

COULSDON AMATEUR TRANSMITTING SOCIETY

G4FUR



M1FUR

CATS WHISPERS

June 2006



Affiliated to the RSGB

SYCOM – Official CATS Sponsor

Visit www.sycomcomp.co.uk

CATS Committee

Chairman: Rob Cole 2E0AYT
Secretary: Andy Jackson G8JAC
Treasurer: Derek Hands G1PGS
Members: Steve Conway G7SYO
Stuart Barber G6CJR
Dave Young G8VXB
Ian Peck M3IGP

CATS Whispers Editor: Andy Jackson G8JAC
email address for contributions:

Regular Society Meetings

These are held on the second Monday in each month at:-
St. Swithun's Church Hall, Grovelands Road, Purley at 2000hrs to 2200hrs.

Society Nets

1st Saturday of Month - 1715hrs Crescenta Valley / CATS Net on Echolink
Normally via MB7IPL node on 145.2875 MHz.
Sunday mornings - 1100hrs. Call on S20 (V40) then to 145.2875MHz.
Sunday evenings - 1700hrs. 3.700 MHz +/- QRM
Wednesday evenings - 21.00hrs. Call on 70.425 MHz

CATS Website

Email :

Forthcoming Meetings

Mon 12th June – Test and Measurement of members' kit
Mon 10th July – Annual 2m DF Hunt
Mon 14th August – CATS Summer B-B-Q



CATS is Twinned with the
Crescenta Valley Radio Club
Glendale California USA www.qsl.net/cvrc

May Meeting Report

The May meeting ended up being a surprise for one or two members. The scheduled event was to have been a presentation on the running and organisation behind the GB200T special event station celebrating Nelson's famous sea victory in 2005. Although this had been arranged back in December last year, the presenters were unable to attend at short notice due to "double booking". To fill the gap, Andy G8JAC reprised the lecture that was given at the Kempton Park rally. A report has been kindly sent in by Glenn G4FVL.

Andy presented an excellent lecture captivating a good audience from CATS membership and guests. He took us through a history of British military forward area radio communications from the beginning of the Second World War circa 1940 with the Wireless Set No.19 (19 set to us novices) vehicular radio set illustrating its issues and limitations and the use of AM and CW, and including various other sets in use by the infantry such as the WS18, and WS38 company-level manpacks with the problems of supplying mobile power in the form of batteries etc.



Andy then took the audience through wartime developments including the first use of FM and the improvements this made to military communications starting in 1943, and the realisation that equipment needed effective sealing against the elements to achieve reliability. Later examples of military radio belonging to the Larkspur radio range from the 1950's which utilised modular designs for simplified field maintenance and a high degree of standardisation were introduced together with a discussion on the technical limitations of frequency accuracy and stability in battery-supplied valve equipment and short-lived ideas such as using narrowband phase modulation at HF to gain improvements over AM.



Members examine some of the items on display

The development of the Clansman radio range during the late 1960s presented a system using stable frequency synthesis and again the use of modular designs utilising Transistor/ Solid state technologies rather than the older valve systems; this enabled better stability, facilities and powering arrangements and utilisation of reduced bandwidths at VHF and SSB at HF.



The lecture was supported by a visual presentation of the material discussed and a selection of these devices were on show throughout the lecture which prompted much conversation during tea break and post lecture.

Andy also discussed the differing requirements for Military radio when compared to amateur radio; he mentioned that the military were mainly interested on communication on known, fixed channels by operators who were primarily soldiers with limited technical knowledge, unlike amateur use where one tends to tune round and adjust the transmitting/receiving devices to suit.

In all this was an excellent lecture and I would like to pass on my thanks to Andy for his efforts and in stepping in at short notice due to a cancellation.

Glenn G4FVL

CATS Activity News

The date of the CATS visit to the navy communications and RADAR museum at **HMS Collingwood** near **Fareham**, Hants is set for Monday 24th July. The visit will entail a fairly early start and will include a lunch and drinks in the wardroom.

The members who had previously indicated that they were interested in making the trip have already been notified but if anyone else is interested in going, please contact the secretary without delay.

