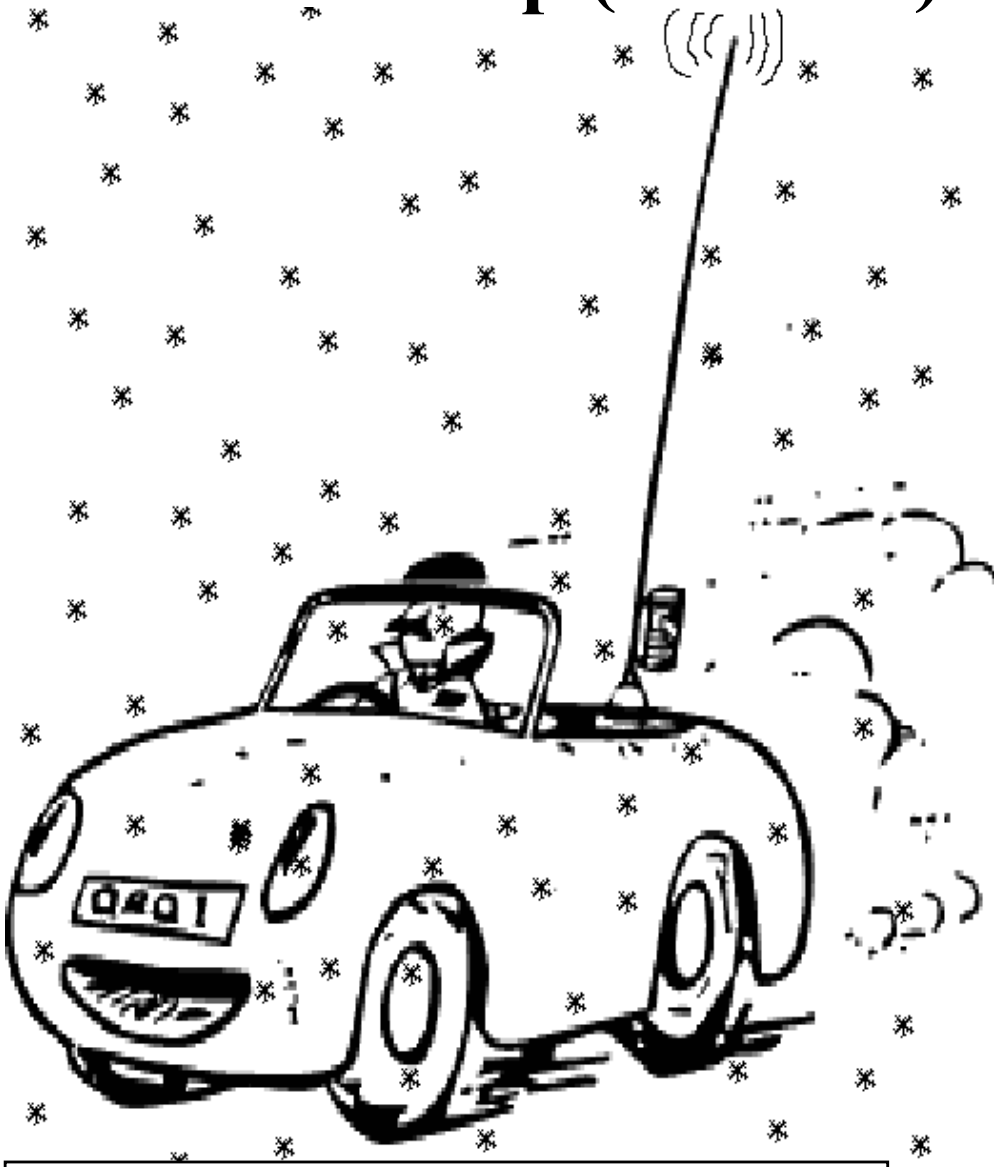
TALKBACK

UKFMGW

The News Sheet of

UKFM Group (Western)



Issue 54 Winter / Spring 2004

The views expressed in this newsletter are those of the article's author and not necessarily, except where indicated those of the UKFM Group (Western) committee or those of the editor.

From The Editor's Pen

Hello again welcome, Diwali, Ramadan, Hanukah and Christmas have all passed, I hope you all had good times / celebrations.
Any way a very big thank you to Geoff G8DZJ for his bit about the interference at GB3ST (see page 4/5)
I am always after articles for inclusion in Talkthrough and as you will see this issue has a bit that some will have seen in a recent RADCOM (I hate that, should have stayed as Radio Communication)
We should have published first but due to other commitments and changes here at G1GYC I did not get round to sorting out a Xmas edition.

