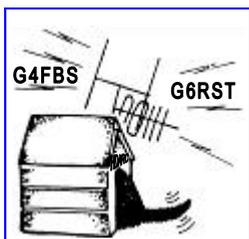


# Horndean & District Amateur Radio Club Journal

Volume 4

Number 11

*February / March 2020*



**Christmas Social**

Horndean & District Amateur Radio Club  
Founded in 1975

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Articles, letters of interest, photographs are always needed and should be sent to the Editor :- Mike Clark. [m0zdz.mike@gmail.com](mailto:m0zdz.mike@gmail.com)

I use Microsoft Publisher to produce the journal so am happy to accept articles/photographs via email. A Word document or Picture attachment. Just use Journal article or Journal picture as the subject matter.

Opinions expressed in the journal are not necessarily those of the HDARC. The editor has the right to reproduce the articles for our affiliated club journals/newsletters. The Editor decision is always final.

**Closing date for next journal is : 6th March 2020**

## Editorial



Hi all,

Let me start by wishing you all a Happy New Year.

A varied content for this edition of the journal, a thank you to those who have contributed.

Looks like everyone who attended the Christmas dinner had a good evening as always.

Looking forward to the weather improving so I can get out and operate portable, currently the fields that I can operate from are under a couple of inches of water.

Till the next time, good DX

73 de,

Mike. M0ZDZ  
Journal Editor HDARC

## Nuggets from the net....By Ralph 2E0HES



Section 3 of the new full licence is  
“Amateur Radio Safety”

My guess is this guy hasn't read the book.

Been a very hectic couple of weeks. Family health problems, work and becoming a granddad, but this afternoon took an hour out to go mobile. Went to my favourite seafront location, mounted a quarter wave antenna that I had tuned for the 17m band. Parked close to the water's edge, and angled the vertical to lean down towards the horizon to get a longer skip. First call 18.140mhz, my longest contact so far, HP9SAM. Another Steve but this one was in Poci, Panama!!!!!! some 5329 miles according to qrz. The sea apparently can enhance your signal by up to 10db; a quarter wave antenna I find makes for the most efficient mobile antenna (also use Ampro, very good but lacking compared to a full quarter wave ant.), combined with a bit of luck the contact was made. My signal to him was 5/3, his to me 5/5. Well, is it mobile or portable?

Works for me



# Diary of a new boy.

Ralph 2E0HES

Last Friday, 1<sup>st</sup> November I attended the HDARC meeting and to my surprise was awarded the John Taylor-Cram scribe of the year, which I was pleased and proud to accept especially as English was never one of my strong points (it's here I thank Microsoft for auto correction).

Mike asked for people's write-up of their shacks, well here's mine, a small set up by the size of some of them you see on QRZ and other publications. An FT897 starts the ensemble, first rig I bought about the same time as I passed the Foundation. This is attached to an MFJ Versa tuner, I used to have an MFJ auto tuner, but it recently bit the dust. All this coupled up to a laptop for data communications, a little more about data later and all this is connected to an end fed on a 10 metre fibreglass pole.



Just to the right you can see an FT-450 which I'm setting into a box for mobile use, as my home QTH is in an awful position; Butser hill one side, Catherington Lith and Windmill Hill each side, which just leaves open to the south, but I do quite well into Spain. As I say, mobile seems to be the way to go. I get up to Butser hill once in a while, but I'm going to get out more now I'm at that age.

At a meeting a couple of months ago someone brought up the subject of data communications, and I said I felt it was a poor part of the hobby. On the way home I thought about what I said, and realised I had put down FT8 without having any play time.

Very briefly FT8 is a data communication with pre-set exchanges to make up a QSO; it's a low power set up which does me well at home, and I have made a few exchanges to the States and had calls from Brazil, Hong Kong and other exotic locations. I've made over a hundred QSO's since I started and that's pleasing, since I've taken a considerable time to make the previous 100 QSO's, I will not try to explain the workings of FT8 PSK31 or any of the others as there are far better people than me on line (You Tube has copious amounts of video) so give it a go people.

Thanks to everyone who voted for my last piece

Ralph 2E0HES



# SOLAR POWER CHARGE CONTROLLER.

By Simon GOIEY

This project came about because of a need to have power at Fort Widley to run an ATV repeater.

Mains power was not available for two reasons, cost and not being able to dig up the parade ground in order to bury cables. The HDARC would not have been allowed to carry out the works either due to Health & Safety. Using a petrol or diesel fuelled generator was not an option for cost, noise and refuelling duties.

