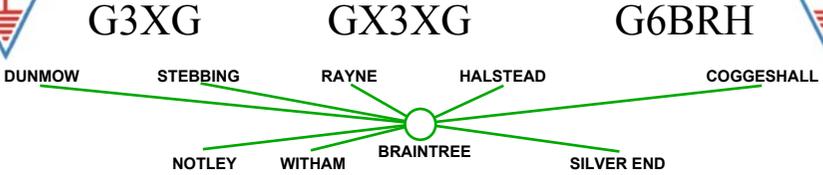




BARSCOM



Monthly Communication of the Braintree and District Amateur Radio Society

JOTA WEEKEND



November
2012



Club Trips?

Tony GØIAG

Open Day

Saturday 1st December, Martin Lynch & Sons of Chertsey, are holding an open day. There will be a hog roast, special deals and a warm welcome.

Perhaps we could make a club day out of it. Any one interested? Let me know and I will try to organise car sharing.

Annual Dinner

The committee has decided to revive the Annual Dinner. It will be held at Timbers Restaurant, Blake End, Braintree, on Saturday March 2nd, 2013. The meal will be pre -ordered from their a-la-carte menu. I will organise menu's and take names nearer the time.

Please note my new mobile phone no., which is shown under "Committee Members", on Page 16.

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Word Quiz

dictionary.reference.com

This word means both "to suspend" and "an alcove." You may remember it from elementary school.

What is it?

Know the Band Plans - IX

70.4875 MHz Digital modes

RSGB**70 MHz (4m)**

70.000-70.090 MHz 1 kHz
 Propagation Beacons only

70.090-70.100 1 kHz Personal
 Beacons

70.091 MHz WSPR beacons
 +/- 500Hz

70.100-70.250 2.7 kHz NB

70.185 MHz X-band CoA

70.200 MHz CW/SSB calling

70.250 MHz MS calling

70.250-70.294 12 kHz AM

70.260 MHz AM/FM calling

70.270 MHz MGM CoA

70.294-70.500 12 kHz AM #1

70.3000 MHz RTTY/Fax
 calling/working

70.3125 MHz Digital modes

70.3250 MHz DX Cluster

70.3375 MHz Digital modes

70.3500 MHz IVG (Note 2)

70.3625 MHz IVG

70.3750 MHz See Note 2

70.3875 MHz IVG

70.4000 MHz See Note 2

70.4125 MHz IVG

70.4250 MHz FM simplex -
 used by GB2RS news broadcast

70.4375 MHz Digital modes
 (special projects)

70.4500 MHz FM calling

70.4625 MHz Digital modes

70.4750 MHz

Note 1: Usage by operators in other countries may be influenced by restrictions in their national allocations

Note 2: May be used for Emergency Communications and Community Events

#1 Channelized operations using 12.5 kHz spacing.

LICENCE NOTES: Amateur Service 70.0-70.5 MHz Secondary User: 22dBW permitted. Available on the basis of non-interference to other services (inside or outside the UK).

Notes to the Band Plan

ITU-R Recommendation SM.328 (extract)

Necessary bandwidth: For a given class of emission, the width of the frequency band which is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions.

The use of Amplitude Modulation (AM) is acceptable in the all modes segments but users are asked to consider



adjacent channel activity when selecting operating frequencies.

Foundation and Intermediate Licence holders are advised to check their licences for the permitted power limits and conditions applicable to their class of licence.

Club Meetings and Nets

*Club Net - 08.00pm local time
2Mtrs (145.375Mhz)
70cms (433.575Mhz)*

November

- 5 Club "Junk" Sale
- 12 Club Net - 2 Mtrs
- 19 Metal Detecting - Howard
- 26 Club Net - 70 cms

December

- 3 Christmas Social
- 10 Club Net - 2 Mtrs
- 17 Natter Night
- 24 Club Net - 70 cms
- 31 Club Net - GB3BZ Repeater

Januaary 2013 **

- 7 Natter Night - Radio Xmas Presents
- 14 Club Net - 2 Mtrs
- 21 Equipment Safety Testing - I
- 28 Club Net - 70 cms

February

- 4 Airfields I have visited - Tony G0IAG
- 11 Club Net - 2 Mtrs
- 18 "How I'm going to win the next construction contest"
- 25 Club Net - 70 cms

March

- 4 Morse Evening - Keys, Programs, On-Air
- 11 Club Net - 2 Mtrs
- 18 Baluns & their construction - G0EMK
- 25 Club Net - 70 cms

April

- 1 Equipment Safety Testing - II
- 8 Club Net - 2 Mtrs
- 15 RSGB Regional Officer
- 22 Club Net - 70 cms
- 29 Club Net - GB3BZ Repeater

May

- 6 Mills w/e Planning - Natter Night
- 13 Club Net - 2 Mtrs
- 20 AGM
- 27 Club Net - 70 cms

June

- 3 Essex Air Ambulance
- 10 Club Net - 2 Mtrs
- 17 Construction Contest
- 24 Club Net - 70 cms

** All 2013 dates are provisional

The Club - Ins & Outs

Tony GØIAG

Monday, October 1 saw another presentation by Richard 2EØXRS.



