturday & Sunday] Harper Adams Univ Campus, Telford, TF10 8NB. (both events)

4 Sept 4th G-QRP Convention

***** The G-QRP event will very probably now be an online only event. *****

5 Sept - 5th Telford HamFest. Nothing is 100% certain, but hopefully we will be able to hold this twin-event for which a booking has been made at the HAU site.
Contact: Martyn G3UKV 01952-255416. Website <http://www.telfordhamfest.org.uk/>

12 September - Exeter Radio & Electronics Rally

America Hall, De la Rue Way, Pinhoe, Exeter, EX4 8PW.

Contact: Pete, G3ZVI, 07714-198374, g3zvi@yahoo.co.uk

12 September - Caister Lifeboat Rally 2021

Caister Lifeboat Station, Caister-on-Sea, Norfolk, NR30 5DJ.

Access through the car park in Beach Rd.

Open 09:30/08:30-sellers until 14:00. Free entry. Raffle. Café onsite

Easy Disabled access. Talk in on S22.

To book, call Zane, M1BFI, 07711-214790.

19 September - Cambridge Repeater Group Rally

Foxton Village Hall, Hardman Road, Foxton, Cambridge, Cambs. CB22 6RN.

Open 0930 (0730 traders). Entry £3. TalkIn, Car boot sale. Trade. B&B.

Catering (Burger van due to be onsite). Disabled facilities. RSGB Books. Free parking.

Contact: Lawrence, M0LCM, 07941-972724, rally2021@cambridgerepeaters.net

Web: <http://www.cambridgerepeaters.net> for details and bookings.

24 & 25 September - National Hamfest [Friday & Saturday]

***** POSTPONED *****

It is with much regret that the organisers of the National Hamfest have decided to postpone the event until September **2022**.

26 September**Weston-super-Mare Radio Society 6th Radio & Electronics Rally**

The Campus Community Centre, Worle, Weston-sur-Mer, BS24 7DX.

Open 09:30/10:00 to 15:00 - Traders 07:30

Contact: Dave, G4CXQ, 07871-034206, g4cxq@btinternet.com

RALLIES & CONVENTIONS

October 2021

3 October - 48th Welsh Radio Rally

***** POSTPONED until 2022 *****

Rob Evans, MW0CVT, 01495-220455, mw0cvt@sky.com

16 October - BATC Convention for Amateur TV 2021 (CAT 21) Part 2 Online

A day of online talks about Amateur Television using a similar format to the very successful CAT 20.

16 October - Essex CW Boot Camp

3rd Witham Scout & Guide HQ, Rear of Spring Lodge Community Centre, Powers Hall End,

Witham, Essex, CM8 2HE.

Open 08:30 for registration. Start 09:00 and finish 16:30. Free parking.

Day costs £10 with free soup, drinks and cakes.

Contact Andy, G0IBN, 07453-426087, g0ibn1@yahoo.com

17 October - Hornsea Amateur Radio Rally

Driffield Show Ground, Driffield, E Yorks. YO25 3AE.

Open 1000. Free parking. Admission £2/Kids free. Trade. Bring & Buy.

Outside car boot area. Catering on site. Raffle.

Contact: Rally Manager, Les, 2E0LBJ, 01377-252393, lbjpinkney1@hotmail.co.uk

Web: <http://www.hornseararc.co.uk>

17 October - Hack Green Radio Surplus Hangar Sale * Was 18 April *

Hack Green Secret Nuclear Bunker, Nantwich, Cheshire, CW5 8AL.

Government Covid Regulations Permitting. Fully Covid Compliant.

Any last minute cancellation will appear on our Facebook Page:

<https://www.facebook.com/HGsecretbunker/>

November 2021

7 November - Holsworthy Radio Rally

Holsworthy Leisure Centre, Well Park, Western Road, Holsworthy, Devon, EX22 6DH.

Open 10:00. Traders. Bring & Buy. Catering. Venue also has disabled access.

Traders & General Enquiries contact Howard, M0MYB, m0omc@m0omc.co.uk

Caveat Emptor

Be sure to check that the events are actually going ahead before you start your journey.

Information provided by: <http://g4rga.org.uk>

Marine Weather Inland

Weather Radio for Forecasting

Forecasts on BBC Radio 4 LW and NAVTEX -information for our member enthusiasts who follow the 'Marine Scene' and the weather fax/data trail on their hobby quest in this fascinating niche amateur radio pastime.



Sometimes, it is just nice to switch off your SDRs and try reception the 'legacy' way. I still listen to the *Shipping Forecast* on BBC Radio 4 Long Wave every day, when I can, and I have found that I spend more time with my radios, for exactly the purpose of weather-forecasting during this lockdown. It has become a habit now.

I currently have a **Palstar R30A** in my shack, and I have paired this with my **Mörer Infobox WIB2D** today, to get both spoken-word forecasts and NAVTEX. To complete the picture, my **Uniden UBC125XLT** is on the *Maritime Safety Information Broadcasts* frequency of the Liverpool/ Holyhead Coastguard and will alert me when the short reports come in every three hours on the following frequencies (MHz).

160.725
160.775
160.825
161.750

As you can see, *Officers Dogger and Fisher* of the RNLI are, once again, keeping me company here.

You can keep up-to-date with all matters radio, weather and maritime through Robert Connolly's monthly column, *Maritime Matters*, in *RadioUser*. See you there.



Mörer Infobox WIB2D screen



Palstar R30A



Uniden UBC125XLT scanning receiver

www.radioenthusiast.co.uk/

Perhaps one of our own RNARS WX enthusiasts could write an article...?



Maritime Safety Information (MSI) amended service: BBC Radio 4 Weather Bulletins

The UK marine weather service will return to the normal schedule for the foreseeable future. The BBC Radio 4 weather bulletins will be broadcast as follows on Weekdays from Monday 5th April and on Weekends from Saturday 10th April:

Weekdays

00:48	LW, FM	Gale Warnings, Shipping Forecast, weather reports from coastal stations and the Inshore Waters Forecast
05:20	LW, FM	Gale Warnings, Shipping Forecast, weather reports from coastal stations and the Inshore Waters Forecast
12:01	LW	Gale Warnings, Shipping Forecast
17:54	LW	Gale Warnings, Shipping Forecast

Weekends

00:48	LW, FM	Gale Warnings, Shipping Forecast, weather reports from coastal stations and the Inshore Waters Forecast
05:20	LW, FM	Gale Warnings, Shipping Forecast, weather reports from coastal stations and the Inshore Waters Forecast
12:01	LW	Gale Warnings, Shipping Forecast
17:54	LW, FM	Gale Warnings, Shipping Forecast

Please note all times provided are in Local Time.

