



# 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](http://www.adarc.co.uk)

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## EDITORIAL

Welcome to another Newsletter during these difficult times.

*Many members will have already heard the sad news that on September 30<sup>th</sup>, Steve (G6SQX) sadly passed away. Steve, a previous Club Vice Chairman, was a very enthusiastic and active member of our Club and will be missed enormously. Our deepest sympathies go to Annie and family. Tributes to Steve from members follow later in this Newsletter.*



This month's Zoom talk is by **Graham (M1GRA)** who will be showing several of his old broadcast radios which he not only collects but lovingly restores. Many of you may have seen Graham's YouTube channel 'Radiocruncher' and will therefore know of Graham's skill in presenting. Graham is eager for his talk to be interactive and it promises to be a most entertaining and informative evening. The Waiting Room will be open as usual at 7pm and the talk will start at 7.30pm - please ensure that you check in before Graham starts his talk.

As you will see from the Table opposite, it is hoped to have another Zoom Talk next month with details to be announced asap. However, your Committee propose that our December Meeting be our **virtual Christmas Party using Zoom** when you can bring your own mince pies and preferred tippie and enjoy a pleasant chat and Christmas Quiz by Dave (G0PGK). We might even try to get John (G3JKL) and Laurence (G4XHK) as a duet with a few seasonal offerings although this may be a challenge too far via Zoom!!

Keep safe and keep healthy

Terry (G4CHD)

## CLUB MEETING

**Due to the present Covid 19 pandemic, ALL meetings scheduled to be held at the Appledore Football Social Club have been CANCELLED until further notice**

**Until Meetings are reinstated a programme of 'virtual meetings using Zoom' has been arranged :-**

Date	Topic
Oct 19th	Zoom Talk and discussion by Graham (M1GRA) - 'Collecting Old Radios'
Nov 16 <sup>th</sup>	Zoom Talk - Topic to be announced later
Dec 21 <sup>st</sup>	Zoom 'Christmas Party' - Quiz, Music? etc - bring your own mince pies etc

It is hoped to add further Zoom Meetings so if you want to give a talk, please contact any Committee member.

## NEW FUSION GATEWAY IN BIDEFORD

One of Steve's G6SQX last wishes was to get a Fusion Room & Gateway up for North Devon and **MB6DN** is now up and running at my QTH in Bideford on kit kindly loaned from the Exmoor Radio Club.

Anyone with C4FM/YSF can find it on **144.8250** just up from MB6DT, hopefully it is a first step to a Fusion/FM repeater which I think would be a great tribute to Steve.

Drew (2E0FQE)

## SEPTEMBER ZOOM MEETING

### OVERVIEW OF 2m/70cm DIGITAL VOICE MODES

by Drew (2E0FQE)



Many thanks to Drew for a comprehensive overview and comparison of the relative benefits of the different modes - DMR, Dstar, & C4FM. The fact that each mode uses different terminology perhaps doesn't help the novice to these modes but as Drew commented - there is a growing swell of interest in this form of communication. A lively discussion from members followed and with 20 members taking part, it showed the interest in Drew's talk. Our thanks to Drew for all his hard work in preparing such an interesting and informative talk.

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### LOCAL NETS

**Zepp FM Net:** Mon/Tues/Thurs/Fri :  
145.450MHz - 4pm - 5pm  
Wed via GB3DN - 4pm - 5pm

**2m Eleveses FM Net:** Mon/Tues/Wed/Thurs/Fri :  
11 - 12.00 noon  
Mon/Tues/Thurs 145.475MHz  
Wed via GB3DN  
Fri start 145.475MHz & then  
possibly qsy to another band

**Friday Night 2m Net:** Friday : 145.450 FM, 8 - 9pm

**2m SSB Nets:** Wed: 8 - 9pm 144.260MHz  
USB SSB  
Sun: approx 10.30am (follows  
Top Band Net) 144.260MHz  
USB SSB (Vertical polarised)

**Top Band Net:** Sunday 1.860 Mhz  
9.30 - 10.15am  
(LSB - 32W pep max)

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### LOCAL REPEATERS

#### **2m Stibb Cross Repeater (GB3DN)**

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

User: Listen 145.6375 MHz - Transmit 145.0375 MHz.

Access 1750 Hz Tone or 77 Hz CTCSS

Repeater keeper is Tony (G1BHM)

#### **Fusion/C4FM/WiresX Gateway (MB6DT)**

Frequency 144.8125 MHz.

Keeper Darren (2E0LVC)

#### **Fusion/C4FM/WiresX Gateway (MB6DN)**

Frequency 144.825 MHz.

