

# Chelmsford Amateur Radio Society

Affiliated to the RSGB

President: Harry Heap G5HF

Secretary: David Bradley M0BQC

Club Call Sign: G0MWT

Chairman: John Bowen G8DET

Treasurer: Brian Thwaites G3CVI

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## Next Month's Meeting - Rig Testing and Evaluation.

Do you ever wonder if your rig is doing its stuff OK! Is it on frequency? Has the receiver sensitivity fallen off? Are you transmitting any hash or forbidden harmonics? It is one of the License conditions that you carry out tests on your station 'from time to time'. Do we ever? Be honest, have we even got the necessary gear? Probably not! There's no telling when an RA inspector might call! Perish the thought!

We are going to try something quite new this month and we have to thank Chris G0IPU for the suggestion. Thanks to him we are going to have a Rig Testing evening. Avid readers of the RSGB Yearbook will have noticed that the Regional Liaison Officer for Essex is **Malcolm Salmon G3XVV**. When Malcolm is not carrying out his RSGB duties he is busy earning an honest crust running his PMR business Samair, together with his assistants **Nigel Hull G6ZVV** and **Geoff Blake G8GNZ**. The whole team have agreed to bring a lot of extremely sophisticated test gear along to our November meeting and test rigs on demand. They can measure virtually any relevant parameter from DC to daylight - 1GHz. All you have to do is bring your rig along together with its power lead and microphone. It would help if you had the technical handbook handy and know where the deviation control is hidden, in the case of FM gear.

There are some changes to band plans in the offing and also to accessing repeaters using CTCSS. Murray G6JYB will give a brief introductory talk on these matters first of all and will explain one of the main reasons for the rig testing session. But whether it's HF or VHF bring it along. If you haven't got a rig to check just watch the boffins in action!

So bring your rig along for a health check at **7-30pm on Tuesday November 7th at the MASC**. Don't forget to **buy a raffle ticket from Ela and have your Club subscription ready for Brian G3CVI as you sign in!**

### Dates For Your Diary

- Nov. 7th. Club Mtg. Rig Testing MASC 7-30pm.
- Nov. 15th. Comm.Mtg. Geoff G7KLV's QTH 7-30pm.
- Nov. 20th. Quiz Night Dengie Hundred ARC Mayland.
- Nov. 25/26th. London ARC Rally Picketts Lock.

**The Club Net Controller for November is David M0BQC.**

## Club Subs. Now Due - Price Held!

The Bad News! Time to dig down in your pocket once again. The Good News is that in spite of inflation Membership remains constant at £8 with concessions at £7. Please pay Brian G3CVI. Cheques made out to Chelmsford Amateur Radio Society at 118 Baddow Hall Cresc., Gt.Baddow, Chelmsford CM2 7BO. Or see him at the next meeting. He prefers cheques by the way!

## CARS Christmas Party

Hurry, Hurry Hurry! Just a few tickets left for the event of the year!. Contact David M0BQC at the next meeting or phone him on 01245-602838 to book your seats at the Beehive, Gt. Waltham.

## Printer For Sale

Pat G0SBQ has got a 24 pin dot matrix printer for sale. There are two ink ribbons, continuous A4 stationery, labels and manual. Its an Epson LQ570 (no cable). Ring him on 01245-467545 or Email at [patg0sbq@enterprise.net](mailto:patg0sbq@enterprise.net) for further details.

## Last Month's Meeting - The AGM.

As usual in October the Club's AGM took place at the Marconi Sports and Social Club. The audience listened to the Chairman's report in which John G8DET paid tribute to the silent keys, Geoff Cockerill G3AMQ and Don Morrison G0LLA. John also described with regret the number of Committee Members who had resigned from the committee including Charles G0GJS, our past Secretary, Gwyn Williams G4FKH, Dick Brocks G3WHR past President, Jan Swanwick G7UVP, Andrew Mead G4KQE and Ela Martyr G6HKM. John detailed the contribution made by each Member to the Club. Our Chairman also thanked the Club Net Controllers for their efforts on Tuesday evenings.

