



## Chelmsford Amateur Radio Society Newsletter

**January Meeting**  
Tue 5-Jan-2021, 7:30pm  
Online by Zoom

**Data Networks & IoT**  
By Phil Pearson G0UIB

For our first talk of the New Year, we welcome Phil Pearson G0UIB who will tell us all about 'Data Networks using Internet of Things (IoT) Devices'. This is all about using cheap devices designed to work with low power sensors etc.

Imagine something you leave in a field and it tells you the soil moisture once a day, so you want it to work on very low power batteries/solar.

To make a digital network which can connect several nodes together, the sensor nodes send data over multiple hops from one end to the other, all cheap to build and low power.

If anyone wants to know more – listen to this talk in January! – online by Zoom

### Zoom:

- Quick Link: <https://us02web.zoom.us/j/81028819195?pwd=cTVjSTNjbmREcTE4S3o5dnV3TXBVZz09>
- Meeting ID: 810 2881 9195
- Passcode: 348573
- Admin: John MOJOC (full clickable links also in newsletter/email)



**Reminder - CARS annual subs are now overdue!!**  
**- at the special £5 'Covid rate' for 2021**

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## Club Diary

Tue 5-Jan-2021	Talk: Data Networks using IoT Devices - Phil Pearson G0UIB	Online by Zoom
Tue 2-Feb-2021	Talk: Forewarned is Forearmed – Nigel Newman M0ICH	Online by Zoom
Tue 2-Mar-2021	Talk: Behind the Scenes – John O’Connell M0JOC	Online by Zoom

## Club Nets

CARS meets for talks/events on the first Tuesday of the month. The subsequent Tuesdays have club radio nets as follows below and dates listed on our calendar at [www.g0mwt.org.uk/main/events/categories/net/](http://www.g0mwt.org.uk/main/events/categories/net/) :-

- 2<sup>nd</sup> Tuesday in the Month – VHF**  
 The CARS VHF FM Net uses GB3DA from Danbury starting at 8pm (local).  
 GB3DA is 145.125MHz Input and 145.725MHz Output - and CTCSS-only (110.9Hz), 2min timeout  
 If for any reason GB3DA is not available then 145.375 Simplex will be used. Vertical aerials are best for this
- 3<sup>rd</sup> Tuesday in the Month - UHF**  
 The CARS UHF FM Net uses GB3ER from Danbury and starting at 8pm (local).  
 GB3ER is 434.675MHz Input and 433.075MHz Output - and is CTCSS-only  
 Vertical aerials are best.
- 4<sup>th</sup> Tuesday in the Month - HF**  
 The CARS 80m Net on "3756kHz" Night, SSB and starting at 8pm (local).  
 Horizontal aerials are best. The idea is to enable distant CARS Members to join the Net.
- 5<sup>th</sup> Tuesday in the Month (when there is one!) - MF**  
 This is the CARS Top Band Net on 1947/1950 kHz +/-QRM, LSB and starting at 8pm (local).  
 Horizontal aerials are usually used for this Net. A reminder - limit your power to a max of 30 Watts, please.

## Training & Morse Classes

If you are interested in the new RSGB online exam or other opportunities, please contact **John O’Connell M0JOC** our training coordinator and Exam Secretary

John can be contacted via [training2020@g0mwt.org.uk](mailto:training2020@g0mwt.org.uk) or 07868-004380

Note: RSGB now have all three levels of exams available via their online exam booking system. It also has new Foundation training videos online at: <http://rsgb.org/foundation-practicals/>

The Bath-Based Distance Learning (BBDL) team are restarting their courses. The first new BBDL course will be for the Intermediate level, running from November 2020 to March 2021. To register your interest, contact the Team Leader, Steve Hartley, G0FUW, via email to [g0fuw@tiscali.co.uk](mailto:g0fuw@tiscali.co.uk).

More info and other updates are at: [www.g0mwt.org.uk/training](http://www.g0mwt.org.uk/training)

Morse classes at Danbury are suspended – but do contact Andy G0IBN who has on-air practice sessions



Follow @TrainWithCARS



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## December Meeting: VHF Propagation

Our seasonal December meeting could not easily do mince pies online but we did have some other treats. Following the HF Propagation talk in January, we completed 2020 with VHF Propagation.

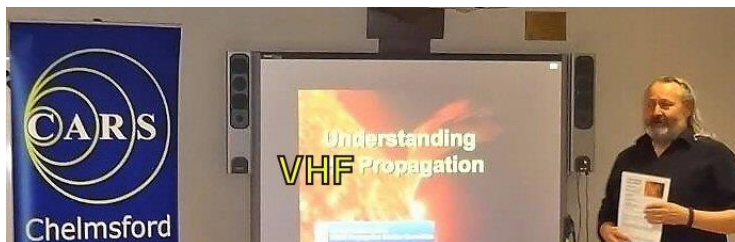
Chris G0IPU along with a video by RSGB Propagation Chairman Steve Nichols G0KYA

dispelled the myths that VHF is short range line of sight. From getting DXCC on 50MHz to 1000+km on 2m/70cm, (not forgetting contests, Sporadic-E, Moonbounce and deep space) DX is possible and really educational too!

