FIVE AND NINE PLUS

THE OFFICIAL NEWSLETTER OF THE APPLEDORE AND DISTRICT AMATEUR RADIO CLUB

Club Callsigns: G2FKO and GX2KKO
Website: www.adarc.co.uk

CLUB OFFICERS

President	Terry Adams	G4CHD	Committee	Ben Louder	2E0FTZ
Chairman	Mike Wogden	G4KXQ		Mark Wildig	G6BNB
Vice Chairman	Dave Boyes	2E0KVJ			
Treasurer	Alan Fisher	2E0EUZ	QSL Manager	John Lovell	G3JKL
Secretary	John Lovell	G3JKL	Web Master	John Lovell	G3JKL
			Exam Secretary	John Lovell	G3JKL
			Editor	Mike Wogden	G4KXQ
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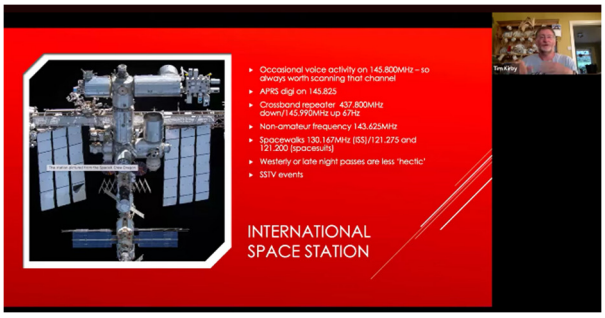
EDITORIAL

A shortened newsletter this month due to the delayed September club meeting and a family holiday.
The September meeting Natter Night/Show and Tell was quite well attended and we had 6 or 7 prospective new members;. I have included a short report of the meeting further in the newsletter.

Support at the Railways on The Air weekend was limited with only four operators able to support on the Saturday. As no other members had indicated any interest in assisting over the weekend at the previous Monday's club meeting nor over the weekend, it was decided that we would not operate on the Sunday. The Saturday had been quite hard work with only three/four operators. Apologies to any club members who turned up on the Sunday or who intended to operate but we made the decision not to continue based on the operators we knew we had available.

The October meeting will be an external on-line talk 'Guide to using satellites in amateur radio' with Tim Kirby GW4VXE. Tim is a well know columnist in Practical Wireless. The talk was previously well received when given to the Pennine Hams in June. This will be an on-line meeting and a link to the YouTube stream will be sent to members prior to the evening but please come along and support in person on the evening.



73 Mike (G4KXQ)

DATES FOR THE DIARY

Two local rallies coming up:
Holsworthy Radio Rally on Oct 26th 2025
Mid Devon Amateur Radio & Electronics Fair 2025 - Winkleigh on Dec 7th 2025

RAILWAYS ON THE AIR

The Club participated in the 'Railways on The Air' weekend of the 27/28th September. The venue was, as in previous years, the Bideford Heritage Railway located at the old Bideford station at East the Water.

Unfortunately, on the day we only had John JKL, Alan 2E0EUZ and myself able to support with the setup and operation. Terry G4CHD had to withdraw at the last minute due to illness. We were assisted by Ben 2E0FTZ during the day but for most of the time was just the three of us taking 20 minute stints at operator, logger and a short rest period. As per previous years we concentrated on 40m as a single band operation on SSB. A total of 130 QSO were worked, of which 17 were other Special Events Stations. We were active all day but were very conscious of a lot of stations were calling up but they were buried under quite high S9 noise. This was confirmed by Mike PGA who could hear lots of stations trying to contact us and failing.. Perhaps we should investigate alternative locations for next year. The operation continued until around 1600Z when we decided to draw stumps.

CLUB PROGRAM

Oct 20th 2025	On-Line Talk - Guide to using satellites in amateur radio	Tim GW4VXE
Oct 26th 2025	Holsworthy Radio Rally	
Nov 17th 2025	Bring & Buy	
Dec 7th 2025	Mid Devon Amateur Radio & Electronics Fair 2025 - Winkleigh	
Dec 15th 2025	Christmas Party	
Jan 19th 2026	External Speaker - Basic Fault Finding	Martin Butler M1MRB
Feb 16th 2026	Antenna Build - Practical	Mike G4KXQ, Mark G6BNB
March 16th 2026	Annual General Meeting	

LOCAL NETS

2m Elevenses FM Net: Mon/Wed/Fri :
11 - 12.00 noon via GB3DN Net Control ; Mike (G3PGA)

