



SURREY RADIO CONTACT CLUB

SEPTEMBER 2001 — No: 708

CLUB NET 29.111 MHz Sunday 9:30am
 CLUB NET 144.325 MHz Friday 8:30pm
 CLUB NET 145.500 MHz and Down Thursday 7.00pm

CLUB Internet WEB Site:
<http://www.g3src.org.uk>

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MONTHLY MEETINGS 1ST AND 3RD MONDAYS 7.45 FOR 8pm
 AT THE T.S. TERRA NOVA, 34 THE WALDRONS, SOUTH CROYDON

"A" MEETING 3rd Sep 2001 FOR THOSE IN PERIL—The Lifeboat Service – Peter G7PWV
"B" MEETING 17th Sep 2001 FIX-IT, ADVICE, CHIN-WAG, CLUB STATION + "MOVE-IT-ON"

Chairman	GOPAR David How	020-8761 2954
Vice-Chairman	G3ZPB Peter Burton	01737-551413
Treasurer, Liaison & Equipment	G4DDY Maurice Fagg	020-8669 1480
Secretary, Membership & Communications	G4FFY Ray Howells	020-8644 7589
VHF Co-ordinator	G8TB Bernard Wynn	020-8660 7517
Publicity & HF Co-ordinator	G4WAY Roger Holyoake	020-8689 7089
Members	G4XAT Gareth Evans	020-8462 2837
	G3RJW Graham Marshall	020-8669 8722
Co-opted	M1MRS Robert Shepperley	020-8640 5166

Dear Members

Hello and welcome to the September 2001 newsletter, which I have started early for a change to try and save a mad-rush! Also it's my 50th birthday over the Bank Holiday weekend and I shouldn't really spend it writing the Newsletter!!

For our "A" Meeting this month (3rd Sep) we are indebted to Peter G7PWV who will be giving a presentation on the Lifeboat service. This is a family evening so all are welcomed to TS Terra Nova, your partners, friends and children. The "B" Meeting (17th Sep) will be the usual Fix-it, Advice, Chin-Wag, Club Station and "Move-it-on".

Next "A" Meeting Monday 3rd Sep 2001

FOR THOSE IN PERIL - The Lifeboat Service - Peter G7PWV - Family Evening

For our "A" meeting on Monday 3rd September we are pleased to welcome Peter G7PWV to give us all a talk on the Lifeboat service. This will be a meeting open to all, members, partners, friends and children. Peter has given me the following introduction:

'For Those in Peril' (words taken from the famous mariner's hymn) will be a slide illustrated talk on both the current role of the Royal National Lifeboat Institution (RNLI), and on its history and heritage.

The RNLI is unique in that it is a charity, but also an emergency service, which exists to save life at sea. It provides, through a network of over 220 lifeboat stations,

24 hour on call cover for search & rescue incidents up to 50 miles out from the coasts of the UK and the Republic of Ireland. The majority of lifeboat crews are volunteers, and every penny required to run the service is raised from voluntary sources.

The history and heritage of the RNLI are displayed in the National Lifeboat Collection, part of the Historic Dockyard, Chatham. Creation and ongoing maintenance of this collection is a project I have been involved with since its inception in 1994.

I am also actively involved as Vice Chairman and Secretary of one of the local fundraising branches, as well as being a member of several specialist groups and a volunteer speaker.

I will have some publicity leaflets with me on Monday.

Thanks Peter and I look forward to a large turnout in support of your excellent efforts and work.

NEXT MEETING: SRCC has WITHDRAWN SSB FD WEEKEND 1st/2nd Sep:

At the 2nd Planning meeting held on 14th August at Maurice's G4DDY, it was reluctantly agreed for SRCC to withdraw from this contest. The meeting has very few members present, and due to also some "key" people being unavailable due to holiday or other commitments, we couldn't be certain of enough support on the day and so had to withdraw. I guess it's a contest too close to the Bank Holiday weekend!

This weekend of 1st/2nd Sep is also the 2m Trophy and it was also proposed that SRCC would support an entry lead by Jim G4WYJ from our normal field. Unfortunately, this support was not forthcoming and Jim has had to reluctantly withdraw from this contest.