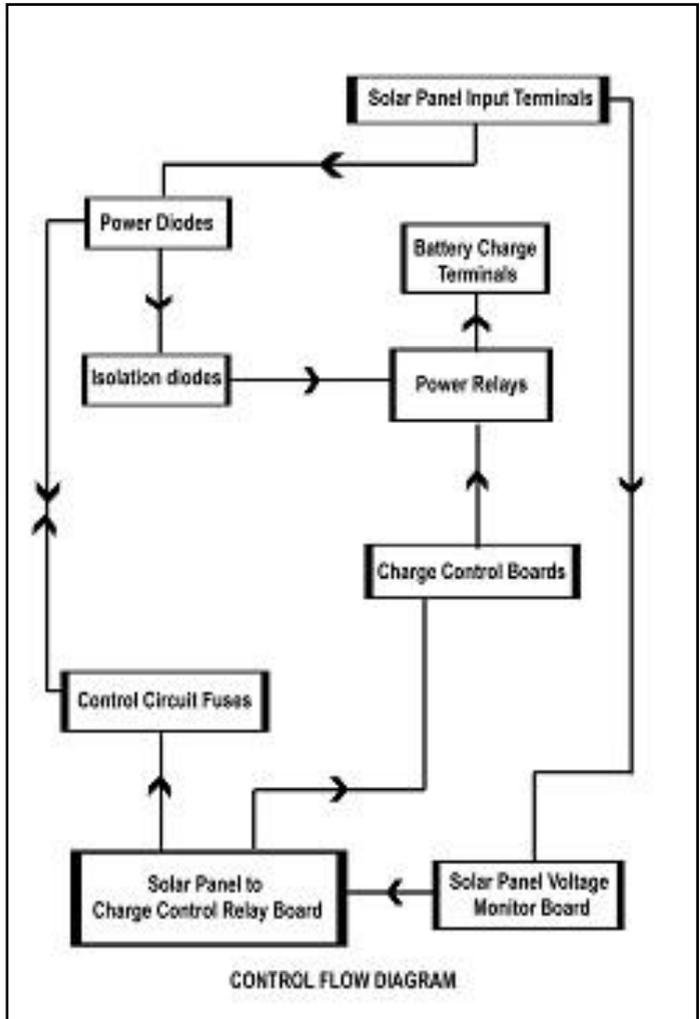
I found a simple charge controller circuit whilst searching on Google and set about building it to see if it was suitable for our needs. The circuit (which I called Mk1), as downloaded did work, but as it had been designed for a part of America that had much sunshine and very little overcast weather or rain did have a particular problem in that the battery requiring charging did also power the charge controller circuit. This meant that during the hours of darkness, rain and overcast weather it put quite a large drain on the very battery we needed to charge. This was compounded by the size (both of the storage battery and power output from the Solar Panel), being used at this stage of the tests. At this time in the test phase, I decided that a way to reduce this drain was to add some circuitry which was powered directly by the Solar Panel and only connected the charge circuit to the battery when there was enough voltage being created by the Solar Panel and therefore did not load/discharge the battery until charge conditions were met. This I called for obvious reason MK2. By now the original space I had allowed in a box for the MK1 & 2 circuits was very cramped so I started to create MK3 and then the MK4 which was then offered for your inspection at the construction contest night.

It works, but like most of my projects it will undoubtedly be modified at some time, and space and terminals have been allowed for that event. The next model MK5 will be based on PWM (Pulse Width Modulation).



During all of this, by chance at a Radio Rally at Newbury Show Ground I came across a stall selling Pulse Width Modulation solar panel charge controllers and other useful items. I bought a 20Amp unit. The unit I had been experimenting with was suitable for solar panel and wind generator control. Which meant that additional circuitry to that purchased would be needed still (see later for the benefit of belonging to a good radio club).

The ATV equipment is currently powered by that PWM unit with some additional isolation control gear and fuses (for both the input and output circuits), and also contains a wind generator control unit (kindly donated by Russ Tribe G4SAQ originally used on his boat, but this had been replaced due to one channel of its controls going defective but we only needed one), and built into a 19" rack mount designed and built by me.

