FIVE AND NINE PLUS

THE OFFICIAL NEWSLETTER OF THE APPLEDORE AND DISTRICT AMATEUR RADIO CLUB

Club Callsigns: G2FKO and GX2FKO Web Site : <u>www.adarc.co.uk</u>

CLUB'S OFFICERS

THE GX21.

APP,

President	Terry Adams	G4CHD		Email:
Chairman	Mike Hammond	G3PGA		Email:
Vice Chairman	John Lovell	G3JKL		Email:
Secretary	Alan Fisher	M6CCH	01237 422833	Email:
Treasurer	Mike Wogden	G4KXQ		Email:
Committee	Graham Bailey	G1ZTJ		Email:
	Dave Cottle	G4XWQ		Email:
	Steve Smith	G6SQX		Email:
QSL Manager	John Lovell	G3JKL		Email:
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April, 2015

EDITORIAL

Welcome to another Club 5&9 Newsletter. As can be seen from the above table, last month's AGM produced a **significant number of changes to the Officers and Committee** which heralds an exciting and wonderful future for the Club. Further details are given in the March Meeting Report on the next page.



For the benefit of any members who were unable to attend the AGM, a copy of the **Club's accounts are included** at the end of this Newsletter.

The new Committee met early in April at Alan's QTH to plan the **events for the Club Year** and as can be seen from the Table opposite, this coming year promises to be both varied and interesting.

It has also been decided to continue to include an **Open Meeting to which family and friends are invited for a non radio related talk**. Various interesting possibilities were discussed and details will be published in a future Newsletter once finalised.

Many members took the opportunity to pay their **membership subs (£13)** at the AGM but may I remind those that were not able to rejoin that the **deadline is the end of May - so make your Treasurer a happy man and pay your subs at this or next month's Meeting!**

Having delved into past 5&9s I thought another snippet might be of interest rather than a full issue - and so this month **includes a Radio Quiz from 2004** which got me scratching my head for the answers! Good luck if you have a go.

Terry (G4CHD)

CLUB MEETINGS

Meetings are held at the Appledore Football Social Club starting at 7.30pm for 8.00pm. Visitors are always welcome.

April 20th	"Podcasts and Webcasts" by Mike (G4KXQ)
May 18th	"Natter Night"
June 15th	"Baluns & Ununs" by Mike (G3PGA)
July 20th	"Practical Applications for the new Raspberry Pi 2" by Steve (G6SQX)
August 17th	"Coax Losses - Measurement & Effects" by Terry (G4CHD)
September 21st	"Bring & Buy"
October 19th	Open Meeting - details to be confirmed
November 16th	"MX0LDG Operations from Lundy" by John (G3JKL)
December 14th	"Club Christmas Party" (open meeting)
January 18th	"Radio Quiz" by John (G3JKL)
February 15th	"Whistles to Radios - Police Communications" by Alan (M6CCH)
March 21st	"Club AGM"
April 18th	"QSLing - Traditional to the latest methods of confirming a QSO" by John (G3JKL)

For further information, contact Alan (M6CCH) - details in the top panel.

QUOTE

This could refer to any of my talks!

"Before I came here I was confused about this subject. Having listened to your lecture I am still confused. But on a higher level." - Enrico Fermi

REPORT ON THE MARCH MEETING

CLUB AGM

There was an excellent attendance for our AGM which demonstrates the healthy interest that members have in the future of their Club.

Reports were then read by the Officers in which Terry stated that he was stepping down as Chairman. As a result, the following were elected :-



Mike (G3PGA) - Chairman



John (G3JKL) - Vice Chairman



Alan (M6CCH) - Secretary



Mike (G4KXQ) - Treasurer



Graham (G1ZTJ) - Committee



Dave (G4XWQ) - Committee



Steve (G6SQX) - Committee

John (G0UNB) also announced that he was stepping down as our President and Mike in his new role as Chairman, thanked John for being such a great Ambassador for the Club.



Mike then presented John with an engraved Dartington Crystal beer mug as a token of the Club's appreciation for all his support over the years for the Club.



The Club's new President was then announced - which was endorsed by the members present - namely yours truly. This was indeed an honour as there are others within the Club who are just as deserving or even more so . The formal Meeting was then closed and members took the opportunity to have a natter and pay their subs to Mike's xyl, Dianne who had kindly come along to help for which the Club is most grateful.

Terry (G4CHD)

RADIO GEAR FOR SALE

Dave (G4XWQ) has the following equipment for sale. If you are interested, he can be contacted on 01271 377001.

