

Est. 1938



G4HRS

H A R C N E W S



The Journal of

Horsham Amateur Radio Club

April 2011

Sponsored by:



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Cover photo: Steve G4TPO, Paul G4TMC, Alister G3ZBU finance department

Editorial

The club welcomes three new members this month, Bill Peel, Leslie Thacker 2E0IBN and Kevin Mccarthy. Bill is actually my brother in law and has been through the Foundation course with Andrew M0GJH and is scheduled to take the exam at the end of March and we send our best wishes for this.

There have actually been many that have been awaiting the return of dulcet tones from G4JHI on the airwaves and I am pleased to inform you that I am now back in business in the new shack. Do you own a Panasonic TU-DSB31 Sky digibox or perhaps have a neighbour with one. This model is quite old now but it has been found to produce a carrier on 145.150MHz (input frequency to GB3WS).

I have one which used to be the main receiver but was brought back into service in the bedroom due to the problems reported recently with my Technomate box. I have been using my hand held on 2m in the bedroom and found the erroneous signal. I checked with Alister G3ZBU and he has the same model and that also does the same!

I can tell you that the main living room box in use here is made by Thompson and doesn't cause any issues. If you are sending in items in for publication please could everyone use the Harcnews email address. Many also have at least one or more email addresses for me but that should be used for general communication.

Items for inclusion in this magazine cannot be guaranteed to appear if they are sent to the wrong address. Thanks to those who have sent in photos for publication along with details of what they represent. This is exactly what we were looking for!

David G4JHI

HARC March Meeting:

Junk Sale

David G4JHI was reported to be wandering up and down Denne Road on the first Thursday in March but with good intentions as he was running up and down with junk and a clipboard to start making a list of buyers and sellers. Soon after the doors opened the items started to fill the tables and numbered tickets were handed out.

As the auction started Tony gave the usual rules and commenced the sale. A Televés digital free to air satellite receiver along with dish and motor was one of the first items up. G4JHI is renowned for wanting this type of equipment but resisted as he already has enough for the time being! After some component drawers on offer came up many boxes of LCD displays (where do they come from!), a GPS receiver, modulation meter and Christmas lights!

For the EMC problems a collection of clip on ferrites came up, paraffin blow lamps and a jar of grommets always very useful. Other items included a CT53 signal generator, various electronic/radio books, 12amp PSU (very much wanted!), audio mixer and 6m SSB/CW transceiver. Thanks to auctioneers Tony and Robin, Ron hander-outer, Adrian and Alan raffle, finance Steve, Paul and Alister, the two David's on the door, finally Andrew and Janet serving refreshments.



(Left)

Tony G3NPF and Ron
G3PYC

Broadcast Listener

Gold 1521KHz AM which was located at Crawley also in the same premises as Radio Mercury (now Heart) handed its licence back at the end of January. It is not clear as to why but listeners were informed to retune their radios to 1548KHz (London) or 1323KHz (Sussex) to continue to listen to the greatest hits.

At breakfast time a Spanish station has been noted on this frequency, however keen Horsham broadcast DXer David Ansell 2E0NKC noted CRI (China Radio International) in Russian at 1900 UTC from the 500 kW transmitter in Urumqi on this frequency. There has been an improvement to the DAB network as a result of a new transmitter located at the existing site at Wrotham in Kent.

This brings improved coverage to parts of Kent, Surrey and Sussex. This transmits BBC (10kw), Digital One and London 1, 2 and 3 (4.5kw) services and although no difference has been noticed of BBC and Digital One the London channels can be received fairly well across Horsham for the first time and in fact better than on FM.

This should have also improved the parts of Crawley which have been black spot areas for reception of DAB. It should be noted that London 3 is still restricted to the South by using directional aerials to avoid interference with Sussex Coast which transmits on the same frequency and is reaching Horsham but may require an external aerial.

This summer a new multiplex for Surrey is scheduled to launch which will include County Sound and BBC Surrey, and will cover Horsham it appears from the coverage maps. Although not clear as yet it is believed Sussex Coast may be extended towards the north of the region then providing BBC Sussex to Horsham but then either Sussex Coast or London 3 would have to move frequency.

Alternatively maybe BBC Sussex might appear on the Surrey transmitters perhaps. But don't worry if you haven't made it to this digital platform yet as analogue FM broadcasting isn't being turned off anytime soon. The earliest reported date for a transition to digital is 2015 perhaps as late as 2025.