The Secretary David M0BQC read his report covering the

Club meetings throughout the past year; the excellent quality of the Newsletter prepared by Geoff G7KLV and Colin G0TRM; the great day at Sandford Mill for International Marconi Day due to the help and support provided by so many Members this year and finally thanks to John G8DET for his first class preparation of the CARS web page.

Brian G3CVI opened his Treasurer's report with a tale of his life at sea including firing at mines saving the ship and being suitably rewarded! The accounts were easy to understand and showed a healthy financial state with no need to increase subs., so everyone was happy. Club Members now number 87, our highest ever.

Harry G5HF read the report of our retiring President Dick G3WHR which described the memorable year Dick has had in returning to RF design and moving with his employment from Essex to Devon. He hoped that one day the CARS meeting would be broadcast on Webcam. In stepping down from the Presidency, Dick said he was reassured that he had a fine successor in Harry.

New committee members Murray G6JYB, Bob M0CSV, Anthony SWL, Martyn G1EFL and Ken G7RFT were voted in making a strong, balanced Committee. Carl G3PEM was voted in as Vice Chairman.

There followed the enjoyable task of presenting awards:- Roy Martyr Trophy for Excellence in Amateur Radio - Bob M0CSV. Amateur of The Year - Geoff G7KLV.

Constructors Contest Certificates - First Bob M0CSV, Second Harry G5HF, Third - Anthony SWL, First Time Winners Prize - Dave G3PEN.

Outstanding Service Awards were presented to Ela G6HKM, Andrew G4KQE, Dick G3WHR together with flowers and an engraved goblet to Ela and engraved tankards to Andrew and Dick and Honorary Membership Awards to Ela and Dick. The Jackpot Prize Raffle of one years free membership of CARS was won by Les G3HTF.

The evening concluded with a light hearted quiz chaired by Colin TRM which clearly demonstrated the vast and varied knowledge of at least some of CARS Members!

*Report By David M0BQC*

## The Tale Of A Dinosaur... By David Barlow G3PLE *Conclusion*

*From early boyhood David had always been fascinated by wireless. With encouragement from his Dad he started to build his own radios. We left David last month having completed his training at that well known establishment at Colwyn Bay. In this final installment he goes to sea and qualifies at 'The University of the Sea'. Read on!*

It was often said that if I did not go to sea I would be a damn good snooker player! Joe and Fred Davis had little to worry about and, in any case, the rewards for playing snooker were trivial by today's standards. I passed my First Class PMG Certificate and applied to New Zealand Shipping Company for a job and was accepted.

I joined the m.v. Northumberland as Second Radio Officer in the Royal Albert Docks in London. One had to spend at least six months under the guidance of an experienced R/O and I was most fortunate to meet Brian Cullimore who was to teach me the right way of doing things. (I understand that some first timers received no help at all from their first Chief).

I spent 20 months on the Northumberland and we were chartered to the MANZ Line run (Montreal Australia New Zealand). Crossing the Pacific three times each way. I found that the Radio Officer also has other duties. I was the ship's librarian and also the projectionist. Imagine a balmy night on the Pacific Ocean with a screen about 20ft by 20ft rigged over a hatch and film being shown on a gently moving ship. One did not dare let it break down or take too long changing the reels!

On board ship the Radio Room works to GMT in various time zones round the world to ensure that ships are keeping watch at the same time. Ship's time would be very different of course and would be adjusted, back or forward, by up to twenty minutes a day depending on speed and which direction you were travelling. One would gain or lose a day when crossing the date line. But the radio log remained on GMT. If ever you see a photograph of an R/O with two watches then you will know that one was GMT and the other ship's time.

The two of us worked 2 on, 6 off, 6 on and 10 off. This inevitably meant that I, as the junior, would have the dead of night (midnight to 6am ship's time) watch. This could be very interesting from a radio point of view. When I was at sea we operated under the Commonwealth Area Scheme. This enabled British registered ships to QSP (relay) messages via stations in Canada, New Zealand, Australia, Hong Kong, Singapore, India and South Africa depending on the area you were in. This made life very easy as the Oceanspan only had 100 watts output. However it was a great achievement to contact Portishead Radio direct when crossing the date line! This on 12 or 8 Mhz. I accept that the traffic was less in those days, but I was working into GKG (Portishead) at its busiest time and from the greatest possible distance, which was quite an achievement. The other pleasure was to contact Auckland Radio ZLD on 500Kc/s from over 2000 miles away.

