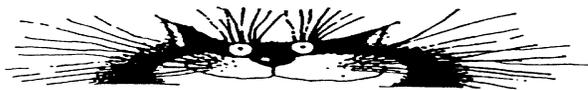


COULSDON AMATEUR TRANSMITTING SOCIETY

G4FUR



M1FUR

CATS WHISPERS



February 2009

Affiliated to the RSGB

SYCOM - Official CATS Sponsor
Visit www.sycomcomp.co.uk

CATS Committee

Chairman: Steve Conway, G7SYO
Secretary: Andy Jackson, G8JAC
Treasurer: Derek Hands, G1PGS
Members: Steve Beal, G3WZK
 Stuart Barber, G6CJR
 Dennis Noe, M0 NDJ
 Frank Emery, G3ZMF

CATS Whispers Editor: Steve Beal G3WZK
email address for contributions: g3wzk@whenland.com

Regular Society Meetings

These are held on the second Monday in each month at:
St. Swithun's Church Hall, Grovelands Road, Purley, Surrey CR8 4LA at 20:00 to 22:00hrs.

Society Nets

1st Saturday of Month - 1715hrs Crescenta Valley / CATS Net on Echolink
 Normally via MB7IPL node on 145.2875 MHz.
Sunday mornings - 11:00hrs. Call on S20 (V40) then to 145.2875MHz.
Sunday evenings - 17:00hrs. 3.700 MHz +/- QRM
Wednesday evenings - 21:00hrs. Call on 70.425 MHz

CATS Website www.qsl.net/cats **Email** : cats@qsl.net

New website host: <http://www.sthost.co.uk/webpace/cats/>

Forthcoming Meetings

Monday 9th February – “Building A Web Site” by Steve G3WZK
Monday 9th March - G6MFM Memorial Lecture: Terry, G4CDY, and Martin, G4FKK,
 present "Flying - Past and Present"
Monday 6th April (NB latest date) – Talk on DAB and DRM by the BBC



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

Tnx to Andy, G8JAC

News in last month's edition of CATS WHISPERS (CW) that Andy, G8JAC, was handing over editorship of CW prompted the following email from Mark, W6MW:

"Having just read the January issue of "CATS Whispers" from my trusty reclining chair here in Columbus, Ohio, I was moved to write this letter. Upon learning that Andy Jackson (G8JAC) is retiring from the position of newsletter editor, I wanted to comment on the readability and quality of the newsletter - it was always a delight to get! Andy injected his own humorous comments and views and that made the "CATS Whispers" even more fun to read. Best of luck to Steve (G3WZK) as the new editor. He has big shoes to fill - what are those, Andy, size 14?"

"Anyway, three cheers from the US side for the hard work of Andy Jackson (G8JAC) for keeping us informed of the happenings of our sister club and our many UK friends!"

"73 de Mark W6MW"

Andy produced CW for 4 years and his will be a hard act to follow, especially as my feet are nowhere near size 14 – despite (as some members will know) very recent podiatric surgery! In my view, CW has always been one of the better newsletters and I aim to keep it that way. Thank you Andy!

This is therefore the first issue of CW that I have produced – in fact the first issue of any newsletter/magazine – so I hope you will enjoy reading it. Please let me have your comments – and please keep up the flow of the ideas, news and articles for future issues.

73 de Steve G3WZK

CATS New Year Dinner

The 2009 New Year's dinner was held on 12th January at the Woolpack in Banstead and was attended by 27 members, XYLs and partners, tempted in some cases by the promise of Real Ale!

A number of members had been regularly using this well-known pub for informal meetings – and the menu came highly recommended by Frank, G3ZMF – but to make absolutely sure that the venue was up to the standard that CATS members have come to expect, the January Committee

meeting was moved to the Woolpack from its normal location of the G7SYO QTH. On members' behalf, the committee pre-sampled a range of their beers and lagers, including cold Guinness, and while Stuart, G6CJR, sampled the pub's cooking, others admired the local scenery. All was assessed to be up to spec. Come the 12th January, we were not disappointed. The present landlords, Danny and Angie, provided an excellent choice, well cooked and tastefully presented.



