

COULSDON AMATEUR TRANSMITTING SOCIETY  
**G4FUR**  **M1FUR**

# CATS WHISPERS



**November  
2011**

Affiliated to the RSGB

## **CATS Committee**

Chairman: Glenn Rankin, G4FVL  
Secretary: Steve Beal, G3WZK  
Treasurer: Steve Conway, G7SYO  
Members: Stuart Barber, G6CJR  
Frank Emery, G3ZMF  
Dennis Noe, M0NDJ  
James Flint, G0SDB

### **CATS Whispers Editor:**

Steve Beal, G3WZK

email address for contributions: [newsletter@catsradio.org](mailto:newsletter@catsradio.org)

## **Regular Society Meetings**

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

## **Society Nets**

1st Saturday of month - 17:15 - Crescenta Valley / CATS Net on Echolink/ GB3NS  
Sunday mornings - 11:00 - Call on 145.400 MHz  $\pm$  QRM  
Sunday evenings - 17:00 - Call on 3.700 MHz  $\pm$  QRM  
Wednesday evenings - 21:00 - Call on 70.425 MHz

## **CATS Website**

[www.catsradio.org](http://www.catsradio.org)

## **Email**

[enquiries@catsradio.org](mailto:enquiries@catsradio.org)

## **Forthcoming Meetings**

Monday	Nov 14th	CATS Annual Quiz: Quizmasters Steve G7SYO and Wendy
Monday	Dec 12th	AGM
Monday	Jan 9th	CATS Annual Dinner At The Fox, Coulsdon Common



CATS is twinned with the Crescenta Valley Radio Club  
Glendale California USA [www.gsl.net/cvrc](http://www.gsl.net/cvrc)

# CATS October Meeting

Our October meeting featured a talk by CATS committee members Stuart G6CJR and Denis M0NDJ entitled "Radio in the Scouting Movement."

Denis began by reviewing the history of the Scouting movement, from Baden Powell's first camp in 1907 on Brownsea Island in Poole Harbour in Dorset to the present day with some 28 million scouts in 200 countries worldwide. Radio as a teaching aid has been part of scouting from the very beginning with benefits such as improving communications skills, international friendship and community service. As early as 1911, the 1st Arundel Troop set up a transmitting station, callsign XBS, with a spark transmitter that they had constructed themselves and by 1913 the Marconi company was providing scouts with free instruction in "Wireless Telegraphy."

By the end of the First World war, thermionic valves had begun to be used and with them came the end of homemade spark transmitters and the imposition of many restrictions on the use of radio by Scouts. From now on, boys would only be permitted to build receivers. However, until 1956 they continued to be allowed to operate a transmitter if supervised by a licensed radio amateur.

In 1957 there was a World Scouting Jamboree at Sutton Coldfield attended by 35,000 scouts from 62 countries. Using amplitude modulation, the event's amateur station made 1712 QSOs using the callsign GB3SP, SSB being very uncommon at the time. There was also an amateur television station. The success of the Sutton Coldfield event led G3BHK to propose the idea of a Jamboree On the Air – or JOTA for short. The first JOTA event was held the following year (1958) and was so successful that it has continued annually ever since on the 3<sup>rd</sup> full weekend of October every year.



This year's JOTA/JOTI badge

Other present day regular radio scouting events include the UK Scoutnet every Saturday morning at 0900 on 80 metres.

A list of regular Scout Frequencies is given in the following table:

Band	SSB	CW
80 m	3.690 & 3.940 MHz	3.570 MHz
40 m	7.090 & 7.190 MHz	7.030 MHz
20 m	14.290 MHz	14.060 MHz
17 m	18.140 MHz	18.080 MHz
15 m	21.360 MHz	21.140 MHz
12 m	24.960 MHz	24.910 MHz
10 m	28.390 MHz	28.180 MHz
6 m	50.160 MHz	50.160 MHz

A list of scouting nets worldwide is given in the following table:

