

RNARS

NEWSLETTER



**Amateur
Radio
Society**



SPRING 2020

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Front Cover: HMS Blake

HMS Blake, one of three *Tiger* class cruisers laid down for the Royal Navy at the end of the Second World War and completed in the early 1950s. She was the last warship in British service to be officially designated as a cruiser. Equipped with quick-firing six" and three" guns, Sea Cat anti-aircraft missiles and, later fitted out with a large hangar for anti-submarine helicopters. She remained a multi-role surface combatant throughout her career.

Back Cover: HMS Prince of Wales entering Portsmouth harbour at night

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.

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RNARS Officers & Committee

| | | |
|-----------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------|
| Patron: Admiral Sir Philip Jones KCB | | |
| President: Commodore Paul Sutermeister DL RN | | |
| 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. | VACANT | |
| Membership Secy & website | Joe Kirk G3ZDF 111 Stockbridge Road Chichester PO19 8QR | G3ZDF@btinternet.com |
| Committee | Doug Bowen, Wally Walker, Kevin Lamb, Steve Legg, Martin Longbottom, Bob New | |
| Ex-Officio | WO1 Daz' Holmes | HMS Collingwood |
| RNARS Managers | | |
| Newsletter Editor | Chairman* | |
| Commodities & Postal NL | Mike Moore 63 Homewater House, Hulbert Road, Waterlooville, HANTS PO77JY | Charlie24374@yahoo.com |
| HQ Shack Manager | Steve Legg M6WV. Asst. Alan Campbell M6LFM | |
| Awards | Ian Pitkin G4KJD Clover Cottage, Kenny Ashill, TA19 9NH | thecloverpress@yahoo.com |
| Call list | Sid Will GM4SID 53 Bishop Forbes Crs, Aberdeen, AB21 0TW | gm4sid@outlook.com |
| RNARS Overseas Representatives | | |
| Australia | VACANT | |
| Canada | VACANT | |
| USA | Mike Rioux W1USN | |
| QSL Managers | | |
| UK | VACANT | |
| Australia | VACANT | |
| Germany | MF Runde DLØMF | |
| New Zealand | Nigel Hardy ZL2TX, PO Box 15078, Otaki Railway, Otaki, 5542, N Z | |
| QSL Card Print | UX5UO – Website: www.QRZ.com | |

SUBSCRIPTIONS INFORMATION

Special Notice Regarding Your Subscription

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

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

Subscriptions:

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

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

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

The society banks with Lloyds 272 London Road, Waterloooville, 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: 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
MOSLL@mail.com

You might notice that we have five vacancies listed on page 3, and this makes for uneasy reading as much as it causes us to reflect that in certain cases it is a sign of the times. The closure of the Australian Branch last year is an example of how time encroaches upon all of us. Also, Canada is without an Overseas Representative. Additionally, here in the UK we no longer have a QSL Manager, and a more pressing need to fill a vacancy has been the standing down of our General Secretary of the last ten years, Joe Kirk - irreplaceable! We need experienced people to fill the gaps in our ranks, we also need to recruit more directly from the wider family at large -those in uniform, because, as in any organisation they will be the lifeblood of our future existence. To that end we have been doing a small number of things to 'brush up' our image and make an outreach to those around us. Our Newsletter has been sent to all shore establishment libraries for some time and we have recently produced a publicity leaflet about the Society which we hope will also create interest within the establishment at Collingwood and elsewhere - especially, among the communicators and information systems people. Not forgetting last year's exposure to the radio world in one of its popular periodicals. Kindly give a thought to what you can do for the Society, and if you know you have the time and the skills please, if you can, volunteer.

This is the first edition with our *new look* Logo integrated with that of the Royal Navy. The specifications for the RN's brand image are set in stone, but it was the repetition of the Royal Navy that was a little clumsy. It was agreed that what we have now is still very much on-message.

On another topic, we will have a stand at Kempton on April 19th, and a first for us will be SULTEC 20 at HMS Sultan on May 16th -three weeks before the Summer Show at HMS Collingwood on June 6th. I have to say that the special event station GB8OCO went well, right up to late afternoon on New Year's Eve! Well done!

Best wishes *David*

MEMBERSHIP MATTERS

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

| New Members | | |
|--------------------------------|--------|------|
| SLt M Batten (RCSCC Quente) | VA3GKY | 5088 |
| Catharine Lacey | 2E0WVL | 5089 |
| Stephen Lacey | 2E0WDR | 5090 |
| Pat Bergin | M0AAC | 5091 |
| Giorgio Zanoni | IW2JJS | 5092 |
| | | |
| | | |
| Re-joiners | | |
| Graham Chatfield | G0LEH | 2529 |
| | | |
| | | |
| Changes | | |
| | | |
| Resigned | | |
| Chris Douglas | GD3ZEX | 2324 |
| Silent Keys | | |
| John Keefe (former member) | G7WFB | 4357 |
| Frank Beech | VK7BC | 1209 |
| Alex Thompson (aged 100) | GM3AHR | 2834 |
| Stan Ellis | GD3SLF | 2049 |
| Dr Ken Lown (Life member) | G4PTE | 2008 |
| Robin Bellerby (former member) | GM3ZYE | 821 |
| Peter Bowen (Life member) | G3TZL | 480 |
| Sid Simmonds (Life member) | G4GJY | 1042 |
| Gordon Thorne | G0JJD | 3638 |
| Johan Bregman | PA3CIB | 2176 |

A MESSAGE FROM THE QUEEN MARY

John Lambert

In 1945 I returned to South East London as a 15 year old school boy, having been away for 5 years as an evacuee. I became very interested in the workings of radio sets, and one day a friend gave me a copy of a magazine called "Practical Wireless" and in this was the design of a 3 valve battery operated short wave receiver. I decided that I would like to build this, and checked on my pocket money but after several donation request visits to my grandparents, had enough money to purchase all the components necessary.

I built the receiver, and to my delight and surprise it worked, and I spent many happy hours listening to broadcasts from all around the world. At that time the majority of the transmissions were either national or commercial broadcast stations, as very few countries had started to re-issue amateur licences. It was with great surprise, therefore, that on



one occasion I heard two men talking to each other, and this intrigued me and it was some time before I understood what was going on. The answer was that it was an interview being made for the BBC programme "Monday Night at Eight", wherein the programme comprised a number of small snippets of information deemed to be of interest to the general public.

One of the items that was broadcast each week was an interview with a famous person whose birthday coincided with the specific broadcast. After listening to the transmission for some time I realised that this was an interview being made for this programme, and the person of interest was Sir Thomas Beecham. The only trouble was that Sir Thomas had been to America and was on his way home, and was on board the RMS Queen Mary in mid-Atlantic. The transmission was spoiled because Sir Thomas would insist on shouting into the microphone, which caused considerable distortion. Also that somebody on board the ship kept removing their headphones, which resulted in all sorts of squeals and other weird noises. This particular interview was being made via shortwave radio, and had to be carefully controlled to avoid interference and signal fading, to both of which this method of long-distance transmission is very prone. I was so intrigued by the whole thing, that I had the temerity to write to Cunard's for the attention of the Chief Radio Officer of the Queen Mary, and a few weeks later was delighted to receive a reply confirming my comments about the transmission, and was "over the moon" to receive a picture of the Queen Mary's radio room.

RADIO OFFICE,
R.M.S. "QUEEN MARY",
SOUTHAMPTON.
2ND MAY 1946

THIS IS TO CONFIRM YOUR QSL OF OUR WKG WITH GB^U ON
29TH APRIL ON A FREQUENCY OF 8830^A BETWEEN 1730 & 1750^{GMT}.
YOUR REPORT ON DETAILS OF THE WKG IS QUITE CORRECT.


YOUR REPORT ON QRK AND QSA, TOGETHER WITH REMARKS
ON QUALITY IS GREATLY APPRECIATED AS WE HAVE ONLY RECENTLY
RECOMMENCED THIS TYPE OF SERVICE, (AFTER THE WAR CLOSE DOWN)
INCIDENTLY YOUR REMARKS ABOUT SIR THOMAS CAUSING DISTORTION
BY SHOUTING INTO THE MIC. ARE QUITE CORRECT. THE HOWL
YOU MENTION WAS CAUSED BY SOMEBODY TAKING THEIR PHONES OFF
INFRONT OF THE MISC THEREBY CAUSING SINGING TO BE BUILT
UP.

I AM ANSWERING THIS QSL ON BEHALF OF THE CHIEF RADIO OFFICER

W. J. Gibson
RADIO (TECHNICAL AND MAINTENANCE) OFFICER

John

The message itself! Thank you John.



DIVERSE REPORTS

Peter Dowde VK7PD

Frank Beech VK7BC, Silent Key

Charles Frank Beech, born on August 6th 1933; grew up in England and attended radio school around the age of 16 where his love of radios began. He was a merchant marine radio officer for over 10 years travelling the world on various ships. During this time, he became licensed as a radio amateur with the call sign G3PVL. In 1970 Frank emigrated to Australia with wife Paddy and son Chris; to settle in Northern Tasmania; there Frank acquired the call sign VK7BC.



With his merchant marine background, it's not surprising that Frank was an avid CW man. The walls of his shack were adorned with many awards earned over the years; including Antarctica and IOTA awards. He was a member of WIA, RSGB, CQDX (UK), RAOTC, ARRL and the RNARS. Frank retired in the late 1990s which gave him the opportunity to pursue amateur radio in earnest; which he certainly did to within a few weeks of his death on November 14th. He is survived by his wife of 54 years, Paddy, granddaughter Ashley, great-grandchildren Hamish, Isabelle and Hunter.

Peter

PUBLIC EVENTS

- **Kempton Park Rally: Sunday 19th April, doors open at 10am**

We will be there.

- **HMS Sultan SULTEC 20: Saturday 16th May 2020**

WE WILL BE THERE!

SULTEC 20 has replaced HMS Sultan's annual summer show though still dedicated to raising money for charity, the event will be tech themed with many new and exciting exhibits and displays, both on the ground and in the air. SULTEC 20 will take place within HMS SULTAN, not on the Polo Fields as traditionally.