The assembled masses tucking in

The Woolpack staff coped well with the challenge of cooking and bringing to table our various orders which had been ordered and paid for individually at the bar – although the order of delivery was somewhat out of sync for some members. The newsletter editor was lucky enough to be allocated tab number 73 – surely a good omen for any radio amateur!



Martin G4FKK (l) and Gerry G8NTT (r) in intensive discussion while a hungry Ann, station manager at G4FKK, wonders just what hams find so exciting about sporadic E propagation

Thanks to his XYL Janice, Stuart G6CJR - renowned for always arriving late at CATS meetings - was delivered safely to the Woolpack dinner in Janice's car. Well done Janice and thank you! Stuart brought with him a box of CATS polo shirts, machine embroidered with members' names and callsigns. These were handed round after the meal. Stuart plans to bring all outstanding polo shirts to the next club meeting.

The only sad point to note was that Frank, G3ZMF, who had originally suggested the Woolpack as a venue, was unable to attend due to illness. We send him our thanks for suggesting the venue and wish him a speedy recovery.

Other Pictures Of The Meal



Mike, G6YOG, contemplating the culinary delights he has missed by only eating in NHS staff canteens for the past 41 years.



Martin G4FKK and XYL Ann

As a footnote, the Woolpack apparently also hosts a jazz concert at 2:30 pm on the first Tuesday of every month. Details of the next two events are as follows:

February 3rd: Mike Byrne's Thameside Seven

March 3rd: John Goddard's Okeh All-Stars

Admission is free and the pub's range of food and beers is available as usual.

Gerry, G8NNT, was also busy with his camera at the dinner and has kindly published twenty of his photos on the internet. Click on the following link to see them:

http://www.mrg9999.com/photo/090112_catsd/



The Jackson 4 (from left Zoe, Jan, Andy G8JAC and Paul 2E0JXN)



Jim G4WYJ and XYL Barbara



Paul, recent proud licensee of 2E0JXN, tucks in while Barbara, XYL of Jim G4WYJ, laughs politely at a joke cracked by Paul's dad, G8JAC. Paul has heard this one before.



Carol, XYL of Ian M3IGP smiles politely at the newsletter editor while, Jean, XYL of Len G0GNQ, concentrates hard on deciding which dessert to order.

Membership Matters

Subscriptions: Just a gentle reminder that if you haven't paid your subscription yet (and some members still haven't) Derek G1PGS is looking forward to hearing from you.

The CATS shirt project: All the CATS polo shirts have now been embroidered with our logos and will be available for collection at the meeting on February 9th.

CATS Fleeces: Following the successful provision of polo shirts, Stuart, G6CJR, is investigating the feasibility of having customised CATS fleeces produced. He doesn't have any firm prices at this

stage, but if you would be willing to pay a maximum of £25.00 for a personalised CATS fleece, please let Stuart know so that he can assess likely demand. Please also see page 9 of this issue of CW for details of events where Stuart invites help or participation.

February Club Meeting

On February 9th, I will be giving a talk with slides and on-line demonstration about how to create a website.

G6MFM Memorial Lecture

The club meeting on Monday 9th March will be presented as the "G6MFM Memorial Lecture", in memory of Derek Hills. Terry, G4CDY, and Martin, G4FKK, will give a talk entitled "Flying - Past and Present". The CATS committee has invited Derek's family to attend this lecture and although his mother won't be coming (she is 96 years old!) his sisters Mary and Sheila (who lives in Folkestone) have accepted our invitation. Please make them welcome.

CATS April Meeting

This year, the April meeting will be on 6th April to avoid clashing with Easter Monday. There will be a talk on DAB (Digital Audio Broadcasting) and DRM (Digital Radio Mondiale) by a representative of the BBC from their Kingswood Warren Laboratories.