I am still in need of those old copies of Talkthrough for the archive so if you have any of these issues :- 1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 14, 15, 16, 17 and 45 I would be grateful if you could donate your copies or at least lend them to me. I will return any issue loaned to me so please have a look in the back of the draws for the older issues that we need.
If you have a good condition issue N°1 that you give up I will pay your membership for the next year and give you a copy of the completed CD Rom when finished, so please, please have a look round.

I can be sent articles for inclusion or contacted by e-mail to this address: –

Talkthrough@g1gyc.demon.co.uk

Or by post: -

The Editor, Talkthrough
Martin Hallsworth, G1GYC
15 Stokesay Drive
Hazel Grove
Stockport
SK7 5PW

Or by phone: -

07788563619 (my mobile)

Also re-member that we run a discussion group on "Yahoo" so why not request to join in.
Note it is a **MEMBERS ONLY** group so you will need to be verified as a member of UKFMGW or be invited to join by a committee member before you can send and receive mail from the group or access the photo's, files and straw polls we have on the group.
Log on at Http://groups.yahoo.com/group/UKFMGW/

Also the group web site has regular updates thanks to Mark who has taken the rains to carry on the good work put in by Morris who sadly past away last year.
The web site can be found at Http://www.ukfmgw.org.uk

UKFM Group (Western) Committee 2003 / 2004

President	-	G3LEQ Gordon Adams

Officers: -

Chairman	-	M0OBW Dave Wilson
Secretary	-	M0DFD Steve Sparkes
Treasurer	-	2E1EAP David Hughes

Committee: -

M1CNY	Kath Wilson (Membership Secretary)
G0SXA	Billy Daly (Recruitment Officer [*Press Gang ! hi hi*])
G1GYC	Martin Hallsworth (Talkthrough [*lost dictionary*] Editor)
2E1CYS	Ian Limbert (Property officer)
G8LZO	John Hibbert (Repeater Network)
G8NSS	Peter Leach (Repeater Network)
MW1MDH	Mark Harper (Webmaster [*black belt 7th Dan in HTML*])

Meetings are held at the Grappenhall Youth & Community Association
Bellhouse Lane, Grappenhall, Warrington, Cheshire unless other wise stated.
Non Committee members are welcome to come along and observe the meeting.
But the committee ask you please do not interrupt or disturb the meetings.

Calendar Dates

Committee meeting dates are: -

	22nd March	2004	
	May	2004	T.B.A.
	June / July	2004	T.B.A
	August	2004	T.B.A.
AGM	13th September	2003	THE AGM SO BE THERE !!!!
	November	2004	T.B.A.

Rallies at which the UKFMGW will be present with the display stand :-

2004

21st March	NARSA – Blackpool
3rd May	Mid Cheshire ARC Rally
6th June	Red Rose QRP Festival
5th September	Telford & DARS Rally
6th November	North Wales Rally
7th November	North Wales Rally
November	Rochdale & DARS Rally
December	Red Rose Winter Rally

2005

January	Oldham radio Rally

Chairman's 2004 Welcome Message

Hello and welcome to the winter edition of Talkthrough. I hope you all enjoyed the festive season and got the presents you wanted from Santa.
Thanks to Martin for looking after Talkthrough and the Yahoo News group – so if you have e-mail facilities and aren't signed up for the Yahoo group let us know, we'll organise an invitation for you to join. (*when you receive the invitation e-mail you will have 7* ***days*** *before it runs out to sign up, if it does run out just send a request from the Yahoo site and Dave or my self will approve you. – Editor*)
Also thanks go to Mark MW1MDH for taking over the group's web site after the sudden death of Morris last year. Morris did the foundation of putting an excellent site together for the group and he will be sadly missed, but I am sure mark will continue to provide an excellent site so if you have any information on the latest status of a repeater let him know.
So on to just a few words about the old chestnuts of: -

1) callsigns - be proud of your callsign it is yours and unique to you. Please use them as per the licence requirement, at the beginning and end of each period of communication. The 15 minute rule shouldn't apply unless you're collecting golden teddy bears for number of "time outs" achieved.

2) Un-identified stations – ignore them if they don't give a callsign.Also ignore any form of keying out etc, not that there's too many problems these days. Acknowledging such actions lets the perpetrator know they are causing a problem and will continue to be a neusiance. If ignored then they will go away eventually. Remember your not to communicate with unlicensed stations !