Country	Day	Time	Freq (MHz)
Denmark	Saturday	13.00 GMT	3.740
Europe	Saturday	09.30 GMT	14.290
Japan	3rd Saturday of month	23.00 local	21.360
Norway	Saturday	15.30 local	3.740
Sweden	Saturday, even weeks	15.00 local	3.740
Sudan	Sunday	12.00 GMT	21.360
UK	Saturday	09.00 local	3.740
US	Sunday	20.30 GMT	14.290
World Scout Net*	1st Saturday of month	22.00 GMT	Echolink 131124

\* connect to node 106440 or 131124

This summer, Denis and Stuart visited the 22<sup>nd</sup> World Scouting Jamboree in Rinkaby near Kristianstad in Sweden, an event that was attended by forty thousand scouts and guides in total.



The SJ22S badge

Stuart and Dennis were among thirty operators of the special event station SJ22S. Your editor was pleased to be able to work them on both 40 m and 17m. Colin G3YCR also managed a contact on 17m.



CATS' own Denis M0NDJ, operating SJ22S

Overall, SJ22S made 7452 QSOs with 126 countries.

Other radio-related activities for the young people at the Jamboree included kit building, Morse code, radio direction finding, radio/echolink operation and PMR games.



The SJ22S QSL card



Assembled operators of SJ22S

The closing ceremony on 7<sup>th</sup> August was attended by the King Of Sweden and everyone is now looking forward to the next Jamboree which will be held in 2015 in Japan.

The evening concluded with a DVD about GB1005 and movie, the latter produced by Maura M3URA (Stuart's daughter.)

Winding up the two-man presentation, Stuart G6CJR said he was planning to organise a trip next summer to the famous VLF (17.2 kHz) transmitter site at Grimeton in Sweden for CATS members.

A big thanks you to Denis and Stuart for a very entertaining evening - watch this space for more information about next year's trip!

## Transponder Net:

Frank G3ZMF has informed CATS Whispers that the November Transponder Net with Crescenta Valley took place on Saturday 5<sup>th</sup> November at the earlier-than-usual time on the UK side of 4:15 pm, as the clocks had gone back on the east side of The Pond but not yet on the west side.

Participants in this month's net included:

UK	US
G3ZMF - Frank	K6POI - Julian
G4DFA/M - Tom	W6MW/8 - Mark
G6CJR - Stuart	

There were apparently some repeater problems in the US and, as *Cats Whispers* was going to press, news came through that the continuity of use of the GB3NS repeater on the UK side is now in doubt. More information next month, if available.

## CATS November Meeting

This will be the reintroduced CATS Quiz hosted by CATS treasurer Steve G7SYO and partner Wendy. The format of the quiz will be similar to "Who Wants To Be A Millionaire" with multiple choice questions. There will be a prize of course – but it won't be £1,000,000 !

Other clubs have been invited to attend and we look forward to seeing as many people as possible at this event.

## **CATS December Meeting** **Advance Notice Of AGM**

### **Annual General Meeting Of The Society**

In accordance with the rules of the Society, notice is hereby given that the Annual General Meeting of the Coulsdon Amateur Transmitting Society will be held on Monday 12th December 2011 at St. Swithun's Church Hall, Grovelands Road, Purley, Surrey CR8 4LA, commencing at 20:15 hours.

Don't forget that this is your opportunity to ask your committee about events of the past year and make suggestions for the future.

Nominations for new committee members will be welcome.

As usual, it is hoped to provide mince pies and wine at this event.

## **CATS 2012 Annual Dinner**

The Committee have decided to make a booking for The Fox Public House on Coulsdon Common, as a venue for the 2012 CATS Annual Dinner. The date for your diaries is 9th January 2012, 7:30 for 8:00 pm.

An email will be sent to all members about the event.

## **Kempton Park Rally & CATS Bazaar**

This November is again a busy month for CATS. On 6<sup>th</sup> November CATS attended the Kempton Park rally and provided the usual Bring and Buy stand. The rally was well attended and CATS made a useful addition to club funds from commission on sales. Full report next month.