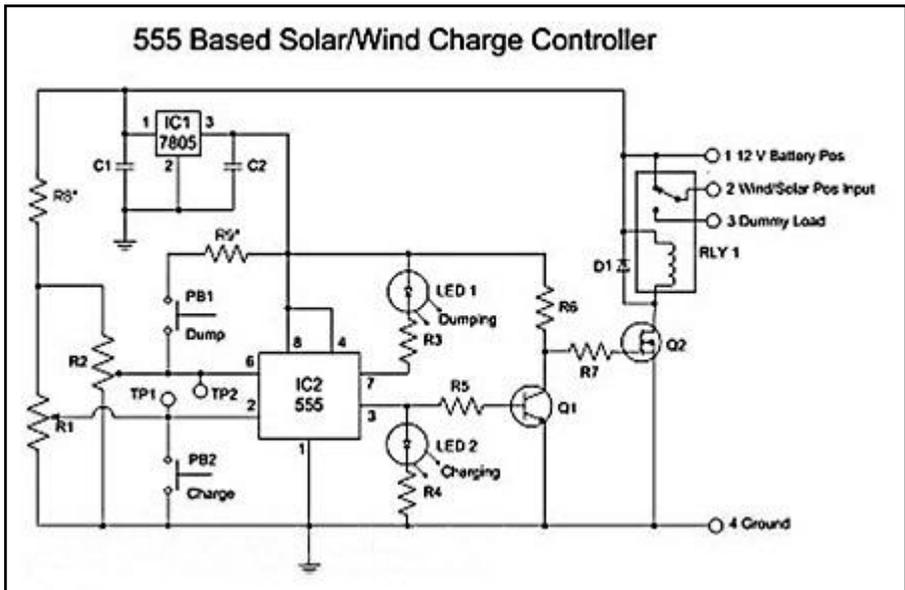


This provides the necessary power and control to meter and protect the various equipment which forms part of an ATV repeater. There is suitable labelling and warning information to advise operators of the correct procedure for operation of the panel. The batteries have a potential to offer 410Ah of storage capacity, plus the wind generator for days when overcast and night time when there is wind strong enough to generate that is. The Solar Panels now in use are rated at 100W Output each and the wind generator when on line at 300W.

Whilst the control panel on view to the judges is now not destined for the Fort Widley site, its design and construction has not been wasted as it is intended to control/charge my own batteries to supply power to my ATV equipment at home. I have enjoyed straining the grey matter and learnt much into the bargain.

I have provided a copy of the basic MK 1 circuit and a block diagram showing the interaction of the various circuits.

73 de Simon G0IEY





**Presentations of awards at the 2019 AGM**



# Intermediate Construction Project Award by Jon M6HZQ

EN

## D.I.Y FREQUENCY COUNTER/CRYSTAL TESTER

Level: Intermediate

AK-130



**ABRA** Serving Industry & Education since 1990

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### PARTS LIST

Please make sure that the following pieces are included in your kit

| Components              | PCB Reference Number                             | Quantity |
|-------------------------|--|----------|
| 1kΩ 1/4 Watt Resistor   | 1K Markings                                      | 9        |
| 10kΩ 1/4 Watt Resistor  | 10K Markings                                     | 2        |
| 100kΩ 1/4 Watt Resistor | 100K Markings                                    | 1        |
| Custom P.C.B            | N/A  | 1        |
| 7-Segment L.E.D Display | D1, D2, D3, D4, D5                               | 5        |
| PIC Micro Controller    | PIC16F628  | 1        |
| 18 Pin IC Socket        | TH-2447476                                       | 1        |
| 22 pF Ceramic Capacitor | 22P  | 3        |
| 104 μF Capacitor        | 104  | 2        |
| Female DC Barrel Jack   | 14-5-9V  | 1        |
| 1N4148 Switching Diode  | 4148 X3 and the single 4148                      | 4        |
| Crystal Oscillator      | 20M  | 1        |
| 3 Pin Headers           | 3 Hole Rectangle next to 100K Resistor Schematic | 1        |
| 4 Pin Switch            | 4 Hole Rectangle next to the single 4148         | 1        |
| Transistor NPN 9018     | 9018   | 1        |
| Transistor NPN 9014     | 9014   | 1        |
| Transistor NPN 7550     | 7550   | 1        |
| Capacitor with Step     | On the left side of the Switch's schematic       | 1        |

### REQUIRED TOOLS

|                         |          |   |
|-------------------------|----------|---|
| Soldering Iron          | SI-9680  | 1 |
| Solder 60 Tin / 40 Lead | 4898-18G | 1 |