- **HMS Collingwood Open Day Saturday 6th June, gates open at 10am.** The place to be – ***SEE YOU THERE!***
- **Bob New and Kevin Lamb** have joined the Committee in recent weeks

DIVERSE REPORTS

A request from Down Under:

I have had an enquiry from a fellow amateur in Australia (**Matthew Jones VK3FDLL**) about his grandfather who may have been a member of the Society or known to some of our members. His grandfather's name was John Leslie Bennetts and he was a Lieutenant in the RAN. He was in BRNC Dartmouth around 1972 – 73.

If anyone knows his callsign or has any details about him could you send them to matt (at) geekle.id.au please? (Joe Kirk)

Statistical Abstract from Membership Secretary's Report 13 Feb 2020

| Type Of Membership | Current | Free | Life | Under25 |
|--------------------|------------|----------|-----------|------------|
| Affiliate | 14 | 5 | 0 | |
| Associate | 129 | 0 | 13 | |
| Corporate | 382 | 3 | 70 | 1 |
| Family | 8 | 0 | 0 | |
| Honorary | 2 | 1 | 0 | |
| Total | 535 | 9 | 83 | 627 |

Joe



GB2RAF Air Defence Radar Museum - Back on the air

RAF Neatishead Norfolk

RAFARS Permanent Special Event Station will be back On the Air from April 2020 to Oct 2020 when operators available. Primary Frequency 3.710 or 7.155. QSL Cards Via RSGB or RAFARS Bureau and eqsl. SAE Direct to G4PSH QTHr .



RSARS Corps Celebrations 2020

The Royal Corps of Signals are celebrating 100 years of service on 28 June 2020. RSARS will be celebrating with them by setting up Special Event Calls which will commence on 28 June 2020.

They anticipate operating from around the UK with various operators various locations. Full details is will be listed on their website nearer to the time.

SEA STORY - continued**Eric Bray MOHFF**

The war raged on for a month, during which we RAS'ed again, this time with a cargo ship, which re-supplied us with stores over the port side, while an Oiler fed us with fuel over the starboard. Frigates from the Fleet were also refuelling and re-storing, outboard of them, so for a while, we were five ships wide, all tied together. Our Wessex SAR, the RFA's Allouette helicopter, and the Wasps from the frigates all waltzed about between ships carrying smaller stuff back and to. How the deck crews kept track of which bag went to which helo, I have no idea, but eventually everyone had the right piles of stuff on deck, waiting for stowing.

A day or two later, the air war heated up again as we moved further east. We were now fighting off attacks from the USAAF, as they raided us with waves of Phantoms, Corsairs, A6 Skyhawks, and A4 Intruders from one of their Carriers, all under the control of an AWACS, from a base in the Philippines. We finally sank their Carrier, then proceeded to 'buzz' each other until the Americans gave up. Our pilots were of the mind set where fifty feet was too high, while theirs wouldn't come down below two thousand! That meant that our aircraft had to climb to cross the American flight deck, whereas our deck was as long as the American one was wide. At flying speed, it was three-tenths of a second long.

Chapter eight - Far East

We ambled in towards Gan, which was little more than an airstrip on a coral atoll in the middle of nowhere, rather like a permanently moored aircraft carrier a mile long. As the COD Gannet was sick, one of the radar Gannets was pressed into service as the mail plane. It was lined up on the catapult, and fired off to commence the short hop to the airfield, just across the bay. As the Gannet left the deck, and it pitched up into a gentle climb, the port wing folded up. Hermes immediately slammed into a hard 'S' turn, so that hopefully we would not trample the stricken aircraft under the bow, or mince it in the props. As soon as we were clear, the SAR Wessex was bearing down on the half-submerged Gannet. A few of the deck crew had leaped in as well, in a frantic bid to save the crew, who had not been able to eject, as the Gannet had rolled inverted the instant the wing folded. By some miracle, all three of the crew were rescued, with nothing more than bruises and fright, and they, and the deck jumpers, were all whisked off to the sick-bay, for a proper examination.

We spent the weekend anchored in the bay, at Gan. There was no shore leave, and nowhere to go anyway, except the Military base. The ship's Divers located the sunken wreck of the Gannet, and attached a marker buoy, for later recovery, if needed, so that the Accident Investigation people could examine it. The Americans had a giant floating crane at Gan, for that very purpose, as in-water crashes were fairly common occurrences, there being nowhere else to go!

We sailed again, mid-morning on Monday. The crew from the crashed Gannet were strapped into another aircraft, with the intention of doing nothing more than making a few circuits and touch and go's, to recover their nerve. When everything was ready, they were fired off into wind, and straight into the sea, with a double engine failure part-way along the cat track. With almost no forward momentum, they dove steeply in, nose first, immediately in front of Hermes. We had scarcely begun to turn when we trampled the aircraft down. It went straight to the bottom, in over a thousand feet of water, with no hope of recovery, taking the three crewmen with it. All flying was cancelled, and the remaining Gannets were stripped down to the last nut and bolt, in a bid to find out what might have happened, as all we had to go on was a frantic call over the radio, from one of the cockpit crew, who yelled 'Engines!', and from a different frequency, the radar man's futile expletive. The flight deck cameras showed nothing unusual. All that could be deduced was that the Twin Mamba Gas turboprop engines had simultaneously quit, for some unknown reason. It had never happened before, and to my knowledge, never since.

We fought the war for another fortnight, without the Gannet radar pickets. One by one, they were re-assembled, then brought up on deck for extensive engine running and tests. They sat there for hours, with the engines howling away at full blast, with never a flicker of a problem, until finally, one of the pilots volunteered to fly one, with just him on board. He was duly fired off the cat, and clambered up the sky, sticking very close at first, but as his confidence grew, further away. Then he began chucking the aircraft about, steep turns at first, then really violent gyrations, ending with a barrel roll. After that, he made a few practice passes, then an arrested landing. Reportedly, as he was climbing away from his initial launch, he said, - "Can I have a new pair of underpants?"

A few days later, all the remaining Gannets had been test flown, and things were more or less back to normal. The war continued until we reached Okinawa, another coral rock in the middle of nowhere, and south of Japan. The Americans had also turned this place into an airfield and a dockyard. Being larger, the island had an indigenous population who had been pushed to either end, with the base occupying the middle. Limited leave was permitted here, but we were not allowed beyond the confines of the dockyard area. There was a P.X., the American equivalent of our NAAFI, an ice-cream bar, and a beer bar which was off-limits to us. Even with those restrictions imposed, a few of the crew managed to make their acquaintance with 'Vietnam Rose', or get drunk, or both!

We stored ship again, taking on board some rather odd vegetables in lieu of the normally accepted ones. This led the chefs into culinary experimentation, as they hadn't a clue what to do with half of the produce. Most of them ended up in stew. Those that could be made edible were sometimes better than the usual fare, and some were pretty dreadful! While we were tied up at Okinawa, I was introduced to another Naval custom. Each crew member is 'invited' to attend his Divisional Officer's cabin, to discuss his work record, behaviour, and such. (What did you

think it was for!?) By discuss, I mean that the Officer did the talking, and the rating said 'Yes, Sir', or 'No, Sir', as appropriate. It was rather like an end of term school report. I was told that I was fitting in nicely, and improving. (Thank you, Sir.) by an Officer who hadn't spoken more than three words to me since I joined the ship. He went on to say that he had noticed that I did not send or receive any mail, particularly to my parents. "No, Sir." How on earth could he possibly know that I didn't write, if all mail was private?

"Well, why not?"

"I prefer it that way, Sir."

"Hmm. As you are still below the age of eighteen, I have taken the liberty of writing on your behalf, advising them of how you are doing."

"I wish you hadn't, Sir."

"Why?"

I told him about being charged for my room at home, when I wasn't even there.

"Oh, I see." He obviously thought I was spinning a yarn. "Still, it has been done."

"Yes, Sir."

"Off you go. That is all."

"Sir."

A fortnight later, I received a terse note from Mother, via B.F.P.O. Ships, demanding that I pay her £640, immediately, for board and lodgings, or she would throw my 'stuff' into the bin. As it consisted of a plastic comb I had forgotten to bring with me, after that very short visit, a few odd socks, a wad of initialled cotton hankies, very inspired birthday and Christmas presents, and a photograph of her, I wasn't greatly bothered about the loss! I asked to see my D.O. and showed him the letter.

"Ah." Was all he said. A month later, another demand arrived, with a £20 increment. Then another, and another. I sent them all back in a pilfered HMSO buff manila envelope, stamped 'not known at this address'. I carved the stamp myself from a carrot, and used the ink pad from the EWO, that was intended for date-stamping things like documents. We sailed into Singapore harbour in late December. In the waiting mail were three more demands for money. There wasn't a single word about the rest of the family. I finally relented, and wrote to Dad, using his works address, hoping that he wouldn't take the letter home. Perhaps I should have written 'Do not take this home!' on it, because a month later, another demand rolled in that began with the comment 'I know you are in Singer-pour'...

We tied up alongside, and stood around watching the locals un-store ship! All the meat, veg, and fruit that remained was carted off and destroyed, to prevent the import of unwanted parasites or insects. (We had plenty of cockroaches they could have!). Canned and dried goods went into containerized storage on the dockside. A small quantity of fresh was brought on board, sufficient for a day or two, while the whole ships company was transferred to barracks for the Christmas fortnight. The mess-rooms consisted of a roof on poles, with lattice sides. Suspended from the ceiling were several 'flies roundabouts', slow-turning

fans with huge paddle blades, and a few strip-lights. Two lines of beds, fitted with mosquito nets, lined the room. One end was built of brick, and had an enclosed room for heads. The other end was filled with showers. The toilets were Oriental-style, squat over a hole in the floor, with grab-handles for stability. Hot water was provided from 6 – 7 am, and 6 – 7 pm daily, except for Sundays, when an extra hour, 1230 to 1330, was allowed. Not many made it up for the am hot water.

While we were in barracks, our duties were simple -keep out of the way until 1200, and then go ashore if we wished. Locals were employed to clean the barracks. Laundry was done daily, all we needed to do was leave it in a pile on the end of our bed. When we returned, it was done, pressed, and folded, five cents an item, buttons replaced, badges sewn on properly, and any worn areas neatly patched from the inside. (A Singapore dollar was worth about twenty pence.). Boots and shoes would be polished for you, too. For ten dollars, a pair of shoes would be hand-made for you, the cobbler drawing round your feet while you stood on a sheet of card. A tape measure was used to get the correct toe and instep height. Three days later, I had a pair of the most comfortable shoes I had ever owned, made from dyed leather, and with car tyre soles and heels. What the leather was, I have no idea, but it was strong, supple, durable, waterproof, and the dye didn't run. They were to last me twelve years, before they finally wore out. Singapore was a 'civvies' run, so we spent most of our time in shirts and shorts, optional socks, and leather thong sandals, with car-tyre soles, two dollars from the cobbler.

