WILKE

## ZERO BEAT

A Monthly Publication of the Hampden County Radio Club

ANNOUNCEMENTS: Our next get-together will be at the usual time, 7:30 p.m., on April 1, 1949 at the Hampden County Improvement League Building, West Springfield. Some time ago, we tried to get Wes Thayer, ILRE, to give us a talk on receivers and their intracacies, but Wes couldn't make it and we had to take a rain check. Well, the check was good and Wes will be on hand Friday night. As we mentioned before, Wes is one of the best men in the city on P.A. systems and receivers so this meeting should be well worth while. The door prize will be donated by Lou Richmond, head man at the Springfield Radio Co. Coffee and doughnuts, as usual, will be the after-meeting fare.

LAST MONTH'S MEETING will be remembered by those that attended for many years to come. First because of the exceptionally fine steak dinner; without a doubt it was the tenderest, tastiest filet mignon available in this part of the country. And second, because of the drawing for prizes. When it came time to draw for the main prize (a Bud wavemeter, donated by the Springfield Sound Co.) president Vic Pacunoff quipped that it would be only fair to give Bob Lieson, chairman of the banquet committee, a chance to draw his own number - and he did! Bob was somewhat embarrassed for a while, but when the other prizes were drawn for and Hank Baier, Ike Creaser, and one of Glen Gurney's guests drew the next three numbers and each drew his own, Bob stopped feeling bad and was just as non-plussed as the rest of us! Those of you who couldn't make it this year may get another chance at a banquet next year, but you'll never see another drawing like that - it just ain't possible.

AMONG THE OCCUPATIONAL ailments of our game is DX Contest laryngitis and we hear by devious means that lPDF, 1CJK, 1QWJ, 1QFB and 1IJT are suffering more than somewhat. Even cle "cw forever" 1JTH had an attack after spending a few hours on 14mc phone during the first weekend. Unofficially, it look as though Bill at 1CJK will have the highest phone score for the club. Next month we will run a complete listing. There wasn't too much activity among the cw men during the contest but unofficially again, it looks like 1JYH, 1IJT, 1EOB, 1KFV, 1QFB and 1APA in that order. We again extend our deepest sympathies to those who missed the thrills and fun that come with participation in the ARRL operating activities - may that portion of you which is dead, rest in peace.

TVI has, of late, become an increasingly popular (?) topic of conversation. Much has been written (in QST, CQ and RCA Ham News) on the subject of its elimination. It seems, however, that the problem is not altogether a technical one. Diplomacy and good relations between the amateur and the TV watcher are of utmost importance, and the burden is largely on the shoulders of the amateur; not because he is always in the wrong, but because his side of the story is more difficult for the "layman" to understand. The TV dealer, of course is upset by anything which lessens his chances for making an extra dollar. The TV set owner quite naturally resents any interference with a picture that cost him hundreds of dollars to get. The amateur, on the other hand, is not trying to makehis living when he goes on the air and, although he has an appreciable investment in his equipment, the average person does not realize its value. It seems to us that approach to any reported case of TVI should be somewhat as follows:

I. Cool both yourself and the TV man off to the point where you can discuss the situation in a mature and friendly manner.

2. Let him know that you understand his side of the question and explain amateur radio and its public service functions to him. Also, let him know that there is an organized amateur radio club in town which is interested in the matter and which has appointed a special committee to assist in eliminating TVI.

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3. Get together with him and make certain that it is you who are causing the interference. If so, measures can be taken to eliminate it - any club member will be glad to give you a hand with the technical end of it. If you are not responsible for the interference, do all you can to help him locate the actual trouble. The good will created will, in most cases, be worth more than your time.

If you come in contact with a TV man who is impossible to talk to, call Ike Creaser, who is chairman of the TVI committee and well known for his

ability to over-come impossible situations.

In short, we have an opportunity to build, in this area, an excellent reputation for amateur radio. The sooner our bold members get the chips off their shoulders and the sooner our timid members stop running for the closet when the phone rings, the sooner we can start construction.

THROUGH THE courtesy of Gil Williams, lAPA, who skeds JAJAA every yawning, we have a copy of the FEARL News on hand. This is a publication of the Far East Amateur Radio League and it has a whole page of addresses for the JA and HL prefixes. The list is too long for us to reprint but if you would like any of the QTH's, give lJYH a call. The bureau for Japan is JAZKG, Maj. Lloyd Colvin, 71st Sig. Ser. Bn., APO 500, c/o Postmaster, San Francisco.

VAUDEVILLE returned last week with the help of lQWJ who sent a bright young lad down to Hal Pansch with a list of radio parts, the last item of which was a grid-lead drip pan. Hal carried through in true straight-man fashion and actually produced an article which he swears is the latest model pan. When last heard from, the victim was leveling up the pan on its mountings so that none of the drips would drop.

