



Volume 5, Issue 1

# Mid Sussex Matters

January 2017



VHF/NFD Crew from approx 10 years ago. If you want to enter these competitions **we need more than JUST a couple of Operators and Loggers**

Inside this issue:	From the President's Corner	2	Past Times No.1	9 / 10	An Analysis of the HF Nets in 2016	12 / 13
	DXing on the 2m Band	3 / 8	From the Chairmum January 2017	11	Diary Dates MSARS Net Times Local Company Adverts	14 / 15



## Reminder

Please note that your subscription for the year 2017 is now due.

Costs are as follows:

£35 for 12 months (per person)

or

£60 for 12 months Family (more than one person at same address)

For full information contact our Membership Secretary or visit our Website at [www.msars.org.uk](http://www.msars.org.uk)

## **From the President's Corner**

Welcome to 2017 and let's see what MSARS can do to liven up the airways this year! Before discussing my ideas I must say that the Christmas Dinner was a great success and that it was wonderful to meet so many members all intent on having a good time. The big surprise for me was the presence of John, G0NOK a long time participant in our Sunday Morning net who incidentally logged more attendances during 2016 than any other visitor or any member of MSARS!

Returning to our own plans for 2017 I would like to think that future "On the air nights" were just that and that our HF rig will now be used on every possible occasion. This would give newer licensed members and those not familiar with HF conditions an opportunity to find out how to make a QSO, how to tune up the transceiver, and what to expect during today's poor HF conditions which are likely to remain with us for a year or so now until they eventually improve.

We have a wealth of knowledge among our members to pass on about these matters but this information can only be imparted if the questions are asked.

So, if you are keen to work HF (and VHF too when we get our antennas on the roof replaced) then ask another MSARS member who I am sure will be only too pleased to help you. Then sit down with them in front of the rig in the shack and work another amateur on 40 or 80. I guarantee that you'll enjoy the experience.

We should have specific frequencies on 40 and 80 on which we will be transmitting and once these are known to members they could work MSARS from home if they can't attend on a Friday night. This arrangement has worked for the 80 and 15m nets and could also work for contacts with Cyprus Hall.

We must have a transceiver monitoring the HY repeater in the shack at all times during every meeting so that absent members wishing to participate can be told on what frequencies MSARS are operating and thus become involved. Why I wonder are we not doing this already.

I believe that all of these matters need immediate attention if we are to function as a real Radio Club and hope that the new Committee will agree that we need to shake things up a bit and will implement the points I have outlined above with the Club's best interests in mind.

73, Ken G3WYN

## **DXing on the 2m Band**

Recently I had some very positive experiences on the 2 metre band on Dec 29<sup>th</sup> and 30<sup>th</sup> (2016) with contacting a number of European stations with much stronger signals than usual, and some very interesting experiences with repeaters which I'll outline below.

### **Tropospheric Propagation**

The reason for the good signals from Europe appears to be due to refraction (or "bending" of radio waves) from good propagation in the troposphere. The weather as many of you will have noticed was very foggy throughout these days. On the Thursday I noticed the fog didn't really clear at all. Apparently this is one of the signs to look out for, and makes it worth checking a forecast for the propagation on VHF (and perhaps use the weather forecast as a general guide).

There are different layers within the troposphere with different temperatures and pressures. When these layers overlay each other this can cause good propagation. In particular it appears that when there is a temperature inversion with one of these layers, the radio waves will refract from this layer, and effectively bend around the curvature of the earth, rather than the waves heading out to space as would occur in fairly normal conditions in the UK.