Band II used for FM will continue to be used for local commercial radio. By the time you read this it will be just under one year before the Midhurst TV transmitter will be switched over to digital only. The analogue service of BBC2 (ch 55) will be closed and ITV1 will replace this on 29th February next year.

On 14th March the other three remaining services will cease and an HD multiplex introduced. On both dates it will be necessary to rescan all digital equipment to continue to receive all of the services unless it does that automatically. From then on due to frequency changes the aerial group required will change in order to receive the HD channels (if the signal is strong enough it may be possible to get away without making any changes).

Instead of C/D (48-68) either an E (35-68) or Wideband (21-68) will be needed. The latter may be preferred in case further channels lower than channel 35 are introduced in the future. If you receive signals from other transmitters such as Heathfield, Rowridge, or the London region Crystal Palace, Guildford or Reigate the dates will vary. Don't wait until the last minute - start preparing now.

Check www.digitaluk.co.uk for further details.

Amendment

Harcnews March 2011 page 5 paragraph 3, line 8 was incorrect. It should have read "Ron had no sphere of heights"

HARC FOXHUNTS RESULTS SUNDAY 27TH FEBRUARY 2011

One of the best turnouts for a long time with 12 teams competing for pole position in this most prestigious event! The Fox (G3WZT) was located at Burton Mill Pond, a few km south of Petworth.

RESULTS

1st	Andrew G0GJH and Janet	50 Minutes
2nd	Paul G4TMC	58 Minutes
3rd	Adrian G4LRP	58.2 Minutes
4th	Mike G8CKT & Yvonne G6CKT	1Hr. 09 Minutes
5th	Ian M0YMK	1Hr. 14 Minutes
6th	Alan 2E0BTO & Dom M0GUZ	1Hr. 15 Minutes
7th=	Marilyn G7EYL & Jan	1Hr. 18 Minutes
7th=	Steve G4TPO	1Hr. 18 Minutes
9th	Robin G3OGP	1Hr. 24 Minutes
10th	Alister G3ZBU	1Hr. 27 Minutes
11th	Bryn G3SWC & Eva	1Hr. 33 Minutes
12th	Mike G4EFO QSY'd to the pub (500M from the fox)	



(Left)

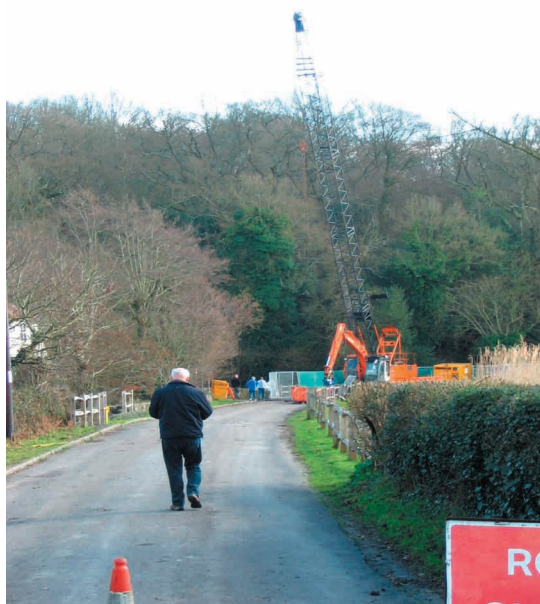
Some of those who found the fox's lair



(Above) The road closed clue!

(Right)

Crane
across the
road



After the previous few days of very wet weather Sunday turned out to be a lovely sunny day. The Fox's location at Burton Mill Pond is a lovely spot to be on a pleasant winter's morning. Mike and Yvonne brought a smile to my face as they got out of their car 10 paces away with the intent of DFing.

Visual communication proved a much better medium. Congratulations to Andrew and Janet for winning by taking a fast sprint finish on foot across the mill pond causeway that was closed to traffic. Well done to Ian M0YMK for finishing with a very minimal set-up albeit not starting from the official start point (let you off this one time!)

G4EFO could not be bothered to do the final footwork across the causeway and decided that a pint would be the better option. Afterwards most contestants retired to the Grove Inn near Petworth for Sunday lunch and a glass of the amber nectar. A most pleasant country Inn that was changed from a restaurant to an Inn just 4½ Years ago. Congratulations to all finishers and many thanks to everyone that turned out for the event. I hope you enjoyed the morning.

