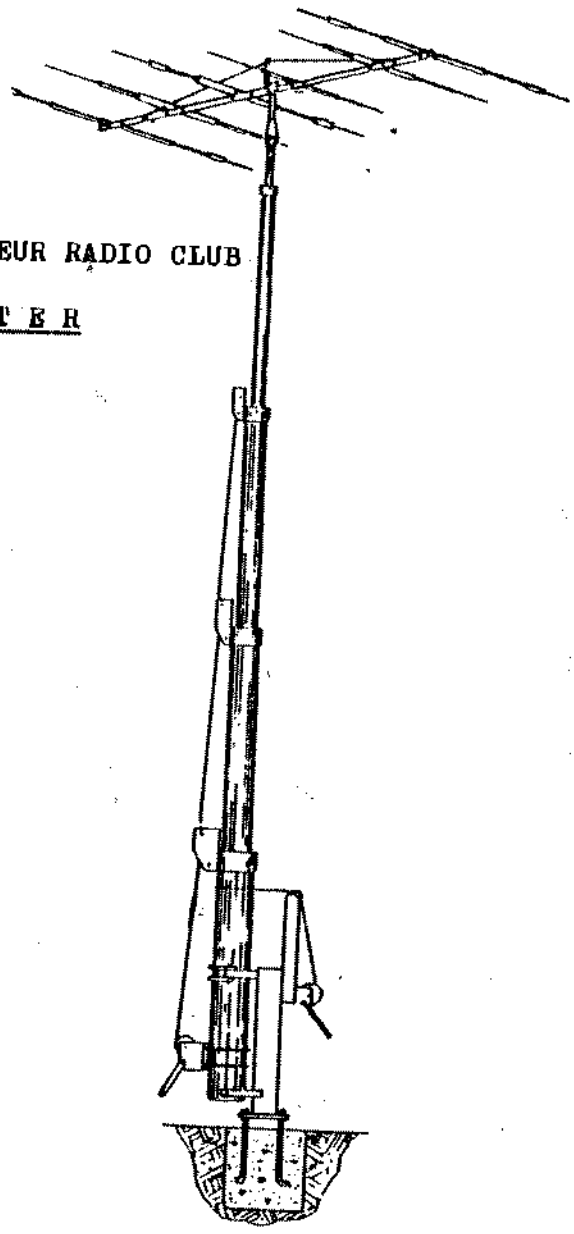


WIRRAL & DISTRICT AMATEUR RADIO CLUB
NEWSLETTER



Club meetings are held at 8 p.m. in the Dining Room (adjoining the bar) of the Concourse Sports Centre at West Kirby. Visitors are always welcome at the club. Further details are available from the Hon. Secretary.

Ian D. Brooks,
28 Paignton Road,
Wallasey,
Merseyside,
L45 6TT

Telephone: 051 639 5666

FUTURE EVENTS

- 13 May Talk by the G.P.O. Radio Interference Staff
- 20 Committee Meeting &
D & W - Railway Inn (alias 7+1) Meols
- 27 Computer by Derek Roger, G3U00
- 28-30 National A.R. Exhibition - Alexandra Palace
- 3 June D & W - The Wirral Hundred, Oxton
- 10 W.M. Furness G3SMM (Region 1 Rep.)
- 17 Committee Meeting &
D & W - Primrose, Liscard
- 19 Mediaeval Banquet, Ruthin Castle
- 20 PMW's Birthday
- 24 The Visiting Amateur in the U.S.A. by G8MMN
- * 1 July Darbecue
- 4-5 V.H.F. NFD
- 8 Eileen Medley Challenge Cup D.F. Hunt
- 15 Committee Meeting &
D & W - The Green Lodge, Hoylake
- 22 D & W - Victoria Hotel, Heswall
- 29 D & W - Shrewsbury Arms, Chester High Road
- 5 Aug. D & W - The Harp, Neston
- 12 D.F. Winner Revenge D.F. Hunt
- 19 Committee Meeting &
D & W - The Green Lodge
- 2 Sept. D & W - The Wirral Hundred, Oxton
- 9 Surplus sale
- 16 Committee Meeting &
D & W - The Parrot, Drury, N.Wales
- 23 Antique Radios by M. Green