This time he played sound tracks from real life near-disasters that he had gleaned from various sources. He also showed photos of the aircraft involved, the clips of radio traffic we heard proved how radio communication was used in proving liability (by sending cockpit audio back to the ground).



The second part of his presentation was about pirate radio with a film about the 1960s pirates, compared to the modern urban pirates (make your own mind up there) - an interesting evening.

As a preview to JOTA four of us went to Tabor high school on Friday, October 12, to inform Braintree Air Scouts what amateur radio is and how it is crucial to JOTA Dave, GØDEC; Edwin, GØLPD; John, M5AJB; and I, spent the evening explaining about the various facets of our hobby to a very enthusiastic, and welcoming bunch of young people.

We look forward to seeing them and the Earls Colne scouts at JOTA

Once again, on Monday October 15, we were lucky enough to host another visit by Mr and Mrs Jiggins. This time the subject of their talk



was the wildlife of Essex. Mrs Jiggins gave the talk, showing wonderful slides of Essex woodland flora and fauna. Most of the photographs were taken by Mr Jiggins, and were of areas close to Braintree.



Mrs Jiggins is a warden for the Essex Wildlife Trust and has been kind enough to invite the club for a visit to her woodland conservation area next year. I am sure that trip will be well supported. Our thanks go to them both for an interesting evening.



JOTA

At the headquarters of Earls Colne scouts with both Earls Colne scouts and 2nd Braintree Air scouts in attendance.



The usual gang of Melvin, Dave, John, Edwin, and I, tuned up on a very wet Friday October 19 to erect aerials for the weekend. We set up the clubs new trap dipole for H.F. and aerials for 2 & 70 plus a satellite tracking station.

On Saturday October 20 the stations were fired up all stations and very soon the scouts were passing



BUILDATHONS

Dave G3PEN

Last year, I attended the G-QRP Convention as usual, which was, as ever, a great event, and a most enjoyable experience which is now held at Rishworth, near Halifax. On the Friday night, at the hotel, those who wanted (some dozen participants and a lot of lookers-on) built a QRP Z-Match ATU, from kits provided by the QRP Club. WE were given a detailed set of instructions and helped where necessary by the designers of the kit - George, G3RJV amongst them. The result was a very useful piece of kit, small but perfect! The maximum power this unit is suitable for (using the components provided) is 5 watts. The nominal frequency range is 3.5 MHz to 30MHz. For 160 m, it would need a bigger toroid and coil, and I have no details for this.

This year, the Buildathon (with at least 10 participants, including a lady member) focused on the Stockton Power Meter, which with 2 meters is both a power meter and a VSWR meter. Again, the end-result was a very useful unit. Mine has been set to show 1 watt as a maximum, but this can be adjusted to a higher figure - probably about 10 watts, according

to G3RJV. The meter is suitable for use up to 30MHz, although it falls away a bit in sensitivity after 14 MHz, so it is probably just for HF.

What I propose is that club members that are interested in owning such useful items take part in our own Club Buildathon; each member taking part paying for his/her parts, with the Club (me?) mustering the parts for each kit. The costs are somewhat hazy at present, because while some components can no doubt be provided from the proverbial junk boxes, a few are more expensive, and probably will need to be purchased new. Specifically, the ATU needs major items such as 2 variable capacitors of about 2 x 500pf, plus 2 knobs, 3 coax connectors, 2 switches, a large white LED and a fairly large toroid (obtainable from the G-QRP sales stock).

The Power Meter mainly needs 2 100 μ A meters and a small toroid. Both kits are assembled on PCB, formed to make open boxes. As far as I can remember, the ATU cost around £13, and the Power Meter cost £15, but the exact cost would depend on how much we have to pay for the main items. I think the G-QRP Club may also have made a

small profit, but I can't be sure - it would help our club if we did too.

If members have some of the major items, and want to use them, that would probably be OK, but as the PCB has to be pre-cut and drilled for specific components, details would have to be provided beforehand.

