

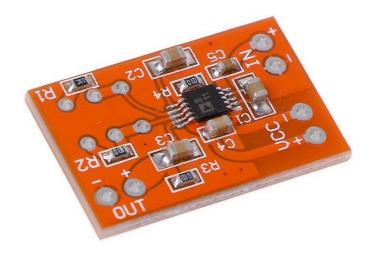
scatterpoint

October 2018

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A Really Cheap Speech Compressor and Noise Gate

Dave Cossar GM3WI



In this Issue

UK Microwave Group Contact Information	2
UKµG WIKI https://wiki.microwavers.org.uk/	
Subscription Information	
UKµG Project support	
UKµG Technical support	
UKµG Chip Bank – A free service for members	
Chairman's Thoughts	
Yahoo group moved	
'Under the Radar: The Secret life of Sir Robert Watson-Watt'	
A Really Cheap Speech Compressor and Noise Gate	
GMRT 2018 Call for Presentations	
Contest results	
UKµG Microwave Contest Calendar 2018	
French microwave activity for 2018	
80m UK Microwavers net	
Activity News : September and early October 2018	
Events calendar.	

Scatterpoint 1810 microwavers. org Page 1 of 16

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UKµG WIKI https://wiki.microwavers.org.uk/

Page 2 of 16 microwavers. org Scatterpoint 1810

Subscription Information

The following subscription rates apply.
UK £6.00 US \$12.00 Europe €10.00

This basic sum is for **UKuG membership**. For this you receive Scatterpoint for **FREE** by electronic means (now internet only) via

https://groups.io/g/Scatterpoint/files and/or Dropbox. Also, free access to the Chip Bank.

Please make sure that you pay the stated amounts when you renew your subs next time. If the amount is not correct your subs will be allocated on a pro-rata basis and you could miss out on a newsletter or two!

You will have to make a quick check with the membership secretary if you have forgotten the renewal date. Please try to renew in good time so that continuity of newsletter issues is maintained. Put a **renewal date reminder** somewhere prominent in your shack.

Please also note the payment methods and be meticulous with PayPal and cheque details.

PLEASE QUOTE YOUR CALLSIGN!

Payment can be made by: PayPal to

ukug@microwavers.org

or a cheque (drawn on a UK bank) payable to 'UK Microwave Group' and sent to the membership secretary (or, as a last resort, by cash sent to the Treasurer!)

Articles for Scatterpoint

News, views and articles for this newsletter are always welcome.

Please send them to

editor@microwavers.org

The CLOSING date is the FIRST day of the month

if you want your material to be published in the next issue.

Please submit your articles in any of the following formats:

Text: txt, rtf, rtfd, doc, docx, odt,

Pages

Spreadsheets: Excel, OpenOffice,

Numbers

Images: tiff, png, jpg

Schematics: sch (Eagle preferred)

I can extract text and pictures from pdf files but tables can be a bit of a problem so please send these as separate files in one of the above formats.

Thank you for you co-operation.

Martin G8BHC

Reproducing articles from Scatterpoint

If you plan to reproduce an article exactly as in Scatterpoint then please contact the <u>Editor</u> – otherwise you need to seek permission from the original source/author.

You may not reproduce articles for profit or other commercial purpose.

You may not publish Scatterpoint on a website or other document server.

UKµG Project support

The UK Microwave Group is pleased to encourage and support microwave projects such as Beacons, Synthesiser development, etc. Collectively UKuG has a considerable pool of knowledge and experience available, and now we can financially support worthy projects to a modest degree.

Note that this is essentially a small scale grant scheme, based on 'cash-on-results'. We are unable to provide ongoing financial support for running costs – it is important that such issues are understood at the early stages along with site clearances/licensing, etc.

