RNARS
NEWSLETTER

Royal Naval
Amateur Radio
Society

SUMMER 2019

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Front Cover: HMS Bristol

Laid down by Swan Hunter & Tyne Shipbuilders Ltd on 15 November 1967. She was launched on 30 June 1969, accepted into service on 15 December 1972 and then commissioned on 31 March 1973. Designed to defend a class of aircraft carriers which were never built, HMS Bristol was the only Type 82 destroyer ever built for the Royal Navy. She served for 20 years – and saw action in the Falklands in 1982 in an air defence and command ship role before she was decommissioned in 1991. Two years later she was converted into a training and accommodation ship to replace HMS Kent. Today, recently refitted, she is moored at the tip of Whale Island in Portsmouth Harbour.

RNARS Officers & Committee



www.rnars.org.uk

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The expression of views within this newsletter do not necessarily represent the views of the RNARS. The RNARS is an affiliated member of the RSGB.

SUBSCRIPTIONS INFORMATION

Special Notice Regarding Your Subscription

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

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

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

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

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

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

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

CHAIRMAN'S CHAT

David Firth
M0SLL@mail.com

First of all, let me thank Gavin Keegan, Chairman of the London Group-HMS Belfast, RNARS 4848 for his invitation to attend their AGM and for their superb hospitality on the day. The weather was warm and the day was a pleasant break from the quiet coastal countryside of retirement. Thank you.

Furthermore, it is always a pleasure to meet up with our President, Commodore Paul Sutermeister, RN who came down to London for the occasion on HMS Belfast. Thank you Paul, and it is appreciated that you came a long way to be there.

Additionally, my grateful thanks to all our volunteers who made our HMS Collingwood open day on Saturday, June 1st a success. Well done! All your efforts and ingenuity to put together working demonstrations, and to help out wherever you could made it all the more worthwhile. Our theme this year was Satellite communications and ATV, and I can tell you that with very little to hand some of our members have test-bedded a lot of tiny technology modules to produce quite stunning results. We had a camera strapped to a lamp post overlooking the field gun competition with an intermediate aerial atop our commodities stall outside, linking the signals to our large LCD display in the shack. A couple of other satellite systems drawing feeds from the world's first geostationary amateur satellite Es' Hail 2 - Qatar OSCAR-100. Apart from the usual commercial TV downlink, there was considerable activity and success with the amateur radio system that had been put together so meticulously. BZ everyone!

A huge thank you to YAESU UK who donated an FT-991A during open day! What a generous gift indeed.

Best wishes to you all,

David

MEMBERSHIP MATTERS

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

Congratulations to *Wally Walker* G4DIU who reached 50 years of continuous membership on April 8th.

New Members		
Jon Page	G1POS	5061
Roger Goldsack	M0UEE	5062
Tony Brown	M6LWO	5063
Dr Merlin Fox	M0MFX	5064
Lt Cdr Simon Murray	MM6OHG	5065
Warsash Sea Cadets	SWL -	-
John Allan	G4LTH	-
Thomas Kenney	G1FAD	-
Jack Hunt	SWL	-
Edwin Daniels	2E0LLD	-
Changes		
Alan Hewitt - new callsign	M7GKB	5055
Chris Wilkinson - was M6FUW	2E0FHH	4990
David Firth - was 2E0GLL	M0SLL	4994
Ian Hutchinson - was 2E0IHH	M0LIH	5003
Resigned		
Phil Whitchurch	G3SWH/AD5YS	0409
Silent Keys		
Ray Schultz	DK5VC	2638
Ed Ailsby	G4MZL	1923
Tony Mori	M1AFM	4295

more on page 12

YAESU DONATES FT-991A TO THE RNARS HQ SHACK!

DEAN CROOME FROM YAESU-UK CAME ON OPEN DAY-LEFT WITH AN INCREDIBLE OFFER !

SS NOMADIC

From Roberto Imperio (RNARS 4783)

Kathy & I visited the Nomadic last June while in Belfast. The Titanic Museum is terrific!

The SS Nomadic - Former tender to the Titanic and the last remaining White Star Line ship in the world. Restored to her original glory and back home in Belfast's historic Hamilton Dock. Come on board and experience over 100 years of authentic maritime and social history. Originally built alongside the mighty RMS Titanic in Belfast in 1911, the SS Nomadic is much more than just "Titanic's little sister". Designed by Thomas Andrews and built using the same design and similar luxurious finishes, the similarities to the Titanic are plain to see. Being exactly one quarter of the size of her famous friend, the Nomadic is often referred to as "a mini Titanic."

In April 1912, the Nomadic completed her most famous task by transferring the excited first and second-class passengers from the shallow dockside in Cherbourg out to the Titanic, which was moored in deeper water just off shore. In awe of the White Star Line luxury and ground-breaking design, those passengers were blissfully unaware of the tragic fate awaiting many of them only days later.

With active service in both World Wars, over fifty years experience of carrying thousands of passengers to the world's largest trans-Atlantic liners and nearly thirty years as a restaurant and party venue moored beside the Eiffel Tower in Paris, the Nomadic has a million stories to tell.

As the last remaining White Star Line ship anywhere in the world and a member of the core collection on the National Historic Ships register, the Nomadic is back "home" in Belfast, after 100 years, and has been painstakingly restored to her original glory. The Nomadic has now opened a new chapter in her history and is looking forward to welcoming a whole new generation of visitors on board.

Roberto

DIVERSE REPORTS

Reverend George Dobbs G3RJV - Silent Key

Sad to report the passing of the Reverend George Dobbs G3RJV who was the founder of the GQRP club in 1974, and who passed away in the early hours of the 11th of March. Although not a member of this society he is well known by many people who are members of the RNARS, and who have, from time to time, generously donated back issues of the QRP magazine SPRAT to the HQ Shack. No doubt he will be greatly missed by those who knew him.

Kempton Park Rally 14 April 2019

This was the one and only rally in Kempton Park this year. The organisers have consolidated the twice a year event into a single one, dropping the late-year rally as it often clashed with Remembrance Day ceremonies with a consequent reduction in attendance. This consolidation seemed to lead to a decrease in both the number of stands and in footfall rather than an increase in the number of stands and in the attendance the organisers probably hoped for. The uncertainty over the long-term future of Kempton Park as a race course may not have helped either.

We were the only one of the service amateur radio societies present. The main manufacturers were there as usual – Icom, Yaesu and Kenwood but the only one of the big suppliers present was Moonraker. One interesting new manufacturer with a stand was SDRPlay whose dual-tuner RSPDuo was reviewed recently in RadCom. They had an impressive display using a selection of SDR programs including their own one, SDRUno. We had half a page of sign-ins and two joiners.

Joe G3ZDF

Congratulations

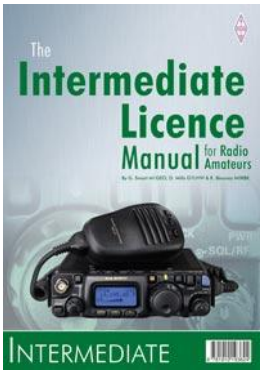
Alan Hewitt (5055) on passing the Foundation exam new callsign is ***M7GKB***
Chris Wilkinson who has attained his Intermediate licence - callsign ***2E0FHH***
Ian Hutchinson on passing the Advanced Certificate Exam - callsign ***M0LIH***

New Commodities Manager Steps in.

Doug Bowen G0MIU has reached a watershed moment, and has decided to step down from the duties of Commodities Manager. For the time being he will continue with other duties as the Newsletter Distribution Co-ordinator; stuffing envelopes and taking them to the post office, and as a long standing Committee Member. A huge thank you, Doug for all the hours of work that you and Judy have committed to the benefit of the Society over the years. Mike Moore M6POY will be taking over after a short period of handover.

DIVERSE REPORTS

RSGB



The Intermediate Licence Manual
for Radio Amateurs

By G. Smart M1GEO, D. Mills G7UVW
& R. Bleaney M0RBK

Syllabus 2019 Edition
for exams from September 2019 onwards

This is the latest book for those studying for their Intermediate Amateur radio licence. The Intermediate Licence Manual contains all of the information required for those seeking to upgrade their Foundation callsign.

Designed to cover all elements of the Amateur Radio Intermediate licence syllabus, this second RSGB course-book The Intermediate Licence Manual is written in an easy to understand style. The new material that was originally in the Full licence syllabus is all included along with updated sections that now cover new topics such as software defined radio. Broken down into familiar chapters such as Licence Conditions, Basic Electronics, Transmitters & Receivers and Antennas, this book contains both the theory needed and details of the practical exercises. There is plenty of helpful advice, including important safety tips and advice about how best to approach the practical assessments and the written or online exams.

