



**RAGCHEW**

**JULY 2019**

## From the Editor

By Brian G4CIB

My archive photo in the May "Ragchew" prompted **Graeme G0EEA** to recall the following incident:-

"I can confirm that I am in the picture of the **G4AYM** Junk Stall at the Longleat Rally in the early 1990s, talking to **Jenny G7JUP**. This is quite likely the year that **George G7GQC** and I lugged a large wooden box, with rope handles, from a car into the marquee to place on the grass in front of the table. The box contained an old and very heavy AM valve set, as I recall maybe it came from **Pat G3MA** who is also in the photo. The surprise of the day was not when this was sold to a lean, middle age fellow, whom I offered that we would help him move it to his car, but when he politely thanked us, assured us there would be no need of assistance, picked up the box and walked away with no apparent effort ! That is my recollection, I wonder if anyone else similarly recalls this ?"

Indeed I do remember that incident. I had a similar one when I decided that I no longer needed a Marconi TF144G Signal Generator which had languished in my garage for quite a few years. That too was lugged to the Club junk stall at Longleat and having not sold it (it was very big and heavy - 31kg/70lb), at the end of the day I was approached by someone who was involved in a Lancaster aircraft restoration project. Not wishing to lug it back home I willingly donated it to the cause!

I recall purchasing it in the mid 1970s at an Army Surplus Store in Hereford when a newly licenced **Tony G4CMY** and I called by.

Enough reminiscing - back to the contents of this issue.

In response to an article in the May "**Radio Communication**", the Future of Radio Clubs is further discussed.

I have received an important communication from **Chris G4IFX**, Chairman of the **UK Six Metre Group** requesting that as many amateurs as possible are active on 6 metres on **Thursday 13<sup>th</sup> June between 0730-0900 UTC and 1100-1230 UTC**. See page 6 for full details.

**Tony G4HBV** continues with his fascinating series on **POW Radios**.

The **Construction Contest** attracted a large number of entrants - a report in this issue.

Once again thanks to the efforts of **Gary M0XAC** and the use of **Cliff G8CQZ's QTH**, we were able to enter **NFD (National Field Day)** - also a report in this issue.

**Malcolm G6UGW** continues with his Amateur and Broadcast band series and this month covers the 40 metre Amateur Band and 49 metre Broadcast band.

And now the usual appeal - please can I have more articles - how about all those entries in the Construction Contest - just a few paragraphs about YOUR entry would be appreciated!

**73 and good DX!**

### Contest Update

The club once again entered NFD - see the report later in this issue.

At the time of writing, we are 24<sup>th</sup> overall in the VHF UKAC Local Clubs table . Club members participating: M0XAC (50MHz, 70MHz, 144MHz, 432MHz), G0ULH (70MHz, 144MHz, 432MHz), G4CIB (50MHz, 144MHz), 2E0MFH (432MHz).

I have not been as active as I would like to have been but did have a free Tuesday in June to take part in the 144MHz event.

Using my FT817ND running 5 watts into a 5 element ZL Special mounted in the loft space on a rotator, I managed 17 QSOs including GM3SEK in IO74, 2E0VCC/P in Cornwall (IO70).

If you would like to have a go in the UKAC events and need any help or guidance, any of the participants above will be more than happy to assist.

**SSB Field Day** takes place over the first weekend in September (7<sup>th</sup>-8<sup>th</sup>). Do we have any members who would like to take part? It's an ideal contest for newcomers to the hobby to get involved - please let **Gary M0XAC** know if you would be interested.

## The Future of Radio Clubs

I expect that many of you who are RSGB members will have read the article by **G4JJP** in the June "Radcom" advocating how radio clubs should adapt to survive in the 21st century. For those who are not RSGB members I will briefly explain the authors reasoning. In the absence of anyone coming forward, he found himself Chairman of a club facing an existential crisis. New ideas on recruiting and retaining members were sadly lacking and this prompted the author to approach the problem in a novel way. Using bookshops and politics as examples, he explains how the internet has revolutionised the former and social attitudes have altered the latter. In the case of bookshops, he points out that the traditional bookshop has been bypassed as more and more people order books on line. In his words, the "middleman" has been cut out. As to politics, he argues that many people have beliefs in the policies of the various political parties without actually being paid-up members. Drawing on these analogies he goes on to argue that the current radio club model is reminiscent of the 1950's High Street which is dying on its feet, and a radical rethink is needed. He argues that in any organisation there are two types of supporters which he categorises as "Participants" and "Associates". Participants are fully paid-up members and organise and Associates are those who believe in the aims of the organisation but

don't join, don't pay and don't help with the organisation. Political parties have realised this and attempt to woo the Associates to ensure they get their vote.