Finally a very big thank you to all those that support the Group - without your subscriptions and donations we wouldn't be able to maintain such a large network. I know we have a few issues with some of the repeaters still being off air, but we rely totally on volunteers to maintain the network. Relying on them giving up their time to build repeaters / resolve problems maintaining the equipment and none of these guys are getting any younger - what we do need is new blood. So If you are able, or know of anyone who is able to help please get in touch with us either via the web site, the Yahoo Group, on the stand at rallies, or over the air.
If any club secretaries or event coordinators are looking for things to do on club nights we are quite willing to come along to any club and give a presentation about the UKFM Group (Western) itself or any specific repeater topic you may be interested in - **no cost involved**.
For such enquiries please contact me directly - Dave 01270 761 608, 07860 691 056 or e-mail dwilson@btinternet.com

Best 73 Dave M0OBW

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GB3ST and Light at the end of the tunnel?

Recently there have been a number of theories regards the nature of an offending signal (Data?) appearing on the input of GB3ST. Theories such as possible interference from: Tetra?, Police Systems? and a car park sign signalling system.
With this in mind, I carried out a simple but highly effective direction finding exercise, the result of being a general location where the signal was being emitted, an area (sort of triangle)
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of some 100metres x 150metres, Ivy House Road / Leek Road / Bucknall Road. For those that are unaware we are talking about a very small area in the vast City of Stoke-on-Trent.
When trying to find the location of an unknown signal there is a Golden Rule that must never be broken, that being to gather as much information possible without jumping to conclusions.
I noticed whilst noting the direction information received that the actual polarisation was erratically but not constantly changing i.e. sometimes vertical, sometimes horizontal, changing polarisation in seconds or minutes but certainly not predictable. This effect being easily confirmed by listening to the offending signal being relayed by GB3ST i.e. flutter followed by constant signal strength then more flutter at times even dropping out of the squelch.

Clue Number 1: The orientation of the offending transmitting device with aerial was portable, almost certainly hand held or attached to an individual moving about, standing and bending etc, causing the erratic changing of polarisation.
The content of the offending signal as displayed on an oscilloscope is that of pulse width modulation, the rate of which seems to change upon demand i.e. at the press of a button, as there appears to be several predetermined different rate changes…maybe several buttons?

Clue Number 2: If clue number 1 is correct, could this be some sort of remote control device to be operated by an individual? and this being so, for what purpose?
Back to the "triangle". Not wanting to drive back to the general area, it was time to use the Internet and good old Google. The Internet is a very powerful tool when used correctly. So entering "Ivy House Road, Stoke-on-Trent" the result proved very useful indeed, even pictures! Goodwin Foundry slap bang in the centre of my triangle. Foundries by the nature of there work require overhead cranes that are often controlled by remote, a device known as a Pendant, the pendant is usually strapped to the operator by belt or harness, walking up and down the factory floor following and commanding the crane functions as required. Could this be it? Or was the control system using infrared? (As is sometimes the case), also if the pendant was the cause, why is the control signal using 70cms GB3ST input? Apart from the unexplained use of 434.650mhz, the rest seems to fit the part perfectly. However there may be a further "fly in the ointment". The offending signal was first heard early on last year, then it seemed to stop around the end of July beginning of August, then appeared again mid October but much worse?

Clue Number 3: If my feelings (and Tarot Cards) were correct, has the foundry gone through a re-fit around that particular time associated with an over head crane?

Faced with this theoretical knowledge it was time to make contact with the foundry and ask the necessary. A phone call was made on 22/12/2003, fortunately, and partly due to the nature of my employment, conversation was first class if not excellent.
Upon contacting the foundry I asked to speak to the relevant department a Mr Foun-Dry (name changed to protect the innocent). I asked if he was aware of any radio equipment involving Data transmission on site too this he replied not that he could bring to mind, apart from…YES YOU GUESSED IT! Remote control of the overhead cranes "a pendant". I went on to ask if the pendant had been causing any problems during the year, he answered yes (well he did put it slightly different than that, but basically he meant yes). The next question was the name of the company that carried out the work on the pendant and being very helpful he furnished me with the relevant information.
Two minutes later, I was in contact with the said company, a Mr Pen-Dant (name again changed to protect also innocent, for he knew not what he did), it soon became apparent, after a

short discussion, that the said pedant was operating on the input frequency of GB3ST. It has to be said that Mr Pen-Dant had no idea that a problem existed whilst using the frequency in question, and unfortunately he is, as it happens located some distance from Stoke on Trent (in north Yorkshire). He has however promised to visit the site as mentioned to investigate further an urgent much required frequency change.

What of the equipment in use I here you ask?