On 20th November, we have the 34th Annual CATS bazaar. In addition to the Bring and Buy stand, we will also need helpers for the refreshments department and for manning the entrance, amongst others, plus people to help set up on the previous Saturday afternoon.

Please contact Glenn G4FVL, if you are available to help in any way.

## **Droitwich To Close**

CATS member Tom G4DFA writes,

"Hi All,

"I wasn't sure how public the news was, but as the imminent demise of Droitwich on 198 kHz has now been mentioned in the Guardian, I thought I'd put in my threepenn'th !

"I have a 10 MHz frequency standard locked to 198 kHz (ex 200 kHz) which is my calibration standard for my frequency counter ..... that's been on permanently for the last 6 or 7 years.

"Now I'll have to find an alternative - as since 60 kHz Rugby went to Anthorn the signal's so weak that most of the time mains noise swamps it!

"For more information, visit:

[www.guardian.co.uk/media/2011/oct/09/bbc-radio4-long-wave-goodbye](http://www.guardian.co.uk/media/2011/oct/09/bbc-radio4-long-wave-goodbye)

"73 de Tom G4DFA."

## **MFJ Video**

CATS member Mike M1CCF kindly sent the following link to CATS Whispers. Introduced by Gary Pearce KN4AQ, it features a show that includes footage taken in the MFJ factory.

<http://twit.tv/show/ham-nation/20>

The "Twit" site has weekly "Ham Nation" episodes dedicated to amateur radio news. For example, episode 22 from this site features JOTA 2011 (from a US viewpoint of course.)

Well worth a look!

## **CATS Contesting**

The CATS Committee have decided to participate in next year's "Brass Monkeys Contest" (144/ 432 MHz) on 3<sup>rd</sup>/4<sup>th</sup> March 2012.

Offers of help to G3ZMF, please.

## Contests Coming Soon

### 2011:

Nov 12: Club Calls  
Nov 19-20: 2nd 1.8MHz Contest  
Dec 4: 144MHz Affiliated Societies Contest  
Dec 26-29: 50/70/144/432MHz Christmas  
Cumulatives Contest

### 2012:

Jan 15: AFS Contest CW  
Jan 21: AFS Contest Phone  
Feb 5: 432MHz Affiliated Societies Contest  
Feb 11-12: First 1.8 MHz Contest  
Feb 26: 70 MHz Cumulative #1  
Mar 3-4: 144/432 MHz (Brass Monkeys)  
Contest  
Mar 10-11: Commonwealth Contest  
Mar 11: 70 MHz Cumulative #2  
Apr 1: First 70 MHz Contest  
Apr 8: RoPoCo SSB  
Apr 15: First 50 MHz Contest  
May 5: 432 MHz Trophy Contest  
May 5: 10 GHz Trophy Contest  
May 5-6: 432 MHz to 248 GHz Contest  
May 13: 70 MHz CW Contest  
May 19-20: 144 MHz May Contest  
May 20: First 144 MHz Backpackers  
May 27: 70 MHz Cumulative #3  
Jun 2-3: NFD  
Jun 10: Second 144 MHz Backpackers  
Jun 16-17: 50 MHz Trophy Contest  
Jun 24: 70 MHz Cumulative #4  
Jul 7-8: VHF NFD  
Jul 8: Third 144 MHz Backpackers  
Jul 22: 70 MHz Trophy Contest  
Jul 22: Low Power Contest  
Jul 28-29: IOTA Contest  
Aug 4: Fourth 144 MHz Backpackers  
Aug 4: 144 MHz Low Power Contest  
Aug 5: 432 MHz Low Power Contest  
Aug 5: RoPoCo CW  
Aug 12: 70 MHz Cumulative #5  
Sep 1-2: 144 MHz Trophy Contest  
Sep 1-2: SSB Field Day  
Sep 2: Fifth 144 MHz Backpackers  
Sep 9: Second 70 MHz Contest

## Local Rallies & Events

**20 November 2011**

**CATS 34th Annual Radio and  
Electronics Bazaar**

**Provisional arrangements as follows:**

1st Coulsdon Scout Group headquarters, Lion Green  
Road in Coulsdon, Surrey. [Map](#)

Open 10:00 to 13:00

Parking, trade stands, bring and buy, refreshments

Contact: [enquiries@catsradio.org](mailto:enquiries@catsradio.org) or

[www.catsradio.org](http://www.catsradio.org)

**15 January 2012**

**7th Dover Radio Rally**

Whitfield Village Hall, Sandwich Road, Whitfield, Dover,  
CT16 3LY.

