

May 1947? W1WRF

ZERO BEAT

A Publication of the Hampden County Radio Club

VOL. II

MAY

NO. 6

Page 1.

* * * * *

ANNOUNCEMENTS: May 6th is the day, 7:30 pm the time, and the Hampden County Improvement League Building is the place. For the benefit of the visitors from the other Western Mass. clubs that we hope to have the pleasure of entertaining this month, this building is on Memorial Ave., West Springfield and is one of the Eastern States Exposition Buildings. Any native can direct you, once you hit Springfield. We are anticipating a large gathering since the speaker will be our well-known division director, Perce Noble, 1BVR, who will give us a preview of the topics up for discussion in the coming ARRL Board meeting. So save up your questions and bring 'em with you next Friday - Perce is the man who can give us all the answers if anyone can. The door prize this month will be contributed by T. F. Cushing, 1AWW, who presides over the Worthington St. Radio store of the same name.

* * * * *

LAST MONTH we promised a good talk on receivers and sound systems and we weren't let down in the slightest. Wes Thayer brought out points on trouble shooting and construction that will save more than one of us many headaches in the future. In fact, Wes made servicing sound so simple that we went straight home and started to fix the XYL's portable which has been on the blink for two years.

FOR SALE: 1 slightly charred midget radio.

* * * * *

AMONG THE out-of-towners that are now on our mailing list is Tom Rothwell, JA3AA, who hails from Honey Bucket Hollow, Japan. It all started when Gil Williams asked us for an extra copy of Zero Beat to send to Tom in exchange for a copy of the PEARL News. We began to think it over a little and decided that since Tom worked 1QWJ, 1APA, 1IJT, 1CJK, 1JYH, 1EOB, 1KFV, 1BVR, 1PDF and possibly others, he undubitably knows more of the Hampden County crew by their first names than some of the local boys and therefore should certainly be on the list. When you work an even 25 of us Tom, we'll send you a special certificate, delicately embellished with a border of golden Honey Buckets!

* * * * *

WHAT DOES FIELD DAY MEAN TO YOU? Does it mean a chance to get out with the boys for a weekend to drink some beer and do a little fishing on the side, or is it just another operating contest under somewhat adverse conditions? Actually, Field Day encompasses both of these things, but neither of them is, by any stretch of the imagination, intended to be the primary function. Most of us lose sight of the fact that Field Day was originally established for the purpose of giving us a chance to set up and operate a complete station under actual emergency conditions. It is with this thought in mind that Hank Baier, chairman of the FD committee, has laid his plans. Hank's crew will have plenty of antennas, (or is it antennae?) available for all bands and there will be sufficient 110v. a.c. for any rig that is portable.

We hope that everyone who has a piece of gear that can be lifted, will bring it out to the Field Day site, set it up, and operate for as long as he likes. In other words, the horsework of antenna raising and generator carrying will all be done for you, so if you want a new thrill, bring your receiver or exciter or both and get a preview of the situation that you may be in the next time that New England has a hurricane. In addition to facilities for individual equipment set-ups, there will be an SCR 299, the complete station which includes the BC610 500 watt transmitter, the BC 312 and BC 342 receivers and a 4 cylinder gasoline engine driven generator! This super-deluxe affair will be on all bands, phone and cw and everyone will get a chance to operate it. If you plan to stay through meal times, you had better bring your food, but there will be liquids of sundry natures for all who come. If you plan to stay over night, it might be well to line up a cot or sleeping bag. Whatever your plans, buttonhole Hank as soon as possible and let him know about them so that he can coordinate all the activities more smoothly.

* * * * *

WE ARE still undecided whether it was more of a battle to work 20 meter phone during the DX contest or to try and get the boys who entered the contest to add up their scores and give us the totals. However, it is encouraging to note that we did get ten of our members in the contest which is a slight increase in the usual percentage. Let's keep it increasing! Anyway, here are the results and standings. The total club score, by the way was 287,062 points.

PHONE

<u>CALL</u>	<u>CONTACTS</u>	<u>MULTIPLIER</u>	<u>SCORE</u>
W1QJK	158	81	38,394
W1PDF	109	74	24,198
W1IJT	86	46	11,868
W1JYH	59	34	6,018
W1QFB	60	33	5,940
W1QWJ	68	29	5,916
W1AVK	8	6	144
W1RIV	5	3	75

CW

W1JYH	298	161	143,934
W1IJT	138	75	31,050
W1KPV	74	50	11,100
W1EOB	56	41	6,888
W1APA	45	38	5,130
W1QFB	32	28	2,688
W1AVK	33	19	1,881

Just wait till next year when we have the 15 meter band too!

SPEAKING OF CONTESTS, which we usually are, the week-end of the 23rd brought forth two of 'em. For the high frequency boys there was a mileage contest sponsored by the v.h.f. Institute of America which was very successful in spite of poor conditions. Among the local boys who took part were 1RFU, 1QXV, 1PKI and 1PHU. The chief point producers in the area were 1QTV/1 on Hogback Mt. in Vermont and 1FMZ/1 on Mt. Greylock. Both of these stations were almost snowbound, but they stuck it out and rolled up impressive scores. On the low frequencies the CD contest was in full swing and 1AFA, 1NY, 1EOB, 1RHU and 1JYH were taking part. 1EOB was doing fine Saturday night but had to leave town on business before the fracas was over.