Amazingly it is type approved, I even have a copy of the type approval certificate issued by the Radiocommunications Agency Approval Number 13958, it is type approved to be used anywhere between 433.050mhz to 434.790mhz, thus taking in mostly all of both our repeater outputs and inputs! A staggering thought! What does the future hold for our 70cms Repeaters? A time bomb waiting to explode. Also remember, if this equipment can and does cause interference to our repeaters then what effect is it having to Ministry of Defence equipment? Or will we the Radio Amateur as usual also be getting the blame for that?

Hopefully some time in the early part of the New Year the problem should cease as the pendant and GB3ST become separated or even divorced!

The end of what has become a difficult and stormy relationship, (fingers crossed that is).

Well the good news is that on the 29-12-2003, Mr pen-Dant did indeed pay a visit to the Foundry, and the equipment in question is now operating on a different frequency, albeit still on 70cms. Without doubt the 70cm band has become a free for all rubbish tip for all kinds of radio equipment, (or gadgets) operating on all sorts of different frequencies, with a total disregard to any knock-on effect to users such as ourselves. Of course should we the Radio Amateur be the cause of any interference, well, then I am sure the end result would be very different.

Geoff, G8DZJ. Repeater Keeper GB3ST.

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The Network - Repeater Reports

GB3SX: 50.79Mhz / 51.29Mhz CTCSS – 103.5Hz

Operational no change.

GB3VT: 145.725Mhz / 145.125Mhz CTCSS – 103.5Hz

Continues to give good service

GB3SM: 433.325Mhz / 434.925Mhz CTCSS – 103.5Hz

Some concerns have been aired by the new landlord and are delaying SM going back on air. We hope to resolve these, then get the repeater in place before anything else happens to delay it further. (It should be noted that this repeater was OK'd before the embargo on new applications from the MOD.)

GB3ST: 433.050Mhz / 434.650Mhz CTCSS – 103.5Hz

All seems to have been sorted out with the data / telemetry interference

GB3SE: 1297.075Mhz / 1291.075 CTCSS – 103.5Hz

No change reported.

GB3WP: 433.275Mhz / 434.875Mhz CTCSS – 82.5Hz

No change reported.
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GB3MN: 145.650Mhz / 145.050Mhz 1750hz Tone burst only
Repeater has the odd but usual winter time hic-ups and a short period of down time with the repeater being taken off site and back to Sandbach for a bench test / tune up.
(*you need bigger 6" nails Dave !! – Editor*)

GB3MR: 433.350Mhz / 434.950Mhz 1750Hz Tone burst only
Operational no problems reported.

GB3MB: 145.600Mhz / 145.000Mhz 1750Hz Tone burst only
Operational with no problems reported.

GB3MA: 433.025Mhz / 434.625Mhz CTCSS – 82.5Hz
Operational with no problems reported.

GB3MP: 145.750Mhz / 145.150Mhz CTCSS – 110.9Hz
Operational with no problems reported. Just a few words regarding GB3MP - it shows how reliable the kit is – the last time we visited site was in the 20th Century, 31st December 1999 to be precise. OK we could maybe do with a quick visit to adjust the squelch tail but if it wasn't for that you'd have nothing to comment on!!!!! As NoV holder I'd just like to say thank you to all those that subscribe to the repeater and if you know of someone who uses the box but isn't a member a gentle nudge can work wonders. The cost of the site is the highest in the group and will keep on increasing. With a healthy membership we are able to afford the site, if numbers drop below say 650 then we will find it more and more difficult to pay for this site.

GB3CR: 433.150Mhz / 434.750Mhz CTCSS – 110.9Hz
Operational with no problems currently reported. Although the repeater was taken out of service for some work in mid January.

GB3LL: 433.000Mhz / 434.600Mhz CTCSS – 110.9Hz
Operational no problems reported.

GB3LI: 433.250Mhz / 434.850Mhz 1750Hz Tone burst only
Operational no problems reported.

GB3MF: 433.175Mhz / 434.775Mhz CTCSS – 103.5Hz
Non operational, No change, waiting on lifting of MOD 70cm repeater embargo.

GB3UK: 50.77Mhz / 51.27Mhz CTCSS – 82.5Hz
Non operational – No change.

GB3MT: 433.300Mhz / 434.900Mhz CTCSS – 82.5Hz
Non operational – No change.

GB3MC: 1297.000Mhz / 1291.000Mhz CTCSS – 82.5Hz
Non operational – No change.

GB3PZ: 430.900Mhz / 438.500Mhz CTCSS – 82.5Hz

The repeater is going strong with no changes reported.