Helping out the

Brownies

Catch 'em young! goes the saying, so CATS did their bit to introduce young people to amateur radio by helping no less than nineteen brownies from the 1st Coulsdon pack to earn their Brownie Communicator badges last month.

Led by Andy G0KZT and assisted by Andy G8JAC, a 2m station using the club IC706 and the 'KZT dual-band antenna and mast was set up at Brownie HQ. An initial introduction to radio and the many different ways that it is used in everyday life was presented together with a "workbook" for each Brownie. The girls then prepared a short message about themselves and their interests and listened to some live Air Traffic Control messages from Heathrow to illustrate how useful radio is. A small exhibition of police and military radios, and some components was laid out to help with the understanding.



Andy G0KZT with more people paying attention than usual.

Interest then turned the rig and actually making some contacts. To use the provisions of the licence that allows messages to be passed by unlicensed operators while under licensed supervision, we operated the club callsign with the English club prefix which made our call GX4FUR/P.



Brownies on the air and learning about amateur radio.

Our initial CQ was answered by Steve G7SYO/P and he was joined by Paul M3JXN. Our thanks go to both members for putting in the effort to give the Brownies someone to talk to and make the evening work. Hopefully this event will have inspired the Brownies to take things a stage further and participate in the annual "Thinking Day on the Air" which happens on the third full weekend in February. Have a look at <http://www.guides-on-the-air.co.uk/> to see what's involved.

If they ask for our help, will you give it?

Kempton Park Rally

The first of this year's West London Radio and Electronics rallies was supported as usual by CATS who ran the usual Bring & Buy stall. An excellent turnout of members to help man the stall and shop for those vital bits at the rally coupled with a good turnover of kit to sell meant that a very successful day was had, with a very good sum raised for club funds. A new feature at the rally – Klub Korner - gave us the opportunity to advertise CATS and its activities, and CATS members Andy G8JAC and Terry G4CDY were active presenting lectures to an interested public. Thanks to G8VXB for organising the admin and to all those members who helped out.



CATS members on both sides of the Bring & Buy stall

What's coming up

For this month's meeting we have a **Test and Measurement** night when we will have some professional grade test gear on hand to test your rig or receiver. We will be able to measure receiver sensitivity, signal to noise ratio, SINAD, squelch threshold, display accuracy etc, and for transmitters, frequency accuracy, power output (up to 400W), deviation, modulation percentage etc. If you want to do any servicing adjustments, then we have to know which pot to adjust so bring along the manual or circuit diagram. You can enter the results in your log, which always looks good if you have a station inspection! We will also have an **AVO valve characteristic meter** on the go courtesy of G4FKK so if you have any valves you're not sure about, bring 'em along!

July brings our annual DF hunt. Last year's winner G4CDY is devising some interesting variations on the Fox theme to increase the interest and we expect to see some practical results from the antenna building project we had earlier in the year. No doubt we will end up in a pub somewhere at the end of the event (Sigh!) to hold the technical debrief. Details of the venue, start point and technical aspects will be in next month's *CATS Whispers*.

For **August**, Prue G4RWW has kindly offered to host the annual CATS Bar-B-Q again. This now traditional CATS event sees us relaxing in Prue's garden with BBQ, beer and people from not only CATS but also our friends in SRCC.

For **September**, we are planning an evening called "Members' Mini-talks – or a "Show and Tell" evening. We are looking for two or three members to present a short (say, 20 minutes maximum) talk on any subject they like that's to do with amateur radio – my antenna system, my favourite rig, an interesting piece of radio kit that I find useful. This means we have to have volunteers so please contact the secretary with your idea before we have to resort to undignified arm-twisting! We also hope to have a presentation on the CATS visit to the Crescenta Valley club and the ARRL Field Day competition.

For Sale & Wants

This space is available for any CATS members to advertise surplus kit or to search for those hard to find items that they need. *CATS Whispers* has a surprisingly wide readership and unlike ebay, it's free! Just drop a line to the editor.