December to February is the monsoon season in Malaysia. It was pretty hot and humid to begin with, and when it rained, it was like walking through an operating car-wash. You were instantly drenched, and the humidity went through the roof. When the rain stopped - each squall lasting about five minutes - and the sun broke through again, the water evaporated off in clouds of steam. Ten minutes later, everywhere was dry again, including you, in your clothes. After the first drenching, and the ensuing mad dash for shelter, nobody bothered. They just continued on their way, ignoring the pouring warm rain. If it REALLY pelted down, nobody minded if you 'borrowed' their veranda for the duration, all shops and houses had them. Sometimes, the shelterer would be offered cigarettes, or a cup of tea, by the man of the house. The women would giggle, and hide their faces with their hands, and the children just chattered on. For all we knew, they were calling us all the names under the sun, but it was done with a cheery smile. Down each side of all the roads, were six foot deep, by six foot wide, storm drains. Normally they had an inch or two of water in the bottom, occupied by little fish that the children tried to catch with nets. When it rained, these ditches would fill with roaring torrents of water, for a few minutes. When the storm had passed, the water drained away, leaving a couple of inches at the bottom, and the little fish!

In the village located at the left-hand end of the dockyard was a cluster of shops that sold everything you could imagine, and some you could not! The shops

didn't have windows, just a steel shutter that was pulled down when the place closed. There, nylon shirts were a dollar each. Cotton or Terylene trousers were two dollars. Underwear, depending on style, was two or three pairs per dollar. For quality clothing, you had to go into Singapore, a short taxi ride, but very few bothered. The cheap stuff was good enough for monsoon wear, as the humidity caused things to rot quite rapidly. The typical useful life of a dollar shirt was a fortnight. (I still have a couple, too small now, but still sound, proving that the fabric was good quality.)

Everything you might wish to buy was on sale, over, under, round the side of, or from behind the counter. That included dubious magazines to suit all tastes. Tiger beer, the local brew, was 25 cents a bottle. If you preferred, whiskey, or more accurately, 'rocket fuel', was a dollar a pint. One bottle was sufficient to put four hardened sailors onto their backs, with matching hangovers the following morning! The flavour was somewhere between battery acid and pickling vinegar. (Guess how I know!) One shot was sufficient for me. I vaguely recall holding a conversation with a lamppost, or was it a street sign, until someone found me, and poured me into my pit in the barracks. Next day, I woke at about seven, crawled out at about two, drank a glass of water, and was drunk again on the residual alcohol still slopping around in my system. I was sufficiently lucid to know I should stay put, so I drank gallons of water, and eventually flushed the stuff out. That earned me the reputation of being able to hold my drink. I never bothered telling them I had only had one measure! After that, I stayed with the Coca-Cola!

Christmas means nothing to the locals, of course, as they don't follow our version of the writings supposedly about J.C. Our New Year, to them, is when the calendar happens to start because they have their New Year on a different date every year (our year). Nevertheless, they accept that we have weird ideas of when and how to do things, so when December 25 came around, they made the effort and produced a proper Christmas dinner, with pud to follow. Later on Christmas day, a P.O. came round with a sack of 'presents', cans of beer and bars of nutty for everyone still on their feet, but who hadn't gone ashore. I believe that Welfare stood the bill. It seemed odd, celebrating Christmas under a blazing sun, in temperatures of 80' plus, but we enjoyed the rest after six months of sea-goin' war-games.

Eric



GEORGE TAGG G8IX

Joe Kirk, G3ZDF

Where world history and the RNARS come together



George Tagg, G8IX was a founder member of the RNARS, Member number 1 and the Society's very first Chairman. He served in the RN as a Telegraphist-Air Gunner in WW1.

When George went silent key in 1982 his very unique membership number was re-allocated to the HQ Station callsign GB3RN.

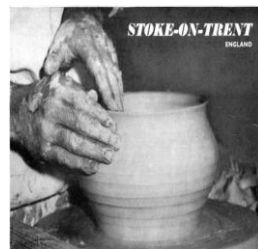
According to Wally G4DIU, the Society's Historian George was a character during his membership.

He was also remembered as the Telegraphist on watch who received the actual message informing the fleet that the First World War had ended.

He was quite proud of that and the actual message he received used to be in the RNARS. Archives. It was set in a black frame and although a bit watermarked it was the original signal. He donated it to the Society shortly after he was made our first Chairman. At home his aerials were all in his living room where he had four hooks, one in each corner, so that he could change his "Curly Antenna" which was 110 Ft long and curled round the support strings between North East-South-West and East-West, or very nearly so.



George G8IX in his shack (h/t Mick G3LIK)



To Radio..... *G3LIK* *historical form*

Confirming our..... *7* Mc/s QSO

on..... *13/11* 1961..... at..... *1255/41* GMT.

Your *QW* Fone Sigs RST..... *5-8*

TNX QSO. CU AGN. PSE QSL..... *nick*

VY 738 ES DX.

Operator..... *George*

Call Sign :..... *8/54*
5/56
16/57
8/60

G8IX

MR. G. H. TAGG,
11 BOTTESLOW STREET,
HANLEY,
STOKE-ON-TRENT.
R.N.A.R.S. *WAGm*
13.W.L. QSL BUREAU,
12, GLADWELL ROAD,
LONDON, N.S. ENGLAND

City of Stoke-on-Trent.

Stoke-on-Trent—familiar to countless millions of people all over the world as The Potteries—is one of Britain's largest cities, and is the main centre of employment for the half-million people of North Staffordshire, with a dominating range of industries which reach out to markets all over the world.

It is the nerve-centre of the clay-ware industries (earthenware, china-ware, sanitary ware, bricks, tiles, electrical porcelain), but it has many other major industries including mining, iron & steel, aluminium, brass, engineering, chemicals, and rubber.

1960 is the Golden Jubilee year of Stoke-on-Trent: it was created in 1910 from the federation of six famous towns, and from April to September is commemorating the anniversary with an extensive programme of celebrations.

Further information about Stoke-on-Trent and its celebrations will be sent readily on application to the Town Clerk, Town Hall, Stoke-on-Trent, England.

Historical Note:

At H.M.S. Mercury, Mike Matthews G3JFF, together with George Tagg G8IX, an ex RN Telegraphist Air Gunner of World War One vintage and Lt. Johnny Riggs RN G3AWO drew up a set of proposals for the setting up of a service wide Society within the Royal Navy... and so it came to pass...



The founder members of the RNARS

John G3ENI, Peter G3IPV, Brian G3MRC, Mick G3LIK, Rod G3KEL, Mike G3JFF, George G3HIS, Peter GELET, John G3AWO, David G3HLW, Chas G3BQR, George G3CED, Anthony G3ACP, Tom G3EMN, Art G3JAF, Terry G3JZV, Joe G3CNO, Bill G2DZT, George G8IX, John G8WC, Jack G3ODJ & John G3DOT.

A Study on Various 9 Volt Compound Batteries

Dipl.-Ing. Jürgen H. Timcke, HB9ANE, RN 3493

Why this study?

9 volt compound batteries are often used as power supply in electronic circuits. All industrial made parts (e.g. capacitors, resistors) have tolerances referred to their nominal value. The different tolerance values of capacitors and resistors normally are indicated either by means of numerical values or coloured rings, as known. However, at 9 volt compound batteries mostly the nominal voltage only is indicated and the capacity (Ah or mAh) not. But in the one or other case it can be necessary for the experimenter to know something more about the technical data, e.g. the internal resistance.

For my experimental works I needed technical data of 9 volt Alkaline compound batteries. Therefore I wrote to the technical departments of VARTA and DURACELL to get technical data. Result : no answer from both (courtesy of our time !). Because of that I decided to make this study to find out by myself useful technical data about this kind of 9 volt compound batteries under different loading conditions.

Note: Following I use for simplification reasons only the designation ' batteries ' (or ' battery ') for the investigated ' 9 volt compound batteries '.

What I wanted to find out :

- The no-load voltages compared with the nominal voltages and in this connection also the battery weights.
- Batteries under load by means of resistors of different R-values as loads -the voltages, voltage drops, the currents and current drops as well as the temperatures, all dependent on the time.
- The internal resistances.
- Temperature increase of the shorted-out batteries.
- Increase of the internal resistance dependent on load, time and temperature.

Important remark: It was not the goal of this study to make with the results a quality assessment between the 5 selected ' makes '. The only one of interest was to determine technical data of this kind of batteries under various conditions. The following the treated themes are listed :

| | |
|-----------|------------------------------------------------|
| Chapter A | The investigated batteries |
| Chapter B | No-load voltages and battery weights |
| Chapter C | Connection board |
| Chapter D | Batteries under load |
| Chapter E | Calculation of the internal resistance |
| Chapter F | Temperature behaviour of shorted-out batteries |
| Chapter G | Long-duration measurements |

Remarks on the study

In arbitrary order some important remarks to the study, the results and their presentation.

- The presented results are based on hundreds of measurements, several thousand of calculations as well as dozens of diagram drafts to find out the best kind of presentation for their final execution.
- To avoid that this report is too overloaded with diagrams only the fundamental ones were selected. They are on the one hand necessary for better understanding of the meaning of the determined values and their various connections and present, on the other hand the different influence quantities on the results.
- With intention I have selected the diagrams referred to different makers and not for one only. This way one can see that the behaviour of the batteries under loading conditions does not depend on a special property of the one or other make, but that it is independent on it and more or less generally valid.
- In this study a great deal of figures are presented, because of that I reduced the text so far as possible, that means I described only that what from my point of view is important to understand the WHY of the different measurements as well as the theoretical connections. All diagrams I draw in such a way that they are self-explaining and with the additional text of the captions clear to understand.

