

**60 years  
of HARS!**



Newsletter of the Harwell Amateur Radio Society  
Affiliated to the Radio Society of Great Britain



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**QAV**

## An over from our *new* Chairman

Not a lot to report on this the first entry as chairperson other than to thank the outgoing committee and chairman for their support for the last year. The retiring chairman John G6LNU has taken the helm for the past two years and I only hope I can provide the same level of commitment. Thank you John.

The society's diary of events for 2018 is already filling up with programmes and events to the end of April; however, we have the rest of the year's meeting to find presentations of interest. We welcome any suggestions of items you would like to see. This is the 60th Anniversary of HARS and as such we intend to arrange some special event/s to celebrate the occasion. More on this as ideas evolve.

I take this opportunity to wish you and your families a very Happy New Year

73 Dave G8DVK

## Editorial Comment

I know I keep saying it, but where does the time go? Last month's QAV I produced while Ann and I were still in Normandy - and Dave and Ann were still there too! Now as I type this we are well and truly into January 2018 with all the Christmas and New Year celebrations behind us. I hope you all had a good Christmas and New Year.

We have already had the first UKAC for 2018 where the scoring system has changed yet again. Last year we had a bonus scheme which gave extra points for each new 4-digit locator square worked, with a heavy bias away from central UK and towards the periphery. This year we still have a bonus scheme but now with a simple 500 point bonus for each new square. It will be interesting to see how this effects us, but we will still be beaming to the continent for the first hour or so to try and gain squares there before beaming 'up-country' later (actually beaming anywhere in the UK later!). There is increasingly more non-UK activity now but remember that their contests finish earlier than ours. Hence trying to work them first! The Minos logger will still work with this new scheme, but it needs some configuration. See the article later in this QAV.

Good luck to you all on any and all operating you do. We shall of course be very pleased to work you on any band!

73 and Happy new Year, Mike, G8CUL/F4VRB

## **HARS reaches 60 years old!**

According to the records, HARS will be 60 years old this year. So, what, if anything, would you like to see to celebrate our Diamond Jubilee? I'm sure you will have some ideas so please let a committee member know what your thoughts are. I'm sure we could organise some event or other, preferably in the summer months when it's not quite so cold!

## **New QAV email address!**

Thanks to Tim, M0KEP, we now have a new email address for sending articles for insertion in QAV. It is

**qav@g3pia.net**

Please use this new email address for all future communications. Don't worry though, we will still be monitoring the old address!

## **Charlie Sierra Signal Report**

There was no coffee shop meeting in December due to all the seasonal festivities but there will be one as usual in January. This will be on the 19th January at Milletts coffee shop, starting at the usual time of 10:45. Come along and be prepared to have a discussion on any interesting topic, not just radio matters!

Ron has stepped down from the CS organiser and has passed the baton along to John, G6LNU as a temporary measure. If anyone else would like to become the organiser of this well attended and popular event, please feel free to come forward and volunteer! Mind you, following on in Ron's footsteps will be a tall order!

73, Mike, G8CUL.

## **G4EQM - Silent Key**

I am sorry to say that Roy Evans, G4EQM from Didcot has gone silent key. He was a member of HARS for some time and regularly attended the rally in February each year. He was an engineer at RAL. His funeral is at the South Oxfordshire Crematorium at Garford on Thursday 18th January at 1300hrs.

# Radio Active

**Ron, G0BNC** - The only radio activity was 15 contacts in the RSGB 2m contest using my house fixed antenna. I assembled the higher portable antenna, but failed to check it. The rotator failed again. It turned out to be a connection in the cavity wall. All cables and connectors and coax were replaced with a different method of fixing the coax to the wall plates. I managed to work Jacques on FM on 70cms, with about 10 watts, but it was difficult for him. Then I worked 15 contacts on the 70cm SSB contest later that same evening. I have done some more work on the 432MHz PA. I did get to the stage of nearly fitting the power device and testing, but I like twiddling and dismantled it to use another fixing method. Everything worked up to the bias stage but when testing the final bias setting was non-existent. I had been supplied a tiny SMD potentiometer that was 20k instead of 5k. I replaced it with a normal size one with multi turns, it works OK now, but was very tricky getting the legs into the 3mm square space vacated by the SMD device. I then undid my previous relay box work and I am going to use the coax relays I purchased for the masthead preamp. I said last month that the coax fixing screws were too short. I purchased some 8BA brass cheesehead screws (the only ones I could get) these are now countersunk screws, but my fingers are a bit sore. These Tohtsu 120a relays were purchased from an Ebay seller alleged

new and sealed. I only tested one. A few weeks later I found the other one did not work. I found out it had been manufactured wrongly. The contacts are different sizes and had been fitted the wrong way round, so the normally open side would not make contact. With very very careful bending the relay now works. With a bit of luck, and when I find the courage to connect the MRF186 power device, I hope to report it is working!!! Perhaps I will try an audio amp device in it first. Well I do not have a 432MHz power or VSWR meter, and am trying to pluck up the courage to power it up. Well I was a good heating service technical engineer, not an electronics engineer.