Those taking part would need to bring along some tools eg soldering iron, cutters and small pliers, small screwdrivers, etc. I am sure that if enough members take part, any item

needed that was not brought by someone (except the soldering iron which would be in almost constant use) could be borrowed .

I will be bringing my finished units along to a club meeting for your view after this has been published, but would like an indication of your interest, or otherwise, as soon as possible so that the search for components can begin.

Are you interested???

News Items

RSGB

Swedish amateurs are now allowed to use the full band of 1.85 to 2 MHz with Secondary status, as well as the Primary amateur radio allocation of 1.81 to 1.85 MHz. For many years Swedish amateurs were not allowed to use 1.85 to 1.93 MHz.

DARC, Germany's national amateur radio society will be asking the Deutsche Commission for Electrical, Electronic and Information Technologies to oppose a new pan-European draft Power Line Transmission standard. Like the RSGB, DARC is concerned about the future ambitions of the

manufacturers of other PLC products in the direction of higher limits for the emission of harmful electromagnetic interference.

International Telecommunications Union members have agreed first-stage approval of a new Universal Power Adapter technical standard for devices such as modems, set-top boxes, home networking equipment and fixed telephones. The standard will complement ITU's very successful Universal Charging Solution for mobile devices enabling further energy savings, reductions in e-waste and enhanced consumer convenience by expanding the concept's application to the vast majority of Information and communication technology) devices.

BWFB Fund

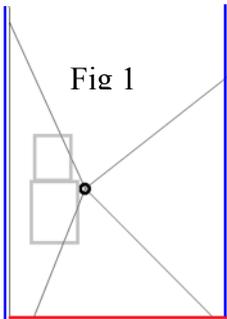
Ian G8MKN

When selling any of your surplus gear on E-Bay why not consider making a charitable contribution to the British Wireless for the Blind Fund or your own favourite charity. You can donate any percentage between 10 and 100% and as you have never had the money - you won't miss it!

Keeping your Erection

Ian G8MKN

Seeing the New York crane take a backward summersault in the recent storms reminded me of my mast going down in 1980. As it was not very high, about 10m, I had used only 4 guys - see Fig 1, irregularly spaced and fixed to 2 parts of the house wall (shown in red)(15 ft agl) and to two concrete garden fence posts (4 ft agl). I had erected it on a temporary basis to try out the 10xy and 88 el multibeam that I had treated myself to. The



bottom was in a hole about a foot deep and the mast was sort of supported by the adjacent shed - well in one direction anyway. Temporary became semi-permanent; until I received a phone call while working in Liverpool to say that my next door neighbour was now in possession of the two antennae and most of my partially bent mast.

What I had failed to consider - apart from the fact that something could go wrong - were the consequences.

When putting up the mast I didn't have a rotator so the whole mast had to be able to turn and the guys were only 'fixed' to it with a few turns of light nylon rope. Over the months if turning back and forth the nylon rope had weakened and, one windy night gave up completely. As this rope was the only connection between the mast and the four guys its failure was catastrophic. Four guys instantly became none & the wind did the rest.

Since then I have looked at mast guying from a more mechanical perspective and come to the conclusion that you should not rely on one thing that could fail easily and that four guys, even if exactly at right-angles, would not be sufficient to stop a mast falling in the event of one guy failing.



Looking at fig 2 - if you assume that all the guys are taken back to ground level and that only guy A fails - then guy B determines that the mast must fall within the green shaded area, similarly for guy D it can only fall within the blue shaded area, this means it can only land at the intersection of these two areas along the line A-C, finally guy C constrains the area further to that within the grey area. This means that the mast must fall towards point C.

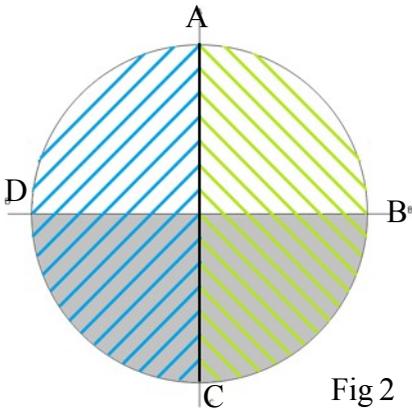


Fig 2

If a guy is fixed to a point significantly above ground level, it is likely that the mast will tend to veer towards that guy as it falls and it may then snap the opposite guy due to the increased strain on it due to the momentum of the mast.