Letter symbols and their meaning

| | |
|-------------------------------------|-------------------------------|
| Unom = Nominal voltage | Jd = Current drop |
| U0 = No-load voltage | Ra = Load resistance |
| UL = Loaded voltage (voltage at Ra) | Ri = Internal resistance |
| Ud = Voltage drop | t = Loading time, temperature |
| J = Current | W = Weight |

Note : For the current I use the letter ' J ' and not ' I '.

Note : The letter symbol ' Ra ' I took over from the German special literature.

Note : ' t ' is the standardized letter for ' time ' [s, min, h] and for ' temperature ' [N°C]

Chapter A - The investigated batteries

For this study I used always 4 new batteries of the following listed and arbitrary selected types (that means altogether 20!).

ALDI Activ Energy, Super Alkaline, 6LP3146, Made in Malaysia, Best before Jun 2023

GOLD PEAK GROUP, GP Super, Alkaline battery, 1604A, 6LR61, MN1604, made in China, Best before 07-2023

VARTA Longlife Power, 6LP3146, Alkaline, Made in Malaysia, Best before 12-2023

DURACELL Industrial, Professional Alkaline Battery, 6LP3146, Made in Malaysia, best before Mar 2021

PANASONIC Alkaline Power, 6LR61, Made in Belgium, Best before 01-2023

Note to ALDI: These batteries I bought at ' ALDI ' (a supermarket chain). The name of the maker is not indicated. Because of that I have designated them as ' ALDI '.



Because of space reasons I used in bar charts and sometimes also in diagrams for GOLD PEAK GROUP, DURACELL and PANASONIC only the abbreviations GP, DURA and PANA.

Before I started with the different measurements the first step was to mark the number of the 4 batteries of each maker.

Figure 1 - The 20 investigated batteries

Chapter B - No-load voltages and battery weights

The first measurements were to determine the no-load voltages U_0 of all 20 batteries by means of my multi-meter VOLTcraft VC940. The scattering of the U_0 -values can clearly be seen compared with the nominal voltage U_{nom} . While GP, DURA and PANA show negligible deviations between batteries 1 to 4, showing ALDI and VARTA have greater deviations: VARTA even under-voltage of the batteries 1 and 2!

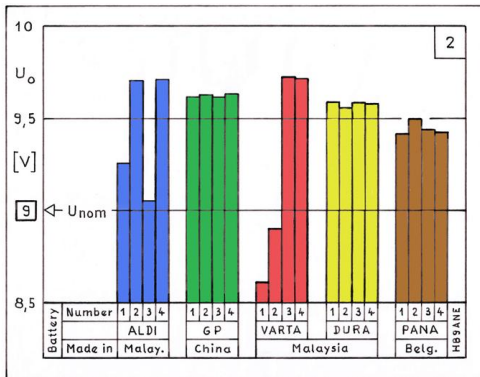


Figure 2 - No-load voltages U_0 compare with the nominal voltage $U_{nom} = 9$ [V]

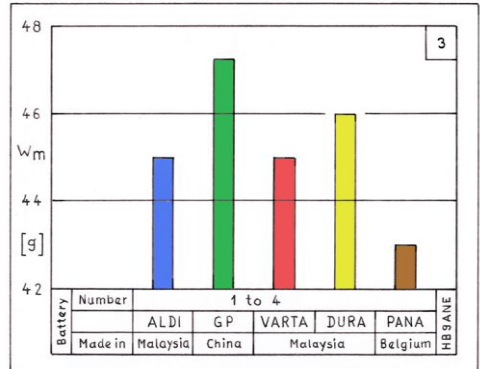


Figure 3 - Mean values of battery weights

The battery weights were determined with an electronic precision balance. Figure 3 shows the mean values W_m of always 4 batteries. The results show: no difference between ALDI and VARTA and also a very little one only between these two and DURA, but between GP and PANA the difference is great: ΔW_m about 4 [g]!

Chapter C - Connection board

If I know that I have to make a lot of extensive measurements over a longer period of time I do not like to have a cable chaos at the test set-up. For that reason I built a little connection board with the battery holding device, a press key (for quick function checking), the connection pins for voltmeter, ammeter and consumer (in this case the different R_a -resistors), see figure 4

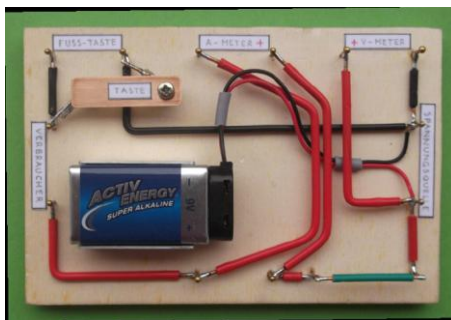


Figure 4 - The connection board with a battery



Figure 5 - The test set-up with the connection board

Chapter D - Batteries under load

General notes in arbitrary sequence

- The voltages at a loaded battery shown in figure 6
- Assignment of the load resistors R_a to the battery numbers (valid for all investigated makes) :

Battery number / $R_a \Omega$: 1 / 136.42 / 102.33 / 68.2 4 / 34.1

Tolerance of resistor $R = 68,2\Omega$: $T = 1 \%$. The three other R -values I realized by means of parallel respective series connections of $R = 68,2\Omega$.

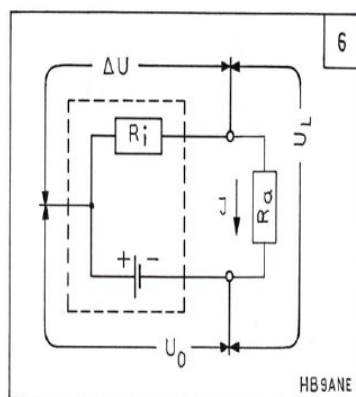


Figure 6 - The Voltage Shown on a Loaded Battery

- Duration time of the measurements of the e.g. loaded voltages U_L : $t = 0$ to 20min in steps of $\Delta t = 1$ min.
- $t = 0$ [min] has two significations : a) Moment of the R_a -connection to the batteries and b) Beginning of the loading time to determine the different required values.
- With my digicam I took photos of the indicated instantaneous values of voltage and current dependent on the time (the test set-up is presented in figure 5) and transferred them into corresponding calculation form sheets.

Voltages and voltage drops

The diagrams and the coloured bar chart show the result of the measurements of the voltages U_0 and U_L as well as the calculated voltage drops U_d in percent. Explanations : see captions.

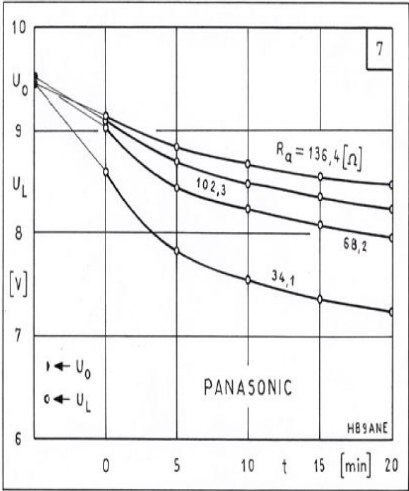


Figure 7 - Influence of R_a on the voltage drops of U_0 at $t = 0$ min and the loaded voltages U_L dependent on the loading time t , PANASONIC-batteries number 1 to 4

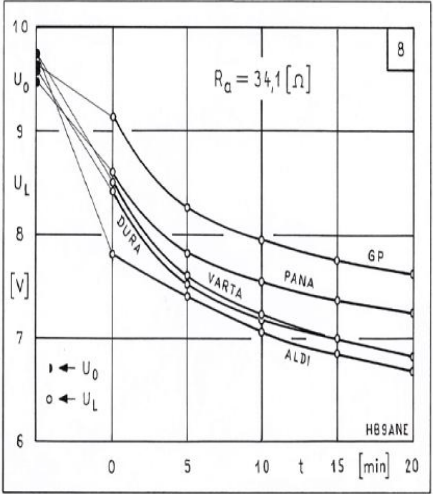


Figure 8 - Influence of $R_a = 34,1 \Omega$ on the voltage drops of U_0 at $t = 0$ min and the loaded voltages U_L dependent on the loading time t , batteries number 4 of the 5 makes

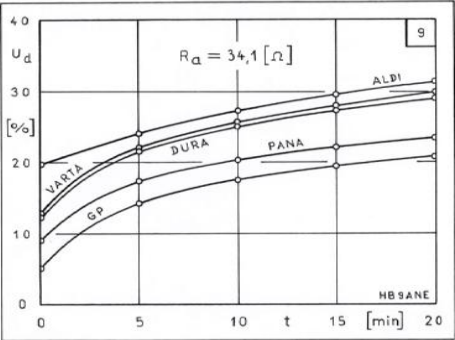


Figure 9 - Influence of $R_a = 34,1 \Omega$ on the voltage drops U_d in percent dependent on the loading time t , batteries number 4 of the 5 makes

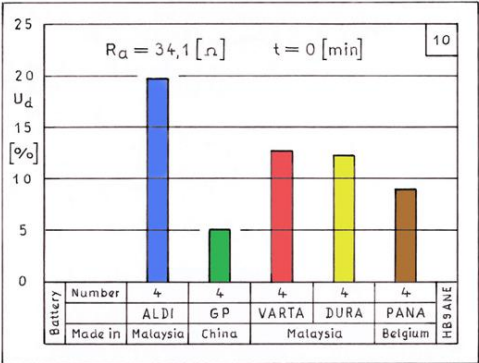


Figure 10 - Voltage drops U_d in percent at $t = 0$ min, that means at the moment of the connection of $R_a = 34,1 \Omega$ to the batteries

Currents and current drops

The diagrams and the coloured bar chart show the calculated currents J and the current drops J_d in percent. Explanations : see captions.