Kempton Park Rallies 2009

The first Kempton Park rally of 2009, otherwise known as the West London Radio & Electronics Show will take place on Sunday April 19th 2009.

As usual, CATS will be running a Bring and Buy stall, for which volunteer helpers are required. A useful benefit of volunteering is a free entry pass and early entry to the rally. Contact G8JAC if interested in helping out.



In addition to the regular attractions of this rally, on 19th April 2009 Kenwood UK, Martin Lynch, the RSGB and RadioFairs are jointly sponsoring the third TopHam competition.

All visitors will be given the chance to enter the competition; the first 100 entries will receive a valuable commemorative mug. The 25 people with the highest score on the multiple choice paper will be put into a raffle for a number of valuable prizes.

The second stage will have more difficult questions and the six people with the best scores will be invited to take part in the final round of questions and answers. This round will be televised at the show, via local ATV repeaters and onto the internet. The quiz will be hosted by Eugene Sully G0VIQ.

The winner will receive the RSGB "Top Ham" Trophy and a valuable HF transceiver from Kenwood, there will also be a prize for the runner up.

A further rally is planned to take place at Kempton on Sunday September 27th 2009.

Energy Saving

On a recent Sunday morning 2 metre CATS net, Glen G4FVL drew attention to a useful website that enables people to calculate their carbon footprint. Using an on line calculator, you can produce a personalised action plan, based on your lifestyle, so that you can do your bit to help fight climate change. Check out the main website at:

<http://www.energysavingtrust.org.uk/>

or click on the following link to go direct to the calculator:

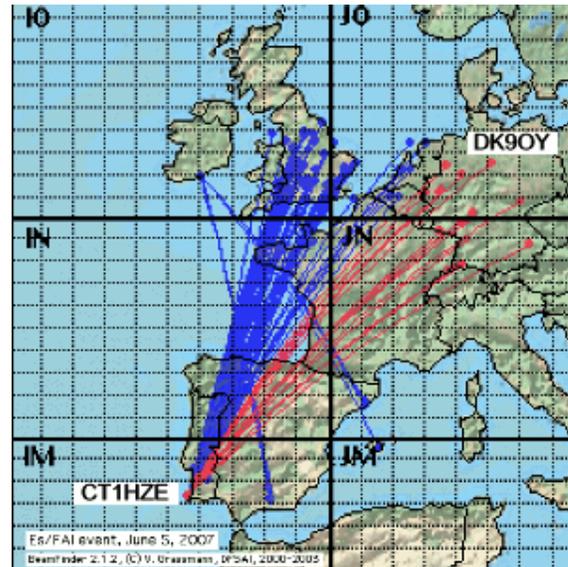
<http://www.energysavingtrust.org.uk/calculator/start>

Brass Monkeys Contest

This 24 hour dual band (144/ 432 MHz) contest is being held on 7th/8th March this year, start time 1400 clock time. However, a definite decision on CATS participation has not been made yet. At the time of writing, four people had volunteered to help full time, plus some part time assistants - not really enough to make this a viable event. If you would like to support a CATS entry, please contact the Contest Secretary, Andy G0KZT, urgently. See also the item in the January issue of CATS Whispers about proposals for CATS contest participation in 2009.

Incoherent Scatter ?

The editor recently discovered this well-designed website dedicate to amateur radio propagation studies and put together by Volker, DF5AI. It covers a wide range of propagation-related topics and includes many interesting graphics such as the one below which relates to an event in June 2007.



Other parts of the site cover: Thunderstorm effects, multi-hop on VHF, Sporadic E, Aurora and Field Aligned Irregularities, Incoherent Scatter, Tropospheric Ducting, VHF Transatlantic, Moonbounce, Meteor Scatter, Radio Astronomy, Long Delayed Echoes, Multiple Tone Effect

You can also download Volker's BeamFinder software from this site. This is a software tool designed to conduct analyses for radio amateurs interested in radio propagation studies. However, please be aware that to download and run this interesting-looking programme you will need a Mac computer.

