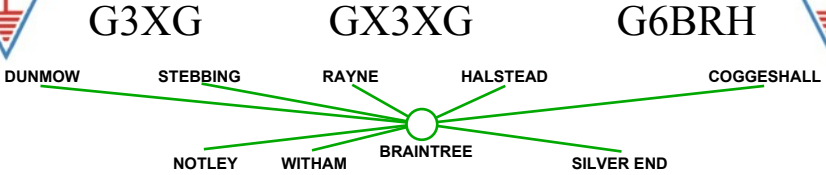




BARSCOM



Monthly Communication of the Braintree and District Amateur Radio Society

September 2012



CQ George Yard Visitors de G6BRH

Club Exhibitions, Raynet, and Special Events

Tony, GØIAG

The following, is a list of club and special events we are taking part in during the summer and autumn:

Some of us help with the RAYNET events, but we could do with more members.

September

- 2 Action Research, Essex
100 mile bike ride
(RAYNET)
- 9 Farleigh Hospice
Cycle for Life (RAYNET)
- 15-16 British wireless for the
Blind
- 22-23 Railways on the air.
Colne Valley Railway,
Castle Hedingham.

October

- 20-21 J.O.T.A.
To be confirmed

Errata:

I apologise for an error crept that in to last month's Contest Calendar, which showed dates for March - May instead of the August - September events for the VHF contests.

Ian Wager

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Call-sign Update

ITU

On August 3, the ITU updated its Table of International Call Sign Series to reflect a call sign change for **Niue**. The island will have the entire E6 prefix block..

Niue -- an island approximately 1500 miles northeast of New Zealand -- is a self-governing island nation with a population of almost 1300 people that has been in free association with New Zealand since 1974. Prior to the change, the island used ZK2.

Screw Location

Dave G3PEN

How many times when re-assembling a piece of cheap kit, with self-tapping screws into a plastic "nut" (usually a small pillar), have you mis-located the screw, and ruined the thread that it should go into??

I can't remember where I read this following advice, although fairly recently. It is so good though that I felt it ought to be repeated as much as possible. Many thanks to its' originator!

When starting to re-assemble the part, insert the self-tapper into the hole. Then, using the appropriate screw-driver, turn the screw ANTI-CLOCKWISE, very gently and without much pressure, until you feel it jump slightly, as it meshes with the original screw thread. Only then should you rotate the screw in a clock-wise direction, still very gently, until you feel it going correctly into place. This works - I've tried it.

(It's easier for re-inserting screws in sheet metal too - Ed)

RAE Practice Questions

If you visit this website at g3vre.org.uk/mock/asp/index.asp you will find some practice examination questions.

Do not be put off by the questions as presented here. Also please be aware that these are examples only and that the syllabus and licence conditions can change with time.

You should undertake full training before you take these exams. For more information on training near you contact BADARS or the RSGB.

Amateur Radio Quiz

H. Ward Silver, N0AX/ARRL

Some are not as easy as you may first think!

1) Which sequence represents the resistor color code?

- a) OBAFGKM
- b) BBROYGBVGW
- c) EGBDF
- d) PNATTMBTC

2) The frequency at which an inductor's inductance and parasitic capacitance have equal reactance is the _____ frequency.

- a) self-resonant
- b) self-tuned
- c) self-excited
- d) maximum useable

3) If a resistor has a positive temperature coefficient, what happens when it gets hot?

- a) Its resistance increases.
- b) The tolerance of the resistor gets tighter.
- c) Air flow around it becomes turbulent.
- d) Its voltage drop decreases.

4) DIP stands for what?

- a) Dual Integrated Placement
- b) Destructive Immolation Probability
- c) Dual In-Line Package
- d) Differential Integrity Profile

5) Which temperature coefficient abbreviation indicates that a capacitor value is stable around room temperature?

- a) Z5U
- b) X7Z
- c) NPO
- d) NCO

6) Match the resistor type with its distinguishing characteristic

- | | |
|----------------|---------------------------|
| a) wire-wound | e) inexpensive |
| b) metal oxide | f) high power dissipation |
| c) metal film | g) non-inductive |
| d) carbon film | h) low noise |

7) Which type of inductor core is most often used in switching-type power supplies?

- a) ferrite
- b) laminated steel
- c) air
- d) epoxy

8) Which of the following is not a common transistor packaging type?

- a) TO-220
- b) SOT
- c) TO-92
- d) FFT

9) Rank the following diode types in order of forward voltage drop for a given current.