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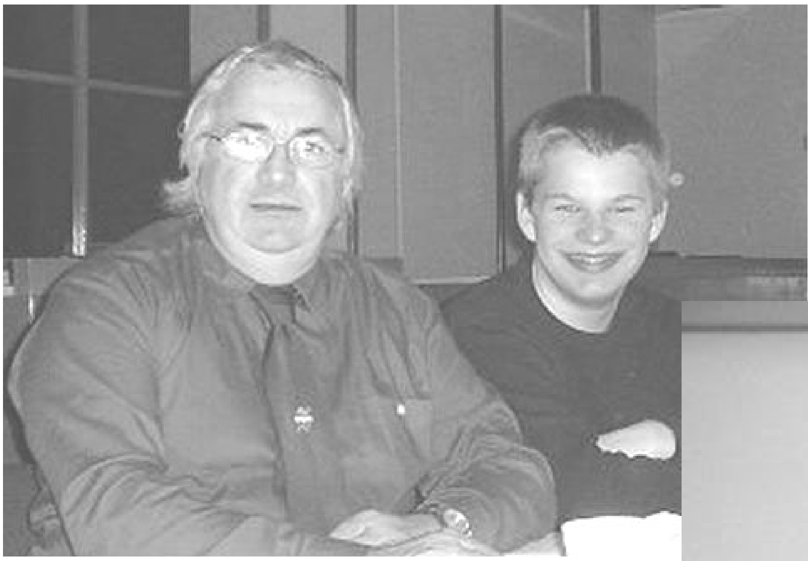
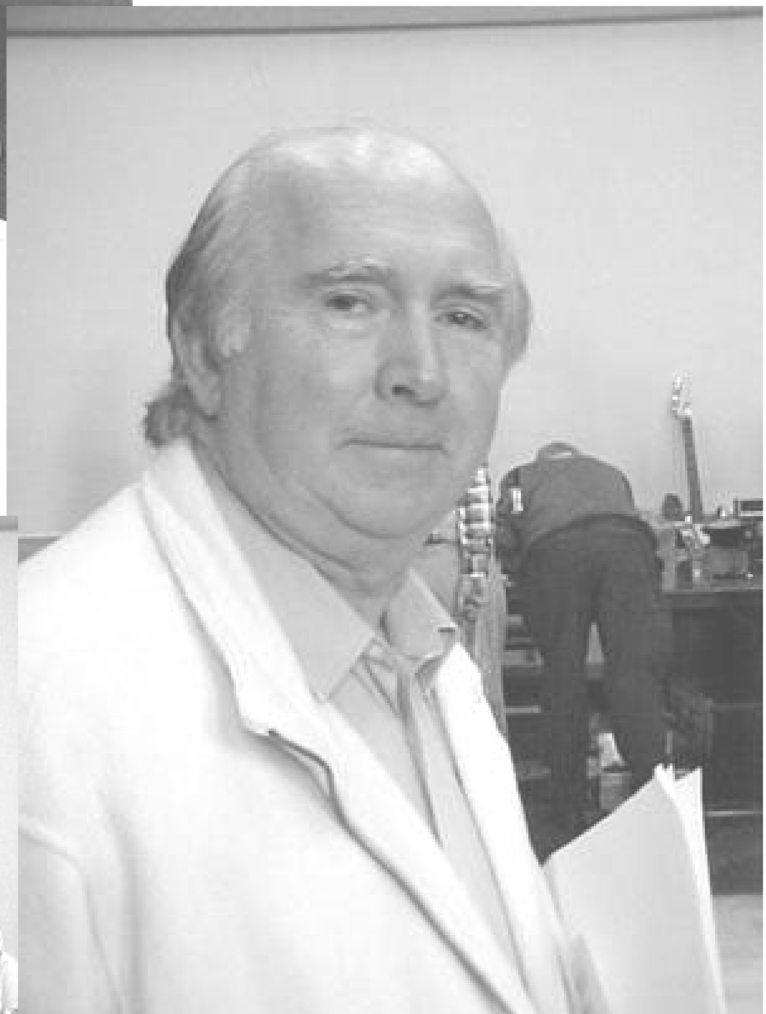
A Rogue's Gallery

A few more pictures of some of the people you might hear on the air using UKFMGW supported repeaters.