Open 09:00

Parking, Boot Fair, Refreshments.

Bring and Buy

Talk in on GB3KS

Contact: Ian, G3ROO, 01304 821588 or

[ian.g3roo@gmail.com](mailto:ian.g3roo@gmail.com)

[www.doverradio rally.com/index.html](http://www.doverradio rally.com/index.html)

**5 February 2012**

**27th Canvey Radio & Electronics Rally**

'The Paddocks', Long Road, Canvey Island, SS8 0JA

Open 10:30

Parking, Catering, Disabled Facilities, Trade Stands

Major Amateur Radio and Electronic component

exhibitors Selling New and S/Hand equipment .

Freshly made refreshments. (And by popular demand the  
famous Canvey Radio Rally Bacon Rolls are back on the  
Menu).

Free car parking with space outside main doors for  
disabled visitors

Contact: Dave, G4UVJ, 01268 697978 (evenings)

[rally@southessex-ars.co.uk](mailto:rally@southessex-ars.co.uk)

[www.southessex-ars.co.uk/](http://www.southessex-ars.co.uk/)

**26 February 2012**

**Rainham Radio Rally**

Rainham School For Girls, Derwent Way, Gillingham,

Kent, ME8 0BX

Contact Trevor, G6LYW, 07717 678795 or

[trev@wig1.co.uk](mailto:trev@wig1.co.uk)

**4 March 2012**

**Cambridge and District ARC Rally**

Wood Green Animal Shelter, King's Bush Farm, A1198

London Road, Godmanchester, Cambs, PE29 2NH.

Open 10:00/10:15. Admission £3. Talk in. Trade. B&B.

Catering with bar.

Disabled facilities. SIGs. Raffle. Lectures. Family  
attractions.

Contact David M0GUM, 01954-203080 or

[rally2010@cdarc.co.uk](mailto:rally2010@cdarc.co.uk)

[www.cdarc.co.uk](http://www.cdarc.co.uk)

**15 April 2012**

**West London Radio & Electronics Show**

Kempton Park Racecourse.

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

facilities. Contact [info@radiofairs.co.uk](mailto:info@radiofairs.co.uk)

*NOTE: CATS involvement in this event. The CATS bring  
and buy sale is a permanent feature of this rally.*

[www.radiofairs.co.uk](http://www.radiofairs.co.uk)

**17 June 2012**

**25<sup>th</sup> Newbury Radio Rally & Boot Sale**

Newbury Showground, M4 J13.

Open 09:00. Free parking, trade stands, catering,

disabled facilities. Contact [rally@nadars.org.uk](mailto:rally@nadars.org.uk)

[www.nadars.org.uk/](http://www.nadars.org.uk/)

**22-24 June 2012**

**Hamtronic Show, Friedrichshafen**

Messe Friedrichshafen, Germany

Open 09:00 each day

[www.hamradio-friedrichshafen.de/ham-en/index.php](http://www.hamradio-friedrichshafen.de/ham-en/index.php)



# SHAK NOWTZ BY "MAD" FRANK - G3ZMF

## SHAK NOWTZ No 14

### A Mobile Whip For 145/ 433/ 1297 MHz

Way back in 1990 I was given a challenge: to make a dual band mobile whip for 2m and 70 cm so I did some research in various books and magazines and set to work. Several failures later I ended up with a usable antenna, but then John G8MNY suggested that the whip might also work on 23cm because of its construction.