- a) Schottky barrier
- b) Germanium
- c) Silicon
- d) Selenium

10) Match the type of capacitor with its distinguishing characteristic.

- a) ceramic
- b) silvered mica
- c) electrolytic
- d) high capacity
- e) low loss at RF
- f) inexpensive

11) Which type of component can be “slug-tuned?”

- a) capacitor
- b) resistor
- c) inductor

12) Which of these abbreviations are equivalent?

- a) μF
- b) $\mu\mu\text{F}$
- c) nF
- d) pF

13) What does a gold tolerance band in the resistor four-band color code mean?

- a) 1 percent
- b) 5 percent
- c) 10 percent
- d) 20 percent

14) Which of the following lead markings indicates that a transistor is an FET?

- a) EBC
- b) PIE
- c) SGD
- d) VCC

15) Which parameter determines the voltage ratio between a transformer's primary and secondary windings?

- a) mutual coupling
- b) stand-off voltage
- c) volts-per-turn
- d) turns ratio

Bonus: A “slop jar” does what?

Answers next month

Next Month

Latest News from the RSGB & ARRL

For Sale and Wanted

Plus the usual ...

Events, Rallies, Contests, etc.

???

Your Photos

Know the Band Plans-VIII

RSGB

50MHz (6m)

- 50.000-50.100 500 Hz CW (except #2)
- 50.000-50.030 (reserved #2)
- Region-1: 50.000-50.010
- Region-2: 50.010-50.020
- Region-3: 50.020-50.030
- 50.050 Future International CoA
- 50.090 Intercontinental DX CoA (#1)
- 50.100-50.200 2.7 kHz SSB/CW - International Preferred
- 50.100-50.130 Intercontinental DX CW & SSB (#1)
- 50.110 Intercontinental DX CoA
- 50.130-50.200 General International CW & SSB
- 50.150 International CoA
- 50.200-50.300 2.7 kHz SSB/CW - General Usage
- 50.285 Crossband CoA
- 50.300-50.400 2.7 kHz MGM/Narrowband/CW
- 50.305 PSK CoA
- 50.310-50.320 EME
- 50.320-50.380 MS
- 50.400-50.500 Propagation Beacons Only
- 50.401 WSPR beacons +/- 500Hz

- 50.500-52.000 12.5 kHz AM
- 50.510 SSTV (AFSK)
- 50.520 IVG *
- 50.530 IVG *
- 50.540 IVG *
- 50.550 Image/Fax working frequency
- 50.600 RTTY (FSK)
- 50.620-50.750 Digital comms
- 50.630 DV calling
- 50.710-50.890 FM/DV Repeater O/p *
- 51.210-51.390 FM/DV Repeater I/p * (#4)
- 51.410-51.590 FM/DV Simplex (#3) (#4)
- 51.510 FM calling
- 51.530 GB2RS news b'cast & slow morse
- 51.650 & 51.750 See #5 (25kHz aligned)
- 51.770 & 51.790 See #5
- 51.810-51.900 FM/DV Repeater O/p (IARU AC)
- 51.910-51.940 IVG *
- 51.950-51.990 FM/DV Repeater O/p (IARU AC)

Notes:

- #1:** Only to be used between stations in different continents (not for intra-European QSOs).
- #2:** 50.0-50.1MHz is currently shared with Propagation Beacons. These are due to be migrated by Aug-2014 to 50.4-50.5 MHz, to create more space for Telegraphy

and a new Synchronised Beacon Project

#3: 20 kHz channel spacing.

Channel centre frequencies start at 51.430 MHz.

#4: Embedded data traffic is allowed with digital voice (DV)

#5: May be used for Emergency Communications and Community Events

LICENCE NOTES:

Amateur Service 50.0-51.0 MHz - Primary User.

Amateur Service 51.0-52.0 MHz - Secondary User: Available on the basis on non-interference to other services (inside or outside the UK).

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 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.

Key:

*(10 kHz channels)

AC - Aligned Channels

ACDS - Automatically Controlled Data stations (unattended)

AM - All Modes

CoA - Centre of Activity

CPS - Contest Preferred Segment

CW - Telegraphy

DV - Digital Voice

IBP - International Beacon Plan

IVG - Internet voice gateway (10 kHz channels), (IARU common channel)

NB - Narrow Band

RTSB - Regional Time Shared Beacons

For Sale ?

Duncan Munro, M0KGG

EBay needs no introduction, it's a world famous online auction site. But have you heard of this one?