SIX METER ACTIVITY is on the upswing with lNY, lUD, lOFZ and 7KDP/1 joining the gang. It won't be long now before six begins to show some DX to the local boys. On Feb. 22, HC2OT in Ecuador broke through and worked a few of the Boston fellows. Incidentally, at the exact time that he was coming through, lQWJ and lJYH were up on Dick's roof putting up a new six meter 4 element beam so that Dick would be prepared for just such an occasion. The irony of it all! When they got down, the band was dead. On Mar. 19th the band opened up again and this time Springfield scored. Bill Rosner, lRFU, and Dick Stevens, lQWJ. worked W4UJ in Florida with S9 signals both ways. Al Purseglove, lQFB, expects to have his 813's on six before too long. If he can get a couple of hot bottles like that on the band, how about some of you other fellows getting on. It should be easy with all the high frequency triodes in town. Don't forget, there is a cash (\$5, that is) prize offered for the most states worked on six. The standings to date are as follows:

 WIQWJ - 5 states
 WIUD - 2 states

 WIRFU - 3 "
 WIOFZ - 2 "

 WINY - 2 "
 WIQCC - ? "

Please send in your states worked totals to LJYH so that we can have a complete list for next month. By the way, WICGX is on every evening from Brattleboro, Vt. about 8 p.m. to start you off towards WAS on six.

ABOUT THIS TIME OF YEAR clubs all over the country start making plans for field day. Last year we were unfortunate enough to have our main generator go on strike at 6 o'clock Sunday morning. In spite of that we still had a good time and made a fair score. This year we hope to have an even better time and possibly one of the top scores in the country. The executive committee has appointed Hank Baier, INY, chairman of the Field Day committee and we are sure that Hank, with his years of

field day experience, will make it a top notch event. In addition to the main affair, we plan to have a three man group working in the one-transmitter class from a Brimfield location and lQWJ is in charge of a VHF-only group, thus giving the Hampden County club a chance to enter three classifications. The Field Day is one event in which every member can take an active part and unless every member does get into the act, it cannot be a complete success. We hope that every one can be on hand even if only for a short time - so start planning on it now.

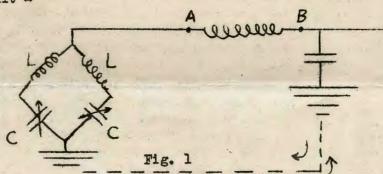
THE BOYS WHO FIRST BROUGHT the 420 mc band to Springfield. Wes Thayer, LLRE, and Bert Binns, 1KZU, have just completed their own TV sets (and not from a kit, either). It seems that all you need is a 5BR4, \$1.98 on the Surplus market, and a bunch of low Q coils and there you have it. 1QWJ has also started one and is being spurred on by his junior op.

ONE OF OUR NEWEST, 1RVW, Peter Pedersen, should soon be on the air. After working all day on the Telephone Company's mobile rigs, Pete has been making every night a "postman's holiday" and now has his six and ten meter job almost ready to go.

OPERATION "MAPLE SYRUP" has been completed in Worthington by Hank Stoddard, 1GEC. Result: 3 gallons. Hank had planned to go on six meters but decided that he couldn't spare the copper tubing from his still to wind a tank coil. (Now there's a guy who could make a fortune dreaming up alibis for wayward husbands!)

KILOWATT ALLEY has a new member since Bill Blankenship, 1RDR, fired up his p.p. 304TL's on ten meters. One thing we have always wondered, Bill, does the use of bottles like that save much on your fuel bill? 260 watts for the filament - wow!

ONE OF THE CLEANEST rigs in town is that of Dick Stevens, lQWJ. Therefore, it might be well to take note of what Dick has to say about TVI, to wit: "One of the main causes of TVI is unbalanced push-pull amplifiers, and fortunately it is one of the easiest troubles to clean up. A properly balanced amplifier can be thought of as a bridge circuit -



where L is our P.A. tank coil and C the tuning condenser. At resonance, the bridge is balanced when the inductive reactance of L is equal and opposite to the capacitive reactance of C. If we have such a case, no RF current will flow in the external ground balance, and since the L is fixed for each band and manufactured coils are held to close tolerance, only C can be adjusted for a balance. First, we must have some means of indicating the unbalance and this can be done by using a O-10 milliammeter and a 1N34 crystal connected as shown across points A and B of Fig. 1.

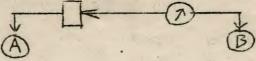
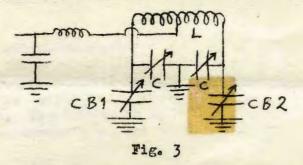


Fig. 2

Introduce a small amount of RF from the driver stage into the P.A. tank circuit and adjust for resonance. Any unbalance will be indicated by a reading on the meter.

To reduce the meter reading to zero, add the balancing condensers CBl and CB2 to the circuit as shown in Fig. 3. Set CBl at about 1/2 capacity and tune to resonance. Adjust CB2 and the P.A. tank condenser until no current is indicated on the meter. The capacity of CBl and CB2 should be the largest capacity that will allow us to resonate the tank circuit. In addition to balancing the tank circuit, these condensers will also by-pass any harmonic content of the amplifier to ground.



An unbalance of this sort can also exist in the grid circuit and of course would be amplified in the plate circuit. The grid circuit may be balanced in exactly the same manner as described above. Looks simple, doesn't it - just remember, Life can be beautiful, even in a 10 micro-volt TV area.

AND WHILE we are remembering things, those of you who jined up last March can tie a piece of nr. 20 wire around your finger to remind you to bring 3 bucks for the Treasurer. Bring your membership card too, for endorsement.

We'll be seeing you April 1st - no foolin'

73, 1JYH