At the time, I had no equipment for that band, so John kindly brought over his 23cm transceiver and SWR meter and tested it for me. To my surprise it performed well across 1290 to 1300 MHz. Wow! I had built something from guesswork that really performed.

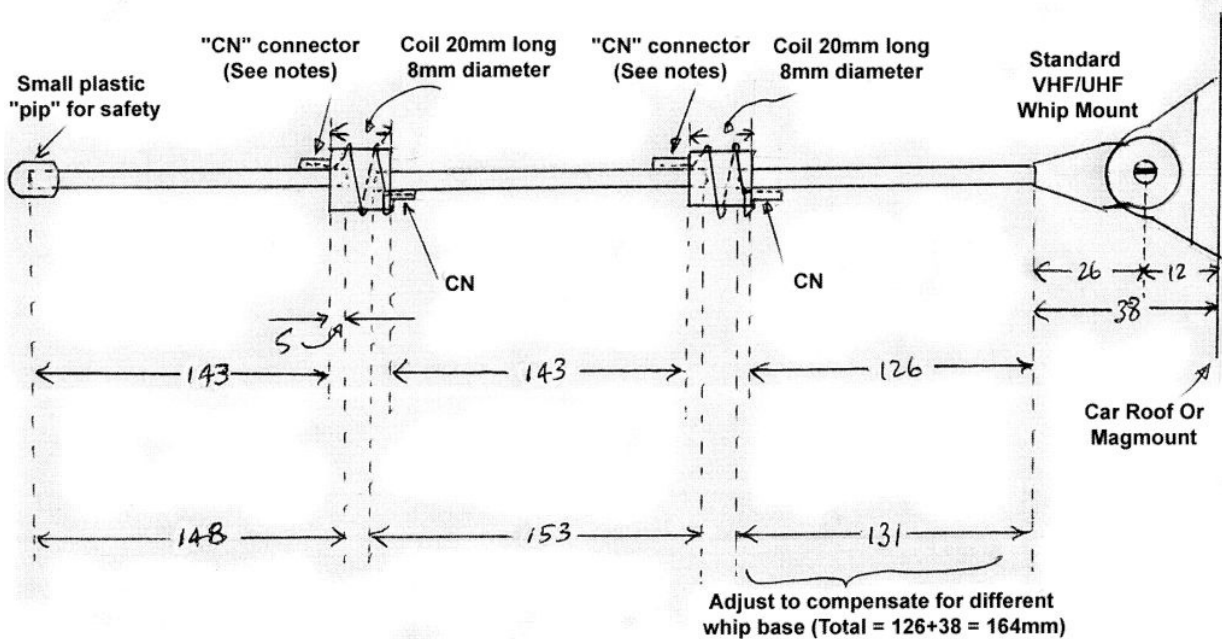
Since then, it has been borrowed several times to the delight of the user, often followed by a request to "make me one please!" I currently have requests to build four more of these antennas in hand.

Construction depends on getting suitable materials, and will commence when I get



The completed antenna

through with the very large pile of jobs to do for "others", let alone "MY" jobs hi! For example, for the coil former I used an 8mm diameter



All dimensions in mm unless stated otherwise. Both coils 2.5 turns 20 swg (see notes.)

Fig 1: The G3ZMF Triband Mobile Whip

## SHAK NOWTZ No 14

knitting needle cut into sections 20mm long with the centre drilled out. In practice you could use nylon, PTFE or any strong plastic that survives the microwave oven test. The wire gauge for the coils is 20 swg enamelled copper although silver plated copper would be better.

The whip sections are made from 2.4mm chromed steel rod (3/32"). The coil formers are drilled 0.1mm (ie 2.3mm diameter) undersize too ensure that the whip sections fit tightly.

Measurements are taken from my original antenna. It acts as a double loaded  $\frac{1}{4}$  wave on 2 metres, as  $3 \times \frac{1}{4}$  waves on 70 cm, and as  $3 \times \frac{3}{4}$  waves on 23cm.

