

HAM RAG

Affiliated with ARRL

NET meets each Monday at 9:00 P.M. local time on 28.7 megahertz



JUNE 1972

It is with this issue that I must announce my resignation as editor of the HAM RAG. I have taken a new job in the Milwaukee area and I will be moving to Waukesha, Wis., around July 1st. I am really sorry to be leaving a really fine club and even greater club members. It has really been a pleasure to be an officer of RARA when you have all the help and backing of the members. We had some rough times together but lot's of guys really came thru in a pinch to get the job done. I really appreciated everybody that has assisted in submitting articles for the HAM RAG, so that we can have something of interest for everybody in the club paper. Special thanks to Jim Nilson, WB9ETH, who was my right hand man while I served as President last year, and to Ralph, WN9HHH, who has been a writer, folder, copy-boy, and mail room clerk with the HAM RAG this year.

Along with giving up my posts with RARA I also have to resign as Comm. Officer and RACES Radio Officer. Public Service work, whether it be with C.D., Red Cross, or handling traffic on the air in most rewarding, especially when you see the direct benefit of your efforts on the faces of those you help in a disaster. I hope that more of you will plan on taking part in the local programs, even if it just means getting a crystal for the proper net freqs. so you can be there if needed. There will be a meeting of everyone involved in emergency communications (RACES) next Monday, June 5th, 7:30 pm, at the Red Cross building. If you are interested plan on attending. By the way, RACES was activated last Tuesday, May 30th to assist in the massive train derailment in Rockton, which involved a possibility of leaks of Ammonium Nitrate from a tank car. A number of mobile and portable units were used for crowd and traffic control.

Along with this issue of the HAM RAG, are a bunch of tickets for the hamfest. As you may know, profits from the hamfest are divided up between the participating clubs based on the number of ADVANCE tickets sold by each club's members. So, we feel that each member should sell at least 10... some have sold 30 and 40 in past years. There are more tickets available by contacting Ralph, HHH.

So... best of DX and 73... de K9PAK.

NOVICE AND BEGINNER

The FCC approved variable crystal oscillator (VXO) for the novice 40 and 80 meter bands works quite well. This new piece of gear was mentioned in the January and May HAM RAG's. The NVX-1 has the usual assortment of fixed capacitors and resistors, a variable capacitor, a 6AU6 tube, and separate tuned circuits with one crystal in a FT243 holder for each of the two bands covered. Power (300 vdc and 6.3vac) is taken from the transmitter and the output is fed into the VFO IN jack on the xmtr. The crystal is "warped" by the NVX-1 to cover the 50 KHz of the band. For the novice who has not invested in several crystals at \$3.00 each, the \$39.75 cost of the NVX-1 may not be out of line. And, when you get your general ticket, you can sell the VXO to a new novice.

I was not on the air last April and May, so I cannot compare the band conditions last spring with this year. Maybe this time of year is always bad for the novice bands. One thing is for sure... in the last several weeks the poor propagation and high noise levels have been discouraging. Bands are so poor that two or three novices thought their receivers have gone on the fritz.

NEWS: What with finishing of high school and a newly acquired job, Phil, WN9HVK, has not been operating much the last few weeks. WN9HCL, Ed, in a school assignment known as an Independent Study Report naturally chose Ham Radio as his subject. He showed the ARRL film "This is Ham Radio" and gave an interesting talk on the subject to a class of about 50 at Eisenhower Middle School. Editor's note: The Rkfd Public Library now has this film on hand for loan to groups. If you are giving a talk on Ham Radio, include this film on your agenda. It runs 15 minutes, and is especially aimed at young people.

Novice DX honors for May go to Mike, WN9IOG. In the few months he has been on the air he has worked 47 states and 12 countries. Late DX included CO6VM, Cuba, PY4ASJ, Brazil, LU5AFN, Argentina, SM6CAW, Sweden, a couple Puerto Rico's and a KL7. WN9HHH worked a KZ5, Canal Zone, and has received the QSL. WN9HPV now has a Drake 2C and has retired the Hallicrafters rcvr. 73, de WN9HHH

HAMFEST COMMITTEE NEWS

At the last meeting of the Hamfest Committee, final decisions on the first and second prizes were made. First prize is a Regency HR-2A 2 meter FM transceiver, second is a Bird Model 43 In Line forward and reverse wattmeter. Total value of these two prizes alone is over \$350!! Many "lesser" prizes are being purchased or solicited. The flyers are done, as well as the tickets. Thanks to Jack, K9UWN, for the flyer design, and to Ralph, WN9HHH, for stamping all the serial numbers on the tickets. Now, if you are planning to attend a hamfest or visit a ham store, be sure to take along a stack of flyers. Ralph, WN9HHH, has a good supply on hand.