Asahi Power/SWR Meter	£5 ono					
Bremi 13.8V 3A PSU	£5 ono					
Sentinel FET VHF Pre Amp	£2					
Yaesu MD-100 A8X Desk Mic	£70 ono					
Cushcraft A4 Triband Beam (18 ft boom)						
in good condition	£150					
Approx 700 valves - Different types &						
manufacturer - take a look	offers					
Dave will bring the valves to this month's Meeting						

LOCAL SKEDS

Zepp Net:	Mon, Tues, Thurs : 145.450 MHz 4pm Wed <mark>via GB3DN</mark> - 4pm
6m Net:	Wednesday, 8pm, 51.480 MHz FM
HF Net:	Friday at 3pm 7.145 MHz ± qrm
Slow Morse:	Run by Dave (G3YGJ) every Tuesday and Thursday, 7pm clock time on 145.250 mode FM.
70cm Net:	Sunday, via <mark>GB3ND,</mark> 11am - noon local time. Available on Echolink node 221334

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.

				4		1	
2				1			6
	6	2	7				
6			5				7
	8				1		3
			4			2	
			1	3	5		
		8				4	
5		4					
	6	6 6 8 8	6 2 6 . 6 . 8 . . .	6 2 7 6 2 5 6 2 5 8 1 4 1 4 1 1 8 1 1 8 1 1 8 1	2 1 2 1 1 6 6 6 6 6 6 6 6 6 6 7 7 8 1 .	2 1 2 1 6 2 6 6 6 6 6 6 6 6 6 7 7 6 1 1 1 1 <td>2 1 6 2 7 6 2 7 6 2 7 6 2 7 6 6 6 6 6 6 6 7 8 1 </td>	2 1 6 2 7 6 2 7 6 2 7 6 2 7 6 6 6 6 6 6 6 7 8 1

Terry (G4CHD)

CROSSWORD

This month's Crossword is by Stuart (M1FWD). The answers will be published in the next month's Newsletter. Good luck !

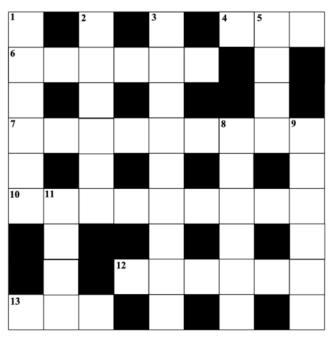
Clues Across

- 4) A pen or enclosure for pigs (3)
- 6) To use the hot exhaust to burn extra fuel in a jet engine and produce more power (6)
- 7) A device of one or more pairs of conductors separated by insulators used to store an electrical charge (9)
- 10) Devices which retard or obstruct the passage of an electrical current (9)12) X-ray Echo land (6)

13) Seventh letter of the Greek alphabet (3)

Clues Down

- In medicine, an artificially produced isotope capable of being followed through the body by the radiation it produces (6)
- 2) The external forms or appearance of persons or things (6)
- British four-engined bomber designed and built by Avro (9)
- 5) A set or group of three (4)
- Each of two corresponding circles on the celestial sphere where the sun appears to turn after reaching its greatest declination (6)
- 9) ? And Hornsby, company which manufactured diesel locomotives until 1966 (6)
- 11) Way out (4)



Last month's answers :-

Across 1) Sofia 6) xenon 7) Mardi 8) Leeds 9) month 12) Urals 13) Lleyn 14) trees

Down 1) sumo 2) Fernandez 3) axil 4) interface 5) ends 9) Mali 10) Hunt 11) asks Stuart (M1EWD)

QUOTE OF ANY ERA!

John (G0UNB) found the following quote which seems very relevant with the Election looming :-

"The Budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled, and the assistance to foreign lands should be curtailed, lest Rome will become bankrupt. People must again learn to work instead of living on public assistance."

No - not a recent quote, but one by a citizen of ancient Rome - Cicero, in 55 BC ! So evidently we have learnt very little over the past 2,070

years.

<u>RADIO QUIZ</u> by Terry (G4CHD)

Found this quiz in the December 2004 5&9 - have a go! Answers to the following questions appear at the bottom of the page.

- If 100 ohm and 200 ohm resistances are in series, and both are shunted by a 300 ohm resistance. What is the equivalent resistance value?
- **2.** A 10V battery feeds a circuit consisting of two 100 ohm resistors in series.
 - (a)What current flows from the battery?
 - (b) What power is dissipated in either resistance?
 - (c) What is the pd across either resistance?
- **3.** A 100 microhenry coil having a 1 ohm resistance, is shunted by a 100 picofarad capacitance to form a resonant circuit.
 - (a)What is the resonant frequency of the circuit?
 - (b) What is the Q Factor of the circuit?
 - (c) If the above capacitance is shunted by a further 300 picofarad capacitance, by what factor would the resonant frequency change?
- 4. A transformer has 1000 primary coil turns and 100 secondary coil turns. If the secondary is connected to a 10 ohm load, what will be the resistance presented by the primary coil?
- 5. What is the feed impedance of a folded dipole?
- **6.** A 1800 ohm load is fed by a quarter wavelength of 300 ohm transmission line from a transmitter.
 - (a) What will be the impedance presented to the transmitter?
 - (b) What is the SWR in the feeder?
- 7. An aerial has a gain of 15dB and feeds a mast head amplifier with a 35dB gain. This then feeds the receiver via a length of coax which introduces a 10dB loss.
 - (a) What is the overall signal gain in dB seen by the receiver?