- 30 Sept. D & W - The Primrose, Liscard
 7 Oct. D & W - The Red Cat, Greasby
 14 Satellite Communication - Video Tape Lecture
 21 Committee Meeting &
 D & W - The Green Lodge
 28 To be arranged - listen to LI and MP for
 development
 4 Nov. D & W - Hotel Victoria, Heswall
 11 The World of Amateur Radio - ARRL film
 18 Committee Meeting &
 D & W - The bar in the Concourse!
 25 Social evening & Certificate Presentation by
 President of R.S.G.B.
 2 Dec. D & W - The Seven Stars, Thornton Hough
 9 Chairman's night
-
- 24 June - The visiting amateur in the U.S.A. A small
 amount about Amateur Radio, but the slides
 of the Grand Canyon are worth the trip to
 the Concourse alone!

1 July - Barbecue.

Start time is 8 p.m. and it will be
 situated as last year, down by G3RLA's
 house. However, this year it will be
 bigger and better - a larger fire, more
 lights and the same amount of food as
 last time. (Rumour has it that RLA is
 still living on the left-over beefburgers).

If you are coming please let Richard NND
 or John UZZ know so we have an idea of
 numbers - bring the XYL or YL with you.

WIRRAL AND DISTRICT AMATEUR RADIO CLUB DF HUNT RULES

- (1) The start point for the DF Hunt will be the lay-by on
 the West Kirby side of Heswall at NGR.260831
- (2) Teams to consist of up to four persons.
- (3) Only one vehicle to be used.
- (4) Teams must check in with the Hunt organiser at least
 ten minutes before the start.
- (5) The 'Fox' will make an initial announcement at the
 start time, then he will 'go to ground' until called
 by one of the teams. He will then give a transmission
 lasting from 10 to 30 seconds.
- (6) You may make as many calls to the 'Fox' as you like.
- (7) Do not trespass onto any private land. This includes
 farmers' fields.
- (8) All speed limits etc. must be observed at all times.
- (9) Please leave the 'Fox's Lair' as soon and as quickly
 as possible after you have found him.
- (10) Teams must not communicate with one another or
 anybody else except the 'Fox'.
- (11) Passive antennas only to be used.

Peter Balestrini, G3BPT

Members of the Society and of Raynet will be saddened to
 hear of the death of Peter Balestrini, G3BPT on Thursday,
 30th April. Peter was attending the IARU Region 1
 Conference in Brighton in his capacity as RSGB Emergency
 Communications Manager. He was heavily involved in the
 development of emergency communications throughout Region 1
 and indeed has chaired a working party earlier in the
 Conference on this topic.

I feel sure that all members of RSGB will wish to extend
 their sympathies to Mrs Balestrini and her family.

D.A.E.

30.4.1981.

EDITED EXTRACTS FROM CLUB COMMITTEE MINUTES

Points of controversy, information or expenditure recorded in the minutes and not shown elsewhere in this newsletter. The club's books, including the committee minutes are normally available on club nights for inspection by any member.

18th February

Collection at club resulted in £4. 51. being sent to Amsat-UK towards the cost Phase 3b.

Cost of 5th edition of the newsletter was 12 sides x 2p per side x 150 copies = £36. The charges for this and the other four editions of the newsletter have been waived but bills will be raised for the sixth and subsequent editions.

McIntosh Trophy accepted by committee on behalf of club - further details in next newsletter.

18th March

Now have 58 paid-up members, despite the fact that 11 of last year's members have not renewed their membership yet.

Following purchases agreed:

- 2 masts @ approximately £22 each
- 4 extra mast sections
- QRA locator scoring tape (for use with a PET computer)
- 1 length of high quality coax and plugs
- 70cm 4-way power divider
- Metalwork to support 4 x 70cm 19 element tonnas

Agreed to organise another Bring & Buy stall on 25th November - all proceeds to club funds.

15th April

Agreed to print club letter paper and make this available to members.

Two more applicants for membership approved - membership now 60.

J. Fogg agreed to stand for the position of R.S.G.B. Area Representative for the Wirral.

20th May

Chairman offered his resignation since he will not be able to continue after the end of September.