You can link to the site via the links section of the CATS website, or simply click on the link below:

<http://www.df5ai.net/index.html#Top>

New Secretary for DDRS

The Dorking and District Radio Society (DDRS) has a new Secretary, David Smith, M0SXD. See page 10 of this issue of CW for revised contact details for DDRS.

eQSL – Have You A Card Waiting?

I received an email from 2E1IDC informing me that I had an eQSL card waiting for me. In addition, I was told that I had a further 91 cards waiting for me. I was curious. I had heard of eQSL but had never bothered with it.

I was given a URL to go <http://www.eqsl.cc/> and had to fill out a simple registration form and confirm a number that was sent to me in a separate email. I found that I had eQSL cards dating back to 1989 which was when I was allocated this callsign. Some of the cards are contest related and could be a useful tool for checking those all important exchanges. It could also count for awards where proof of a contact is required.

It appears that you can send your electronic logs as an ADIF file. However, this could send out hundreds of eQSL cards I guess!

There is a free sign up and also a higher grade membership that allows you to design your own QSL card.

Andy G0KZT

QSLs Received

Still on the subject of QSLs, a batch of cards arrived at the 'WZK QTH from the bureau this month. Of particular interest to me were cards from HB9DRM and UR7GG, both worked on 6 metres during the Sporadic E (Es) opening in late May/ early June last year. I had never used 6 metres until moving to my present QTH and this occasion really opened my eyes to the band's possibilities. During the opening, I worked a total of 19 European countries, including some on 10 metres. I've made a note in my diary to look out for 2009's Es season which is expected to peak in mid to late June, with a second lesser peak in mid-December.

Contests Coming Soon

Feb 2: 80m Club Championship (SSB)
Feb 8: 432 MHz AFS Contest
Feb 11: 80m Club Championship (Data)
Feb 14/15: 1st 1.8 MHz contest
Feb 15: 70 MHz Cumulative #3
Feb 19: 80m Club Championship (CW)
Feb 22: 70 MHz Cumulative #4

Mar 2: 80m Club Championship (Data)
Mar 7/8: March 144/432 MHz
Mar 11: 80m Club Championship (CW)
Mar 14/15: Commonwealth Contest (3.5–28 MHz)
Mar 15: 70 MHz Cumulative #5
Mar 19: 80m Club Championship (SSB)
Apr 5: RoPoCo 1 (3.520-3.570 MHz)
Apr 5: First 70 MHz Contest
Apr 6: 80m Club Championship (CW)
Apr 15: 80m Club Championship (SSB)
Apr 19: First 50 MHz Contest
Apr 23: 80m Club Championship (Data)
May 2: 432 Trophy Contest
May 2: 10 GHz Trophy Contest
May 2/3: 432 MHz–248 GHz Contest
May 4: 80m Club Championship (SSB)
May 13: 80m Club Championship (Data)
May 16/17: 144 MHz May Contest
May 17: 1st 144 MHz Backpackers
May 21: 80m club championship (CW)

Shak Nowtz

Turn over the page and you will find the first in a series of articles written by “mad” Frank, G3ZMF. For anyone who doesn't know him, Frank could perhaps best be described as being to amateur radio what Patrick Moore is to astronomy!

As Frank himself says, “After much badgering, I am finally putting pen to paper (or as it's been so long, “quill to parchment”) with some of the notes and circuit ideas I have collected over the past 41 years of licensed amateur radio (G8CAX 1968-1970, then G3ZMF to date.)

“The first set of Shak Nowtz is entitled “Rectifier and Regulator Tips”. Following Nowtz will cover the following:

- PSU tips and “trix” with transformers
- ATU ideas
- Wire aeriels and earths
- “Little wips” and “big wips” (not kinky ones!)
- Friggin' with the rigin'

“Then it's up to you! What do you want and what d'ya know that can be added to the Shak Nowtz portfolio? See you on GB3NS de mad Frank G3ZMF (GB3NS Tx 438.525 (Rx + 7.6 MHz) CTCSS 82.5 MHz Rx 430.925 MHz.)”