The application form has a number of guidance tips on it – or just ask us if in doubt! In summary:-

- · Please apply in advance of your project
- We effectively reimburse costs cash on results (eg Beacon on air)
- We regret we are unable to support running costs

Application forms below should be submitted to the UKuG Secretary, after which they are reviewed/ agreed by the committee

www.microwavers.org/proj-support.htm

UKµG Technical support

One of the great things about our hobby is the idea that we give our time freely to help and encourage others, and within the UKuG there are a number of people who are prepared to (within sensible limits!) share their knowledge and, what is more important, test equipment. Our friends in America refer to such amateurs as "Elmers" but that term tends to remind me too much of that rather bumbling nemesis of Bugs Bunny, Elmer Fudd, so let's call them Tech Support volunteers.

While this is described as a "service to members" it is not a "right of membership!"

Please understand that you, as a user of this service, must expect to fit in with the timetable and lives of the volunteers. Without a doubt, the best way to make people withdraw the service is to

hassle them and complain if they cannot fit in with YOUR timetable!

Please remember that a service like our support people can provide would cost lots of money per hour professionally and it's costing you nothing and will probably include tea and biscuits!

If anyone would like to step forward and volunteer, especially in the regions where we have no representative, please email john@g4bao.com

The current list is available at

www.microwavers.org/tech-support.htm

New Tech support needed in Wales as Chris (now G4DGU) has moved to Cornwall but has volunteered to be TS Elmer for Devon & Cornwall

UKμG Chip Bank - A free service for members

By Mike Scott, G3LYP

Non members can join the UKuG by following the non-members link on the same page and members will be able to email Mike with requests for components. All will be subject to availability, and a listing of a component on the site will not be a guarantee of availability of that component.

The service is run as a free benefit to all members and the UK Microwave Group will pick up the cost of packaging and postage, that is, Jiffy bags, small plastic bags for individual component values, and Large letter 2nd class postage, currently 76p.

Minimum quantity of small components supplied is 10.

The service may be withdrawn at the discretion of the committee if abuse such as reselling of components is suspected. We have asked Mike to check with the Chairman (or designated officer) if any individual is making excessive requests, and we will ensure that the service is only available to members.

There is an order form on the website with an address label which will slightly reduce what I have to do in dealing with orders so please could you use it.

Also, as many of the components are from unknown sources, if you have the facility to check the value, particularly unmarked items such as capacitors, do so, and let me know if any items have been mislabelled.

The catalogue is on the UKµG web site at www.microwavers.org/chipbank.htm

Page 4 of 16 microwavers. org Scatterpoint 1810

Chairman's Thoughts – On the new microwave reflector

Sam Jewell G4DDK

Most Scatterpoint readers will, by now, be aware that the 'old' Yahoo Groups microwave reflector is now being closed and the Group is being moved over onto • UKMicrowaves@groups.io

Most of the active members of the Yahoo group have already moved over and each day I see, as a moderator of the Yahoo group, a significant number of microwavers signing up to the new group reflector.

The old groups Yahoo reflector is now closed to new postings but will remain until we judge that it is no longer worth keeping. If you haven't moved over, please do so. We don't want to lose you! Moving over is easy and don't forget to close your Yahoo reflector account afterwards.

Why has the new reflector been instigated? The old reflector was started by Simon, GM3PLM, shortly after the UK Microwave Group was formed. It was mistakenly thought by many users that the reflector 'belonged, to the UKuG, but that is incorrect. The Committee of the UKuG had no control over the reflector, its policies or any of its membership, except in as much as G3XDY and me were appointed as moderators. When Simon emigrated to New Zealand (now ZL4PLM) he retained control of the reflector. John and I didn't always agree with Simon's actions on the reflector, but by and large we got on well and overcame any difficulties. I was even lucky enough to be visit Simon in Christchurch and meet his partner at his new home.

More recently Simon has given up amateur radio and taken up astronomy in order to take advantage of the lovely dark skies down there. He lost interest in the reflector and we had some problems contacting him from time to time (the near-half day time difference didn't help!).