Corrections and updates

We are currently shipping the 1st edition of this book and updates to this edition are provided below. These are picked up as the book is reprinted and there are often a number of printings in circulation, so it is worth checking your copy against the updates below. We are currently shipping the 2019 printing of the book

Page v, column 1, 2nd paragraph
Please ignore the first three lines of this paragraph. There is no chapter 17 as the intention to produce sample questions was dropped before the book was finally printed.

DIVERSE REPORTS

RSGB

Page 32, column 3, 4th paragraph
Please change the worked example to read as follows.

Power supplied to amplifier = 13.4 Volts x 15 Amps = 201 Watts

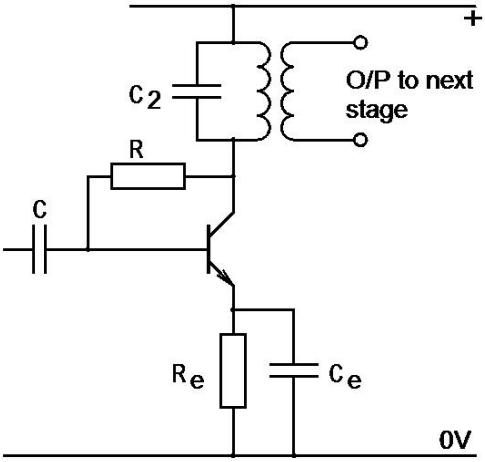
For clarity you may also amend the following text although the original is correct.

the power leaving the amplifier = 0.35 x 201 Watts = 70.35 Watts

Page 34, Figure 7.15
Please amend the caption image to read 'Circuit diagram of the TRF receiver input stage'

Page 35, Figure 7.20

Please replace this image with the one below.



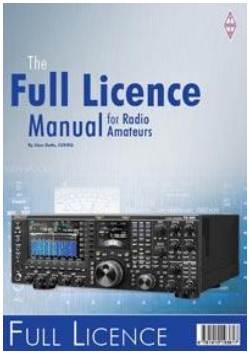
No other corrections have been reported at this time

If you are into heavy DXing then this website could be for you. Packed with information; reports, charts, predictions and so on.

SolarHam by Amateur Radio Station VE3EN http://www.solarham.net/

DIVERSE REPORTS

RSGB



The Full Licence Manual
for Radio Amateurs

by Alan Betts, G0HIQ

Syllabus 2019 Edition - for exams from September 2019 onwards

This book is the third course-book in the RSGB series for those interested in obtaining an amateur radio licence. In line with the progressive three-tier UK licence structure The Full Licence Manual completes the natural progression from Intermediate and Foundation Licence Now!

Fully revised to reflect the changes introduced in Syllabus 2019 the Full Licence Manual contains all of the information required to move to the final stage of amateur radio licensing. Written to match the Full licence syllabus the book is broken down into logical sections. Licence conditions are covered in detail as are operating techniques and amateur radio safety. As you would expect, there are sections covering technical matters such as circuits, semi-conductors and more. The Transmitter and Receiver are covered in detail along with the material required for understanding the Software Defined Radio section of the syllabus. Feeders, Antennas and Propagation all get chapters of their own, as do Electromagnetic Compatibility and Measurements, All this means that the Full Licence Manual is the ideal companion to a formal training course. The book is also a useful reference source and many amateurs will find themselves referring to it long after they have passed their examination.

Warsash SCC Training at RNARS HQ

Under the tutelage of Ian Hutchinson, RNARS, and the eagle-eyes of their CO, Lt 'Shadey' Lane RN, the Cadets are receiving training as CIS Specialists, and will be later on studying for their Foundation Licences in Amateur Radio, to consolidate their training and to give them an early start to get on the air in their own right.

DIVERSE REPORTS

COLLINGWOOD OPEN DAY SATURDAY 2019

For the very first time the RNARS Colours were hoisted at 08:00 on the morning of our open day.

Gently waving in the breeze atop our mast the flag signalled officially that the RNARS HQ Shack was open for business.
And what a sight it made too!

IAN M0LIH & ANDY 2E0REE
RAISING THE STANDARD

ALAN M6UIT
ANDY 2E0REE
TONY M5AGB

Final touches before the gates are flung open

Let's get the priorities in order!

MARTIN (Nev) LONGBOTTOM M0EHL
IAN HUTCHINSON M0LIH

Two of our most active members who worked unstintingly turning ideas into fully working solutions, including the basic necessities as bacon rolls for the early starters, and clearing up the galley!

COULD THAT BE A TUNING FORK?

DIVERSE REPORTS

GATES OPEN!

MIKE M6POY AT THE PITCH

EARLY BIRD VISITORS

FIELD CREW TAKING A BREATHER
ALAN M6FM
BOB G0BSJ

ON THEIR FEET ALL DAY!

DIVERSE REPORTS

KEVIN LAMB G4BUW AT WORK

JOE G3ZDF COOLING OFF IN THE RUN-UP

Kev giving Mick Puttick G3LIK a break at the morse key

SURPRISE! SURPRISE! EVERYONE!

YAESU MAKES AN ASTOUNDING DONATION TO THE RNARS !!!

Dean Croome from Yaesu UK came to see us during Open Day and after being shown around the shack by Joe Kirk, announced that he would like to donate one of these rigs to the RNARS. Here is a summary of this magnificent gift:

FT-991A ALL-BAND, MULTIMODE PORTABLE TRANSCIEVER

The FT-991A is designed for the most competitive operating situations, with a suite of new features to enhance the experience. Whether you primarily operate at home, mobile or in the field, the FT-991 will provide outstanding fundamental performance plus give you easy access to the full range of exciting modes available on the ham bands today.

Thank you very much, どうもありがとうございます

DIVERSE REPORTS

Ed

HMS BELFAST GROUP AGM & Social

Gavin Keegan

Gavin Keegan, Chairman of the London Group, HMS Belfast opened the AGM at 11:30 on Friday 26th April, after welcoming drinks and biscuits beforehand. As is usual at this event there is a parade and VIP inspection by a visiting serving officer on the fo'c'sle afterwards providing us with time for casual conversations close to A-turret. We were mustered by Mick Puttick and after the inspection we made our way down to the wardroom for a pleasant buffet lunch.

L-R: Chairman David Firth, RNARS President Paul Sutermeister, Hon. Secretary Joe Kirk, Hon. Vice-Chairman Mick und Maren (back to camera)

The business of an AGM provides, among other things, a general summary of trends over the previous year. Just comparing notes with Kevin, we all have similar problems with upkeep as well as with the recruitment of youth into our ranks. Nevertheless, we all keep going because of our willing team of volunteers.

Our grateful thanks to Gavin and to the Committee of the Belfast Group.

What it's all about

Present and Correct

SEA STORY - continued

Eric M0HFF

The Buccaneer rolled back a few feet, as the strain came off, pulled by the weight of wire, until the hook disengaged, and the wire fell free. Following a sign from a deck man, the hook was jacked away, then the wire reeled itself in, ready for the next 'trap'. The Buccaneer, wings folding as it moved, taxied up to the very front of the deck, out of the way of the next machine, which was already on the way in. All the deck men dove back into their boltholes, and another Buccaneer made a controlled crash onto the deck, dragged out a wire, and they all did it again. When all the jets were down, the helicopter thrashed over to its 'H' and perched there, still running, for fifteen minutes, then it clambered off again, and parked in its 'working' spot, while the earlier seven returned. Once they were down, the helo went for a quick 'jolly', battering around the ship while an official cameraman hung out of the side door, snapping away with his camera.

The Gannet came droning past, overhead, then the Wessex reoccupied its SAR spot, while the radar plane fluttered down to the deck like an aluminium feather. Its arrestor hook skipped over all the wires, but the machine still stopped with plenty of deck to spare, courtesy of the stiff wind, and our forward speed. Once the SAR was parked, the green-hats began shunting the aircraft around, using deck tractors. Some were positioned along the angled flight deck runway area, while others were taken down to the hanger, using the lifts. I shivered, feeling a bit chilly, and glanced at my watch, and was shocked to see that I had been there for five hours! It was a good job that I had been told to skip the first dog, because Taff had the UAZ in bits, chasing an intermittent fault. That saved me from being an hour adrift for my duty watch!

I went down, and dined on something they called Shepherds' Pie, although I defy anyone to find the pie, or the shepherd! After that, I queued up at the NAAFI, in the hope of finding something to eat! With my stock of Mars bars and cans of coke renewed, I went up for the First watch. The UAZ was still in bits, so Pete did the first half of the watch, while I did the second two hours. At ten to midnight, the next shift rolled up, and most of them turned round, and went back down. Taff had given up for the night, so all we were doing was

keeping a fire watch. There were circuit diagrams lying around all over every flat surface, and sets of test leads trailed from electronic gizmos inside the drawers, to testing gizmos that stood wherever they would fit! Slinger got the short straw, of course, and was told to wake only Bagsy for the Morning watch.