Keeper Drew (2E0FQE)

## STEVE SMITH (G6SOX) - A PERSONAL RECOLLECTION BY LAURENCE (G4XHK)



I first met Steve while back on weekend leave from the RN at a social gathering of a local teachers group which included Annie and my better half Viv (G0OXW). In general chit chat with Steve we found out that both were amateurs - at that Steve launched into a characteristically enthusiastic impromptu 'teach in' on the various radio activities in the area and he set about encouraging me back into the fold - after many years of being inactive, mainly due to the incompatibilities of amateur radio with Service life, rather than a lack of interest on my part.

Subsequently, particularly after retiring from the RN in 2001 and rejoining ADARC, Steve continued my radio 'education'. Members will recall some of Steve's demos at the Football club of various bits of radio wizardry that few of us really grasped at the time.

The weather balloon tracking project in conjunction local schools was a typical example of how Steve used his practical ability to build and deploy simple but advanced radio kit into a project of wider interest to a non-amateur audience. The ISS link up with local schools was another example.

A leading light in the Exmoor Club, Steve encouraged all local amateurs to come along to the 'Black Cock, Molland' meetings where a hospitable welcome and good grub was guaranteed. I appreciated from those meetings just how much effort Steve and Annie put in over the years supporting the Exmoor Challenge, and the other events that Steve and the Exmoor Club have supported.

Just as the Covid restrictions started to bite, Steve's unfortunate illness became apparent. Steve typically just carried on, continued running the 160m and 2m SSB nets every Sunday, the Wed evening 2m SSB net and Exmoor Club meetings despite his voice and fragility becoming rapidly worse. He continued working to the end on plans for North Devon area digital C4FM networks and the embryonic project for a North Devon repeater.

Steve is another tragic loss to the local amateur fraternity, but his enthusiasm and effort to advance amateur radio in the area has left an enduring legacy- all any of us can hope for.

Rest in Peace Steve and our deepest sympathies to Annie.

**STEVE SMITH (G6SQX) - A PERSONAL TRIBUTE BY MIKE (G3PGA)**

I was shocked to hear the sad news that Steve had passed away. He was a strong supporter of the ADARC, Exmoor and Tiverton amateur radio clubs. His boundless energy, knowledge and enthusiasm was apparent in everything he did. He was always available to assist any club member with electronic problems and never failed to solve them. He will be sorely missed by all radio amateurs near and far. I was proud to call him my friend.

Rest in Peace.....Mike G3PGA

**STEVE SMITH (G6SQX) - PERSONAL THOUGHTS FROM DARREN (2E0LVC) WHO VISITED STEVE DAYS BEFORE HE PASSED AWAY**

Steve has been a great inspiration and friend that I've been blessed to know, His enthusiasm for the radio community young or old was outstanding, The driving force behind the Exmoor Club reboot, Exmoor challenges, Balloon projects for schools, A never ending source of information, research and help for anyone that asked, Between 3 clubs Steve's mind just never stopped whirring, even when the end was but days away he sat with me discussing our C4FM projects determined to get as much information to me as possible before I left saddened but inspired and grateful to have met and known Steve G6SQX.

**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**

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

Terry (G4CHD)

**CROSSWORD**

Many thanks to Stuart (M1FWD) for this month's Crossword.

The answers are in next month's Newsletter. Good luck !



**CLUES ACROSS**

- 1) Fourth rock from the Sun (4)
- 3) ? distance, how far a radio wave travels (4)
- 7) Nine November (9N) land (5)
- 8) Status ?, the existing state of affairs (3)
- 9) Edgar Allan ? (1809-1849), American writer (3)
- 10) Device for holding and guiding tools in a piece of work (3)
- 11) Tree of the genus Ulmus (3)
- 13) The lower alimentary canal (3)
- 14) ? Coast, Tango Uniform (TU) land (5)
- 15) Traverse sections of a radio band, seeking signals (4)
- 16) Single anode and cathode separated by electrolyte, used to produce a voltage and current (4)

**CLUES DOWN**

- 1) Foxtrot Oscar (FO) islands (9)
- 2) "The Biggest Little City in the World", in Nevada, USA (4)
- 4) Brown seaweed of the genus Laminaria (4)
- 5) In physics, the quantity determining the energy of charge in an electric field (9)
- 6) The fifth letter of the alphabet used in Sierra Victor (SV) land (7)
- 12) Silicate mineral used in many capacitors (4)
- 13) A circulatory ocean current (4)

1		2			3	4		5
				6				
		7						
8						9		
			10					
11		12				13		
		14						
15						16		

**Last month's answers :-**

**ANSWERS ACROSS:** 1) ibis 3) Asin 7) Ghana 8) urn  
9) bandwidth 12) kid 13) loops 14) risk 15) Suzi

**ANSWERS DOWN:** 2) Bahia 4) sound 5) Ninth  
6) Harwell 9) Baker 10) nodes 11) topaz

## IDLE THOUGHTS ON DIGITAL VOICE MODES BY LAURENCE (G4XHK)

Sitting here one morning with early cup of tea listening with a newly acquired Yaesu FT3D to the CQ-UK 1 reflector via an under £100 hotspot, the recent on air discussions of whether digital voice communication is 'real radio' came to mind. The conversation on the CQ-UK reflector was between a UK (G1xxx) and a US amateur both of whom were disabled and using simple radio equipment linking in to local gateways/hotspots - both expressed the view that without this technological advance neither would be capable of maintaining the hobby, yet alone having an interference free international 'traditional style' QSO. 'Real' amateur radio or not? No doubt Club members will and should have their own views.