After some reflector discussion about moving over to Groups.IO Andy, G4JNT, made the decision to start a new group. John and I managed to contact Simon and gained his blessing to move the group over. We were unable, initially, to move the archives and files and one of our members undertook to download all the files and then move them over. This would (might?) have led to the original owners losing control of their content. This has now been resolved and the original files and achieves are now transferring over. This can take some time, so please be patient.

The new reflector is now the place to pose amateur microwave questions, inform members of new developments and generally keep in touch. As we are all radio amateurs it would be a courtesy to your fellow hams to sign your posts with your name AND callsign. There are just too many Daves, Peters and Jans for that to identify you. If you don't have a callsign then use your full name or at least your affiliation, please.

I think a big thank you is due to Simon for keeping the Yahoo reflector going for nearly 20 years. And also a big thank you to Andy for taking the initiative and starting the new reflector. Long may it keep us in touch.

73 de Sam, G4DDK Chairman, UKuG

Scatterpoint 1810 microwavers. org Page 5 of 16

'Under the Radar: The Secret life of Sir Robert Watson-Watt'

Project Summary

Summary

Dear Microwavers,

I am leading a Canadian – UK team that is advancing a first ever, full Sir Robert Watson-Watt biography (SRWW). A summary of our project is attached for your interest. It will assist you in appreciating why our team is certain that our work will make a strong contribution to WWII and Cold War military history – and a deeper appreciation of this remarkable, intriguing man.

We shall soon be launching an international campaign to promote our project. I shall be grateful for the opportunity to provide a brief article detailing our work, and our objectives, for your Microwavers newsletter. If you can advise, our team shall be grateful.

Kind regards,

Bryan Davies

Partner, UNITED FRONT ENTERTAINMENT

Overview

UFE (Bryan Davies and Rob Herholz) is heading up a Canada – Scots team that is advancing a first ever, full life Watson-Watt biography and multimedia project. The press releases and supporting social media sites will be available by approximately November 7 2018. Watt's central role in developing radar is well-known, including Churchill's assertion that Watt's Chain Home radar system 'saved Britain' from the German Luftwaffe and likely military invasion in 1940. We build on this previously well-documented story to more fully explain Watt's entire career – especially his remarkable post-War life in North America.

As noted below, we have control of an extensive collection of Watt's personal correspondence (over 1000 letters, including exchanges with Churchill, Beaverbrook, and other leading figures), WWII passport (detailing extensive secret work undertaken for Allied command 1942-1945), notes, books, unique medals, unpublished research papers from 1925 (anticipating radar in 1935), photographs, numerous speeches delivered in Canada and the US (1946 – 1966), and other personal materials that contribute to the unique perspective we adopt concerning this important WWII era scientist and tech developer.

In early October 2018, Bryan wrapped up UK trip that furthers our Watt project. We have now secured research support from the RAF Museum (Hendon), the Scottish National Archives (Edinburgh), and the Sir Robert Watson-Watt Society devoted to his Brechin (Angus), Scotland history and roots.

Most importantly, we have allied ourselves with an excellent Brechin-based military historian. Steve Nicholl is a retired Royal Marines Major. As a native Scot and highly skilled amateur historian, Steve has

undertaken several years of extensive, highly nuanced research that probes deeply into Watt's story from different military and personal perspectives. Amongst numerous examples, Steve debunks a myth (repeated across the WWII – radar development scholarship and regularly promoted by Watt throughout his life) that Watt is a direct descendant of James Watt of team engine fame.

The letters Watt wrote, or that were written to him, during his life with his second (Canadian) wife are pivotal to our project. One of our team members inherited the entire Watt collection in late 2017 from his grandfather, Watt's Canadian stepson. These letters now number approximately 1000 (we continue to locate others), a true treasure trove.

We have also located a 285-page (typed) diary / memoir authored (unpublished) by Watt's Canadian wife written immediately after their 1952 marriage A separate trove of information that contributes to the 2 extremely intriguing theories we are advancing regarding Watt and his post-WWII Canadian – North American life (see Page 2 below). This includes how Watt actually met his Canadian wife in 1942 – through JP Bickell, wealthy Canadian businessmen, friend of Lord Beaverbrook's (Canada's Max Aitken, Churchill's right hand, and a 'dollar a day' man for the war effort).