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

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

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

Sunday FM Net: Sunday: 11 to noon via GB3DN
Net Control : Chris (G0FJY)

Note :- FM Nets which use GB3DN as shown above will continue despite the recent changes. GB3DN is disconnected from the Wires-X/ Southern Fusion Room just before the listed start and end of each FM Net

ITEMS FOR SALE

Mike G3PGA has the following items for sale. Please contact Mike direct if you are interested in any of the items:

Item Description	Price (£)
Intel i7 PC System (Complete)	250
Easy Rotator System (Unused)	75
Yaesu VX170 Cable & Software	15
Yaesu MH31 Microphone	15
Morgan Arrestor	20
Audio Preamp Switch	10
High Power Balun	25
Retevis Microphone and Aerial	20
West Mountain RigBlaster with Cables	30
RTL SDR Dongle RF Switch & Cables	75
Yaesu FH-2	25
Cable Crimper RJ45	4
Box Assorted Connectors	10
AVO Case with Cables	50
SDR Play with Cables	60
MFJ Speaker	40
Yaesu SP8 Filter Speaker	95
Hole Punch & Stapler	3
Balun project needs completion	10
Dipole Centre	2
US Navigator Facias (unused)	10
Sony Soundbar System	50
Headphones x two sets	15

HOLSWORTHY RADIO RALLY 2025

The annual Holsworthy Radio Rally will take place on Sunday 26th October 2025 at the Holsworthy Livestock Market Cafe. This is a great opportunity to pick up a bargain or clear out your shack, meet up with friends over a bacon roll.

This year's traders include:

Amateur Radio Equipment Bring and Buy - a great opportunity to sell you surplus equipment and items
Nick Trollope - Expert Audio
C Beagle - Military Radio equipment
Steve Webber - Second Hand equipment and accessories
Luke M3VHV: Vintage radio items.
RSGB: Books and membership services
Bob and Andrea Parrot - HAM Radio Equipment and Supplies
Worsley Communications: Second hand equipment, aerials and accessories.
Zoli M0ZOL - HAM Radio Equipment
NDRG North Devon Repeater Group

There will be free parking and catering by Linda.
Admission just £3 per person
Setting-up will start at 8 am and the public will be admitted from 10 am. Finish time will be 2pm

SEPTEMBER MEETING- NATTERNIGHT AND SHOW AND TELL

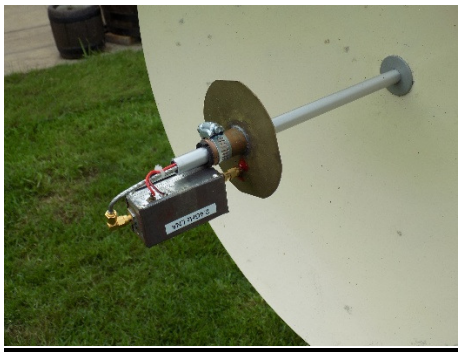
The September meeting was a re-arranged natter night. Previously I requested that members with any suitable projects bring them along for a show and tell.

I am grateful to Chris G0FJY for bringing along his homebrew azimuth and elevation rotator system that he is developing for tracking the ISS. It was quite fortuitous that coincidently during the meeting we has a visible pass from the ISS and some of the members went into the car park to witness a fine West/East Overhead pass whilst simultaneously watching Chris's dish track the path.

The azimuth/elevation unit is a repurposed CCTV mount. This has two dc motors. Driven by a dual H Bridge circuit and an Arduino board running K3NG code. Control is given from a PC running GPredict software. This generates the azimuth and elevation values from the orbital parameters of the satellite being tracked. All performed automatically.

The dish is approximately 60 cm diameter. Equipped with a circular polarised patch feed. A Low Noise Amplifier is fitted directly to the rear of the feed. This will feed a downconverter and BATC MiniTouner receive; the dish could be swapped out for a small yagi antenna.

The purpose is to attempt reception of the HAM TV digital Television transmissions from the International Space Station. (Live moving pictures from onboard the spacecraft).



My own show and tell was a demonstration of the Icom IC-705 working digital modes wirelessly via Wifi. I set up a simple 40m dipole using loaded whips outside the club house and showed the rig working FT8 and SSTV mode using both an Apple iPad using SDR-Control and a Linux Laptop using JTDX and a software package call ed Kappanhang. The CAT and Soundcard connections in both cases was using Wi-fi with the IC-705 in Access Mode.