M3s get 10m

Ofcom have announced plans for British Foundation Licence holders to be given access to the 10m band with effect from 1 October 2006. Foundation licensees were originally prevented from using 10m because of concerns over the proximity to the 27MHz CB allocation. While some amateurs have opposed the proposal saying that it removes incentive for M3s to make the effort to advance to intermediate level or higher, AMSAT-UK does not believe that the relaxation in the rules goes far enough. The organization is calling for Foundation licensees to also be allowed to use amateur satellites. At present, although Foundation licence holders are allowed to transmit on the satellite frequencies, they are not permitted to exploit the services offered by the satellites. According to AMSAT, the UK is the only country that prevents its Foundation licensees from using amateur satellites. UK Foundation licence holders are, however, allowed to communicate with astronauts on the International Space Station or Space Shuttle. Details of Ofcom's proposed changes to 10m access can be found on the Ofcom website at: www.ofcom.org.uk/radiocomms/ifi/tech/interface/req/ir_2028.pdf

CATS going west

After what seems an interminably long wait, three intrepid CATS members are off to sunny California this month. Andy G0KZT, Andy G8JAC and Prue G4RWW are going out at the invitation of our sister club, the Crescenta Valley Radio Club to participate in the annual ARRL HF Field Day competition. The radio site is high in the mountains of the Los Angeles National Park and located at some 6000 feet above Los Angeles. Apart from the actual radio event that takes place over the weekend of 24/25 June, the trio will be meeting CVRC members at a specially convened club night, and a couple of days of sight-seeing to places and activities of interest in the area have been laid on – including witnessing a production of the Tonight Show hosted by Jay Leno at the NBC studios in Burbank. A report on how they get on will be included in next month's *CATS Whispers*.

New RSGB DRM

A new RSGB Deputy Regional Manager for the London South/Surrey region has been appointed. He is Andrew Vine M0GJH, a member of Horsham ARC, who takes over from Paul Lonsdale.

The March Contest Results

Our efforts in March have now been reflected in the latest set of results published on the VHFCC website <http://www.vhfcc.org/results/06/march144432.html>

144MHz

Section M	Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
	1 *	G0VHF/P	JO01PU	376	131,667	OL8R	855	400	2 * 12 ele
	2 *	M8C	IO91JH	341	111,917	DG3FK	897	400	17 ele
	3	G5B	IO92WS	301	103,126	DG3FK	862	400	4 x 12 ele
	4	M0DJW	JO02DD	100	27,108	EI5FK	606	??	??
	5	G4FUR/P	IO91XH	56	13,417	DG5CST/P	655	160	2 x 17 ele

Out of the five entries for the multi-operator section we basically came last. It's a shame that we don't know how much power or what antenna M0DJW was using. It appears that we were one of only two portable stations.

432MHz

Section M	Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
	1 *	G0VHF/P	JO01PU	211	78,739	F6FHP	853	400	4 x 21 ele
	2 *	G5B	IO92WS	142	50,015	DK0NA	855	400	4 x 28 ele
	3	M1FUR/P	IO91XH	40	3,324	DR5A	470	50	2 x 19 ele

Again, 70cms sees us last but of only 3 entries. A lower output power along with a smaller antenna array reflects this. We could not have made any more CQ calls as you will remember that I had a CD player repeating "CQ contest" every 18 seconds!

As a comparison, for each of the sections these are the top three for each -:

144MHz

Section SF

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G4DEZ	JO03AE	278	106,115	SK7MW	878	400	2 x 12 ele
2 *	G3MEH	IO91QS	200	51,772	DF0DBP	726	400	2 x 9 ele
3	G6UT	JO01BS	108	26,442	DH4FAJ	612	??	??