The future – well this is your Club and what we do is lead by yourselves. So do you what to take part is this type of activity, I would appreciate your views. One aspect of our hobby is about communication but we don't seem to be very good at it! We need your thoughts – thanks.

**NEXT "B" MEETING: Monday 17th Sep 01
FIX-IT and "MOVE-IT-ON" Evening**

The "B" meeting on Monday 17th Sep will be the regular "Fix-It" and advice evening with the extra twist. If you have a radio item that you just wish to clear out then bring it along - you never know it may be just what another member is looking for!

The Fix-It section has proved very interesting and successful so please bring along that item that has been giving you grief - the collective heads at the meeting usually come up with something.

**Last "A" Meeting Monday 6th Aug 2001
SUMMER BARBECUE @ QTH of Peter G3ZPB,
Old Coulsdon.**

Once again this was a very successful event and we are indebted to Peter G3ZPB and Wendy for kindly hosting the Barbecue and supplying the salad and bread.

It was a very pleasant evening with some 16 members and partners enjoying the efforts of our "cooks" barbecuing the meat that was brought along whilst sitting in the garden. We also thank Mikiko who brought along a delicious curry and during the subsequent debate it was agreed for me to have a Menu spot in the Newsletter. I am now waiting for the first "menu".

I seem to remember that excellent home-brew vintage that was brought along.



"The Cooks – Graham G3RJW & Peter G3ZPB"



"Some of those present"

THE CALENDAR SECTION

This section includes not just Club meeting dates of SRCC and local Clubs, but also future Rallies and some contests that you may like to enter or experience before the big ones that SRCC enters.

SRCC and Local Club Meeting Dates:

3 rd Sep	"For those in Peril" - The Lifeboat Service - Peter G7PWV – Family Evening
4 th Sep	Thames Valley ARTS – Audio Wattmeters – G8MOB @ Library reading Room, Giggs Hill, Thames Ditton – 8pm. Sec: Trevor M0CDB 01372-457674
10 th Sep	CATS – Meeting @ Radio Authority Laboratory in Whyteleafe - Contact: Andy G0KZT 01737-552139. Meetings normally @ St. Swithun's Church Hall, Grovelands Rd, Purley 8pm 2 nd Monday each month
14 th Sep	W&DARS – TBA. Meetings @ St. Andrew's Church Hall, Herbert Road, Wimbledon-8pm. Details: Jim G4WYJ 01737-356745
17 th Sep	Fix-It, Advice, Chin-Wag, "Move-It-On"
18 th Sep	Bromley & District – Picatune ATU with Paul M0CJX Meetings 3 rd Tuesday of every month @ Victory Social Club, Kechill Gardens, Hayes – 7.30 for 8pm. Sec: Alan G0TLK 020-8777 0420
20 th Sep	Sutton & Cheam RS – Loop Antennas by Prof. Mike Underhill G3LHZ @ Vice Presidents Lounge, Sutton United Football Club, Gander Green Lane, Sutton – 7.30 for 8pm. Sec: John G0BWV 020-8644 9945
21 st Sep	Crystal Palace – Presentation on new RSGB Regional Structure and Activities @ All Saints Parish Rooms, Beulah Hill - 7.30 for 8pm. Further details from Sec: Bob G30OU 01737 552170 or WEB Site
25 th Sep	Dorking & District Radio Society – TBA. Meetings @ Friends Meeting House, Butterhill South Street, Dorking - opposite Spotted Dog. Details: Jon G0GNA 01306-883718
26 th Sep	Crawley ARC – Junk Sale @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Sec: Jerry G0FPI 01293-512932
26 th Sep	South London College ARS (G3HFY) - Meetings on last Wednesday of month @ ATC HQ, Commonside West, Mitcham - 7.30pm. Derek M0BGX 020-8684 0963
1 st Oct	Autumn Surplus Equipment Sale
5 th Nov	Digital Audio Broadcasting - Peter G3ZPB - this will be held at RTCG @ Whyteleafe CR3 0YY
3 rd Dec	M2000A Station with Bob BRS32525+Team
7 th Jan	RSGB DRRM for South London & Surrey
4 th Feb	Picatune with Paul Berkeley M0CJX

SRCC Meetings indicated in **BOLD** with venue of Terra Nova unless otherwise stated.