**Neil, G4BRK** - Christmas was busy, with even the shack floor being used for sleeping accommodation, so no participation in the Christmas Cumulatives. I seemed to do very badly in the last 70cm contest. Looking at the system afterwards I found the SWR was very poor. My 21e1 Tonna driven element seems to have finally given up. Or the cable has developed a fault.

Otherwise I have started to sort out some of the worst corners of the shack. The 2m and 70cm amplifiers are both held together with croc-clips, relays hanging in mid-air, etc. I ordered some aluminium cut to size and started metal-bashing for the 70cm PA. Made good progress which is unusual for me and metalwork. I might have something ready by the construction contest.

**Malcolm, G8NRP** - I managed an entry of seven contacts in the 144MHz December UKAC although the local activity was somewhat reduced. Unfortunately due to family commitments was not able to take part in the Christmas Cumulatives Contest so must try harder in 2018!

**Clint, M6YCG** - This past month I've continued testing my HF set-up with my Elad FDM DUO and the MP1 Super Stick antenna, but unfortunately with little success. It appears that this type of antenna requires a very good ground plane and apparently operates best when placed on top of a lump of metal LOL! My car is made of fibre glass, so even that isn't going to work. I'm achieving excellent SWR though, so that certainly isn't the problem. I spoke to one of my SWLing buddies who is also a ham radio operator and he's suggested an inverted 'L' antenna with a 7 MHz trap. This configuration will undoubtedly out-perform my compact vertical and so I have collected all the necessary parts for the build, including a 7 metre telescopic pole for support at the end of the garden. Hopefully I can have everything set up in the next few days and my first QSO on HF will follow sometime thereafter. My review of the Tecsun S-8800 receiver will be published in the February edition of RadioUser magazine and in the meantime, they have asked me to write another, this time on the latest receiver from SDRPlay - the RSP-1A. Finally, I will be

travelling back to the jungles of Northern Brazil for the fourth time in February. I use these business trips as an opportunity to DX exotic stations on the Tropical bands and this time I will be taking a new receiver with me - the excellent Tecsun PL-880. This will be coupled to a super-compact Bonito MegActive MA305 E-field antenna which operates on 5V USB...and no doubt some experimental longwires/Beverages which I tend to set up whilst I am out there for typically for 3 or 4 weeks. In the meantime I would like to wish you all Happy New Year!

**Mike, G8CUL & Ann, G8NVI** -

We spent half of December in Normandy, coming back to the UK shortly before Christmas. We took part in the 2m AFS and the 2M UKAC from IN98PT as well as meeting up with the members of the Caen Radio Club each week. They have a well-appointed clubroom on the Rue de Bayeux in Caen where they meet each Thursday and Saturday afternoon as well as their monthly Sunday morning 'formal' meeting. Sadly, at the moment, due to extensive re-development in the area, their aerials have had to be removed for safety reasons, but hopefully these will return to their rightful place in due course.

The joint development work on the low power meter in conjunction with the Caen Radio Club that I mentioned last month is gathering pace with a require-

ment specification just about finalised (in 2 languages!). I am currently waiting for one more power sensing head board to come from China. Once this has arrived, I can finalise the Printed Circuit Board design and get the boards manufactured.

Talking of getting boards made, I have just sent off another board design (to

China!) for a GPS locked 10MHz reference system which also incorporates a shack clock. I built the prototype some time ago and have even used it to 'lock' my 2.3GHz transverter to the right frequency during an SHF UKAC contest. That seemed to work well so the new board now includes all the 'mods' that I had to do to the prototype to get it to work correctly.

An amusing cartoon from Alex, 2E00XF -



## Minos logger and the new UKAC bonus scheme

As the UKAC scoring scheme has changed again for this year, the Minos logging software written by Mike, G0GJV has also been updated to suit. However, these changes have taken place in Minos 2 rather than Minos 1. On the face of it, this doesn't seem to be an issue, except that Minos 2 will only run on Windows 7 or higher, not on XP. There are a lot of dedicated testers who are using older XP machines so they can't run Minos 2.

