

*On The  
Air for  
Sixty  
Years*

# *The* RNARS



## NEWSLETTER



Royal Naval Amateur Radio Society



**Promoting amateur radio in the Royal Navy since 1960**



Amateur  
Radio  
Society



**WINTER 2021**

# LDG ELECTRONICS

## FAST AUTO TUNERS REMOTE – DESKTOP – ZERO POWER

Designed to work seamlessly with your transceiver & match a wide range of antennas!



### Z-100A

#### Plug and Play operation

Use with Yaesu, Icom, Elecraft, Alinco and Kenwood models using the seven supplied interface leads, installation could not be simpler. Featuring LDG's famous 10:1 SWR tuning range that matches Dipoles, Verticals, End Fed Wires and even windoms. Covers 1.8 to 54MHz with powers from 0.1 to 125W.

£199.95



### Z-100 Plus / IC705 Icom IC-705 Auto Tuner

£199.95

Supplied with stereo interface cable and BNC to PL259 plug to work directly with the Icom IC-705.

Features 2,000 memories that both store frequency and tuning parameters. The Auto tuner provides 125W power handling with super-fast 0.1 second tune (from memory).



### Z-100 Plus Zero power auto tuner

£169.95

Handles 125 Watt and will work from just 100mW of drive. Latching relays use almost zero current once tuned. 2,000 memories and a matching range of 6 to 800 Ohms its ideal for Portable or mobile operation



### AT-1000 Pro II Flagship Auto Tuner

£529.95

Handles 1,000 Watts with a large easy to read Bargraph display. Covers 1.8-54MHz with a choice of two antennas. Matches from 6 to 1,000 ohms so easily handles Yagis, Dipoles, or virtually any coax fed antenna.



### AT-600 Pro II General Purpose Auto Tuner

£384.95

Designed for mid sized amplifiers up to 600 Watts with a large easy to read bargraph that shows Forward/Reverse power and SWR. Switch between two antennas with 2,000 memories for each antenna, giving almost instantaneous recall.



### AT-200 Pro II 250W Auto Tuner

£279.95

A general purpose tuner ideal for the higher powered 200W transceivers, but will tune from just 5W input. With a bargraph display, two antenna outlets and 4,000 memories, (2,000 per antenna) it learns your favourite frequencies for near instant recall



### AT-100 Pro II 100W & QRP Auto Tuner

£249.95

Requires just 1 Watt for operation, so ideal for QRP, but will also handle up to 100W. Has two antenna outlets and 2,000 memories per antenna. The bargraph display provides both 12.5W and 125W scales for easy QRP or higher power readings.



### Z-11 Pro II QRP Portable Auto Tuner

£189.95

Ideal QRP tuner needing just 0.1W for tuning, but capable of 125W. Dedicated buttons for manually fine tuning the antenna once near match. Ideal for portable use with internal AA batteries requiring just 20 micro amp standby current.



### Z-817

£139.95

Interfaces through the CAT port providing full control of the tuning cycles. Supplied with all cables required to interface to the FT817/818. 2,000 memories store previous settings for fast recall. Ultra low power consumption and truly portable from internal battery power.



### BALUNS

LDG provide a selection of 200W Baluns and UNUNs with 1:1, 2:1, 9:1 and 49:1 ratios

FROM £29.95

# nevada®

Nevada - UK Exclusive Distributors  
Available from our dealers throughout the UK or direct from Nevada

023 9231 3090 • [www.nevadaradio.co.uk](http://www.nevadaradio.co.uk)

• Unit 1 • Fitzherbert Spur • Farlington • Portsmouth • Hampshire • PO6 1TT

# CONTENTS

## REGULARS

Membership Matters	Joe Kirk G3ZDF	4
Subscriptions Information	Special Offer...	5
RNARS Officers & Committee	Who we are	6
Chairman's Chat	David M0SLL	7
RNARS Nets	Mick Puttick G3LIK	41
RNARS Commodities	Suspended service	42
RSARS/RAFARS Nets	Our Affiliated Friends	47

## NEWS & REPORTS

<b>Pye Swordfish Radio Project -Help</b>	<b>Johan Spek in Holland</b>	8
Diverse Reports	Club and members' news	14
Rallies & Conventions- late 2021	G4RGA online	15
Diverse Reports	Club and Members News	21
Branch News	News From The Branches	23
Books Corner	Editor's Pick	25
In The News	News From Here & There	26
The AGM	Summary From The Chair	27

## FEATURES

WRENS Who Sank The Bismark	Bletchley Park, Max White	11
The IC-7300 Clock Battery	M0SLL	21
Whispers of The Past	The Communicator - 1961	19
Mayday In Magellan Pt 3	Cdr Tom Sharpe OBE RN	28

**Front Cover:** The Blackburn Buccaneer a was low-level subsonic strike aircraft that served with the RN and later with the RAF, retiring from service in 1994. Designed and produced by Blackburn Aircraft at Brough, later known as the Hawker Siddeley Buccaneer. The Buccaneer was a replacement for the original choice of the TSR2 which was scrapped by Harold Wilson's government. The Buccaneer was a low-level subsonic strike aircraft that served with the RN as a naval strike aircraft capable of fleet carrier operations from 1962 to counterbalance changes in the Soviet Navy. The Buccaneer carried both nuclear weapons and conventional munitions for anti-shipping warfare. Well known for its long range 'lob bombing' capability.

**Back Cover:** HMS Cutlass Delivered to Gibraltar in November 2021

**Special  
Notice**

*From the 1<sup>st</sup> to 26th December all UK and Crown  
Dependency licensees may add the suffix /2ZE to their  
amateur call sign to mark the centenary of the first  
Transatlantic amateur radio signals*

# MEMBERSHIP MATTERS

Joe Kirk G3ZDF

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

Membership Changes since Autumn 2021 Newsletter

New Members		
David Gillatt	2E1CIK	5147
Simon Hammond	MOSIH	5148
Trevor Smith	M7BWW	5149
Re-joiners		
Martin French	G8WSH	1737
Changes		
Resigned		
Bill Best (age and infirmity)	G0SCY	3780
Silent Keys		
Colin Dewhurst	G4KLD	1681
Iain Drysdale	GM3TYS	0570
Tony Tapp	G4MTQ	1568
Bill Connolly	GM4ZET	2664
Harold 'Mac' McGuinness	G0RPK	3886

## Statistics

Type Of Membership	Current	Free	Life	Under25	Total
Affiliate	15	5	0	0	20
Associate	127	1	13	0	141
Corporate	335	3	63	3	404
Family	5	0	0	0	5
Honorary	1	1	0	0	2
<b>TOTAL</b>	<b>483</b>	<b>10</b>	<b>76</b>	<b>3</b>	<b>572</b>

**RNARS CONTACT NUMBER - 01329-717627 (answer phone)**



## MEMBERSHIP MATTERS – SUBSCRIPTIONS

**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:** 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, 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.

© Royal Naval Amateur Radio Society, RNARS, All rights reserved



# RNARS Officers & Committee

<b>Patron: Admiral Sir Philip Jones KCB</b>		
<b>President: Commodore Paul Sutermeister DL RN</b>		
Chairman	David Firth* M0SLL	Chair-RNARS@mail.com 02392 553744
Hon Vice Pres' & Net Lists	Mick Puttick G3LIK 21 Sandyfield Crescent, Cowplain PO8 8SQ	mick_g3lik@ntlworld.com 02392 255880
Treasurer	Adrian Mori 2EØJVM 33 Valerian Road, Southampton, SO30 0GR	Ade.mori64@gmail.com
Gen Sec.	<b>Martin Longbottom</b> Building 512, HMS Collingwood, Newgate Lane, Fareham, Hants, PO14 1AS	Secretary@rnars.uk 01329 717627 A/phone
Membership Secy & website	Joe Kirk G3ZDF 111 Stockbridge Road Chichester PO19 8QR	G3ZDF@btinternet.com
<b>Committee</b>	Doug Bowen, Wally Walker, Kevin Lamb, Steve Legg, Martin Longbottom, Bob New, Mike Moore, Pete Milson, <b>Simon Murray</b>	
Ex-Officio		HMS Collingwood
RNARS Managers		
*Newsletter Editor	<a href="mailto:Chair-RNARS@mail.com">Chair-RNARS@mail.com</a>	
Commodities & Postal NL	Mike Moore M6POY	
HQ Shack Manager	Steve Legg M6WVV. Asst. Alan Campbell M6LFM	
Awards	Ian Pitkin G4KJD Clover Cottage, Kenny Ashill, TA19 9NH	thecloverpress@yahoo.com
Call list	Contact Joe Kirk G3ZDF	G3ZDF@btinternet.com
Overseas Representatives		
Australia		
Canada		
USA	Mike Rioux W1USN	
QSL Managers		
UK	<b>Pete Milsom G4GSA</b>	pete.milsom@virgin.net
Australia		
Germany	MF Runde DLØMF	
New Zealand	Nigel Hardy ZL2TX, PO Box 15078, Otaki Railway, Otaki, 5542, N Z	
QSL Card Print	UX5UO – Website: <a href="http://www.QRZ.com">www.QRZ.com</a>	

## CHAIRMAN'S CHAT



**David Firth**  
Chair-RNARS@mail.com



The continuing restrictions and the infection rates prior to the AGM allowed the committee to take a mature decision to opt for another zoom AGM this year. I am grateful to the Committee for their diligence and wisdom in making a sound decision. Additionally, I would like to thank the Committee for a smoothly running AGM. The AGM itself concluded on a hopeful note that we may well see our access to the HQ Shack re-instated early in the new year. In the meantime, the Committee and other members continue to work from home to keep the affairs of the Society running. Thank you to all who participated via the facility of zoom which proved to be quite easy to access via the link set up by Joe Kirk and Martin Longbottom.