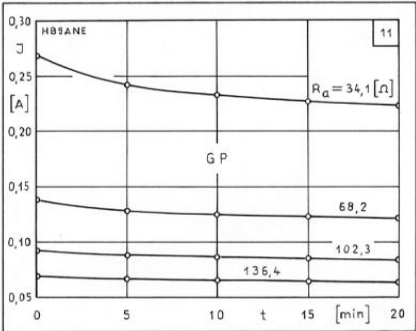


Figure 11 - Influence of R_a on the currents J dependent on the loading time t : GP-batteries number 1 to 4

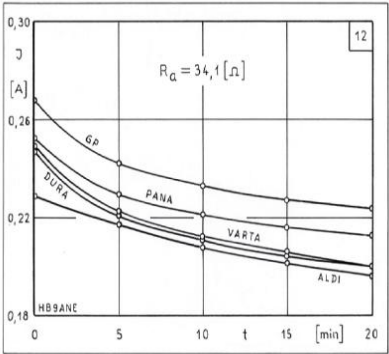


Figure 12 - Influence of $R_a = 34.1\Omega$ on the currents J dependent on the loading time t : batteries number 4 of the 5 makes

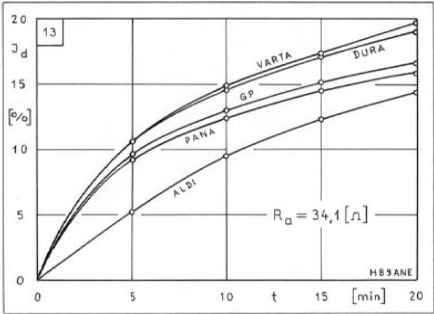


Figure 13 - Influence of $R_a = 34.1\Omega$ on the current drops J_d in percent dependent on the loading time t : batteries number 4 of the 5 makes

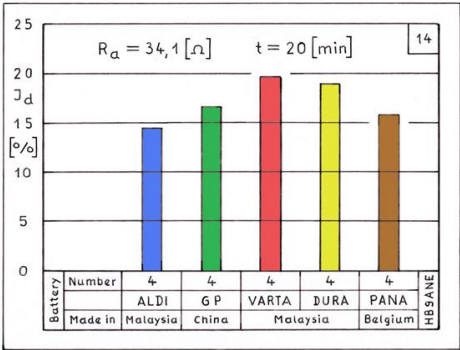


Figure 14 - Current drops J_d in percent after $t = 20\text{min}$, batteries loaded with $R_a = 34.1\Omega$

Temperatures

Figure 15 shows the test set-up to measure the time dependent temperatures. The voltmeter (Meterman PM55) I added only to watch the battery behaviour during the temperature measurements. Explanations: see captions.



Figure 15 - Test Set Up

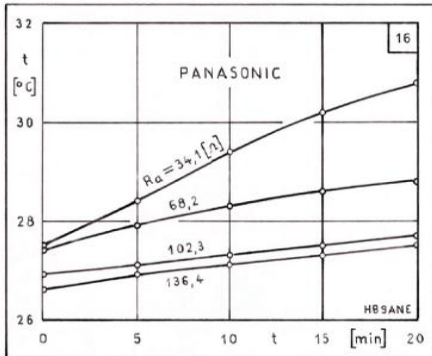


Figure 16 - Influence of R_a on the temperatures t dependent on the loading time t : PANASONIC-batteries number 1 to 4

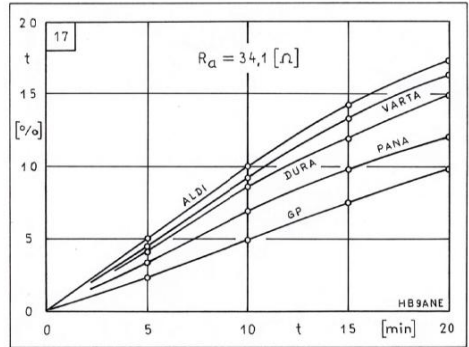


Figure 17 - Influence of $R_a = 34.1\Omega$ on the temperature increase in percent dependent on the loading time t : batteries number 4 of the 5 makes

Chapter E

Calculation of the internal resistance

An important question as part of this study is : The internal resistance R_i of a battery, is it a constant value or not ?

By means of the equations $R_i = \Delta U/J = (U_0 - U_L)/J$ the internal resistance can be calculated. The equation shows the three influence quantities. For a new battery U_0 is a constant value, but neither U_L nor J are constant quantities. As shown in chapter D, figure 7, U_L drops and in figure 11 can be seen that J drops also, in both cases the influence of the drops is the load resistor R_a and the loading time. The consequence is that R_i increases, see figure 18 and figure 19.

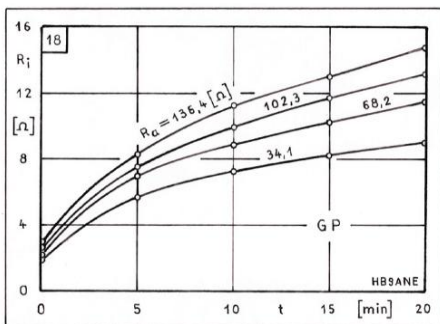


Figure 18 - Increase of R_i dependent on R_a and the loading time t , GP-batteries number 1 to 4

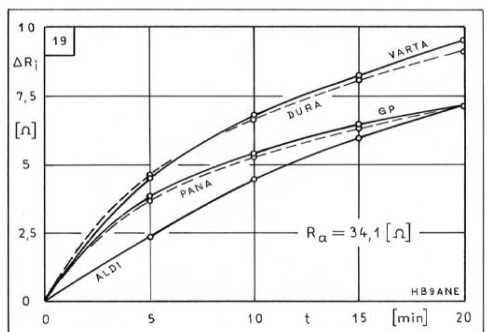


Figure 19 - Influence of $R_a = 34.1\Omega$ on ΔR_i , the increase of R_i , dependent on the loading time t : batteries number 4 of the 5

Calculation example to prove that R_i is not a constant value

With $R_i = \Delta U / J = (U_0 - U_L) / J$ and $J = U_L / R_a$ a simple mathematical derivation leads to an equation to calculate R_i without J :

$$R_i = (U_0 - U_L) / J = \{(U_0 - U_L) / U_L\} \times R_a = \{(U_0 / U_L) - (U_L / U_L)\} \times R_a =$$

$$\{(U_0 / U_L - 1)\} \times R_a = (U_0 / U_L) \times R_a - R_a$$

Example : GP-Battery number 4, $R_a = 34.1\Omega$, $U_0 = 9.63V$

t = 0 min, $U_L = 9.14V$ Then $R_i = (9.63V / 9.14V) \times 34.1\Omega - 34.1\Omega = 1.83\Omega$

t = 10 min, $U_L = 7.95V$ Then $R_i = (9.63V / 7.95V) \times 34.1\Omega - 34.1\Omega = 7.21\Omega$

t = 20 min, $U_L = 7.62V$ Then $R_i = (9.63V / 7.62V) \times 34.1\Omega - 34.1\Omega = 8.99\Omega$

Refer to figure 18 for these results

These three results show clearly that no one of them is R_i of the battery, but only its instantaneous value at the moment of the measurement! In no one book of my technical literature I found a note about this, that means the influence of the loading time on R_i ! Likewise has the increasing temperature of the loaded battery an influence on R_i how it can be seen in figure 20

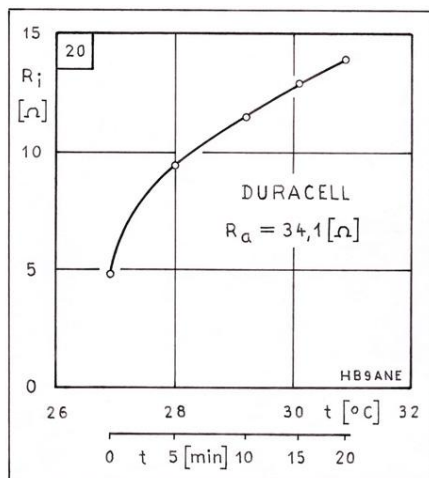


Figure 20 - Influence of both on R_i the temperature as well as the loading time

Chapter F

Temperature behaviour of shorted-out batteries

It is well known that the electric current J warms up each conductor (exception: superconductors), dependent on its strength more or less. If one connect the two poles of a battery together the result is a short circuit and the battery begins to warm up. Without interruption of this connection the temperature increases. However, to what extent?

To find out what happens with the shorted-out batteries in practice I selected arbitrarily one battery from each of the 5 makes to make corresponding measurements.



Figure 21 - Test set-up to measure the time dependent temperature increase of shorted out batteries.

Regarding the test results, in figure 22

I was very surprised! I would have expected that the temperature will increase more and more and after a certain time the batteries will

Figure 21 shows the test set-up, but the photo shows only the principle, the data is not part of the series of measurements.

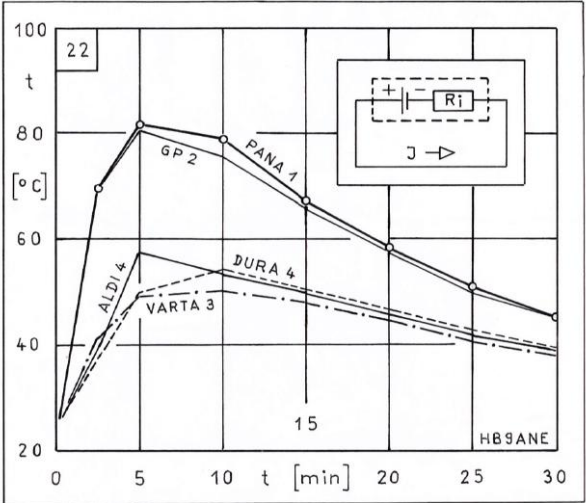


Figure 22 - Temperature behaviour of shorted out batteries.

show some damage or that they will even explode. But the opposite occurred: a very steep temperature rise during the first 5 minutes until the peak value and then it dropped slowly. And the batteries themselves ? They did not show any external damage! As Table 23 shows, it is self-explanatory, some interesting data of the voltages as well as the temperatures before and after these measurements.