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### SOLDERING GUIDE

- Turn on the soldering iron to 360°F - 370°F (182°C - 188°C) using Tin-Lead 60/40 solder.
- Flip the board on the side where all the schematics are shown. Then, place the IC socket on the board where the white rectangle marked TH-244746PIC16F628 can be seen. Make sure the socket's notch faces the correct direction according to the schematic on the board.  
**Note:** It is suggested to use the IC socket since soldering the Microcontroller directly could cause damage.
- Insert the pins in the holes and begin the soldering process on the other side of the board.
- After having soldered the IC socket, place all twelve resistors found in the kit according to their matching schematics named "1K", "10K" and "100K" on the board (Refer to Appendix for a guide on reading resistor values).
- Note:** Polarity is not an issue when placing the resistors on the board.
- Insert the resistor leads in the holes, bend them in order to hold the resistors in the preferred position, flip the board and then, begin the soldering process for the resistors. Once finished, cut the remaining part of the resistors' leads.
- Now, flip the board on the side with schematics and place the five 7-Segment LED Displays each on one of the five sockets found on the corners of the board, named "D1", "D2", "D3", "D4" and "D5".
- Once again, insert the leads in the holes, flip the board, and begin soldering the leads.
- Now, flip the board, place the crystal oscillator on the schematic named "20.000", insert the leads in the holes, flip the board again and begin soldering on the top side of the board. The remaining parts of the oscillator should be cut after soldering.
- To solder the 22pF capacitors, flip the board to its bottom side, place these capacitors on the schematics named 22P and repeat the same instructions as in step 8 for this capacitor.  
**Note:** Polarity is not an issue when placing these capacitors.
- Next up, solder the two 104μF capacitors on the markings "104" found on either side of the oscillator, again on the bottom side of the board. Repeat the same instructions as in step 8 for these capacitors.
- Next up, solder the switching diodes where its marked "4148 X3" and "4148" on the board. Repeat the same instructions as in step 8 afterwards.
- Then, solder the Female DC Barrel Jack on the "DC 5-9V" spot on the board.
- Now, solder the switch on the 4 Hole rectangle next to the single 4148 number on the board.
- Next up, place all the NPN Transistors on their matching schematics on the board and begin soldering. Proceed just as in step 8 afterwards.
- Finally, solder the 3 Pin Headers and the Capacitor with Step according to the PCB Reference Number mentioned on the previous page in the Parts List.

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### WIRING GUIDE

- First, either plug in an adapter in the Female DC Barrel Jack or connect the power wire (red wire) of a battery holder (preferably 9V Battery Holder) to the positive sign on the board and the ground wire (black wire) of the battery holder to the negative sign on the board.  
**Note:** It is suggested to use the adapter for the lights on the 7-Segment LED Displays to be brighter.
- Then, insert the leads of the crystal you want to test the frequency for in the first two leftmost pins of the 3 Pin Headers starting from the "100K" resistor side and you will get the value of your frequency on the 7-Segments.

### FEATURES GUIDE

These are the features that you can access by using the switch on the PCB. If you only press once on the switch, you will enter the programming mode and you will be able to toggle through these features by pressing on the switch again. When you find the desired feature, keep the switch pressed for more than a second and that feature will be applied.

- "Quit": Leave programming mode without modifications.
- "Add": Save the previously measured frequency so you can add it to another frequency later. If you insert a crystal in the header place and hold your hand on the switch while in the "Add" mode, the crystal's frequency will be saved and it will be added to the frequency value of the next crystal you measure.
- "Sub": Save the previously measured frequency so you can subtract it from another frequency later. The same procedure as in "Add" mode applies here.
- "Zero": Frequency offset will be set to zero so that the next time you measure your frequency, no offset will be added to or subtracted from the value you wish to measure.
- "Tab": This feature will allow you to choose a predefined offset value from a list ("155.0 kHz", "4.194 MHz", "4.435 MHz", "10.700 MHz" and "9.0900 MHz"). Holding your hand on the switch for more than a second and then releasing while on "Tab" mode will bring up the list. You will then be able to browse through this list, choose your desired offset frequency and then hold your hand on the switch again for a second and release. Now, you will be brought in the previous menu where you can choose to "Add" this offset value to the next crystal frequency measured or "Subtract" it from the latter. Afterwards, when you insert the crystal in the headers, the previous offset value will either be added to or subtracted from the frequency of the crystal.

If the frequency of the crystal you are testing for is in kHz, the decimal point on the 7-segment will flash and if it is in MHz, the decimal point will be steady.

Finally, please remember to not connect the battery holder to the positive and the negative sign while having an adapter connected to the Female DC Barrel Jack. Use only one of them.