We must not forget to thank those of our members who continue to work in HMS Collingwood and those who are serving members at sea or at other establishments far and wide, who drop into the shack to keep an eye on things for us, and who flash up the gear to keep those little transistor-gadgets humming nicely. However,

At the time of writing members finally visited the shack last Thursday and by all accounts were grateful to be back -no doughnuts, but the promise of these jammy delights next Tuesday 7<sup>th</sup> of December is a strong incentive.

On a personal note, may I lean on you to fill in Henry Zae's survey form, because we want to gain an understanding of our members' radio related activities to see if we can fine tune our own society-wide activities. On a personal note, I reckon the Holsworthy event is worth investigating to see how rural groups are coping -might see you there...

Congratulations to the Hellenic Navy's inauguration of their very own amateur radio club.

I would like to take the opportunity of wishing every one of our members and their families a merry Christmas and a new year with much better prospects than the last two have given us.

*Best Wishes to everyone*

*David*

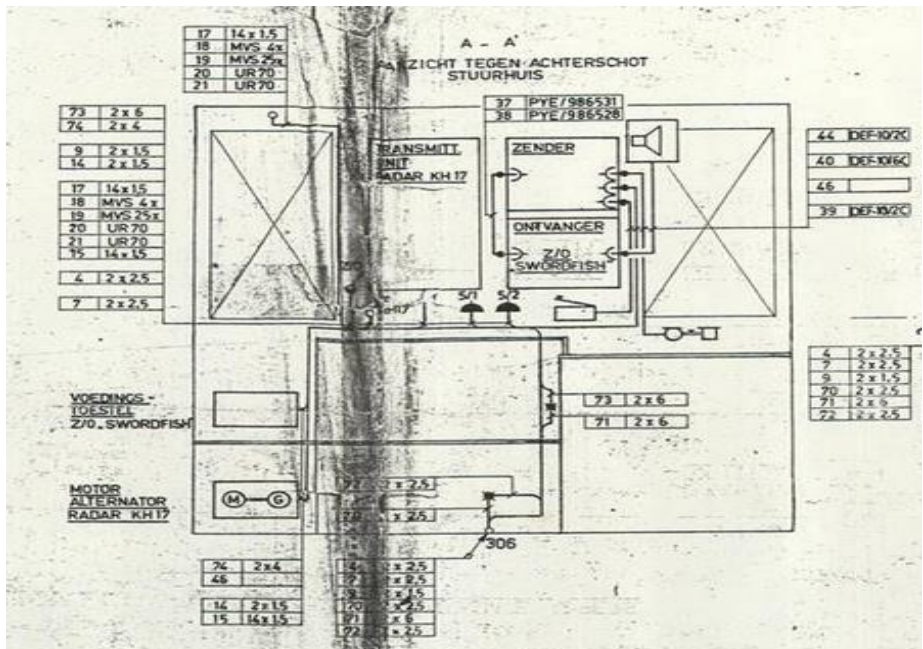
# PYE SWORDFISH RADIO - HELP

Johan Spek, Holland

**Subject: Information search PYE Swordfish PM 248 II and PTC 791/2**

My name is Johan Spek, living at Anna Paulowna, the Netherlands. I am a retired FT ( Fire Control Technician) from the Royal Dutch Navy. At this moment I am helping a friend (Gijs Balster, Groningen, the Netherlands), who is restoring an Auxiliary Vessel named DREG IV. (A920). Link to his weblog: [DREG IV](#)

The vessel was used to make depth cartographics of the sea in combination with a sister ship and a mother ship. We found that a former TX/RX equipment Collins CMX-46159 was replaced by a "PEY Swordfish", at the time she was used as a communication vessel.



A simple drawing diagram we found: see also the appendix Z-O Swordfish DREG IV:

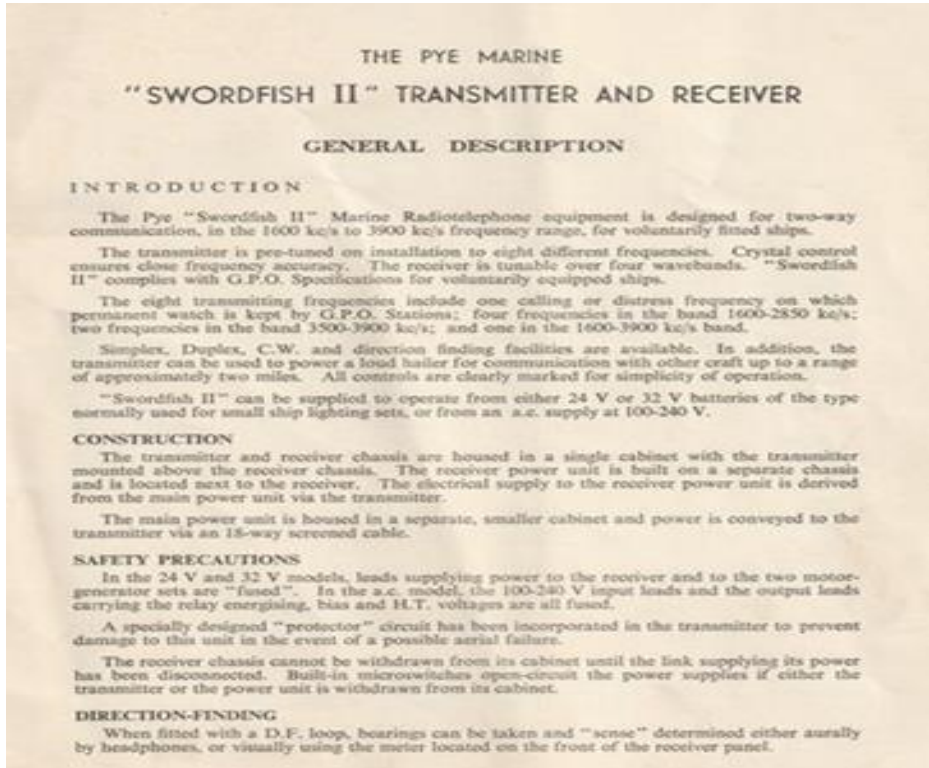
The Swordfish Transmitter (Zender) and Receiver (Ontvanger) are interconnected by a couple of cables named: PYE/986531 and PYE/986528. A Speaker is connected to the Receiver.





# PYE SWORDFISH RADIO - HELP

## SWORDFISH RADIO INTRODUCTION



From: <[spekanna@hetnet.nl](mailto:spekanna@hetnet.nl)>  
Date: Fri, 13 Aug 2021 at 07:57

If anyone has experience and knowledge of this variation of what may have been originally a General Service item please feel free to contact Johan. My seagoing memories go back to the mid 60s when I was just a lad with permission to carry a screwdriver and the Chief REA's toolbag and a fleeting memory of a 619 that had gone up in smoke -with the rest of the MWO after a DC genny over speeded. Then the type was discontinued. [Ed]



# WRENS WHO SANK THE BISMARCK

Max White, MOVNG

## ***Bletchley Park's Secret Source tells how Wrens helped to sink the Bismarck***

*The role of a secretive women's unit in key moments of the war is revealed at last*



The women whose interception of German naval messages during the Second World War helped to sink the Bismarck have spoken for the first time about the mysterious Y Service.

Members of the Women's Royal Naval Service gathered crucial intelligence by eavesdropping on enemy transmissions and passing them to codebreakers in Bletchley Park. While those codebreakers broke their silence in the 1970s, the Wrens kept their secrets for a further 50



years.

A new book is now recounting their role in thwarting what would have been a catastrophic air raid by the Japanese on the navy's Eastern Fleet in Sri Lanka, and in tracking the flight of German warships in the Channel Dash, which should have averted an infamous British failure. Bletchley Park's Secret

Source, by Peter Hore, includes testimony from Pat Davies, 98, a former Wren who now lives in Chiswick, west London. She said that her colleagues became so adept at recognising the idiosyncrasies of the German morse code operators that they were able to identify which ship was sending a message before its code had been broken. A morse operator might be identified by how long his dashes were on certain letters or the length of pauses at certain points. This proved its worth during the hunt for Bismarck, the most fearsome battleship built by Germany, as it evaded the navy in the North Atlantic after sinking the battlecruiser HMS Hood.

Another Wren, Mary Earl, said that her team was able to identify the “fist” of Bismarck’s main wireless operator. *“[During] the Bismarck episode, four of us did a 14-hour stretch. We were identifying individual ships or subs by their radio operators and/or radio... Our results were sent to Bletchley Park by dispatch rider to join all the other enemy cipher messages intercepted by the telegraphists in Y. We felt very proud to think that we might have helped to sink the Bismarck.”* The German ship sank after she was crippled by torpedoes launched by Swordfish aircraft and attacked by four navy ships.

...so adept at recognising the idiosyncrasies of the German Morse code operators that they were able to identify which ship was sending a message before its code had been broken.

Davies, who later created the British version of University Challenge, based on an American show called College Bowl, was part of the team that informed the Admiralty of the Channel Dash, an incident in early 1942 in which two damaged German battleships were able to return to Germany from France. On February 14, 1942, The Times said that the vice-admiral Otto Ciliax had succeeded where the Spanish Armada had failed.