CONTEST CALENDAR

Lots of contests this month as we move into the winter . The highlight is CQ Worldwide DX SSB Contest. This is probably the biggest contest in the Ham Radio Calendar.

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Contest Name	Time & Date (UTC)
17-19 October	
+ RSGB 80m Autumn Series, Data	1900Z-2030Z, Oct 15
+ JARTS WW RTTY Contest	0000Z, Oct 18 to 2400Z, Oct 19
+ YLRL DX/NA YL Anniversary Contest	1400Z, Oct 18 to 0200Z, Oct 20
+ Worked All Germany Contest	1500Z, Oct 18 to 1459Z, Oct 19
+ Feld Hell Sprint	2000Z-2359Z, Oct 18
+ Asia-Pacific Fall Sprint, CW	0000Z-0200Z, Oct 19
+ UBA ON Contest, 2m	0700Z-1000Z, Oct 19
+ SKCC Sprint	0000Z-0200Z, Oct 22
+ IRTS 80m Counties Contest	2000Z-2100Z, Oct 22
+ RSGB 80m Autumn Series, SSB	1900Z-2030Z, Oct 23
October 24-26	
+ Zombie Shuffle	1500-2400 local, Oct 24
+ CQ Worldwide DX Contest, SSB	0000Z, Oct 25 to 2359Z, Oct 26
+ Classic Exchange, CW	1300Z, Oct 26 to 0700Z, Oct 27 and
	1300Z, Oct 28 to 0700Z, Oct 29
+ UKEICC 80m Contest	2000Z-2100Z, Oct 29
October 31 - November 2	
+ YBDXPI FT8 Contest	0000Z, Nov 1 to 2359Z, Nov 2
+ Silent Key Memorial Contest	0600Z-0859Z, Nov 1
+ IPARC Contest, CW	0600Z-1800Z, Nov 1
+ UK/EI DX Contest, SSB	1200Z, Nov 1 to 1200Z, Nov 2
+ ARRL Sweepstakes Contest, CW	2100Z, Nov 1 to 0300Z, Nov 3
+ IPARC Contest, SSB	0600Z-1800Z, Nov 2
+ EANET Sprint	0800Z-1200Z, Nov 2
+ Classic Exchange, Phone	1400Z, Nov 2 to 0800Z, Nov 3 and
	1400Z, Nov 4 to 0800Z, Nov 5
+ High Speed Club CW Contest	1400Z-1700Z, Nov 2
+ RSGB 80m Autumn Series, Data	2000Z-2130Z, Nov 3
+ ARS Spartan Sprint	0100Z-0300Z, Nov 4
+ VHF-UHF FT8 Activity Contest	1700Z-2100Z, Nov 5
+ UKEICC 80m Contest	2000Z-2100Z, Nov 5