Contest Calendar:

1 st /2 nd Sep	HF SSB and IARU 2M- Contact Roger G4WAY (020-8689 7089)- SRCC not taking part !!
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Rally Calendar:

21/22 Sep	The Leicester Amateur Radio Show - Geoff G4AFJ 01455 823344 g4afj@argonet.co.uk
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MEMBERSHIP NEWS:

Hospice Donation in memory of Ron G6LX

May I thank those of you who have sent in donations and advise that we wish to close the list in the next two weeks and count it up for presentation to the hospice. Any of you that wish to contribute we will be pleased to receive it either at the next "A" meeting, or by post to me – thanks.

Mikiko & Robert M1MRS



The above pictures were kindly supplied by Robert M1MRS taken in their Mitcham Shack. I am always impressed in the way they have embraced the Amateur Radio hobby and next month I have some material on their interests with Satellite communication and their visit to the University of Surrey.

John Headland's QRM and a result!

The following from John G3BFP shows what a bit of co-operation between people can achieve.

Several weeks ago, after being plagued by a buzzing sound on the 10MHz band, which was very strong on my vertical aerial, I went Direction Finding with Tony Naylor's portable HF Rx and to cut a long story short, I discovered the source of the noise emanated from the Bradmore Green Library, which is about 100 Yards from here. With their aid it turned out to be their security arch through which you pass through having first offered your books for stamping otherwise all hell breaks out. I found that this was left on 24 hours a day. After some friendly chatting, they offered to turn it off on the closure time of the library and it has been bliss as I enjoy 10MHz in the evenings.

Every so often I thank them for their co-operation and I did so today and I was about to leave the library when the lady asked me if I knew of the Coulsdon Amateur Transmitting Society!!.

I explained that we have a good liaison with 'CATS' and did she know of the Croydon Club (which she didn't) and would she like some literature. She said she would be delighted to have our newsletter or anything else on show so..... after all that, shall I give them my July newsletter or have you any other ideas?

John has now given me their E-Mail address and they will also get a posted copy – watch their Notice Board at the Coulsdon located library.

Converting an engine to run on GAS, or LPG by Gareth, G4XAT.

I have written before about my attempts at breaking the world record for miles per gallon achieved by a road legal single seat vehicle. It's an unusual branch of motor sport, but (a) affordable and (b) still open to innovative engineering approaches. One of these is to convert a petrol engine to run on LPG (liquefied petroleum gas). This is currently popular with motorists as it attracts lower duty than petrol and a range of DIY kits are available.

So how does it work? Basically, the liquid gas in a cylinder or 'tank' is turned into vapour. On small engines it is just tapped off the bottle but the larger volumes of gas required for cars means additional heat is required, taken either from the water cooling system or on air-cooled units from the exhaust system. The vapour is then passed through a safety solenoid, a low pressure regulator and then to a demand valve. This unit senses the small vacuum created in the engines intake tract and supplies gas literally 'on demand'. More airflow into the engine demands more gas, once 'set up' the system is very simple to use. I bought a system from a friend originally sold for converting a petrol generator to LPG. This provided the regulator and demand valve but the collar for feeding the engine was the wrong diameter. Rather than machine a collar I looked for a simpler solution. This was found in my 'junk box' in the shape of an old moped carburettor. Consider for a minute the purpose of a carburettor. It mixes a liquid (petrol) with air in the correct proportions. A venturi is supplied with fuel through a main jet itself fed from a float chamber which maintains a constant level of petrol. Opening the throttle (on this type of carb) lifts a needle and raises a slide. The slide lets more air into the engine, the needle is tapered so as it rises it lets more fuel out into the venturi. Simple I thought, remove the float chamber and feed gas to the base of the main jet. I anticipated the need for a greater size jet (so that manifold depression could be sensed better by the demand valve) so I removed the main jet permanently, with a drill!! This left a small brass pipe with peripheral holes (known as an emulsion tube). Gas was added to the base of this assembly and the start button pressed. The engine would only run on 'full choke', indicating that it was not getting enough gas. Out with a drill, (2 mm) and a quick try showed a slight improvement but still symptoms of a weak mixture. Next drill size was 2.5 mm at which point the engine was much happier. Investigating the carburettor mouth showed what looks like an air bypass tube which literally bypassed the throttle slide and needle valve. This was blocked with a self tapping screw and the engine was very happy indeed, starting and accelerating with ease. Taking the drastic step of drilling with a 2 mm straight off was not entirely baravado. The supplied gas collar had a jet with a 2.7 mm hole so I knew roughly when to stop!!