***“With trifling losses he has sailed a hostile fleet from an Atlantic Harbour [in Brest], up the English Channel, and through the straits of Dover to safe anchorage in a North Sea port. Nothing more mortifying to the pride of sea-power has happened in home waters since the 17th century.”***

The criticism might have been more severe had the public known that the Y Service, which intercepted messages “in plain” as well as in code, had tracked the battleships’ progress by monitoring the chatter of German lighthouse operators on the French coast. Davies, who was at a listening station in Lyme

Regis, Dorset, said that a colleague had filed a report to the Admiralty that would have allowed a precise attack by British forces.

*"It ended up in someone's in-tray on a Friday afternoon and he'd gone on leave," she said. "The Wren who sent this was terribly disappointed that it wasn't acted on. It was one of the most important signals of the war."*

Hore said that the Wrens, who were known as Freddie's Fairies after their chief Freddie Marshall, had been taken for granted. "Did somebody dismiss them as mere women?" Betty Bowen, another member of the Y Service, says in the book: *"You do your very, very best and then they don't bloody believe you."*

One of the most successful Wren operations was the interception of messages that showed the Japanese navy was planning to attack the British Eastern Fleet in Colombo harbour

Hore said that one of the most successful Wren operations was the interception of messages that showed the Japanese navy was planning to attack the British Eastern Fleet in Colombo harbour. *"The Y Service Wrens prevented a second Pearl Harbour in March 1942. They... enabled the British fleet to sail before the attack."*

Davies, who learnt German as a child from her family's Austrian servants, also served at listening stations in Withernsea, East Yorkshire, and at Abbot's Cliff in Kent.

It was there that she met Winston Churchill on one of his visits to the area to give the impression that the D-Day landings would take place near Calais rather than in Normandy. *"He suddenly appeared one morning to look at the enemy coast. I was coming out one morning after spending the night on duty, wearing a jersey and bell-bottom trousers, and there was a bunch of army officers coming up the cliff path with Winston Churchill among them . . . I hadn't got a hat so I couldn't salute."*

She and her colleagues had been shocked when codebreakers first spoke about their war experience in the 1970s because they felt bound for life by the Official Secrets Act. "We all rang each other and said: 'What a disaster.'"

**Jack Malvern, The Times, 9/6/21**

**Max MOVNG**



## DIVERSE REPORTS -our members

### Colin Dewhurst – Silent Key

I am sorry to inform you that Colin Dewhurst passed away on 26 July this year.

May I say how impressed I was with the recently received copy of your magazine. It is very professionally produced and apart from the technical articles, I enjoyed reading some of the items, especially Kuala Lumpur by Eric Bray.

Regarding the survey by Henry Zae, I would suggest the decline in 'old fashioned' amateur radio is due to the age and decline in numbers of live members of that era. My own husband having been a prolific morse code operator on 13 navy ships including The Royal Yacht over 25 years.

With best wishes, Ann Dewhurst

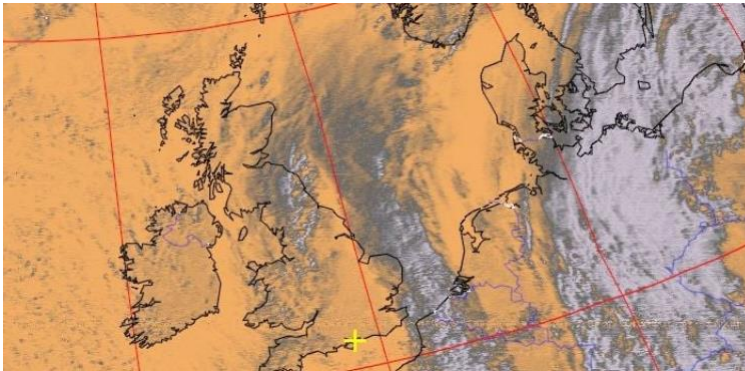


### Steve Legg has been tinkering with satellite weather decoding

Inspired by previous posts about August's weather satellite reception) I thought I would give weather satellite decoding a try. It's been over 30 years since I have looked at this area of the hobby. So did an internet search, downloaded some decoding software called WXtolmg, watched some tutorials online, setup my SDR RSP1A black box with freq/mode/bandwidth, audio input etc via SDRUno. Set up the extensive menus in WXtolmg and was then ready to do some tests on upcoming passes. Three NOAA satellites still transmit as they pass over the UK, after updating the latest Kepler data the program gave me the times for the next passes.

All was set, though the satellite signals are circular polarized I thought I would try my modest Discone antenna to see if it was possible to receive and decode these signals without the extra investment of a new helix antenna. After a couple of passes some signals were received, some with noise but some were surprisingly clear, a lot depends on the orbit and elevation of each satellite pass. I still have some tinkering to do to get the images clearer and more consistent but very pleased with results so far. If this type of thing interests you then give it a go, if you already have a computer, SDR receiver or scanner capable of hearing the 137MHz band and a Discone or white stick you just may be surprised at what you decode with no extra outlay.

## DIVERSE REPORTS -our members



### A Note from the Editor:

On a personal note, the work continues with the Newsletter in temporary accommodation in GUZ. However, my email address is still valid for the time being. The food is excellent, and we have found the buses are good for getting around Plymouth and down to the Barbican.

We still need input from members, so if you have a project, been on a rally, or have an interesting slant on something new in radio, please let us know how things are going.



**Ed**



## DIVERSE REPORTS -our members



### The Holsworthy Radio Rally

The Holsworthy Rally took place on the 7<sup>th</sup> of November in the village community centre. Given the current circumstances there was a fair turnout of people including various RNARS connections:

Phil Williams G3YPO, RNARS 2009 (lapsed), [GBTT -QE2 Radio Officer].

Ian Warnecke, 2E0DUE, RNARS 5022 from Margate in deepest Kent.

Phil Challans, M5PGC (lapsed), plus two others in the background lost in conversation. According to Ian he is part of a DX-pedition group based in Hartland in N. Devon, operating on HF including 80m.

### Mike Moore M6POY our Commodities manager writes -

While the suspension of sales activities will continue a little longer because it is apparent that some suppliers have gone under due to lockdown restrictions during the pandemic. I am investigating new sources of supply for our RNARS products and memorabilia, we will resume trading again which I hope will be early next year, I will also sort out those transactions that were suspended due to the difficulties of lockdown.

Mike

A message from the RNARS committee

## Seasons Greetings

TO ALL OUR MEMBERS WORLDWIDE

WE WISH YOU AND YOUR FAMILIES  
A VERY MERRY CHRISTMAS



♥ And a huge  
Thank you to our  
wives and loved  
ones who put up  
with our rather  
quirky pastime



## DIVERSE REPORTS -our members

### Hot tip from Steve Legg:

A useful piece of information for any antenna experimenters.... If looking for a source of aluminium rods/poles to construct antennas then one possible source is a garden centre -look for frame making kits, here you will find various lengths of sturdy alloy rods and plastic connectors, useful for dipoles etc or even parts for a yagi.

### Ed writes:

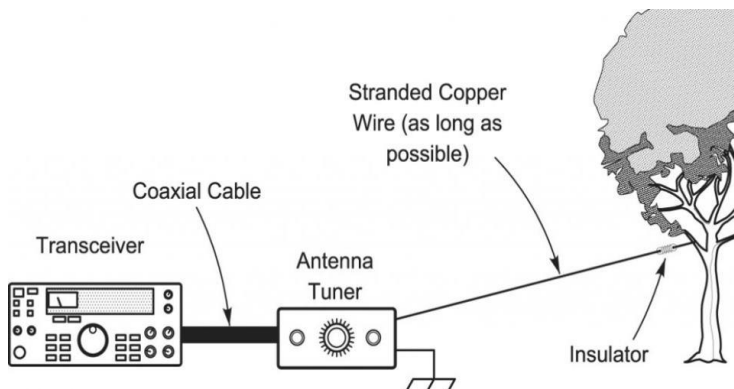
If you want to know something about building and using long wire aerials look up the following face book page:

*The Random Long Wire antenna for ham radio.* It introduces the reader to the building of 9:1 ununs and ways of putting up wire aerials that can easily cover the HF bands with a little forethought and preparation.



<https://www.facebook.com/groups/148657776810627>

It's amazing what you can do with a 10m fibreglass fishing pole these days when there isn't a handy tree nearby...



*The Random Long Wire antenna for ham radio*

## DIVERSE REPORTS – our members



### The Bubbly Rats Net

**Glen Loake** informs us that the new 40m frequency is now 7.085. this is to get away from the data noise. We are starting on this band as it is working well most days, but if not we go back to 3.748 (see the RNARS nets)

**Notice**

**73's Glenn, 3481 GØGBI**

### Letter from Taiwan(BW)

Jim Banner's Musings

I am still restricted to a 6 month (in 1 year) tentative operating permit that I apply for from 1<sup>st</sup> January to the 30<sup>th</sup> of June, so just ended my TX period for this year. Having achieved my DXCC-CW with the call BW/G4TDS, I decide to switch operations to RTTY to achieve my DXCC-RTTY. Even though I believe this will take many more years to complete, I think it is possible over the next sunspot cycle. I think I have made a good start over the past 6 months (see attached QRZ logs). The first couple of months saw me acquiring the equipment that I wanted to use including an ex-US Coast guard keyboard from the late 1980's type Microlog Corporation ACT-1 and the Advanced Electronic Applications Inc PK-232MBX. Both of which needed a little work to get them back into their operational state. I feel the sensitivity of these old, dedicated machines is far better than the modern multimode software applications. I plan to update my QRZ page with a full list of my awards i.e.

