

Horndean & District Amateur Radio Club Journal

Volume 5

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Communication badge training for the cubs

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 :- Ralph Heslop....landscape@sky.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 : 1st May 2020

Editorial



Hi Everyone

Welcome to my first journal as the new editor, firstly I am sorry to see Mike go and wish him all the best for the future.

The weather must be getting better soon surely then we will all feel better, but until then have a think and jot a few thoughts down for the next journal

Thanks to all those who contributed to my first journal

Ralph 2E0HES
HDARC Journal Editor

HDARC 45th ANNIVERSARY 2020

As many of you know the HDARC will be celebrating its 45th Anniversary this year, Wow!!

The committee put some ideas together as a way to celebrate and discussed them with the membership. Ideas consisted of a coach trip, dinner at restaurant, or a BBQ.

The idea of organising a family day out seemed to be the most popular option so it was mentioned again at the AGM in October that I was looking at a family day out at Amberley Museum and to see if the radio shack which is operated by the Worthing club could be opened for some members to operate using the special NOV call sign to that club. This would however, be dependent on which day/date we book and if the key holders are available. If we are given the privilege to partake then you have to take your licence along to provide evidence of your own call sign.

Once we have agreed on a date for the visit the radio club will be notified by the museum following which I will hopefully be sent an email with good news.

I have made enquiries and received a booking form from the museum which needs to be completed and returned to them by the end of March 2020. This means I will need to go through members suggested dates and formulate the best option choice including the date so I require you all to look through the list of dates and choices on offer and email me your suggestion/s no later than the second meeting in March please. I am happy if you want to choose all and not worried. The Museum have so far pencilled our group in for August time as a ball park month, but this is flexible depending on you the members wanting to support one of the anniversary weekend dates of activities options.

THESE ARE:

11th/12th July =Railway Gala Weekend

19th July = Classic Car Show

9th August = Communications Day with Commercial Vehicles

12th/13th September = Miniature Steam weekend.

A Group booking discount is available with groups of 10+ paying guests.

There are three options available but having looked through them, I think the following would be most suitable for our group as it is an anniversary day out.

This option includes discounted entry + a 45minute talk on museums history + a hot drink and cake.

COST per person is

£20 = Adults

£18 = Over 60

£12 = 4-16yrs

Registered Carers = FREE

There is a large restaurant on site for those who want a cooked lunch or light snack, and plenty of picnic areas are available if you want to take your own food and drink. The HDARC is not providing a coach or mini bus so it will be up to you to arrange your own transport or maybe car share, we will all meet up in the car park outside

Getting to know you



Stuart G0FYX age 71, Club Secretary

At what age did you get into radio and what got your attention?

18. Visited an exhibition in London where they had a demo radio station. Got a Heathkit Mohican Communications Receiver soon after. Was a SWL 1966-1970. Took it up again in 1985 and passed RAE/Morse in 1986.

What is your favourite part of the hobby?

Dxing, contesting, award chasing.

What set up do you have at home?

HF Yaesu FT1000MP. VHF TR751E. Antennas: HF G5RV and VHF Collinear.

If you could have any radio which one would it be?

Yaesu FT5000MP.

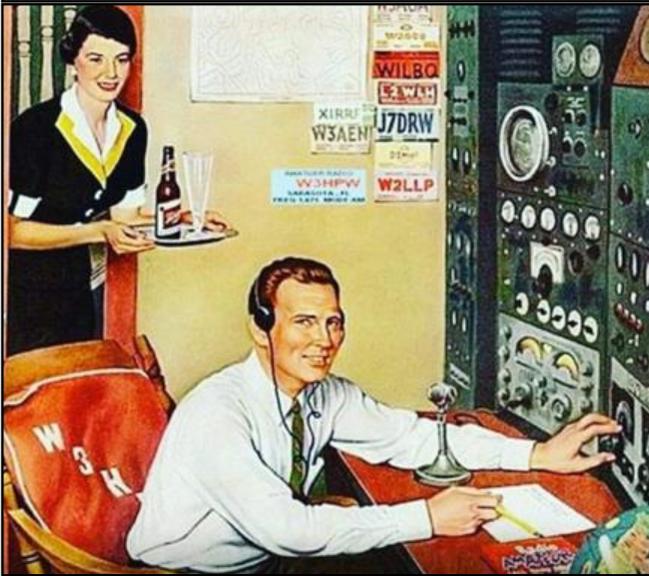
Where do you see the hobby going in the next 5 years?