In a way, this doesn't really matter as the log robot on the RSGB website will always re-score your logs for you when you upload them. For me though, I like to see the score on the screen as we go. Mike, G0GJV had already written the latest version of Minos 1 (Minos 1.7) last April and this can be made to score correctly during the contest including the new bonus scheme.

First of all, you need to download Minos 1.7. It doesn't need installing, just 'unzipping' into where you want to run it. If you have been running Minos before you might also want to copy over some of the '.ini' files in the Configuration folder from the previous version. These files hold your station information. Also don't forget the archive files in the Lists folder and maybe old logs from the Logs folder.

In the Configuration folder there is a file called 'B2Mults.xml' which defines the bonus points you get for each square worked. This file needs changing so that the new 2018 bonus scheme is used. This is simple to do but beyond the scope of this article. I have already edited this file and can supply it to anyone who wants it. It can also be found at on the HARS website at [B2Mults.xml](#).

Minos is then run by double-clicking the 'Minoslogger.exe' file. You should 'create' the new contest in the normal way but before selecting 'OK', you need to select "UKAC Bonuses" in the Bonus Scheme box (middle bottom of the window!). This will then use the 500 points per square bonus scheme defined in the edited 'B2Mults.xml' file.

During the contest your correct total score so far should now appear at the bottom of the screen!

# Rally News

## Harwell Radio Rally – Sunday 11th February 2018

**Didcot Leisure Centre, Mereland Road, Didcot OX11 8AY**

We have nearly 100 stalls booked for the rally already so I imagine it will be a full house.

**Saturday 10th February** from 1600-1800 (setting up)

### ***Help is required with:***

- ◆ Organising the halls, bringing in tables and chairs (with the help of the Air Cadets)
- ◆ Carpeting the Squash Courts and Dance Studio

**Sunday 12th February** from 0800 onwards.

### ***Help is required with:***

- ◆ Putting up notices
- ◆ Manning the car parks
- ◆ Welcoming traders
- ◆ Taking the money on the door
- ◆ Helping on the Junk Stall
- ◆ Organising tea and coffee for the traders
- ◆ Other general jobs
- ◆ Talk-in
- ◆ Demonstration Station

Please put the dates in your diary and try and come along – you will be guaranteed a great day.

Offers of help to and details from Ann G8NVI ([ann.stevens@btinternet.com](mailto:ann.stevens@btinternet.com) or 01235 816379)

### ***Harwell Rally Junk Stall***

Please look to your shack, shed, loft, cupboard, drawers and anywhere else you have stored those valuable pieces of radio/electronics kit saved for that future project still in the 'thinking about' stage. The Harwell Rally Junk Stall needs

those items which are not going to make it! After all, they have been there for 3, 5, 7... years and have not moved. Part built kits, home electronic projects or any electronic items which can be cannibalised for components are all welcome. For larger items, where possible, stick on a label with a realistic estimate of what we can sell for on the junk stall. (I have been guilty of selling things too cheaply in the past through not knowing the value of what I am selling!) All items are received as donations to the club and the sale is for club funds. We cannot accept items for sale on behalf of the owner, even with a donation to the club, as it is impossible to guarantee the safety of such items.

On the Saturday of the rally weekend I can make a tour of any members who wish to donate 'junk'. All you have to do is send me an email at **derek.chaloner@hotmail.co.uk** or text me on **07941044622** with some contact details. If necessary, I can pick up things in the week ahead of the rally.



More pictures of previous rallies can be found on page 11



# Contest News

## Forthcoming VHF/UHF/SHF Contests

4th February—432MHz AFS

## Forthcoming HF Contests

13th January—RSGB AFS 80m-40m Contests Phone (AFS Super League)

20th January—RSGB AFS 80m-40m Contests Datamodes (AFS Super League)

Full details of all forthcoming contests can be found on <http://www.rsgbcc.org/>

## 2017 UKACs

The final results for the 2017 UKACs are being held up by the lack of a 70MHz result which will be forthcoming very soon. I will publish the club's overall result, the club's results on each bands and individual's overall results in the February issue of QAV.

## VHF/HF Contest Calendars 2018

The VHF and HF Contest Calendars for 2018 can be found at [www.rsgbcc.org](http://www.rsgbcc.org).

## AFS Super League

Harwell ARS are in 10th position after 2 rounds of the AFS (Affiliated Societies) Superleague.