McIntosh Trophy is to be awarded annually for mechanical or electrical projects made in the preceeding 12 months (full rules in the next newsletter)

The committee also has accepted the offer of a shield to be competed for annually in the RSGB 144MHz fixed station contest. (full details in next newsletter)

looks like you should be cleaning the dust off your soldering iron as well as fixing up the aerisls while the weather is fine.- editor.



"No, I can't hear you on the input, but that's probably because I'm only running 10 watts here".

"I have to treat my car like a lady first thing in the morning..... I have to choke it slowly. (So that's why he's referred to as the leader of the Wirral Mafia?).

For the Prospective Amateur

Want to Study

As in past years a Radio Amateur's Examination course will run at the North Wirral College of Technology, Borough Road, Birkenhead, at 6.45 p.m. on Thursday evenings with Dave Owen G4GGD as the Tutor. The course is specifically designed for students who want to sit for the May 1982 examination. Enrolments can be made from 9.30 a.m. to 7.30 p.m. on Monday, 7th Tuesday, 8th, and Wednesday, 9th September.

In the past the course has been over-subscribed after the first week and we have had to turn potential students away. (If you live outside Wirral you will need a permit from your local education office before you can enrol.)

If you know of anyone who wishes to take the course then please tell them to enrol early. The cost will be approx. £25. - reductions available for under 18's in full-time education, O.A.P.'s and the unemployed. For further details phone: 653 5555 extn: 230.

Examination

There are at present only two City & Guild Radio Amateurs' Examinations per year; one in May and the other in December. Applications should be made to the Examinations Officer, North Wirral College of Technology, Borough Road, Birkenhead, in August for the December examination and December/January for the May examination.

The examination will cost approximately £12 - £13.

For those who do not know, to pass the examination you must get 60% correct in paper I (Licencing Conditions) and 40% correct in paper II (Theory of Radio). Both of the papers must be attempted at the first sitting - if you are successful in only one paper you will be referred in the other, i.e. you only have to resit the paper you failed. If you phone or write immediately on receipt of your results you can then re-enter for the next series.

GD2RS and GB2ATG from IEQ Land

I'm afraid that I haven't any information to give members re: GB2RS at present.

I am, however, pleased to say that GB2ATG should be QRV very shortly.

GW4IEQ

A message from the Parrot

The Landlord and Landlady of IEQ's local were very interested in our recent visit to their establishment for a D & W. They have asked me to tell members that they are welcome any time. They were quite amused at some of the comments and antics of our members and believe that a good time was had by all.

IEQ Comment: Since our D & W at the Parrot I have had 2 tape recorders to repair for the Landlord. Who opened their mouth?

Thanks to Art Rothe (KA6DII) Secretary and Newsletter Editor of the Hughes Amateur Radio Club, Fullerton, California, for sight of their newsletter, from which I have poached wholesale.

PMW - Ed.

From the Personal Column in the Grapevine of 2nd May:

To Jorge, Piper, Wier, and
Sue: Don't get off my
garage or I will get Sunday
Beer and Budy on to you
Love Square Eyes. (w)

Is that a big 10 4?

Friends who find themselves on same wavelength

by Anthony Belhel

THE ACCEPTED image of radio amateurs as a group of ageing, technically-minded people, will be shattered by a visit to West Kirby Con-

course. That is where once a fortnight, a band of 60 dedicated enthusiasts, of all ages, gather for meetings of the Wirral and District Amateur Radio Club.

They come from all walks of life. Doctors, shopkeepers, chemists and schoolboys meet to discuss the past two weeks' events in the box rooms and sheds in to which they retreat for hours at a time.

It is in these makeshift workshops — most with a minimum of floor space after giving in to essential equipment of the radio trade — that amateurs make contact with each other.

A startling array of transceivers, filters, slow scan televisions and other units form the passport to conversations with other

"hams" on the other side of the world.

It is all highly organised, of course. The 27,000 amateurs in this country are under the control of the Amateur Radio Society of Great Britain, the president of which is Heswall radio fan Basil O'Brien.

All are required to gain the society's City and Guild certificate before they can be granted a licence to transmit.

As part of their conduct, they rarely reveal their full name, preferring to refer to each other by their code call.