As an editorial note, perhaps I should add that these “Nowtz” are just that – they are not meant to be finished projects. So don't forget the need for suitable fusing and safety precautions when dealing with high voltages – Ed.

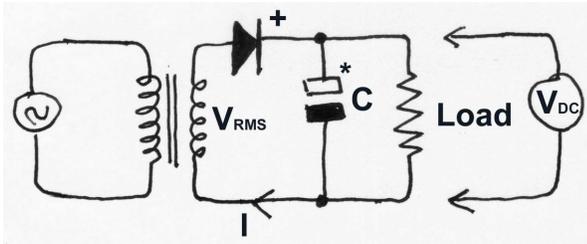


Shak Nowtz by "Mad" Frank, G3ZMF

SHAK NOWTZ No 1: RECTIFIER & REGULATOR TIPS

1 TRANSFORMERS

Half Wave



* Capacitor value $4C/\text{amp}$. This refers to a rule of thumb where for determining capacitor value depending on the load current to be smoothed, with or without any regulation. $4C = 4000\mu\text{F}/\text{amp}$ load to reduce ripple voltage.

$$V_{\text{LOAD}} = 0.9 \times V_{\text{RMS}}$$

ie 10 V AC secondary = 9V DC on load
 I (full load current) = $1.8 \times$ Secondary
 Max rating as only passing load current for 50% of cycle.

But remember, off load the voltage is higher ie:

$$V_{\text{OFFLOAD}} = V_{\text{RMS}} \times \sqrt{2} \quad (\text{ie } 10 \text{ V} \times 1.414 = 14.14 \text{ volts})$$

Special note: any good power supply unit (PSU) will have properly "current rated" smoothing capacitors, eg computer grade. These are usually labelled, for example, 30,000 μF , 40 V DC, 28 A. Yes, they are big, but the results are worth it! These can be picked up at rallies or the CATS Bazaar for anything from 10p to £2. Don't panic about £2 for a new capacitor - just remember that a new one can cost £20 or more.

WARNING! Don't just fit the capacitor and switch on, as you could wreck the rectifier and/or the transformer. All capacitors that have been unused for more than 6 months should be "reformed": that means putting from half to full working voltage across them but with a resistor in series to limit the initial current to, say, 10mA.

Use your Ohm's Law! Measure the AC voltage, multiply by 1.414 ($\sqrt{2}$) to give you peak voltage after rectification, then divide by 0.01. For example:

$$10\text{V (RMS)} = 14 \text{ V DC} \div 0.01 = 1400 \Omega$$

Then use the standard E12 value of 1500 Ω (or 1k5). A $\frac{1}{4}$ or $\frac{1}{2}$ watt resistor will be fine.

I have always used "bleed resistors" across the smoothing capacitors (or capacitor bank): firstly, to drain off the voltage after switch-off, and secondly to reduce the peak voltage by a little bit, remembering that load volts = $0.9 \times V_{\text{RMS}}$.

Diodes should be rated for 2 x full load current (or more.)

ANOTHER WARNING: OK, you have a transformer that gives 15V AC output and you have calculated that half wave rectification (on load) = $15 \times 0.9 = 13.5 \text{ V}$ Very nice for that mobile or base station rig that needs 12.0 to 13.8 V. **BUT**, you forgot about PEAK volts !!! $15 \text{ V AC} \times 1.414 = 21.2 \text{ V}$. **OUCH !!! BANG!!!** Because many of the rigs internal components are probably rated to a max of 16 V. **DON'T DO IT ! USE A REGULATOR (SEE LATER)**

Hopefully by now I have (a) encouraged you to use those 15 V transformers but (b) stopped you blowing up your lovely rigs! (*You might consider also using crowbar overvoltage protection – Ed.*)