- 01-12-1981 – **Amateur Radio Certificate G6HNM**
- 20-04-1983 – **Home Office Certificate G4TDS**
- 16-04-1990 – **RNARS Mercury Award 1115 (200 credits)**
- 16-04-1990 – **RNARS World-Wide Award 171 (23 countries 4 continents)**
- 16-04-1990 – **RNARS Kaleidoscope Award 148**
- 07-03-1995 – **RNARS Morse Code Proficiency 30wpm**
- 08-06-2005 – **License 9H3PA**
- 20-07-2009 – **License 9H1RN**
- 05-03-2017 – **QRZ Continents of the World-CW Award 16858**
- 09-05-2017 – **eDX 219085 (50 countries)**
- 10-12-2017 – **QRZ Grid Squares Award**
- 16-02-2018 – **eJapan 235366 (11 call areas)**
- 20-12-2018 – **QRZ World Friendship Award**
- 09-04-2019 – **CQ WPX-CW Award 3896 (endorsed Asia)**
- 10-10-2019 – **eAsia-CW Award 295451 (14 countries)**
- 29-01-2020 – **eWAC-CW 313102 (7 continents)**
- 13-06-2020 – **DXCC-CW Award 24034**
- 13-05-2021 – **eWAC Award 398546 (6 continents on 17m)**
- 13-05-2021 – **eWAC Award 398547 (6 continents on 20m)**
- 13-05-2021 – **eWAC Award 398548 (6 continents on WARC)**

# DIVERSE REPORTS – our members

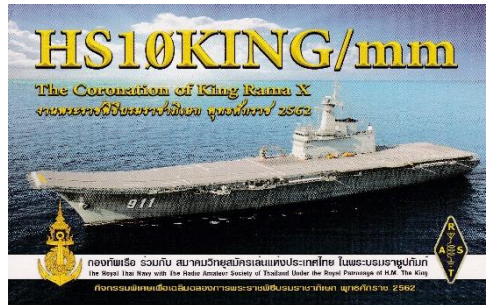


## Best DX

10m	HB3YFC	Switzerland	9,629 kms	02/11/2017 @ 06:44z	CW	
12m	PY2XB	Brazil	18,743 kms	12/10/2015 @ 01:04z	CW	
15m	KA1JBE	Mass. USA	12,543 kms	14/11/2014 @ 12:26z	USB	
17m	ZP9/N3BNA	Paraguay	19,808 kms	09/03/2016 @ 12:24z	CW	
20m	ZP6CW	Paraguay	19,778 kms	23/07/2016 @ 21:26z	CW	
30m	PY2XB	Brazil	18,743 kms	19/04/2017 @ 20:50z	CW	
40m	CX2AQ	Uruguay	18,795 kms	20/01/2019 @ 10:13z	CW	
80m	K6NA	Cal. USA	11,168 kms	06/02/2019 @ 14:57z	CW	

Who said we are in sunspot minima and dx conditions are poor? All done in a 6 month in a year operating window with 100 watts to a 7.1 mt vertical GP antenna mounted on a flat roof. I consider my situation best described as an apartment operator with no real estate for a tower and beam.

Currently experimenting with a homebrew Mag loop 1.3 mt diameter resonant on 40 / 30 / 20 / 17 mtr bands at 100 watts with 480 pF air spaced capacitor. Only 3 dB's down over 2,000km compared to the vertical but with a much better signal to noise ratio. Switching from a 50% readable RTTY QSB contact on the vertical gives a 100%



readable contact on the Mag-loop. The Microlog ACT keyboard keeps printing when the signal disappears in the noise (something I discovered in the 80's and have been looking for ever since – a very rare find). The vertical has the Chameleon at its base and is the best dx together. It is a 4-section fibre copper element up the centre of

**HS10KING/mm**  
 CQ ZONE: 26 ITU ZONE: 49 Grid: OK02  
 Radio Amateur Society of Thailand  
 100/100-2019 04-21  
 04-May-2019 13-23  
 BW/G4TDS via G4TDS  
 Date UTC Band Freq RST CW  
 04-May-2019 13-23 30m 20.1 599 CW  
 BW/G4TDS  
 Date UTC Band Freq RST CW  
 04-May-2019 13-26 40m 19.1 599 CW  
 To all VELOCIMODERS  
 QSL'd verified by EA3EHC  
 verified only by VELOCIMODERS  
 No Reply QSL Needed  
 QSL 1689  
 EA3EHC  
 VELOCIMODERS

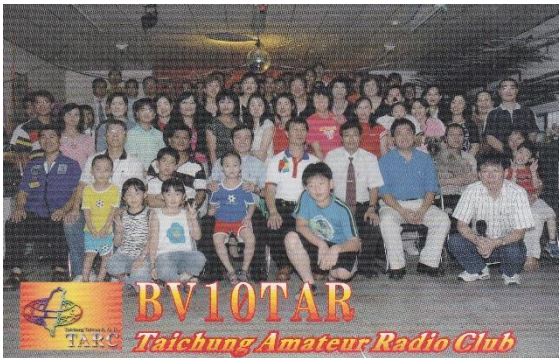
Hybrid Mini antenna I have ever put glass screwed antenna with a 2mm each section (typical ships antenna). It is guyed to keep it stable and survive the Taiwan Typhoon winds and rain. Simplicity with the minimum connections and still capable of transmitting in very wet conditions. It was shipped to Taiwan from Martin Lynch (London) and I modified it to use the Chameleon Hybrid Mini.

## DIVERSE REPORTS – our members



The result is reflected in the awards listed above. G6HNM, G4TDS & 9H1RN are now all lifetime licenses. From my QRZ log you will see digital voice mode logged and I will be active on DMR/C4FM/Dstar over the next 6 months.

I have hit the UK on many occasions, but no members were listening. I was amazed at some of the openings i.e. 599++ to Finland and not one single G station heard. Operating times are nothing like the UK, seeing me with a pileup on 17mt that took me from 02:00 to 04:00 local (JA and BV all sleeping). Recent European hot time is 00:10 local on 20mt with my signals being heard in Slovenia, Austria and Poland. At 1 hr before and up to Taiwan sunset on 20mt my signals are heard in California, Arizona and at times to Texas. 1 hr after sunset on 20mt / 30mt Canada west coast. It sounds a little complicated but around midnight the propagation on 20mt / 30mt flips from the east (America) to the west (Europe). When I arrived in Taiwan, my mind was set with UK operating frequencies and times. 70% of my contacts were JA calls, just couldn't get out of Asia. Quite a lot of listening, research and many late night sessions over 8 years soon corrected the error of my ways.



Taiwan local is UTC + 8 (no daylight saving time). Hence Taiwan midnight = 16:00 (UK winter) 17:00 (UK summer). Who's eating meals at this time?

It's not every day you get to work a carrier particularly with the call HS10KING/mm on 3 bands 599 CW. OH6OS was the Finland 599 CW

40mt contact mentioned in the previous email (in the UK I thought it was good if I got Portsmouth from Chester on 40mt). I would appreciate you publish the BV0TAR Taichung Amateur Radio Club image without whose help and support the club continue to give me I would not be transmitting today. I think they would be extremely pleased with a big thank you from the RNARS.

Best regards

**Peter Banner (Jim BW/G4TDS – RN3355)**



# THE IC 7300 CLOCK BATTERY



Prior to putting the shack into storage I was given a heads-up by fellow member Edwin Daniels and decided to follow it up with a little research on the web. True enough it seems to be that if the rig is not hooked up to an active PSU for about 3 months, the internal battery backup for the clock circuit will go flat and this may damage the battery.



The symptom observed is erratic time keeping by the clock which can be seen to drift. To stop this from happening in the first place just leave your PSU supply to the 7300 turned on to provide an external supply to keep the battery fully charged even when the rig itself is switched off. There is a U-Tube video: **IC7300 clock battery work around** which shows you the basics of getting to the battery and replacing it with an external battery pack. Additionally, it has been said that the life of the battery is 3 years. Personally, I would not touch it unless it displayed the symptom of chronological fatigue. Mine has been going for about five and a half years with the external supply always active -and for that reason it has not been stored.

Ed

## Battery replacement

Nominal Voltage(V): 3  
 Charge Voltage\*1 (V): 2.8 to 3.1  
 Nominal Capacity: 1.0 (3.1V ~2.0V)  
 Internal Impedance\*2 ( $\Omega$ ): 600  
 Standard Charge: 0.005  
 Cycle Life \*3 (Time)50: 300 (10% D.O.D\*4)  
 Diameter(mm): 4.8  
 Height(mm): 1.4  
 Weight(g): 0.07



Data from: [radioaficion.com](http://radioaficion.com)

Joe Kirk G3ZDF has found even more information on the following websites:

There's now Icom software to update the clock on the IC-7300 (and other Icom rigs). Details at [https://www.icomjapan.com/support/firmware\\_driver/3428/](https://www.icomjapan.com/support/firmware_driver/3428/)

There's a long thread about it on the groups.io IC-7300 page:

[https://groups.io/g/ic7300/topic/clock\\_synch\\_software\\_from/87405887?p=...20,0,0,0::recentpostdate/sticky,..20,2,0,87405887,previ=1638808340754607722,nextid=1637760225296280087&previ=1638808340754607722&nextid=1637760225296280087](https://groups.io/g/ic7300/topic/clock_synch_software_from/87405887?p=...20,0,0,0::recentpostdate/sticky,..20,2,0,87405887,previ=1638808340754607722,nextid=1637760225296280087&previ=1638808340754607722&nextid=1637760225296280087)

# WHISPERS OF THE PAST



## The Communicator Christmas 1961

By the time that this article appears in print the first Annual General Meeting of the R.N.A.R.S. will have been held, and we shall be well into our second year.