An online flea market - G3CWI Flea Market www.qsl.net/g3cwi/the.html

Please contact us if you know of any other sites?

Club Meetings and Nets

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

September

3 TBA
10 Club Net - 2Mtrs
17 TBA
24 Club Net - 70cms

October

1 TBA
8 Club Net - 2Mtrs
15 TBA
22 Club Net - 70cms
29 Club Net - GB3BZ Repeater

November

5 Club "Junk" Sale
12 Club Net - 2Mtrs
19 TBA
26 Club Net - 70cms

December

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

January

7 TBA
14 Club Net - 2Mtrs
21 TBA
28 Club Net - 70cms

Digital Radcom?

Ian, G8MKN

The digital version of the September QST is now available to ARRL members; it includes many features not available in the print version, such as:

- A video overview of the YouKits HB-1B transceiver.
- A video interview with AMSAT' about the Fox-1 satellite.
- Three classic QST articles by author Jack Troster, W6ISQ.
- Extended results for the 2012 ARRL DX Phone Contest.

There has been some thoughts towards making a digital form of RADCOM and this change to QST may show whether or not it may be feasible.

There are many aspects to consider including: the effect on advertisers, resistance of subscribers, cost of production and distribution of the hard copy version due to reduced bulk discounts.

We'll have to wait and find out....

Ancient Modulation

Geoff Quiz

Do you recognise any of these rare 1940's sets?

Answers next month



Set #1



Set #2



Set #3



Set #4



Set #5

The Club - To the People

Tony GØIAG

On Wednesday (8/8/12) we took the club to the people of Braintree. We set up a club station in George Yard Shopping Centre.



Dave GØDEC, Melvin GØEMK and I set up early ready for the public by 9.30am. Edwin GØLPO and John M5AJB turned up for the day. Other club members turned up at odd times during the day.



We had HF, VHF, UHF and APRS/DATA operational, to show the public that amateur radio is up to date and relevant to modern society.

There was interest from various people, including a lapsed G8 who did not know that the club existed, a man looking for an old Pye Olympic for his vintage fire engine, and a scout leader looking for some help to run a communications course for his scouts. We had good general interest, and Edwin even tried to teach a large rabbit how to work 40 meters (see picture).

It was a worth-while day for the hobby and our club. Our grateful thanks are extended to the management and staff of George Yard, who looked after us so well, they have invited us back next year.

Summer Camp 2012

Tony GØIAG

After a day in the shopping centre, a bit of R&R was called for, so the Summer camp was perfect. Friday afternoon (10/8/12) Melvin, Owen M3OIL and I turned up at the QTH of John in Southey Green. We set up aerials, the tent and radio station for the club members to enjoy.



Finally, I was surprised at the lack of members who bothered to show up at the summer camp. To paraphrase Churchill, never have so many not turned up after the efforts of so few. But it was a good

Apart from those previously mentioned only four other members turned up over the whole weekend, Richard 2EØXRS, Geoff GØBYH, Jim GØDCR and Ann King.

I was able to work stations that I could not hear at home because of the high level of static and QSB at my QTH. Melvin worked many stations all over the world, I think his most distant contact was Tasmania.



weekend, the weather was ok. We broke station on Sunday afternoon.

Rallies

2 SEPTEMBER

TELFORD HAMFEST – Enginuity Technology Centre, Coalbrookdale, Telford TF8 7DU. OT 10.30. TI S22 & GB3TF 433.200MHz. TS, SIG, free CP, LEC, FAM. Details from Martyn, G3UKV, 01952 255 416 [www.telfordhamfest.co.uk].

8 & 9 SEPTEMBER

NATIONAL TRUST, POLESDEN LACEY, Nr. LEATHERHEAD, SURREY. Dorking & District Radio Society will operate with callsign GB0NT on the Trust's Open day, Saturday 8 Sept and on Sunday 9th. Further details from Garth: G3NPC 01737 359 472 or www.ddrs.org.uk

9 SEPTEMBER

FRISKNEY & EAST LINCOLNSHIRE COMMUNICATIONS CLUB RALLY – The Friskney Village Hall, Church Road, Friskney, Lincs, 6.5 miles south of Skegness. Details Bren, 2E0BDS, 01754 820 060, Ian Donnelly, 2E0XOD, 07554 362 020 [www.felcc.com].