One never forgets the thrill - or was it fear? - of one's first live contact on the key with a Coast Station, and then when one was further away, one's first contact with Portishead radio. There were rumours that Portishead had a "black book" of bad operators (this was true but it rarely had British R/Os in it) and one lived in awe of those who worked at that station. In fact they were probably one's ex-colleagues from Wireless College!

There was one thing you were not taught at college, which was how to type. In those days it was thought a little "girlish" to operate a keyboard, but what was the point in taking a telegram (or a long news broadcast) in long hand and then typing it out? So one often sat there with headphones on, typewriter in front and key at one side. This became a little difficult in rough seas! Even today with modern computers and keyboards it is not easy to take down Morse in this way.

The Northumberland was an OBS ship, which meant that four times a day you sent a free meteorological observation report to your nearest participating coast station. All the usual measurements were included temperature, barometric pressure etc. The deck officer of the watch would supply the information. However, one of them used to take the sea water temperature from the engine intake rather than lower a bucket over the side of the ship. He got into a bit of bother when the Australian met office came on board to ask why we had large variations in the measurements.

I was also called to the bridge on one occasion when an unlit ship was calling us on the Aldis lamp we were in the Caribbean at the time. The Third Mate said his morse ability was not good enough. I read "What ship?" gave the reply and we were told to extinguish navigation lights and head North as quickly as possible. We found no immediate reason for this - it was only the next day that we heard the news of the Bay of Pigs episode. Perhaps we were a little close for comfort!

Having completed six months at sea you would be given a ship of your own and be the only Radio Officer on board, unless you were a passenger ship addict (which I was not), in which case you would move up the hierarchy.

The R/O on a single operator ship had enormous responsibility. In the armed services you were first and foremost part of a fighting force and you might be a technician or a signaller within that service. In the Merchant Navy you had a totally different role. The Radio Officer was answerable only to the Captain, who probably knew nothing about radio or the mechanics of radar and direction finding. The "old man" as he was called would sign your log book daily, and pester you when he wanted to find out information from the owners or their agents by telegram. Of course that would, inevitably, be the time when propagation was bad and you could not get through.

The R/O would have the radio room as his office, a radar set on the bridge (later a VHF set also) and a battery locker (with emphasis on the word locker as they would disappear in some ports if not locked up). His cabin would be close to the radio room. Watch keeping hours were again GMT and unlike the remainder of the crew who had 4 hours on 8 off, we worked 2 on 2 off with a 10 hour break - if he was lucky. If it was necessary to get a message away or if there was an emergency these hours were meaningless. The watch would start with a traffic list from Portishead or one's Area Station and every 15 and 45 minutes past the hour there would be a three minute silence period on 500kc/s so that he could listen for any faint distress calls. He would also log two calls heard in the interim if he were not on air himself.

Not only was he the operator but he was also the technician for, in the event of any fault on his equipment, he had to repair it. There was no alternative because somehow things had to be operational, so a full inventory of spares was required. Batteries were checked daily. Admiralty handbooks had to be kept up to date. He was his own accountant and he had to know how to charge for telegrams and messages and balance the books on a quarterly and voyage basis. In other words he ran his own department on board ship and was operator, technician, accountant, clerk and ashtray emptier. Not bad for someone just out of his teenage years.

It is a well known fact that the Deck Officers and the Engineers often were at loggerheads. 'Sparks' (often our name on board) was often the go between or the peace-maker. However, he was not immune from some taunting as both sides thought he had the cosiest job

on board and spent his time feet on desk listening to dots and dashes. On one occasion I got fed up with this and on arrival in port I spent a day in the engine room "doing units" I have to say that it was not easy work and I stank of diesel oil afterwards, but the 2nd Engineer said he had never seen a sparks do that work and admitted they had given me the worst possible job. In recognition of my efforts a party was thrown in my honour.