For the most up-to-date information on UK broadcasts of marine weather forecasts and maritime safety information for all UK seafarers, please see the electronic leaflet below:

www.gov.uk/government/publications/maritime-safety-information-leaflet

April 2021

MARITIME AND COASTGUARD AGENCY © CROWN COPYRIGHT



The Integrated Operating Concept Isn't Very Good

The Integrated Operating Concept 2025 (IOpC 25) is supposed to guide the UK armed forces for the years ahead starting in 2025. As a concept, however, it contains significant flaws and has been met with more than just the 'concept fatigue' mentioned in Steve Maguire's analysis of February 2021. This article presents an alternative view and argues that it's not very good.

Much credibility is lost when the document claims to be "the most significant change in UK military thought in several generations." To the contrary, its central idea of integration has been raised every five years or so for decades. IOpC's 'integration' is simply a heated-up version of fusion doctrine, the comprehensive approach, integrated action, and many other phrases. We need to question what's actually new this time round. The analysis underpinning the focus on integration is frustratingly lacking and avoids the hard questions high level doctrine centres should be asking. If integration is so important the document should identify the factors that work against it and how we can overcome them.

This is not new...

The IOpC gets worse when it suggests that "distinguishing between operating and warfighting represents a fundamental shift in military philosophy." The RAF detachments in Romania or the resident battlegroup in Estonia seem to understand the difference fairly clearly. There are plenty of other examples to show that this isn't 'fundamental'. IOpC also presents 'forward presence' as a new idea. This ignores historical reality, including the British Army of the Rhine and two hundred years of Royal Navy deployments and isn't new.

The failure to understand what has gone before means that there is no examination of what has worked (or not) in the past, or of why the approach has waxed and waned. This in turn means that there are no useful conclusions on what to do different in the future. Defence needs a deeper level of analysis, which in turn needs a better appreciation of the past.

Albert Einstein once famously defined insanity as doing the same thing [over and over again] and expecting different results. A more cutting question IOpC hasn't engaged with is why, when we 'operate' already, have we not been able to exploit it to achieve the impact we now deem critical? Without answering this question first, the concept is likely to be 'more of the same'.

Is the narrative that important?

Another idea, the argument for the centrality of the narrative, is not so much badly explained as simply wrong. IOpC argues that information tools are 'persuasive' and that 'narrative' increasingly determines victory or defeat. Would a good narrative in 1944 have avoided the need to conduct D-Day? Or, to look more recently, did Azerbaijan win its war with Armenia because of a superior narrative? Or was it through superior firepower that killed enough Armenians that others fled the front lines, combined with an offensive on the more open Southern flank? It seems victory went to the side that did better fire and manoeuvre, not the side that sold the best story. Yet, IOpC makes numerous assumptions about how important the narrative is.

There is no certainty that the narrative is the most important thing nor does IOpC ask the deeper questions needed to make the concept credible. The narrative may have been critical in Afghanistan, but that is only one example of possible future conflicts. Physical action can make the same claim. In any event, the narrative and the domains of warfare constantly interact and subordinating one to the other is illogical. Ultimately, Defence still needs to break things and kill people. And it needs to do so quickly, while the enemy is doing the same to us.

There are other problems with the IOpC such as its blithe assertion that mobility is more important than protection. That's not the view of the Ukrainians and the Russian proxies digging trenches in the Donbass. Steve Maguire is right to point out the need to protect the moral component from damage inflicted by the enemy's use of information but the first step has to be to keep your people alive. Prioritising one over the other does neither.

We may also question the chances of other government departments buying into a Ministry of Defence concept. It is clear that the IOpC was not created using the integrated approach it advocates. There doesn't appear to be a plan for how to operate with other parts of government. Is the Ministry of Defence just speaking to itself (again)? Or maybe the concept just isn't very good and lacks credibility outside narrow military circles? Without a vision for further engagement the concept is likely to remain an exercise in staff college thinking.

It's not all bad

IOpC is not all bad of course. There is a coherence to the overall view. It takes a plausible view on "grey zone" conflict, though not using the phrase.

OPINION

Constant competition isn't new but it is more important than it was twenty years ago and is worthy of study. IOpC also has some sensible things to say about the near ubiquity of information. But this kind of thought is commonplace and not the superior analysis one hopes for from the Defence Concepts and Doctrine Centre. In this regard, IOpC is already behind the academic world in considering the deeper implications. Simply responding "read the classified version", as do in response to critique, does not mean that it contains a sufficient level of understanding. So the IOpC could be worse. But it could also be so much better. Can we hope that the incoming Chief of the Defence Staff, rumoured to be Admiral Radakin, gives it a burial at sea?

Sarah Chubb

Sarah is an early years researcher, retired from the RAF, interested in strategy and the use of military force.

The Wavell Room 3/21
CONTEMPORARY BRITISH MILITARY THOUGHT

DIVERSE REPORTS - OUR MEMBERS

Bob Houlston G4PVB, 5129 writes about 73 Magazine:

I have a word.doc that lists free access to old copies of *73 Magazine* in the vintage years of the 60s & 70s. A friend of mine put it together. I'm not sure if it's of any use to you but I enclose it anyway. Just look at those prices and weep!

73 **Bob**

Thanks Bob. I have summarised the basics below and passed the complete listings on to Joe Kirk so that he can see if it can fit on to our website in its entirety:

The list runs from October 1960 to March 1972:

http://www.survivorlibrary.com/library/73_magazine_1960_10_october.pdf to

http://www.survivorlibrary.com/library/73_magazine_1972_03_march.pdf

For example, if you wanted to review May 1969's edition you would type:

http://www.survivorlibrary.com/library/73_magazine_1969_05_may.pdf

Thanks Bob

DIVERSE REPORTS - OUR MEMBERS**Meanwhile, Steve Legg tells us that he has been quite busy:**

Helloooooo... Not been doing much radio recently, work has got me heavily involved with radios these past weeks so when I finish I have had my radio fix for the day!!!! Also been busy de-wiring my trusty old Alfa to swap it over to another vehicle. You wouldn't believe the amount of wiring etc, still got a couple of coax runs to remove and the radio battery and some further wiring. So far taken this lot out from various locations, under seats, under carpets. The car was setup for 70cm, 2m, 4m and all HF bands down to 80m. Cup of tea time beckons...

**Barry Lyons** has written in:

I've just received my copy of the Newsletter, another interesting read with a good range of articles. I was very interested in the "A Blast From The Past", re early Naval Communications because many years ago I read an article in the "Army and Navy Illustrated" and I'm sure members will find it interesting, especially those who have operated in the RN. Pleased to see we sent our condolences to Her Majesty, the Duke enjoyed his time with the RN.

Lack of activity on the nets, well it is Summer and after Covid we are all longing for some fresh air and exercise. It'll pickup towards the end of the year.