Small clubs face increasing overheads such as rent and administrative costs. The proposal is to create one networked regional club existing primarily online and offering information on all aspects of the hobby. People would pay for access, not for membership resulting in an income from both Participants and Associates. He argues that with one income stream and one set of overheads, the regional centre could eventually offer a fully functioning station, training facilities etc which would be available to all. At a local level, if people wish to meet socially then he suggests that Weatherspoons provides a suitable venue!

One thing I would question is the bookshop analogy. Buying on-line is fine if you know what you want. Browsing a "bricks and mortar" bookshop can uncover previously unknown authors and titles. Likewise the internet is a fantastic training tool – witness the success of the Essex Ham project and the move towards on-line examinations. But this must go hand-in-hand with face to face interaction and what better place than our "bricks and mortar" club where week in and week out between thirty and forty members sign in?

## From The Archives



This happy group were at the GARS Dinner Dance at the Fleece Hotel in the late 1970s. L-R Edith (G3VZR XYL), Mary (G4FSW XYL), Frank G4FSW, Leta G4RHK and Roy G3VZR. This was a formal affair with a guest after-dinner speaker who would finish by proposing a toast to the Society, suitably responded to by one of our members. After the formalities of the Loyal Toast, followed by the announcement "Gentlemen - you may smoke", the 50 or so members, partners and guests would dance the rest of the evening away to the George Howard Trio. Memorable dancers were Mick G2H DU and his XYL Helen (Tango), Roy and Edith (Foxtrot), also Walter G8WCP and his XYL Dorothy when the band struck up with the Gay Gordons!



5. TWO- AND THREE-LETTER PROCEDURE SIGNALS			7. MISCELLANEOUS SIGNS			FOR OFFICIAL USE ONLY		
Symbol.	Sign.	Meaning.	Symbol.	Sign.	Meaning.			
— — — —	AA	"All After"	— — — — —	DDDT	"Service work" sign.			
— — — — —	AB	"All Before"	— — — — —	EEEEEE	"Erase" sign.			
— — — — —	GR	Group signal.	— — — — —	FI	"Numeral" sign.			
— — — — —	NR	Number signal.	— — — — —	INT	"Interrogative" sign.			
— — — — —	TOR	Time of Receipt signal.	— — — — —	NO	"Negative" sign.			
— — — — —	WA	"Word or Group After"	— — — — —	OE	"Preparative" sign.			
— — — — —	WB	"Word or Group Before"	— — — — —	PAN	"Urgency Signal" for aircraft.			
			— — — — —	SOS	"Distress" sign.			
			— — — — —	UK	"Block letter" sign.			
			— — — — —	TTT	"Safety" signal.			
			— — — — —	XXX	"Urgency" signal.			
6. PROCEDURE SIGNALS			8. SIGNS USED IN COMMERCIAL PROCEDURE			SEMAPHORE AND MORSE SIGNS.		
Symbol.	Sign.	Meaning.	(Differing from or in addition to those in R.A.F. procedure.)					
— — — — —	AAA	" <del>Common</del> " sign.	Symbol.	Sign.	Meaning.			
— — — — —	AE	"Ending" sign.	— — — — —	etc. (Dashes for 1 Min.)	Automatic Alarm Signal.			
— — — — —	BT	"Long Break" sign.	— — — — —	AS	Wait.			
— — — — —	DC	"Difficult communication" sign.	— — — — —	CT	Commencing sign.			
— — — — —	HM	"Silence" sign.	— — — — —	VA	End of work sign.			
— — — — —	II	"Separative" sign.	— — — — —	ä				
— — — — —	III	" <del>Common</del> " sign.	— — — — —	ä				
— — — — —	IMI	"Repeat" sign.						
— — — — —	UO	"Negative Silence" sign.						
— — — — —	VA	"No message" sign.						
— — — — —	VE	"Commencing" sign.						
5 second dash	5 secs.	"EXECUTIVE" sign.						
— — — — —	NW	"Readiness" sign. (Used in H.S. procedure, see Chapter 38.)						

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SEMAPHORE SIGNS AND SIGNIFICATIONS

A & I	B & 2	C & 3	D & 4	E & 5
F & 6	G & 7	H & 8	I & 9	J
K & 0	L	M	N	O
P	Q	R	S	T
U	V	W	X	Y
Z	Alphabetical	Numerical	Annual	

SIGNS USED WITH THE MORSE CODE

SIGNALLING RULES

A dash is three times the length of a dot. The interval between the component parts of a sign is equal in duration to one dot; that between each complete sign forming a word or group to one dash or three dots; and that between words or groups to two dashes or six dots. A dash over the signs indicates that the letters are made without pausing between them.