Mixture adjustment is accomplished by tweaking the demand valve or by altering the air bleed screw which was originally used for mixture adjustment at tickover. The taper of the needle takes care of the rest of the rev. range. Those readers familiar with SU carburettors will be familiar with the principle.

Why gas? (apart from the cost benefits). Because the engine is breathing in vapour and air, not droplets and air, better mixture distribution is achieved which gives a cleaner burn. The simpler nature of the hydrocarbon (propane is C3H8 compared to Octane C8H18) may also allow better burning. There is a minor loss of power (about 10%) but emissions become trivial compared to a petrol engine, and of course, it's cheaper! The ability to run on petrol OR gas, either by swapping a carburettor or by machining a suitable sized gas collar makes this a dual fuel vehicle, so now what.....

Well I bought (a)nother Diesel by Gareth, G4XAT.

I have written before about the good and bad sides of diesel engines, in particular with reference to my generator. I have also written and spoken briefly about my miles per gallon attempts. So far I have dual fuel capability, petrol and gas. Why not add a third, diesel? Why no indeed?

A magazine I subscribe to (Stationary Engine) has quite a good adverts section. Contained therein were the magic words "Petter AB1, £30". I just had to phone up. Yes they were available (it turned out to be a pair) and no they were not variable speed versions. Never mind, I could probably convert them as I have the workshop manual for the series. As they were located in Bristol I didn't follow it up until the next months magazine came out. Contained therein was another advert, "Petter diesel spares, phone for details". So I did. Yes he had the variable speed parts and a new throttle cable adaptor/bracket and the price was right. OK, just a quick phone call to Bristol, are the engines still available, "Yes" so a trip to Bristol was in order. I choose Sunday evening of the Mayday bank holiday, for reasons of domestic bliss and no traffic. Leaving at 6.25 pm, I arrived at the vendors house at 8.25 pm. - a quick journey!! Half an hour later I was on the way home again, with both engines in the boot, having seen one run into the bargain - they were sold as-is.

Remarkably the journey home took an identical amount of time. Total distance off the milometer was 270 miles. Ask me in a month if I still have my license!!

A couple of days later the variable speed parts arrived and 5 minutes saw them fitted. A hard pull on the rope produced a running engine, now throttleable (controllable I suppose as diesels aren't actually throttled) from tickover (about 1000 rpm) to full speed, 3,600 rpm at which point the unit develops 5 BHP. All that remains is to design a starter mechanism for conversion to electric start. This range of engines lends itself to this as many output options were available. One has a half crank speed (cam) drive output and a hole in the casing (currently blanked) for a crank speed output. I'll need to phone my Petter spares man for that piece (or make it) and by adding a sprag to the cam speed output, with a chain drive to a ex motorcycle starter motor I should be in business.

Fitting the engine to my vehicle is relatively simple but driving a small diesel in a light car it is rather an experience! The transmission is a centrifugal clutch combined with a 'variomatic' belt drive. This equates to 'rev it up and go'. Having tried a friends vehicle (the one who sold me the car, gas conversion kit and various sprags over the years) which was similarly equipped (5hp Robin electric start diesel) I can assure you the experience is very much that of driving a "Throbbin' Robin", (because of its three wheels and the 'thud' of a single cylinder).

I suppose I could convert it back to electric now, only a suitable motor (Lynch 7 KW), speed controller and enough lead acid for 30 miles would cost well over £1500!! No contest!!

Best make good use of fossil fuel then!

A day at the baths by Gareth, G4XAT

Participants in the Sunday morning net may have heard me talk of my swimming activities. I have always enjoyed recreational swimming and made sure that both my children could swim from an early age. When Joshua started to express interest in 'doing better' at swimming we let him join Bromley Swimming Club. Having a pool to 'yourself' (well, no Joe Public anyway) and formal training on hand for stroke technique produced rapid results and soon Joshua was faster than his father! At this point it seemed appropriate that I joined the club too, as a 'Master - swimming parlance for anyone over 25!