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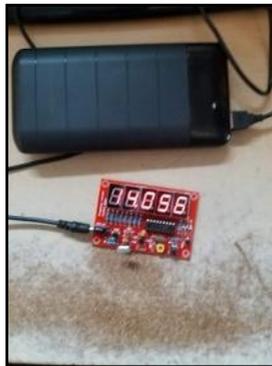
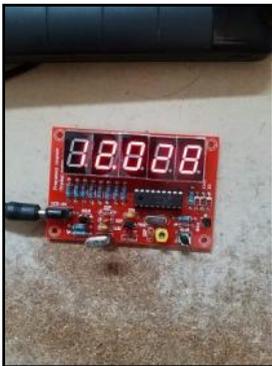
APPENDIX

Resistor Table Values

|               | Black | Brown | Red  | Orange | Yellow | Green | Blue | Purple | Grey | White |
|---------------|-------|-------|------|--------|--------|-------|------|--------|------|-------|
| As digit      | 0     | 1     | 2    | 3      | 4      | 5     | 6    | 7      | 8    | 9     |
| As Multiplier | X1    | X10   | X100 | X1k    | X10k   | X100k | X1M  |        |      |       |

In resistors, there is always the first digit followed by the second digit followed by the third that is called a multiplier. For example, if we have Brown, Black and Red, the value of the resistor will be 10 multiplied by 100 which gives 1k, which is the resistor in our case.

You can download the manual from abra-electronics.com and search for AK-130.  
Vous pouvez télécharger le Manuel sur abra-electronics.com en cherchant pour AK-130.



Jon put “ Been trying to find information for the Frequency Counter” as he did not get a circuit diagram. All the component positions were mark on the circuit board, he just measured the resistor values to confirm the correct values before soldering onto the board.

<https://www.youtube.com/watch?v=st72Q9mCd2I&t=1808s>



## The Radio Amateur, by Doug G4BEQ

Ask most people of my vintage "What is a radio amateur" and it's a fair bet that the answer will contain a reference to Tony Hancock, and what a delightful programme "The Radio Amateur" was. (Am I the only one who thinks the art of true comedy is sadly lacking these days?). Amateur radio as a hobby is as old as radio itself, and since there was no radio professionals in the beginning, it is arguable that Henry Jackson was the first Radio Amateur. You will note that I did not say Marconi. Who was Henry Jackson? Would you believe that he became an Admiral of the Fleet?

Henry Jackson joined the Royal Navy as a cadet in 1868. He became a torpedo specialist which gave him a good introduction into electrical engineering which qualified him as an associate of Telegraph Engineers (IEE). In 1895, as a Captain, he was appointed in command of the Torpedo Training Ship, HMS Defiance, an old wooden hulk moored at Devonport. Jackson had been fascinated with the discovery of electromagnetic waves by the German scientist Hertz and thought they might have potential as a system of signalling over long distances. Whilst in command of Defiance he seized the opportunity to extend his research into the generation and detection of electromagnetic waves and succeeded in sending Morse code over a distance of 50 yards from one end of the ship to the other in August 1895. He was totally unaware that at roughly the same time Marconi was engaged in similar research in Italy. Marconi had sought the financial assistance of his Government to support his experiments, but was refused. He then decided to come to England in 1896 to try his luck here. On arrival, to safeguard his work, he took out a patent in June 1896.

Had their Lordships been quicker on the uptake a similar patent could have been taken out on the basis of Jackson's achievements in HMS Defiance nearly a year earlier? Had that been so then it would have gone down in history as Jackson being the inventor of radio and not Marconi. Jackson would appear to bear no malice or ill feeling about the way things had happened, and he and Marconi became great friends and collaborators.

In June 1897 Jackson, by his own experiments had demonstrated to the higher echelons of the Navy that operations by wireless telegraphy between units of the Fleet was not only feasible but would bring about huge benefits in tactical and strategic use. However, the Navy being what it was, and it has never changed, sent him off for two years as Naval Attaché to Paris. This separated him from his wireless interests whilst Marconi forged ahead with his, but still with Jackson supporting him from Paris.

Returning home on completion of his tour of duty, he was given command of HMS JUNO, which, with two other ships, was fitted with wireless apparatus. They were sent on exercises against the rest of the Fleet to test the value of wireless communications. They won hands down. Wireless telegraphy had arrived and ordering as well as fitting of equipment and training of operators now began. In 1901 Jackson was elected a Fellow of the Royal Society (FRS) the highest scientific honour.

Radio propagation, being fickle, meant quite often signals could be read in London but possibly not in Cardiff or Glasgow etc. With the V.I's so wide spread it meant that a signal would always be read regardless of the conditions. Those V.I's in reserved occupations would, on returning home from the days toil, retire to their radio room and spend several hours of day/night listening and logging all signals heard.



These would then be sent to Box 25 Barnet, a collecting point for Bletchley Park. There was a security problem for the V.I.; everybody was doing their extra bit in some way or other, neighbours wanted to know why they were not in the Home Guard or doing something like Wardens or firewatching at night. In some cases their employers' were suspicious. In one known case a V.I. was marched off at revolver point to the local army camp as Morse signals had been heard coming from his house. In such cases BOX 25 in Barnet had to be contacted to smooth the waters.