If the whip base is a different size, then the 38 mm allowed for in Figure 1 must be adjusted so that the total remains at 164 mm. Thus the overall length from car roof to tip is  $164+20+143+20+143 = 490$  mm.

For the coil to whip connection, use a 2 or 3 amp connection block squeezed in a vice to make the hole oval, with screws bearing down on the whip material, NOT the coil wire (see below.) Tighten the screws to maximum, cut off the heads and remove from vice. Finally, cover the coil and joint with heatshrink sleeving.

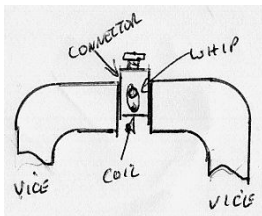


Fig 2.1 Squeezing the connector

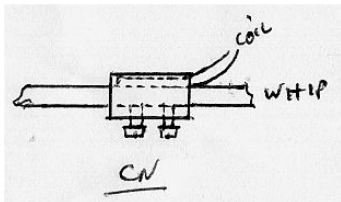


Fig 2.2 Detail of connection



Frank G3ZMF with the completed antenna



Close up of loading coil

### Remote Relay Switching With Limited Connections

I'm sure we have all at some time or other wished we could remote relay control something, but lacked a suitable multi-core cable. However it is possible to operate two relays using coaxial cable and suitably separated DC and RF connections at each end. The system relies on being able to send either a positive or a negative voltage along the coax inner. A suggested PSU for generating these voltages is given in Fig 3.1.

# SHAK NOWTZ No 14

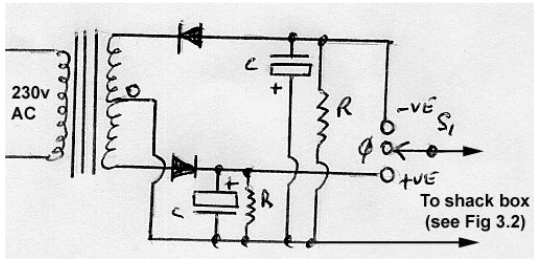


Fig 3.1: Switchable source of +ve, -ve or 0 volts for remote relay switching

S1 can be a rotary switch or a centre-off single pole toggle switch  
 C is 100  $\mu$ F rated at 2 or 3 times the AC voltage  
 R is a DC bleed resistor with a value calculated as 1 k  $\Omega$  per DC volt: ie 12k  $\Omega$  for a 12 volt supply.

The output from Fig 3.1 is fed into the "Relay Feed" connection of fig 3.2 – see below.

A further refinement that permits up to 4 remote relays to be switched, involves using two additional wires such as on a length of two core flex, and the circuit of fig 3.3, with the coax braid as the common.

All wires should be decoupled to RF with capacitors and series chokes at both ends of each feed. As before, rotary switches can be used or centre-off single pole toggle switches. With each of the two wires able to indicate three states (+ve, -ve or zero volts) there are

nine combinations in total of possible relay states at the distant end.