73, Stay Safe and thanks for all you do for the Society,

Barry Lyons / GM4GIF / RNARS 852

Henry Zae catches up with the Bubbliess and with the RM Memorial net:

Saturday Bubbliess net of the RNARS on the 10th July 2021

We were on 7080 and 3747 this morning. Good to very good propagation conditions with a fair bit of solar noise and some qsb. There was no qrm; fair to good copy. Some SDRs used - many thanks to their owners. Wx: (8/8). i.e. overcast. with cloud. 18-20°C Feels Like 20°C F0 Gusts F0 Precip. 0.0mm, Pressure 1015 hPa. We had 7 on board: Incomplete contact with F6 station the only one on 7080, Dan m0wks (55), Hugh GW0WWQ (56), Matt G6WPJ, (58-59), Marc M0YWO(59), Dave G0OKA (11-32-58wsm), Tony G0LUB (57-59) and I.

DIVERSE REPORTS - OUR MEMBERS

Get well Mike G0VIX, Glenn G0GBI, Baz GD0SFI; delighted to hear that Tony M6LWO is getting better – hope to hear his booming signal on the nets soon.

Also on the RM memorial net:

Saturday G0DLH, **RM Memorial net of the RNARS** on the 10th July 2021.

We were on 7080 and 3747 this morning. Good to very good propagation conditions with a fair bit of solar noise and some qsb. There was no qrm; fair to good copy. Some SDRs used - many thanks to their owners. Wx: (8/8) overcast cloud. 18-20°C Feels Like 20°C F0 Gusts F0 Precip. 0.0mm; Pressure 1015 hPa.

We had 4 on board: Steve 2E0WDR (44-35), Terry G0SWS (59), Phil G1LKJ (57) with 60w, and I.

Many thanks I your support.

PS: A wi after the report means “heard through Wismar”. I suggest similarly: h = Hack Green, t = Twente, a = Andorra, j = Jordan, f = France f8kgo, o = Allhau-Austra, c = Stafford, w = Weert, we = Wheathampstead, co = Conway, do = Donegal, b = Barny; without letters it is a direct report.

73 de "Henry" m0zae RNARS #4955 RAFARS #4782 RSARS #4321

A note from **Stephen Palmer, GM0EQS**

Just a brief note to congratulate you on the quality and professionalism of the latest newsletter. We are all in your debt. Well done! Yours aye, 73s

Stephen

...and from Max White:

Thanks for latest newsletter - nice read & much appreciated.

73 - Max M0VNG/4701

Mick Puttick, G3LIK

Our Vice-Chairman Mick Puttick is back in hospital and has been moved from the QA in Pompey to Gosport War Memorial for rest and observation. I'm sure you will join us in wishing him well and a swift recovery. For our newer members, Mick is one of our veteran Founder members of 1947, and also a Freeman of London -Thinking of you Mick, get well very soon.



DIVERSE REPORTS - Survey of Members Radio Related Activities

'Henry' Zae

To get an understanding of the radio interests/activities of members would you please indicate your stand on the following questions by ticking the box that closely matches how you feel. Send your completed survey form to Henry:

ACTIVITY	primary	sometimes	indifferent	Not inclined
Scratch-building				
Kit building				
Refurbishment				
Electronics experimentation				
Aerial experimentation				
Field-day style experimentation				
Field-day style contesting				
Contesting of any type				
Dx hunting				
Casual random QSOs (active calling CQ)				
Casual random QSOs (passive answering CQ)				
Regular nets				

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SWL				
Mode SSB				
Mode CW				
Mode digital				
Involvement - Social (active)				
Involvement - Social (passive)				
Incidental - triggered by other activity				
Other				

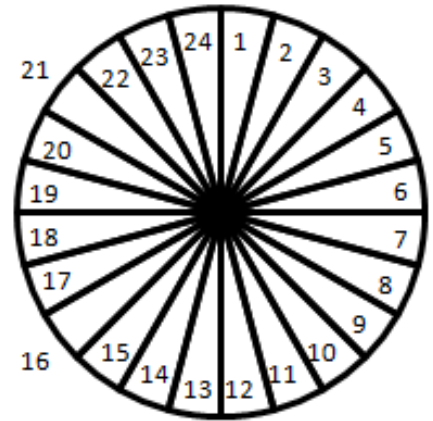
Time for radio and other things

1. Family
2. work
3. chores
4. relaxing
5. Radio on air
6. Radio off air
7. other pastimes

Time For Radio

Shade in and label the clock segments
-you know the drill from the olden days.

Send your completed survey to Henry Zae:
MOZAE@yahoo.co.uk



WIRELESS TELEGRAPHY ONBOARD THE EUROPA

Commander E. P. Statham, R N

During the recent Fleet Manoeuvres, Marconi's apparatus for sending messages without the aid of a continuous wire was fitted up on board three vessels in the Reserve Fleet, in order to test the efficiency of this method for the purposes of Naval warfare. The vessels so fitted were the "Alexandra" battle-ship, carrying the admiral's flag, the "Europa", first-class cruiser, and the "Juno" second-class cruiser.

The experiments proved to be of the greatest interest; but before describing the manner in which they were carried out, and the practical results arrived at, it may be well to give a brief account of the principles of the invention, and the apparatus required to work it.

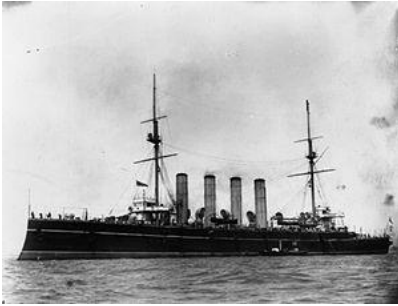
**The ships callsign was
GRKB**

In ordinary telegraphy the current of electricity *-to use the popular term-* is conducted from one place to another by means of a wire; and without this channel to hold it, there is no possibility of communication. Cut the wire, and you are done. The current is confined to this conductor, and can only reach the spot aimed at by its means.

Wireless telegraphy, on the other hand, depends entirely upon the communication of a series of waves to that mysterious and impalpable medium which is known as "ether", these waves spreading on all sides like the little ripples caused by dropping a pebble in a pond. It sounds very impracticable, for how, in the first place, are we to set the waves in motion? And how is the receiver of the message to catch them in any particular place?

The manner in which the "splash" is caused is simple enough. The apparatus required consists of a battery and an induction coil, the primary wire of the latter being connected to the battery with the intervention of an ordinary key, which leaves a gap in the circuit. On pressing the key, the circuit is completed through the primary wire, and this induces a powerful current in the secondary wire, or, rather, an extremely rapid series of currents, caused by a "make and break" arrangement which works with tremendous speed, producing the well-known buzzing sound of the induction coil. One end of the secondary wire goes to earth, the other to a brass knob, causing what is, in fact, a little flash of lightning. The second brass knob is in connection with a wire receiver, hung up aloft as high as possible; and the tension of the electricity being very high, it spurts off this receiver in little discharges at inconceivably small intervals. And here is our "splash"; we have dropped in our pebble and set the ripples going. The higher the receiver, the further the waves will extend, becoming weaker as they near the outer limit; and in order to utilise this current in wave form, there might be somewhere within the effective radius a receiver, suspended aloft, precisely similar to the one which

gives out the waves. This condition being fulfilled, we may imagine a succession of these almost infinitely rapid discharges reaching our friend's receiver, and traversing the wire attached to it. The rapidity of these disruptive discharges is so great that, if we write down the figures at which they are approximately calculated, they convey but little meaning to the mind - 800,000 per second! No wonder they should appear to us in the form of a continuous current, and the spark between the brass knobs of the induction coil as a thin line of fire.