← G1EFU and M3JON

The "BOSS" Gordon G3LEQ →



← Graham G4HFG
(is he the Rochdale Cowboy ?)
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John G1 “SEXY” (G1CXE) →

← Dave M0OBW

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The STEPPIR Antenna – Warrington ARC’s New HF Beam aerial

Despite having the use of a Force 12 C4S antenna at the club shack at Grappenhall Warrington members of the club were anxious to match their newly acquired Icom 756 pro II transceiver with a state of the art antenna. When details emerged of the SteppIR antenna manufactured by Fluidmotion Incorporated of America they realised that here was a radical new approach to the problem of tuning a beam to several bands.
It was decided therefore to purchase a 3 element SteppIR Yagi covering 20 to 6 metres including the WARC bands. Most radio hams have constructed antennas and are aware of the need to select the correct dimensions in order to present a correct load to the transmitter without recourse to traps or an ATU. The SteppIR does just that at a command from the control box. The display on the control box shows the mode, band and frequency to which the antenna is tuned and push buttons are provided for each amateur band. By pressing the relevant band button tuning can be moved to various segments of the band and further buttons provide fine tuning up or down in 25kHz steps. There is provision for Setup, General Coverage or amateur modes the latter being the default setting. There is a further three position button for OFF, 180 degrees or Bi directional. When pressed the first time the antenna will reverse direction in three
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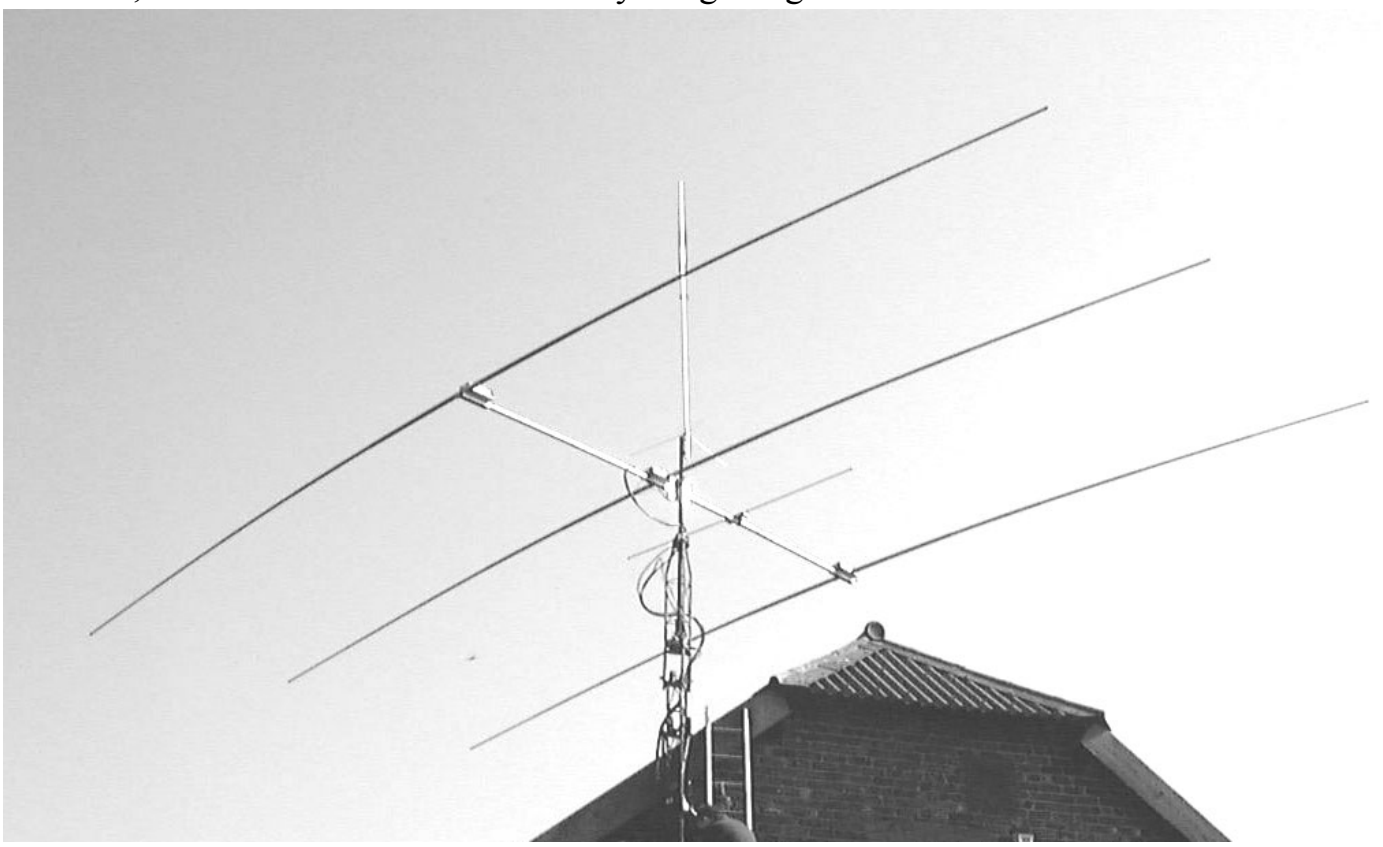
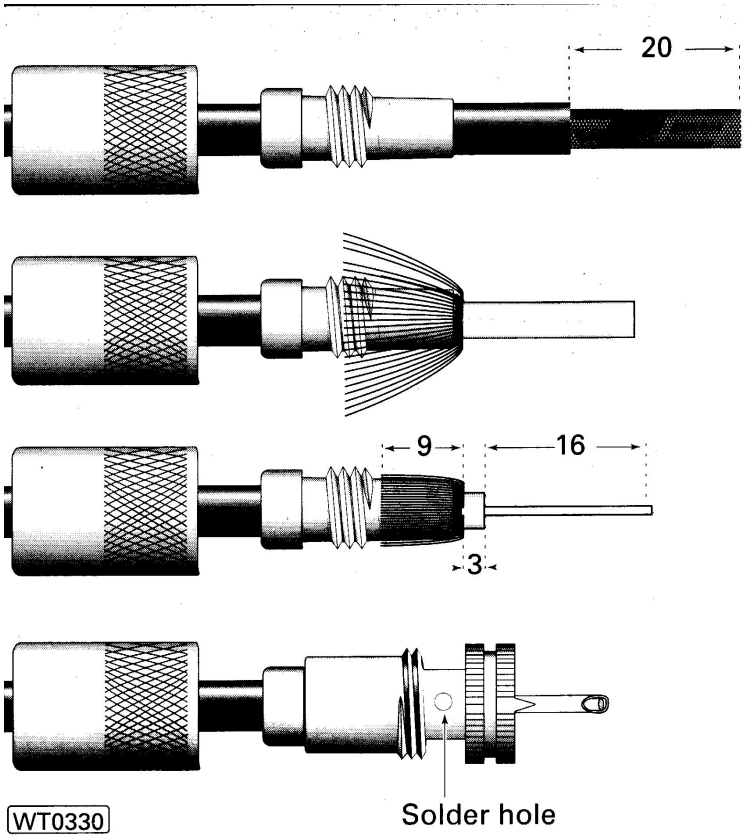
seconds to enhance that back of the beam call – much quicker than using the rotator. Another push and the Bi directional mode provides 4db gain both ways.
To achieve the tuning the elements of flat copper-beryllium strips are housed in glass fibre tubes and spooled in and out by stepper motors. All the elements are adjustable but the spacing between them is a compromise to give the best overall performance. The adjustments make it possible to achieve close to 1:1 SWR on all bands. To make operation even more fool proof an optional interface kit allows the controller to read the transceiver's frequency and automatically adjust the band and frequency of the antenna to suit.
So how does it work in practice? Our location is not the best by any means but a quick look at the log shows a VK contact on Marconi day and two over the pole JA contacts in April 2003. On 28mHz a casual 'listen' with the mast retracted to roof level revealed a PU on the back of the beam at S4 and a press of the 180 degree button secured a 599 QSO with Brazil. Further South American contacts followed. In the WPX contest two operators in 17 hours worked 197 stations in 61 countries mainly on 10 and 15 metres despite a dead spell between midnight and 5 am with only four contacts. All this using just 100 watts.
All in all we are well pleased and the simplicity of operation (provided the control box is turned on) means that members enjoying the benefits of access to the H F bands, some for the first time, will be more confident that they are getting the best out of the club station.