More digital mode operating, but otherwise much the same.

Stuart thank you

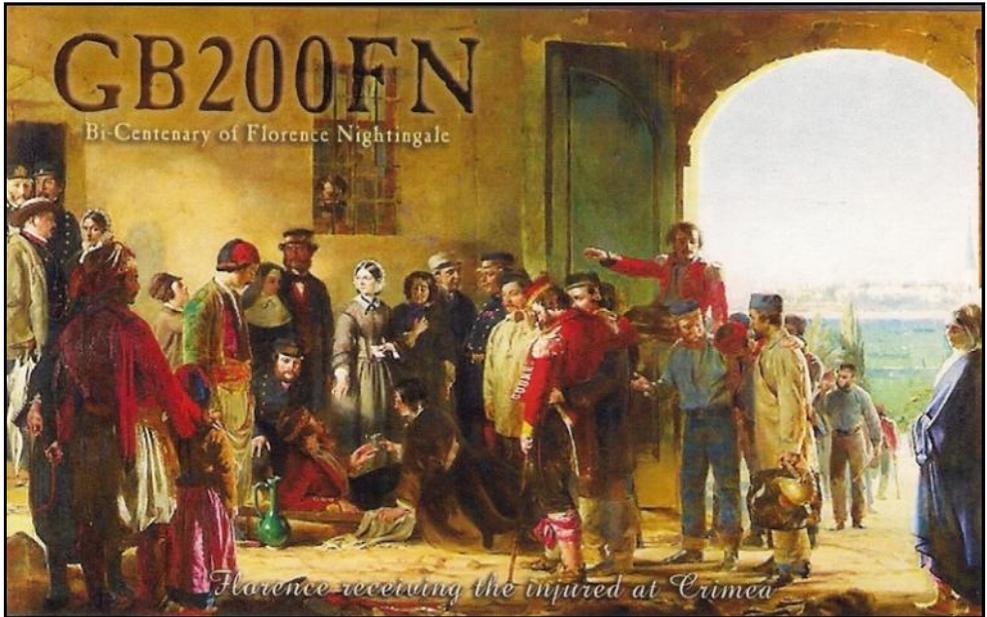
Nuggets from the net

I bet she wants to go to her mother's again



@PEANUTSSPECIALS





Florence Nightingale was born in Florence, Italy on 12th May 1820. Her family home was Embley Park, Wellow, Hampshire from 1825 until the time of her death in 1910.

Nightingale is remembered as “The Lady with the Lamp”, who tenderly nursed the soldiers, and is the heroine of the Crimean War (1854-6). She is recognised as the major founder of the modern profession of nursing. She started the first nurse training school in the world, after which she carried out pioneering statistical work on the high death rates of the war. This work won her election to the Royal Statistical Society, the first woman to be so honoured. She went on to do considerable work towards hospital reform and the expansion of quality health care services to the poor. Her remarkable achievements have made her one of the greatest and most famous Victorians.

Florence is buried in St Margaret’s Church, Wellow, and for this special bicentenary year the annual commemoration service will take place with the Bishop of Southampton as guest preacher. A similar service will take place in Westminster Abbey on 12th May, the actual bicentenary, and also International Nurses Day. Thank you to John MØXIG for permission to copy his QSL card and text. Images courtesy of the National Portrait Gallery. John will be activating the callsign at various times in 2020. Next session is March 1st-28th.

GØFYX

Cubs Badge Communication

Daniel 2E0WXC is one of the HDARC's youngest members who obtained an Intermediate licence in November 2019.