The great majority of those due to renew their subscriptions have already done so, and this assurance of continued support is particularly gratifying and encouraging to committee members and all those concerned with the running of the Society. We look forward to steady progress in 1962, with a continued increase in membership.

Once again, however, we would appeal for further support in the form of newsy and interesting items for inclusion in this section of the Magazine. Little material has reached the committee so far, and we urgently need a great deal more. Please send in your contributions, at any time, either to the Editor or the R.N.A.R.S. Secretary. The earlier the better, and Christmas is not too soon for the Easter edition.

Mr. G. H. Tagg (G8IX), our first Chairman and a founder member, has now voluntarily and reluctantly surrendered his place on the committee. We owe him a great deal for his loyal leadership in the difficult first year. A very special "thank you" to George for his fine example. How many of us would regularly travel 150 miles to attend meetings? Our thanks also to R.S. F. Moore for his work as Secretary, and a welcome to C.R.S. K. Taylor who has taken on the job of managing the "shack".



## BRANCH NEWS



### Dragon salutes the Mighty Ark as destroyer remembers legendary WW2 carrier

**Sailors from HMS Dragon paused to remember the most famous aircraft carrier in the Royal Navy's history, 80 years after she was lost.**

The destroyer's Mediterranean patrol took her over the wreck of

HMS Ark Royal which finally succumbed to a torpedo strike about 30 nautical miles east of Europa Point in Gibraltar in November 1941. Just one sailor was lost – Able Seaman Edward Mitchell – out of a complement of 1,749 sailors. They struggled for more than 12 hours after the carrier was hit by a torpedo from U-81 to prevent her sinking.



Royal Navy.MOD.UK

### HMS Northumberland helps push student pilots to the limit



***HMS Northumberland have helped push navy aviators of the future to the limit to prepare them for operations around the world.***

It's no simple task with the ship pitching and rolling beneath, but it's a rite of

passage naval fliers must go through to ensure they are ready for the rigours of front-line missions.

Plymouth-based Type 23 frigate Northumberland has been on operations in waters close to the UK and, during that time, worked with student pilots of 825 Naval Air Squadron and their Wildcat helicopters.

In the crashing waves in the English Channel, trainee pilots have been learning to land this helicopter on Northumberland's deck.

Royal Navy.MOD.UK

The following notice is included here for future reference:

## II1TCWC Special event station – 1901

### First transoceanic wireless communication

The I.N.O.R.C. "Italian Naval Old Rhythmers Club" organizes the "II1TCWC" award to commemorate the 120th anniversary of the first transoceanic wireless communication made on 12th of December, 1901 by Guglielmo Marconi.

The wireless transmission took place from Poldhu (Cornwall, UK) to Saint John's (on the island of Newfoundland, Canada). The transmission of radio waves across the ocean was not – at the time – thought possible due to the earth's curvature; this was the thesis supported by the scientists of that period. But Guglielmo Marconi managed to prove the groundlessness of those theories.

Then – on December 12th, 1901 – he managed to send the radio signal from Poldhu to the receiving station on the hill of Saint John's (later nicknamed "Signal Hill"). The three points corresponding to the letter S of the Morse alphabet crossed the Atlantic Ocean overcoming the distance of 3540 km.



Dear Sirs,

I inform you that from 12 December until 17 we will remember the 120 years of the first transoceanic radiotelegraphic transmission carried out, under the supervision of Guglielmo Marconi, from the radio station of Poldhu in Cornwall, managing to connect the station of St. John on the island of Newfoundland in Canada. The callsign will be II1TCWC. All information on [qrz.com](http://qrz.com)

Best regards.

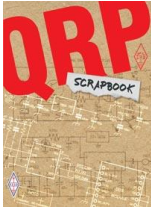
I.N.O.R.C.

foreign naval clubs representative

Nicolò MEO/IK7LSE



# BOOKS CORNER



**SALE PRICE - ONLY £10.99 RSGB Bookshop  
SAVING £4.00 ON THE USUAL RRP**

**ISBN: 9781 9101 9379 2**

Low-power operation or QRP is one of the most popular aspects of amateur radio and the UK's G-QRP Club is a leading light in this area. This book draws together the very best articles from authors around the world that have been published in the club's journal *Sprat* in recent years. Packed with projects QRP Scrapbook contains all-new material not previously published in an Radio Society of Great Britain (RSGB) book. SKU-1893



***Covert Radio Agents  
Signals From Behind Enemy Lines***  
By David Hebditch

**SPECIAL RSGB MEMBERS ONLY PRICING  
30% OFF USUAL RETAIL PRICE**

**ISBN: 9781 5267 9494 9**

Covert Radio Agents, 1939-1945 not only tells the dramatic stories of these 'behind the lines' highly skilled agents' who had to maintain regular contact and pass vital intelligence back but also details the equipment they used. Who were they? How were they trained? How did they survive against the odds? This book is highly informative about the clandestine activities and equipment of Allied spies in World War II. SKU-2016



***Cognitive Radio Technology [2<sup>nd</sup> Edition] -Elsevier 2009***  
By Bruce Fette

**ISBN 9780-0-12-374535-4**

This book gives a thorough knowledge of cognitive radio concepts, principles, standards, spectrum policy issues and product implementation details. In addition to 16 chapters covering all the basics of cognitive radio, this new edition has eight brand-new chapters



**2022 Klingenfuss Shortwave Frequency Guide – 26<sup>th</sup> Edition**

***Worldwide broadcast & utility radio stations***

A comprehensive guide for the amateur radio enthusiast or SWLer alike, packed with well researched frequency lists for those idle moments when the HF are quiet

## IN THE NEWS

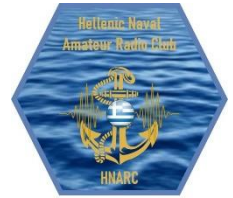
### Hellenic Naval Amateur Radio Club - HNARC

#### Announcement by Antonis Parashis SV1ENG

22-Oct-2021

It is with great pleasure that today we announce the formation of the Hellenic Naval Amateur Radio Club - HNARC. The membership is comprised of Amateur Radio Operators holding Greek Call Signs who are all former Navy, Merchant Marine or Coastal Radio Station personnel. Our club's site: *Hellenic Naval Amateur Radio Club (hnarc.gr)*

Welcome!



Crown Copyright 2021

#### New First Sea Lord takes post

##### Admiral Sir Ben Key takes over as First Sea Lord

*“He formally took over command of more than 30,000 men and women, more than 90 war ships, nuclear submarines and support vessels, the helicopters and jets of the Fleet Air Arm and the elite Naval infantry of the Royal Marines.”*

He takes over the post from Adm Tony Radakin who has been appointed Chief of the Defence Staff

#### Royal Navy ship deployed to fight piracy in West African waters

*“HMS Trent is in the Gulf of Guinea – one of the world’s piracy hotspots – as the UK looks to improve security and help prevent widespread piracy which has seen international shipping suffer, seafarers’ lives put in danger and damage caused to the economies of nearby nations. HMS Trent carries a specialist team of Royal Marines from 42 Commando who are experts in boarding operations, known officially as Maritime Interdiction Operations. The commandos have been sharing knowledge and expertise in the skills needed to board, search and – if needs be – seize suspect vessels.”*



*“HMS Trent carries a specialist team of Royal Marines from 42 Commando who are experts in boarding operations, known officially as Maritime Interdiction Operations. The commandos have been sharing knowledge and expertise in the skills needed to board, search and – if needs be – seize suspect vessels.”*

**Royal Navy.mod.uk**

# THE AGM

From The Chair, David MOSLL

It was with a sense of déjà vu that I turned on my laptop to connect with the Zoom meeting room for our second electronic AGM. The combined technical wizardry of organising the event and the screen directorship set up and worked by both Martin Longbottom and Joe Kirk worked a treat. There were no hitches or glitches that I was aware of and the meeting itself worked well with Joe's skilful handling of the multiple screen direction.

After looking back a couple of years to the 2019 AGM my observation at the time had been that we were in a good position to start going out and about with the prospect of field days and rallies, and so on, so the past two years have stood out for us in stark reality that in some areas little is happening where once there was a lot going on. We can all see a tapering off in activities with nothing going on at the HQ shack for quite a while. Also, despite there being an apparent drop in numbers participating in the RNARS Networks they are still active. It does not help when the breaking rumours from major newsfeeds are telling us we should expect another round of restrictions in the wearing of face masks and keeping ourselves to the safety distance of 2M from other human beings when venturing forth into the world outside our dwellings, but this time around I believe we can do a bit more than just sit in semi-isolation.



Let us hope that we can lighten the mood in the coming months by making someone's day with a successful QSL here and there, or by a 'radio rendez-vous' over lunch one afternoon. If I were to choose a theme for the coming year it would be: *Learn a new mode of radio operation and practice new-found skills.*

## MAYDAY IN MAGELLAN - PART 3



## MAYDAY IN THE MAGELLAN - PART III What Caused the Flood?

by Commander Tom G Sharpe OBE RN (Retd) © July 23, 2019

**Commander Tom G Sharpe OBE RN (Retd) July 23, 2019**

### PART III What Caused the Flood?

*Ten years ago, the Royal Navy's Ice Patrol Vessel HMS Endurance catastrophically flooded. Her main engine room filled to the deckhead within 30 minutes. Such was our remoteness our Mayday call went unanswered. The crew and I spent the next 24 hours fighting for our lives.*

*This article is the final part of a three-part blog focusing on leadership, culture and priorities. Part III – Culture, looks at what caused the flood and was it inevitable or could more have been done to prevent it? What was it about the ship that set it apart and yet rendered it so flawed? Has the Royal Navy learned the lessons from this incident?*

### Introduction

Joseph Nye in his paper [Inevitability and War](#) argues that conflict occurs only when three causal thresholds have been crossed; deep, intermediate and precipitating. His analogy is that of building a fire: “The logs are the deep cause, the kindling and paper are the intermediate cause, and the striking of the match is the precipitating cause.”