More information is available online, this is one of the articles on the RSGB:

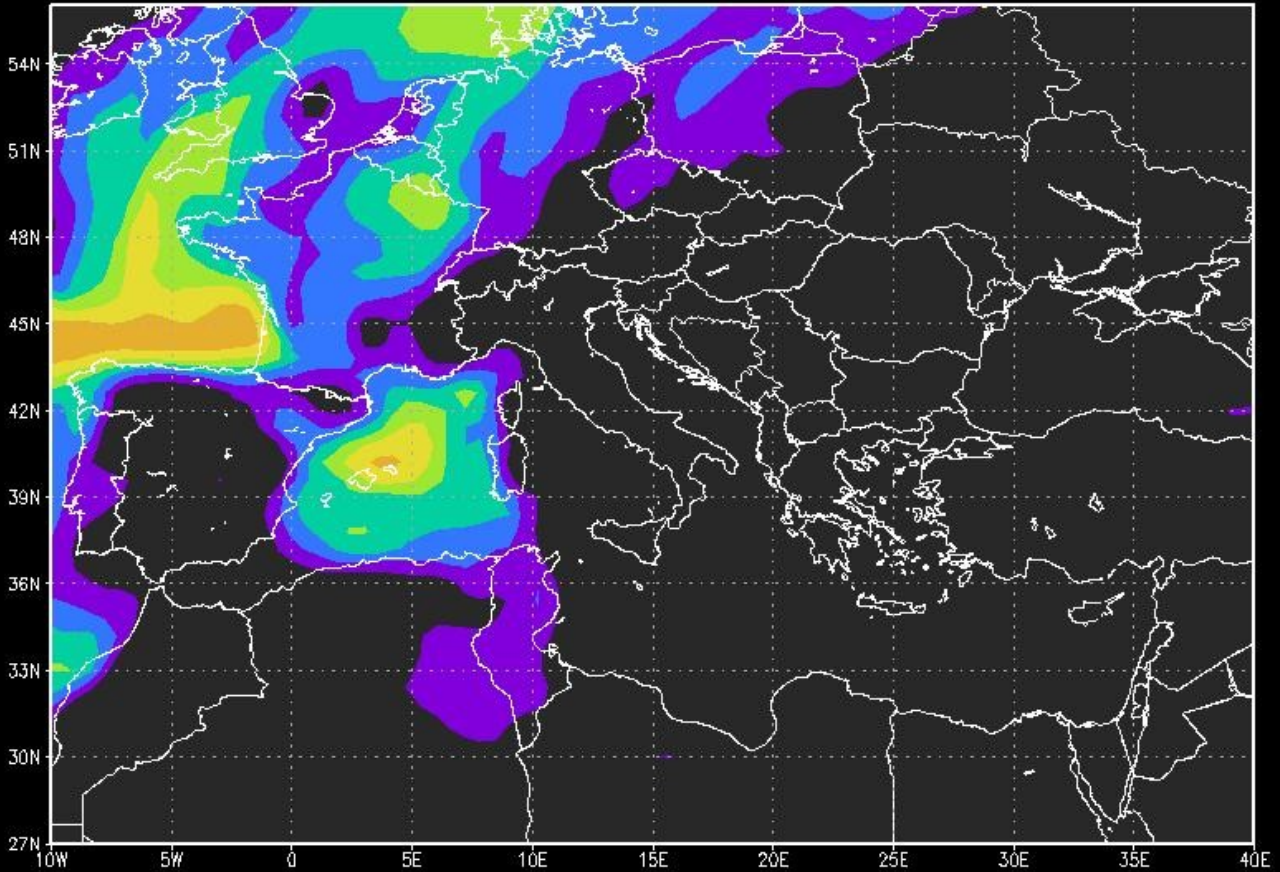
<http://rsgb.org/main/get-started-in-amateur-radio/operating-your-new-station/vhfuhf-propagation/>

I also enclose a couple of archive images of the tropospheric propagation during the 29<sup>th</sup> and 30<sup>th</sup> December (p.t.o. for these), where you can see the areas of very strong propagation in green and a few patches of intense in the slightly darker shade. The source of these 2 forecast images below is William Hepburn from his website : [http://www.dxinfocentre.com/tropo\\_eur.html](http://www.dxinfocentre.com/tropo_eur.html) whom on his website kindly mentions the archive images could be used for publication/website for non-commercial use. Unfortunately I couldn't locate one for Thursday evening, which would have been great to reference. More on that later. P.T.O.



