



FIVE AND NINE PLUS

THE OFFICIAL NEWSLETTER
OF THE
APPLEDORE AND DISTRICT
AMATEUR RADIO CLUB

Club Callsigns: G2FKO and GX2FKO
Web Site : www.adarc.co.uk

CLUB'S OFFICERS

President	Terry Adams	G4CHD	
Chairman	John Lovell	G3JKL	
Vice Chairman	Steve Smith	G6SQX	
Secretary	Alan Fisher	M6CCH	01237 422833 Email: fisheralan@gmail.com
Treasurer	Mike Wogden	G4KXQ	
Committee	Graham Bailey	G1ZTJ	
	Dave Cottle	G4XWQ	
	Ray Hunter	M0TLO	
	Keith Luxton	G0AYM	
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Web Master	John Lovell	G3JKL	
Exam Secretary	John Lovell	G3JKL	
Editor	Terry Adams	G4CHD	

June, 2016

EDITORIAL

This month's Meeting on June 20th is a talk by yours truly in the familiar **Back to Basics** theme - **this time the topic is an Overview of Vertical Antennas.**



It's been a bit of a rush to get something prepared but hopefully everybody will find something of interest in the talk and I look forward to the usual lively 'Any Questions' at the end. Your Committee have indeed now had their Meeting and produced the excellent list of Events as shown opposite. Please make a note of our customary **Open Meeting on August 15th when Peter Smith will be giving a most entertaining talk on 'A Life on the Slide'**. Peter is a freelance orchestral trombone player and has had a fascinating and eventful career which Peter uses as the basis for his talk. I have heard Peter give a talk in the past and found him to be everything from hilarious to amazing. So, bring along family and friends for a great evening's entertainment.

On Saturday, June 11th, the Club put on a Special Event Station at the South Molton Olde English Fayre. As often happens, the weather was not at its best and propagation was fairly dire with a high noise level. However, in the true spirit of our Club, some contacts were made and our hobby explained to passers by. A fuller report will appear in next month's Newsletter.

At this point I usually find I've missed out something important but hopefully not this month!!
Enjoy the Newsletter Terry (G4CHD)

CLUB MEETINGS

Meetings are held at the Appledore Football Social Club starting at 7.30pm for 8.00pm. Visitors always welcome. For further information, contact the Secretary, Alan (M6CCH) - details in the top panel.

June 20th	Back to Basics - Vertical Antennas - Terry (G4CHD)
July 18th	Radio Activity Night' - Steve (G6SQX)
August 15th	Open Meeting - 'A Life on the Slide' by Peter Smith, a freelance orchestral trombone player
September 19th	Programme Your Baofeng Radio' - Mike (G4KXQ)
October 17th	Flex 9300 Demo' - John (G3JKL)
November 21st	Bring and Buy Night'
December	Club Christmas Party. Date to be confirmed
January 16th	Club Quiz Night' John (G3JKL)
February 20th	Memory Lane' TBC
March 20th	Club AGM
April 10th	TBA

LOCAL SKEDS

Zepp Net:	Mon, Tues, Thurs : 145.450 MHz 4pm Wed via GB3DN - 4pm
6m Net:	Wednesday, 8pm, 51.480 MHz FM
HF Net:	Friday at 3pm 7.145 MHz ± qrm
70cm Net:	Sunday, via GB3ND, 11am - noon local time. Available on Echolink node 221334

REPORT ON THE MAY MEETING

NATTER NIGHT

There was an excellent attendance by members old and potentially new for a relaxed and enjoyable chance to have a cuppa and a chat particularly with a few new faces who I hope also enjoyed the evening and will be joining our friendly Club.

Our Treasurer, Mike (G4KXQ) was on hand to take membership fees which included a couple of new members who we warmly welcome to our Club. Of course, the end of May was the dead line for membership fees to be paid although anyone who has forgotten can still make our Treasurer supremely happy by paying ASAP.

Terry (G4CHD)

LOCAL REPEATERS

70cm Handy Cross Repeater/Echolink (#221334)

Gateway (GB3ND)

User: Listen 433.35MHz– Transmit 434.95MHz
Access 1750Hz Tone (Timeout 4.25 mins)/ 77Hz CTCSS
Repeater keeper is Jeff (G4SOF)

2m Stibb Cross Repeater (GB3DN)

<http://www.g0rql.co.uk/gb3dn.htm>

User: Listen 145.6375MHz - Transmit 145.0375 MHz.
Access 1750 Hz Tone or 77 Hz CTCSS Repeater keeper is Tony (G1BHM).