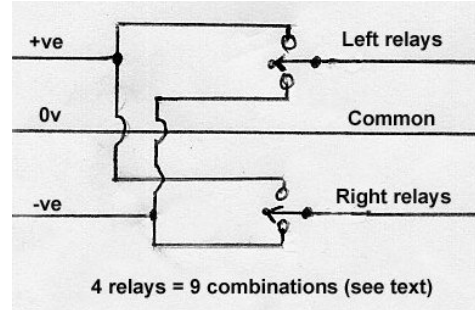


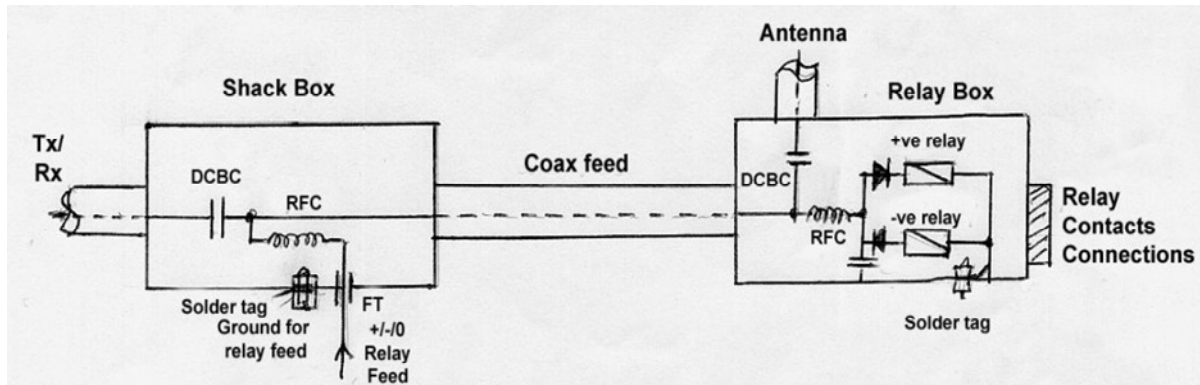
Fig 3.3: Arrangement of switching to permit four relays to provide nine different switched states

Well folks, that should keep you busy for another month or so!

Future issues of Shak Nowtz will include circuits for a simple timer, a one valve Transmitter plus some basic measurements for "slender James's" - homebrew Slim Jims, in other words, but do let me know if there's anything else you'd like me to cover.

Have fun!

73 de Mad Frank G3ZMF



DCBC = DC blocking capacitor, value to suit frequency, eg 2nF for 1.8 MHz to 30 MHz, 500 pF for 50/70 MHz, 250 pF for 145 MHz, 100 pF for 435 MHz  
 FT = feedthrough capacitor, eg 1000pF at 200 v working  
 RFC to suit frequency, eg 2.5mH at LF/HF, 1mH at VHF, 0.5mH at UHF  
 Do NOT fit "back EMF" diodes across the relay coils as the presence of RF may cause the relays to chatter  
 However, a 100pF/200v capacitor across relay coils may help

Fig 3.2 Remote relay switching with limited connections

# Other Club News & Contact Information

## **BROMLEY & DISTRICT ARS**

**Website:** [www.bdars.org.uk/](http://www.bdars.org.uk/)

**Email:** [info@bdars.co.uk](mailto:info@bdars.co.uk)

**Meetings:** 3<sup>rd</sup> Tuesday of every month at Victory Social Club, Kechill Gardens, Hayes, Kent, 19:30 for 20:00.

**15 Nov** - PIC's (JAL)

**20 Dec** - Mince Pie Evening and Quiz

**Jan 2012** – Club dinner

## **CPREC (CRYSTAL PALACE)**

**Website:** [www.gsl.net/g3oou/](http://www.gsl.net/g3oou/) or <http://www.g3oou.co.uk/>

**Club Net:** Wednesdays 20:00 on 145.525 MHz

**Meetings:** 1<sup>st</sup> Friday at All Saints Church Parish Rooms, Beulah Hill at 19:30

**04 Nov** – Evening of short talks

**02 Dec** - Christmas Social

**06 Jan** – TBA

**03 Feb** – AGM and construction contest

## **CRAWLEY ARC**

**Website:** [www.carc.org.uk](http://www.carc.org.uk)

**Club Nets:** Tuesdays 20:00 on 145.550 MHz and

Fridays 19:00 on 1.970 MHz

**Meetings:** Every Wednesday at Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley from 19:30, and Sundays, 10:30 to 13.00.