Documented Voltage and Temperature values

| 1 | Battery: letter symbol and number | | A4 | G2 | V3 | D4 | P1 |
|--------|----------------------------------------------|----|------|------|------|------|------|
| 2 | U_0 at $t = 0$ [min] (Start) | V | 8,99 | 9,23 | 9,17 | 9,00 | 9,11 |
| 3 | U_{30} at $t = 30$ [min] (End) | | 8,02 | 7,49 | 7,66 | 7,54 | 4,87 |
| 4 | Difference: $U_0 - U_{30}$ | | 0,97 | 1,74 | 1,51 | 1,46 | 4,24 |
| 5 | U_0 after 2h, batteries cold | | 8,35 | 8,27 | 8,35 | 8,27 | 8,14 |
| 6 | U_0 after 26 days | | 8,54 | 8,33 | 8,65 | 8,53 | 8,36 |
| 7 | Temperature t_0 at $t = 0$ [min] (Start) | °C | 24,8 | 24,6 | 24,3 | 23,5 | 24,1 |
| 8 | Highest temperature t_{\max} | | 57,7 | 80,6 | 50,1 | 53,9 | 81,8 |
| 9 | Temperature increase $t_{\max} - t_0$ | | 32,9 | 56,0 | 25,8 | 30,4 | 57,7 |
| 10 | Temperature t_{30} at $t = 30$ [min] (End) | | 39,1 | 45,3 | 37,9 | 39,4 | 45,2 |
| 11 | Difference: $t_{30} - t_0$ | | 14,3 | 20,7 | 13,6 | 15,9 | 21,1 |
| HB9ANE | | | | | | | 23 |

Figure 23 - Voltage and temperature data. Letter symbol:

A = ALDI, G = GP, V = VARTA, D = DURACELL, P = PANASONIC

Chapter G

Long-duration measurements

Excepting the measurements of the temperature increases of shorted-out batteries all other measurements were limited to a loading time of $t = 20\text{min}$. However, the question arises as to what is the behaviour of a loaded battery over a longer period of time? To investigate this I made measurements during a loading time of $t = 6\text{hours}$.

These measurements I made with one of the previous used batteries; DURACELL number 2, but with a much greater load resistor of $R_a = 204,6\ \Omega$ to reduce the J-values.

After 6 hours I terminated these measurements because the tendencies of the already measured values of UL and the calculated ones of J and Ri showed that with a prolongation of the loading time no further results of essential differences could be expected.

Figure 24 shows the results, but the temperature increase is not presented in this diagram because it was very low. During these 6 hours it increased only from $t = 27,6^{\circ}\text{C}$ at the beginning to $t = 27,9^{\circ}\text{C}$ at the end.

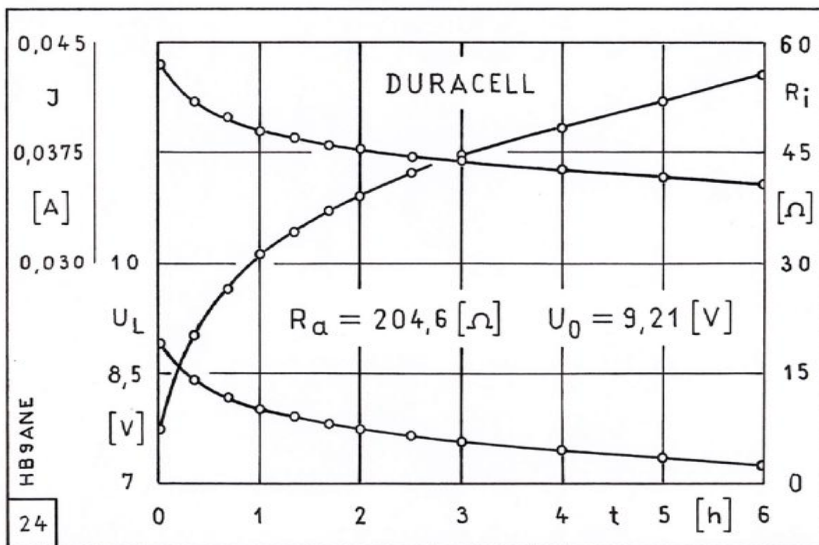


Figure 24 -Results of the long-duration measurements at the DURACEL battery number 2, loaded with $R_a = 204.6\Omega$

Summary

As already mentioned: all figures are presented in such a way as to be self-explanatory. To avoid misinterpretations, additional descriptions are given in the captions and because of that I restrict the summary to the essentials:

- It does not exist THE internal resistance R_i , that means only ONE, on the contrary! It depends on two important influential quantities: the load resistance R_a and the loading time t . If $R_a = \text{const}$ then the loading time t is the decisively influential quantity on U_L (measured), $J (= U_L/R_a)$ and finally on $R_i (= (U_0 - U_L)/J)$. See figure 25.
- The surprising behaviour of the shorted-out batteries, see figure 22. It can be only explained in such a way that the cause is a chemical reaction of the electrolyte (which is the internal resistance of galvanic batteries!).
- At the end still a word about the tendencies of the curves e.g. $U_L = f(t)$ at $R_a = \text{const}$, see figure 8. The different makes of the batteries have no influence on the tendencies.

That means in no one diagram of this kind curves of contrary tendencies are existing! The differences between the curves themselves are the result of minor differences in the manufacture of different makes of battery.

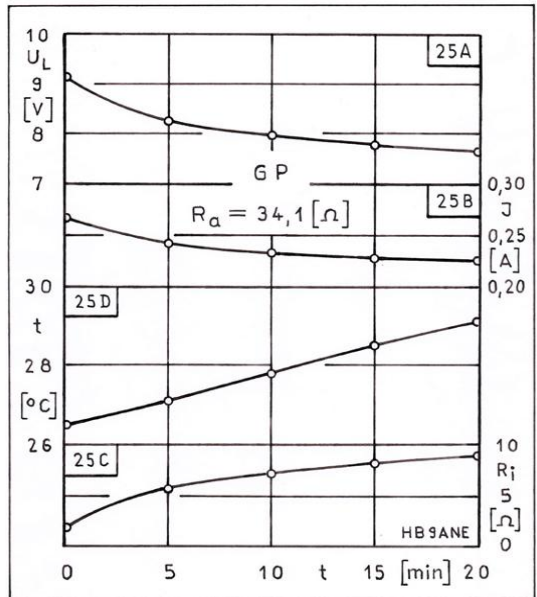


Figure 25 - Influence of the loading time t on UL 25A, J 25A, R_i 25°C and the temperature t 25°C, $R_a = 34,1\Omega$, GP-battery number 4

Final word

The findings of this study can be seen as a contribution to know a little bit more about the behaviour of this kind of batteries under different loading conditions. If the one or other reader has made similar investigations I would really appreciate to hear about it to exchange experiences with each other.

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Auflage 2003, Verlag Europa Lehrmittel, Europa-Nr.: 3141X, Haan-Gruiten

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Photoworks at figures 2, 3, 10, 14: Foto Huber, Radolfzell

Layout: Carmen Aschinger

www.juergen-h-timcke.ch jhtimcke@gmx.ch

BRANCH NEWS - In Brief



Trident: UK's Nuclear Warhead To Be Replaced

The Defence Secretary said the UK will "continue to work closely" with the US...



The Defence Secretary has confirmed the UK is working on a programme to develop a new nuclear warhead for its Trident missile. In a written ministerial statement in Parliament, Ben Wallace said the new warhead will replace the existing one and will be fitted on to missiles used as part of Trident

forces net 26th Feb 2020

Leading Seaman Honoured at Buckingham Palace

Leading Seaman David Groves, who received The Queen's Gallantry Medal for helping to save the lives of 27 Sailors from a burning vessel. As part of the crew of HMS Argyll he helped to save all members aboard a cargo ship after its containers and cars caught fire in March last year. The sailor responded to a mayday from the 28,000-tonne Italian merchant ship, Grande America, in the Bay of Biscay. "It is good to get recognised for the work done," Leading Seaman Groves told Forces News.

forces net 25th Feb 2020



F-35s Conduct First Night Landings On HMS Queen Elizabeth In UK Waters

Exercise Lightning Fury follows sea trials completed during last year's Westlant 19 Carrier Strike Group deployment.

forces news 7th Feb 2020



BRANCH NEWS - In Brief

Royal Navy Merlin Mk2s hunt subs in the Ionian Sea

The Royal Navy helicopters are being put through their paces during NATO's annual test of anti-submarine forces in the Ionian Sea. The Flying Tigers of 814 Naval Air Squadron have joined forces from Canada, France, Germany, Greece, Spain, Turkey, Britain, the US and Italy for the two-week Exercise Dynamic Manta. Assisted by eight surface ships and five



long-range maritime patrol aircraft, the Merlin Mk2 from Culdrose is equipped with sonobuoys, a dipping sonar, operations room and Sting Ray torpedoes to carry out aerial anti-submarine warfare (ASW) operations. In addition to enabling the helicopters to test their ASW capabilities, the exercise also provides an opportunity for naval vessels to evade the helicopters, frigates and sonobuoys trying to locate them and conduct mock attacks on the surface ships.

shephardmedia.com

Britain gets a new frigate factory



As part of their successful bid to build 5 of the Type 31 frigates for the Royal Navy, Babcock is constructing a new module hall in which to assemble the ships at their Rosyth yard.

On the 24th January 2020 planning permission was given for the development at the dockyard at Rosyth. The building will occupy land between the Syncrolift hall (opened in 1980 and used primarily for minehunter refits), and Number 1 Dry Dock where both QEC aircraft carriers were assembled. This area was previously used to fabricate and erect the 14 sponson blocks for each carrier that Rosyth contributed to the construction. A spokesperson for Babcock said this week: *"Demolition work for the new module hall is now complete, with development of the new facility underway"*.

savetheroyalnavy Feb 20 2020

IN THE NEWS

Russia 'green-lights' production of PAK-DA stealth bomber



The Russian MoD has signed a contract with the developer of PAK-DA long-range stealth bomber to begin production for a possible delivery by 2027 according to state media.

"The Ministry of Defense of the Russian Federation has signed all the necessary contracts to start production of the PAK-DA long-range bomber. Flight tests of the

aircraft is scheduled for 2027," deputy head of the department Alexey Krivoruchk was quoted as saying by Zvezda, run by the Russian MoD reported on Monday. The aircraft is expected to be of subsonic speed, have a 12,000 km operational range and a capability to continuously remain in the air for up to 30 hours while carrying both conventional and nuclear payloads up to 30 tons. The aircraft is expected to have a crew of 4. The PAK-DA is expected to replace all current strategic bombers in the Russian Air Force by the next decade.

UKDJ Feb 3rd 2020

Embracing the Royal Navy's new combat management system



The Thales TACTICOS Combat Management System (CMS) will be a critical aspect of the Type 31 programme.