Of numerous stories that contribute to why the Watt story has international legs, we can establish how Watt was secreted by the Brits to the US in the immediate December 1941 Pearl Harbour aftermath (flight to neutral Portugal, submarine and then flights to Hawaii). We also have Watt's original notes made of the Pearl Harbour radar installations The minutiae that gives our research additional force....

Watt's combination of obvious scientific ability bordering on brilliance, effusive personality, ego, his

Page 6 of 16 microwavers. org Scatterpoint 1810

well-deserved operational research and radar pioneer status, equally personal sense of entitlement / bitterness / grievance for not having secured a 'big job' with the UK post-War military establishment as a reward for his work, relationships with Churchill and Beaverbrook, his later involvement with anti-nuclear activists.... Collectively items of great interest, and ones that we are certain would alone merit book publication or film treatment.

But additional, substantiated threads and themes elevate the Watt story to another level of intrigue, and interest. Watt's 'striving' working class background (his father was a much disliked Brechin rent collector and landlord's agent in an era when home ownership was less common) – the classic 'smart laddie' who as a man thirsted for social status and respect.

We can establish that Watt's first marriage of 36 years was grounded in his numerous adulteries – this point was reasonably well-known in any event. We can take this information much further, and to far greater effect. Watt's affair with his Canadian wife lasted 10 years (from 1942 to 1952), to his 1952 divorce and immediate re-marriage to her. The 100s of letters exchanged between them contain remarkable observations regarding the British military-political establishment. For his British wartime colleagues, it seemed as if Watt essentially disappeared to Canada after his UK divorce ... nothing could be further from the truth.

Watt enjoyed a high end North American social and professional existence that contributes to the hive of contradictions that we regard as the true Watt. He was a well-regarded patron of New York charities, notably one headed by Ruth Houghton Axe (mutual fund fame) – a social circle for Watt that included John F. Kennedy, Lyndon Johnson, Francis Spellman, and Nelson Rockefeller. Yet Watt's Canadian and North American electronic and consulting businesses each failed because Watt possessed little commercial sense. Watt owed money in many places, he relied on his Canadian wife's money to a significant degree, and he dined out on the 'Sir', his British military technology fame, and (contrived) hyphenated surname across North America for many years.

When placed in this context, it is no surprise to us that when Watt secured the then-largest ever single UK government award for innovation (£52,000 tax free made in 1952, about £1.6m today), he obtained a divorce from his wife of 36 years, immediately married his Canadian wife, moved to Toronto, and promoted himself in Canada as a UK 'brain in exile'. Watt's Canadian wife (she died of sudden cerebral hemorrhage in late 1964), and Lady Jane Trefuss-Forbes (1st head of the RAF Women's Auxiliary Air Force), Watt's third wife whom he married in early 1966

were each independently well off. Watt's immediate pursuit of Lady Jane after his second wife's death contributes to the larger sweep of our Watt story.

2 intriguing theories....

We also have Watt's remarkably prescient 1950s speeches about the future of computers, radar technology, the nuclear threat, and similar topics as supported by Watt's extensive personal notes. We are also focusing on two other (mutually exclusive) theories about the post-War, Canada / North America Watt:

- (1) Watt was a member of the Committee for Nuclear Disarmament, a 1959 and 1960 Pugwash Conference attendee (it was infiltrated by Russian agents), and he publicly opposed to the arms race. Watt spoke and wrote with affection regarding Russian science and technology, frequently travelled to Cold War Russia and Eastern Bloc states, and argued that the Russians were not really a threat to world peace.... we have some teasing informational threads suggesting this undeniable WWII British hero was under scrutiny by MI-5 and the CIA, or ...
- (2), in a 1962 London criminal trial regarding some CND activists where Watt was called to testify by the defence, the trial judge disallowed various questions Watt was asked, relying on on the Official Secrets Act an equally teasing hint that Watt had continued to provide the UK government with information regarding Russian military tech matters for years after leaving the UK.