Now we have got our electricity into our friend's receiver and down the connecting wire attached to the little instrument which really forms the most important link in the whole chain. This is the "coherer". It consists of a little glass tube, containing two silver plates very nearly touching, and having between them some exceedingly minute filings of nickel and silver. The wire from aloft comes to one plate, the other is connected with earth, passing on its way through the

primary wires of an induction coil. So we are shaping for a complete circuit, only interrupted by that little space between the silver plates.

Now the tiny filings come in and do their part. The tremendously rapid but feeble waves cause the filings to cohere and de-cohere with corresponding rapidity, thus producing a sort of sympathetic wave-action among them, resulting in the passing of a practically continuous current between the silver plates and so on through the primary wire of the induction coil, inducing a stronger current in the secondary wire. This current, however, is still far too feeble to work a telegraphic recorder and is, moreover, unsuitable for the purpose, consisting as it does in reality of a series of disruptive discharges; so a well-known expedient in electrical apparatus is introduced. The weak current, by the interposition of delicate electro-magnets, puts on a stronger battery, which, in its turn, works the recorder.

Such, very briefly stated, is the general principle of the Marconi apparatus. There are some obvious drawbacks as regards its practical employment. In the first place, its sphere of action extends on all sides; anyone situated on or within the circle reached by the widest ripples, and being possessed of an apparatus with a receiver in sympathy with that of the sender, will take in the message as readily as the person for whom it is intended. This defect is certainly being tackled, and it is said that in some instances the effective arc has been reduced to a mere segment of a circle; but as yet it must be taken, as a rule, to be nearly 360-deg. Again, the height of the receiver is a very important factor; and, so far as can be seen at present, in order to communicate over any great distance – say hundreds of miles – the receiver must be carried at a height which would be quite impracticable afloat. Another drawback is the comparatively slow speed at which it can be worked, making a long message a tedious process. This is said to be due to the coherer, which cannot convey the wave-currents quite as fast as they reach it.

The first-mentioned is obviously the most serious defect. It is true that, in order to take in a message, the receiver must be precisely similar, and there may be a vast variety of receivers. Still there is always something more than a possibility of the enemy possessing a similar one; and even a cypher is not always a safeguard. However, the apparatus as applied for practical purposes, in peace or war, is in its infancy, and there is but little doubt that vast progress will be made in the next year or two. Meanwhile, the outcome of the practical test at sea is encouraging in the extreme.



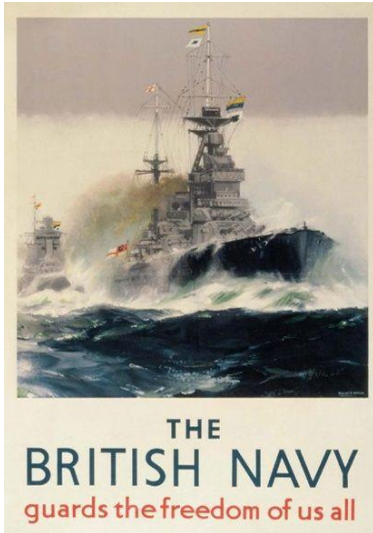
When the Reserve Fleet first assembled at Torbay, the "Juno" was sent out day by day to communicate at various distances with the flag-ship; and the range was speedily increased to over 30 miles, ultimately reaching something like 50 miles. At Milford Haven the "Europa" was fitted out, the first step being the securing to the main topmast head of a hastily-prepared spar, carrying a small gaff, or sprit, to which was attached the receiver, the wire from it being brought down to the starboard side of the quarter-deck through an insulator, and into a roomy

deck-house on the lower after bridge which contained the various instruments.

When hostilities commenced, the "Europa" was the leading ship of a squadron of seven cruisers despatched to look for the convoy at the rendezvous. The "Juno" was detached to act as a link when necessary, and to scout for the enemy, and the flag-ship, of course, remained with the slower battle squadron.

The "Europa" was in direct communication with the flag-ship long after leaving Milford Haven, the gap between reaching 30 or 40 miles before she lost touch, steaming ahead at a fast speed. Reaching the convoy at four o'clock one afternoon, and leaving it and the other cruisers in charge of the senior captain, the "Europa" hastened back towards another rendezvous, where the admiral had intended remaining until he should hear whether the enemy had found and captured the convoy. But scarcely had she got well ahead of the slow ships when the "Juno" called her up, and announced the admiral coming on to meet the convoy. Now the "Juno" was at this time fully 60 miles distant from the "Europa", and the news could consequently be communicated in a minute or two over 120 miles of sea. A cruiser steaming 18 knots would take over six hours to get within signalling distance, in the clearest possible weather.

Now imagine a chain of vessels, 60 miles apart; only five would be necessary to communicate some vital piece of intelligence from a distance of 300 miles, receive in return their instructions, and act immediately, all in the course of half-an-hour or less. This is possible already. Doubtless a vast deal more will be done in a year or



two, or less; and meanwhile the authorities should be making all necessary arrangements for the universal application of wireless telegraphy in the Navy. The outfit is not expensive; £120 would probably fit up any ship, and it is sure to become cheaper in time. It might be imagined, from the manner in which the current, so to speak, is conveyed, that any solid substance directly interposed between sender and receiver would seriously interfere with, if not altogether destroy, the practical efficiency of the apparatus; it would not be surprising, in fact, considering the curiously intangible nature of the link connecting the two stations, if a gale of wind or a thick fog were to constitute a formidable obstacle.

As a matter of fact, these curious waves are not in any way affected by such trifles as fogs or gales of wind; indeed they appear to revel in a fog, and give remarkably good results. It has further been ascertained recently that four or five miles of solid cliff make no sort of difference to these waves. Like their first cousins, the X-rays, they decline to recognise the existence of solids, and so long as the height of the receivers is duly proportioned to the distance, they ripple merrily in all directions, and "call up" anyone within range. It is not a matter for surprise, among those who have worked at this science, that this should be the case, as the more deeply the characteristics of electricity are investigated, the more clearly does its marvellous adaptability and universal presence come out.

Some humorous faddist has been trying to prove that the earth is flat, from the fact that two ships 60 miles apart can communicate by this means; it is rather an old joke, but this apparently incongruous communication by wave-forms through a considerable slice of ocean affords a good peg whereon to hang a revival of the theory. A curious illustration of the great tension of the current, as carried from the induction coil to the masthead, was noticeable in the induced current in the wire backstays. When the operator was at work sending a message, on looking closely at the backstay a little spark could plainly be seen playing between the wire and the small tarred rope which protects it from chafe.