John G3WZT.

(Right)

The lair





(Above) A small pub, fortunately for us it was empty until we arrived

(Right)

Doom Bar
barrel at
the bar



New Product Launch

This month sees the expected launch of a new product for the amateur radio community. The SATMND2011 is a slimline Notebook style transceiver that runs from 150KHz to 30MHz and can transmit on all HF amateur bands in this range. It also includes a second VFO running from 30MHz to 860MHz with transmit capability on 6/4/2 metres and 70cm.

All modes AM/SSB/CW/FM(N) and FM(W) and data modes are included. On top of that it can receive UHF digital terrestrial TV. There is the add on module which will give capability to watch satellite TV in the Ku band and includes disequ switching for multiple satellite LNB switching.

It includes 7 day EPG's for Freeview and Freesat and can receive HD services. By turning the screen inside out this machine can be used as a standard notebook with the Windows interface. Although an external mouse is included as well as a touchpad no antennas of any sort are included but there are plenty of connectors of all types for use in the above modes.

A spokesperson from the manufactures described the machine as 'a masterpiece that would appeal to many radio amateurs'.

Copy deadline for May edition 21st April

For items sent by email please send to this address:

harc.news@g4jhi.co.uk

Practically Wireless – a small dose of nostalgia!

By Mike, G8CKT

As a small boy I would eagerly await the arrival of Practical Wireless at our local newsagent. When the day came, I would cycle down to the village with my four three-penny bits to purchase the latest copy and then spend many hours poring through the various articles trying to make sense of it all.

This period of my life recently came back to me vividly when I discovered a cherished copy of PW dated December 1955 hidden away at the back of my filing cabinet. So, what was the world of radio like back in 1955? Let me remind you by taking a look at what the editor, F. J. Camm, had featured in that issue.

Oh, and before I forget, there weren't any transistors for sale and no-one had any idea that we might ever have circuits that used many thousands, if not millions of them, on a single small chip of silicon. In fact, I remember my father arriving home from work one day in 1958 with a couple of transistors that he had purchased from a well known London store.

The cost of these two magic devices (a 'top hat' XA102 and an XB112) was equivalent to more than a day's pay and so it wasn't without a certain foreboding that I connected them to my home-built 'power pack' and tried to make them perform! And what did things cost 55 years ago?

I seem to remember that there was no way that a small boy could afford to purchase valves and components, let alone invest in 'surplus' radio equipment. An Avo Minor was priced at ten guineas (for all you mere babes that was £10 10s 0d or £10.50 in decimal currency). By today's money this would be over £200! A 6V6 octal valve was priced at 7/6 (equivalent to over £7 today) and a 'surplus' R1155B would be £12 10s

(nearly £250 in today's money).

If you happened to be looking for a job you could hardly do better than work for GCHQ as a radio technician for the princely sum of £7 18s 10d per week (roughly comparable to an annual salary of £20k today). One small surprise, however, was to find that a humble half-watt 1k resistor would set you back a whole 6d (this would be around 50p today).

Articles in December 1955 PW included 'Selectivity and the R1155', 'Making a Car Radio', and a 'Three Valve Single Span' (see Figure 1). In 'On Your Wavelength', 'Thermion' mused on the role of radio in schools: "Many schools now teach radio