As mission systems integrator for Type 31, Thales will supply the CMS, the communications, navigation and bridge systems for the ship. From an RN perspective, TACTICOS has been seen as something of an outsider, with BAES supplying the CMS throughout the fleet until now. This dominance was recently eroded when Thales won the Oceanographic Reconnaissance Combat Architecture (ORCA) contract to fit its TACTICOS-based M-Cube command & control system on the Hunt & Sandown class mine hunters. Although Thales is a French multinational the CMS will be made in Britain.

savetheroyalnavy Feb 12 2020

SAAB's ICS: TactiCall Integrated Communication System (SAAB.COM)



SAAB's modern naval communications system looks very sophisticated allowing control of multiple radio units and other systems through one interface. A radio amateur dream! It's a tactical ICS system.

In today's world navy operations often consist of joint setups. Task or coalition force operations, including other military arms. SOF teams, air force, marine detachments and even civil and NGO agencies can be important players in the operation. More often than not, this setup includes a multitude of different frequency bands, networks and radio equipment. TactiCall will integrate all these into one simple and easy to use solution that permits everybody to reach each other, regardless of equipment used. The system will allow key features for modern day operations like

secure voice separation with multiple levels of security and radio remote control. Utilizing this functionality government or task force commanders will be able to communicate directly with whoever needs to be addressed - facilitating a much smoother and more rapid "Statement of No Objection" chain for example.

NATO begins using enhanced satellite services

NATO held a ceremony to mark the conclusion of a Memorandum of Understanding between four nations for the provision of critical satellite communications services to the Alliance for the next 15 years. The memorandum between France, Italy, the United Kingdom and the United States enables the four Allies to provide space capacity from their military satellite communications programmes to NATO. Nations began delivering the capability on the 1st of January 2020. At the ceremony, the Assistant Secretary General for Defence Investment Camille Grand said:



UKDJ George Allison-Feb 24, 2020

RAF Typhoons Scrambled In Scotland After 'Unidentified Aircraft' Tracked

The fighter jets, part of RAF Lossiemouth's Quick Reaction Alert team, were launched but "no intercept took place", according to the RAF. Royal Air Force Typhoons based in Scotland have been scrambled after "unidentified aircraft" were tracked flying towards UK airspace... however, the aircraft remained outside of our area of interest and no intercept took place."



forces net 26th Feb 2020

MAKING TRACKS - Royal Marines in California



Royal Marines have been developing the Future Commando Force concept as the lethal tip of the spear on war games in the California desert alongside the United States Marine Corps. The marines are evolving for the battlefield of the future, focusing on the

way they take on their adversaries and developing equipment that will give them the cutting edge in combat. As part of that, the Green Berets are putting their commando skillset at the forefront of what they do, rather than centring on conventional warfighting. Now it's about being a commando first and foremost in small elite teams and that is exactly what the 40 Commando Battle Group in the heat of Mojave Desert have been testing. In the vast training areas of the Marine Air Ground Combat Training Centre at Twentynine Palms, near the border with Mexico in California

Navy News 29 Dec 2019



The Royal Navy International Air Day

RNAS Yeovilton - Saturday 11th July 2020

HM WIRELESS STATION St. PEARL

City of St. Johns

Newfoundland Royal Naval Reserve

As part of a global network of wireless communications, the British Royal Navy commissioned the Marconi Telegraph Company to build a wireless station in Mount Pearl in November 1914, one of a series around the globe. Every detail of construction and operation was provided by the Admiralty. The call sign for HM Wireless Station Mount Pearl during WW1 was BZM (Bravo-Zulu-Mike). Built to transmit, receive and intercept secret naval messages, and to listen for ships in distress, it went into operation on September 16, 1915.

The British Admiralty also specified who the staff would be starting with the OIC being Commander

MacDermott, and others all from the Royal Naval Volunteer Reserve and Royal Naval Reserves. Marconi Company staff were also assigned to the Royal Navy until

naval staff could be trained to operate the station. The large building at right centre was the transmitting and receiving building of HM Wireless Station Mount Pearl. Just below and within the double ring of security fencing, was the oil storage building, as is one of the three 93 m (305 ft) high towers. The residential building, attached by a covered tunnel at left, is the home of the current Admiralty House Communications Museum.



Credit: Maritime History Archive, MUN

Crew and reservists from *HMS Calypso* performed armed guard duties. Besides the antenna and supporting towers, there were buildings for stores and offices, a workshop, the transmitting and receiving plant, and residential quarters. Decommissioned in 1922, the antennas and high-powered transmitting equipment continued in use as a radio station. This station, BZM, is the last WW1 station standing and is home to the Admiralty House Communications Museum.

It was the British Admiralty who helped to finance the Royal Naval Reserve, with the Newfoundland Division established in 1902. *HMS Calypso* arrived in St. John's that same year. The

"The Hardest and Most Skilled Boatmen That Exist"

Winston Churchill: First Lord of the Admiralty 1911-1915

Newfoundland Government converted the ship and by 1914 over 1,400 Newfoundlanders had trained on board and were ready to serve on Royal Navy ships. On September 6, 1914, *HMCS Niobe*

embarked from St. John's, with 106 Newfoundland reservists and one officer onboard. They were the first Newfoundlanders to go on active service in WW1. Unlike the united Newfoundland Regiment, naval reservists were dispersed: "...scattered throughout every flotilla and squadron in the war zone, earning high praise from their commanding officers everywhere." Anthony MacDermott, CO Royal Naval Reserve, Newfoundland Division, WW1.

If it's going to go wrong it will go wrong in style!



I hope this edition will get to you in time. You see, I had a bit of an analogue blow out in the digital world of my computer -it was really quite spectacular! It happened as I was quietly typing away when the lights rapidly went off and on like an aldis lamp, it even clattered like one for a moment. It isn't that old either. What a drag, but it made me fetch my trusty old test meter and while I was poking around I had a lurid thought about the heads crashing on to the disc -made me shudder. Never mind, a

short drive to our local distributor of computer paraphernalia and a new PSU sorted it out, but an alternative editor didn't help in the interim...

EMERGENCY COMMUNICATIONS

RSGB.org

The provision of emergency communications is one of the fastest growing areas of amateur radio around the world.

Amateur radio is so useful to emergency communications because it does not depend on any infrastructure.

That means amateur radio does not rely on the electrical power grid or any cabled network. Although mobile phones and the internet have wireless capability, they are still dependent on fixed masts and cabling which can be severely disrupted by a natural or man-made disaster; so while very useful in an emergency, mobiles and the internet cannot be relied upon completely.

When the phone lines are down and the electricity is off, it is still possible to communicate worldwide with amateur radio using only battery power. This versatility has saved many lives over decades of amateur radio emergency service. ***Amateur radio still gets through when everything else has failed.***

RAYNET

RAYNET was formed in 1953 following the East Coast floods, when radio amateurs provided emergency communications, and was administered by the RSGB.

Radio Amateurs who are willing to provide communications during emergencies are organised in autonomous local RAYNET Groups and are also members of the national organisation, RAYNET-UK.

There are over 100 RAYNET Groups around the country. These Groups practice and improve their skills by taking part in exercises or by providing communications for community events.

RAYNET-UK is a registered charity, affiliated to the RSGB and there is regular liaison between the two, promoting a coordinated approach to emergency communications.

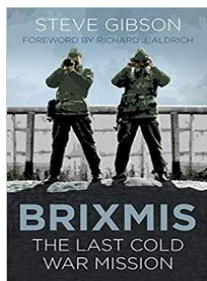
RAYNET-UK provides the special support which Groups need, such as specific insurance and photo ID. RAYNET-UK also liaises with the emergency services, government and other organisations at a national level. Only groups in RAYNET-UK are able to use the title RAYNET.

Many RAYNET groups are affiliated to the RSGB as Clubs.

FIND OUT MORE: Visit the [RAYNET-UK website](http://www.raynet-uk.net)



BOOKS CORNER



BRIXMIS - *The Last Cold War Mission*

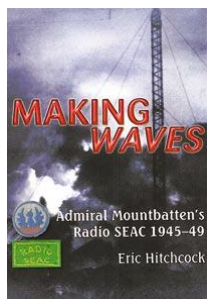
By Steve Gibson (The History Press)

For those who are aware of it BRIXMIS (British Commander-in-Chief's Mission to the Group Soviet Forces of Occupation in Germany) is one of the most covert elite units of the British Army. They were dropped in behind 'enemy lines' ten months after the Second World War had ended and continued with their intelligence-gathering missions until the fall of the Berlin Wall in November 1989.

Making Waves

ADMIRAL MOUNTBATTEN'S RADIO SEAC 1945-49

By Eric Hitchcock (Helion Studies in Military History)

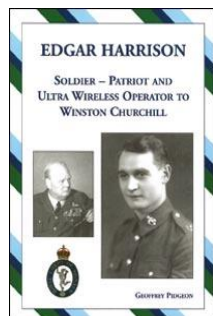


The story of British Forces Broadcasting in the Indian and South-East Asian Commands (SEAC) during WWII is one that very few people know about. This book sets out to tell the story behind all of the challenges, difficulties and problems of building a radio communications network over such a huge area, and Mountbatten's pivotal role in making it possible.