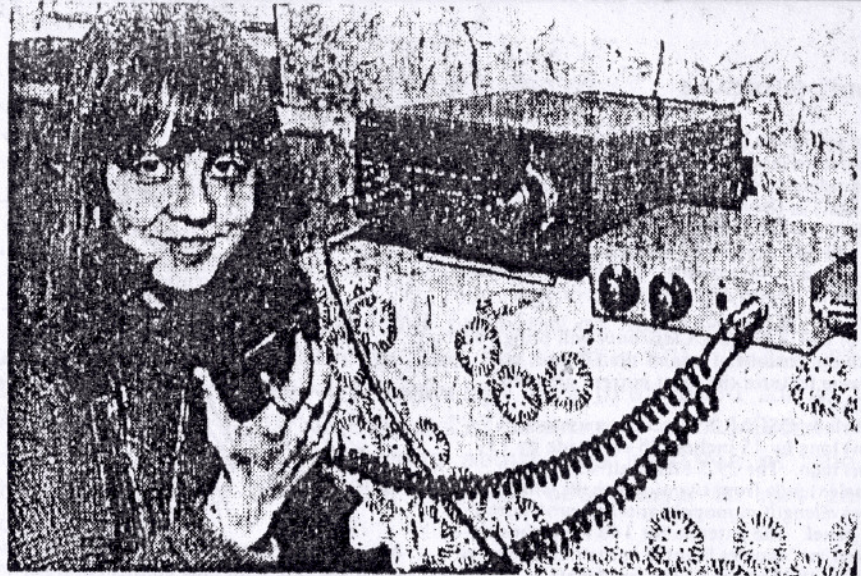
This strict standard they must maintain makes them understandably cool towards illegal transmitters.

The mere mention of the letters CB are enough to make any devoted amateur cringe.

Those initials stand for Citizens' Band — the free-for-all illegal radio transmission which is in widespread use between motorists in the USA.

As one amateur, Clive — G4CZR — an industrial chemist from West Kirby, said: "The first duty of any citizen is that they obey the law. The so-called Citizens' Band does not exist in England within the law. Using it is a criminal action."

Clive has been an amateur for eight years. He is in the elite band, a Class A "ham", which gives him



Wirral and District Amateur Radio Club member Marlon, call-sign G8RYR, pictured at her home. B21981

licence to transmit anywhere in the world.

He reckons to spend an average of 20 hours a week with his transceiver, communicating with amateurs as far away as Brazil, New Zealand and the United States.

He also has a mobile unit fitted in his car, and one morning managed to speak to a person in New Zealand while driving to work.

"That was a one-off though," he is quick to admit.

"I certainly don't talk to people on the other side of the world every morning, although I do have a chat with my friends over the radio most days on the way to work."

"Amateur radio is extremely relaxing for me. It gives me an opportunity to talk to people with a basic interest in communication."

"It is not like using a private telephone. The person on the other end is not somebody I will talk to again very often. I record every call I make in my log book so I can see if I have spoken to a person before."

Besides the thousands of qualified amateurs, there are also many radio listeners who do not need a licence.

Alison — G8 MVX — an 18-year-old trainee nurse from West Kirby, says amateurs are always careful what they say so as not to

offend those who may be overhearing a conversation.

"You tend to avoid subjects such as politics, in case you may offend somebody," she said.

"To begin with, you are always conscious of the fact that people are listening to everything you say, but after a while that is forgotten."

Alison is one of about 10 women amateurs in the Wirral club. She has been a member since it was formed three years ago after being introduced to the hobby by a teacher at school.

"I don't think it is an unusual hobby for a girl," she said. "It is very interesting to be able to sit and talk to different kinds of people each day."

"One of the best things is that you can have a break from radio and when you come back to it you know it will be just the same."

"People will still be friendly and will always want to know you. You can make really strong friendships over the air and it is great to be able to meet people for the first time after you have spoken to them."

One of the most remarkable and attractive aspects of amateur radio is that you don't need to have a deep knowledge of mechanics or electronics to be able to enjoy it.