Radio amateurs are frequently called upon to assist in times of disaster. Their compact and simple equipment is frequently more flexible in an emergency than today's complex commercial gear. Help has been provided at earthquake sites, train disasters, plane crashes, the list is endless. During the Falklands war ,amateurs on the Islands were in constant touch with their friends in England and passed on much vital information. Amateurs in this country at that time had direct phone contact with the War Office so that information could be passed both ways. Later in Bosnia and Yugoslavia, amateurs quite often provide the only communications to and from some of the besieged towns as well as passing information to the outside world. On a personal note, I first became licensed as a "ham" in 1968. I had dabbled in that area several years before but had never taken my City & Guilds. What made me take the plunge was my enforced 2-year stay in Hospital, devoting my body to improve medical science. Near the end of my first year there I was informed that the very best I could hope for was a permanent seat in a wheelchair. On receiving this news I began to consider what my options were now that it appeared all active leisure pursuits would be out of my reach. It was then I thought of amateur radio. An ideal hobby; I could sit in my wheelchair and work the world, meeting all sorts of interesting people, letting my mind wander across the airwaves and forgetting my disability. I wrote off to the RSGB and asked them to supply me with all the information on how I could obtain my licence. They sent me a wealth of information and also supplied me with the books I would need for my studies. When I had prepared myself to the standard required to sit the City & Guilds they arranged special dispensation for me to take the exam from my hospital bed. I did manage to beat the system and finally, after two years, was able to walk out and get back to normal fitness. However, I was now a fully qualified radio amateur with a full licence. My only regret was that I had not done it years before. For the remainder of my working life in the Royal and Merchant Navy I never went anywhere in the world without an amateur waiting for me on the jetty. I would always work the next port of call and make this arrangement. On arrival I would be taken home, entertained, and given full use of that person's radio equipment.

Two things would now happen. Firstly I would call up a near neighbour of mine, a fellow amateur, and tell him where I was etc. He would give my wife a call so that we could update each other on the latest news: much better than letters and far more personal. No Skype, Smart phones or Facebook in those days. You could book with Cable and Wireless for a phone call, at a price. Then I would put out a call to the next port the ship was calling at to fix up similar arrangements there. It never failed. In the same way of course I extended the same facilities to fellow amateurs from all over the world.... and still do. One of the great joys of amateur radio when in touch with another is the use of Christian names only throughout the contact. You never know who you are talking to; it could be a King or a road sweeper.



The only way to establish who the owner of the call is, is to look the details up in the International Call book. Even that is no guarantee these days as you can, by request, ask for your details to be withheld. Two incidents stand out in my mind as an example of this: I was travelling through London by car and got hopelessly lost. Putting a call out on my radio, Top Band in those days, I was answered by a man who told me his name was Brian. He patiently talked me through London, intermixed with general chat of interest to us both and even invited me to call on him as he was nearby for a cuppa, I declined as I was anxious to reach my destination. It was not until sometime later that I decided to look his call sign up in the book. It turned out to be Lord Rix, as he was later to become, the actor. At no time did we ever discuss our professions as it was of little interest at the time. On another occasion I had regularly worked a fellow amateur who lived just south of Banbury. Our contacts were always made using c.w. I happened to mention on one occasion that I was motoring up to see my parents in Rugby which meant passing through Banbury. He invited me to call in on him on the way and told me he was in one of the Lord Cheshire Homes. On arrival at the reception I was taken into his room and was amazed to see him in an iron lung. He worked his Morse key with one of his toes. Local amateurs had rigged up all his equipment so that he could still go on air despite his obvious restrictions. At no time in my many contacts with him had he mentioned his disabilities. He told me whilst I was there that amateur radio had kept him sane as he could "talk" to the world and quite often imagine he was there when others described their surroundings. That really was a moving occasion.

Amateur radio is a wonderful world, and its members are some of the most friendly that it's been my fortune to meet. I have often thought that if the world was run by Radio Amateurs it would be a very peaceful place. An example of this friendship, extended by amateurs to each other, took place some years back. It was my routine on leaving the docks to operate "mobile" from the car on the journey home. It quickly began a routine to talk to a German amateur who was travelling to his home at the same time in Hamburg. Our journeys coincided in time and distance. On one occasion he mentioned that the audio of my transmitter was becoming intermittent. I knew that would be caused by the output valve becoming soft and mentioned the type that I was using, saying I would have to purchase a new one as I did not have a spare. On arriving home my wife handed me a package and said "one of your ham friends has just left this for you". On opening the package it was the valve I needed with a quick note telling me he had been listening to my conversation and knew I needed it. Needless to say I rang him up as he lived about a mile from me and thanked him. There was no question of payment as it is quite normal to help each other that way when only small items are concerned. On that point, if you are thinking of taking up this superb hobby, join your local radio club and get to know your local amateurs, they will be more than keen to help you in your quest to get a licence.