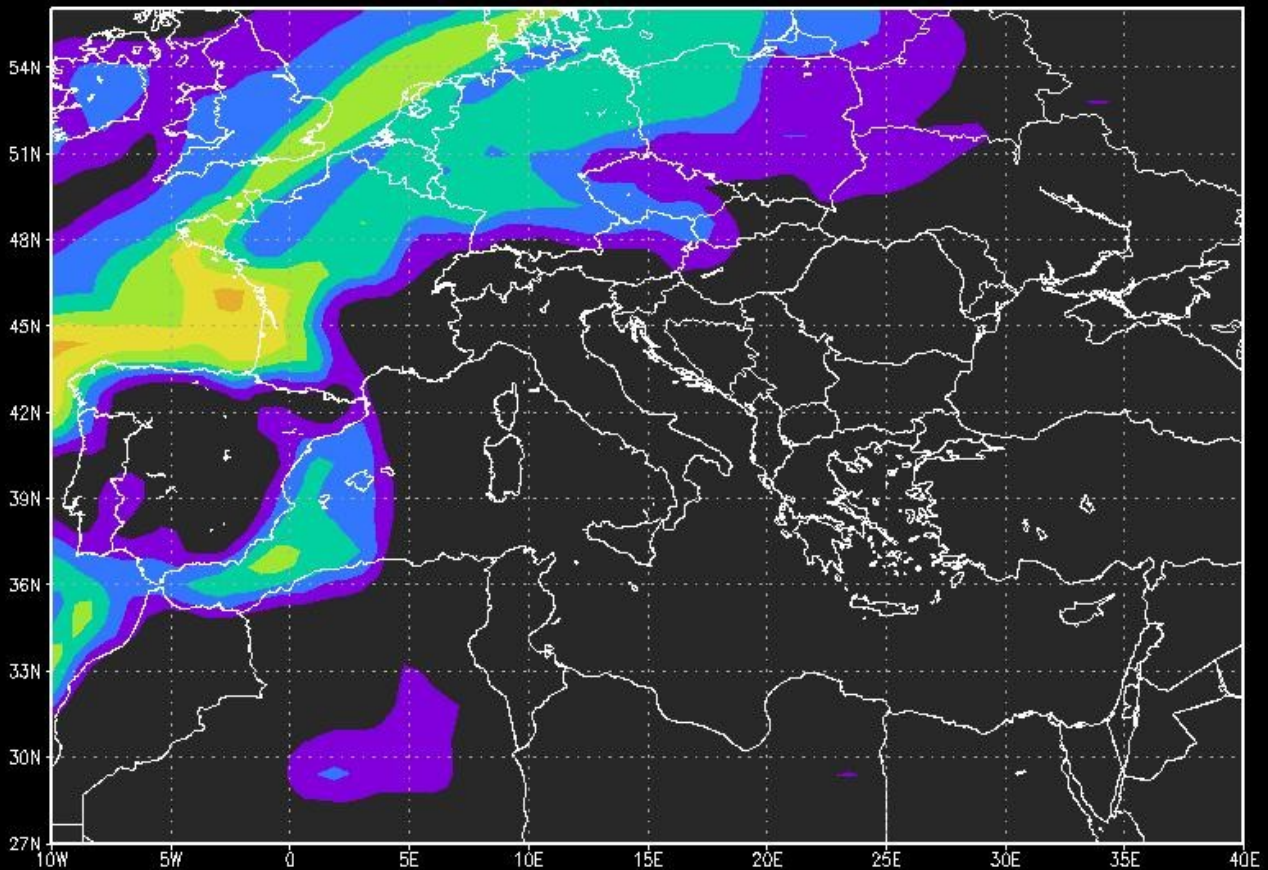
Hepburn Tropo Index Valid 0600 UTC Thu Dec 29 Europe

COPYRIGHT 2016 WILLIAM R HEPBURN [www.dxinfocentre.com](http://www.dxinfocentre.com)



Hepburn Tropo Index Valid 0600 UTC Fri Dec 30 Europe

COPYRIGHT 2016 WILLIAM R HEPBURN [www.dxinfocentre.com](http://www.dxinfocentre.com)



## **DXing on the 2m Band continued**

**Thursday 29<sup>th</sup> December 2016**

On the Thursday morning I made a few contacts on 2m SSB on my 5 Element Yagi. I was pleased to make a contact in Belgium on 2m for the first time, which I hadn't heard before under average propagation in the RSGB evening contests. The stations had very strong signals so things were looking very good in terms of propagation.