Yahoo users group for general chat and banter at :-
<http://groups.yahoo.com/group/GB3DN/>

SUDOKU PUZZLE

The aim is to enter a number into each cell so that **any column, or any row, or any block of cells contains all numbers from 1 to 9.**

9					6	3		2
	2						7	
				2			1	9
		4		9			8	1
			2		7			
7	8			6		2		
6	5			4				
	7						9	
4		2	6					7

Terry (G4CHD)

CROSSWORD

This month's Crossword is by Stuart (M1FWD).

The answers will be published in next month's Newsletter. Good luck !

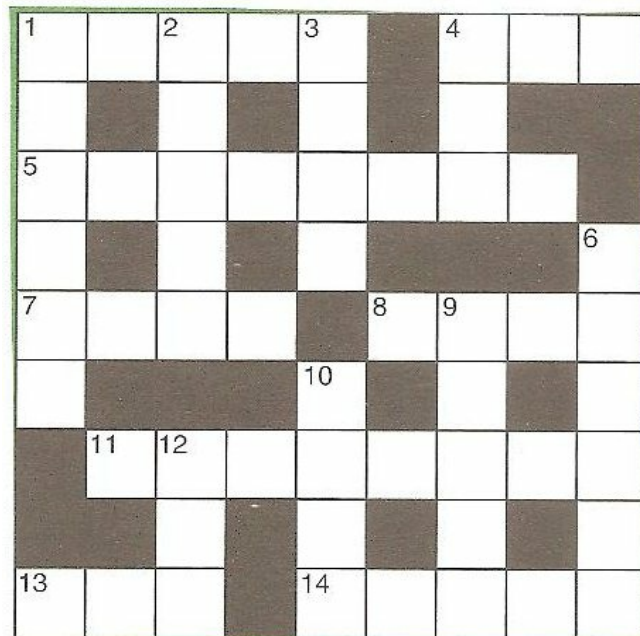


Clues Across

- 1) Posts for supporting aerials (5)
- 4) To make or become less bright (3)
- 5) Half-wave dipoles cut for the lowest operating frequency and fed with ladder-line or open-wire (8)
- 7) An area of the City of Westminster (4)
- 8) ? Dumnoniorum, the Roman name for Exeter (4)
- 11) Panels or units accommodating a set of switches or controls (8)
- 13) The operator of an amateur radio station (3)
- 14) Impedance transformers which match an unbalanced antenna to a feed line (5)

Clues Down

- 1) Diffident, bashful, retiring (6)
- 2) ? Georgia, Victor Papa Eight (VP8) (5)
- 3) Sodium chloride (4)
- 4) The shorter signal of the two used in Morse code (3)
- 6) U.S. state nicknamed 'The Sunflower State' (6)
- 9) A resort town in the Tarragona province of Echo Alpha (EA) land (5)
- 10) Jacob's twin (4)
- 12) The SI unit of resistance (3)



Last month's answers :-

Across 1) Dave 3) loop 6) Drama 7) toc 8) Norfolk
13) tic 14) state 15) Home 16) tune

Down 1) dodo 2) Elmer 4) octal 5) Pick 9) Occam
10) octet 11) Utah 12) Teme

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Terry (G4CHD)

PREPARATION FOR THE SEPTEMBER CLUB TALK ON PROGRAMMING A BAOFENG RADIO BY MIKE (G4KXQ)

The following article by Mike (G4KXQ) is a most useful precursor to his talk in September and gives valuable advice on how, if you wish, you can obtain a Baofeng Handheld Transceiver before the Meeting at a very affordable price.

In order to encourage more use of the two repeaters in our area the club has programmed a club evening entitled 'Programme Your Baofeng Radio' in September 2016. Mike G4KXQ will be offering a programming service for the various Chinese handhelds members may have obtained. These include the Baofeng UV-3R, the Wouxun KG-UV6, the Baofeng UV-5R and its many variants. The radios can

be programmed to a standard set of frequencies Simplex or Duplex or to any individual requirements people may have such as out of area repeaters.

For those people who don't at present own a Chinese handheld I have located a UK source for the rigs who although isn't as cheap as buying direct from China via ebay or Amazon, does have the assurance of a UK based shop and no risk of unexpected customs changes.

Charlie Charlie - M0PZT of Ham Goodies (<http://www.hamgoodies.co.uk>) has kindly offered a 10% discount code that can be used once per customer. The code is PZT73 which can be entered on the "Basket" page to apply it.

Even if you're not after a new rig Charlie has lots of interesting things on his website shop including;

- The Infamous RTL SDR Dongle - Listen to aircraft, amateur, DAB/FM radio, PMR from 25-1800MHz
- MD-380 70cm FM/DMR handheld comes fully programmed for your area.
- Coaxial Cable - RG316 (3mm) for baluns (good for 400w HF) ... RG142 (5mm) for high-power (2kW) baluns and amplifier hook-ups
- All kinds of adapters - For aerial connections and converting patch leads, they have BNC, MCX, N-Type, SO239, SMA types available
- Baluns and UnUns

No minimum order value - There's just a fixed 1st-Class "Signed-For" postage rate of £4 per order, regardless of size.