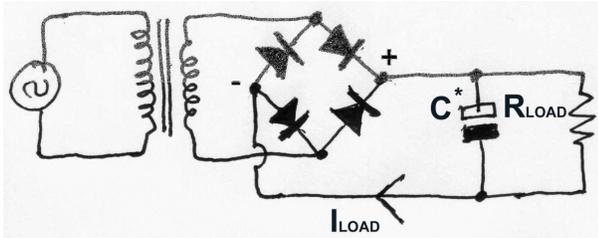
OK, let's go onto full wave rectification now:

2 FULL WAVE RECTIFICATION (Four Diode Method - or twice the voltage if you only want half wave rectification)

Aye, aye, sounds like summat for nowt! No it's not! You **MUST** check the total load of the transformer and do not exceed it. Yes, you can have 2 x volts for the "job" – but it will be half the current.

SHAK NOWTZ No 1: RECTIFIER & REGULATOR TIPS - continued

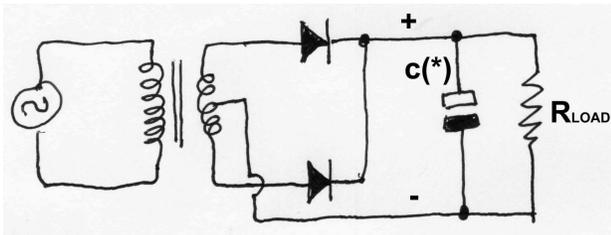
Full Wave From A Half Wave Winding



(*) $1C/\text{Amp}$ refers to $1000\mu\text{F}/\text{amp}$ (full load) as a rule of thumb – see previous notes. Diodes rated for full load current

This circuit produces $\sqrt{2}$ (or 1.414) $\times V_{\text{RMS}}$; ie 10 V AC = 14.14 V peak. In practice = about $1.25 \times V_{\text{RMS}}$ on load, BUT very unstable, due to load variance

3 FULL WAVE RECTIFICATION (Two Diode Method)



(*) Use $1C/\text{Amp}$ as per bridge rectification; otherwise the full current rating of the transformers can be utilized. The diodes are rated at full load current

4 REGULATORS

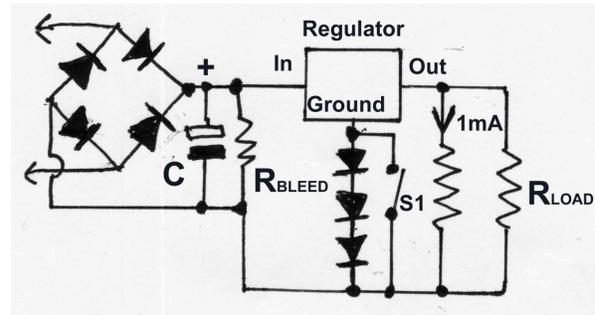
There are numerous “one-device” items that can accept a wide range of input voltages, to give a very good output at a regulated voltage, many with “current- limit- foldover” facilities built in. **BUT AGAIN – BE WARNED** – Don’t try to get 2 pints from a 1 pint bottle!! In the next article, I’ll explain how to get 20 pints from a 1 pint bottle.

From the low current devices available to the “monsters”, you must respect their ratings.

For example, the 78L05 is a 5 volt output regulator, full load is around 50 mA and input voltage from 8 to 15 V. Likewise, a 78CT12 is a high current device that delivers a 2 volt output \pm not much, at 1 amp (or more) and again has a limited input of 15 – 30 volts. **BUT - DON’T FORGET** – any volts dropped towards the output voltage, at the current rating = power loss = heat. So heatsinks and/or fans to cool them are most essential – or else **BANG!**

“Don’t panic Mr Mainwaring, we can jiggle your volts!” Yes you can!

A very easy way to get a few more volts from a 12V regulator is to “jack up its ground connection” - but in this case you **must** insulate the device from its heat sink.