### **Christmas Cumulative RSGB Contest – Thursday 29<sup>th</sup> December**

The RSGB run a number of VHF contests after the Christmas Day and it's a good opportunity to use a 2m yagi to see who's out there and see how many contacts you can make, as well as what your best "DX" contact will be. On side note, I regularly take part in the 2M / 70cm SSB RSGB contests on Tuesday evenings; Chris G3YTU published a short article about those in the last newsletter.

I started this contest in the afternoon, and once again the signal strength was very good. The propagation was so good that I could hear a couple of French stations at a signal strength 8 on the meter, even if I turned the antenna away from the station to the East / West (for example for a station fairly centrally located in the South).

I contacted 4 French stations with varied signal reports, certainly stronger than I've seen on my setup in previous evening contests. 59, 57, 55 and 54. Other notable stations, Guernsey, Cerne Abbas, Isle of Wight.

### **Repeaters – More exciting contacts to make!**

After the contest, I had a quick listen to see if I could hear the GB3JB repeater which was on the border of Somerset I believe. I'd heard it at a signal strength 58 during the morning, but it had dropped down to signal 1 or 2, so things seemed to be closing down, so I thought.

G3YTU went into the shack and was monitoring GB3MH and I overheard a local station in the UK talking to a station in Belgium through it. I turned my handheld on and called in after a short while, to speak to one or two of the stations on there. Activity quietened down so I made a CQ call once QSOs were completed, with a station listening while I made some calls. I heard a station coming back with the callsign starting M7. The other UK station I was talking to also heard this and I proceeded to reply to the M7 station.

## **DXing on the 2m Band continued**

The station I made a QSO with was actually SM7YES in Sweden, which was 644miles from my own QTH! (with the distance between myself and the repeater being under 10 miles). I opened up the CQ call to any other stations, such as other local stations who might wish to give the Swedish station a call. I think we lost SM7YES just as another station was making a contact. I proceeded to call CQ and I managed the calls coming back to the repeater by handing over to each station in turn, and then stations handing back to me. After a number of UK stations came back to me for a QSO, I then had some more European stations coming back to my CQ calls. Where the European stations were willing to standby for a moment after I made a basic contact, I then handed over to any local UK stations wishing to give them a call, after which, they handed back to me and so forth.

I made contact with 4 Belgian stations and 2 French. Stations across the southern part of the UK were coming back to me as well, from Nottinghamshire, Kent, South Devon, West Somerset, Berkshire.

One good moment on the repeater was that a Belgian station said that his daughter was also an amateur and had been listening in another room on a radio without CTCSS, but would like to use his radio to make a contact. I made the contact and she was happy to standby while some other UK stations had the opportunity to have QSO with her as well. To my surprise, one of these stations was in South Wales, talking through GB3MH into Belgium – brilliant

### **Repeaters – Carrier-only operated repeater in Denmark!**

During the QSO with SM7YES, I briefly had to standby while he explained to another amateur on a Danish repeater that he was talking to a station in the UK, and that their repeater isn't using a CTCSS tone, and hence when he's keying up the mic, it's opening theirs too.

Certainly interesting to hear about that one. Ideally I suppose they would all use CTCSS to avoid such occurrences.

I would recommend looking at the SM7YES station on QRZ.com and taking a look at his video on YouTube where his huge radio tower was constructed. It doesn't look like it's something to be attempted by anyone who isn't keen on heights!

## DXing on the 2m Band continued

30<sup>th</sup> December 2016

As you'll see from the propagation charts, Friday morning was also very good, where I worked a station in Germany and one in Denmark, which I suppose you could call DX! At least, for 2m band anyway. The barometer reading on that morning was very high pressure, also reflecting the weather and conditions.

On that note, perhaps you'll join me in keeping a look out for the conditions for 2m for some more interesting contacts to come.