By looking at the causes of the flood through these lenses it is hoped that this blog will broaden the findings of the relevant [Service Inquiry](#) which tended towards the more precipitating events. These are naturally woollier and more

## MAYDAY IN MAGELLAN - PART 3

open to interpretation and thus perhaps the reason the Service Inquiry avoided them. My aim here is not to expose or embarrass anyone, but to inform those who are interested in this subject (and there are many). If it helps those currently responsible for running the replacement ship HMS Protector, then so much the better. And if I do raise concerns about the culture onboard prior to the flood, then that must be set against the fact that it was exactly the same culture that so heroically saved the ship as described in Part 1.

### Deep Causes (1990 – 2008)

This section covers the 18 year period from purchase-to-incident during which the way the ship was manned, operated and assured all diverged from her design criteria



HMS Endurance 2007

### People

MV Polar Circle was designed to have a crew of 38. By the time she became HMS Endurance, she had a complement of 119. It's not entirely clear why. Merchant vessels generally run with very lean crews when compared to their Royal Navy counterparts for a number of reasons; they are mechanically simpler, they don't need large numbers of people for battle damage repair, and their equipment and staffing is designed to minimize crew costs. As one would expect, putting 119 people in a ship designed to run with 38 and only occasionally surge to higher numbers put considerable and sustained strain on her systems.

## Operations.

MV Polar Circle was built to operate in the Arctic, a relatively short hop from its home port, and to undergo dry-docked maintenance once a year. HMS Endurance operated every austral summer in the Antarctic—a harsher environment, requiring a much longer commute. This had consequences both serious and comical: the heated shower floors, whilst lovely in Antarctica, made a lot less sense off the West Coast of Africa, and couldn't be turned off. More seriously, crossing the equator with no air conditioning (which Endurance had to do twice yearly) caused regular engineering issues. Most seriously of all, under naval ownership she was dry-docked and refitted only every five years – far beyond her design criteria. Her last docking period, in Falmouth in 2004/5, was generally reckoned to have been a disaster. More on that later.

There is a phrase in common usage amongst warship drivers: “drive it like you stole it”. It alludes to a sort of Bondian derring-do; cavalier yet sharp – understand the limits of your ship and then vigorously explore them. Sensibly applied to an agile, high-powered warship fitted with systems expecting to be stressed, it's a good thing. Where it doesn't work at all is in a large, heavy, relatively underpowered ice-breaker whose machinery is designed to be run for very long periods without excessive loading or alterations. As an example, Endurance had a propulsion configuration called “ice-mode” that directed all power away from non-essential systems through the single shaft in order to optimise her performance in the ice. Not only did it sound cool, it gave you nearly a *whole extra knot* of top speed. So, of course, the ship had steamed around in ice-mode at full throttle for years. There's a reason Endurance was nicknamed The Big Red Plum and it wasn't because of her raked bow, slender lines or wave-piercing prowess – “drive it like you want it to run forever” would have been more sensible.

In every warship in the fleet, breakdown drills are conducted routinely three times a week as an essential part of ensuring that everyone onboard instinctively knows the systems and their reversionary modes. Continuing to provide propulsion to a warship under fire is clearly a core skill, so we did breakdown drills routinely...but we weren't a warship. A Bergen shipping engineer visited us off Africa after a particularly unreliable passage and discovered that every drill we conducted was damaging the engine control systems: we were starting each serial when the mechanics had reset from the previous drill but, unbeknownst to everyone, the electrical control systems had not; this had been going on for 20 years. The Bergen engineer was a vocal man, or he may have just had a loud voice, but when he shouted at me “would you do these drills in the ice in Antarctica?” and I answered “no” he bellowed, “SO WHY ARE YOU DOING THEM NOW?” My answer “because they support career progression and conform to Fleet Engineering Orders” felt pretty lame.

## MAYDAY IN MAGELLAN - PART 3

### Assurance

Integrated Project Teams (IPTs) were part of Naval engineering standards and assurance for many years, normally with a high degree of success. However, it was clear by 2005 that the Minor Warships and Boats IPT (MWAB), of which Endurance was a major element, was not fit for task and thus the Minor, Patrol and Hydrography IPT (MPHIPT) was born. I have received written accounts from engineers who served in Endurance over this period and their assessments of the new group are scathing. The ship was in a constant state of materiel fragility almost across the board. Our Operational Defect list was excessively long and measures were never in place to take the required bold action to fix it.

Between the IPT and the ship's captain there are two Naval organisations responsible for delivering ships on operations: Flag Officer Sea Training (FOST) and the Flotilla organisation, in our case in Portsmouth Dockyard. Neither were familiar with Endurance or her systems. Their training and inspection methodologies were all configured for grey ships – very few understood the red one. Admittedly, this was compounded over the years by senior ship's companies (and Commanding Officers) holding these organisations at arm's-length on the principle that “we know how to operate our ship – you don't”. When a ‘wrecker’ (a member of the FOST team responsible for simulating damage in order to train your teams in controlling it) admits that they're “making it up as they go along when they inspect Endurance” then you know something is wrong.

The ship was formally assessed by a small FOST team a couple of months prior to the incident. In isolation there are some telling comments in their final report:

***“Equipment. Despite the best efforts of the engineering department, the equipment is assessed as “below standard” due to the defects on both shaft generators.***

***There are an additional five outstanding high-level defects.”***

***“Sustainability. The Main focus of the forthcoming period will be defect rectification...”***

***“Summary. The planned inspection programme's sea phase was significantly affected by emergent defects...”***

But the overall impression of the report was one of “doing OK considering. Nothing fantastic, plenty of caveats, but nothing to worry about.” Of course, all we wanted to do at the time was get rid of the inspection teams and get back to sea.

## MAYDAY IN MAGELLAN - PART 3

### Culture

There were two things wrong with the culture in HMS Endurance – “this is the way we’ve always done it” and alcohol consumption. Both of these, anecdotally but believably, predate the ship and perhaps go all the way back to the first [HMS Protector](#), but certainly existed in the previous HMS [Endurance](#). The stories of mishap in these two ships are legion and worn almost as a badge of pride in various blogs and groups.

Prior to taking over as second in command of Endurance I attended an eight-week course to prepare me. This is a standard RN course that refreshes you on all manner of things from your knowledge of the Rules of the Road, to the power and propulsion systems in your upcoming ship, to the latest regulations for dealing with errant sailors. I have never been asked to stay behind after lectures “for a chat” so much in my life. Every time it was to give me examples where standards of maintenance and discipline onboard were of concern. Individually I treated the stories with caution – ‘dits’ like that often magnify in the telling. Collectively, it was clear that there was a problem, but I didn’t want to pre-judge too much – and how bad could it really be? Either way, I joined with my eyes and mind open.

Imagine my surprise when I joined to find everyone wearing slippers around the ship. It’s quite hard to describe how inappropriate and unsafe -and simply odd- this is to someone not used to operating in warships and therefore how comprehensively that image encapsulates “The Endurance Way” and all that was wrong with it. I had an exceptional Executive Warrant Officer who was also new to the ship and who had been equally well pre-briefed. One of my early conversations with him was over slipper-gate and what we should do about it. He was also opposed so I suggested that we ban slippers immediately, only to find that it was permitted in Ship’s Standing Orders! Ignoring the advice given on my course to not go in too hard too early, we banned them anyway. A unique ship operating in the most hostile conditions on the planet is bound to diverge from the norm a little, and a bit of character is a good thing. The key, and what often seemed to be missing in Endurance, is knowing where and how.

**Drink culture** was hardwired into Endurance, more than any other ship I served in. This was principally because the senior ratings who would normally set the tone for this kind of thing were often in their last tour and many harked back to some sort of misplaced notion of ‘the good old days’. Again, this was a common feature across the entire ship’s lifespan and was probably even brought across from the previous Endurance. The fact that she wasn’t a warship per se, certainly lent itself to a more relaxed and informal atmosphere that in turn lead to too much drinking whilst at sea. Tighter control mechanisms were put in place by the Captain and I and the first person to contravene them spent 28 days in



## MAYDAY IN MAGELLAN - PART 3

Colchester's service prison. Many conversations took place discussing the dates that the worst offenders were due to leave and how they could be accelerated. All sensible measures. However, with the wisdom of hindsight, maybe we didn't do enough.

To summarise the Deep Causes, since 1990, the Royal Navy had been operating the ship contrary to its design criteria. This caused her to age prematurely and the assurance mechanisms were not robust enough to halt the decline. Then, the "Endurance Way" was often misplaced leading to lower standards in many areas.