In this circuit, the regulator is insulated above ground/chassis so that diodes (eg the 1N4001 series) can be put in series @ 0.6 V/ diode in the “ground” line of the regulator. This “pushes” the output up by the total of the diode forward drop voltages. So, three diodes at 0.6 V per diode each = 1.8 volts, plus the 12volts of the regulator = 13.8 volts. The switch (S1) across the diodes allows you to switch between 12.0 and 13.8 volts for a 12 volt regulator. **BUT...** don’t overload the regulator.

OK! That’s enough for this lesson

73 de “mad” Frank, G3ZMF

Local Rallies & Events

Sunday 8th February 2009

Harwell Radio & Electronics Rally

At Didcot Leisure Centre, (Adjoining St. Birinus School), Mereland Road, Didcot, OX11 8AY, Oxfordshire.

Sunday 8th February 2009

Train The Trainers at Banstead

Contact Stuart, G6CJR

Saturday 21st February 2009

Guides Thinking Day On the Air at East Croydon
Contact Stuart, G6CJR if you want to be involved.

Sunday 22 February 2009

Breadhurst R&TS (BRATS) Radio Rally

Rainham Girls' School, Derwent Way, Rainham, Kent (just off A2 & M2/J4). Open 09:30/10:00. Parking. Talk in 2m. SIGs, Catering, Lectures, Trade. Admission £2.50. Details:

O.wheeler@btopenworld.com

Sat 28th February/ Sun 1st March 2009

Foundation Course at Banstead: **FULL**.

1 March 2009

Cambridge & DARC Rally

The Britten Arena, Wood Green Animal Shelter, King's Bush Farm, London Rd, Godmanchester, Cambs, PE29 2NH. Details: David G8JKV

rally@cdarc.co.uk

8 March 2009

Bournemouth RS 21st Annual Sale

Kinson Community Centre, Pelhams Pk, Millhams Rd, Kinson, Bournemouth, BH10 7LH. Open 09:30. Free parking, trade stands, catering, disabled facilities. Contact John G0HAT 07719 700 771.

19 April 2009

West London Radio & Electronics Show

Kempton Park Racecourse.

Open 10:00. Parking, trade stands, catering,

disabled facilities. Contact info@radiofairs.co.uk

NOTE: CATS involvement in this event.

25 April

International Marconi Day

See www.gb4imd.org.uk for details

21 June 2009

Newbury Radio Rally & Boot Sale

Newbury Showground, M4 J13.

Open 09:00. Free parking, trade stands, catering, disabled facilities. Contact rally@nadars.org.uk

12 July 2009

McMichael Rally & Boot Sale

Reading Rugby Club off A4 east of Reading

Open 09:00. Parking, trade stands, catering.

Contact g0jms@radarc.org

27 September 2009

West London Radio & Electronics Show

Kempton Park Racecourse.

Open 10:00. Parking, trade stands, catering,

disabled facilities. Contact info@radiofairs.co.uk

NOTE: CATS involvement in this event.

For Sale & Wanted

FOR SALE/ SWAP – Frank, G3ZMF, has a large number of low voltage transformers (wall warts), thousands of crystals and hundreds of skeleton pots. Contact Frank on 01737 218463, or call on GB3NS.

WANTED - Frank, G3ZMF, is looking for some electrolytic capacitors to restore his KW2000A PSU. He requires capacitors with values 8µF, 16µF or 32µF rated at 450 volts or higher. Axial configuration preferred. Contact Frank on 01737 218463, or call on GB3NS.

FREE – Paul, G8KDQ, has a computer available for collection. It is made by e-Machines, has a 600 MHz Celeron processor, Windows ME, 160 MB RAM, 10GB hard drive, CD-RW drive, DVD-RW drive, CRT monitor, keyboard & mouse and 2 loudspeakers. Contact Paul on 01883 620360 or by e-mail at paulpatricia@tiscali.co.uk

WANTED – Loan of simple to operate receiver (HF and/ or VHF/UHF) for very enthusiastic budding disabled amateur. Contact Steve on 01883 620730 or by email g3wzk@whenland.com

Other Club News & Contact Information

BROMLEY & DISTRICT ARS

Website: www.bdars.org.uk

Email bdars-news@talk21.com

Meets on 3rd Tuesday of every month at Victory Social Club, Kechill Gardens, Hayes, Kent, 7:30pm for 8pm.