After two weeks of wandering randomly around the Atlantic, chasing minor defects, and getting everything working properly, including the crew, we sailed into Portland dockyard. (One day, I will find out how a steam ship can sail anywhere, as there is nowhere to PUT a sail!) I was about to learn that all Matelots dread going to Portland, -the war-games centre for the R.N.

Cinderella leave was granted to the off-watch, and the off part of the on-watch.

In the morning, it was store ship. The afternoon was the same, except for those who had been on the Middle watch, the night before. Some of the stores were swung onto the flight deck by a crane, which dumped them onto the after lift, from where they were whisked down into the hangar for sorting. Putting most of the aircraft on deck had made space. That evening, the previous night's on-watch were granted Cinderella leave. On Saturday, we re-fuelled, and all the senior hands found things to do, elsewhere in the dockyard. Sunday isn't Sunday in Portland, it is just another day, which happens to be called Sunday. It found us scrubbing and painting our passageway. The only flat surface was the floor. The walls and ceiling were festooned with runs of cables and pipes, fuse boxes, junction boxes, valves, control shafts, wheels, air conditioning ducts, and the brass tally plates that identified them all, so we very quickly found that we had to paint the bit at the back first, or otherwise, we were putting our arms through areas that had just been done, to reach the bit behind it! We rapidly got paint up our arms, in our hair, and all over our eights I'm sure that MoD. paint is made super-runny on purpose!

During the afternoon, we were all issued with new gas masks and anti-flash gear, even though our others hadn't been used. As we signed for them, we were cautioned to keep them to hand, all and every day, whether on or off watch. On Monday, at high tide, we sailed again. We had to wait for the tide,

to get over the sand bar at the entrance to the harbour. Once we had finished playing at daisies, complete with gas masks and anti-flash, we launched into a series of 'work-up' exercises that saw us being 'attacked' by a submarine. I was on watch in the EWO, on the UA9 which was tuned to 9.6 Gigs, the submarine radar frequency, and I had the gain, (the video volume) cranked up to maximum, causing the normal centre dot to be a large fuzzy blob that was slowly mesmerizing me. The headphones were hissing angrily with amplified noise. I had been sitting there for nearly two hours, having taken over from Bagsy and Fred, who had spent their entire watch staring at nothing, and waiting.

BLOOOP! I jerked awake, seeing the telltale blue strobe fading on the CRT as I swung the engraved cursor over it, then grabbed the A.I. mike, and babbled, "Submarine radar, one sweep only, bearing... er... 205, Sir!" A bored voice replied. "Thank you, we see it. We haven't started yet!"
"Oh, er, roger." Deflated egos to the fore! I looked questioningly at LRO Burfman, who looked equally baffled, then reached for the clip-board with the agenda attached, and leafed through all the various signals and messages, until he found the bit he wanted. "It says here a ten hundred start!" He stood up, "I'll be back in a minute." BLOOOOP! I logged all the details, so I would have it all, ready. All I needed was the pennant number, or the name, off the side of the sub's sail. (At least, a sub's sail is flat and thin!) Dave came back. "The sub is 'Porpoise', and our notes are up the wall, we don't start until ten tomorrow!" He threw the clipboard onto the RS's chair, "messed up already! Typical!" He sat down, on the clipboard, which he threw onto the desk in disgust. "Pete, put the kettle on, then took over on the nine. He can brew up, and give his eyes a rest." To me, he said, "Log the sub, then shift down to 9.4, and get busy."

"Already done." I tuned down to the usual band, changed the audio from all to select, which shut out most of the hissing noise, turned the gain down a click, to the normal position, then gave the cursor a hard spin. It whirled like a roulette wheel, and came to rest at an arbitrary position, which became my start point. I nudged the cursor round a degree or so, fine tuned, picked up the stopwatch, and began 9.4 Gig, 2.5 arp, 0.5 pw, 1237 on the nixi. "I've got a Russian, first go!"
"It doesn't surprise me, they hang around here in droves!" Dave said. "Log it, but don't bother reporting it. They know 'em all on sight."

"Ok." Three 978's, two Decca Navigators, and a Raytheon later, "there's another!"
"Ok. Push over, and I'll log a few." Pete said. "The
kettle's about to boil, and the water bottle wants filling."
"Right." As I was about to make the coffees, R.S. Welch came in. "Everything ok?" He asked, peering over Pete's shoulder.
"Why aren't you on 9.6?"
"The notes are a load of crap!" Dave replied. "We don't start until tomorrow! Did you smell the kettle?"
"Yes please, two sugars, no milk."
"It's a good job, R.S. We haven't got any until the next issue."
"And the coffee is mine. I bought a jar in the NAAFI, earlier." Dave added.
"Oh? We can't have that!" The R.S. picked up the phone, and dialled a number. "Oh, hello, Ken, Tony here, is Patsy in the mess? – Yes, please. – Patsy, Tony. Is there any chance of an issue of coffee, sugar, and milk? We're on twenty-four hour watches up here, and we've run out. – You will? Great. I'll send a lad down. – Ten minutes, ok, cheers." He put the phone down. "Pete, you know where the store is, take him with you, so he knows for next time. Ask for Patsy Palmer."
"Right, R.S. Come on, follow me."

We went down to four deck, then forward, through the canteen, and forward some more, into a compartment filled with the noise of screaming generators, through another hatch, and into a tiny compartment with a split 'stable door', and a ladder leading down into another cubby below. "PO Palmer?" Pete yelled down the hole, over the screaming noises from the steam driven gennies.

"Yes?" The voice came from behind us, "Are you Tony's boys?"
"That's us!"
"I think I saw you the other day, carrying spuds onboard?" P.O. Palmer looked at me. "Probably,. I was storing ship all day."
"Knackered, I'll bet!"
"Slightly. It was nice to stop!"
"I'll bet!" He eased past, and went down the hole. After a few clanks and bangs, he passed up a 5lb can of instant coffee, three cans of condensed milk, and two 2lb bags of sugar, followed by a request form. "Get Tony to fill it in, and sign it. He can give it to me, in the mess, later. You might be entitled to a bigger issue."

"Thanks, P.O."
"Ok, now push off, before I have to accuse you of skiving!"
"Yes, P.O!" We pushed off with our trophies. Pete led me round to the equivalent compartment on the other side of the ship, where the temperature was much higher. "If ever you get sent for a loaf, here's the bakery!" He laughed, as he opened a hatch. The superheated air that billowed out was rich with the smell of fresh bread. "Next door is the hidey-hole of the Ship's Photographer. His lads will develop and print anyone's black and whites, for pocket money. They don't do coloured film, though. You can also buy official photos from them, when the place is open." A shredded sheet of A4 was sellotaped to the door, with a list of times. "Come on, let's get back before Tony has kittens."

We dumped our stores into the EWO, then I was immediately dispatched again, to refill the five gallon water can, from the fresh tap on five deck. I staggered back into the EWO with it, gasping for breath, and wringing wet, then flopped into a chair. "You didn't fill it, did you?" Dave smirked. "A third is plenty!"
"Now you tell me!" I gasped.
"Where did you go? It took you long enough!"
"Five deck."
"What on earth for? There's a bog and a tap just past the ladder, up here!"
"Now you tell me!" I repeated. Dave had made the coffees himself, while we were away, and at least, he had made me one, as well. R.S. Welch had an enormous pot bucket, in lurid green enamel, and labelled 'Tone's Tank'. It showed signs of considerable use. The First Dog shift arrived, and we went down to the mess, for a few hours, before we started the Middle. We hadn't been there for five minutes, when there was a tremendous CRACK from the passage, outside. Muggins was sent to look. As I opened the door, a man in an orange boiler-suit gave me a card which read – Explosion and fire in (where you are.)."...Er?"
"Well, son, DO something!" I went back into the mess, picked up the 'phone, dialled the Damage Control Centre, and told them. "Is that for real, or an exercise?"
"A man in an orange –."
"Exercise, right." The 'phone went dead A few seconds later, the p.a. intoned – "Exercise exercise, fire, fire, fire. Fire in four papa passage, Exercise!"
Shortly after, the thunder of boots signalled the arrival of the Damage Control, party bearing hoses, nozzles, and Siebe-Gorman breathing gear. They pretended to put the imaginary fire out.