NOTE: No HAM RAG for July. But you will receive a reminder of the gala RARA Family Picnic coming up July 15th. Save that Saturday afternoon!!!

JUNGLE JIM'S JAMBOREE

(If you don't know why we call him that, go over and see his antenna "jungle"... ed.)

I've heard a few comments about the HAM RAG being too much FM and very little about the low bands. Well, let's see what I can do about that. I am by no means an expert on any part of amateur radio, but I'm learning.

One portion of DX work that has always puzzled me is the third person traffic regulation. This is the agreement that we have with some countries to allow us to pass traffic and run phone patches if the message is not important enough for commercial facilities. That raises a question in regards to medical traffic of which most seems quite important. I guess when it comes to splitting hairs, it's up to an individual's judgement, and it's pretty hard to pass judgement on somebody trying to help one in trouble.

I have written to the Friendly Candy Company offices in Washington to try to get an interpretation of third person traffic but have yet received a reply. I have asked several hams and even the FCC Chicago office, and I get all kinds of varied answers. Maybe by the next issue I will have an answer.

Here is a list of call signs that are O.K. for traffic: CE, CM, CO, CP, CX, EL, HC, HH, HI, HK, HP, HR, LU, OA, PY, TI, VE, VO, 8P, XE, XP, YN, YS, YV, ZP, 4X, 4Z, 9Y4, and W-K's. Put these on a card and keep them handy by the rig.

The latest change concerns Okinawa, which is now under Japanese control. The call sign is KA6 for U.S. personnel and traffic of phone patching is not permitted.

If you haven't tried phone patching, and have the equipment, it can be very rewarding. As far as equipment is concerned, it only involves a couple of matching transformers at \$1 each, and a couple of connectors for the mike and phone jacks, and you're in business. (See last months HAM RAG for more on patches.)

If you're planning any extensive travelling, the U.S. has reciprocal agreements with most So. American countries, several European countries, and a few African.

Lot's of rare DX on lately. Guess DX really brings out the animal in some operators. KC4DX on Navassa Island caused a mad house. Here's my suggestions... when the pile-ups get out of hand the DX station should stop right there and lay down the ground rules so everyone gets a chance and contacts can be made at the rate of 3 and 4 a minute instead of 3 to 4 minutes per contact. I really hate the list type DX contact; what is gained by having the whole world calling at once? Another gripe of mine is the fellow who likes to slip his call in right over another station making a transmission, or when the DX calls for the "2 area" only because band conditions for them are changing and some jerk in 6-land with 4KW and stacked 8 element beams jumps in with both feet. I sure know what I would do if I was that DX station. C.U.L. de WB9ETH

HAM AD: For Sale: 2 meter FM base station Motorola 40 watts on 146.94, 2 meter beams stacked 11 el. Cush Craft, 6 meter beam, 6 meter AM xmr, Novice Xmr, 6 meter FM, QST', CQ's, more. Must sell. Call Dave, K9PAK, 399-1344.

THE LAMENT OF A HAMFEST ADDICT

IT WAS COLD AND RAINING AT 7:30 A.M. WHEN VFU, EEH, AND MYSELF LEFT FOR THE DEKALB HAMFEST ON MAY 7TH. UPON ARRIVING AT THE NEW SITE, THE EAGLE STORE PARKING LOT ON HWY 23, WE FOUND NO SIGNS OF A HAMFEST IN PROGRESS, JUST A COUPLE OF CARS WITH CAL LETTER PLATES AND STEAMED WINDOWS WITH OCCUPANTS TRYING TO KEEP WARM INSIDE. LET'S HEAD FOR THE NEAREST COFFEE SHOP, A BLOCK AWAY. HERE WAS APPARENTLY WHERE THE HAMFEST HAD MOVED, . . . MANY TABLES WERE OCCUPIED BY WARMLY DRESSED HAM-OPERATOR TYPE ADMIRING HT HANDIE-TALKIES AND OTHER GOODIES SPREAD AMONG THE TOAST AND COFFEE.

RETURNING TO THE ADVERTISED SITE SOME TIME LATER WE FOUND A FEW BRAVE SOULS HAD SET UP SHOP WITH THEIR WARES COVERED BY LARGE SHEETS OF PLASTIC. THE RAIN CONTINUED, AND THE HAMFEST SPONSORS HAD RUN OUT OF THEIR "FREE" COFFEE WELL BEFORE THE SCHEDULED COFFEE HOUR.