1.

ALPHABET

Symbol.	Meaning.	Symbol.	Meaning.
—	A	—	N
— — —	n̄ or "A barred"	— — — — —	n̄ or "N barred"
— . . .	B	— — —	O
— . . . .	b̄ or "B barred"	— — — .	ō or "O barred"
— . . .	C	. — . . .	P
— . . . .	c̄ or "C barred"	. — . . . .	p̄ or "P barred"
— — — — —	Ch	— — — — —	Q
— . .	D	. . .	R
. — .	E	. . .	S
. . . . .	ē or "E barred"	. — .	T
. . . .	F	. . .	U
— . .	G	. . . — —	ū or "U barred"
. . . .	H	. . . .	V
. .	I	. . . .	W
. — — — —	J	. . . .	X
. . .	K	. — . . .	x̄ or "X barred"
. . . .	L	. — . . . .	Y
—	M	. — . . .	Z

2.

NUMERALS

Symbol.	Meaning.	Symbol.	Meaning.
. — — — —	1	— . . . .	6
. — — — .	2	— . . . .	7
. . . . .	3	— . . . .	8
. . . . .	4	— . . . .	9
. . . . .	5	— . . . .	0

NOTE.—The figure "0" (nought) is to be signalled as "T" when occurring in the text of a figure cypher or code message. In all other cases, such as Time of Origin, Time of Receipt, Originator's Reference Number and Dates, Procedure Messages, etc., it is to be signalled in full.

3.

ABBREVIATED NUMERALS

Symbol.	Meaning.	Symbol.	Meaning.
. —	1	— . . . .	6
. . .	2	— . . . .	7
. . . .	3	. . .	8
. . . . .	4	. —	9
. . . . .	5	—	0

4.

PUNCTUATION SYMBOLS

Symbol.	Sign.	Meaning.
. — — — —	AAA	Common. Full STOP.
. — — — .	CN	Semicolon. ;
— . . . .	DU	Hyphen.
. . . . .	EK	Fraction Separative Sign.
. . . . .	FI	Decimal point.
. . . . .	III	Note of Interrogation. ?
. . . . .	IMI	Note of Interrogation. P
. — — — —	KK	Parentthesis (before and after the words concerned).
— . . . .	GW	Exclamation. !
. . . . .	OS	Colon. :
. . . . .	EE	Inverted Commas (before and after words concerned).
. . . . .	UK	Underline or Block letters (before and after words concerned).
. — — — .	WG	Apostrophe. '
. . . . .	XE	Oblique Stroke.

P.T.O.

## **POW RADIO'S –Part 3 by Tony G4HBV**

Something I should mention concerning reception of Allied broadcasts in Germany during World War Two; the Germans routinely jammed BBC overseas broadcasts – which we in the UK did not do to their broadcast transmissions.

I have acquired another book “he Last Escape”by John Nichol and Tony Rennell. John Nichol was himself a POW in the first Gulf War when his Tornado was shot down. The book provides further insight into the construction and operation of POW radios. In Stalag Luft VI a secret radio was hidden inside a wind-up gramophone. This home-made radio had already survived a search of the operator's belongings by specialised security officers. On this radio the POW's heard about D-Day, but all POW's were warned against celebrations as his would give the game away.

After the Great Escape – and subsequent murder of those recaptured – a plan was hatched at one POW camp to provide themselves with a transmitter. A fire was started to hide the fact that an amplifier had been robbed of parts which were to be used to modify the secret receiver into an emergency transmitter. In fact a proposal to get transmitters to POW camps before German surrender had been abandoned; although there were plans to supply POW camps with transmitters and operators some days after formal surrender.

As the Russians approached from the East, POW's were marched Westwards and their POW camps abandoned. Even so, some of the secret radios survived to be carried on the march and listened to during the nights as the POW's rested. This enabled the POW's to get information about the Allied Advance and Red Cross information which helped in their survival. Conditions on these winter marches were atrocious as our late member, Jim (G4OYU), an RAF mid-upper gunner, recalled in previous GARES newsletters.

The hiding places and disguises of these secret radios never fail to amaze me. One radio, carried on the march was hidden in a hand-built racing car model, handled many times by German guards in admiration. There is a photo in the book showing how an earphone was hidden in a tooth-powder box.