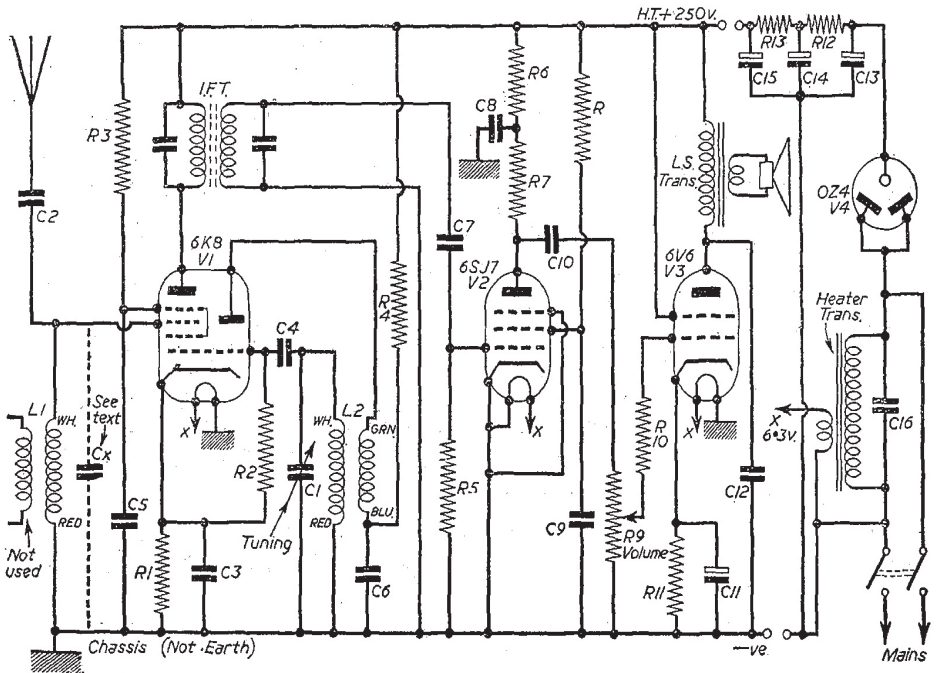


Fig. 1.—Theoretical circuit of the receiver.

Figure 1 (page 13) Circuit of the Three Valve Single Span (note the cold-cathode gas-filled rectifier and the direct connection to the mains supply!)

construction instead of how to make silly ash trays and photo frames out of cigar boxes”.

He then goes on to urge readers to “get in touch with the headmasters of local schools and offer assistance, and where possible any spare parts”. ‘Thermion’ continued by bemoaning the reliability of car radios (he did a lot of bemoaning).

To quote his words: “I have had two car radio receivers and each gave trouble within six months. As it is nearly impossible to get these serviced locally the car must be taken to some remote service depot and left for a day or so.”

‘Thermion’ laid the blame for all of these problems on the ‘vibrators’ that were commonplace in these receivers. Nowadays we might be a little more cautious with a word that tends to have a rather different meaning!

G2AK *This Month's* **G2AK**
Bargains

ABSORPTION WAVEMETERS.—3.00 to 35.00 Mc/s in 3 switched bands. 3.5, 7, 14, 21 and 28 mc/s Ham bands marked on scale. Complete with indicator bulb. A MUST for any Ham Shack. **ONLY 15/-** each. P. & P. 1/-.

TEST METER.—7 ranges as follows: 1.5 v., 3 v., 150 v. 6 mA., 60 mA, 5,000 ohms, 25,000 ohms 2½ in. dia. scale M.C. meter. Rotary selector switch. Black bakelite case, 6 x 4½ x 4½ fitted with removable lid, also provision for internal batts., ranges can be easily extended. Bargain price **30/-**, plus 1/6 post.

VALVES.—Genuine American, brand new, ex-W.D. stock, boxed 807's. 7/6 each, or 4 for 25/-.

HEADPHONES.—Low resistance type CLR No. 3, 9/6. DLR No. 2, 13/6. High resistance and the most sensitive of all DHR, No. 5B, 18/6 per pair, P. & P. 1/- pair.

FISK SOLARISCOPES.—Complete with charts. Give World time, light and darkness paths. Invaluable to the DX man. List 21/-, our price 7/6, post free.

PANL Home Crackle.—Black only, 3/- tin. P. & P. 8d.

XTAL HAND MICROPHONES in Silver Hammer Case with polished grille, Handle and 4 ft. Screened lead, 21/-.

SPECIAL OFFER. DEAF AID CRYSTAL MIKE INSERTS. 7/6 ea., or 2 for 12/-.

UNREPEATABLE OFFER

POWER UNITS in Black Metal Case. With input and Output sockets. For 200/260 v. 50 c. Input. Output 200/250 v. 60/80 ma. Fully Smoothed and Fused. Also gives 31 v. 3 A. D.C. and 6.3 v. 3 A. A.C. fitted with 6X5 rectifier. 50/- ea. Carr. Paid.

Postage free on all orders over £1 except where specifically stated. **PLEASE PRINT YOUR NAME AND ADDRESS.**

G. H. YOUNG, G2AK

All callers Mail Orders to Dept. " P "
110, Dale End, 102, Holloway Head,
Birmingham 4 (CEN 1635) Birmingham 1 (MID 3254)

Figure 2 G2AK's advertisement in PW December 1955

Figure 1 and 2 and any reference relating to information printed in the 1955 magazine edition is reproduced by kind permission of Practical Wireless.