### EQSL Cards

I've recently signed up on the EQSL website and here is one of the cards which came back to confirm the contact made with ON3LTE via GB3MH, with an extract below from the QSL log details. (Note: I have obscured the address in the image below in the grey area to respect others privacy).



The image shows an EQSL card for station ON3LTE. The card features a logo for CUSHCRAFT in the top left corner and a photograph of a Yagi antenna against a blue sky with clouds. The call sign 'ON3LTE' is prominently displayed in large, bold, black letters. Below the call sign, there is a grey rectangular area where the station's address has been obscured for privacy. To the right of this area, the text 'ITU:27 CQ:14' and 'tx icom 9100' is visible. Below the photograph, the card contains the following text: 'To: M6YTU Confirming 2-way TR FM QSO', 'Date: December 29, 2016 Time: 18:17 UTC', 'Band: 2m UR Sigs: 59', and 'thans for the nice contact'. At the bottom of the card, there is a table with the following data:

<a href="#">ON3LTE</a>	29Dec2016 18:17	2m FM (TR)	BELGIUM	59 thans for the nice contact		
------------------------	--------------------	------------	---------	----------------------------------	--	--

<a href="#">EDIT</a>	<a href="#">ON3LTE</a>	29Dec2016 18:17	2m FM (TR)	59	Via GB3MH repeater (tx freq 145.625mhz , rx freq 145.025mhz), Vertical Polarisation. Many thanks for the contact.	
----------------------	------------------------	--------------------	------------	----	---	--

## **DXing on the 2m Band continued**

### **How to become involved and other information**

- Previous newsletter article by G3YTU about RSGB 6m/2m/70cm evening contests, and <http://www.rsgbcc.org/vhf/> This is when the band becomes alive, as it's often very quiet indeed on most other occasions. If you take part, type in your contacts onto the RSGB website with your callsign and QTH information, and select your club as Mid Sussex ARS. Before joining a contest, check if the contest you are entering requires individual RSGB membership.
- For using SSB you'll need to use a Yagi in horizontal polarisation and a transceiver which has an SSB mode. If you don't have one at your home QTH, and you're interested in mobile (static) operation from a height, perhaps consider trying the Tuesday UKAC events on a summers evening while it's still light for sometime (I doubt its recommended in these cold and dark nights!).
- If fitting a Yagi with rotating capability isn't for you, there is a new regular RSGB FM contest which starts before the SSB contests, and for this could you use a single vertical antenna with a transceiver capable of only FM. Success would presumably come with very good propagation (other stations might also use vertically polarised Yagis, and may hear you with their directional gain). I'm fairly new to this contest which started on Tuesday, and I made one contact as I joined very late.

### **RSGB UKAC Contest Final Results for 2016**

The club is listed on these results based upon the logs I have submitted, with a check log only by G3YTU. I started fairly late in the year but it's fun to see how the scores come in for each evening, as you can build up multiplier points by contacting new and more distant maidenhead locator squares. I've given a very quick summary on the results, with the links to the RSGB.

Mid Sussex ARS Society -

Overall UKAC: 90 out of 112

432MHz UKAC: 65 out of 79

144MHz UKAC: 80 out of 105

50MHz UKAC: 76 out of 78 (Even with 1 QSO!)

My individual results and placing are shown further down the results page. I did fairly well in the 144Mhz with 93 out of 193 and fine on others. Amazingly, with 1 QSO on 50Mhz I was above last position, probably down to the distance of the contact.