Before moving on perhaps it is worth mentioning that in the 50's and 60's we knew nothing of standing wave ratios and tuned aerials. The distance between the two masts dictated the length of the one aerial on board. There was a safety loop at either end with a weak link in it so that if sudden stress occurred then the weak link would snap and the aerial stayed aloft (sagging a bit). Often when in port the aerial would be lowered so that it was not snagged by cranes loading the holds. This was the time when it was most prone to damage. I often saw the aerial lit up with St. Elmo's fire especially in the Panama area where there always seemed to be a thunder storm in mid afternoon or early evening.

I left New Zealand Shipping Co. and joined the Marconi International Marine Co. and, as they say, landed on my feet. My first ship was the Ivinghoe Beacon, which belonged to the Crawford and Medomsley Steam Shipping Company, the English subsidiary of the Dutch Ph. Van Omeren Company. I was to sail on Crawford Shipping Co. ships for the rest of my sea-going career, because for some reason they liked me and told Marconi that I was to stay with them and Marconi always did what the ship owners wanted. The fleet comprised some 10 ships, which were all named after English beacons.

I joined the Ivinghoe Beacon in Immingham, where she had been provisioned for two years away but we only sailed to Coatzacoalcas in Mexico for a load of rock sulphur and back again twice. A word of warning - keep sulphur away from silvered contacts, it turns them black. I had the hell of a job finding out why relays were packing up in almost all the radio gear. When the fridges gave up we had to call in at Miami for extra gas, this did not work, the fridges broke down and homeward bound we ate like Lords. That is until two days out from home when the menu read "Curried Corned Beef and rice" and the Chief Steward said that "the rice is a little off"!

I had study leave and obtained a MoT Radar Certificate and also went to Hull to train on new Marconi Radar (value was £5000 in those days). Then I sailed on the Hurley Beacon. It was her second voyage and she was air-conditioned. Absolute luxury and home for the next two years.

The Hurley Beacon was fitted with the latest radio equipment - I had 500 watts, Decca Navigator, D/F, Echo Sounders, VHF and R/T not to mention the expensive radar. We were to circumnavigate the globe, visit over 80 ports in 35 countries and spent 14 months chartered to the Japanese KKK line.

I had one major triumph when the dumbest of our United Nations deck hands by the name of Omari, was scrubbing the wheelhouse deck but had failed to tether his bucket which moved from side to side in rhythm with the ship. Eventually the inevitable happened when it smashed against the side of the radar display unit; hot soapy water cascaded into the air and landed on the top of it. It was running at the time. The Captain, who had had one accident at Panama, told me that he required it to work before we got there.

Remember that printed circuits and servomotors were very new in those days and soapy water does not do them much good; each one was carefully cleaned and metered out. It took much time and the problem was that spares were limited and too much trial and error would have been a disaster. Twelve hours from Panama and we had an operational radar, however the servo motor which matched the scanner to the display was beyond repair and there was no spare available as I had already used the spare supplied. So I rigged an oscilloscope and the 17 year old apprentice had to match the dot on the 'scope with a handle I had supplied to keep the display head up. He did this whenever the radar was operating on the way to New York. That poor lad spent many hours turning a little handle - it must have affected him for life. The Marconi representative in New York came on board, condemned the display unit and arranged for a replacement to be flown out. He said and Marconi's confirmed that it was a miracle that it had been made to work.

In New York I was to purchase a Vibroplex bug key. The use of such keys was strictly forbidden on board ship (and also at Portishead Radio) but this rule was honoured more in the breach than in the observance. However, one could not use the key in bad weather or when the engines were vibrating as, in both cases, you would send too many dots! The Vibroplex was a fine key but unfortunately was no help at all when I tried to use electronic keying and paddles thirty years later.

My interest in meteorology started at this time. We obtained pacific charts and I used to receive weather maps sent by the US Coast Guard in the form of mixed code groups. This would entail some 20 mins receiving Morse at 25 words per minute (and you had to be accurate). It was then decoded and transposed to the chart and we would have bets on what time it would rain based on the chart and speed of the ship.