The Navy and Army Illustrated, August 26th 1899

Barry Lyons, GM4GIF

Source: <http://www.godfreydykes.info/The HMS EUROPA story>

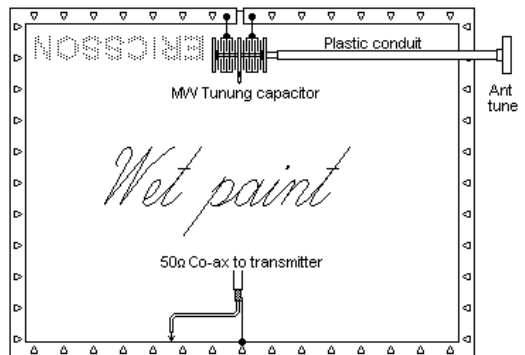


PACKING CRATE ANTENNA

Harry Lythall, SM0VPO / G4VVJ

I have been placed in a situation where a landlord denied permission to erect an antenna. Any form of antenna was unreasonable, even a white-painted broom handle caused interference!! My dartboard frame did not cause any interference at all. This antenna was based upon a packing crate lid, as is often found wrapped around heavy machinery. Such packing crates are used by Ford, Volvo, and Ericsson. They all have a metal band around the frame of the lid. I found mine on the stairs of my place of work with "WET PAINT" scrawled across it. Most of the crates I have seen are made by a company called NEFAB here in Sweden; their biggest customer is Ericsson. You can often find these crates beside rubbish skips or in basements.

The larger the lid is the better the results. Paint it black and hang upon it a dartboard. Nobody will ever suspect that it is really an antenna and is used for transmitting. The antenna is also quite portable & robust; it can be just thrown in the back of a car and hung on a tree, a lamp-post or any convenient support. I have used this antenna with up to 50 watts of RF power at HF, and it functions well from 7 MHz - 30 MHz without any form of switching, just a bit of tuning.



The first prototype antenna was about 1 meter wide by 0.75 meters. Cut a 1 cm notch out of one side and place a 270 + 270 pf MW tuning capacitor across the gap. The capacitor MUST be air-spaced, as was commonly found in the older MW transistor radio's. Do not be tempted to use modern plastic capacitors or you will have a wonderful pyrotechnic display on TX even with QRP. Larger packing crate lids are more efficient and operate at lower frequencies, but they give an increased impedance at the cut-out which will reduce the maximum power you can use with a simple receiver type tuning capacitor.

The tuning is fairly narrow, but hand-capacity can detune the antenna quite a bit, so you must extend the capacitor shaft with a length of plastic conduit so that it can be tuned, without getting your hands in contact with the metal forming the loop. Touching the loop will give you a bit of a burn if you use powers of more than 10 watts. Tune the antenna for minimum VSWR.

RF is coupled to the loop antenna by means of a tap as shown in above. I have used a coupling loop shaped something like a coat hanger with the first few antennas, but the method shown is a little simpler. Adjust the RF tapping for best VSWR. I have worked several European countries with the antenna from Stockholm, on a 2nd floor balcony.

Finally, if you use a Futaba R/C servo to tune the antenna it may be situated well clear of the operator. The Futaba R/C servo requires a square-wave pulse of 1mS which is varied between 0.5mS and 1.5mS. This will give you 180 degrees of rotation. Cheap servo's seem to move in minute jerks in one direction, but are quite smooth in the oposite direction. The RED and BLACK wires are 6 volt power and the WHITE (or YELLOW) wire is for the 5-volt pulses. Radiating 50 W does not seem to affect even the cheapest of servos mounted at the antenna.

I hope that you have as much fun with this antenna as I have. It was always a great talking point when visitors saw it!
Have fun, de HARRY.

© Harry Lythall Ts & Cs (1)



**DON'T
PANIC!**



**JOIN
THE
RNARS**

The **RNARS** has its roots as far back as 1947 with the Amateur Radio Club at *HMS Mercury* being started by a group of enthusiastic radio-telegraphists at the Royal Navy's Signal School near East Meon in Hampshire.

The '*Club*' became the RNARS in 1960, at *HMS Mercury* on the 22nd August. The new Society remained under the watchful gaze of their Commander at the time; Commander David Seeley RN (who was later to become Lord Mottistone and the Society's Patron).

From humble beginnings, with 26 members, very little equipment (vintage thermionic valve-driven, a spare classroom and a first shack the Society has grown significantly to over 600 members worldwide, with a medium-sized HQ building in the grounds of *HMS Collingwood*, in Hampshire.

70MHz BAND PROFILE

RSGB

Bandwidth: 70MHz Band: 70.0 – 70.5MHz

70MHz Band Licence conditions

In the UK the 70MHz (4 Metre) band is allocated with Secondary status. It is available on the basis of non-interference to other services inside or outside of the UK. For Full Licensees the power limit is restricted to 160W (22dBW) – lower than normal.



70.000 – 70.100MHz - Propagation Beacons

This area of the band is allocated to beacon stations with a maximum transmission bandwidth of 1kHz. The primary purpose of beacons is the checking of propagation conditions both for every day amateur use and for special propagation research projects.

70.100 – 70.250MHz - Narrowband Modes (CW/SSB/MGM)

Narrowband modes with a maximum bandwidth of 2.7 kHz in common with all VHF, UHF. and microwave band plans are always found at the bottom of individual allocations. This is where you will find Morse (CW), telephony (SSB) and machine generated mode (MGM) activity such as PSK31 and JT6M Most CW and SSB activity will be conducted around 70.200MHz but you must be aware of the specific band allocations of other European countries as these often differ from the UK allocation.

70.250-70.294MHz - All Modes

This non-channelised area of the band is allocated to any mode with a maximum bandwidth of 12 kHz. The 70MHz band is unique insofar that it has an AM calling frequency on 70.260MHz.

70.294-70.500MHz - All Modes (Channelised Operations – 12.5kHz spacing)

This section of the 70MHz band is allocated to all modes channelised operation where both telephony and digital modes exist. These are narrowband FM (NBFM) channels with 12.5 kHz spacing and in this sub-band area you'll find FM telephony, packet radio, RTTY and internet gateways. Incidentally although the UK usage column of this sub-band indicates that the majority of channels are used by digital modes, internet gateways or emergency communication groups that does **NOT** mean you cannot use them for FM telephony. It is simply a case of listening on these channels to ascertain **LOCALLY** whether they are in use or not. If you hear no other traffic then you may conduct your contact on any channel you wish to use.

For more information visit:

<https://rsgb.org/main/operating/band-plans/vhf-uhf/70mhz-band/>

SEA STORY

Eric Bray M0HFF

Kuala Lumpur

Eric and his pals continue their capers up country in Malaya on a mystery bus tour and find a growing respect for the insect community in their jungle surroundings -and get a spectacular introduction to some nasty little fish..