We have assembled an excellent team (including social media specialists, a museum archivist, and others) that is determined to do justice to this story. We are also very fortunate to have Dr. Doug Delaney, Canadian National Research Council Chair, War Studies, as our military history consultant. Doug provided me with excellent support concerning our 2017 Royal Newfoundland Regiment – WWI memoir that garnered positive reviews here.

Based on the strong, positive UK and Canadian feedback to date (we have not yet broadly publicized our project), we are also certain that our team holds the keys to ensuring the Watt story is well-told, as befits an important figure. Watt's 1962 memoir (a poorly written account, no referencing, and much self-aggrandizing commentary), and a more 'fiction that truth' 2014 film regarding the pre-War radar story ('Castles in the Sky', BBC) are the only previous works that deal with Watt's life in detail. We believe that any other biographers would encounter problems in such a project, without the personal letters, memorabilia, and North American materials we have been fortunate to obtain.

A Really Cheap Speech Compressor and Noise Gate

By Dave Cossar GM3WIL

I use a 290R2 as a microwave QRP IF and for 2 metre talkback.

I always wondered why rigs like the FT290 and the FT817 don't have some form of compression on their designs there are of course some commercial units available.

Then I saw this on E-bay – a little module using a SSM2167 speech compressor and noise gate module

As you can see there is an input and output. These leads should be screened.

The unit works on 5volts to 3.3volts so with the FT290R2 there is 5v on the mic socket to power the module.

I made another one for an ICOM but beware, Icom use 8volts on their mic sockets, so I used a small 3.3v regulator to power the ICOM one. I have no FT817 to try it out

If you shop around and are prepared to wait a month the modules cost £2.80 – yes that's right! A double pole switch 2-way was used to switch it in and out, It does not work on FM only SSB.

I use an 8 pin mic plug into my rig connecting with a cable carrying the 5v to power it the PTT line mic out from the switch grounds for mic PTT, etc

The other end of the small metal box has an

8-pin chassis mounted socket to take the Audio in to the switch it has the routed through unswitched PTT and the 5v/3.3v for electret mics.

I used a Latching press button 2 pole 2 way switch so it can be switched out for FM

There are a couple of things you could play with the compression level which is set by changing the value of R1 the noise gate is set by R2





Page 8 of 16 microwavers. org Scatterpoint 1810

GATE: (R2)

Noise Gate (dBV)	Value of R _{GATE}	
-40	0 Ω (short to V+)	
-48	1 kΩ	
-54	2 kΩ	
-55	5 kΩ	

R2 default 1K resistance, can be modified as needed.

COMP:(R1)

Compression Ratio	Value of R _{COMP}	
1:1	0 Ω (short to V+)	
2:1	15 kΩ	
3:1	35 kΩ	
5:1	75 kΩ	
10:1	175 kΩ	

R1 default 15K resistance, can be modified as needed.

Ok here is what I have found: a 3:1 compression is very loud and gives an "s" point increase over the default settings. The default as it come out of the box gives an increase of 3 "S" points and is good. Don't go for the extra talk power, you will only become unpopular with your received station.

SO STICK WITH 2:1 I

As far as I can see FT290MK1 does not have 5V available at the mic socket, but you could always add one to the free pin.

All you have to remember is route the PTT and power through the unit all that is switched is the mic in/out and a bypass to switch the unit through when not in use

The price of £2.80 from China makes think about ordering another I was at one stage going to build it into my FT290 but an external one is so easy make sure you decouple the PTT and Power lines with 1nF capacitors ferrite beads on the in/out is good construction practise. Enjoy!