A while later the mess door was flung open, and an orange clad arm tossed a smoke bomb in, then banged the door shut. We all evacuated through the other door, but were collared by another orange suit, who slapped stickers on

our chests as we emerged, chanting “You’re dead! You’re dead! You’re dead! You should have put your gas masks on! Go back in, lie down, and be dead!”
“But the war doesn’t begin until tomorrow!” Someone protested. “Do you think the second war German mine the ship just bumped into, cares? Be ready for anything, all the time!” We were shoved back into the smoke filled mess, and the door banged shut behind us. We lay on the deck, gasping as the smoke roiled around us, until one of the D.C. party found us, read our labels, and telephoned the sick-bay.

We were dumped carelessly onto stretchers and carted off, then dumped again to lie in the passage outside the hospital. As we were dead, we weren’t urgent! After a while, Pete whispered, “I’m busting for a slash!”
“I’m dead! I can’t hear you.”
“Then you can’t see me, either!” He got up and set off. “Hey! Where do you think you are going?” An S.B.A. (Sick Bay Attendant, or Nurse), yelled at his retreating back. “The heads!”
“You are dead. Lie down and die!”
“Stuff you! I’ve been on watch since twelve! I’m going to the heads!”
“Dead men don’t, so Lie down!”
“Stuff you!” Pete kept on going. We all went, then came back, and died again, until nosh time, when we quietly faded away when the SBA wasn’t looking. We left our ‘dead’ stickers on the stretchers. The mess stank of gunpowder. There was a big black burned streak on the paintwork, and trails of oily boot-prints on the deck. We, the J.R.O’s, were still scrubbing at them when the Evening Rounds arrived. The Subbie smiled. “I see you’ve been got at! Carry on!”
“Yes, Sir, We’re all dead, too!”
“Keep scrubbing, Ghouls!” He left us to it. Half an hour later, the burned patch began to take on an orange hue, so we went to seek advice. “You’re down to the primer!” The Mess LRO said. “Leave it, it will have to be re-painted. It’s nearly lights-out, anyway.” We put the gear away.

Eric

Project Nite at the old RNARS Shack...

INVESTIGATIONS ON A GALVANOSCOPE

Jürgen H. Timcke, HB9ANE, RN 3493

Based on the results mentioned in chapter D it was clear, that a 9Volt-compound battery could not be used for this investigation. The ideal appliance for this purpose was my „Regulated DC Power Supply“ (VOLT-CRAFT PS 1302D) with the adjustable technical data U_{max} = 30 [V] and J_{max} = 2 [A]. This power supply has a current limitation, which is necessary to keep the adjusted current absolutely constant under load. Figure 5 shows the test set-up to determine α = f(J).

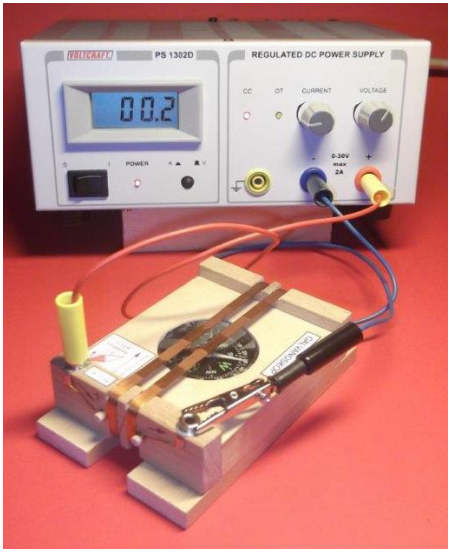


Figure 5 - Test set-up with PSU

In connection with the determination of α = f(J) it was also of interest to me to investigate whether or not the volts on α =f(J) had an influence on each of the values of J.

I determined α at each J-value with three different test voltages: U = 10 - 20 - 30 [V]. With these three α-values I calculated the mean value α_m for the different J-values.

These mean values α_m = f(J) are meaningful numerical values. The results are presented in a table (figure 6), and as diagram in figure 7

	1	2	3	4	5	6		6	7	8	9	10
	J	U V			Mean value			J	U V			Mean value
		10	20	30					10	20	30	
		α			α_m				α			α_m
	A	°						A	°			
1	0,1	59	60	57	58,7		7	0,7	85	84	83	84,0
2	0,2	70	71	70	70,3		8	0,8	85	84	85	84,7
3	0,3	77	75	77	76,3		9	0,9	86	85	85	85,3
4	0,4	78	80	79	79,0		10	1	87	86	86	86,3
5	0,5	82	82	81	81,7		11	2	88	88	88	88,0
6	0,6	82	83	82	82,3							HB 9 ANE

Figure 6
Measured values of α and calculations of α_m

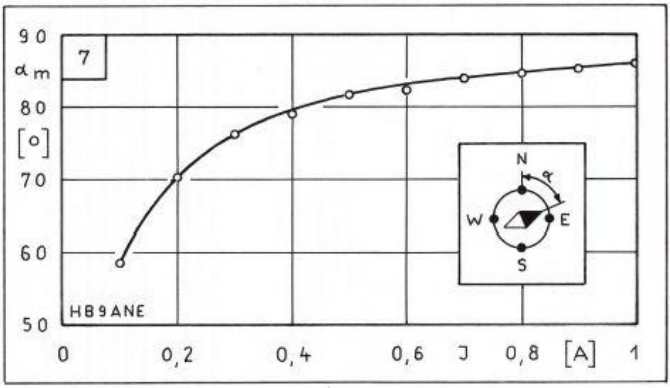


Figure 7Needle Deviation Angle α_m = f(J)

Comments on Figures 6 and 7

Accuracy of reading

Because of the small diameter of the compass dial the values between two pitch lines, this are 5 degrees, can be assessed only with a reading error of about +/-0,5 degrees, in other words: the accuracy of reading is restricted. However, as we see in figure 7, the calculated mean values α_m are sufficient exactly to connect them with a curve α_m = f(J), which has no considerable deviations from the individual α_m-points.

Needle deviation α = 90^o

In the table, figure 6, line 11, can be seen that also with a current strength of J = 2 [A] a needle deviation of α = 90 [^{o}] could not be reached. Consequently the inrush current at the moment of make contact with the electric circuit must be higher than J = 2 [A] (a multimeter is too lazy to indicate it immediately), but much lower than J = 18 [A], because this J-value is calculated without the (unknown) R_i of the battery. However: how much higher than J = 2 [A]? This will be treated in chapter G:

Chapter G - Approximate determination of J at α = 90^o

The current in the electric circuit „battery and galvanoscope“ is J = U / (R_i + R_a). This equation can be transformed to R_i = (U / J) - R_a

Because the internal resistance R_i of the battery is not known, I calculated J with the nominal voltage U_{nom} = U = 9 [V], R_a = 0,5 [Ω] and R_i-values from R_i

= 0 [Ω] to R_i = 1 [Ω] (in steps of ΔR_i = 0.1 [Ω]) and R_i = 2 [Ω] to R_i = 10 [Ω] (in steps of ΔR_i = 1 [Ω].

The calculated values are presented in a table, figure 8: $J = U / (R_i + R_a)$. This is mathematically seen, as the function $y = 1 / x$, which is a hyperbola. Also, drawn in a diagram with the x-axis as well as the y-axis in a logarithmic scale it shows a falling straight line. In figure 9 this straight line is presented in the form; from: (X_1,Y_1) to (X_2,Y_2). That is to say, (J_1,Ω_1) to (J_2,Ω_2). (**Ed**) Specifically:

J = 18 [A] at $(R_i + R_a)$ = 0.5 [Ω] to J = 1.2 [A] at $(R_i + R_a)$ = 7.5 [Ω].

What can we use this straight line for? $J = U / (R_i + R_a)$ well, to find out J at α = 90 °. Therefore the curve $\alpha_m = f(J)$, from figure 7, is drawn into figure 9

H89ANE	1	2	3	4		5	6	7	8
	R_i	$R_i + R_a$	U	J		R_i	$R_i + R_a$	U	J
	Ω		V	A		Ω		V	A
1	0	0,5	9	18	12	2	2,5	9	3,6
2	0,1	0,6		15	13	3	3,5		2,571
3	0,2	0,7		12,857	14	4	4,5		2
4	0,3	0,8		11,250	15	5	5,5		1,636
5	0,4	0,9		10	16	6	6,5		1,385
6	0,5	1,0		9	17	7	7,5		1,2
7	0,6	1,1		8,182	18	8	8,5		1,059
8	0,7	1,2		7,5	19	9	9,5		0,947
9	0,8	1,3		6,923	20	10	10,5		0,857
10	0,9	1,4		6,429	$J = U / (R_i + R_a)$				8
11	1	1,5		6					

Figure 8 - Calculated values of $J = U / (R_i + R_a)$

With reference to ***Figure 9***, Straight line $J = U / (R_i + R_a)$: not all calculated values are shown with circles, what can be seen now?