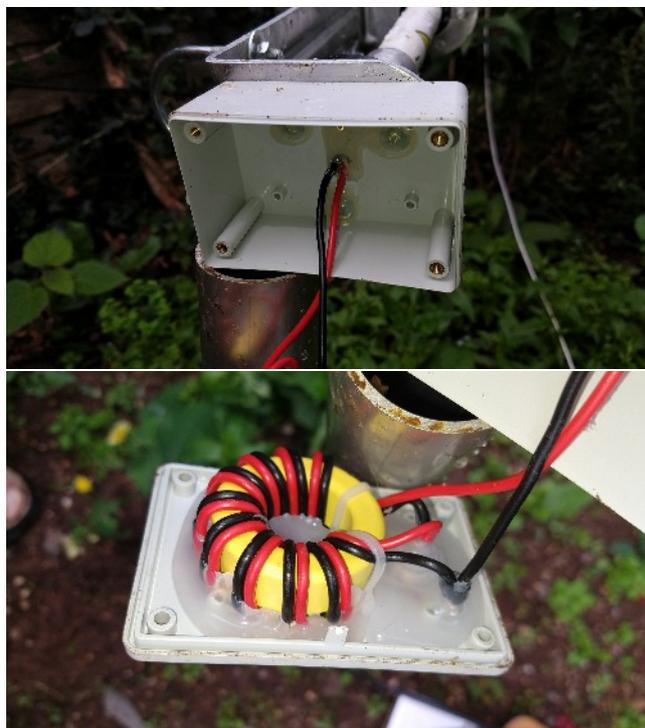
In my view amateur digital voice (DMR/D-star/C4FM) should only be considered another form of modulating an RF carrier wave - and as such is as much 'real radio' as any other mode. Other common digital modes include Morse, RTTY, FT4, FT8, PSK etc. Many of which are an essential part of many amateur operators enjoyment in the hobby. All have advantages and disadvantages and is up to you whether you choose to use them or not. I believe this choice encourages people into amateur radio (as do contests!!) so are, arguably essential to stop the hobby declining.

Few could argue that simplex contacts using digital voice, FM, SSB or AM modulation are not equally valid radio modes. More problematical to some is perhaps the increased use of VOIP (voice over the internet protocols) to replace part, or all, the 'traditional' RF carrier to propagate a signal from one antenna to another. The example I used at the outset is one where internet linking was essential to make the contact possible. Personally, I am happy to use anything from Echolink to whatever I have the interest and ability to try out! I think most of us have now accepted the use of repeaters as qualifying as a normal amateur communication route, so why not the others with VOIP over part of the route? Others may wish to voice a view using the excellent Club newsletter (and thanks to Terry for your persistent efforts and indeed Stewart for his monthly crossword) to provide the Editor with some 'non technical' material to swell the pages of the 5 & 9 during these challenging times.

*Editor's comment - many thanks Laurence for a fascinating and no doubt thought provoking article. Members will have varied opinions on the use of digital voice modes and it would be interesting to have your reactions for inclusion in future 5&9s.*

## SIGMA 360 UNUN

From time to time this multiband vertical is a topic for discussion on our Nets. In particular the feed arrangements and the role played if any by the feeder. Consequently I thought it might be of interest to members to include this short article which includes the following photos taken of the Unun at the base of my Sigma 360.



This Unun is described as a 6:1 in the data supplied with the antenna but in various other references it is quoted as being either 9:1 or even 4:1. The latter figure of 4:1 is from the article by the Isle of Avalon Radio Club in :-

<https://www.avalonarc.org.uk/articles/servicing-hf-360-antenna.html>

which suggests that the Unun is to a Ruthroff design which is described in the following article by G8JNJ :-

<https://g8jnj.webs.com/Balun%20construction.pdf>

It would be interesting if any member has any thoughts on this - particularly as to whether such a design would allow RF to spill over onto the coax screen outer rendering the coax feed effectively part of the antenna system.

So that's it for this month

Hopefully not too many errors this month!!  
Stay safe and stay healthy  
Terry (G4CHD)

Tempted to show this to the XYL next time she comments on the state of my shack!!