The Nazis were well aware of the impact of foreign broadcasts –revealing the truth rather than their own propaganda. An interesting piece of evidence supporting their concern over this is the fact that before the war, the Nazis had forced their radio industry to produce a medium-wave receiver for the home market which was deliberately insensitive to make reception of foreign broadcasts difficult. A propaganda short was shown to cinema audiences in which one actor advises another “hat good Germans don't listen to foreign broadcasts”and advising him of the prison sentences if caught doing so.

## **The Bands Explained - Part 2 - 40 metres and 49 metres**

**By Malcolm G6UGW**

### **40 Metre Amateur Band - Frequency range 7.0MHz - 7.2MHz**

This band is good for distances of 150 to 2000 miles. As with the lower frequencies, the distances increase during the dark hours with occasional openings up to 5000 miles

### **49 Metre Broadcast Band - Frequency range 5.95MHz - 6.2MHz**

The behaviour of this band is somewhat similar to the 60 metre band. However, it is occupied by very strong international broadcasting stations, and for this reason, may at times be more consistent.



## NFD 2019



**Dave G4HJV operating on 40m and  
Brian G4CIB listening in.**



**Dave G4HJV notching up another station on 40m**



Operating with the call sign G2HX/P, the club once again put on a National Field Day station. The antenna was the club's 160m Doublet fed with open wire feeder into a Kenwood TS-590S with a ZLP CW interface, with the QSOs logged on the clubs laptop using N1MM+ logging software. Operators were **Bob M0NQN**, **Brian G4CIB**, **Tony G4CMY** and **Dave G4HJV** who between them notched up 336 QSOs. Many thanks to **Gary M0XAC** for organising and to **Cliff G8CQZ** and **Beverley** for the use of their QTH.



**Did you Know?** The first National Field Day was first held in 1933 at the instigation of G6UT Mr T A St Johnston. The original concept was to demonstrate the ability of operating an Amateur Radio station for 24 hours independent of "mains" power. This contest has been an annual fixture (apart from 1940 - 1946) in the RSGB contest calendar. **Pat G3MA (SK)**, a member of GARES, took part in every NFD during his lifetime. Before he married, he did warn his wife-to-be Olive that the first weekend in June was reserved for NFD activities and would take priority over any other family activity!



### **Important**

#### **50 MHz Test 13 June 2019**

This year the ITU World Radio Conference (WRC-19) takes place and there is an important motion on the agenda to consolidate and extend access to 50 MHz in Region 1 (Europe, Africa and Asiatic Russia). One of the national telecoms administrations which is actively supporting the proposal is the Czech Republic; unfortunately some other administrations are actively opposed.

To gather solid evidence of the high level of amateur activity on the band, and at the same time to demonstrate that amateurs can co-exist with other band users including the military, IARU is supporting a monitoring trial in the middle of June. The event is being run by the Czech national radio society, in conjunction with their regulator and it is part activity period, part contest. Government and professional users will be monitoring (and some will be transmitting as well) so it is important that we make a good showing. Remember, by the way, that if you do hear any non-amateur stations you must make sure you do NOT cause them any interference.

Full details of the event can be found here: <https://www.iaru-r1.org/index.php/vhfuhsshf/1854-czech-pohotovostni-test>

The key facts are:

Date: Thursday 13 June 2019

Times: 07:30 - 09:00 UTC and 11:00 - 12:30 UTC.

There needs to be as much activity as possible on the band during these two periods, preferably sticking to the Czech power limit of 25 W ERP. It doesn't matter whether the band is open or not, just get on the air using SSB, CW, Digital, or all three. It is not essential that you should submit an entry for the contest although that would be appreciated, but IARU would definitely like as many logs as possible (contest or non-contest) to be sent in by 15 June, to provide solid evidence that can be used in pre-WRC planning.

This is your chance to do something to help the 50 MHz community in Europe and beyond. I'll be on the band, I hope you will be too.

**73 Chris G4IFX**

Chairman



**“Thinking Day on the Air”**

**Special Event Station GB4QBP - Quedgeley Brownie Pack**

**Photos by G4MGW**







**More activity at GB4QBP**



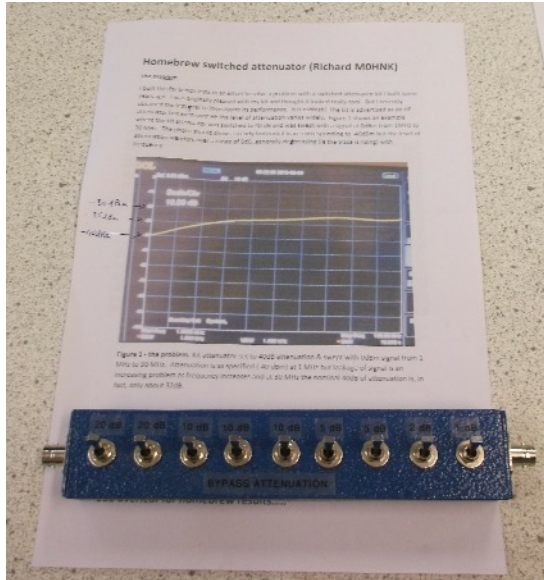
**Gary M0XAC and Richard M0HNK busy operating at Crickley Hill on the May Bank Holiday**