The prolongation of the curve $\alpha_m = f(J)$, drawn as broken line, in direction to $\alpha_m = 90^o$ until J = 5 [A] (at the abscissa) shows, that this value can be J_{max} (but only theoretically because of the glancing approximation to the line $\alpha_m = 90^o$).

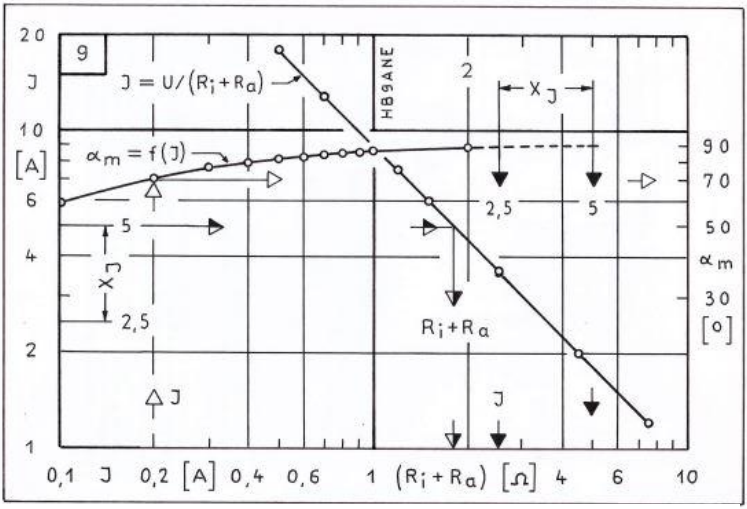


Figure 9 - X_J: approximate range of J at α = 90°

Finally, what can be stated? The current which causes a needle deviation of α = 90° must be anywhere between J = 2.5 [A] at (R_i + R_a = 36 [Ω]) and J = 5 [A] at (R_i + R_a = 1.8 [Ω] (marked with X_J in figure 9)

Final word: Without any doubt: a galvanoscope is far away from being an appliance like the high-tech instruments of our time. But, and this is for me the important fact: it is not only an appliance for practical use by the experimenter, it is very suitable to explain the fundamental principles of the connection between direct-current and magnetism. That means it can be used as a teaching aid for the education of newcomers into our world, the world of amateur radio.

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Layout: Rolf Rüttimann **Jürgen**

BRANCH NEWS - In Brief

Take a trip to the Firth of Clyde and you'll sometimes notice a Type 23 Frigate in the area, but why?

Much of the time, there is a very specific reason with the vessel having a very specific function, Towed Array Patrol Ship. The primary purpose of the Towed Array Patrol Ship (TAPS) is to keep look out for submarine activity, especially around HMNB Clyde which is the home of the UK's nuclear deterrent.

George Allison **UKDJ**

Simply put, TAPS is a standing Royal Navy task to provide anti-submarine patrol duties in support of the Vanguard class nuclear submarines that are responsible for delivering Trident nuclear missiles. A Type 23 frigate is maintained at high readiness for this task 365 days a year and can typically be found, as said above, around or near the west coast of Scotland. Type 23 Frigates provide the towed array patrol ship for reactive anti-submarine patrol duties in support of the strategic nuclear deterrent.

Bomb reported on nuclear submarine at Barrow found to be hoax 10/4/19

The BAE Systems facility at Barrrow has been evacuated after reports of a bomb onboard an in-build Astute class submarine. **Barrow-in-Furness,** 'Barrow,' is a town and borough in Cumbria and is the home of BAE's submarine construction facilities. 1,700 staff are believed to have been evacuated.

Henry Jones UKDJ

BRANCH NEWS - In Brief

Maiden flight for Crowsnest – the Royal Navy's eye in the sky

The regeneration of RN carrier strike capability took another small step forward on 28th March when a Merlin HM2 fitted with the Crowsnest Airborne Surveillance and Control (ASaC) system completed the first test flight from Yeovil Aerodrome.

Crowsnest is a development of the existing Thales Search-water radar and Cerberus mission system and is supposed to offer a low cost, low-risk solution compared with the other more radical and advanced options that were considered.

savetheroyalnavy.org

Royal Marines look to battlefield of the future

Royal Marines have been looking to the future at new ways in which they might be sent into battle.

The amphibious assault specialists, Plymouth-based 1 Assault Group Royal Marines (1AGRM), brought emerging civilian technologies to their RM Tamar base in Devonport Dockyard for an innovation day. The idea was to study and think about how new tech can be brought to the battlefield.

03/05/19 royalnavy.mod.uk

IN THE NEWS

WARSHIPS won't be used as sacrificial lambs

-in order to provide the manpower kick to run Britain's two colossal aircraft carriers, the head of the Royal Navy has vowed. Admiral Sir Philip Jones said the navy was 'through' relegating frigates and destroyers to 'training' vessels due to a shortage of sailors.

THE NEWS 15th March 2019

PHOTO: Andrew Milligan/PA Wire

Tornados Come Home

The Panavia Tornado was a pan-European collaboration between the UK, Italy and West Germany. Having first entered service with the RAF in 1979, the Tornado has enjoyed a career spanning almost 40 years. Its first combat duty came during the Gulf War in 1991 (GR1 model) and it has played an active role in Kosovo, Afghanistan, Libya, Syria and Iraq (GR4 model). The fleet was welcomed back to its home base of RAF Marham in Norfolk for the final time on Tuesday, February 5th

The Engineer

Crashed Japanese F-35 wreckage found in Pacific, pilot still missing

The aircraft, less than one-year-old, was the first F-35 to be assembled in Japan and was aloft for only 28 minutes on Tuesday before contact was lost, a defence official said. The plane had logged a total of 280 hours in the air since its first flight, he added.

TOKYO: Search and rescue teams found wreckage from a crashed Japanese F-35 stealth fighter in the Pacific Ocean close to northern Japan, as efforts to find the missing pilot continued, authorities said on Wednesday.

The Economic Times 11/4/19

IN THE NEWS

D-DAY 75th Anniversary Plans

The MOD announced that more than 4,000 Armed Forces personnel will lead the nation in marking the anniversary. This will include 300 veterans who will leave Portsmouth on a specially-commissioned ferry to attend events in Normandy. They will be accompanied by up to 11 Royal Navy ships.

This was reported in The Sun, The Guardian and online in the Metro.

Gavin Williamson, Secretary of State for Defence, said:

"75 years ago troops from 14 Allied countries united together, many on the south coast of Britain, before launching the historic operation to liberate occupied Europe.

"Britain must always keep the legacy of that special generation alive. I urge people to join our Armed Forces in showing that all of us, young and old, will never forget the price they paid for the freedom and peace we now enjoy."

Chief of the Defence Staff Sir Nick Carter said:

"The Armed Forces are honoured to dedicate so many personnel and assets to this significant commemoration. Our forebears, who planned and executed Operation Overlord, and those who enabled it to happen by fighting in Italy, Africa and beyond, have the enduring respect of our Armed Forces. We will ensure the example of that special generation lives on."

France Honours D-Day Naval Veterans with Légion d'Honneur

Denis Haley, 92, Patrick Reardon, 93, John Nicholls, 93, Charles Kavanagh, 92,

BRAVO ZULU!

IN THE NEWS

Max M0VNG 4701

Peter Widd, 72: Senior pilot of warships on the Thames

On April 14, 2004, a photograph of Concorde, stripped of its wings, on a barge bound for Edinburgh, was printed on the front page of *The Times*. Of those who viewed Concorde glide swan-like under the bridges, few knew that its serene passage was due to the careful preparation of the co-pilot, a quiet, thoughtful Yorkshireman.

Peter Widd, the senior pilot on the Thames, was renowned for his cool head and for having the mathematical competence essential to navigate the complex twists, turns and tricky tidal changes of the river. When tasked with bringing each part of the un-built London Eye on barges up to the South Bank,

the meticulous Pete, furnished with tide tables, calculator and bridge dimensions, pored over the Admiralty charts. Always calm, Pete had a forensic eye for detail and knew that any error in navigation, time or tide would bring London's transport to a standstill if it caused him to as much as scrape a bridge. Such an accident might have sank the barge's cargo of glass pods and the Eye's colossal spindle. Fortunately all went well.

In 1999 the Admiralty chose Pete to become its pilot of choice. Joining a long line of select pilots, he was entrusted with guiding the aircraft carriers, HMS *Ark Royal*, HMS *Illustrious* and HMS *Invincible* to Greenwich through the narrow confines of the Thames Barrier. He was also one of the few licensed to pilot from Margate and Harwich into the Thames from Gravesend and up to Putney Bridge pier. Although Pete loved his work, he was intensely modest. Quietly self-assured, he never mentioned that while working, he had managed to obtain three university degrees, without taking leave. Peter was born a Yorkshireman and lived as one: he was resolute, confident, gentle, hardworking and kind. He had nerves of steel, a heart of oak, great determination and trueness of spirit. His life was well lived. He is dearly missed.