### Intermediate Causes (2005 – 2008)

This section takes us from the refit in Falmouth in 2005 to the flood:

#### 18 Month Deployment.

At the top of the list of intermediate causes was the plan to deploy for 18 months. The then Commander in Chief was, not unreasonably, looking at ways to get more out of the fleet. Endurance's operating cycle was pretty inefficient, so the notion of keeping her 'down south' for an austral winter, rather than transiting c8500 miles back to and from the UK each time, was a good one. The ship would conduct multiple Work Periods in the ice then, as the austral winter set in, head for the ex-Naval dockyard of Simon's Town, South Africa for her mid-deployment maintenance. From there, she would conduct a period of engagement up the coast of West Africa before returning to the Falklands and then Antarctica for the start of the following austral summer. So far, so good. However, there were two major omissions from the plan. First, no consideration was given to what deploying for this length of time would do to an already fragile platform. Second, with no extra crew assigned, the agreed rotation involved sending one third of the ship's company home at any given time. This became known as 'managed gapping' and was just as chaotic and disruptive as the name implies.

My statement above that Endurance was over-staffed remains true. However, 'managed gapping' one third of the crew also meant that the ship was now *under*-staffed in the sense that the resident expert on any given system might be gone one-third of the time. We had too many bodies overall and yet not enough specialists for key systems. An odd dichotomy. On the day of the flood, the person responsible for the equipment that failed was on leave and whilst his advice was sought by e-mail, the reply (which was "don't do the work") came too late to be heeded.

Nothing in the pre-deployment documentation suggests that any of this tautness

## MAYDAY IN MAGELLAN - PART 3

was challenged and thus we fell foul of a classic case of press-on-itis. Someone between the ship and the Commander-in-Chief should have challenged the way the deployment was configured and the associated cumulative risk associated with deploying a clearly fragile ship for this length of time. The Marine Accident Investigation Branch ([MAIB](#)) call this a failure of organizational influence:

***“Organizational influence is a two-way exchange: Organizations cannot accomplish their goals if they can’t influence their members to do the right things. And the members, of course, cannot do the right things -and satisfy their needs in the process -if they can’t influence what goes on in their organizations.”***

### Refit

In 2004 the ship went into its five-yearly refit in Falmouth. Speaking to uniformed personnel who were onboard either during or just after reveals that this was a substandard refit. On undocking the ship’s stability condition was so poor that she rolled to 45 degrees and had to be quickly bullied back onto the blocks and errant water pumped out – this seemed to set the tone. All defects are logged onboard through a process called OPDEF (Operational Defects) reporting. I have it on good authority that the OPDEF count post 2005 was significantly higher than before and anecdotally, that she never felt the same. It was during this refit that the actuator at the heart of the incident was replaced with a non-compliant valve actuator, such that the actuator air-lines had to be disconnected to remove the sea suction strainer lid. More on that later but this was indicative of the poor standards of workmanship undertaken and accepted during that period.

### Engineering Standards

There is no nice way of saying this. The end result of much of the above was a ship with poor engineering standards. I was supposed to join her in Cape Town but had to divert to the Falklands because on sailing to transit the South Atlantic, and before having left sheltered waters, her shaft bearing seized locking the (only) propeller firmly in position. It turned out that the person whose job it was to check the oil level in the bearing prior to sailing hadn’t bothered. This was a pivotal moment in the story because when I eventually joined, I found that the legal advice from ashore on how to deal with this incident involved sacking a large percentage of the team. The problem with that, and the discussions I had at length with the Captain, was who would replace them? We still had well over a year to run in this deployment and the only RN expertise in the platform was already onboard. In the end we both agreed that the most sensible course of action was to manage the situation we had. But that was only one incident. On

## MAYDAY IN MAGELLAN - PART 3

sailing from the Falklands again, pipework to the roll reduction tank ruptured and dumped seven tons of water into the engine room causing significant secondary damage. On another occasion, a tank was overfilled, warping the lid and again, flooding the engine room – this was becoming a habit. We eventually made it to South Africa and received our maintenance package, but on sailing into the tropical waters of West Africa it was clear that all was not well as propulsion system failings caused the ship to regularly end up dead in the water.

The Intermediate causes were succinctly summed up in the Service Inquiry:

***“Externally, the provision of engineering and management assurance for a unit conducting an unusually lengthy deployment in a remote and challenging environment was insufficient, and the significance of previous incidents suggesting poor engineering management were not recognised.”***

### **Precipitating Causes (7 days leading up to the flood)**

So, who did what on the day and immediately prior to the flood? This in some ways is the easiest section to review as the Service Inquiry covers it in detail. Since leaving South Georgia we had been struggling to produce enough fresh water for the very high number of people on board. However, this was far from critical and we had options for managing it that had yet to be put in place. The order/threat given to the senior engineers that morning, “improve fresh water production or we’re going to the Falklands for Christmas” was therefore clumsy and certainly contravened the Command Aim of “safe passage to Valparaiso”. It also set in train a rather hurried and poorly diagnosed piece of work. As mentioned previously, the ‘owner’ of the valve in question was contacted and advised by return e-mail against doing the work at sea, but the advice was not heeded or even seen.

No risk analysis was conducted prior to commencing the work, nor was there a fixed procedure in place for such a thing. Neither the Engineer nor I knew that we were going to be ‘one valve open to the sea’ whilst the work was going on. In the US Navy, a ship to be in this condition requires sign-off from the captain. Given the sea-state, our relative proximity to Valparaiso and the fact that we were at flying stations, I’m not sure I’d have given it; easy to say now mind.

What happened next is summarized in the Service Inquiry:

## MAYDAY IN MAGELLAN - PART 3

***“The opening of the hull valve was caused by the incorrect re-connection of the air control lines during the reassembly of the strainer, and a failure to fully isolate the compressed air supply to those lines. There were a number of contributory factors: poor system knowledge among those attempting the maintenance work; the absence of the appropriately trained system maintainer due to the manpower constraints of an extended deployment; management failure to implement a safe system of work including adequate risk assessment and mitigation measures; a failure to apply satisfactory engineering practice and design shortfalls in the valve control system.”***

What was not clear then, and never will be, was whether the “failure to fully isolate the compressed air supply to those lines” was due to a defective valve upstream in the system (i.e. it was passing air despite having been closed properly) or human error (i.e. that valve was opened prematurely before the main valve lid had been re-secured). The Technical Investigation suggested the former, but the Service Inquiry suggested the latter. By the time the Service Police came along to investigate almost a year after the event (and they were the first team who had the remit to apportion blame) the evidence had been long since contaminated. Because of this, no one person was ever blamed for the incident. I’m glad about this. One of the points of this article is to indicate the breadth and depth of causal issues and therefore if at the end of the investigation one person had been held responsible, then that would have been unfair.

I will at this point defend the Engineer who came under considerable scrutiny during the endless investigations (see [Part 2](#)). When it became clear that proving ‘who did what to which valve’ was going to be impossible then the broader business of engineering culture started to be questioned. As highlighted above, this would have been reasonable had it been spread over an appropriate timeline. However, pinning it on the person who had taken charge of the department just 17 days before, was not. He subsequently won a formal letter of guidance from the Admiralty that, in my view, he hadn’t earned. It also, and this is inevitable I’m afraid, cancelled out his impeccable performance as the head of the damage control organization during the flood itself.



## MAYDAY IN MAGELLAN - PART 3



HMS Endurance on board the Heavy Lift ship, Target in Stokes Bay  
Photo courtesy of and all rights reserved by Steve Wright\*

### Administrative action

After all was said and done, the Navy took very little administrative action. Technically and legally unable to pin the blame on an individual, and seemingly unwilling to dig into the deeper causes, the end result was a handful of 'letters of guidance' to various members of the engineering department. Outside of the ship, where many of the causal issues lay, no action was taken.

### Lessons

Having said that, much was learned from this incident that has since been

transferred into the wider Royal Navy. The service from the Fleet Incident Response Cell was outstanding that day and that system is now firmly in place for future major incidents. The relationship between ships and their many external auditing agencies is now smarter than it was which is good news especially given how ships are getting more complex, living longer than their designed lives and operating in an increasingly resource constrained environment. Damage control lessons have been taken to the school in Whale Island and are routinely taught to ships' crews as they pass through. However...

### HMS Protector

In 2009, about nine months after the flood, I went to sea for a day in MV Polar Bjorn to scope her out as a possible replacement ice breaker as the prohibitive cost of repairing Endurance was starting to become clear. It was a very

## MAYDAY IN MAGELLAN - PART 3

interesting day, not least of which was because she had a crew of just 17. That is an unremarkable number for a merchant vessel but is almost unimaginably low to those used to operating RN ships. (For example, a 'lean-manned' Type 23 Frigate deploys with over 200 crew). Polar Bjorn's engineering department had just seven people in it. She operated a two-crew system on a five-week rotation so successfully that she lost only 18 hours on-task over seven and a half years due to defect rectification. Their system knowledge, ability to order stores quickly and conduct repairs at sea whilst still on task left me and the visiting engineer from Abbey Wood both deeply impressed and scratching our heads. We were clear that if we were to procure Polar Bjorn to replace Endurance then we should adopt a similar operating model even if this meant deviating from 'normal' RN practice.

Protector is now firmly in service and has been operating in the deep south now for some time. My suggestion to mimic her previous operating methodology and create a lean two crew system of about 30 per crew (there was no-way we could manage 17 by the time the Hydrographers and Royal Marines were added) was very quickly ignored, as were my thoughts on the shape and seniority of the engineering department. In fact, she currently has a crew of about 80 operating on a three-watch rotation. Sound familiar? As for other cultural habits that we inherited all those years ago, I am not well placed to judge if we passed any of them on. I do hope that if the notion of "the Protector way" exists onboard, then it is being applied for the right reasons. As an aside, but for the Foreign Office's requirement to keep a White Ensign flying in the Southern Ocean, I believe this task would have been handed to the Blue Ensign of the Royal Fleet Auxiliary whose natural tendency to lean-crew ships would have made them a most suitable operator.