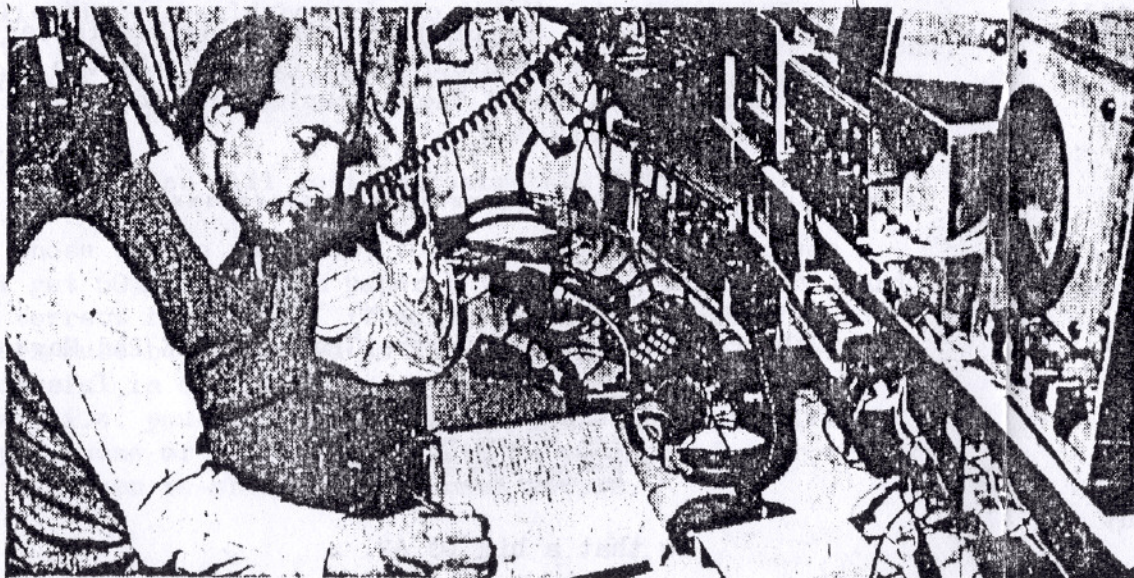
Marlon — G8 RYY — a 16-year-old student from Hoylake, said: "You don't have to be mechanically brilliant before you start, but you do need to have an interest in technical things."

Amateur radio is one of the most popular hobbies in the world, with national societies in almost every country, including those behind the Iron Curtain.

Among the millions of enthusiasts are many blind and handicapped people who are able to join in a pastime which requires few physical needs.

They too are able to communicate with people all around the country using an electrical current of only two watts — as little as that used in a torch.

An amateur from West Kirby, 17-year-old David — G8 WKD — said: "For some handicapped people, amateur radio is their only contact with the outside world."



Clive, call-sign G4CZR, calls up a fellow amateur radio enthusiast. B21881

B21881

BUILD A MODEL OF OSCAR 8

One project your class is sure to enjoy is construction of a full-size satellite model. Your students will gain a better understanding of satellite terminology (eg. solar cell, antenna, etc.) as they build the model, as well as get a chance to see what a satellite 'really looks like.' Perhaps they will be surprised by the compact size of an actual communications satellite. In addition, a model makes an excellent display at a science fair or other demonstration.

Each issue of *OSCAR in the Classroom* will bring you a drawing with dimensions of one of the OSCAR satellites. This issue features the most current amateur satellite, OSCAR 8.

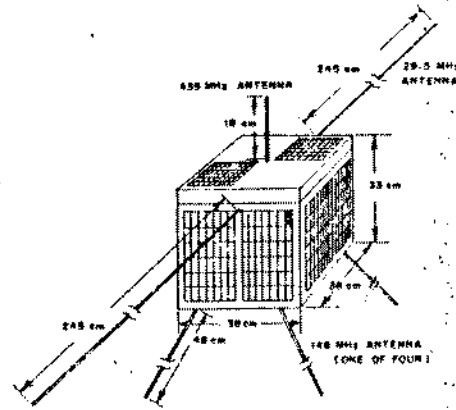
As shown below, OSCAR 8 is a cube, measuring 15 inches (38 cm) long by 15 inches (38 cm) wide by 13 inches (33 cm) high. The 29.5 MHz half-wavelength dipole antenna extends from two side panels, while the 435 MHz 1/4-wavelength monopole antenna protrudes from the top panel. The antenna for 146 MHz consists of two 'inverted vee' dipoles (canted turnstiles) mounted at right angles on the bottom of the spacecraft.