* * * * *

SIX METERS has been rather quiet, from all reports - or we should say, from the absence of all reports - but there have been several openings on two meters. Bill Rosner, 1RFU, was listening during the recent eclipse of the moon and heard W2's in southern N.J. working W4's but they wouldn't swing their beams up this way. Bill says that it was the only time he had heard W2's with absolutely no fading; not to be discouraged though, he worked a couple of W2's during the mileage contest as did some of the other local boys.

* * * * *

LAST MONTH we had a bit to say about TVI and mentioned in the process that Dick Stevens, 1QWJ, had a TVI proof rig. That statement will be put to the test as of this week 'cause Dick has now completed his \$25 TV set and is getting fb pictures from New Haven - his antenna is a Lazy H in the attic and he receives the voice channel on a Meissner FM converter. By the way, any of you fellows who are looking for a really hot 2 meter converter might get in touch with Dick, as we understand that he will soon have some available.

* * * * *

OUR TECHNICAL STAFF has been constantly besieged with requests to unravel the knotty problem of an 813 working as a power amplifier on the higher frequencies. It seems that the RF current at the fundamental frequency is not always found to be completely in the tank coil, therefore it is probably distributed around the circuit in the form of parasitic oscillations, self-oscillations and on the screen, filaments and the chassis and it behooves us to investigate the probability distribution of I, the RF current. This is essentially a study of the integral:

$$p(I) = \frac{666}{x\sqrt{A_0}} \int_0^{100} B \left[\frac{I - Q \cos F}{\sqrt{R_b - Y}} \right] dF$$

where:

$$Q(Y) = \frac{1}{\sqrt{2A}} e^{-y^2/2}$$

and $p(I)$ is the probability density of I . It is apparent from the above that upon solving for the quantity N , the problem is reduced to an extremely simple form. Let us also consider that:

$$R(t) = 4Q^{-2} \int w(f)(f-f_0)^2 \cos 2X(f-f_0)t df$$

and we immediately have the frequencies of all the oscillations and harmonics and our problem is solved; to wit - merely substitute a well neutralized 810 for the 813 and give the 813 to your aunt to use as a model for the sweater she will knit for you next Xmas. It will be a better fit than the one you got last year, won't it?

* * * * *

TO MANY OF US the deterioration of the ten meter band for DX purposes is a sad time of year, but to the 20 meter cw boys it is a joyous occasion. First, because much of the good DX which has been hibernating on ten during the winter months will turn to 20. Second, and most important, several of our good DX men who have confined their activities to ten meters in the past, have now signified their intentions of getting on 20 cw. It may seem paradoxical at first to say that we welcome more competition on the band, but 1KFV and 1JYH discovered recently by going over their countries worked lists that each had at least ten countries that could not have been worked without help from the other. By help, we mean tips as to frequency, time, note and operating characteristics of the DX. Consequently, we feel that with more of our members on the band, more of this useful information can be circulated to the advantage of all. Let's start now: VK4SI/VR1, T7, 14, 020kc. W0HWI/KS6, T7, vfo. VK9NR, T9, 14, 000kc. VK9GW, T9, 14, 000kc. EA8MC, T6, vfo. CR4AC, T9, 14, 040kc. MP4BAJ, T4, 14, 080kc. WLEEC/KW6, T9, 14, 100kc. ZC1UN, T9, 14, 050kc. VR2EL, T9, 14, 040kc. VS2GH, T9, 14, 050kc. ZK2AA, T9, 14, 125kc. That should be enough to keep us going for awhile but they are all from one log so how about a few more tips to keep the subject hot?

* * * * *

BEND AN EAR all ye bargain hunters; Clarence Bordeau, 1LJT, has a whole bunch of stuff that he is disposing of for prices calculated to tempt the tightest purse. Among the items he has on the auction block are a rack type cabinet, meters, power supplies, dials, tubes, transformers, condensers, etc., etc. From what he has told us, he has an assortment that almost any one could find something useful in. (All right so we did use a preposition to end a sentence with!) Oh yes, he has a National 101X for sale too.

* * * * *

We didn't come out even on the last page.
Use the paper to jot down your contributions,
literary or otherwise to hand to Ye Editor
on May 6th.

* * * * *

* * * * *

YOU WILL probably notice the lack of personal news in this issue. We're sorry but we can't print it if we don't get it and because we don't get it, one of the most important functions of this paper is lost. Specifically, this paper was originally intended to keep the members in touch with each other's activities with the aim of greater unification of the club. Instead, we have been forced to make it almost completely a series of editorial comments. Anyone who thinks it is easy to sandwich three or four pages of typewriting in between family affairs, work, social events and ham activities, with no contributions from the readers, is welcome to take a crack at it. In fact, we are pretty well convinced that the majority of you do not care about receiving the paper anyway. Is that the story? Or is it because you didn't know the telephone number was 3-5020 or the address was 100 Oakland St. in Springfield. We cannot promise more than a couple of issues more unless we get some news, not from those who have already contributed, but from those who have never done so. Wat sa ?

* * * * *

AND NOW, for reasons mentioned above, we have run of material so until May 6th.

73
LJYH

TO YE EDITOR: - -



HONORABLE CONTRIBUTOR