## Club members' 10-minute talks

This was held on January 3rd 2020, and five brave people stood out the front and gave a variety of presentation subjects.



L to R: Mick G3LIK, Rob MØRZF, Christine M6UBI, Ken GØJWL, Bill 2EØWGK

Ken started off, but unfortunately his version of Word file wouldn't run on our laptop, so he did an off-the-cuff talk about statistics, Next Christine told us about her long involvement with the local Scouting movement, with tales of camping holidays and days out. Mick gave us biographies of Gene Hackman, Drew Carey, and James Earl Jones, all with a military connection. He then told two stories about Al Capone and his lawyer 'Easy Eddie', and the second about Lt Cdr Butch O'Hare. The punchline was that Butch O'Hare was Easy Eddie's son! Next Bill told us all about RAYNET. Bill is the secretary of the South-East Hants group. Rob gave a presentation about a clever and powerful circuit design simulator and testing program called LTSpice. It is freeware and Rob uses it a lot at home and work.

Thanks for photo from Frank GØLFI; Text by Stuart GØFYX



## HDARC CHRISTMAS SOCIAL 2019

On Thursday 12<sup>th</sup> December 2019 the club held its annual Christmas Dinner at the Crofton in Stubbington, with 20 in attendance. This included members, family and friends. Due to unforeseen circumstances, many who would normally have attended had other commitments and couldn't join the annual festivity. It was particularly nice to see some of our newer members attending and I hope that when we hold the annual skittles night in April we will see a few more.



The dates for the Skittles and the Christmas social 2020 have been provisionally booked, but we are always open to suggestions on alternative venues. There are not many places with skittle options so we are generally more restricted on location for that event.



On behalf of the HDARC I am however very pleased to say that Doug G4BEQ, the club president, was able to join us this year. As many of you are aware Doug lost his wife Louisa shortly before, and as he was going away for Christmas and the New Year thought it would be nice to catch up with friends. Simon and I spent a couple of hours with Doug in Gosport, then we all went to the venue together, and we took him home after.



The function room adjacent the main restaurant was reserved for our party and had been nicely decorated with a long table down the middle which made it much easier for the staff when serving food at 20.00hrs. It was also nice we could keep members and guests together much easier.



I thank Elayne, the XYL of Bill the club's Treasurer, for helping to keep the raffle prizes as brought in by guests arranged nicely on a table for all to view.



I thank Christine M6UBI and Frank GOLFI for their help with selling raffle tickets and placing stubs in container ready for the draw later.

Photos of the venue were taken during the course of the evening and I thank Simon and Mick for the photos included with this article.



The food was good, albeit a bit of a delay between some courses, so finishing time was later than expected. Because some guests had to get away as a taxi had been booked, we did the raffle draw, this was followed by the lucky ticket number which was drawn by one of the staff attending our table. Number 2 was read out and won by Simon so congratulations to you and all the other guests who won a prize. I sincerely hope that all those who attended had a good time and had a safe journey home afterwards.

I wish you all a Happy New Year  
Julia G0IU Y (Soc Sec)



## **QUIZ NIGHT DECEMBER 2019**

The last club meeting of 2019 went well with lots of members in attendance. Mince pies and Schloer non alcoholic drinks were available to members.

Julia G0IUY and Christine M6UBI organised a fun Quiz Night so teams of 4-5 were grouped around the hall on the smaller tables. A video was taken to be shown at a later date if required. Christine started the evening with general knowledge followed by a fun sweetie section where you had to guess the sweet from the question.

**Here are two examples to make you smile.**

**Question 1 = "MOTHERS LOCAL"**

**Answer = "MARS BAR"**

**Question 2 = "EDIBLE FASTENERS"**

**Answer = "CHOCOLATE BUTTONS"**

Julia took over for part two, and started with general knowledge, followed by Simon kindly operating the laptop and projector as sample exam questions under the new RSGB syllabus Licence was displayed. This consisted of both written text questions and some picture questions, all of which had a multiple choice answer.

Total scores per team were verified and read out in ascending order with the winning team captain being Chris M0KTT. A box of Chocolate Éclairs as the prize was handed over for the team to share.

Thanks, Julia G0IUY

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## **TRAINING**

In November at the club, two students both of whom are club members, one of which was on the Advanced level under the old RSGB syllabus on the Bath Distance Learning Course, and the other an internal member who was studying the Intermediate, had to re-sit their relevant exam. We marked the Intermediate paper and were able to give the student his indicative pass result at that time. He has now obtained a 2E0 call sign.