There are several on e-bay but if you want to buy a UK one it's closer to £9, China £2.82 that's the cheapest I could find.

https://www.ebay.co.uk/itm/SSM2167-Microphone-Preamplifier-Board-Low-Noise-COMP-Compression-DC-3V-5V-Module/292543834109?ssPageName=STRK%3AMEBIDX %3AIT&_trksid=p2057872.m2749.l2649

Scatterpoint 1810 microwavers. org Page 9 of 16

GMRT 2018



Image source: www.gmroundtable.org.uk

The Scottish Round Table will be held on Saturday 3 November 2018.

Details of accommodation, transport and other activities can be found at www.gmroundtable.org.uk
As a departure from previous practice the organisers thought it would be good to have a call for presentations from attendage. In previous years the programme of talks have been accombled by the

presentations from attendees. In previous years the programme of talks has been assembled by the organisers and was restricted in scope by their knowledge of what people were working on. Do you have a project that would be of interest to the audience? If so why not do a talk about it!

Presentations generally last 30 to 40 minutes and typically would be accompanied by a set of Powerpoint slides. Topics can vary widely but should be microwave related. They could range cover a very wide range of topics such as a review of some commercial kit, modification of surplus gear, test gear, propagation, beacons, software for microwaves, microwave operating, microwave SDRs, antennas, how to get on a new band, microwave construction techniques. The list goes on.

If you are interested please email Brian Flynn, GM8BJF (brian dot flynn at tiscali dot co dot uk) with a title and a very brief outline of your topic.

Page 10 of 16 microwavers. org Scatterpoint 1810

Contest results

John Quarmby G3XDY, UKuG Contest Manager

As we approach the end of the 2018 contest season, I would be pleased to hear from members about any changes they would like to see for 2019 prior to setting the rules for next year in December. I don't have any major changes planned but I await your feedback.

Contest news will be next month due to an issue with the adjudication program.

73

John G3XDY

UKuG Contest Manager

UKµG Microwave Contest Calendar 2018

Dates 2018	Time UTC	Contest name	Certificates	
21 -Oct	0900 - 1700	4th 24GHz Contest		
21 -Oct	0900 - 1700	4th 47GHz Contest		
21 -Oct	0900 – 1700	4th 76GHz Contest		
18 -Nov	1000 - 1400	5th Low band 1.3/2.3/3.4GHz	F, P,L	
Key:	F	Fixed / home station	Р	Portable
	L	Low-power (<10W on 1.3-3.4GHz, <1W on 5.7/10GHz)		

French microwave activity for 2018

Ralph G4ALY

October WE 27 & 28

80m UK Microwavers net

Tuesdays 08:30 local on 3626 kHz (+/- QRM)

73 Martyn Vincent G3UKV

Scatterpoint 1810 microwavers. org Page 11 of 16



Activity News : September and early October 2018

By Neil Underwood G4LDR

Please send your activity news to:

scatterpoint@microwavers.org

Introduction

With mainly fine weather continuing well into October due to high pressure systems across the south of the UK there have been good tropo conditions on the VHF and UHF bands and at times on the microwave bands as well. This has resulted in some 'none contest' activity, which is most welcome. On occasion the fine weather has given way to short periods of heavy rain which have has resulted in good rain scatter propagation on the 3cm band.

Band Reports

From Pete G1DFL IO91

A Couple More 24GHz QSO's!

On Sunday 16th September it was the 3rd UKuG 24GHz Cumulative of the 2018 series. I decided to take the Nortel ODU transverter (kindly on loan from Mike G0MJW) to a couple of locations. The weather was gloriously sunny and unfortunately this meant that there were not that many stations in range to try with!



Looking SW from the Farm Gate, Remenham Hill

First stop was Remenham Hill (IO91NM78VW) 99m ASL to try and work Barry G4SJH/P who was at the trig point on Walbury Hill (IO91GI44EN) 297m ASL. After a while Barry found me and I peaked the dish. With a bit of a struggle as signals were weak and distorted, we completed the QSO at 45km. Really pleased to finally work Barry on the band after several unsuccessful attempts earlier in the year.