There were a number of codes that were used in cases of emergency. We all know of SOS but XXX is the urgency signal and TTT the safety signal. I had reason to send an XXX when a single seater Japanese military training aircraft crashed into the sea when we were 18 hours out of Tokyo. Unfortunately we did not find the pilot.

We carried a Dutch super cargo (a person who is on board to supervise the cargo) for a while. He was a real pain in the backside for every time we saw another Dutch ship, he would demand access to the VHF. We, the deck officers and I, were very fed up with him and I arranged for a Chinese fire cracker to be put (safely) in the switch unit on the bridge. The next time he was using the VHF the fuse was lit from the chart room. I was close to him at the time and recall saying "You stupid bastard look what you have done now" he said, "I know vot stupid means". David's reply "Yes but do you know what bastard means?" He later looked it up in his dictionary.

There was very little language problem when using a morse key as most operators could send in English or get by with Q codes or abbreviations. However, in an article like this, one must be allowed a sailor's yarn. It is another super cargo story, about a Japanese we carried on a Pacific crossing. As a matter of interest, there are no swear words in Japanese, but the supercargo learned the lot though he did not realise what he was saying. When we arrived in San Francisco the First Officer's wife joined the ship. We carefully explained to Mr. Kushida that he must not use certain words in front of a lady, so imagine the reaction when we were all in the saloon for our evening meal and he said to our new lady passenger "pass the effing salt please!"

We had one Pacific crossing to deliver cargo to South America visiting such countries as Columbia, Equador, Peru and Chile. We were anchored off the port of Tocopilla - a good three miles off and there was 4000 miles of Pacific Ocean on the other side. At about 0530 hrs local time a Liberian ship crossed our bows and continued in a full circle, its steering gear apparently jammed. It hit our bows causing

a gash fifteen foot across at the top and down to within an inch of the water. The safety loop in the aerial broke. We stayed afloat but this led to my confinement to the radio room for 48 hours non stop. All the equipment worked perfectly.

We eventually sailed very slowly to Antofagasta where we dry docked and temporary repairs were made, big plates were welded over the hole. The insurance claim was quite fantastic. I did not know that it was possible to store so much in the bow section of a ship - how my spare aerial got up there I will never know - but I did get a replacement for it! We had the full repairs done in San Diego, California.

R/Os are often asked how, on an 8-hour watch ship, can a distress signal be picked up when the R/O is off watch. The answer to this is the Auto Alarm (we carried the Marconi Vigilant). This was a piece of apparatus that will receive the Alarm Signal, which was a series of twelve dashes sent in one minute (four second dashes with one second spaces). This alarm signal was sent preceding the SOS call. However it was a very important piece of equipment, which was tested regularly once a week. I had four genuine triggers of the Auto Alarm when I was at sea - all demonstrated the sensitivity of the equipment, as the distress was always many miles away and was already being handled by other ships or a coast station. It never failed to surprise me how often the alarm was triggered by static and one was out of ones bunk at the most inconvenient times with alarm bells ringing.

The other piece of equipment that required regular testing was the lifeboat transceiver. The handles, which cranked the generator, were pretty difficult to turn (another job for that young apprentice). Once again we logged our regular tests of this vital piece of equipment. There were times when we spent days at anchor and would use it to calibrate our direction finding set by lowering the boat and sending it on a circle round the ship while visual and D.F. readings were taken.

If one spends 8 hours a day in the radio room then one does not really want to spend ones leisure time on the amateur bands although some amateur licensed R/Os did carry crystals for the Oceanspan which would let them work /MM with the permission of the Captain.

It was while I was at sea that my amateur "handle" came about. I am often asked why I am known as "Duke" on the HF bands. The fact of the matter is that I had a habit of walking the deck in uniform with hands behind back Duke of Edinburgh style. For this reason and because there were a number of Davids on board I was called Duke. While in Sydney, Australia a friend of mine from Colwyn Bay who was 2nd R/O on the Oriana came on board. My new name amused him and shortly afterwards, when back at sea, he gave me a call and used the name on air. It spread like wildfire. Of course it was used to advantage by my shipmates. In the USA it was common to hear "Gee you got a real live Dook on board?" We had a few free drinks as a result.