Each of the satellite's side panels is covered with solar cells which generate enough power to operate the spacecraft systems and recharge the battery cells. In addition, two smaller solar panels are located on the top of the spacecraft near the 435 MHz amateur band antenna. Each solar panel is made up of many discrete small rectangular solar cells.

The bottom panel holds the attach fitting used to connect the satellite to the launch vehicle.

Deciding the proper colors for the model is easy. The solar panels are a deep blue, while the rest of the satellite's surface is covered with a mirror-finish silver-colored thermal coating to reflect the sun's rays. The 29.5 MHz antenna is copper-colored, and the 146 MHz antenna elements are black on one side and white on the other.

Models of OSCAR 8 may be built by all grade levels. The model may be built in several different ways, ranging from simple to complex. You're only limited by your imagination. At one end of the scale, a simple cardboard



box makes a nice main structure. Your students can cover the box with blue construction paper to represent the solar cells and aluminum foil to represent the reflective thermal coating. Stiff wire (coathanger wire for example) can serve as model antennas.

At the other end of the scale, a high school or college class with access to a metal working shop could use aluminum angle stock to construct the main structure, and then cut and polish aluminum side panels. Masonite panels painted the right color make excellent model solar cells, and aluminum tubing can be used for the antennas. A round cake pan bolted to the bottom panel makes a perfect model attach fitting.

If it's that small no wonder I cannot find it with my 70cms signal. I'm sure LI's bigger than this and that's only in Liverpool - and NNS is still looking for that!

THE FICKLE FINGER FACTOR:

- Part 1: "Rotors never break when the weather is nice".
- Part 2: "The same goes for antennas".
- Part 3: "The higher the beam the surer it is to break".
- Part 4: "He who buys a piece of equipment usually sees it on sale in the next issue of Rad.Comm."
- Part 5: "He who wants rain should take his new rig out on field day."

Thanks to Art Rothe KA6DIH, the Secretary of Hughes Amateur Radio Club, California (K6QEH) for this article.

A different approach to the problem of deliberate interference was taken by the Fullerton (CA) Radio Club when "The psychology of Jamming" was presented at a recent meeting. Dr Roberta Trieschmann, a clinical psychologist, told the group about the motives of those who maliciously cause QRM and the best ways to get them to stop.

Dr Trieschmann started out by commenting that interference problems on Amateur Radio seem to parallel our entire society's "me first" attitudes, where etiquette and consideration for others is on the wane. Also, the anonymity of being a jammer provides a convenient way for frustrated hams to react to the sense of powerlessness they may feel about other areas of their lives.

She had the following suggestions for counteracting jamming :-

- 1) DON'T RESPOND. Even if only one person responds in some way, reinforcement and encouragement are provided to the jammer. Remember, what he/she wants is attention. You won't hear jamming on un-busy repeaters. No audience, no jamming.
- 2) REDUCE ANONYMITY. Unless he/she has a specific vendetta, jammers don't usually jam people they know. Your repeater club or other local ham group should reach out to encompass all users and active hams. Who knows, you may turn a jammer into a productive ARES member!
- 3) SUPPORT THE FCC. Letter writing at the national level may help the FCC to get the funding they need to combat interference successfully.

- 4) SET AN EXAMPLE. Put articles in your club newsletter on proper procedure and common courtesy. Make sure your own operating procedure is beyond reproach.

Although not an amateur herself, Dr Trieschmann received a thorough introduction to our hobby before her presentation, including hearing many examples of jamming on both FM and VHF. Many persons in the twice-normal-size crowd attending the meeting commented the fresh views of a non-ham were quite useful.

Sharing the platform with the psychologist that evening was FCC Engineer-in-charge Larry Guy from the field office at Long Beach, California. Mr Guy, who holds K6EHM and understands Amateur Radio as well as anyone in the commission, answered questions from the floor about the problems of enforcing the FCC rules relating to jamming. He related how difficult it is to get a conviction with the present system:

"When we take a case down to the U.S. Attorney, we have to have a great deal of evidence... The first reaction is: "why don't you send him a letter?" When we point out we've already sent 15, he says: "I don't think the judge wants this kind of case".