In 'Open to Discussion' (the readers' letter pages) G. S. Benson from Huddersfield, warns that "it is extremely unlikely that we shall be able to deliver electrical energy from atomic energy" and T. H. Alliman is trying to find a supplier willing to ship a centre tapped 600 to 750 volt transformer to his home in Trinidad.

'Transmitting Topics' (my favourite column) provided some advice for those wishing to design a high-voltage power pack and this included a description of the use of a 'swinging' choke (something that I completely failed to understand!). In 'News from the Clubs' we find that several of the clubs held their meetings on a weekly basis and one of them even met every night of the week.

Finally, it was interesting to note that 'The Ham's Shop' was able to offer "deliveries within 14 days" on a wide range of parts and components. So, if there's anything that can we conclude from all of this it must be that the world has got smaller, faster, and a whole lot more complicated!

HARC Subscriptions

Last Call!

By the time you read this you will most likely have paid for this years subscription due for 2011 club membership. However if you haven't now is the time to act as newsletter subscriptions will stop otherwise.

Please forward £15 to the Treasurer which can be paid by cash or a cheque payable to H.A.R.C. Alternatively payment direct to Paul Barnett, 8 Parsonage Road, Horsham, RH12 4AR.

TV Addict

In early March Sir Patrick Moore hosted the 700th edition of The Sky at Night programme. Guests Brian Cox, Jon Culshaw and Martin Rees descended on Patrick's home in Selsey along with regulars Dr Chris Lintott, Paul Abel, Pete Lawrence, Dr Chris North and an appearance by Dr Brian May along with others.

The one hour special was dedicated not only to archive material but also viewers questions. Each guest would answer questions relating to their specialist subject, such as the moon and galaxies. In response to asking for questions for the programme there were over 1000 submitted but there was only time for a handful.

Further questions and information on the programme can be viewed online. The programme airs at the beginning of each month and the full version is shown on BBC Four usually Tuesday evenings at 7.30pm with short versions shown on BBC One and TWO and the iPlayer! www.bbc.co.uk/programmes/b006mk7h

Web Trawl

Ever wanted something for nothing.....? Then read on.... Freecycle is the place to visit for perhaps those things sitting around at home not doing that much but you don't want to throw them away. First you will need a Yahoo ID so you can join your local group.

After your membership is approved by the moderator you will be sent the group rules. If you live in the Horsham area it's best to join the Horsham and Southwater group. It is also useful to join a neighbouring group such as Crawley. Once set up you can advertise and view what is on offer.

But everything is 'free' and you are not allowed to sell on afterwards. For example the newsletter editor got a very decent computer desk for his new shack absolutely free from an advertisement!

West London Radio & Electronics Fair

Date Sunday 17th April 2011

Time 10:00

There will be a CLINIC where the public can come and discuss problems on various topics. The Areas of Excellence will be -

EMC problems and solutions - Robin Page-Jones (provisional)

Getting Licensed - Whitton ARG

Contesting, getting started - Steve Knowles

Antenna problems, advice and hints - Mike Underhill

Home brew problems and tips - Terry Giles

Bring in your rig to get a basic health check - Terry Giles/Martin Charman

All usual traders will be in attendance

Bring and Buy and local clubs

Diary

Apr 4th, CW Club Championship 20:00 - 21:30

Apr 7th, Club Night: Minimum Antenna Height - Mike Underhill G3LHZ

Apr 9/10th, HARC Weekend Away (via Calais)