Section SO

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G7FWE/P	IO90VV	47	12,763	DK3EE	617	80	19 ele

Section 6O

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	M9T	IO80AQ	123	38,025	DK9IP	914	400	2 x 10 ele
2 *	G0SRC/P	IO93BA	83	18,034	DL2KCK	660	100	9 ele
3	M0BAO/P	IO80LV	24	4,723	DL2KCK	718	80	8 ele

Section 6S

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G4HGI	IO83PL	79	15,257	DG3EX	706	400	2 x 7 ele
2 *	G4HSO	IO91UU	69	13,262	DK3EE	607	100	12ele ZL
3	M0GHZ	IO81VK	41	8,583	DK3EE	743	100	9 ele

432MHz

Section SF

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G4DEZ	JO03AE	29	7,550	DK2OY/P	649	400	4 x 28 ele
2 *	G3MEH	IO91QS	56	6,486	PI4GN	526	250	2 x 21 ele
3	M0CGL	IO93VD	12	2,040	F8BRK	436	75	13 ele

Section SO

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G7FWE /P	IO90VV	14	2,427	DF1JM	470	40	19 ele

Section 6O

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G8OH M	IO92AJ	41	6,529	DG1KJG	652	400	17 ele
2 *	M9T	IO80AQ	18	3,352	PA6NL	580	180	21 + 9 ele
3 *	QN/PE7 B	JO10JS	3	624	G5B	300	5	6 ele

Section 6S

Pos	Callsign	Locator	QSOs	Total	ODX Call	ODX Kms	Power	Ant
1 *	G3XDY	JO02OB	22	8,827	DL0GTH/P	736	250	28 ele
2 *	M0GHZ	IO81VK	22	4,129	DL0V	637	250	21 ele
3	G8IYS	IO91XH	18	3,531	PI4GN	512	90	2 x 21 ele

Overall results

Section M

Pos	Callsign	144MHz	432MHz	Total	Group
1 *	G0VHF/P	1,000	1,000	2,000	Colchester CG
2 *	G5B	783	635	1,418	Five Bells Group
3	M8C	850		850	Cray Valley RS
4	M0DJW	206		206	Hadley Wood CG
5	G4FUR/P	102	42	144	Coulsdon ATS

Section SF

Pos	Callsign	144MHz	432MHz	Total
1 *	G4DEZ	1,000	1,000	2,000
2 *	G3MEH	488	859	1,347
3	M0CGL	74	270	344

Section SO

Pos	Callsign	144MHz	432MHz	Total
1 *	G7FWE/P	1,000	1,000	2,000

Section 6O

Pos	Callsign	144MHz	432MHz	Total	Group
1 *	M9T	1,000	513	1,513	Moors CG
2 *	G8OHM	117	1,000	1,117	South Birmingham RS
3	G0SRC/P	474	22	496	

Section 6S

Pos	Callsign	144MHz	432MHz	Total
1 *	M0GHZ	563	468	1,030
2= *	G3XDY		1,000	1,000
2= *	G4HGI	1,000		1,000

Next Year?

Thoughts for next year? We could consider operating in the 6 hour section for each. With activity being as low as it was, we could have fared better in the overall results. There's always the option of a fixed station but that would need someone with a large garden. More power? Maybe, but I think we are on our limit with the antenna stakes.

The most essential thing that we need is support and enthusiasm to take part from CATS members.

Andy GOKZT

Mass Amateur Satellite Launch – 28th June

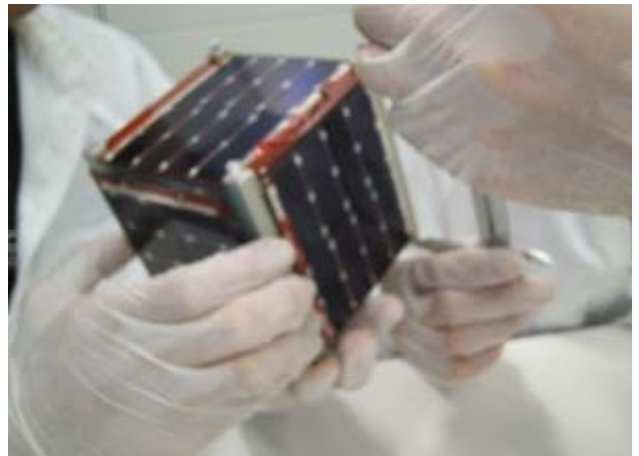
13 Amateur Satellites will be launched at 19:39:11 UTC on the 28th June 2006 on a DNEPR-1LV rocket from the Kazakstan Baikonur Cosmodrome in what will be the largest ever deployment of Amateur Satellites.