CPREC (CRYSTAL PALACE)

Website: www.gsl.net/g3oou/ or

<http://www.g3oou.co.uk/>

Club Net: Wednesdays 20:00 hrs 145.525 MHz

Meetings: 1st Friday at All Saints Church Parish Rooms, Beulah Hill at 7:30 pm.

6th February – The History Of Sound Recording by Jon Weller G0GNA

6th March – AGM and Construction Contest

April - TBA

CRAWLEY ARC

Website: www.carc.org.uk

Club Nets: Tuesdays 2000hrs 145.550 MHz and

Fridays 1900hrs 1.970 MHz

Meetings: Every Wednesday at Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley from 7:30pm, and Sundays, 10:30 until 13.00.

25th February – Surplus equipment sale

DORKING & District RS

Website: <http://www.ddrs.org.uk>

Email: ddrs.secretary@yahoo.co.uk

Contact: David Smith, MOSXD, 07808579501

Club Nets: Sunday 0815hrs 3.770 MHz & 2030hrs 144.775 MHz

Meetings: Friends Meeting House, Butterhill, South Street Dorking at 1930hrs.

HORSHAM ARC

Website: www.harc.org.uk

Club Nets: Saturdays 2130hrs 144.725MHz

Sundays 1000hrs 3.722 MHz

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

5th February – Nuclear Power Generation by John Narborough

22nd February – Sunday morning fox hunt

26th February – Social at the Red Lion, Slinfold

MID SUSSEX ARS

Website: www.msars.org.uk

Club Nets: Sundays 0800hrs 3.740 MHz

Sundays 1100hrs 145.350 MHz

Wednesdays 2000hrs 145.350 MHz

Daily 1330hrs 21.330 MHz

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

REIGATE ATS

Website: www.gsl.net/rats

Email: rats@gsl.net

Club Nets: Thursdays 2000hrs 145.500 MHz

Sundays 2000hrs 3.740 – 3.760 MHz

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

SRCC

Website: www.g3src.org.uk

Contact: Ray Howells G4FFY 020 8644 7589

Club Nets: Sunday 0930hrs, 1905 kHz

Daily natter channel – 144.215 MHz at 19.30.

Meetings: 1st & 3rd Mondays at Trinity School, Shirley Park, Croydon CR9 7AT 7.45pm for 8pm

2nd February - SMD Masterclass with Gareth G4XAT

2nd March – Spring surplus Equipment Sale

6th April – 69th AGM

11th May – Project Construction Evening

SUTTON & CHEAM RS

Website: www.scrs.org.uk

Contact: John Puttock G0 BWV 020 8644 9945

Club Nets: Monday 20.00hrs 145.500 MHz

Saturday 11.00hrs 145.500 MHz

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

19th February – ‘Hamtests.co.uk’ by Paul Gibson M0TZO

19th March - ‘The Technology Behind Entertaining Light’ by Chris Chew M3YGO

16th April – Talk & demonstration of Amateur TV, by Mike Sanders, G8LES

21st May – AGM and Construction Contest

18th June – ‘Frequency Standards’ by Mike O’Beirne, G8MOB

THAMES VALLEY ARTS

Contact: Trevor Farris M0CDB 013 7245 767

Club Nets: G3TVS, Saturdays 1400hrs on 40m

WIMBLEDON & DISTRICT ARS

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.

13th February – ‘Bird Photography, Now And Then’ by Graham 2E0BJX

27th February – Construction: Antennas

13th March – ‘Stamp Duty’ by Denis Noe M0NDJ

27th March – Surplus Equipment Sale

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S J Beal G3WZK on behalf of the
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