We didn't take part in the **1.8MHz AFS Contest** as there were extreme logging difficulties thrown up by the fact that the rules now allow contacts with the same station on SSB and CW to class as 2 scoring contacts, something that most of the generally used logging programs cannot cope with yet. The results also needed to be in within 24 hours which gave little time for transcribing logs from paper to computer.

We fared well in the **50MHz AFS** where we managed to field 2 teams who came 4th and 28th! Well done to G3MEH, G0ODQ, G4BRK, G0MJW, G8NRP and G8CUL.

We await, with interest, the results of the **144MHz AFS** that took place at the beginning of December. Although there were at least 5 club stations on, F1BHL/P's and F4VRB's points will not count towards the AFS score as we are not in the UK or within 35km of the VMP (virtual meeting place) (now changed to 80km for 2018).

The next 2 HF contests in the AFS Super League take place on 13th January: **80m-40m AFS (Phone)** and 20th January: **80m-40m AFS (Datamodes)**. **Please try and contribute to these if you can.** The next VHF contest in the series is on 4th February: 432MHz AFS—when I hope we will be able to field a couple of teams.

<b>NOVEMBER-DECEMBER (overall position 5th)</b>			
	Callsign	Section	Position
70MHz (Nov)	G4BRK	AO	10th
	G3MEH	AO	12th
	M0PXM	AL	16th
	M0IEP	AR	43rd
2.3GHz (Nov)	G4BRK	SAO	2nd
144MHz (Dec)	G3MEH	AO	8th
	G0ODQ	AR	20th
	G4BRK	AR	25th
	F1BHL/P	AR	73rd
	F4VRB	AR	87th
	M0KEP	AR	115th
	G0BNC	AR	137th
	G8NRP	AR	158th
	M0PXM	AL	38th
	G6LNU	AL	50th
432MHz (Dec)	G3MEH	AO	9th
	F1BHL/P	AR	8th
	G0ODQ	AR	12th
	G4BRK	AR	24th
	M0KEP	AR	61st
	M0PXM	AL	20th
	G0BNC	AL	21th
50MHz (Dec)	F1BHL/P	AR	6th
1.3GHz (Dec)	G4BRK	AO	7th
	G8CUL	AR	2nd
	M0PXM	AL	32nd
	M0KEP	AL	34th



## RCE NEWS

### **Foundation Course**

We are running a Foundation Course at Hagbourne School on Saturday 27th and Sunday 28th January. The course is full. Good luck to all the candidates!

### **Advanced Exam**

2 candidates are taking the Advanced Exam at Hagbourne School on Saturday 27th January. They will be taking the exam online - a new facility being offered by the RSGB which will shortly be available for all levels of exams. Good luck Alex and Paul!

### **Intermediate Course**

An Intermediate Course is planned for later in the Spring. Please register your interest with Ann ([ann.stevens@btinternet.com](mailto:ann.stevens@btinternet.com))

Please email [ann.stevens@btinternet.com](mailto:ann.stevens@btinternet.com) for details of any of the above.

## HARS Annual Dinner

This will be held on the 12th May 2018 at the Cosener's House, Abingdon.

More details to follow nearer the time, but please make sure the date is in your diary now!

## CLASSIFIED ADS

No adverts this month. I wonder if the items that were for sale last month got sold? If you bought one of them please drop me a line at [qav@g3pia.net](mailto:qav@g3pia.net) and let me know how you are getting on with it! I can then put it in *next* month's QAV!

## DIARY

**Thursday 11th January**  
Rally prep and G6LNU quiz

**Thursday 8th February**  
Construction Contest

**Sunday 11th February**  
Radio and Electronics Rally

**Thursday 8th March**  
Dr Stuart Eves

**Thursday 12th April**  
Minos and ON4KST (with 6m) G8CUL  
& G8NVI

## OFFICERS

**Chairman: Dave Aram, G8DVK**  
**Vice-Chairman: Ann Stevens, G8NVI**  
**Secretary: Elle Frost, M0NRK**  
**Treasurer: Angus Wilson, G0UGO**

## ORDINARY MEMBERS

**Alex Comerford, 2E0OXF**  
**Roger Powell, G0AOZ**  
**John Durban, G6LNU**  
**John Morris, G6PEP**  
**John Booth, G6ZHB**  
**Tim Keep, M0KEP**

## CONTACT DETAILS

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Opinions expressed in QAV are the personal views of the contributor and cannot be taken as reflecting the views of the society, committee or editor.

The deadline for the December QAV is 31st January 2018. Articles submitted after this date cannot be guaranteed to be included.

Contributions from all members are greatly welcomed. They may be submitted to [qav@g3pia.net](mailto:qav@g3pia.net). Please note the new email address!