NORTH NORFOLK AMATEUR RADIO CLUB CAR BOOT SALE - Muckleburgh Military Collection, Weybourne NR25 7EG. Radio & non radio pitches. OT 1000, pitches from 0700. Radio Museum open free. For further information see www.gb2mc.com.

15 & 16 SEPTEMBER

AMSAT-UK SPACE COLLOQUIUM - Holiday Inn, Guildford GU2 7XZ. LEC, AMSAT shop, GB4FUN. Visit website: www.uk.amsat.org

16 SEPTEMBER

TORBAY ANNUAL COMMUNICATIONS FAIR - Newton Abbot Racecourse, Newton Abbot, Devon TQ12 3AF. TS, B&B, C, DF, RSGB Books, OT 9.30/10am, £2. Details Mike Dixon, 01803 557 941, rallytars.org.uk.

23 SEPTEMBER

22nd GREAT NORTHERN HAMFEST – Barnsley Premier Leisure Complex, Queens Ground, Queens Road, Barnsley, South Yorkshire S71 1AN. OT 10.30am – 3pm, £3, DF, TS, SIG, RSGB Bookstall, LB, C, FAM. Ernie, G4LUE, 01226 716 339 [www.greatnorthernhamfest.co.uk].

28 & 29 SEPTEMBER

NATIONAL HAMFEST – brought to you by the RSGB in association with the Lincoln Short Wave Club. George Stephenson Pavilion, Newark and Nottinghamshire Showground, Lincoln Road, Winthorpe, Newark NG24 2NY (close to junction of A1/A46/A17). TS, B&B, CB, C, SIG, Morse proficiency tests on demand, RSGB Bookstall, RSGB Services & Committees, DF, FM [www.nationalhamfest.org.uk].

Subs - An Excuse

'George' *

Have you heard a better excuse for late or non—payment of subs.

Sorry for the delay in sending my 'subs but I have had awful complications with my UK bank account — my debit card expired on the 1st of May so cannot draw money or my pension here.

Because of 'security' the banks will not send cards or sensitive bank documents to Thailand; many people are very poor here, theft is a way of life, and the only way to live for many.

At the same time I am in the process of changing the type of account I have — I was paying £25 every

month for services which do not apply in Thailand (I had a Premier Account, and paid in £1,075 over 43 months for nothing) and I cannot send you a cheque because the original account is now closed.

I have found a £10 note in my wallet (*at least it wasn't a photocopy - Ed.*) which I now enclose — if notes have changed and it is useless I'm sorry. My bank affairs will be sorted by the 12th of August, that is when a friend is coming here, bringing cards and cheque books etc. that he is going to collect from Lloyds at Halstead. If the 'tenner' is not legal tender, e-mail me and I will respond with a cheque as soon as I have the plastic or paper-work to do so.

**The author's name has been changed to protect the guilty innocent.*

Contests

VHF/UHF

September

- 1-2 1400-1400 144MHz Trophy
- 2 1100-1500 5th 144MHz
Backpackers
- 4 2000-2230 (Local) 144MHz
UKAC
- 9 0900-1200 Second 70MHz
- 11 2000-2230 (Local) 432MHz
UKAC
- 18 2000-2230 (Local) 1.3GHz
UKAC
- 25 2000-2230 (Local) SHF UKAC
- 25 2000-2230 (Local) 50MHz
UKAC

October

- 2 2000-2230 (Local) 144MHz
UKAC
- 6 1400-2200 1.2GHz Trophy /
2.3GHz Trophy
- 6-7 1400-1400 432MHz-248GHz
IARU
- 9 2000-2230 (Local) 432MHz
UKAC
- 16 2000-2230 (Local) 1.3GHz
UKAC
- 21 0900-1200 50MHz AFS
- 23 2000-2230 (Local) SHF UKAC
- 23 2000-2230 (Local) 50MHz
UKAC
- 30 2000-2230 (Local*) 70MHz
UKAC

* BST ends October 28 at 02.00

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

HF

September

- 1-2 1300-1300 SSB Field Day
Open/Restricted
- 12 1900-2000 80m Club Sprint
SSB QRP
- 27 1900-2000 80m Club Sprint
CW QRP

October

- 7 0700-1900 21/28MHz Contest
Open/Restricted/QRP
- 10 1900-2000 80m Club Sprint
CW QRP
- 25 1900-2000 80m Club Sprint
SSB QRP

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

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 callsigns G6BRH and G3XG. The net commences at 20.00 clocktime 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 **October 1**

The deadline for submissions for the next edition is **September 27**

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

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