The satellites will be put into a 500 by 566 km orbit with an inclination of 97 degrees. Each satellite is a 10cm cube weighing just 1kg into which is packed the battery, transmitter and the various experiments.

Twelve of the satellites have downlinks in the Amateur Satellite Service allocation between 435 and 438 MHz and one will operate on 145.950 MHz so they'll be lots of signals to listen out for after launch.

Further information on the Dnepr Launch 1 can be seen at: <http://littonlab.atl.calpoly.edu/>

One of the CubeSats to be launched is known as SEEDS. Built by students at the Nihon-University it contains a CW beacon, Digi-Talker and other experiments. After launch it will operate a CW beacon on 437.485 MHz using the callsign JQ1YGU. The Digi-Talker experiment will be activated later. The builders say they look forward to receiving reports and data from the satellite from Amateur operators and SWL's all over the world.



One of the "SEEDS". Handle with care!

For further information on SEEDS see http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_e.html

If you fancy building your own CubeSat check out <http://www.cubesatkit.com/>



AMSAT-UK

If you want to know more about the fascinating world of Amateur Satellite communications why not attend the AMSAT-UK International Space Colloquium which runs from the 28th to 30th July at the University of Surrey in Guildford, details at <http://www.uk.amsat.org/Colloquium/>

AMSAT-UK produces a newsletter Oscar News packed full of Amateur Satellite information. For membership details contact the secretary Jim Heck G3WGM
Tel: +44 (0)1258 453959
Email: g3wgm@amsat.org
Website: <http://www.uk.amsat.org/>

Online Satellite Pass Predictions:
<http://www.amsat.org/amsat-new/tools/predict/>

Other Club News & Contact Information

BROMLEY & DISTRICT ARS

Website – www.bdars.org.uk

Email bdars-news@talk21.com

3rd Tuesday at Victory Social Club,
Kechill Gardens, Hayes, Kent
7-30pm for 8pm

June 20th- 6m sporadic E on-air practical
& lecture.

The Crystal Palace Radio and Electronics Club

Meets on 1st Friday of every month at
7.30pm at All Saints Church Parish
Rooms, Beulah Hill.

Club Net – Wednesdays 2000hrs
145.525 MHz

www.qsl.net/g3oou/

CRAWLEY ARC

www.carc.org.uk

Club Nets –

Tuesdays 2000hrs 145.550 MHz

Fridays 1900hrs 1.970 MHz

Every Wednesday at Hut 18 Tilgate
Forest Recreational Centre, Tilgate
Forest, Crawley from 7-30pm, and
Sundays, 10.30 until 13.00.

Wed 14 - Loop Antenna Update including two
novel designs and a high power loop. by Mike
Underhill G3LHZ

DORKING & District RS

Club Nets –

Sunday 0815hrs 3.770 Mhz

2030hrs 144.750 Mhz

Meetings are held at the Friends
Meeting House, Butterhill, South Street
Dorking at 1930hrs.

HORSHAM ARC

Club Nets –

Saturdays 2130hrs 144.725MHz

Sundays 1000hrs 3.722 MHz

Meetings: 1st Thursday at The Guide
Hall, Denne Road, Horsham.

Latest news – www.harc.org.uk

June 8th – 2m DF hunt

MID SUSSEX ARS

Club Nets –

Sundays 0800hrs 3.740 MHz

Sundays 1100hrs 145.350 MHz

Wednesdays 2000hrs 145.350 MHz

Daily 1330hrs 21.330 MHz

Every Friday at Cyprus Hall, Cyprus
Road, Burgess Hill West Sussex for
7.45pm

Info – <http://www.msars.co.uk/>

MITCHAM & DISTRICT ARS

(G3HFY) – Last Wednesday of each
month 1930hrs at ATC HQ,
Commonside West, Mitcham.