The D.A, is right, basically, because not too many of these lawyers and judges understand radio, and they know it's going to get them involved in something over their heads. So what we have to do is go down to the U.S. Attorney's office and make it as simple as possible. We have to show a great deal of hue and cry before they will take it, and we just sit there spoonfeeding them until they're comfortable with the case."

Another problem making enforcement difficult is different opinions on what constitutes profanity. Mr Guy commented: "I've never asked a repeater licensee to determine what is profane, obscene or indecent. The U.S. Court can't even do that... but certainly every repeater owner knows the difference between music and communications. That's what I ask him to do."

Does this mean the repeater owners should not be held liable for the content of the users' transmissions? What should a repeater controller do about controlling the content of communications through a machine? This was the point on which Guy was eager to clarify his position:

"If somebody uses a 2-meter transmitter and works through a repeater to transmit a threat to do bodily harm to someone, that person is committing a criminal violation of Title 18, Section 875c. The repeater licensee is NOT in violation. In essence, the content of the communication determines who's going to be held responsible. If somebody plays music over a 2-meter station being repeated, that person playing the music is in violation of FCC rules, not the repeater operator.

"So what is the repeater operator responsible for? If the repeater operator permits someone to play music over his repeater CONTINUOUSLY, then he is not controlling his repeater. He will be cited for failure to control his repeater...NOT for playing music, but for his failure to control. If someone continuously transmits threats, the control operator will be cited for failure to control, not for transmitting threats. The repeater licensee does have responsibility for his transmitter."

Legal repeater operators and users were shown they have nothing to fear from this FCC official approach to amateur band policing by saying: "Believe me, I'm going to be very generous in my judgement because I don't want to lose a case. I've not lost a case yet and I'm not going to start now. So if you get a violation from me, it's going to be for good cause."

AN INVITATION

To all wine and beer makers in the Wirral area:

THE HOYLAKE AND WEST KIRBY WINE CIRCLE meet on the second Thursday of each month at the Unitarian Church Hall, Brookfields Road, West Kirby at 8 p.m.

FILMS SOCIALS DEMONSTRATIONS LECTURES etc.

ALL WELCOME

A HOMEBREW 2M ANTENNA

If you were inspired by the talk on 25th March to try your hand at home brewing, and are using one of the kits supplied in cans, the empty cans may be used to construct an efficient 2m antenna.

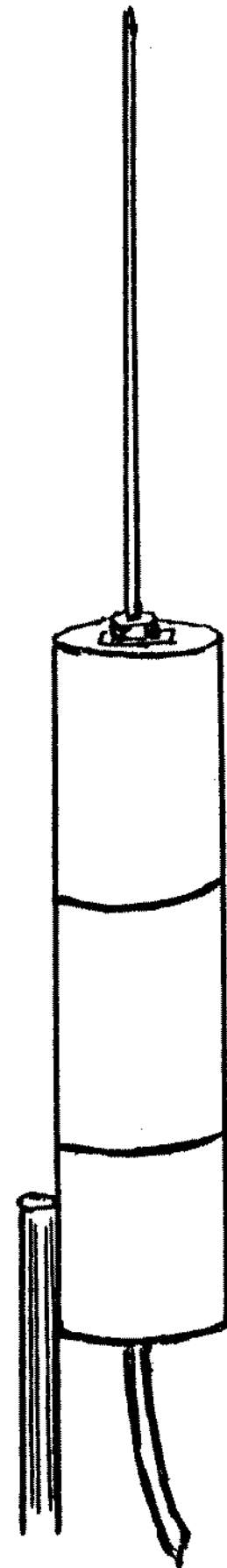
Three cans are required. The top can has a 50239 socket attached to the centre of the base of the can by four nuts and bolts, a clearance hole being made for the joining of the centre of the co-ax to the centre of the socket. The outer braid of the co-ax is secured under one of the nuts which secure the socket. The two lower cans have both top and bottom removed and all three cans are soldered together, the bottom can being cut to provide an overall length of $19\frac{1}{2}$ ".

A vertical wire, aluminium or brass, is inserted in the 50239 socket and aradite applied to waterproof the top of the socket.

The whole antenna may be mounted by bolting the lower can to a wooden pole.

S.W.R. is adjusted by cutting the vertical wire.