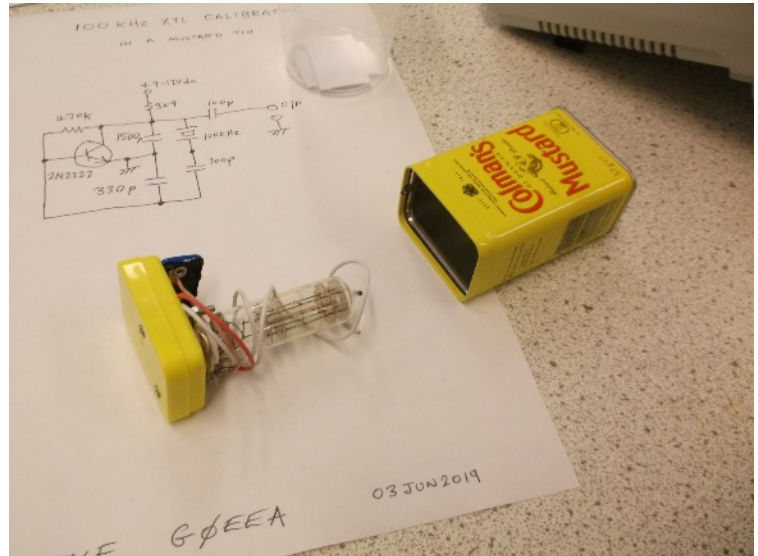
## Construction Contest

A splendid array of entries filled the benches at the recent Construction Contest. In the Basic Section the winner was **Barry M0HFY** with his 70cm "Hourglass" antenna. In the Advanced Section, **Jim G7GKN** attracted the largest number of votes with his replica **Paraset Whaddon Mk VII**.

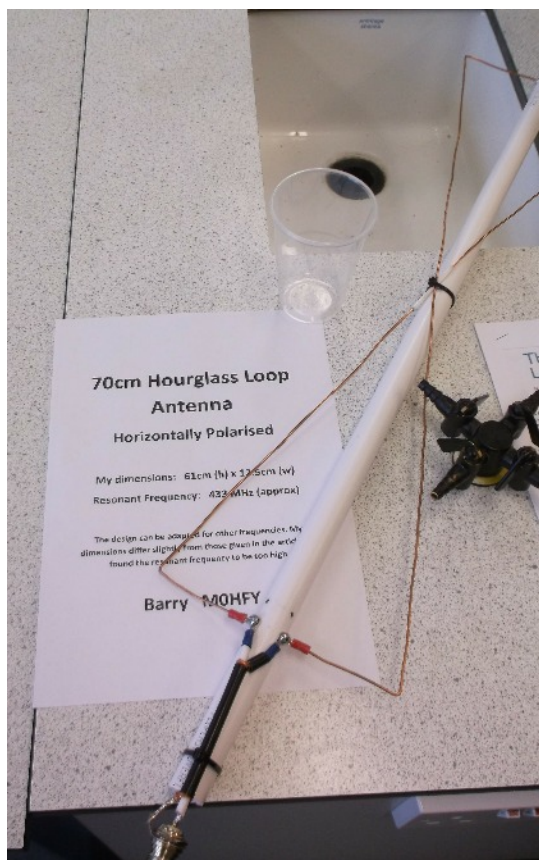
Entries ranged from well assembled kits to home-fabricated modules - well done to all who entered.



**Switched Attenuator by Richard M0HNK**



**100kHz Crystal Calibrator in a Colman's Mustard Tin by Graeme G0EEA**



**Basic Section Winner - 70cm Hourglass Antenna by Barry M0HFY**



**Advanced Section Winner**

**Replica Paraset Whaddon Mk VII by Jim G7GKN. This view shows the "Inner workings"**

Other entries included a QRP Labs 80m transceiver (Dave G4HJV), a Wilderness Radio KC1 Keyer/Frequency Counter (Richard M0HNK), QRP Labs WSPR Transmitter (Mike G6OTP), 160m Transceiver (Tony G4CMY), Ford SW Receiver (Ted M7RTX), 3 ele 2m beam (Brian G4CIB). Apologies to those entries I forgot to note down!