The Times 16th March

FALKLANDS HAM IN THE NEWS

Montevideo, March 20th 2019

Falkland's 1982 civilian hero and life-long radio ham dies in England

The Falkland Islands weekly Penguin News reported this week on the death in England of Reginald (Reg) Silvey, one of the perhaps lesser known civilian heroes of the war in 1982, but almost certainly the one whose activities put him most at risk of arrest and possible execution.

Made redundant by the Argentine takeover of the Cape Pembroke lighthouse, where he had worked, Reg, a life-long radio ham, call sign VP8OE, found himself with both the time, the skill and the opportunity to take up a new occupation as a spy.

Reg Silvey was one of the perhaps lesser known civilian heroes of the war in 1982, but almost certainly one whose activities put him most at risk


The "Voice of Radio Port Stanley" — a certain Reg Silvey who, says reliable reports, kept the British informed of Argentinian movements on the Falkland Islands.

THROUGHOUT t
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the Falklands,
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Making contact with a fellow ham, Bob North, in distant North Yorkshire, Reg asked him to inform the Ministry of Defence that the Stanley airport was again in use after the Vulcan and Harrier raids. Later, using abbreviations, map coordinates and simple codes, Reg transmitted information about the position of Argentine weaponry around Stanley. These messages made little sense to Bob, but they did to the British forces.

The Argentine authorities in Stanley became aware that someone was transmitting information to the British, but were unable to locate the source despite having mobile radio tracking vans. To avoid discovery, Reg would transmit in short bursts at a time, from a variety of places, including upstairs in the old Falkland Club in Stanley. On occasions, taking his equipment out into the street, he concealed his antenna in a length of plumbing piping carried over his shoulder. He continued to be a thorn in the side of the Argentines, until the very end of the war. (Penguin News)

Photo: Sunday Times 25 July 1982
MercoPress - South Atlantic News Agency

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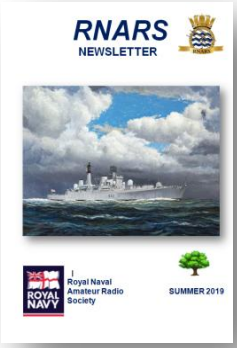

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SCRATCH-BOX CIRCUITS

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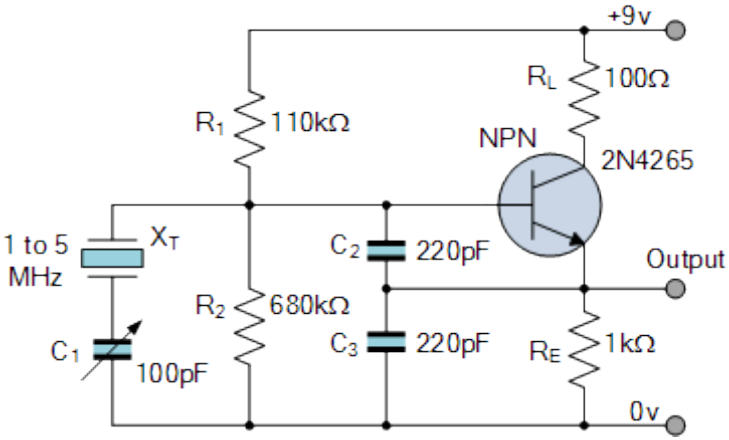
XTAL OSCILLATORS

Colpitts Crystal Oscillator

We've all come across this type of oscillator before -the Colpitts Oscillator. Always found in radio amateur training materials and projects as a basic oscillator circuit without the crystal. With the crystal in the circuit we obtain a high degree of frequency stability, just perfect for SSB and other signals requiring accuracy such as in carrier reinsertion, and so on:

This type of oscillator is designed around a common collector amplifier (emitter-follower). The R_1 and R_2 resistor network sets the DC bias level on the Base while emitter resistor R_E sets the output voltage level. Resistor R_2 is set as large as possible to prevent loading to the parallel connected crystal.

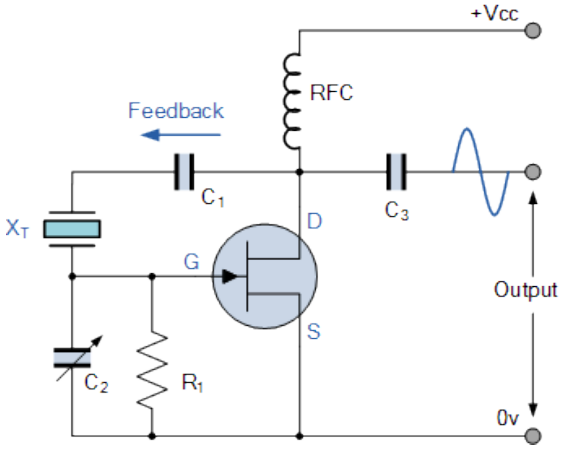


The transistor, a **2N4265** is a general purpose NPN transistor connected in a common collector configuration and is capable of operating at switching speeds in excess of 100Mhz, well above the crystal's fundamental frequency which can be between about 1MHz and 5MHz. The circuit diagram of the oscillator circuit shows that capacitors, C1 and C2 shunt the output of the transistor which reduces the feedback signal. Therefore, the gain of the transistor limits the maximum values of C1 and C2. The output amplitude should be kept low in order to avoid excessive power dissipation in the crystal otherwise could destroy itself by excessive vibration.

SCRATCH-BOX CIRCUITS

Pierce Oscillator

Another common design of the quartz crystal oscillator is that of the **Pierce Oscillator**. The Pierce oscillator is very similar in design to the previous Colpitts oscillator and is well suited for implementing crystal oscillator circuits using a crystal as part of its feedback circuit.



The Pierce oscillator is primarily a series resonant tuned circuit (unlike the parallel resonant circuit of the Colpitts oscillator) which uses a JFET for its main amplifying device as FET's provide very high input impedances with the crystal connected between the Drain and Gate via capacitor C1 as shown below. In this simple circuit, the crystal determines the frequency of oscillations and operates at its series resonant frequency, $ƒs$ giving a low impedance path between the output and the input. There is a 180^{o} phase shift at resonance, making the feedback positive. The amplitude of the output sine wave is limited to the maximum voltage range at the Drain terminal.

Resistor, R1 controls the amount of feedback and crystal drive while the voltage across the radio frequency choke, RFC reverses during each cycle. Most digital clocks, watches and timers use a Pierce Oscillator in some form or other as it can be implemented using the minimum of components.

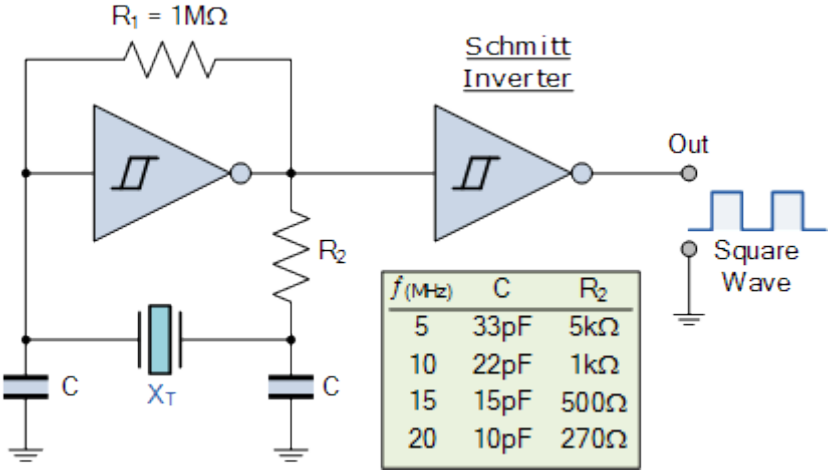
As well as using transistors and FETs, we can also create a simple basic parallel-resonant crystal oscillator similar in operation to the Pierce oscillator by using a CMOS inverter as the gain element. The basic quartz crystal oscillator consists of a single inverting Schmitt trigger logic gate such as the TTL 74HC19 or the CMOS 40106, 4049 types, an inductive crystal and two

SCRATCH-BOX CIRCUITS

capacitors. These two capacitors determine the value of the crystals load capacitance. The series resistor helps limit the drive current in the crystal and also isolates the inverters output from the complex impedance formed by capacitor-crystal network.