He attends a local Secondary School and has, since becoming a member, been a keen and enthusiastic participant in club special event stations and activities. When the club ran the museums on air from Fort Nelson in 2019 Daniel was there from day one helping to erect antennas etc; and speaking to members of the public. The club had a Morse display set up inside the foyer of the museum so visitors of all ages could have a go on the key, Daniel interacted very well with the younger generation when he was available.



This is not surprising as he is involved with many after school activities and helping charity groups. Daniel asked Simon and myself in November if we would help him and his cubs group to obtain their communications badges, so after a get together with Chris M0KTT (the club's station manager), Stuart G0FYX (club secretary), Ralph 2E0HES (club member who is now the new Journal Editor), myself G0IUUY and Simon G0IEY, Daniel was able to agree a suitable date and time with his Cub Group's Leader Dave.



The event took place on Monday 10th February from 18.15hrs to approx 19.45hrs within the foyer area of the Sports Hall set within Crookhorn School, Waterlooville. There were a total of 23 cubs (girls and boys), Daniel organised two tables so we could set up a simple 2mtr station on one and on the other a Morse Display using a Hi Mound key and oscillator so the cubs could have a go sending Morse.

Daniel brought out groups of 6-7 cubs in 20 minute intervals, enabling Stuart and Chris to take 3 cubs for the radio link with Ralph who was operating from his car outside, and the remaining three or four cubs to sit with Simon and I to do the Morse. They wrote their first names on a sheet of paper vertically then used the Morse sheet to write the dots and dashes alongside each character. The very enthusiastic cubs chose to write their surname and age as well which enabled them to send numbers too. A few of the cubs I spoke to said they had done Morse using a light but found the key much more interesting.

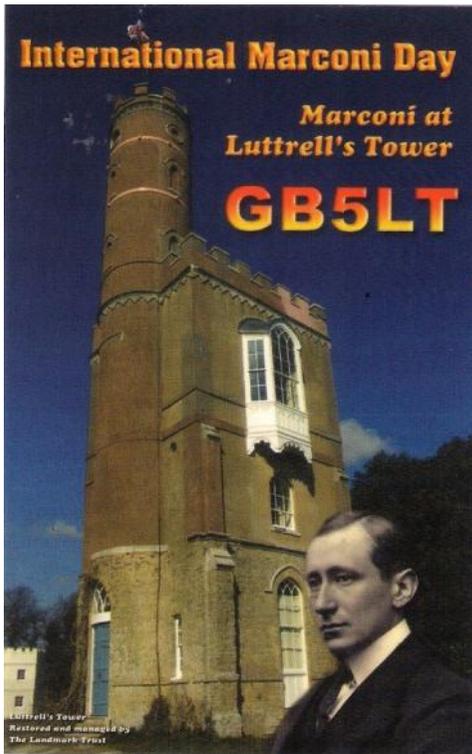
Once the groups had completed both the radio and Morse sections, I gave each of them a signed and dated certificate with the club logos to include their name and printed wording on certificate which read "they had successfully passed a message using Amateur Radio as an activity", the RSGB had sent us some peel off stickers for clothing and leaflets about amateur radio that shows how you can build a simple radio. When the event finished the HDARC were thanked by the cubs for giving up their time to allow them all to apply for their communication badge. Some of the parents came across whilst we cleared away to personally thank us too which was very nice.



The cubs were very well behaved at all times, but importantly were very keen and seem to have enjoyed it. The HDARC thank Daniel and Dave his team leader for allowing us to help with the activity in such a nice environment and we look forward in helping with the next event.

A couple of photos included with this article show Stuart and Chris with Daniel and a group of cubs on the 2mtr radio. The other photo shows Daniel with a group who were sat at the Morse table. All photos taken on this occasion have been granted permission so we could include as part of the article for club journal and RadCom.

Julia
GOIUY



The story behind the callsign - GB5LT

The callsign GB5LT has been used since 2006, to celebrate and commemorate International Marconi Day in April each year and operated by the Waterside New Forest Radio Club. I first made contact with the group in 2009, and the QSL card is for another contact I made with GB5LT in 2019.