Apr 13th, 80m SSB Club Championship 20:00 - 21:30

Apr 14th, Committee Meeting - QTH G3ZBU

Apr 17th, West London Radio & Electronic Fair 10:00

Apr 21st, 80m Data Club Championship 20:00 - 21:30

Apr 28th, Social Evening - The Limeburners Arms - Newbridge

May 2nd, Club Night: 80m SSB Club Championship

May 5th, Club Night: Software Defined Radio

All above times are BST

Committee/Club Meetings and Socials start at 8pm

Club Champs 2011 - Horsham Club Scores

Issue: 31st March 2011 Rev A

PARTICIPANTS	JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			TOTAL POINTS	%	MODE TOTALS		
	SSB	Data	CW	SSB	Data	CW	SSB	Data	CW	SSB	Data	CW	SSB	Data	CW	SSB	Data	CW	SSB	Data	CW			SSB	DATA	CW
G3LET Pete						407																407	1.9	0	407	0
G3NPF Tony	780	485		423	275																	1963	8.9	1203	760	0
G3OGP Robin	203	703	655	650	456	604																3271	14.9	853	1159	1259
G3PYC Ron				99																		99	0.5	99	0	0
G3SWC Bryn	1000	958	810	600	565	690																4623	21.1	1600	1523	1500
G3VQO Les																						0	0.0	0	0	0
G3WZT John																						0	0.0	0	0	0
G3ZBU Alister	682	899	477	550	571	500																3679	16.8	1232	1470	977
G4EFO Mick																						0	0.0	0	0	0
G4LRP Adrian		566		550	559																	1675	7.6	550	1125	0
G4TMC Paul																						0	0.0	0	0	0
G4TPO Steve	0	530		450																		980	4.5	450	530	0
G7DFV Gavin																						0	0.0	0	0	0
G8CKT Mike	406	670	191	450	370	52																2139	9.8	856	1040	243
G8HQJ Barry	485	551	108	296	440	164																2044	9.3	781	991	272
M0FRH Ian																						0	0.0	0	0	0
M0GJH Andrew	580		346																			926	4.2	580	0	346
2E0BTO Alan	129																					129	0.6	129	0	0
2E0DDW Dominic																						0	0.0	0	0	0
Mode totals	4265	5362	2587	4068	3643	2010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21935		8333	9005	4597
Month totals to date			12214			9721			0			0			0			0			0			38%	41%	21%
Contest dates/times	12th	20th	3rd	7th	16th	24th	24th	7th	16th	13th	21st	4th	2nd	11th	19th	23rd	6th	15th	13th	21st	4th	Start times are all 2000 clock time, ending 2130 local				

HARC overall position after above results announced **6/71 4/75 7/53 3/78 5/83 6/82** ← **HARC POSITION DOWN 2 posn since last report**

All entries to be uploaded with the Contest Robot at:- www.rsgbcc.org/cgi-bin/hfenter.pl Latest robot entries may be viewed at:- www.rsgbcc.org/cgi-bin/hfposted.pl
 Contest results may be viewed at:- www.rsgbcc.org/hf/results/2011/80mcc2011.shtml Contest rules may be viewed at:- www.rsgbcc.org/hf/rules/2011/r80mcc.shtml

FROM 3rd POSITION IN LAST MONTHS REPORT WE DROPPED TO 6th & THEN GAINED A STEP UP TO 5th POSITION.
 CONDITIONS HAVE IMPROVED SOMEWHAT SINCE LAST MONTH WITH SHORT SKIP THANKFULLY NOW BEING THE NORM PRODUCING PLENTY OF ACTIVITY.
 SURPRISINGLY, DATA IS HARC'S HIGHEST SCORER OVER THE PAST TWO MONTHS, HOWEVER THE SSB CONTEST SEEMS TO BE THE OVERALL FAVOURITE WITH ALL CLUBS AND IS GAINING EVEN MORE ENTRANTS MAKING IT VERY CHALLENGING ESPECIALLY WHEN USING QRP. THERE HAS BEEN A GOOD TURN-OUT WITH 10 PARTICIPANTS IN MARCH SSB, BUT REGRETTABLY WE ARE STILL VERY POOR ON CW AS CAN BE SEEN IN THE TOTALS ABOVE. (MARCH SCORES ARE YET TO BE PUBLISHED).
 WE STILL NEED CONTINUED SUPPORT ON ALL MODES, SO PLEASE SPARE THE ODD 90 MINS OR SO AND SUPPORT HARC AND MAYBE WE CAN MAINTAIN OUR 5th POSITION?

THE TOP TWELVE CLUBS - out of approx 83 participating (data courtesy of RSGB website)					
Pos	Club Name	Total	CW	SSB	DATA
1	Bristol CG	42328	14286	16191	11851
2	Newbury & DARS	29658	12093	7997	9568
3	Norfolk ARC	24538	7912	8379	8247
4	De Montfort University	23258	7300	6748	9210
5	Horsham ARC	21935	4597	8333	9005
6	Three As CG	21190	11193	6090	3907
7	Brimham CG	17035	8115	5712	3208
8	Grimsby ARS	16365	6925	4416	5024
9	Tall Trees CG	12598	4819	3893	3886
10	Travelling Wave CG	12012	4031	2984	4997
11	Cheltenham ARA	11312	7449	2027	1836
12	Torbay ARS	9236	3099	3451	2686