73s, Aharon M6YTU



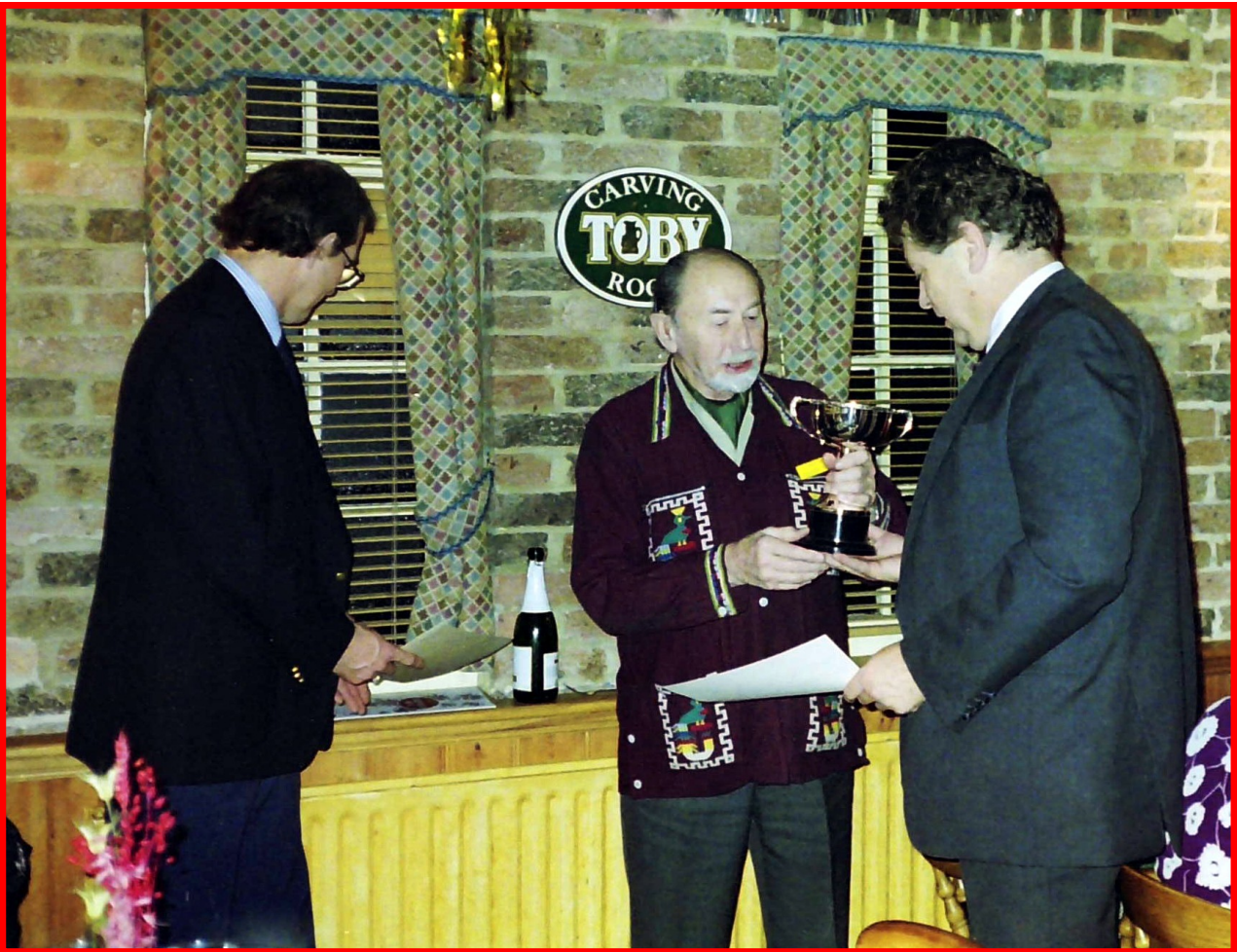
## Past Times No.1

These photo's show members of MSARS having a Christmas meal at 'The Sergison Arms' in Haywards Heath on the night of 16.12.94.

During the evening, our President Louis Varney G5RV awarded the G5RV cup to John Fuller G0OIO.

Chris Cook was our Chairman for 1994.





## From the Chairmum

January 2017

Surplus Equipment Sale 7th April  
Mills on the Air Weekend 13th and 14th May  
Burgess Hill Town Festival Open Evening 9th June??  
Burgess Hill Town Day 11th June  
VFH/NFD Contest Weekend 1st and 2nd July  
Haywards Heath Town Day 9th September  
Surplus Equipment Sale 3rd November

Above is a list of events that the committee think that the Society could participate in.

- If any Society member would like the club to participate in any other events this year please let a committee member know.
- Participation in these events depends on members volunteering the help to assist at the event.
- Please make a note of the dates in your diaries and if you wish to volunteer to assist at any of the events please let a committee member know as soon as possible.