CMOS Crystal Oscillator

The crystal oscillates at its series resonance frequency. The CMOS inverter is initially biased into the middle of its operating region by the feedback resistor, R1. This ensures that the Q-point of the inverter is in a region of high gain. Here a 1MΩ value resistor is used, but its value is not critical as long as it is more than 1MΩ. An additional inverter is used to buffer the output from the oscillator to the connected load.



f (MHz)	C	R2
5	33pF	5kΩ
10	22pF	1kΩ
15	15pF	500Ω
20	10pF	270Ω

The inverter provides 180° of phase shift and the crystal capacitor network the additional 180° required for oscillation. The advantage of the CMOS crystal oscillator is that it will always automatically readjust itself to maintain this 360° phase shift for oscillation.

Unlike the previous transistor based crystal oscillators which produced a sinusoidal output waveform, as the CMOS Inverter oscillator uses digital logic gates, the output is a square wave oscillating between HIGH and LOW. Naturally, the maximum operating frequency depends upon the switching characteristics of the logic gate used.

NOTICE TO MEMBERS

Chairman

Commodity Pricing

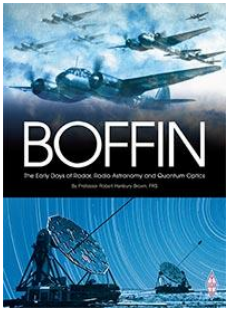
Over the years we have managed to keep our prices down through careful management of our resources, and no end of thanks to Doug Bowen for being so prudent for so long. Inevitably, we arrive at a time when we have to review our stock and make adjustments for changes in suppliers' markets -they have to pass on to their customers the rising burdens of business. Price rises in postage and packing doesn't help us either when it comes to looking for savings. Quite frankly, we have been running as a cut to the bone organization in order to bring to our members a low cost list of RNARS commodities, and it is the right time to look at what we are doing. More news on this later.

URGENT AERIAL MAINTENANCE

Recent inspections carried out by the safety management organisation at HMS Collingwood have flagged up several defects in our 9M mast which supports our G5RV and T2FD aerials. While several of these faults are due to relatively minor areas of rust and flaking paintwork, there remains a serious defect where one of the footings has been completely rotted by rust, and destructive testing has removed a short section of metal at ground level. A Serious Fault Notice has been issued which requires immediate attention to either repair the mast or remove it for safety reasons. We are looking at the options available to us and have given notice that we will respond quickly to effect repair of the damage. The only fly in the ointment is that the footings are set in concrete, not bolted down onto a concrete pad, so this means that removal of the mast for any reason will necessitate cranage while cutting the supports away at the base. This is a four-legged mast and is quite robust under normal circumstances and has thankfully, withstood recent gales with just three of the four supports remaining. However, not to be complacent about this serious defect, we are putting together a plan of action that will satisfy the requirement to remove this dangerous defect from our 'to do list.' In fact, the mast has been in situe since 1993 and it is about time we had a review of our external hardware -lots to think about. We will keep you informed of our progress.

David

BOOKS CORNER



Boffin
The Early Days of Radar and Radio Astronomy and Quantum Optics
By Prof. Robert Hanbury Brown.

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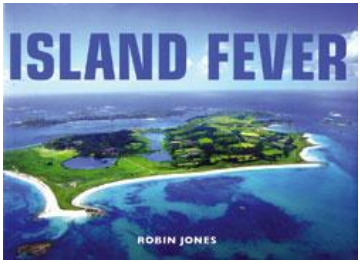
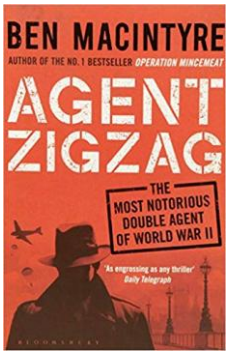


Island Fever
By Robin Jones **(50% OFF for RSGB Members)**

If you have ever dreamed of mounting a DXpedition to a far flung part of the world, yet it has never come to pass, this book could easily be a trigger for something closer to home. The glossy pages host nearly 300 top quality photographs which highlight some of the well known and many lesser known scenic parts of the British Isles that may well tempt you into that DXpedition you have promised yourself. ISBN 9780711034716



One December night in 1942, a Nazi parachutist landed in a Cambridgeshire field. His mission: to sabotage the British war effort. His name was Eddie Chapman, but he would shortly become MI5's Agent Zigzag. The problem for Chapman, his many lovers and his spymasters was knowing who he was. Ben Macintyre weaves together diaries, letters, photographs, memories and top-secret MI5 files to create the exhilarating account of Britain's most sensational double agent.

FALKLANDS JOURNAL Pt 3

Dr Stephen Palmer GM0EQS/Ken Randall G3RFH

By kind permission from the Falkland Islands Journal

Ken Randall

The party were informed that evening that the lift-off day for the whole camp would be on Sunday, one day earlier than expected, as the bad weather was becoming more frequent.

On 21 March two hours of Morse produced four QSOs and only four more on 20 metres SSB [Single Side Band – voice telephony] Another hour on 20 metres Morse produced only another 13 QSOs and six more were still needed for the 1,000th QSO. The very poor state of the bands was disappointing after expecting to do so much better.

The last day, 21 March started off [with poor radio conditions] but around 1700 GMT QSO number 1,000 was made on 15 metres [Morse] with W5FGO/M and later that evening, 20 metres opened up to the [United Sates] and made a real grand slam finish on CW with 156 contacts. SSB [Voice] was tried at various times but there was so much [noise] from South American stations that it took anything up to 30 minutes to make a QSO. Therefore CW was maintained in order to give QSOs [make contacts]. At 0050 GMT on 22 March the last QSO was made from South Sandwich Island, [the station was] K6LEB - making a grand total of 1,153 QSOs in the 16 days on the island during a period of extremely poor radio conditions.

The morning of the 22 March dawned foggy and definitely un-flyable, but everything had been dismantled and packed ready for the lift-off ‘at first light' as requested, with the exception of the 62 set and the 36ft whip. This was kept for communications with the ship right up to the last moment. As it turned out, one helicopter trip was made in fog at about 11 a.m. but no more. By now all surplus petrol had been ditched to save flying time but there was still some paraffin left to operate primus stoves to cook Sunday dinner if necessary. At 1755 a break in the heavy clouds was observed and visibility improved to such an extent that neighbouring Vindication Island, four miles away, came into view for the first time that day. The helicopter arrived at l820 and the lift-off commenced. I was the last to leave Candlemas Island at 1920 having spent a thoroughly enjoyable 16 days there, only regretting that it could not have been longer.

General conclusions on the expedition are that there seem to be far too many stations who come on the [amateur] bands and make 'CQ DX' [calling long distance] without even a cursory glance over the band, and more often than not they are calling on top [of other stations] - so earnestly [desiring] a contact. Regarding SSB [voice operation] some of the rubbishy so-called SSB signals that were thrown at South Sandwich had to be heard to be believed. Donald Duck will be out of business if some of those signals aren't cleaned up! But these were very much in the minority and practically all signals were very good and clean. It is considerably more difficult to sort out a pile up of SSB than it is on CW, as has been discovered much to the pain in my ears!! But the worst offenders were those who persistently called VP8HF about a dozen times and then when the 'quacks' reached a crescendo, give his callsign about twice!

The statistics are as follows: Total QSOs [contacts]: 1,153. CW 771. SSB 382. Europe 289, of which 94 were UK stations. USA 751. On l5 metres 64 and on 40 metres 2, and altogether 51 different countries were worked. This [was] an experience that I will never forget and most likely will never get the chance of having again."

Homeward bound

In his Report of Proceedings on Protector's visit to the Falkland Islands, the Commanding Officer made the following remarks:

The fatal accident caused by the demolition explosion on the net deck, in early December was a setback that shook the morale of the Ship's Company considerably at the time. They recovered quickly, and have remained remarkably cheerful and willing despite many weeks at sea without much sight of the sun … Much has been done to alleviate the boredom onboard, but I believe that a major factor in keeping the Ship's Company contented has been the excellent relations with the people of Stanley. Local families have taken an unusually large number of sailors into their homes and given them friendship and a bed for the night. The atmosphere ashore made Port Stanley very much a Home Port.

Ken Randall continues: "At the end of March 1964, winter was starting to close in, it got colder and the weather closed in. Back onboard now and supposedly heading for Cape Town, we were ordered to rendezvous with a South African survey ship, RSA, off Bouvet Island in the South Atlantic. Apparently, they

were trying to replace an automatic meteorological station on top of the rock but couldn't get ashore and had no helicopter. The Navigating officer said he was unsure of our position as he had not seen the sun or the stars for 29 days and had been navigating by dead reckoning. (No GPS in those days!!) I suggested we send a telegram through Cape Town Radio to the RSA, requesting them to transmit a radio signal for direction finding purposes. This we did and when I came to take the bearing the signal was not very strong and I estimated the bearing to be 20 degrees on our port bow. I reported to the Captain my findings and he said that on my say so he would alter course 20 degrees to port and I would get the RSA to transmit again in six hours. With my fingers crossed I managed to get a more accurate bearing with a much stronger signal six hours later and we were on the right course. Two days later we met up with the RSA and were able to help them site their met. station on top of Bouvet [Island], which resembled a lump of cheese with a steeply sloping top and sheer cliffs all around it.