When the guys are not 90° apart the area in which the mast could fall increases as shown by the mauve

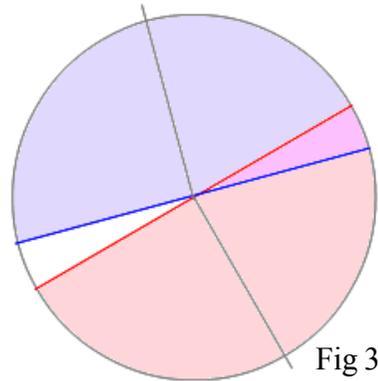


Fig 3

section in fig 3. However, with guys this far apart, the stress in each guy due to wind and off-centre forces increases rapidly as the angle approaches 180° as does the likelihood of the mast falling in the opposite direction.

Generally: The mast should have AT LEAST 5 guys spaced as evenly as possible around the perimeter. It should be inspected regularly for fraying or degrading of the strands due to UV from the sunlight. All parts should be of sufficiently strong materials even after possible corrosion/degradation. And metal parts should be corrosion resistant (plated or greased or both).

Taking into consideration the 'fault' conditions could save you being sued for damage or injury or worse. **And the life you may save may be your own.**



greetings messages to other JOTA stations.

Contacts were made all over the country and into Europe, with one contact lasting nearly an hour. About 37 scouts of varying ages passed



Word Quiz - Answer

Recess

1 - Temporary suspension from work or activity.

2 - A bay or alcove in a room

Did you get it right?

Remember, Remember

The 5th of November at 20.00
Junk Sale

Also, November 19th Metal
Detecting Howard - G6LXX

nearly 500 greetings messages to 7 countries.



Howard and Neil turned up to help operating over the 2 days, and all the scouts seemed to have a great time message passing.

Unfortunately, the satellites were in sleep mode, so although we could track them and the shuttle, we were unable to work them.

The station was dismantled on Sunday afternoon. Our thanks go to the scouts for hosting us, they were great and we look forward to next year.

Rallies

4 NOVEMBER

HOLSWORTHY AMATEUR RADIO RALLY – Holsworthy Community College, Victoria Hill, Holsworthy EX22 6JD. Contact Roger Williams, 07773 983 691, gsowter@talktalk.net.

FOYLE & DISTRICT ARC RALLY - White Horse Hotel, 68 Clooney Road, Londonderry BT47 3PA. OT 11.30, TS, SIG, RSGB book stall, IRTS, B&B, WIN. Philip Hosey, MIØMSO, mi0mso@yahoo.co.uk.

10 NOVEMBER

ROCHDALE & DISTRICT ARS TRADITIONAL RADIO RALLY - St Vincent's Church Hall, Cutgate, Rochdale OL12 7QL. OT 10.30, £2.50 (concessions U12 & Seniors), B&B, C. Pitches £7.50. Dave, GØPUD, 01706 346 517, dave.shaw1@sky.com.

Visit website: www.radars.me.uk

11 NOVEMBER

WEST LONDON RADIO & ELECTRONICS SHOW (Kempton Rally) - Kempton Park Racecourse, Staines Road East, Sunbury on Thames, TW16 5AQ. TI, free CP, OT 9.50/10.00. TS, FM, B&B, SIG, C, DF, WIN, LEC. Details Paul, MØCJX, 08451 650 351, info@radiofairs.co.uk.

Visit website: www.radiofairs.co.uk

17 NOVEMBER

HALTON & DISTRICT RADIO AMATEURS RALLY - The Heath Business & Technical Park, Runcorn, Cheshire WA7 4QX. OT 10.15/10.30am, £FREE, TS (free), B&B, C, DF, SIG, cash machine. George Low, [GØRLF, 01928 897 591 \(daytime only please\), g0rlf@talktalk.net](mailto:GØRLF, 01928 897 591 (daytime only please), g0rlf@talktalk.net).

18 NOVEMBER

MAYO RADIO RALLY - Welcome Inn Hotel in Castlebar, Co Mayo, Loc8 code FY4-44-NS4. OT 11am, €5, TS, IRTS, QSL, B&B, DF, LEC, WIN, C. Pdraig Baynes, EI9JA, 0876 957 154, baynes1@eircom.net.

Visit website: www.ei7mre.org

24 NOVEMBER

NORTH WAKEFIELD RADIO CLUB RALLY - Drighlington
Community Hall, Moorland Road, Drighlington BD11 1JZ. Tables £6. OT
10.30am (8am traders), £2 (U14s free), C. Tony, GØJVI 0774 000 3159,
tonymawson@btinternet.com.

25 NOVEMBER

34th CATS RADIO & ELECTRONICS BAZAAR - 1st Coulsdon Scout
HQ, r/o Council Car Park, Lion Green Road, Coulsdon, Surrey. 10.00-
13.00, £1, B&B, C, DIS, free CP. Details Glenn, G4FVL,
chairman@catsradio.org.