For those interested, below is a list of two typical rigs priced alone or complete with aerial adaptor and speaker mic. Perhaps two or more members may want to club together and share the postage charges.

MOPZT's
Ham Goodies
Amateur Radio. Components and Tech Stuff

[Baofeng BF-888S Handheld Transceiver](#)

A rugged UHF handheld transceiver for 70cm and business/PMR use. It's a simple radio: no display, just a volume control and channel selector - up to 16 memories can be programmed via CHIRP.

- Frequency range: 400-470MHz
- RF output: 5-watts (1-watt low)
- 16 Channels (memories) can be programmed
- CTCSS/DCS Squelch (for repeater access)
- Narrow/Wide Deviation
- Side buttons for LED torch and monitor/power toggle
- 2.5mm+3.5mm Speaker/Mic socket

- Comes with 3.7v 1500mAh battery, belt-clip, wrist-strap, earpiece/microphone and docking charger

Cost: Radio (£12) complete with SMA to BNC Adaptor + Speaker Mic **Total Cost £21.50**

Baofeng BF-F8+ Handheld Transceiver

The latest offering from the Baofeng camp and an upgraded version of the classic UV-5R. A VHF/UHF FM transceiver featuring the 2nd generation board with improved RF performance yet still ensuring backwards-compatibility with UV-5R accessories such as batteries, cases etc. The internals are the same as the GT-3 Mk2 transceiver and contains updated firmware over the original UV-5R series.

This, in our opinion, is the best of the various 4-5-watt Baofeng radios available.

- 2m and 70cm (plus PMR446)
- Up to 128 Memories
- Frequency steps: 2.5KHz, 5KHz, 6.25KHz (PMR446), 10KHz, 12.5KHz, 25KHz
- Wide (5KHz) and Narrow (2.5KHz) Deviation
- RF output: High: 4-5w (2m), 3-4w (70cm), Low: 2-watt
- CTCSS Encode/Decode
- DTMF Keypad
- 7.4v, 1800mAh battery
- SMA-Female Aerial Connector

Includes [Earpiece/Mic](#) , UK charger, hand-strap and instruction manual. £28.00

Cost: Radio (£28) complete with SMA to BNC Adaptor + Speaker Mic **Total Cost £37.50**

Mike (G4KXQ)

RADIO GEAR ETC FOR SALE

Graham (G1ZTJ) has got an assortment of items for sale which are too numerous to list fully here. However, Graham intends bringing a selection to the next Club night (June 20th) for sale before the evening's talk. So bring along your cash and grab a bargain.



CLUB TO ASSIST CAEN PRIMARY SCHOOL, BRAUNTON TRACK A HIGH ALTITUDE BALLOON

After the Club was approached by the school, Steve, our Vice Chairman (G6SQX) has been in touch and has written the following fascinating article :-

The Appledore and District Radio club has been approached by the Caen Primary School in Braunton to help out in tracking their high altitude balloon (HAB). <https://caenhab.wordpress.com/> Over the last couple of years with the availability of cheap micro computers such as the Raspberry pi it has been

possible to send a meteorological balloon into near space at around 100,000 ft for about £250 recording hi resolution images and sending telemetry data continually to the stations tracking them.



The balloons ascend to to the point where they expand to bursting point and then descend by parachute to be hopefully recovered with their payload intact. In the USA Aprs is the preferred means of tracking the balloons but amateur transmissions from airborne vehicles are not permitted in the UK so a continuous telemetry system called Habitat has been developed that uses very low power (10mW) FSK transmitters in the ISM allocation within the 70cms amateur band.

A common frequency used is 434.650MHz with a data rate of 50 or 300 baud.

A number of receiving stations have been set up around the country using a version of Fldigi (DI-fldigi) to process the audio output of a suitable SSB radio (SDR - RTL dongle etc) and send verified strings of telemetry to the Habhub server where the position, altitude etc are displayed on a google map along with the location of chase vehicles and tracking stations.

Full details can be found at <http://tracker.habhub.org/> and following the links.

The HAB modem and tracker android phone app (with offline mapping) can be used for mobile balloon chasing along with a GSM tracker to transmit the position of the balloon once it has landed.



The launch is scheduled for the **22nd of June** and everyone is welcome to hook up and track the balloons. We hope to have the kit on display for the **July Radio evening...** Just have to hope the balloon lands somewhere sensible!!!



Setting up... https://youtu.be/IM_DLgJEa0k

The photo shows a home made hand held yagi feeding a SSB receiver (Yupiteru MVT-7100) connected to

computer running DI-fldigi and hooked up to the internet.

Steve (G6SQX)

So that's it for this month - I hope everyone enjoys the read

Terry (G4CHD)