Looking for a 'place in the country', Guglielmo Marconi's Irish wife, Beatrice, found Eglehurst, which included Luttrell's Tower, at Calshot in the parish of Fawley, Hampshire. Eglehurst was let to the family in

1911, and Marconi used the top room of the tower as a laboratory. A stone plaque, affixed to the base of the tower, bears the following inscription: "Luttrell's tower built 1730. Here Marconi concluded his wireless experiments during the great war of 1914-1918." In 1912, he and his family were invited by the White Star line to be their guests on the maiden voyage of the Titanic. Fortunately, Marconi left 3 days earlier on another ship, and the rest of the family were delayed by his son Giulio's sudden illness. Degna, his eldest daughter, recalled how she and her mother climbed the tower on the morning of April 10th, to watch the Titanic sail by. The tragedy of the sinking of the 'unsinkable' liner had thus nearly destroyed the family, but Marconi's radios did save many lives subsequently. His youngest daughter, Giola, was christened at Fawley church in 1916, and the family left Eglehurst for Italy the same year. Thanks to The Waterside club for the text copied from their QSL card.

Stuart GØFYX

The G5RV Mythology

By Robert Brown, M0RZF

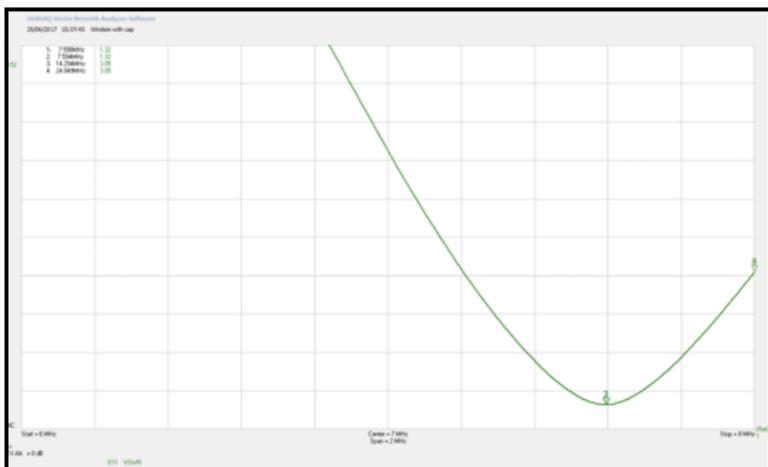
As mentioned many times at the club, I have no respect for this antenna design! Louis Varney G5RV didn't invent it, only published a magazine article. Same situation as the "Windom" which wasn't invented by Loren Windom! Immediately we bust 3 myths -

A G5RV is an all band antenna. **No, it doesn't give a 50Ω match on any band. Actually a no-band antenna in SWR terms**

The balanced line is some magic length. **No, the balanced line was cut so G5RV could match his valve transmitter and fit his garden**

You don't need a balun. **No, you definitely need a choke (balun) !**

The only thing in its favour is that any piece of wire in the same location receives about the same signal. But "about" in my book is 3dB, or half the power. Do you want to lose half your signal? I measured two of the club's G5RV antennas.



Some internal tuners of modern radios cannot match above 3:1. So an external tuner is needed at greater expense and adding extra losses.