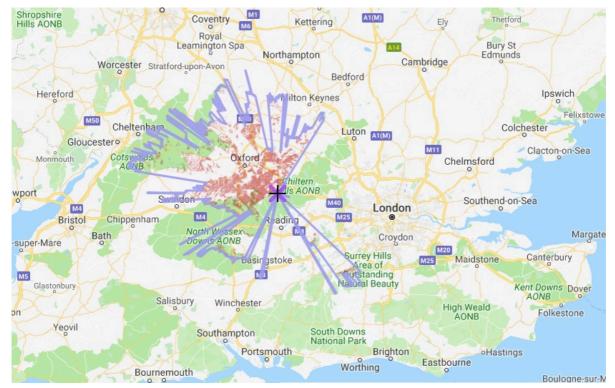
Page 12 of 16 microwavers. org Scatterpoint 1810

I then roved to a new site at Britwell Hill (IO91LO98FM) which is 229m ASL on the Chiltern Ridge just SW of Christmas Common. This site is super convenient being a farm track off a quiet country road. There are clear views from NW to N, with Didcot power station about 7km distant.

Fabulous Views NW from Britwell Hill

Set-up was again quick with the new mast bracket on the 24GHz transverter helping enormously. I called out on the UK Microwave 2M talkback channel 144.390MHz and quickly found Martyn G3UKV and the Telford Group G3ZME/P on Brown Clee (IO82LS) some 188Km distant. We have worked each other several times on 3cm from Christmas Common, but the path is obstructed and despite several tries, 24GHz unlike 10GHz just would not go! Whilst at Britwell Hill, Barry G4SJG/P called me on 2M and we worked each other this time easily on 24GHz SSB at 40km. This time signals were at good strength both ways.





Britwell Hill Visible Horizon (Source: HeyWhatsThat)

Scatterpoint 1810 microwavers. org Page 13 of 16

All in all a good hour or so spent out portable, trying some new 1.2cm paths. I'll try and get out again in October for the last UKuG 24GHz event!

From Neil G4LDR, IO91

Noel G8GTZ/P using the UKuW Group 76GHz system has been carrying out further tests with G4LDR including an attempt to increase their current DATV distance of 12km.

With Noel near Basingstoke and Neil near Thruxton west of Andover 59+ SSB and NBFM signals were exchanged over a 35km path. Despite the strong narrow band signals no DATV signals were successfully received. It is possible that 35km is too far using the few mW of TX power available when spread over a wide bandwidth, although Noel as subsequently discovered a voltage regulator in the loan equipment that had not been properly decoupled and was introducing noise onto TX unit. Noel has now fixed this and we are hoping to try further paths in the near future. As we move towards winter with lower temperatures and lower absolute humidity path loss will be lower which will help with the longer paths.

EME News

From John G8API and Paul M0EYT IO90/IO80

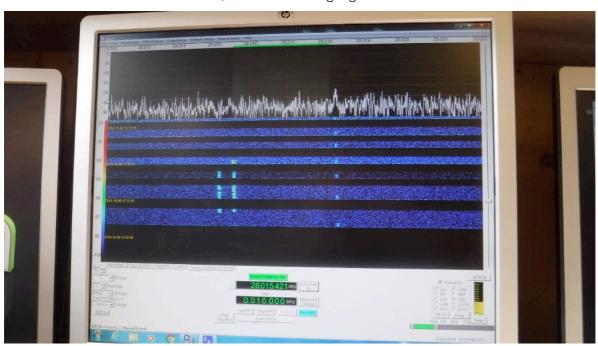
On Monday 8th October G4RFR sent signals to Paul, M0EYT via 10GHz EME. This was a one way test, but is believed to be the First contact between IO90 and IO80 LOC squares.

The contact used the 3.4m dish at G4RFR, which is now fully auto tracked and the 2.4 m petal extended dish at M0EYT, both are prime focus.

G4RFR used a 10W TWT lashed to the feed box via the TVTR head fitted with 4 port WG switch and a MK2 Octagon LNB, with GPS referenced 25MHz LO from a Leo Bodnar Mini.