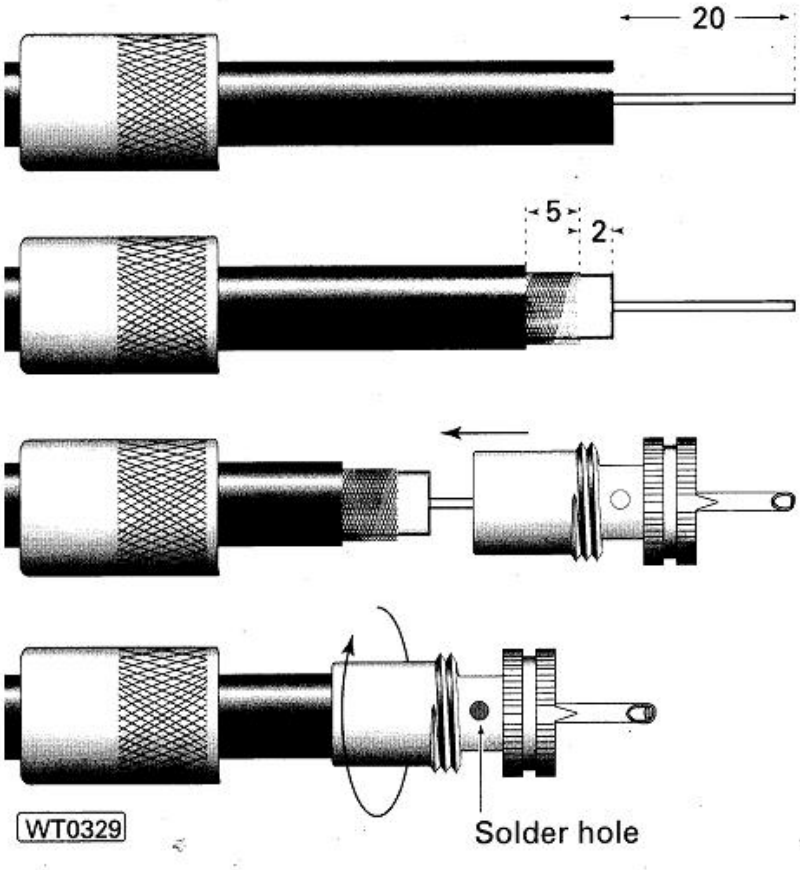
How to fit a PL259 connector to RG58 / UR67 and RG8 / UR67 cables: -