Breaststroke has always been my best stroke and over the last 14 months I slowly (and painfully) learnt front crawl (properly) and backstroke, beginning butterfly some 4 months ago. Last Sunday (25th March) 8 club members and I entered the Basingstoke Masters Gala and out of 42 clubs we managed 6th overall.

Breaststroke remains my most competitive stroke, although not my fastest which is currently front crawl. Butterfly is fast improving and backstroke remains my slowest. I prefer to swim 'old English' backstroke, a type of upside down back to front breaststroke. Although traditionally a recreational stroke, I find it faster than conventional 'back crawl' at present and far more sustainable!

The races were in heats, generally against swimmers of similar ability. I swam 50 metres each of the four strokes, one 25 metres front crawl (a real dash!) and two relay contributions, one each of front crawl and breaststroke (which gave us a third place medal!) and last (literally, thankfully) an 100 m 'IM' (individual medley, four

lengths, one each of every stroke in the order, butterfly, back, breast, crawl) which was an absolute killer. I improved on my previous best by several seconds (1m: 36s). Improving is easy when you could hardly swim it to start with! Considering that a year ago I could only really swim one stroke any distance, I am pleased with myself. The time commitment to this fitness is not great, one session on a Wednesday evening (1 hour) and one session on a Sunday, (2 hours). Different people coach both in different ways and although it sometimes seems a battle against the impossible, I feel much better in myself. This helps greatly with managing stress from my job (teaching, believe me, it's stressful!) and keeps my heart and lungs in good condition so that I can hopefully enjoy a long retirement, when I get there!

Soon I will start distance training and cold-water training for another venture - a cross channel relay swim. Well, it seemed a good idea at the swimming club Christmas Dinner! More of this escapade in another submission!

E-Mail from Harry G4TWK:

"Hi Ray, when I read the letters in the September RadCom the one entitled Advertise Our Hobby interested me as like the writer and many other amateurs my first hearing of a QSO was on Top Band A.M. whilst tuning the family radio at the bottom end of the medium wave. After that I regularly listened and the one name that stuck in my mind was that of Dicky Bird who was very active in the late 40's. Coming back to the letter from G3JKX I wondered if time had clouded his memory, like it does us all, or did he mis-hear the call signs and that he was hearing a QSO between G8TB and G3BFP and not as written G8VB and G3EFP.

I would like to think that it was Bernie and John that started G3JKX on this hobby of ours, as did Dicky Bird did for me.

I was sorry to hear that the SSB field day is not on for SRCC."

For Sale:

HP DeskJet 970cxi colour printer.

I am so impressed with the quality of this printer that I have now bought the HP Officejet (uses the same print engine but includes fax/scanner/copier functions). The 970 is nearly brand new (only printed about a dozen sheets) and is complete with packing, manual & software etc but less the double-sided feed unit option (that also fits my new Officejet). It is a 1200 x 1200 dpi printer with separate colour and B/W cartridges. £140 ono.

Also I no longer require my Primax "Colorado Direct 9600" scanner which is also complete. It is the parallel printer port version and is capable of excellent results now I have learnt how to use it properly!! £40 ono.

Peter Burton 01737 551413 pburton@iee.org

SIGNING OFF:

That's it for this month, many thanks for your contributions, which are always welcome so keep them coming - thanks. I am always looking for more, especially any technical one as these have been thin on the ground. Now hopefully this correctly worded this month!

I am still having fun with my Athlon PC and have recently reverted back to Windows98SE as WindowsME was proving very troublesome! Looks like my Jaws PDF Creator 2 has an interesting effecting when the created files are read with Acrobat3. When using the Comic Sans MS font all lower-case c's are missing when using Acrobat Reader Ver3. Acrobat Readers 4 or 5 are perfectly OK. It was John G3BFP who brought this to my attention.

See you all at the "A" meeting on Monday 3rd Sep for the Lifeboat talk with Peter G7PWV (usual venue of TS Terra Nova).

Ray G4FFY

73 and 88

Posted: 30th Aug 2001