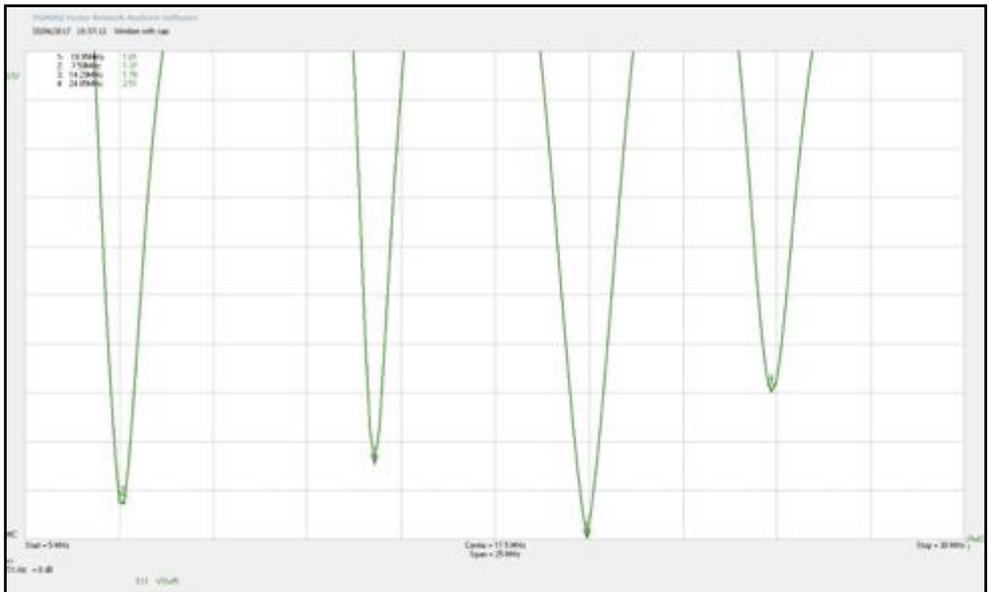
Other readings are:

3.5:1 at 7.1MHz, >4:1 at the bottom of 40m

1.8:1 at 14.3MHz covering the top end of 20m

1.1:1 at 19.9MHz, not covering any band

2.5:1 at 24.8MHz, covering 12m



The full band plot is above. One of the G5RV's had very lossy coax, which makes the SWR look lower. This is not good practice, especially if the coax is laying on the ground.

Few G5RV's sold commercially have a coaxial choke (balun). So common mode current flows on the feed line, giving "RF in the shack" or noisy reception. Probably the G5RV's reputation for picking up a lot of signal is from the added noise picked up off the coax.

Having lossy coax or no-balun makes it look like the antenna has a good SWR and pulls in a lot of signal and noise, both factors can confuse beginners and be exploited by antenna manufacturers to cut costs. Have I compared a G5RV and done extensive work to back up my words? I measured 2 G5RV's and found similarly bad SWR results. The design has been worked over by lots of people, notably L.E. Cebik, and Brian Austin (G0GSF/ZS6BKW) who published several articles in RadCom. The G5RV can be improved with these options -

Use the G0GSF design. It's a bit shorter, and gives a resonant match on some bands.

Make your own. A lot of commercial G5RV's use thin 300ohm line which has high resistive losses, and is affected by rain water.

Fit a high impedance ferrite choke where the twin meets the coax.

But why bother with this obsolete design? There are so many better designs available.

VOLK's Electric Railway

Volk, (pictured right) was born in 1851 in Brighton. He was forever experimenting with electricity, telegraphy and telephony. His growing prowess as an inventor and engineer, and the fact that he was the first person in Brighton to equip his house with electric light, led to him being awarded the contract for providing the famous Royal Pavilion with electric incandescent lighting. Volk's had many projects, and these included the clock tower ball. In 1887 he provided an hydraulically operated ball for the top of the clock tower that rose up a mast on the hour, every hour. When it got to the top it would drop to the bottom with a great clang. Unfortunately, it proved very unpopular with local residents, because of the noise. But what he is particularly remembered for, is the Electric Railway. It was the first public electric railway in the world.



At noon on August 4th, 1883 Magnus presented the people of Brighton with his latest creation - an electric railway operating over a quarter of a mile of 2ft gauge line

extending from a site on the seashore opposite the Aquarium to the Chain Pier. Power was provided by a 2hp Otto gas engine driving a Siemens D5 50 volt DC generator.

The small electric car was fitted with a 1½hp motor giving a top speed of about 6mph.

Although the line would run along the seashore it still required a lot of timber trestles to bridge gaps in the shingle, and severe gradients down and up to allow the cars to pass under the Chain Pier. The Railway was a great success and despite a set-back in objections by the Council to his original request for an extension westwards, he succeeded in getting permission to extend eastwards from the Aquarium to the Banjo Groyne.