Details Mike Knott G0WCR

Tele: 020 8764 4716

REIGATE ATS

Club Net –

Thursdays 2000hrs 145.500 MHz

Sundays 2000hrs 3.740 – 3.760 MHz

Website www.qsl.net/rats

Email rats@qsl.net

3rd Tuesday at RNIB Redhill College,
Philanthropic Road, Redhill for 7-30pm

SRCC

Ray Howells G4FFY 020 8644 7599

Club Nets –

Sunday 0930hrs 29.111 MHz

Friday 2030hrs 144.325 MHz

Thursday 1900hrs 145.500 MHz

Website – www.g3src.org.uk

Meetings: 1st & 3rd Mondays at T.S.

Terra Nova, 34 The Waldrons, South
Croydon 7.45pm for 8pm

3rd July – Construction contest

SUTTON & CHEAM RS

John Puttock G0BWV 020 8644 1614

Club Nets –

Monday 2000hrs 145.500 MHz

Tuesday 1030hrs 3.700 MHz

Tuesday 1500hrs 144.300 MHz

Friday 1100hrs 433.500 Mhz

Saturday 1100hrs 3.700 MHz

Saturday 1200hrs 145.500 Mhz

Website – www.scrs.org.uk

3rd Thursday at Sutton United Football Club, The Borough Sports Ground, Gander Green Lane, Sutton 7-30pm for 8pm

June 15th – Visit by Martin Lynch & Son

THAMES VALLEY A.R.T.S.

Trevor Farris M0CDB 013 7245 767

Club Net Only – G3TVS

Saturdays 1400hrs on 40m

7.070 – 7.085 MHz

WIMBLEDON & DARS

Website – www.gx3wim.org.uk

Club Net –

Mondays 2045hrs 145.500 MHz

2nd & last Friday of each month at

Martin Way Methodist Church, Buckleigh Avenue, Merton Park SW20. 7.30pm for 8pm.

9th June - Desert Island Radio, by Reg M1EEK and Kim G6JXA

30th June – Construction projects

Special Event Stations

GB150VC will operate from the Firepower museum in Woolwich from 1 – 28 June to mark the 150th anniversary of the Victoria Cross. Details from Mike M1CCF.

Castles and Stately Homes On The Air
GB0TOL will be active from The Tower of London and GB8CC from Conisbrough Castle over the third weekend in June.
More info available at: <http://www.cashota.org>

Local Rally & Event Calendar

Dates for your diary:

18th June - The Newbury and District ARS Boot Sale.

18th June – Newhaven Fort summer rally organised by Worthing & district ARS. 10.30 – 14.30.

15th July – **Martin Lynch's Summer Boot Fair & BBQ. 09.00, Guildford Street, Chertsey.**

16 July - 24th McMichael Rally, Reading RFC, Sonning, Berks.
Info: Min Standen, 01189 723 504
g0jms@radarc.org

24th July – CATS visit to the Navy Communications & RADAR museum at HMS Collingwood.

13th August - Flight Refuelling ARS rally, Wimbourne, Dorset.

8/9 September – Leicester Amateur Radio Show, Donnington Park.

15th October – Rusty Radios rally, Cottered village hall, Nr Stevenage, Herts.

12th November - West London Electronics Show, Kempton Park (Radiofairs).

19th November – CATS Bazaar. Our well-known and regarded autumn amateur radio event.
This year bigger and better than ever!

International:

June 23 – 25 International Radio Amateur Exhibition, Friedrichshafen, Germany.

CATS Whispers is published monthly by
A Jackson G8JAC on behalf of the
Coulston Amateur Transmitting Society.
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ONLY FIVE MONTHS TO THE CATS BAZAAR!

COULDSON
MATEUR
ATRANSMITTING
TSOCIETY
S



RADIO And
ELECTRONICS
BAZAAR

At the 1st Coulsdon Scout Group HQ
ACCESS VIA
PUBLIC CAR PARK
IN LION GREEN ROAD
COULSDON

FLEA MARKET AND
TRADERS STALLS
SALE OF NEW AND
SECOND-HAND
EQUIPMENT

SUNDAY
19th
NOVEMBER
2006

10.00 AM
TO
2.00 PM
Admission £1



Bring and buy -
Bring your gear and we will sell

To book a table or for more information
Please e-mail cats@qsl.net

Enquiries for tables or information to cats@qsl.net or Andy G8JAC g8jac@btinternet.com