Mickey came in with a wad of today's last-week's papers, from Kuala Lumpur, dumped them on the counter, and went to the bar. He came back with his ration of three cans. "Why don't you go earlier?" Someone asked. "I did. I can't come back till now, though, because it's too hot. The truck would never make it up the hill!" Mickey tipped one of the cans down his throat, and broke out in a sweat. "Ah! I needed that!"

"Why not put in for a new one?"

"Someone did, ten years ago. We're still waiting, because we're not very high on the list of priorities. God knows what will happen if it really quits on us!" He looked round. "Hey! Someone's got that old radio going! It hasn't worked since Christmas!" I pointed at the Greenie, who pointed at me. "He did!"

"Well, now it's going, don't turn it off, it takes an age to warm up!"

"Is there anything to do, around here?"

"No. It's supposed to be a rest camp, so rest! Look at you, here one day, and you're stir-crazy!"

"What was this place?"

"Some say it was a Jap P.O.W. camp, others say it was an observation post, but there's nothing to observe, from here!" The second can of tiger chased the first down his throat. "There used to be a wooden radio mast over on the other side, but it's gone now. The bugs ate it!"

"Is that what that group of concrete blocks were?"

"No, that was something else, I don't know what. It was over near where Papillon was sitting, earlier."

"Don't you start that! What's this Papillon, anyway?"

"You don't know?" Mickey looked at me, with a grin. "If we had a dictionary, I'd say – look it up – but we haven't!" The third can followed the previous ones.

"I'm off to my pit, now, before the mossies really get going." He vented gas from both ends, and vanished, leaving us choking on the stench. The first of the mossies didn't seem to mind.

At Oh-god-o-clock, a Baboon screamed, starting the dawn chorus. "Oh, we're off again!" Someone muttered. He drew a deep breath, then let out a blood-curdling reply of his own. It was greeted by a stunned silence from the trees, then a cicada chirped, a whatever bonged, and the rest came back to life,

redoubling their efforts, and going on twice as long. “Don’t do that again, oppo!” His mate advised. “You’ve upset them!”

“I’ll upset them, if they don’t SHURRUP!” Screech, bong, chirp, chirrup!

“Shut up, you..!” The Greenie grouched. “Every time you shout, they shout back, and there’s more of them!”

Later, sitting outside the shed, after pool-cleaning, I asked Fred what made the bong noises. “Is little tree creature, live in water.”

“A frog?” I ventured.

“Come, I show. Some just down there.” He led me to a thick, fleshy-leaved plant with a puddle of water trapped in the centre of the rosettes of leaves. In the water were three black tadpoles. “Them babies. Later get legs and tail go.” Fred tried another plant nearby. “Here one.” He lifted something out. In his palm was a bright green frog that was about an inch long, which had suction-pad toes, like a chit-chat. “That tiny thing?”

“Him little, but shout big!” Fred put it back into its puddle. “What you call?”

“Frog.”

“F – r – og?”

“Yes, frog. What do your people call it?” Fred shrugged. “Here tree. Our people eat nuts, make mouth go red.” I recalled a sketch in the ring-binder, labelled Betel nut. “Your peoples can eat, but not like.” He twisted a kernel off a twig, split it open, and displayed the nuts contained within. They looked rather like Horse-Chestnuts. “You want try?” I hesitated, expecting a trick, so Fred plucked one out, and munched on it. I nibbled a corner of another, and my mouth turned inside out. Imagine the flavour of a banana, and the bite of a sour lemon, then make it the sourest, bitterest, lemon, ever, before you multiply it a few times, and don’t try eating one yourself! Fred smiled at my expression. “Is need getting used!” He picked the last nut out, then tossed the kernel into the scrub. “Also make into drink. Get off head plenty bloody quick!”

“I hope it tastes better than the nut!”

“No!” He suddenly grabbed my arm and wrenched me sharply sideways.

“Sorry, Boss, you about to tread on – thing. Bite real bad.” He poked a twig at a shiny black creature that had six legs, claws like a crab, and a long, segmented tail with a wicked spike on the tip. “Not know your name for.”

“Thank you.”

“Him bite with -.” Fred made pincers with his fingers, “And stick with tail. Go like fire on skin, then grow big hole, go bad. Hurt bad, bleed lot, and yellow stuff, smell bad, too. Most creature not go in man’s house, him will. Shake clothes before putting on!”

“I will!”

“Better get back, dinner soon.”

“Ok, Fred. See you tomorrow.” There was no answer, so I looked away from the glossy black creature, but Fred had vanished into the shrubbery.

I made my way back to the pavilion, watching for snakes and - things. Mickey was in the canteen, filling his face, so I described the creature, and asked if he knew what it was.

“Ah, scorpion. Nasty bastards, don’t mess with them. Their venom kills the skin cells, and you end up with a gangrenous ulcer, then, in this climate -.” He shrugged. “What?” He looked at me. “Amputation, kiddo. Out with the knife, and – zip!” He demonstrated on a sausage, using his table knife. “Amputation? From an insect bite?”

“You better believe it! Your Chinese friend Fred told you right!” I didn’t bother reminding him that Fred was a Malay, and not a Chinese, and he was more of a teacher. I didn’t think his teaching would serve me very well in the concrete jungle I knew, any more than my description to him of what traffic lights were for, but who knows? “Best thing to do, when you see one, is squish it. An’ not with your boot, the sting can go through the leather, use a lump of rock, or a tree branch. Wheel jacks work ok, too!”

After lunch, I debated with myself over whether to add a sheet of paper to the ring-binder, with my interpretation of a scorpion on it. My artistic skills nowhere near matched those of the originator, but I thought maybe, if someone looked, in future, it could save them from a nasty injury. Should a better artist find it, they could always replace my drawing with a decent one. Having done that, I lay on my bunk, reading a Dick Francis novel I had found. Halfway through chapter one, I woke up in time for tea. On the table was a chitty advertising a ‘Mystery Bus Tour’, tomorrow afternoon, with a few names below, claiming interest. I added mine, even though it wasn’t clear whether the bus, or the destination, was the mystery.

I picked a different spot to sit, after, as a few of the lads were playing a quarter-hearted game of football on the flattest area, and I wasn’t interested in anything that energetic. I took the Dick Francis with me, and started reading from where I’d left off. It didn’t make sense, so I went back a page, and another, and another, to a bit that I recalled, then read on from there. Although my eyes were on the pages, my ears were listening to the Humming-birds, and the wuff of the occasional winged insect-eater as it zipped past me.