The Advanced paperwork was sealed up and returned to the RSGB who mark the papers, so there was a delay before that student received his results in the post. The club can now concentrate on the new syllabus for each level that the RSGB introduced and took effect from September 2019. We have a total of 8 students signed up to do the new Foundation level which starts on January 17th. Due to the sudden high demand prior to Christmas the practical sessions will be extended by one meeting so it is planned for the examination to take place mid-May.

A new PowerPoint Presentation to include digital modes etc; has been put together for the Foundation level, but will be an ongoing operation, as the RSGB and tutors forum keep including new ideas/material. The other level PowerPoint Presentation's will be finalised as soon as time permits and we apologise to the Full licence students for the delay in their course start. An interim PowerPoint Presentation will be completed to cover digital modes from Foundation right through Intermediate to Full under the new syllabus, as most of you were studying under the old and will need to be kept up to speed. If you have any queries please contact me so I can forward them on to the training team.

Thanks, Julia G0IUY, HDARC exam secretary



## ***Horndean & District A.R.C Information.***



**Club Call signs**    ***G4FBS (Held by MØKTT); G6RST (Held by G4WQZ)***

**Club Website**        **<http://www.hdarc.co.uk>**  
*(Maintained by Neil 2E0LNX )*

**Club Groups.io site** *Administrator is Stuart GØFYX*

**Club Facebook Page**    **<https://www.facebook.com/hdarc1975/>**

**Club Twitter Account**        **@HorndeanARC**

**Club Meetings**        *Held at Deverell Hall, 84 London Rd, Purbrook,  
Waterlooville, Hants. PO7 5JU, on the 1st and  
3rd Friday of each month. Commencing at 1900.*

**Club Nets**                ***All times are local and frequencies plus/minus QRM.***

**Sunday**                    *0900 CW until about 0930 then SSB on 1950 kHz.  
Net controller:- Stuart GØFYX*

*2000 FM 433.450 MHz  
Net controller:- John G4WQZ*

**Monday**                    *1930 SSB 1950kHz  
Net controller:- Stuart GØFYX*

**Wednesday**                *1930 FM 145.375 MHz  
Net controller:- John G4WQZ*

### **Club Membership**

***Joining fee £2 . Annual fee £26. Those aged 10-18 pay half this rate, and under 10's have free junior membership. For Europe and rest of the World fees please contact the Membership Secretary. All annual fees payable on November 1st. If fees not paid by the following January 31st, membership is ended.***



### News of club members

Welcome back to Adrian GØWEJ from Denmead, who has returned to the area and now re-joined the club.

Club subs for 2019-2020 are due. Still £26 for members, with those aged 10-18 years of age paying £13. If not paid by January 31st, I'm afraid you will no longer be a club member. Any queries, please contact our membership secretary.

### Diary

Friday February    7th Club night  
Friday February    21st Club night  
Friday March        6th Club night  
Friday March        20th Club night

### This 'n' that

The club project for 2019 attracted no entries by the closing date of September 6th. Therefore it was decided to carry this over to 2020, with the closing date of early September 2020, so you now have plenty of time to build this. A reminder that you need to make an RF Earth Tuner (Artificial Earth). If you need details, please contact Julia or Simon.

Need CW practice? - contact John MØHTE via [john.taylor177@ntlworld.com](mailto:john.taylor177@ntlworld.com)

RSGB Club Championship contests start in February and continue to July inclusive. Each month there is a CW, an SSB and a Datamodes contest. Please consider taking part for the club. February dates are: SSB on the 3rd, Data on the 12th, and CW on the 27th. March dates are: Data on the 2nd, CW on the 11th, and SSB on the 26th. Full rules and details at <https://www.rsgbcc.org/hf/rules/2020/r80mcc.shtml>

For those interested in DATAMODES, there is also a FT4 contest each month from February to November inclusive (except for August). Details at [https://www.rsgbcc.org/hf/rules/2020/r80m\\_ft4.shtml](https://www.rsgbcc.org/hf/rules/2020/r80m_ft4.shtml)

All amateurs are required to **revalidate** their licence with Ofcom at least every five years. If it has been a while since you did that, go to [ofcom.org.uk/manage-your-licence](https://ofcom.org.uk/manage-your-licence) or email [spectrum.licensing@ofcom.org.uk](mailto:spectrum.licensing@ofcom.org.uk). The process doesn't take very long.

Check out the HDARC nets. Details on the Information page in each journal.

Also there is a lot of radio equipment for sale on the club website [www.hdarc.co.uk](http://www.hdarc.co.uk) .. Click on the FOR SALE tab





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