SOON THE WORD GOT AROUND THAT THE "JOHN" AT THE NEARBY GAS STATION WAS HEATED, AND IT WAS A MOST POPULAR SPOT. BY 10:00 THE RAIN HAD ALL BUT QUIT, AND A FEW MORE SELLERS HAD SET UP. SEEMED LIKE THE COLD HAD TAKEN AWAY THE BARGAINING SPIRIT. MANY WERE SELLING FOR ANY PRICE THEY COULD GET JUST TO GET RID OF THE STUFF AND GET HOME. VFU PICKED UP A TWO METER FM MOBILE OUTFIT AT A GOOD PRICE AND PZZ WAS SEEN WALKING AWAY WITH A HALLICRAFTER'S RECEIVER. BY FAR AND AWAY, THE MOST PREVELENT ITEMS WERE FM RIGS AND ACCESSORIES. SEEMED LIKE EVERYBODY SELLING AT LEAST HAD A FEW PIECES OF FM GEAR.

SO, ALL IN ALL, IN SPITE OF THE COLD, RAIN, AND POOR LOCATION, THERE WERE BARGAINS TO BE HAD FOR THE HEARTY.

DE K9PAK

TECHNICAL TOPICS

CONTINUING OUR DISCUSSION OF VFO CONSTRUCTION FROM THE MARCH ISSUE, I WAS DISCUSSING CAPACITORS. MICA CAPACITORS FOR THE MOST PART HAVE TEMPERATURE COEFFICIENTS OF PLUS OR MINUS 100 PPM OR BETTER. CERAMIC CAPACITORS ARE AVAILABLE WITH ZERO TEMPERATURE COEFFICIENTS OF VARIOUS VALUES FROM 150 TO 1500 NEGATIVE. DRIFT IS USUALLY LOWER IN FREQUENCY. IF SO, IT CAN BE CORRECTED WITH A CAPACITOR WHICH HAS A NEGATIVE TEMPERATURE COEFFICIENT. THERE IS A FORMULA IN THE HANDBOOK FOR THIS. HEAT IS THE CAUSE OF MOST DRIFT, BUT MORE ON THAT LATER.

THE TUNING CAPACITOR MUST BE OF THE BEST QUALITY AND BE OF THE DOUBLE BEARING TYPE.

MOST OF THE ARTICLES AVAILABLE DO NOT SAY MUCH ABOUT DRIFT, BUT MANUFACTURERS ALL SAY HOW MUCH DRIFT WILL BE PRESENT AFTER SO MUCH WARMUP IN THEIR SPECS. SWAN AND EICO HAD A LOT OF TROUBLE WITH DRIFT IN SOME OF THEIR EQUIPMENT. WITH SSB, VERY LITTLE DRIFT CAN BE TOLERATED. IF TWO GUYS ARE BOTH DRIFTING, AND FOLLOW EACH OTHER'S DRIFT, THEY COULD MOVE OUTSIDE THE BAND!

THERE ARE MORE CONSIDERATIONS WHEN MAKING A VFO. LOADING IS VERY IMPORTANT, AND A BUFFER IS A MUST. IF A TRANSISTOR IS USED, THEN AN AMPLIFIER IS REQUIRED TO GET THE OUTPUT HIGH ENOUGH TO USE. IN SOME CASES HARMONICS MUST BE SUPRESSED, AND/OR PARASITICS. WHEN USING AN FET, A DIODE WILL BE NECESSARY TO CLIP THE PEAKS WHICH ARE RICH IN HARMONICS. OF COURSE A TUNED CIRCUIT IN THE OUTPUT WILL HELP. PARASITICS CAN OFTEN BE SUPRESSED BY USING FERITE BEADS.

THERE WILL BE MORE ON THIS SUBJECT AT A LATER DATE, INCLUDING A LIST OF DO'S AND DON'TS. . . . DE W8QUR, VIA AM. RAD. NEWS SVC.

MAY MEETING

The May meeting of RARA was held on May 12th at the usual place. The meeting was well attended... everybody evidently wanted to get off with a good start on those points for the club contest!! Lot's of business matters were handled, included the reading of the revisions to the club constitution which were then approved by the membership. Field Day plans took up a good part of the meeting. Phil, WN9HVK, showed the films he took of last year's event to give us some ideas. Many alternative plans were brought up and compared. The younger members preferred the ol' fashioned Field Day in the farm field or the park, while others went along with WTS's idea of setting up at the Red Cross as more of a simulated disaster test. The latter plan won out and the opponents to it pledged their support for a total club effort. The May meeting ended with a "show-n-tell" time, where some of the members showed off their latest projects and gained a few points in the club contest as well. The meeting adjourned to the Electronics Lab where we were joined by the students in the Tech/General class for coffee, donuts, and rag chewing. By the way, 25 students are enrolled the the class to get their general license!