Shortly after ten, the next morning, Fred and I trudged down to the pool with the net and bucket. Fred was carrying himself. At the pool, he made the usual circumnavigation, while I prepared to net the night’s crop of corpses. “Not do yet. Leave!” He suddenly cautioned, watching something in the pool. “What is it?” I put the net down, and moved to where he stood. “See, in bottom?” I saw what looked like an old length of fire hose in a coiled heap in one corner. After a minute or two, it uncoiled, and undulated up the sidewall. A wide flat head popped out of the water, and hissed air, as a forked tongue flickered. “Him know me, not frighten. You different smell, not know.” A reptilian black eye

stared at me, as the tongue continued flickering. “Stan’ still. Not move.” The head slid over the side of the pool, followed by twelve more feet of snake. It lay on the concrete edge, warming up, watching us, for a few minutes, then moved off into the jungle. “Him squeeze snake, not bite.” Fred wrapped his arms around himself, and tensed. “Come for swim sometimes, when skin get old, makes it come off better.” He picked up the net from where I’d left it, then scooped out a long transparent thing like a giant condom that had split down its length. “You want keep?” Fred spread it out on the grass to dry, then began netting the drowned moths from the pool. “Not many mens swim in pool?” He observed. “No, there’s too big a temperature differential.”

“Sorry?” He clearly didn’t understand.

“There’s too big a-,” I changed direction. “Air very warm, water very cold, the change is too big.”

“Ah!” Fred understood that. “Diff-ren-shull.”

“Yes, differential, too big a change from hot to cold.”

“I learn new words from you.”

“Your English is better than my Malay!”

“You only practice two day!” Fred smiled. “You talk different to Mickey, and from not Jock Geordie who was here two week ago. Him I not understand one bit!”

“Mickey’s what we call a Cockney, from a big village called London. I’m from another big village called Manchester. I didn’t know Geordie, but he was probably from a place called Newcastle.”

“Lon-don, Man-chest-her, New-castle. Funny names.”

“No funnier than – cl – gl – gg!” Fred burst out laughing. When he got his breath back, he said, - “You still not got right!” He said the village name again, slowly. “T – gl – ggu?” I ventured. “Ct – gl – ggu?”

“Near!”

“Tc –gl – ggu?”

“Village!”

“T – gl – ggu?”

“Why you talk different to Mickey?”

“Do the people of your village talk differently to those from Kuala Lumpur, or Johore Baru? When they speak, do you know they are from a different place?”

“I don’t know. I never gone there.” We thought about that for a while. “I been next village, one time, meet my woman.”

“You’ve only seen her once?”

“No, you not understand! I bring her back my village, make house, make babies!” Fred didn’t seem old enough.

“You have woman in your place?”

“No, not yet.”

“You family fix up, when you go back?” I imagined my Mother picking out her idea of the perfect partner for me, and shuddered. “We don’t do it that way in

my country.” I smiled. “It is up to me to find the girl I like, and persuade her that I’m the man she needs.”

“Ah.” Fred thought about it. “How you do? Fight other mens who want her?”

“If I have to, but usually we just talk to her, go places together, dance to music, do things together, buy her presents, and things like that. Then, eventually, she decides yes or no.”

“Woman decides?” He seemed surprised. “Yes.”

“My people, women get telled by Head Man. He decide!”

“What if you don’t like her, or she doesn’t like you?”

“Doesn’t matter, still make good baby, look after house, grow food. My woman thin like snake, smell like flowers in rain. My other self – how you say? - Man make boy, boy, girl, boy. I one boy, other boy.”

“Your brother? Girl is sister.”

“Bro – thah? He get one, fat like football, smell like – psss! He sketched an arc from his groin to the ground. Fred fanned his nose. “Pss.” Then he smiled. “All squishy like old fruit. Make good baby though, shout plenty loud when hungry!” He picked up the net and bucket. “Talk too much, make late. Is dinner time. You go now, come tomorrow.” He wandered off to the shed, while I went to the pavilion, wondering what weird vegetables the chef would present today.

Lunch proved to be omelettes filled with cheese, or chopped bacon, and nearly tomatoes. I presume that they were grown locally, because they didn’t keep very well.

While we were dining, the tour bus arrived with a clatter of ancient diesel engine, and a whine of gears. It was still steaming gently when we boarded. It was like stepping into a steel furnace that was going at full blast. We all promptly opened the windows and the Emergency door, which upset the driver, then piled out again while it cooled down to a bearable temperature. The driver went storming off to protest to the Chief. When he was dragged out of the bar, we were all sitting carefully on the scorching seats, looking innocent. Chiefy shrugged, and went back to his latest pint, leaving the driver to harangue us in Malay, until he’d run out of things to say. “Bluddy sailormens, all trouble!” He found some English. “Break bus, think funny haha! I not bluddy laugh!” He banged the door closed so firmly that the glass fell out of the mirror attached to it. “See! Bluddy trouble! We go now! Remember way, make trouble, I make walk back! Bluddy trouble!” He took his seat, fidgeted around, then turned the key. Something under the bonnet went ‘clack!’, the engine churned over lazily, puffing blue clouds from the exhaust until one cylinder woke up. He kept the key turned, and eventually a few more cylinders joined in. A smell of burning electrics crept in through the open window, along with diesel fumes. The driver released the key, and sat there, juggling the throttle as the engine coughed and jerked spasmodically. Another cylinder fired, then there was a thunderous back-fire, spitting out a cloud of smuts and

a long orange flame from the exhaust, before the engine settled down to a lumpy idle. The driver decided that the last cylinder wasn't going to join in just yet, and trod on the clutch before fishing for first gear. Then he gave it some gas, and let the clutch up. The engine stopped with a loud clang, and a jerk. The coach jumped forward a foot, taking up the play in the transmission, and twisted the engine over the next compression. With a bang, it fired, and wound the transmission the other way, and stalled again. Jerk, bang, jerk, bang! We lurched down the road, gradually gathering speed, until there was enough to keep the engine going, and we staggered off in a blue haze.

“Well, that solved one mystery!” Someone said, “The bloody thing started!” We kangaroo-hopped off the plateau, and onto the twisting descent, in a series of neck-wrenching jerks, whereupon the motion became a series of brake-smouldering screeching moments interspersed with the driver wrestling with the enormous steering wheel, which was set almost flat on its column. His back and



arm muscles writhed as he wrestled with the iron monster, all the while his right leg was pumping on the brake pedal as he tried to keep the speed in check and the bus on the narrow road. The brakes howled again as we scraped round the final bend, and onto the long straight section. They continued howling, though, and we took another turn, diving into a narrow gap in the brush, and onto a gravel track. After a short way, the track opened out to an almost disused two lane road, the centre white line still visible. We drove down the middle, with the jungle grabbing at both sides of the bus, the wheels trampling over new growth that was pushing through cracks in the tarmac. “I hope there’s nobody coming the other way!” Someone commented, from the back. “Nobody from Kuala Lumpur know this road here!” The driver said, now he was getting his breath back. “I find by mistake two year. Nobody drive this way two week.” Looking at the baby jungle growing through the surface, it was believable. Given time, the jungle would reclaim this forgotten section of road again.