I am assuming that we are using the type of PL259 that has a ”Reducer” to fit to RG58 / UR76 type cable.

1) Place the locking bezel and the reducer on to the coaxial cable.
2) Cut the outer plastic sheathing 20mm from the cable end.
3) Push reducer up to the point where the sheathing ends and fold the screening braid back over the reducer.
4) Trim the braid to about 9mm long.
5) Cut the insulation from around the centre wire leaving about 3mm between the braid and where the insulation is cut.
6) Fit the plug main body – ensure the centre wire fits up the pin of the connector. Screwing the reducer all the way in.
7) Solder the centre wire in place and also run solder in through the holes in the side of the connector body onto the screening braid.
8) Trim any excess wire from the plug centre pin and clean with a small file.
9) Screw the locking bezel over the main body.

For RG8 do the same as for RG58 but trim the sheathing back a further 7mm and remove the braid screening to leave 5mm exposed in front of the sheathing (you could fold the braid over the sheathing if it will still fit the connector man body). Cut the insulation from the centre wire leave 2mm between the end of the braid and the cut. Fit the connector main body and solder up then trim/ clean as required.



UK FM GROUP (WESTERN)

I, the undersigned, hereby apply for membership to the UK FM Group (Western), undertake to abide by the rules of membership of the Group and only to make use of the Group's repeaters in the approved manner and in accordance with the licence conditions. I further understand that the Group cannot guarantee to maintain operational repeater facilities at all times.

On becoming a member my first annual payment will take effect from the date of submission of my application, and my membership renewal shall become due one year later. I agree that no portion of my membership payment shall be refundable.

Should I participate in any Group activities or use any vehicle in connection with any Group activities, I understand that I do so entirely at my own risk. Furthermore, should I be involved in carrying equipment belonging to the Group in any vehicle, I understand that I would do so at my own risk and that the Group cannot accept claims arising out of accidents involving vehicles either directly or consequentially.

Furthermore, I consent to my particulars being held in the form of computer data, for record purposes, by the Membership Secretary, and agree that the Group is not required to register such information under the provisions of the Data Protection Act 1984.

BLOCK CAPITALS PLEASE

Call-sign ……..…… Previous Call-sign ……..……

Full Name ….……..……..

Full Address …...……..……..

……..……..…… Post Code ……..…….

Telephone No ……. E-Mail Address ……..

Subscriptions £4.00 Paid by: cash / cheque / PO *

Donations £____

* Please delete as appropriate

____ Cheques payable to "UK FM Group (Western)"

Signature …… Date …….

Send to: Membership Secretary
Mrs K. Wilson M1CNY / M3CNY
12 New Street
Elworth
Sandbach CW11 3JF

PLEASE TICK 3 REPEATERS YOU OPERATE MOSTLY

MN		**SE**		**MF**		**WP**	
MB		**LL**		**MT**		**SX**	
MP		**LI**		**MR**		**PZ**	
VT		**CR**		**SM**		**UK**	
MC		**MA**		**ST**			