Data Thanks to WA7BNM Contest Calendar

DX NEWS

Entity/Callsign	Dates	QSL via	Reported / Info
Greenland (OX3LX)	03/10/25 – 28/10/25	OZ0J	By OZ1DJJ fm Nuuk; HF + 6 4m
Burkina Faso (XT2AW)	04/10/25 – 27/10/25	M0OXO OQRS	By DF2WO fm Ouagadougou; 160-6m
Guatemala(TG9BBV)	05/10/25 – 25/10/25	VE7BV (B/d)	By VE7BV; 40-6m; CW SSB
Svalbard (JW)	08/10/25– 13/10/25	Home Call	By LA7XK as JW7XK; HF; CW SSB + digital
Fernando de Noronha (PY0FB)	08/10/25– 15/10/25	M0URX OQRS or PY2DV	By PY2DV; 80-6m; SSB
Grenada(J38)	08/10/25– 15/10/25	M0OXO	By GM5RDX as J38DX; 80-6m
Panama (HP3)	09/10/25– 17/10/25	F4GHS	By F4GHS fm Chiriqui Province; HF
North Cook Is (E51MWA)	09/10/25– 20/10/25	M0URX	By N7QT WA7CPA N7JP KC7EFP N9ADG KN2P; 160-6m
Vanuatu (Yj0CA)	14/10/25– 24/10/25	VK2YUS direct	By VK2YUS fm Port Vila; 40-10m; SSB
Tanzania (5H3MB)	16/10/25– 20/10/25	Club Log OQRS or IK2GZU	By IK2GZU; 80-10mw; SSB CW RTTY FT8
Angola (D2A)	17/10/25– 28/10/25	Various (see web)	By multiple ops; 160-6m; CW SSB RTTY FT8
Saba & St Eustatius(PJ6y)	17/10/25– 29/10/25	pj6y25.com	By W6IZT W2FQ NM1Y and YOTA team; 160-6m
Gambia (C5)	18/10/25– 12/11/25	LoTW	By F5RAV as C5LT and YT3PL as C5R; HF; CW SSB FT8
US Virgin Is(NP2R)	20/10/25– 28/10/25	Club Log OQRS, N4XTT direct	By 1W3MLJ N4XTT W9RFT KC1KUG; 160-6m
Dominica(J79FJ)	20/10/25– 29/10/25	FM5FJ	By FM5FJ; HF; CW SSB
Wallis & Futuna Is (FW5K)	20/10/25– 07/11/25	NC7M NG7E...	By NC7M NG7E N7JI K6VHF ...; 160-6m
Madagascar (5R8TT)	29/10/25– 12/11/25	5R8TT OQRS	By I1FQH I1HJT I2PJA ...; Nosy Be I
Sierra Leone(9L8MD)	30/10/25– 10/11/25	IK2VUC	By 14 op team; 160-6m
Bolivia (CP9DX)	31/10/25– 10/11/25	LU1FM	By LU1FM LU1HF ...; Tarija
Burundi (9U1RU)	31/10/25– 20/11/25	LoTW	By R7AL OK8AU ...; 160-6m
Palau (T88HR)	01/11/25– 06/11/25	JH1MLO (B/d)	By JH1MLO fm Koror I; 75-6m
Falkland Is (VP8THW	01/11/25– 22/11/25	DL7HW	By DL7HW; 20-10m; SSB FT8
Cyprus SBA (ZC4RH)	03/11/25– 07/11/25	G4WXJ	By G4WXJ fm Dhekelia; 40-6m; CW SSB FT8 FT4
Chatham I (Zl7)	03/11/25– 20/11/25	LZ1GC	By LZ1GC as ZL7/LZ1GC; 160-6m
Lesotho (7P8EA)	03/11/25– 27/11/25	HB9CCS	By HB9CCS fm Thaba Tseka; 15m SSB/CW

Data courtesy of Ng3K.com DX Operations : 2025

LOCAL REPEATERS/GATEWAYS

Frequencies are those transmitted and received by the Repeater

GB3ND UHF DMR Repeater - Holsworthy Beacon TX 439.7375 RX 430.7375 Colour code 1 Slot 1 local RF, Slot 2 SW Cluster Keeper G1BHM

GB3DN VHF FM/C4FM Repeater - Stibb Cross
Tone 77Hz (for analogue FM) TX 145.6375 RX 145.0375, Default Digital Connection : Wires-X Southern Fusion http://www.g0rql.co.uk/gb3dn.htm. Keeper Tony G1BHM

GB7FB UHF DMR Repeater - Bideford TX 439.475 RX 430.4750 Colour code 5 Slot 1 Local RF/DoD Slot 2 SW Cluster . Keeper Drew M0MFS

GB3LZ VHF FM/C4FM Repeater - Winkleigh
Tone 77Hz (for analogue FM) TX 145.6625 RX 145.0625, Digital Connection :
Wires-X SOUTHERN ENGLAND. Keeper Simon G4MQQ

GB7LZ UHF DMR Repeater - Winkleigh
TX 430.9125 RX 438.5125 Colour code 1, Slot 1 Talkgroup 9 local and direct dial, Slot 2 South West Cluster. Keeper G4MQQ

MB6DT VHF Fusion Gateway - Barnstaple
Frequency 144.8125 MHz. Gateway. Keeper Darren (2E0LVC)

GB7TG - UHF DMR Repeater - Wembworthy
TX 430.9750 RX 438.5750 Colour Code 7, Default Connection : Slot 1 Local/DoD Slot 2 SW Cluster Keeper G7SOJ

GB3NX VHF FM Allstar Holsworthy Beacon TX 145.7375 RX 144.1375. CTCSS tone 77hz Connection SW AllStar network (SWAN). Wires-X default room: Southern-Fusion, Keeper G1BHM

GB3BU - UHF DMR Repeater - Bude
TX 430.9625 RX 438.5625 Colour Code 1
Default Connection: Slot 1 Local/DoD Slot 2 SW Cluster Keeper G1BHM

GB3JH – UHF Analogue Repeater – Tiverton
TX 430.8625 RX 438.4625, Tone 77Hz – Keeper G6ASK