After half an hour, we came to a clearing. The driver pulled up, still on the road, so that we could see. “Here Jap-knees make house. Make road for airplanes, but not use much. Kiwis’s come, and kill bang-bang. Jap-knees all dead. Air-plane still in hut, hut fall down, squash. Jungle take back. Not safe go look, tins in ground jump up bang! Blow leg off. My frien’ dead now. Kill by dead Japknees.” He banged the gear-shift into first, and we neck-snapped off again down the road.

We were quiet for a while, after that, thinking of the innocent locals, and the Japanese minefield, still waiting for victims, thirty years on. “One day, go back

for friend, when all tins gone bang. Get old now, sometimes go bang on own, or when bird or creature walks on.” So, his friend was still there, waiting to be returned to his family. The jungle closed in even tighter, as we pushed and crushed along the forgotten road. We were still descending slowly, and running dead straight. As the sun was hidden by the canopy, our direction was unknown. The jungle light was a dappled, gloomy green, splashed with colour where ever a flower called for attention.

Ten minutes on, a cliff reared up, as we entered another clearing. On the other side, the ground fell away several hundred feet, to more jungle canopy that spread out as far as the eye could see. “We here. Road stop now. Rocks fall off before, take road.” We all piled out, stretching cramped limbs, and massaging bruises where the metal parts of the seats had savaged us. The driver waited until we were clear, then performed a sixty-point turn in the confined space, then turned the engine off and went to sleep. Now what? We looked around. There was the road leading back, a ragged scar where the land had slipped, and not much else. On the other side of the scar, the barely recognizable road continued on its way to wherever, heavily overgrown with scrub, and impassable on anything less than a bulldozer.

Behind, the near vertical cliff, and in front, the vertiginous drop to the jungle below. A narrow fall of water, barely a yard wide, cascaded down from above, into a pool, making the water churn and boil. A stream ran from the pool, into the scar, and then



fell again, until it vanished into the green below. ‘Someone dangled a hand into the water. “Hey, it’s warm!” He removed his shoes and socks, and paddled around in about three feet of water. “Come on, Papillon, come and play with the little fishes!”

“What colour are they?” I asked, curious. He peered, “Green, with red heads.” “I think they’re piranhas!” Their sketch had been in the ring-binder. “What, these little – OW!” He made a sudden dash for the nearest dry bit. “Ow! Gerroff, you little bast-! OW!” He scrambled out of the water with a little fish attached to the calf of his left leg, its tail flailing furiously until its jaws met, and it fell to the ground, flapping helplessly. A trickle of blood ran down his leg, welling from a pea-sized hole. The fish, as he had said, was green, three inches long, and slim. It had a huge, round, caudal fin. The head was twice as deep as the body, with serrated teeth that snapped furiously at the air.

Eric

CONTENDERS FOR NEW ANTI-SHIP MISSILE

NAVYLOOKOUT

Contenders for the Royal Navy's interim anti-ship missile requirement

The semi-obsolete Harpoon Block 1C (GWS 60) anti-ship missile that still nominally equips the Type 23 frigates and Type 45 destroyers has survived several attempts to take it out of service. Its current official OSD is now 2023 which should dovetail with I-SSGW arrival.



However, the RN recently invited Babcock to submit a tender to continue supporting the system until 31 March 2024 with 3 additional one-year options, potentially sustaining it until 2027. Curiously, only HMS Kent among the 3 Harpoon-capable escorts assigned to the 2021 carrier strike group deployment, sailed with the canisters in place. HMS Montrose, based in the Persian Gulf is the only other RN warship currently equipped with the full set of 8 missiles.

Name	Manufacturer	Country of origin	Approx Range	Warhead Weight	Guidance	Launch Weight	Comments
Naval Strike Missile (RGM-184A)	Kongsberg / Raytheon	Norway	185km+	120 kg	INS, GPS, Infra Red	400 kg	Light, agile, hard to detect/counter. Small warhead (c £1.6M each)
Gungnir RBS 15 Mk 4	Saab	Sweden	300km+	200 kg	J-band active radar seeker INS, GPS	810 Kg	Central warhead. Good range / size balance
Sea Serpent Gabriel Mk V	IAI / Thales	Israel	200km+	Estimated 250 kg	INS, GPS, Radar Seeker	1,250 kg	Limited information in public domain. Similar dimensions to Harpoon.
Long Range Anti Ship Missile (LRASM) (AGM-158C)	Lockheed Martin	US	500 km+	450 kg	Multi-mode passive radar, GPS INS, Infra Red, passive ESM	2,000 kg	Sophisticated guidance, swarmable, long range, powerful warhead. Integrated on P-8. Large and expensive (c £2.8M each)

The available budget for I-SSGW is up to £200M (excluding VAT if payable), enough to buy a modest stock of missiles, logistic and training support until the Future Cruise and Anti-Ship Weapon (FCASW) is available in 2028.

The I-SSGW specification states it must be “a ship-launched, have over-the-horizon anti-ship capability and a terrain-following precision maritime land attack capability.” The desire for land-strike is sound and but adds another dimension to the project. This requirement also effectively eliminates the MBDA Exocet MM40 Block III and the Boeing Harpoon Block II+ from the competition due to their limited capabilities in this regard.

NAVYLOOKOUT.COM

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 Bubby 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 / 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	M6LWO					
	1700	TG 23527	Wednesday DMR Net	M0LIH					
	1900	3.748	Wednesday Net	G0VIX					
Thurs	1900	3.542	Scottish CW Net	???					
	2000	145.575 (S23)	RNARS Scottish 2m Net	GM0KTJ/P					
change	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					
Sun	0800	7.015/30555	MARAC CW	PA3EBA/PI4MRC					
	11:00	14.329	SSB - Les	VK2CPC*					
	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

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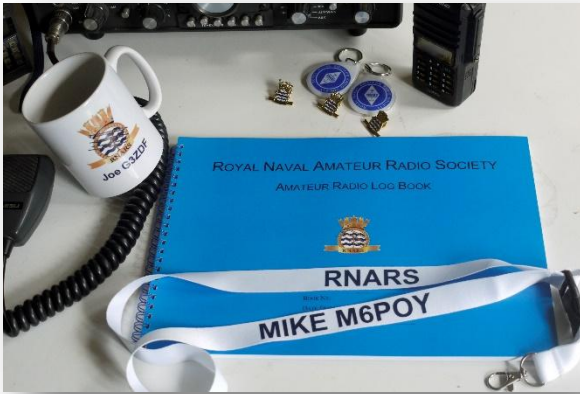
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	1830 A	3.71	G3HWQ	MØRGI
Monday	1900 A	3.7	G3PSG	GØBIA
Tuesday	0730 A 1400 A 1900 A	14.27 7.015 3.567	G4IYC	
Wednesday	1500 Z 1530 Z	14.29 21.29	?	
Thursday	1830 Z	14.17	ZC4RAF	
Friday	0730 A	14.055	CW Net	
Sunday	0900 Z	5.403	?	
1st Monday of the 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	G6NHY	
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	
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