Dr Hein E. Kahn, writing in "Rundfunklagerzeitung" of 1.4.80. states that in his opinion "this antenna will radiate signals to areas other antennas will not reach".



For members' information. During the last few days a new station has been heard. Beam headings from a few club members seem to indicate that these signals emanate from the Meols area. The call sign being used is G8NOF. Club members may like to make a note of this as special QSL cards are being sent by him.

Is it true that one reason for UZZ constantly purchasing mobile antennas is due to the fact that he transmits over the legal limit and melts them?

IEQ may at some time in the future sell his superb tower. Anybody interested should contact him so that he can keep them in mind when the time comes.

GW4IEQ

G8NNS & GW4IEQ thank those who supported their club by turning out on weekend 3/4 May to evaluate a new site for the Region I contest. Several severe problems had to be overcome due to 'usual suppliers of essential equipment' not being very forthcoming for some reason or another.

Missed out from last Newsletter. (It never arrived - Editor)

Many thanks to all those who helped to take down aerials, tower etc. at Bromborough. Also supporting a never-ending load of chests, boxes etc. to IEQ's new QTH in Drury. Extra thanks to WOF for giving up almost 2 days to take down various fittings at Bromborough and then carrying out demolition work at Drury. (The wall in the kitchen still hasn't been plastered Steve).

GW4IEQ.

If you find mistakes in this publication, please consider that they are put there for a purpose. We publish something for everyone and some people are always looking for mistakes!

Thoughts on Crystals

The Pye Europa High Band F.M. uses 9093⁷⁵ MHz Xtals (x16) for Tx and 11233.3¹⁴⁵⁻⁵ MHz for Rx or 13016 (10:700 for IF).

The Pye Westminster UHF uses standard HC6U 12MHz xtals

Su8	is	11736.11	Rx and	12033.3	Tx	433.200	433.2
SU20	is	11744.44	Rx and	12041.67	Tx	433.500	433.5
RB10	LI	is	11737.5	Rx and	12079.17	Tx	433.250 434.850
RB6	CR	is	11734.72	Rx and	12076.39	Tx	433.150 434.750
RB4	LL	is	11733.33	Rx and	12075	Tx	433.100 434.700

FOR SALE

Creed 7E Teleprinter - £30.

Peter G8GYO
342-7155

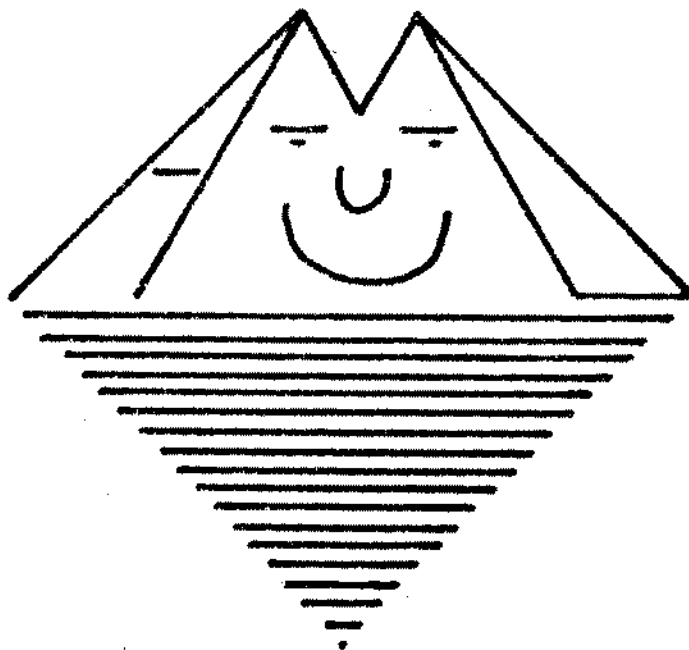
FT 221RD Multomode
12/240v, 12 W.O.P. - £250.

Alan G4EFP
QTHR or 645 3826

Trio 2400 2 meter
Handheld - £150.

(between 6 - 7 p.m.)

IC215 portable 3W F.M. 15 channels, fully xtaled with a few spare xtals. Nicads, charger, carrying case, whip and rubber duck aerials all included for approx £150 phone Ian G4IPQ on 327 7108 and haggle!



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