The contact was not planned as Paul has only recently added the petal extensions to his Deep Space tracking system. He bought an LNB from the far east for 3 dollars, delivered and hacked off the inbuilt horn feed structure. One of the original input probes was fitted into a section of WG16 and mated to a Super VE4MA, designed for the 0.4 f/d.

This produced visible echoes from G4RFR, who were seeing signals at 10dB above noise floor in a 6HZ RBW.



Picture shows G4FRF's own 10GHz echoes off the moon.

From initial carrier test the RFR signals changed to QRA64D and shortly after decodes at -18db were detected by Paul .Full details were exchanged over a 4 min period.

The tests were carried out just HF of the Moon Beacon DL0SHF, which is running 50W to its 8.4m dish. The 10W signals from G4RFR were averaging -9dB against the beacon. Work continues towards the full QRO system at RFR and improvement to the RX, which passes through 2 transitions before the WG switch.

Page 14 of 16 microwavers. org Scatterpoint 1810



The feed system and \$3 LNB at M0EYT used to receive G4RFR and the DL0SHF moon beacon

Beacon News

Gordon GI6ATZ

The GB3NGI 23cms Beacon below the Beacon Cluster Controller

20 October

It looks like we've had our first failure of the new hardware at the GB3NGI site!

The 23cms Beacon went off air yesterday morning around 10:30. The 3 other beacons are all still working OK so the failure is in the 23cms PA unit.

I'd hope that the new hardware would have been a bit more reliable than this but such are the joys of being a Beacon keeper!

Will try and get up to the site as soon as I can but that takes a little bit longer to organise these days!

Eddy ON7UN

The ON0EME Moonbeacon is still on half power. The output power is around 250 Watt.

A new PA is ready but we need to make modifications on the mechanics inside the beacon box, power supplies and Monitoring and Control.

Also to the west we have a new installed building which might obstruct at certain low elevations.



From Robin G4APZ IO91

The 13cm beacon at Martlesham was spotted deep into Europe, including Austria and Poland!

On the 26 September 2018 at 15:09 GB3MHZ on 2320.830MHz was heard by OE5VRL at strength RST 419 in locator JN78DK at a distance of 1010km.

Two weeks later on the 9th October at 17:58 it was heard by SP4MPB for the first time at 519 in KO03HT, the distance was 1311km. Two hours later at 19:45 it was being heard by SM7ECM in JO65NQ80 at 599 over the 877km path. The following day OZ1CTZ received it in JO46OE at 17:39 at a distance of 692km.

From John G0API IO90

I logged GB3FNY for the first time yesterday morning 2/10/2018, at 319km, which according to Beaconspot is the best DX recorded for a G station for that beacon.

This was due to a heavy rain system over the North Midlands and only lasted for approximately 30 mins. The path was offset by 10 degrees from the direct heading.

.....and finally

The deadline for activity reports to be included in the next issue is Thursday 1st November 2018.

2018 AMSAT Space Symposium

2018 AMSAT Space Symposium named in honor of Bill Tynan, W3XO I Southgate Amateur Radio News

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Events calendar

2018

Nov 3	Scottish Round Table	www.gmroundtable.org.uk
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2019

Jan Heelweg

March 15 IET Colloquium on Millimetre-wave and Terahertz Engineering

& Technology 2019 www.theiet.org/events/2019/248017.cfm

RSGB AGM

April 13–14 (tbc) Martlesham Microwave Round Table

May 17–19 Hamvention, Dayton <u>www.hamvention.org/</u>
June 21–23 Ham Radio, Friedrichshafen <u>www.hamradio-friedrichshafen.de/</u>
Sept 15–20 European Microwave Week, Utrecht <u>www.eumweek.com/</u>

2020

August EME 2020 in Prague domain www.eme2020.cz registered but currently not in use

[Googling EME2020 comes up with some unusual items! Ed.]

Page 16 of 16 microwavers. org Scatterpoint 1810