### Conclusion

To conclude, two questions should be addressed; was the flood inevitable and could we have done more to prevent it?

To answer the first, I don't think it was inevitable. Since Parts 1 and 2 of this blog were published I've had a handful of Endurance ship's company contact me with stories that could make you think it was. Certainly, when all the woes are compressed in a blog like this you can convince yourself that it was. However, this kind of dit-compression (as I'm now calling it) is misleading. In reality, the gaps between incidents were much longer than the incidents themselves and we did have a knack of muddling through them, making it to the next work period or port on time and always with a healthy post-operational report to submit to the Admiralty. If someone in authority had confronted the larger issues effectively and sooner, and thereby broken the chain leading to the precipitating error, I am convinced that the flood could have been averted.

## MAYDAY IN MAGELLAN - PART 3

So why didn't we do more onboard to see and prevent this happening? Partly because it's hard-wired into every naval commanding officer to go to sea and, if necessary, bring violence to the enemy. Staying alongside because you think your ship might not be safe is utterly contrary to RN norms and values and would most likely end with you being replaced by someone who would. Ruling out that path—not even considering it seriously—left us on the much less effective path of attempting major repairs-in-place on the ship's culture and practices while also conducting operations. Both the Captains I served with in *Endurance*, the Executive Warrant Officer and I spent hours every day discussing how we should tackle both the culture and the poor engineering standards and we had plans in place that reflected the nature of the deployment that we were on and the people involved. Regrettably, they weren't enough, or at least they weren't in time. But here is the rub: the chain should have been broken long before we ever left Portsmouth. B.M. Batalden & A.K. Sydnese's conference paper, "What causes 'very serious' maritime accidents?" written in 2017 summarizes the nature of the most serious failings perfectly:

"The study builds on investigation reports published by the UK's Marine Accident Investigation Branch (MAIB) published in the period from 01 July 2002 until 01 July 2010. The study investigates 22 very serious accidents and the 133 causal factors identified as leading to them. *It concludes that very serious accidents, distinguish themselves by having causal factors that are to be found higher up in organizations, in comparison to other accidents.*"

The decision to deploy a fragile and poorly understood platform for 18 months with almost no consideration given to the cumulative risk is a real culprit here. Another is a misapplied warship-staffing policy that pays too little attention to the distinctive mission and needs of this type of ship. Better decision-making on either of these matters would have reduced the chances of the flood happening. They would not have corrected the cultural issues, but they would have eliminated crucial factors that enabled those to have such an amplified effect.

In the end, no lives were lost on *Endurance*, and the ship made it to port. There is no guarantee that any future repeat of this type of incident will be as kind.

### To Finish

Any analysis of a disaster such as this inevitably tends toward the negative. It is an appropriate counter-balance, therefore, to finish this three-part series by going back to [Part 1](#) and the heroic actions and deeds of the ship's company on that cold day in the South Pacific just over 10 years ago. The ship was brilliant but flawed; the flood might have been inevitable or avoidable – one can't be absolutely sure. What I am absolutely certain of, is that regardless of all the difficulties and shortcomings mentioned above, the sailors onboard that day,

# MAYDAY IN MAGELLAN - PART 3

from a standing start, conducted themselves with the professionalism and courage that typifies the finest traditions of the Royal Navy. No one underperformed and many performed exceptionally. Some were rewarded for their efforts, others were not. Put yourself in a dark, oily and violently rolling machinery space, with freezing water coming in at a rate of 2400 tons an hour making enough noise to drown out the main engines. A mayday call goes out on the bridge and no-one answers. What would you do? The ship's company of HMS Endurance ran at it head-on until beaten out of the space, then they ran at the next challenge and the next one, for 48 hours until we were alongside. Because of that, the ship didn't sink and no one died. Given how this scenario could have played out, that's all that really matters. Thanks everyone.



### Commander Tom G Sharpe OBE RN (Retd)

Tom Sharpe is a freelance communications consultant specialising in managing reputations and capacity building for complex and often contested organisations. Prior to this he spent 27 years in the Royal Navy, 20 of which were at sea. He commanded four different warships; Northern Ireland, Fishery Protection, a Type 23 Frigate and the Ice Patrol Vessel, HMS Endurance.

***Mayday in Magellan has been reproduced here in the Newsletter by the kind permission of the Author.***





# RNARS NETS

Mick Puttick G3LIK

Contact: [mick\\_g3lik@ntlworld.com](mailto: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 North SSB net	M6LWO					
	1100	7020	RNARS CW net	G4TNI					
Mon-Sat	1030-1330	<b>7.085</b>	<b>The Bubbly Rats Net</b>	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	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									
<b>FM</b>	<b>145.40</b>								
<b>CW</b>	<b>1.824</b>	<b>3.52</b>	<b>7.02</b>	<b>10.118</b>	<b>14.052</b>	<b>18.087</b>	<b>21.052</b>	<b>24.89 7</b>	<b>28.052</b>
<b>SSB</b>	<b>1.965</b>	<b>3.66</b>	<b>3.74</b>	<b>7.088</b>	<b>14.294</b>	<b>14.335</b>	<b>18.15</b>	<b>21.36</b>	<b>28.94</b>

# COMMODITIES PAGES

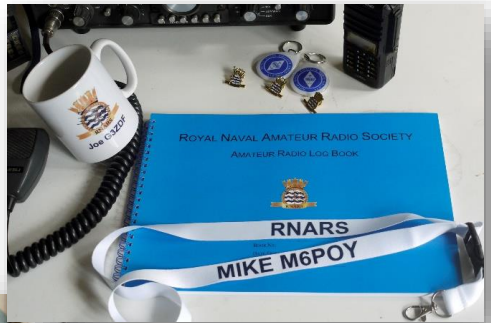
[Order Form is at the back](#)

A variety of items are available from the RNARS storeroom with many of them being personalised if you wish.



Mugs, key rings,  
Lanyards  
&  
Clothing

RNARS Log Books  
&  
Mugs



Really nice RNARS  
Branded head gear -  
embroidered hats with  
your call sign on one  
or even both sides of your  
head. From £12

# COMMODITIES PAGES

The ideal birthday or anniversary present...



RNARS Branded Gilet with your name and c/s Perhaps?



**Great Caps  
From £12**



RNARS Badges  
Fobs  
&  
Lanyards



RNARS Branded  
Fleeces  
&  
Polo Shirts

Comfy Fleece  
£25



Great Caps!  
From £12



Just the thing to keep you warm in the shack when it gets cool outside



Mike is re-sourcing our supply chain and he hopes to begin with new suppliers early in the new year. Ed

# COMMODITIES PAGES

Download order form - (<http://www.rnars.org.uk/Commodities.html>)

Item	Price
<b>Gilet/body warmer</b> w/ embroidered RNARS logo, Name and callsign. Taped seams. Waterproof & windproof, Double zip for easier fastening. Sizes S to 4XL Colour: Black	£68.50
<b>Navy cotton/polyester polo shirt</b> w/ embroidered RNARS logo, Name and callsign. Sizes: S to XXXL Colour: Navy only	£25.00
<b>Sweatshirt</b> , embroidered with the new RNARS logo, your name and callsign. Colour: Navy only Sizes: S to XXXL	£20.00
<b>Fleece jacket</b> embroidered with RNARS logo, name and callsign. Colour: Navy only Sizes: S to XXXL	£25.00
<b>NEW! White long-sleeved shirt</b> with RNARS logo & your callsign on the pocket	£38.00
<b>Baseball cap</b> with RNARS Logo	£12.00
-with your callsign on one side	£17.00
-with your callsign on both sides	£22.00
<b>Baseball hat</b> -plain	£12.00
<b>Gold blazer badge</b> with new RNARS logo (p&p £2)	£11.00
<b>Lapel badge</b> w/ new RNARS logo (p&p £1.00)	£2.50
<b>RNARS Tie</b>	£4.00
<b>Lapel badge</b> w/ new RNARS logo (p&p £1.00)	£2.50
<b>RNARS Log Book</b>	£4-50
Lanyard with RNARS & your callsign	£5.00
Mug with RNARS logo & your callsign	£15.00

Post & Packing is at UK rates:

Payment with order please

Small to medium items £7.00

Large to Extra Large £8.50

Outside UK +£10.00

Please complete the Order Form and include your RNARS Membership Number. Note that some orders can take up to 3 weeks. If you wish to pay by PayPal the RNARS PayPal account email address is [rnars.treas@gmail.com](mailto:rnars.treas@gmail.com)

You can download a copy of the order form our website at:

Size in inches:



Small 36-38

Medium 38-40

Large 40-42

Extra Large 42-44

2 Extra Large 44-46

3 Extra Large 46-48

4 Extra Large 48-50

# COMMODITIES PAGES

**PLEASE write clearly and use block CAPITALS**

**Photocopies of this form are accepted**

Call-sign | RNARS No: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Post Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_



Advisable to check before ordering as to availability in your size

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

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

Send orders to:

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

# RAFARS & RSARS NETS

RAFARS	Time	Freq	Control
Daily	1100 A	3.71	GØSYF
	1830 A	3.71	G3HWQ
Monday	1900 A	3.7	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
	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
Daily 24/7	DMR-TG23527	DMR TG23527	

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



**HMS Cutlass Enters Gibraltar for the first time – November 2021**