However if you volunteer please ensure that you will be available for the event you have volunteered for.

If you have any talks that you would like us to hold please contact Sue Davis -

Programme Secretary via

[g6ypy@msars.org.uk](mailto:g6ypy@msars.org.uk)

73 Stella M6ZRJ

MSARS Chairmum

[chairwoman@msars.org.uk](mailto:chairwoman@msars.org.uk)



## An Analysis of the HF Nets in 2016

Once again I present my analysis of the Club's HF nets for the past year revealing as usual one or two surprises.

### **THE SUNDAY MORNING NET (from 8am clock time on 3.740Mhz.)**

A slight falloff in members calling in during the year with 13 MSARS members using 15 callsigns compared with 15 members the previous year. Of the 13 some appeared only once and there were one or two members who had previously participated obviously now preferring a warm bed than talking to their friends so early in the morning.

13 other stations called in during the year including a wonderful contribution from John Young G0NOK who made more appearances on the net than any MSARS member or other caller. John also delighted me by making an unannounced appearance at the MSARS Christmas Dinner and was able to meet many of the net users he had not previously eyeballed.

A total of 26 participants, 5 down on the previous year but Sean, EI7CV and I managed another 37 contacts despite circumstances beyond our control which kept us off the air on a few occasions. Our grand total so far now stands at 1782 and we have no intention of giving up yet!

If you can't hear us on 3.740 Mhz tune down a little, we may have to move to avoid the continental QRM but we will be there somewhere.

Remember this net is for you to talk to MSARS members no longer living in West Sussex but still wishing to keep in touch. Let's have a few more of you switching on a Sunday morning in future, you might enjoy it!

# AN ANALYSIS OF THE HF NETS IN 2016

## continued

### **THE WEEKDAY 15M NET (1330 clock time on 21.330Mhz. Mon-Friday).**

Again a slight reduction in members participating with 16 MSARS members calling in using 18 different callsigns compared to 19 the previous year. 18 other amateurs called in although the fall off in band conditions prevented regular contacts with our US and Canadian friends and once again contacts with Bob, N4XAT were mostly CW when SSB just failed to get through.

The 18 non members came from 14 countries and 4 Continents and included our regulars Bob N4XAT, David W1GN, and Bob VE3UUH, although contacts with North America were difficult and sporadic. There was DX out there though and Sasi VU3SNW from the South West coast of India proved to be the most distant followed by Brian, 9J2BO from Zambia who called us several times.

Another caller who deserves a mention was Theodore, LZ1TSD/QSP from Bulgaria using 1 watt to a dipole and still perfectly readable!

A grand total of 34 participants in this net, well down of the previous year where we had 50 but those that did take part enjoyed themselves. There was some DX to talk to during our Lunchtime nets after all and perhaps some MSARS members added to their country score whilst doing so.

One or two of our members also improved their antennas, one at least made his first CW contact during the net and that's just wonderful, it makes it all worthwhile to hear such enthusiasm.

I'd like to thank Russell, G7TMR who stepped in as net controller when circumstances prevented me from guaranteeing my presence every lunchtime but between us we kept the net alive and hope to do so in the future.

Thanks to all of you who joined in either of the HF nets, its how we keep in touch and make more friends on the way.

73 to all, Ken G3WYN.

## Diary Dates January 2017 and March 2017

27-Jan Friday Downstairs **Merv 2E0WVE Talk about Breakfast Machine**

03-Feb Friday Downstairs **Air Ambulance Talk**

10-Feb Friday Downstairs 'On Air Night'

17-Feb Friday Downstairs **Meet the Committee**

24-Feb Friday Downstairs **Video Night**

03-Mar Friday Downstairs 'On Air Night'

10-Mar Friday Downstairs **Dennis Conway MOYDC Talk Green Antennas**

17-Mar Friday Downstairs Radio Night and Table Top Sale

### Copy

I am hoping to go to print each month. For this I need copy from any one of you however small and it **may or may not be** radio related.

Request for copy around 6th—10th with copy to me nominally by the 15<sup>th</sup> of each month.