Earlier in this article I mentioned that both my father and I were both known as David, he was G3HGI and I G3PLE and for this reason we both had different names on the HF bands. So the name "Duke" has stuck on HF ONLY ever since.

My amateur radio morse test was a bit of a farce. I had arranged to take it at Ilfracombe Radio GIL. I was still at Colwyn Bay and had not obtained my PMG certificate so had to take the test. When I arrived we went to the ops room and I was reading the morse from the ships with no difficulty. As the examiner was also ex Colwyn Bay we straight down the road to the pub for a pint and I got my pass without touching a key or reading a test piece.

So after seven years at sea as a Radio Officer I came ashore. I had had a great time in the University of the Sea. I had visited some 56 countries in the world. I had taken an interest in those countries. My visit to the Sony factory in Tokyo was fascinating. Being the first ship under the Golden Gate Bridge in 1966 then having a New Year Party with an American family whose hospitality

to a total stranger was overwhelming. Plus many people and places that made it all so happy. This at a time when travel was a lot more difficult than it is today.

For a while I sent RSGB slow morse practice sessions but work and marriage meant that amateur radio went on the back burner for nearly twenty five years.

Having been earning good money and been a departmental manager on board ship one found that there were two options - put on a uniform and operate a lift or become a rep. I became a rep for a very early stereo record player. I remember going to Llandudno for its launch; one Sam Costa, who extolled the virtues of a very poor product, made the main presentation. I later became assistant branch manager for an electric wire and cable company and moved to the Confederation of British Industry and finally to the Engineering Employers Federation.

In 1992 my wife, Diane, and I retired to live in Cornwall - it was sheer coincidence that we live within a mile of Poldhu and can see the site of Marconi's first transatlantic transmission in 1901 from our house. There are quite a number of radio amateurs in the area, so I found an old licence and got my old call sign back again. I joined the Poldhu Amateur Radio Club and trained 14 people through the 12 wpm morse test before becoming a morse examiner, I also read the GB2RS News for the South West on HF.

On coming back to amateur radio I looked to see if there was an organisation that catered for the ex maritime R/O. I found that the Royal Naval Amateur Radio Society, with over 1800 members, allows as members those who have served under the Red duster as well as the white one. However, in 1993, it was with great pleasure that I found that there was an association for those who hold civil aircraft and merchant marine certificates - the Radio Officers Association. It came as little surprise that of the ROA membership of 200 at least 50% held amateur licences.

The ROA ran the highly successful Maritime Radio month in April 1999 and one weekend was devoted to the old coast stations - 126 were revived world wide with appropriate call signs ( GB0GLD for GLD Lands End). More than 50,000 QSOs took place and over £1000 raised for charity through the sale of awards.

It is interesting to look through the careers of the ex MN R/O. There are many who became Lecturers and Vice Principals of Colleges and Universities. Company Directors, Senior posts in radio and television, senior civil servants, managers, writers, publicans (of course). There was one MP and many ran or run their own businesses and shops. This seems a credit to the job that we all did at the start of our working life and to the experience we gained from doing that job. The "University of the Sea" did a fine job.

Within, and very much a subsidiary section of the ROA is the Radio Officers Association Radio Society ROARS of which I have the honour to be chairman.

With the introduction of new technology and the GMDSS system the Radio Officer is no longer required at sea. It seems amazing that it has taken almost exactly 100 years for the Wireless Operator to become the Radio Officer and then become extinct. I now know what it must be like to be a dinosaur; but while the job may be extinct we survive in memory. (part of which may be a little inaccurate).

*Rather than serialise this story we decided to finish it in one go and hence this month's 'one off' bumper bundle!*

*Our thanks to David Barlow G3PLE. Incidentally he is one of the leading lights in the Poldhu Club which organises IMD.*

*Thanks also to Charles G0GJS who discovered the story*

## Joint Editors.

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