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WIRE ANTENNAS IN SMALL SPACES FOR 80M AND 160M

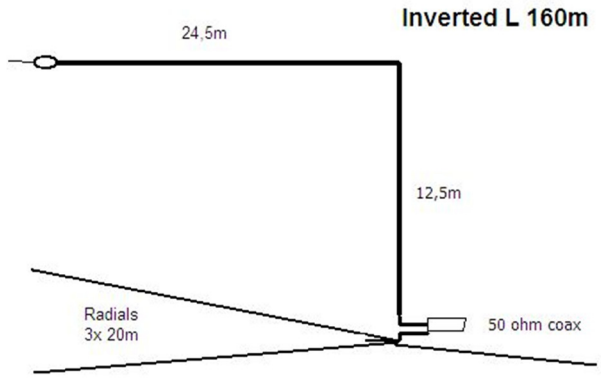
Operating on the 80m and 160m bands presents unique challenges to amateur radio operators with small gardens and limited space to deploy long wire antennas, primarily due to the long wavelengths involved. However, with a bit of ingenuity and some practical tricks, you can significantly enhance your wire antenna performance on these lower bands, even in limited spaces. Here are some tips to help you get the most out of your 80m and 160m operations:

1.Inverted-L Antenna

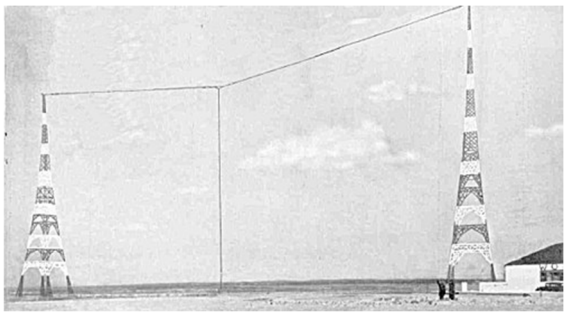
The Inverted L antenna is a popular choice for 80m and 160m due to its relatively small footprint. It consists of a vertical section and a horizontal section. The vertical part helps with low-angle radiation (good for DXing), while the horizontal part contributes to NVIS (Near Vertical Incidence Skywave) propagation for local contacts. To maximize performance, ensure the vertical section is as high as possible and use high-quality ground radials or counterpoise wires.

2.Loading Coils

If you have limited space, adding loading coils can electrically lengthen your antenna without requiring more physical space. Place the coils strategically along the wire, usually about 20-30% from the end. This allows the antenna to be resonant on 80m or 160m without needing the full length of a half-wave dipole. Make sure to use coils with low loss to maintain efficiency.



Top Band Inverted 'L'



Top Loaded Verticle

3. Top Loading

Top loading is another effective method to improve performance on these bands. By adding horizontal wires or a capacitance hat at the top of your vertical element, you can increase the effective electrical length of the antenna. This method is particularly useful for vertical antennas and can help you achieve better radiation efficiency.

4. Sloping and Curved Wires

In confined spaces, you can curve or slope your antenna wires to fit your property. While a perfectly straight antenna is ideal, a slightly bent or sloped wire will still work. Experiment with different configurations, such as an inverted V or a zigzag pattern, to find what works best in your available space. Ensure the bends are gentle to minimize losses.

5. Improved Ground Systems

A good ground system is crucial for antennas on the lower bands. Use as many radials as possible, ideally 16 or more, each at least a quarter wavelength long. If you can't bury them, lay them on the ground and secure them with landscape staples (on lawns, the grass will eventually cover your radial wires for an excellent stealth installation). Elevated radials, though more complex to install, can also offer excellent performance with fewer radials needed.

6.Matching Networks

Impedance matching is critical for efficient power transfer. Use a high-quality antenna tuner or a matching network designed specifically for 80m and 160m. An L-network or a balanced tuner can help you achieve a good match, especially if your antenna isn't perfectly resonant.

7.Baluns and Chokes

Using a balun can help balance the antenna and reduce common-mode currents, which can cause RF interference in your shack. A choke balun at the feed point can also help by suppressing unwanted currents on the feed line, improving overall system performance.

Conclusion

Improving your wire antenna performance on 80m and 160m doesn't necessarily require a large, open space. By employing these tricks—using Inverted L antennas, loading coils, top loading, optimizing ground systems, experimenting with wire configurations, and proper matching networks—you can achieve efficient and effective operation on these challenging bands. Remember, experimentation is key, so don't hesitate to try different setups and see what works best for you