If I get no copy there will be no MSM, it is as simple as that.

73

Stella, Editor of MSM

### Mid Sussex ARS Net Times—all times local

Sunday	0800
3.740MHz <sup>+</sup> /.QRM	
Sunday	1100
145.350MHz	
Weekdays	1330
21.330MHz <sup>+</sup> /.QRM	
Tuesday (SCARF)	2030
3.725MHz <sup>+</sup> /.QRM	
Wednesday	2000
145.350MHz	

GB3HY is now working on the new frequency:

Listen 430.900Mhz, Transmit  
438.500Mhz, CTCSS 88.5hz

# Amateur Radio Insurance General Information

South West Broking Ltd Insurance Brokers

South West Broking Ltd is pleased to offer insurance for radio amateurs.

## Cover

Insurance is available to individuals, clubs and Raynet Groups

Cover is provided for "All Risks" of loss or damage to your amateur radio equipment including masts, aerials and ancillary equipment by theft, water damage, lightning strike and other accidental damage.

- Cover at your home or club house.
- Anywhere in the United Kingdom.
- Anywhere in the world.

**For All Your Radio  
Insurance Needs**  
there is no better company than  
**South West Broking  
Ltd**

## Basis of Claims Settlement

- New for Old

## Significant Exceptions and Limitations

- Wear and tear, gradual deterioration, frost, faulty or defective design or materials or workmanship.
- Mechanical or electrical breakdown or derangement.
- Losses from unattended vehicles unless certain conditions are met.
- An excess of £50 applies if you have cover restricted to your premises only but this is increased to £75 if you have selected cover for anywhere in Great Britain or worldwide. In respect of outdoor antennae and masts, you will be responsible for the first £250 each and every loss.

## Third Party Personal Liability

Personal Liability providing cover against injury to third parties or damage to their property arising from your negligence is included as standard whilst you are engaged in any amateur radio activities.

For further information, please contact Julian Dent  
Telephone: 01454 806503  
Email: [julian@southwestbroking.co.uk](mailto:julian@southwestbroking.co.uk)  
[www.southwestbroking.co.uk](http://www.southwestbroking.co.uk)



Scan here for more information

South West Broking Ltd – Amateur Radio Insurance Scheme v4 September 2016  
This is only a brief summary of cover and does not form part of any policy document or implied quotation or contract

## Mid Sussex Amateur Radio Society 2016— 2017

President	Ken Gibson	G3WYN	01444 412420
Vice President	Mike Pollock	G8KMP	01444 244953
Chairman	Stella Rogers	M6ZRJ	01273 844511
Secretary	Alan Cragg	G8YKV	01273 844511
Treasurer	Vacant		
Programme Secretary	Sue Davis	G6YPY	01273 845103
Vice Chairman	Kim Newland	G7AIE	07787 770059
Shack Manager	Chris Davis	M6FOW	
Committee Member	Dennis Conway	M0YDC	07476 301044
QSL Manager	Rob Simpson	2E0KDT	07730 209539
Course Administrator	Adrian Allen	M0TCD	01798 815286
Lead Instructor	Chris Saunders	G4ZCS	

Our normal "QTH"  
is Cyprus Hall  
Burgess Hill  
Sat Nav  
RH15 8DX

We meet most  
Fridays in the  
Millfield Suite  
7.30pm till  
10.00

Postal Address is:  
MSARS  
Mr A Cragg  
28 Damian Way  
Keymer  
Hassocks  
West Sussex  
BN6 8BJ



**Email (call sign)@msars.org.uk**

**(This will only work from a members email  
address registered with the society)**

Newsletter—Editor Stella Rogers M6ZRJ

All articles and photographs are the copyright of the authors. Contributions are invited from Society members and should be sent to [newsletter@msars.org.uk](mailto:newsletter@msars.org.uk)

Otherwise you can use Snail mail to my address at:

28 Damian Way,  
Keymer,  
Hassocks,  
West Sussex,  
BN6 8BJ.

If you have some great old pics that need to be aired I can share them with the rest of the club.

Best Wishes  
Stella