Edgar Harrison

Soldier, Patriot and Ultra Wireless Operator to Winston Churchill

By Geoffrey Pidgeon (Arundel Books)

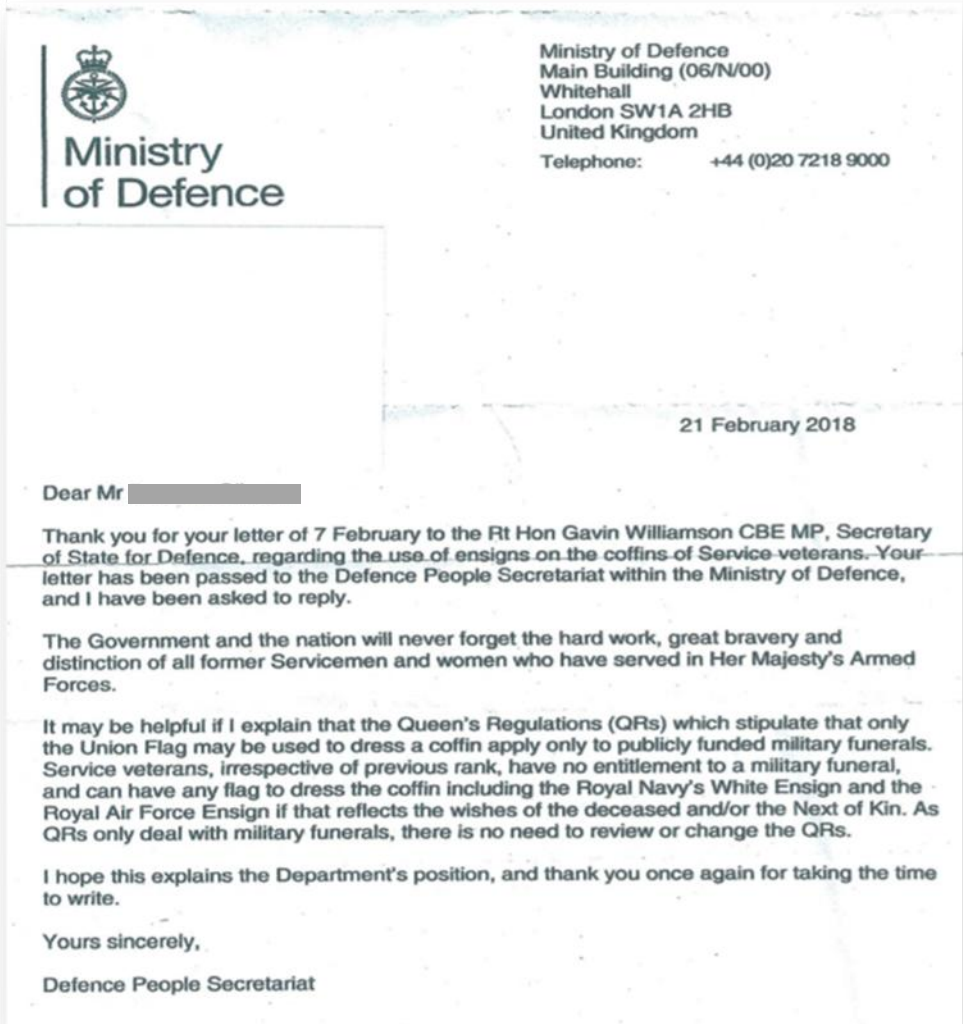


Edgar Harrison had the most extraordinary adventures in World War II. This book details the life of the man from his earliest years through a career in the Royal Corps of Signals an abrupt move into MI6. The story of his numerous missions on all fronts and his time working as an Ultra operator for Winston Churchill, is fascinating. This biography has been written by an acknowledged expert on Britain's clandestine activities Geoffrey Pidgeon.

A VETERAN'S FAREWELL

Joe Kirk G3ZDF

Joe has found an informative letter regarding this sometimes tricky topic relating to service veterans who have crossed over the bar.



RNARS Nets

Mick Puttick G3LIK

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

| UK | UTC | Frequency | Net | Control |
|---------|--------------|--------------------|---------------------------|------------------------------|
| Daily | 0001-0400 | 145.73 | Midnight Nutters | M0WRU |
| Sun | 08:00 | 3.67 | SSB net (news: 0830) | G3LIK |
| | 09:30 | 3.72 | IOM Net | GD3LSF GD0SFI |
| | 10:30 | 7.068/3.748 | RNARS North SSB net | M6LWO |
| | 11:00 | 7020 | RNARS CW net | G4TNI |
| Mon-Sat | 10:30-13:30 | 3.748/7.068 | The Bubbly Rats Net | GX3WTP/G0GBI/ G0OKA/M0ZAE |
| Mon | 14:00 | 3.58 | QRS CW Net | G0VCV |
| | 19:00 | 3.748/ 7.088 (sec) | N.W. SSB Net (News: 2000) | G0GBI |
| | 19:30 | 145.400 (S16) | RNARS Cornish Net | G0GRY |
| Tues | 16:00 | 7.068/3.740 | Tuesday HQ Net | GB3RN |
| | 19:00 | 7.028/3.528 | RNARS CW Net | G3RFH |
| Wed | 14:00 | 3.75 | Stand Easy Net | M6LWO |
| | 17:00 | TG 23527 | Wednesday DMR Net | M0LIH |
| | 19:00 | 3.75 | Wednesday Net | G0VIX |
| Thurs | 19:00 | 3.54 | Scottish CW Net | ??? |
| | 21:00 GMT | 1.84 | RNARS Top Band CW | G0CHV/G4KJD |
| | 20:00 | 145.575 (S23) | RNARS Scottish 2m | GM0KTJ/P |
| Fri | 16:00 | 10.12 | RNARS 30m CW Net | SM3AHM |
| Sat | 08:00 | 3.75 | G0DLH Memorial Net | G0VIX |
| DX | GMT | Frequency | Net | Control |
| Sun | 08:00 | 7.015/30555 | MARAC CW | PA3EBA/PI4MRC |
| | 14:30 | 14.329 ±QRM | RNARS DX | W1USN/GD0SFI/ GM7ESM |
| | 18:00 | Echolink | Echolink | VE3OZN / K8BBT |
| | 19:00 | 14.33 | N American | WA1HMW |
| Mon | 09:30 | 3.62 | VK SSB | VK1RAN/VK2RAN |
| Wed | 01:18-06:18 | 7.02 | VK CW | VK4RAN |
| | 01:48-06:48 | 10.12 | VK CW | VK4RAN |
| | 08:00 | 3.62 | ZL SSB | ZL1BSA |
| | 09:30 | 7.02 | VK SSB | VK5RAN |
| | 09:45 | 7.09 | VK SSB | VK1RAN/VK2RAN |
| Thur | 14:30 | 14.329 ±QRM | RNARS DX | W1USN/GD0SFI/ GM7ESM |
| Sat | 04:00/ 14:00 | 7.09 | VK SSB | VK2CCV |
| | 13:30 | 7.02 | VK CW | VK2CCV |
| | 14:30 | 14.33 | RNARS DX | W1USN/GD0SFI/GM7ESM |

COMMODITIES PAGES

Mike Moore M6POY



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

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



COMMODITIES PAGES

[Order Form is at the back](#)

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COMMODITIES PAGES



Badges

Fobs

Lanyards



Fleeces



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Mike Moore M6POY

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

RNARS COMMODITIES

Mike Moore M6POY

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

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(<http://www.rnars.org.uk/Commodities.html>)

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RNARS| Commodities

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

Send orders to:
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Waterlooville, Hants PO77JY
email: Charlie24374@yahoo.com

Please allow up to 3 weeks for delivery and while these prices are correct when going to press, prices do vary and are subject to change

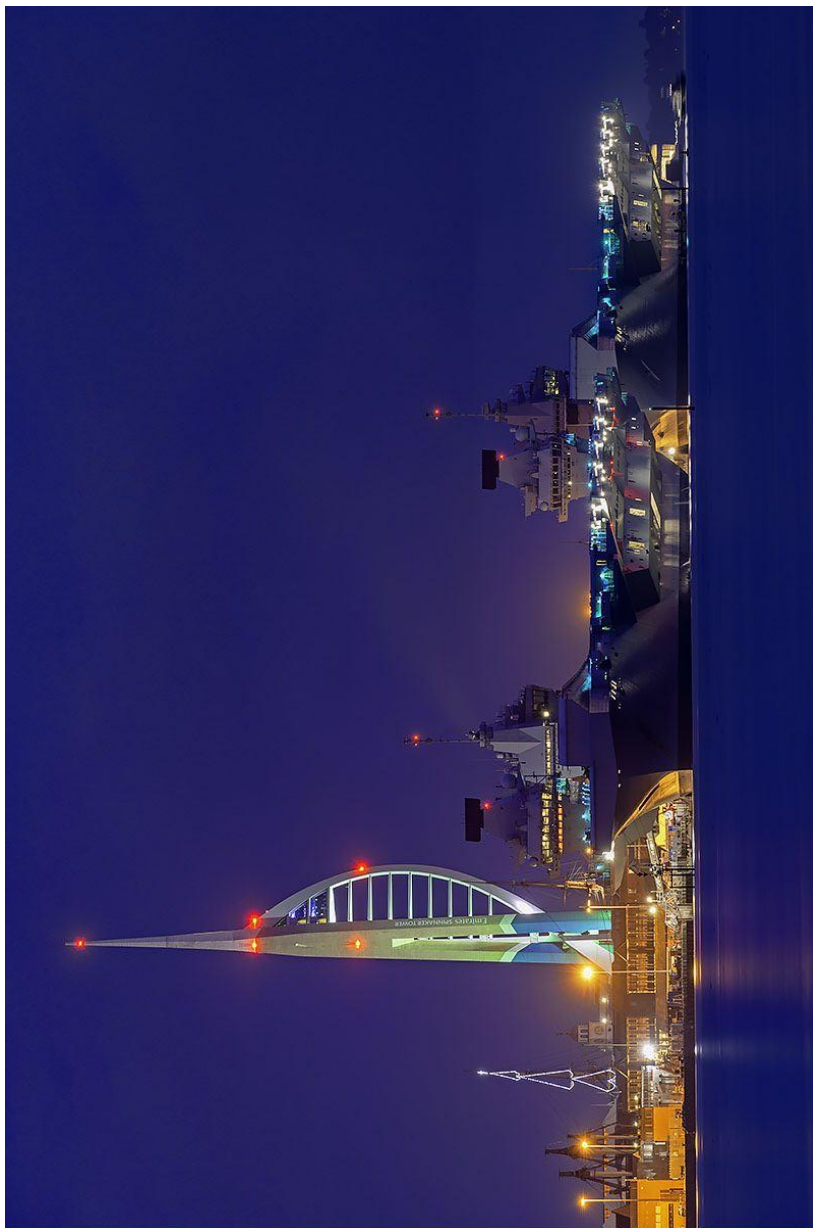
RAFARS & RSARS Nets

| RAFARS | Time | Freq | Control |
|-------------------------|----------------------------|-------------------------|-----------------------|
| Daily | 1100A | 3.71 | G0SYF / GI4SAM |
| | 1830A | 3.71 | G3HWQ / M0RGI |
| Monday | 1900A | 3.7 | G3PSG / G0BIA |
| 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 | 1000A | 7.17 | GW3KJW /M3VRB |
| | 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 is on DMR TG23527 at 1700LOCAL on Wednesdays

HMS PRINCE OF WALES ARRIVES HOME



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