In 1896, Magnus proposed extending his Volk's Electric Railway to Rottingdean (just East of Brighton). The railway actually took passengers further out to sea, some 50-100 yards offshore, operating on stilts. It was nicknamed the Daddy Longlegs at a fairly early stage, because of its rather ridiculous appearance. The track bed consisted of two separate 2ft 8½" gauge tracks with their respective outer rails 18ft apart. Although the Daddy Longlegs was very popular, due to a severe storm, and more planning restrictions by the Council, this part of the Railway closed in 1901.

The remainder of the Railway underwent many changes over the years in respect of track length and facilities, and rolling stock of cars was gradually built-up. Despite a few problems, it says a lot for Magnus's fortitude and engineering that this service operated right up until 1940 when the threat of invasion closed the railway for the duration. It re-opened on the 15th May 1948. From 1962 cars started to appear in a new brown and yellow livery with VR and the Brighton crest applied to the sides.

Magnus Volk died in Brighton on 20 May 1937, and is buried at St Wulfran's churchyard in Ovingdean, near Brighton.

Today the railway can carry up to eighty passengers along the beach for one and a quarter miles, running from the aquarium to Black Rock. The railway only has three stops, The Aquarium Station, Peter Pan's play ground (half way along Madeira Drive) and Black Rock Station which is only five minutes walk from Brighton Marina. Fares and train times can be found at a link on the website below.

For more information about the railway have a look at

<https://volksrailway.org.uk/>

where you will find out the full history of a fascinating man and his unique electric railway.

Stuart GØFYX

RSGB NEW SYLLABUS 2019

The HDARC has a total of 8 students on the new Foundation 2019 syllabus. The course commenced on Friday 17th Jan which consists of PowerPoint and interaction discussions between course tutor and student. Homework is being sent in between course sessions and with no apparent learning difficulties of the course material students are already $\frac{3}{4}$ of the way through the theory and PowerPoint. Once the practical sessions commence it should take a total of three meetings to complete and then examination.

A photo of the students listening/interacting to the PowerPoint is included. The HDARC wish all students luck when sitting examination.

Julia G0IUY Hon. Exam Sec HDARC



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 the club, Adrian GØWEJ from Denmead, Milan MØOKQ from Carshalton, Surrey and Mike Hillary M5KZI from Purbrook.

Congratulations to Ray G3KOJ and Mick G3LIK who both contacted the VP8PJ South Orkney Islands DX-pedition station. On CW of course. I did try but was unsuccessful. Doubt if I will be around when the next trip to those remote, cold wet and windy islands takes place.

There are lots of items FOR SALE. Please see the FOR SALE tab on the club website. Items include books and a variety of equipment. Some of it is free, just suggesting a donation to club funds.

Diary

Friday April 3rd Club night/Foundation Licence training

Friday April 17th Club night/Foundation Licence training

Friday May 1st Club night

Friday May 15th Club night

This 'n' that

The RSGB Club Championship series of contests is underway. April dates are CW on the 6th, SSB on the 15th, and Data on the 23rd. May dates are SSB on the 4th, Data on the 13th, and CW on the 28th.

Full details at <https://www.rsgbcc.org/hf/rules/2020/r80mcc.shtml>

For those interested in Data, specifically FT4, there is a monthly contest. Dates are April 27th and May 18th.

Full details at https://www.rsgbcc.org/hf/rules/2020/r80m_ft4.shtml

Need CW practice? - contact John MØHTE via john.taylor177@ntlworld.com

As 2019 winner of the HDARC trophy, John MØHTE chose the phrase for 2020. It is **HDARC FOUNDED MCMLXXV ENCOURAGES MEMBERS IN THE PROFICIENT USE OF TELEGRAPHY** . Qualifying period is October 1st 2019 to September 30th 2020. Work different stations, the last letter of whose callsign makes up the phrase . Closing date for log book extract entries to Stuart GØFYX is October 2nd 2020.

Car parking at Deverell Hall can sometimes be a problem. In addition to the parking at the rear of the Hall, there are a few places by the front entrance, or we have permission to park over the road at the building supplies premises.



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