After that we carried on to Cape Town where we embarked the Tristan da Cunha Administrator and the islands' first tractor. En route to Tristan we were told they were having difficulties with their radio equipment which was their only link with the outside world, mainly through Cape Town radio. We ascertained that the equipment involved was an identical transmitter to one of ours onboard and the other radio was identical to the one I had been using during my stay on Candlemas Island, so I was the number one candidate to be put ashore and have a look at their radios.

Went ashore by ships' helicopter and met up with the Tristan electrician by the name of Glass. I cannot remember his first name but he was one of the direct descendants of the first male inhabitants of Tristan, Sergeant Glass, who had been sent from the English garrison on St. Helena to populate and inhabit the island. Shortly after getting ashore, the weather blew up and Protector had to go round to the other side of the island for shelter, which meant I and three others who had been put ashore, had to stay overnight, sleeping on the floor of the recreation hut. I soon fixed one of the radio defects, but the other was a bit more challenging. It was a battery powered set and the batteries were housed about 200 yards from the radio room in a small enclosure. When I saw the 'batteries' I was astonished. There were shelves full of big glass jars, Leclanche cells I think they were called, each glass jar producing about two volts or slightly less. I discovered that there was insufficient voltage reaching the radio due to voltage drop in the connecting cables, even though as Mr. Glass said, he'd got 12 cells connected in series to produce 24 volts. So I told him to keep connecting cells until I had 24 volts at the set. This resulted in the equipment working OK.

The Administrator was having a welcome home party at his house that evening and when he heard we were stuck ashore invited us to his house to join in. We were up bright and early next morning and Protectors' helicopter was on the lawn in front of the Administrator's house. Meanwhile the ship was heading north but there was a big delay getting airborne due to all the fond farewells that were being said. Remember, these people rarely get visitors from outside and when someone does visit, they make them very welcome indeed. So by the time we were airborne, the pilot (the First Lieutenant, Lt. Cdr. 'Jumper' Cross) had to go up very high to see where the ship was. It took us about an hour to catch up with the ship and landed on safely. From there we called at Las Palmas, Canary Islands before arriving back in Portsmouth.

I have already mentioned Joe Booth VP8BN, but other VP8s that I had contacts with were: VP8GO John, VP8FJ Chris and his wife Heather VP8HC, VP8HD Austin Spencer (radio operator at BAS ZHF88), VP8GQ Peter Hobbs, radio operator on Signy Island, VP8GB, Dave on Adelaide Island, VP8GA, Stew at Halley Bay, VP8HG Charles, VP8GW Andy, VP8DQ Miriam (Dancing Queen)[Miriam Booth was the BAS representative in Stanley for many years, and is the daughter of Joe Booth, who is mentioned in the text above, concerning the radio contacts made with the British Consul in Punta Arenas], Marouka VP8DR, Miriam's mother, VP8GF Norman and Jim, South Georgia, VP8HJ David Hardy Port Stanley, VP8DW Tony Port Stanley. I have thoroughly enjoyed my voyages to the Falkland Islands and British Antarctic, the very friendly people and above all the fantastic scenery. To think, I was paid to see all these things and go to these places whereas now people pay thousands of pounds to do it on cruise ships and I bet they don't have as much fun as I had."

Conclusion

Ken Randall's account of his naval service in 1950s and 1960s, the South Atlantic and Antarctica, is a vivid first-hand portrait of a radio communicator's life in the Royal Navy. His personal story is worth recording in the pages of the Falkland Islands Journal. Eyewitness accounts – both oral and folk history – put 'flesh and blood' on the bare bones of historical events. So much of our shared history is lost if we don't record it before it is too late.

This article shines a light on the story behind two headstones in Stanley cemetery. The headstones tell of a heart-rending story of personal loss. The family's grief was well expressed by Reg Hodges' sister:

Reg Hodge's Memorial

Shady Lane's Memorial

"On that tragic December day in 1963, we lost a man, a son, a brother, a husband and a father." [Reg Hodge's wife echoed his sister's words, paying tribute thus:] "He was a good and loving father and husband, and loved family life. He's still sadly missed by all his family and left behind three children aged five years, three years, and a baby of just seven months."

The magnificent response of the people of Stanley to the accident is eloquent testimony to the affection for the Royal Navy in general, and to the Protector in particular, that is widespread in the Falkland Islands.

The story of the Nereide's and the Protector's service in Falkland Islands waters are good illustrations of how imperative it is for the UK government to maintain a credible and effective naval presence in Falkland and Antarctic waters to assist with scientific research and also to counter the aggressive sovereignty claims of Argentina. It is not without significance that each ship was described as 'Guardship'.

Ken Randall's story first appeared in the pages of the news letter of the RNARS. In this enlarged and updated account of one man's experiences, we are reminded about the vital role and importance, in human history, played by the Morse code and HF communications. For more than a century, long range communication was wholly dependent on this mode of transmission. But technology has made huge advances in recent years – is there still a place for Morse and HF? The skills and art of Morse and HF will probably always be affectionately maintained by dedicated amateurs, but is there more that can be said?

In today's world of instant voice, email, messaging, fax and GPS navigation, what has High Frequency (HF) radio to offer? Surprisingly perhaps, HF radio provides all of these options and has several important advantages over other communications media.

HF retains its pre-eminence in long-range communication; it is low-cost, flexible, requiring little infrastructure, and it is particularly useful in disaster and emergencies. Far from being a relic of former days, Morse and HF can complement VHF/UHF, cellular phones, satellite communications and the Internet. Long may they continue.

Acknowledgement:

I am deeply grateful to Ken Randall for all his help and support in the preparation of this article. Both his diaries and subsequent emails to the author proved to be a veritable gold mine of information.

Stephen Palmer
GM0EQS/VP8CIL
RNARS 2436

Ooops! Correction
The first photo in earlier parts of the journal was not that of Ken Randall. Apologies to Ken whose true likeness is now in place at the beginning of this concluding part.

There's no truth in the rumour that the police are looking for...

RNARS Nets

Mick Puttick G3LIK

Contact Mick: *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	RNARS SSB net (news: 0830)	G3LIK
	0930	3.715	IOM Net	GD3LSF GD0SFI
	1030	7.068/3.748	RNARS Northern SSB net	M6LWO
	1100	7020	RNARS CW net	G4TNI
Mon-Sat	1030-1330	3.748/7.068	The Bubbly Rats Net	GX3WTP/G0GBI/ G0OKA/M0ZAE
Mon	1400	3.575	QRS CW Net	G0VCV
	1900	3.748 (Pri) 7.088 (sec)	N.W. SSB Net (News: 2000)	G0GBI
	1930	145.400 (S16)	RNARS Cornish Net (Falmouth)	G0GRY
Tues	1600	7.068/3.740	Tuesday HQ Net	GB3RN
	1900	7.028/3.528	RNARS CW Net	G3RFH
Wed	1400	3.748	Stand Easy Net	M6LWO
	1700	TG 23527	Wednesday DMR Net	M0LIH
	1900	3.748	Wednesday Net	G0VIX
Thurs	1900	3.542	Scottish CW Net	???
	2000 GMT	1.835	RNARS Top Band CW Net	G0CHV/G4KJD
	2000	145.575 (S23)	RNARS Scottish 2m Net	GM0KTJ/P
Fri	1600	10.118	RNARS 30m CW Net	SM3AHM
Sat	0800	3.748	G0DLH Memorial Net	G0VIX

DX	GMT	Frequency	Net	Control
Sun	0800	7.015/30555	MARAC CW	PA3EBA/PI4MRC
	1430	21.41/14.329	RNARS DX	GD0SFI/W1USN
	1800	Echolink	Echolink	VE3OZN / K8BBT
	1900	14.33	N American	WA1HMW
Mon	0930	3.615	VK SSB	VK1RAN/VK2RAN
Wed	0118-0618	7.02	VKCW	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	21.41/14.329	RNARS DX	W1USN /GD0SFI
Sat	0400	7.09	VK SSB	VK2CCV
	1330	7.02	VK CW	VK2CCV
	1400	7.09	VK SSB	VK2CCV
	1430	21.41/14.329	RNARS DX	W1USN /GD0SFI

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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RAFARS	Time	Freq	Control	
Daily	1100 A 1830 A	3.71 3.71	GØSYF G3HWQ	GI4SAM 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	?	
First 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	
Daily 24/7	DMR-TG23527	DMR TG23527		

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

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