- (b) If the signal at the aerial is 10 microvolts, what signal will be fed to the receiver?
- 8. A 40 microfarad capacitance in series with a 10 microfarad capacitance, is in turn shunted by a 2 microfarad capacitance. What is the equivalent capacitance of the circuit?
- **9.** A common emitter npn transistor amplifier circuit has a 5 kohm collector resistance and a 1 kohm emitter resistance which is shunted by a 10 micofarad capacitance. The amplifier is fed from a 10 volt supply, and the measured voltage on the emitter is 1 volt.
 - (a) What is the collector emitter pd?
 - (b) What is the approx voltage on the base?
 - (c) Why is the 10 microfarad capacitor included?
- **10.** If the air gap between the parallel plates of a capacitor is doubled in size, what will happen to the capacitance value?
- **11.** What is the approx maximum hop distance achievable via the F layer?
- **12.** On the 20m band, what effect does the D layer have upon the signal?
- **13.** What is the speed of an electromagnetic wave in space in metres per second?
- **14.** What would be the physical length in metres, of a quarter wavelength of coax cable, having a velocity factor of 0.7, which is cut for a frequency of 15 MHz?
- **15.** What is the Q Code for a change in frequency?
- **16**. A superhet receiver has a 10 MHz IF. If the receiver is tuned to a radio frequency of 7 MHz, then what possible local oscillator frequencies can be used?
- **17.** If the MUF is 20 MHz for a particular location at a particular time of the day, what would happen if a signal of 25 MHz were to be used there and then?

So that's it for this month - I hope everyone enjoys the read Best 73s de Terry (G4CHD)

Outer space.

Answers
1: 150 ohms, 2a: 50 mA, 2b: 0.25 W, 2c: 5V, 3: 150 ohms, 2a: 50 mA, 2b: 0.00 degrees
3a: approx 1.6 MHz, 3b: 1000, 3c: freq/2, 4: 1kohm, 5: 300 ohms, 6a: 50 ohms, 6b: 61, 7a: 40dB, 7b: 1mV, 8: 10 microfarad, 9a: 4V, 9b: 1.6V, 9c: Decouple
8: 10 microfarad, 9a: 4V, 9b: 1.6V, 9c: Decouple
8: 10 microfarad, 9a: 4V, 9b: 1.6V, 9c: Decouple
11: 1000 miles, 12: Attenuation, 13: 300 million m/s, 14: 3.5 m, 15: QSY, 16: 3 or 17 MHz, 17: Pass into

	Apple	edore & D			idio Club Accounts			
			Year End	6 March	2015	1 1		
Receipts Summary (£)					Payments Summary (£)			
		2013/14	2014/15				2013/14	2014/15
Bring & Buy		30.00	0.00		RSGB Subs		47.00	47.00
Christmas Social		83.00	58.81		Christmas Social		29.74	0.00
Members Donations		17.00	12.00		Club house rent		240.00	240.00
Bank Interest		0.48	0.48		QSL Managers Expenses		35.20	0.00
Annual Sunscriptions		456.00	468.00		OFCOM Licence		20.00	0.00
Equip Donations/Sales		67.55	65.00		Sec's Stationery/admin			0.00
Other donations/bequest		0.00	0.00		J McFee Trophy		_	0.00
					Equipment Purchase		132.87	0.00
					Glass Tankard			20.00
					Stationery		7.37	0.00
					Club Insurance Donation to RNLI			141.53 20.00
Total Receipts		654.03	604.29		Total Payments		512.18	468.53
		004.00	004.23				012.10	
Lloyds Treasurers Current A/C	b/f	635.47	785.27			c/f	785.27	934.05
Lloyds Business A/C	b/f	945.36	945.84			c/f	945.84	946.32
Cash	b/f	65.79	57.36			c/f	57.36	43.86
Totals		1,646.62	1,788.47				1,788.47	1,924.23
			<u>2013/14</u>	2014/15				9000-0000-0000
Cash carried forward at end of p	eriod	(£)	£1,646.62	£1,924.23				
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Prepared by: M Wogden, HonTr	easur	er		· · · · · · · · · · · · · · · · · · ·			1	
Auditors Report	1	and the second sec		I		1		
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A&DARC. It represents a true and	nd acc	urate summ	ary of the fi	nancial tran	sactions for the year 2014/15	Y		
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