25 NOVEMBER NEW VENUE!

PLYMOUTH RADIO CLUB RALLY - Harewood House, The Ridgeway,
Plympton, Plymouth PL7 2AS. CP, TI, OT 10.00, £2, TS, B&B, C.
Contact g7nhb@hotmail.co.uk.

25 NOVEMBER

ARVM HAM FAIR - Lisbon, Portugal. Details
www.arvm.org/fr2012.html.

2 DECEMBER

BISHOP AUCKLAND RADIO AMATEURS CLUB RALLY -
Spennymoor Leisure Centre, Co Durham DL16 6DB. CP, TI S22 (V44),
OT 10.15/10.30, £2 (U14 free). TS, B&B, C, LB, DF, FAM. Details Mark,
GØGFG, 01388 747 497.

8 DECEMBER

SOUTH LANCS WINTER RALLY - Bickershaw Labour Club,
Bickershaw Lane, Bickershaw, Wigan. OT 10am, traders 8am. Tables £8
pre-booked, entry £1.50, TI, B&B, C, DIS, CP, SIG, DF, TS, LB. Allan,
2EØRAG, 07533 970 841, rally@slarc.co.uk.

Events for 2013

13 JANUARY - RED ROSE WINTER RALLY

20 JANUARY - DOVER AMATEUR RADIO CLUB RALLY

Contests

VHF/UHF

November

- 3-4 1400-1400 144MHz CW
Marconi
6 2000-2230 144MHz UKAC
13 2000-2230 432MHz UKAC
20 2000-2230 1.3GHz UKAC
27 2000-2230 SHF UKAC
27 2000-2230 50MHz UKAC

December

- 2 0900-1700 144MHz Affiliated
Societies Contest
4 2000-2230 144MHz UKAC
11 2000-2230 432MHz UKAC
18 2000-2230 1.3GHz UKAC
25 2000-2230 SHF UKAC
25 2000-2230 50MHz UKAC
26-29 1400-1600 50/70/144/
432MHz Christmas
Cumulatives Contest

2013

January

- 1 2000-2230 144MHz UKAC
8 2000-2230 432MHz UKAC
15 2000-2230 1.3GHz UKAC
22 2000-2230 SHF UKAC
22 2000-2230 50MHz UKAC
29 2000-2230 70MHz UKAC

HF

November

- 10 2000-2300 Club Calls All
14 2000-2100 80m Club Sprint
SSB QRP
17-18 2100-0100 2nd 1.8MHz
Contest
29 2000-2100 80m Club Sprint
CW QRP

2013

January

- 13 1400-1800 AFS Contest CW
All Affiliated Societies contest
(S1)
19 1400-1800 AFS Contest
PHONE ALL Affiliated
Societies contest (S1)

February

- 4 2000-2130 80m CC SSB QRP
9-10 2100-0100 1st 1.8MHz
Contest UK Non-UK DXCC &
UK District Bonus (M3)
13 2000-2130 80m CC DATA
QRP
21 2000-2130 80m CC CW QRP

Braintree and District Amateur Radio Society

Braintree and District A.R.S. meets every 1st and 3rd Monday of the month at The Clubhouse, Braintree Hockey Club, Church Street, Bocking. Doors open from 7.30 pm for an 8 pm start to the meeting. Prior to 8 pm, and during the refreshments break, when a cup of tea or coffee is available free of charge, members have the opportunity to sell or exchange equipment etc. Meetings normally finish at 10 pm.

A Club Net operates on the 2nd and 4th Mondays (excluding Bank Holidays) under the call-signs G6BRH and G3XG. The net commences at 20.00 clock-time on V30 (S15) - 145.375MHz and SU23 - 433.575MHz, unless QRM. In months with 5th Monday the net operates via GB3BZ 430.850Mhz.

The Club Membership fee is £16 annually; Senior members (State Retirement age) and Junior members (under 18) pay a reduced club subscription of £10. Door fees are payable per meeting. Rates are £1 for members, and £1 for visitors.

This magazine "BARSCOM" is issued free to members, usually at the first meeting of the month by e-mail. Members unable to attend club meetings may lodge S.A.E.s with the Editor for printed copies of BARSCOM. Usual deadline for copy is the 3rd weekend of each month.

Members advertisements are published free of charge.

The club operates a no smoking policy at it's meeting.

For more information and pictures of events and projects see our Web Site at www.badars.co.uk

The next edition will be published on December 1

The deadline for submissions for the next edition is November 28

When disposing of this booklet please shred or destroy the back page to protect members' privacy.

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