There are numerous mechanisms that assist in this including refraction, tropospheric ducting, aircraft scatter, aurora, Sporadic-E and meteorscatter etc (even bouncing off the ISS!)

Recent news has had a number of VHF/UHF QSO distance records in excess of 1000s km so it really does happen in practice with good narrowband/multimode equipment.


**RSGB Guests:** We were also joined by our RSGB regional reps led by David De La Haye M0MBD and Dave Cutts M0TAZ who had info on recent topics inc Training, EMF exposure, reporting abuse and VDSL interference (and promised more sunspots for 2021 propagation!).



**Radio Propagation - VHF and higher  
(Without the Mathematics)**

Written by:  
**Dr John Worsnop G4BAO**  
RadCom "GHz bands" Columnist

Narrated by:  
**Steve Nichols G0KYA**  
Chairman, RSGB Propagation Studies Committee



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Our thanks to Chris G0IPU for hosting the VHF session. With a good online Zoom attendance it was a great opportunity to learn, ask questions or pass on **Seasons Greetings!**

The VHF video has now been released by the RSGB on YouTube - [Click to Watch](#)

### Useful VHF Propagation Links:-

- Mike Willis Tutorial: [www.mike-willis.com/Tutorial/propagation.html](http://www.mike-willis.com/Tutorial/propagation.html)
- Tropo: [DX Info Centre](#), [F5LEN Tropo Forecasts](#)
- Space Weather: [www.solarham.net](http://www.solarham.net), [www.swpc.noaa.gov](http://www.swpc.noaa.gov)
- VHF Realtime: [www.dxmaps.com](http://www.dxmaps.com), [www.on4kst.com](http://www.on4kst.com)
- Meteors: [stardate.org/nightsky/meteors](http://stardate.org/nightsky/meteors)
- EME skeds: [www.gm4jjj.co.uk](http://www.gm4jjj.co.uk)
- RSGB GB2RS: [Weekly Forecasts](#)
- RSGB PSC: [Propagation Topics](#)

**CARS QSL Card Collection**

We have started a collection of members' QSL card on the CARS web site.

Currently we have 36 cards from 28 different members, plus 11 cards from our special events stations.

The collection can be found here:

<http://www.g0mwt.org.uk/society/qslcards/qsl-cards.htm>

We would love to add your card to our collection. Also if you have received cards from CARS members or special event stations not already in the collection we would like to have those as well.

Please look through your QSL cards to see what you have,

Please send good quality photos / scans (preferably jpg format) to Paul G4PVM, [g4pvm@yahoo.com](mailto:g4pvm@yahoo.com)

Alternatively please send your card and as can scan it. Thanks for your help,

Paul G4PVM

**Silent Key - Peter Graves G0KSJ**

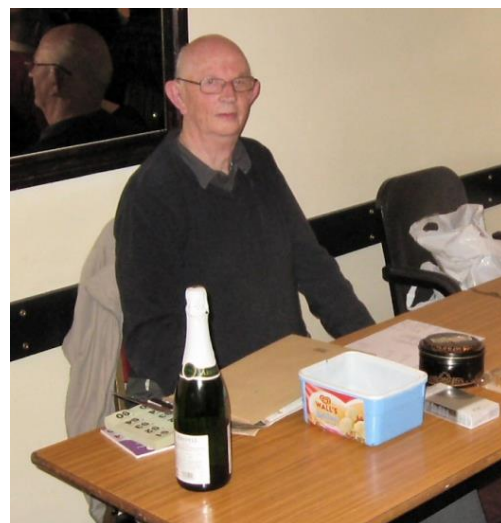
It is with great sadness that we report that Peter Graves G0KSJ passed away in Dec-2020.

Originally licensed as G1XFV, Peter joined CARS in November 1988 and soon upgraded to G0KSJ. He was a keen participant in NFD and DF events.

Dick Brocks G3WHR recalls that for Chelmsford NFD events he contributed to the improvement to logging, resulting from his introduction of the Superduper computer program.

Later on he was a long running volunteer for the famous CARS raffle until his final stint at the role in Oct-2012.

Peter was a recipient of the CARS 'Amateur of the Year' award - presented to him by Carl G3PEM at the October-2012 AGM

**Wanted: Volunteers**

Following the CARS AGM, we still have important **Vacancies to fill:-**

**PR/RadCom, Newsletter Editor, Equipment Manager, Event/Operating roles and other volunteers**

Please contact Colin G0TRM or Chair Elliott

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**Editor:** [editor@g0mwt.org.uk](mailto:editor@g0mwt.org.uk)

**Newsletter and Archive:** <http://www.g0mwt.org.uk/newsletter>

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