## **CRAY VALLEY RS**

**Website:** [www.cvr.org](http://www.cvr.org)

**Contact:** Richard Perzyna, G8ITB (see website)

**Club Nets:** Wednesdays 21:00 on 145.500/QSY and 22:00 on 3.720 ± QRM, and Sundays 11:00 on 3.720 ± QRM

**Meetings:** 1<sup>st</sup> and 3<sup>rd</sup> Thursdays at Progress Hall, Admiral Seymour Road, Eltham, SE9 1SL

**3 Nov** – Junk sale

**17 Nov** - Christmas Island Dx'pedition Part 2 - Nobby G0VJG

**1 Dec** – Reprise on CVRS in the 1970s

**15 Dec** – Christmas social

## **DORKING & DISTRICT**

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

**Email:** [ddrs.secretary@yahoo.co.uk](mailto:ddrs.secretary@yahoo.co.uk)

**Contact:** David Smith, M0SXD, 07808579501

**Club Nets:** Sunday 08:15 on 3.770 MHz & Thursday 20:00 on 144.775 MHz

**Meetings:** Friends Meeting House, Butterhill, South Street Dorking at 19:30.

**22 Nov** - The 4 Square Antenna – results - Garth Swanson.

**9 Dec** - Christmas Dinner

## **HORSHAM ARC**

**Website:** [www.harc.org.uk](http://www.harc.org.uk)

**Club Nets:** Saturdays 21:30 on 144.725MHz and Sundays 10:00 on 3.722 MHz

**Meetings:** 1<sup>st</sup> Thursday at The Guide Hall, Denne Road, Horsham, Sussex

**3 Nov** – John Narborough Lecture

**1 Dec** - AGM

## **MID SUSSEX ARS**

**Website:** [www.msars.org.uk](http://www.msars.org.uk)

**Club Nets:** Sundays 08:00 on 3.740 MHz and at 11:00 on 145.350 MHz, Wednesdays 20:00 on 145.350 MHz and Daily 13:30 on 21.330 MHz

**Meetings:** Every Friday at Cyprus Hall, Cyprus Road, Burgess Hill, West Sussex for 19:45

**11 Nov** - Construction Contest

**25 Nov** – Talk on Sussex trams by Ian Gledhill

**09 Dec** - Club Christmas Dinner

**16 Dec** - Christmas Quiz

## **REIGATE ATS**

**Website:** [www.gsl.net/rats](http://www.gsl.net/rats)

**Email:** [rats@gsl.net](mailto:rats@gsl.net)

**Club Nets:** Thursdays 20:00 on 145.500 MHz and Sundays 20:00 on 3.740 – 3.760 MHz

**Meetings:** 3<sup>rd</sup> Thursday at RNIB, Redhill College, Philanthropic Road, Redhill for 19:30

## **SRCC**

**Website:** [www.g3src.org.uk](http://www.g3src.org.uk)

**Contact:** John Kennedy G3MCX, 020 8688 3322

**Club Nets:** Sunday 09:30 on 1905 kHz

Daily natter channel – 144.215 MHz at 19.30.

**Meetings:** 1<sup>st</sup> & 3<sup>rd</sup> Mondays at Trinity School, Shirley Park, Croydon CR9 7AT 19:45 for 20:00

**7 Nov** - An Airport for London That Never Was  
Ced Verdon

**5 Dec** - Talk (TBA)

## **SUTTON & CHEAM RS**

**Website:** [www.scrs.org.uk](http://www.scrs.org.uk)

**Contact:** John Puttock G0 BWV 020 8644 9945

**Club Nets:** Monday 20.00 on 145.500 MHz

Saturday 11.00 on 145.500 MHz

**Meetings:** 3<sup>rd</sup> Thursday at Sutton United Football Club, The Borough Sports Ground, Gander Green Lane, Sutton. 19:30 for 20:00

**17 Nov** – GSM Mobile Phone Network Infrastructure - Dave M0SXD

**8 Dec** – Christmas Junk Sale

**19 Jan** - Ham Radio Olympics - Roger G3SXW

**16 Feb** - Military Radio - Denis M0NDJ

## **WIMBLEDON & DISTRICT ARS**

**Website:** Unavailable

**Contact:** Jim Bell M0CON 020 8874 7456

**Club Net:** Mondays 20:45 on 145.500 MHz

**Meetings:** 2<sup>nd</sup> & last Friday of each month at

Martin Way Methodist Church, Buckleigh Avenue, Merton

**25 Nov** - Surplus Equipment Sale

**9 Dec** - Christmas Social

CATS Whispers is published monthly by  
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