JUNE MEETING

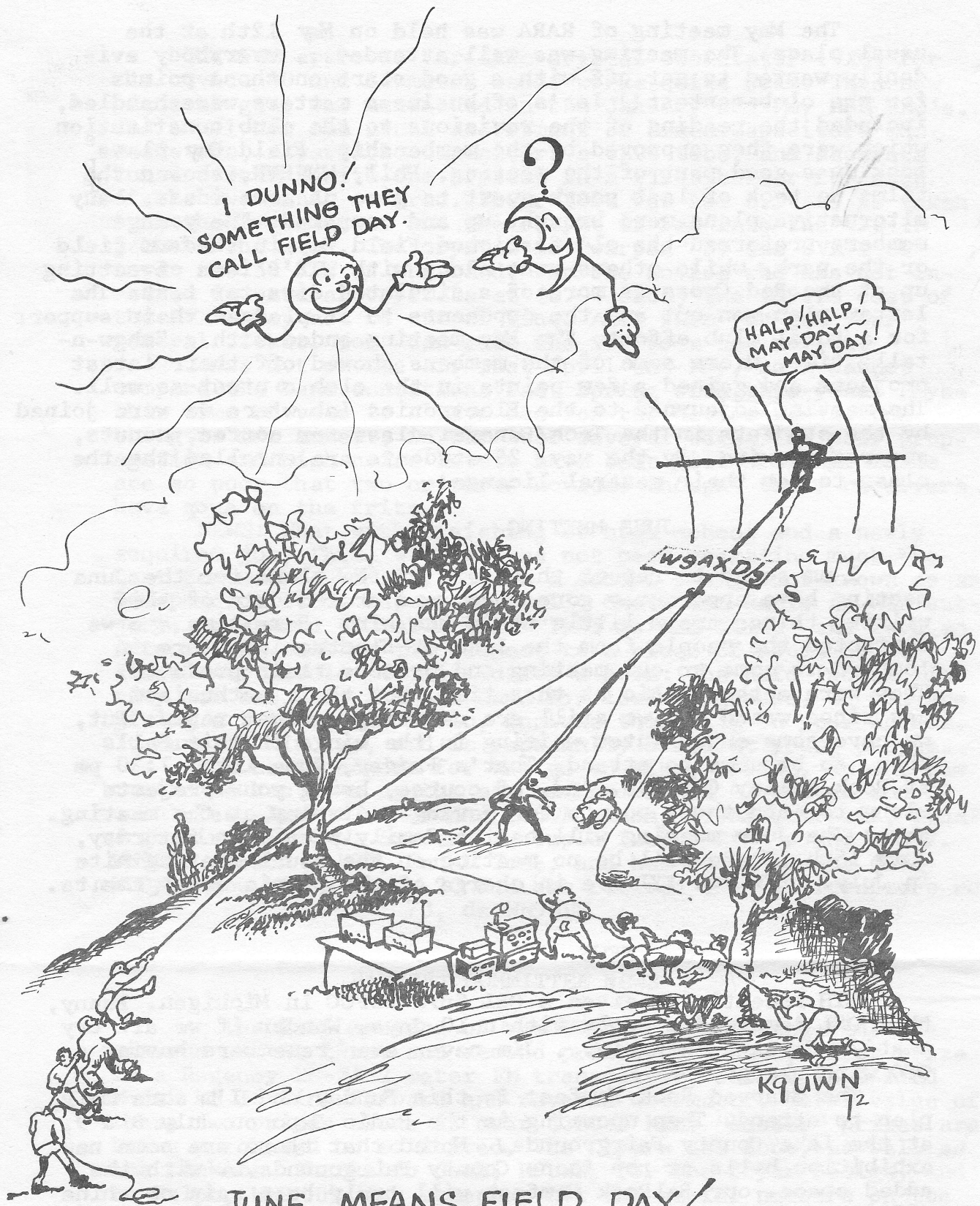
I am sorry to report that some of the plans for the June meeting have apparently gone sour, and at the date of this writing things are a little up in the air. Some time ago we contacted the people from the Land of Electronics store in Lombard to come to our meeting and promote their products. They were enthusiastic at that time, but their enthusiasm has since waned and we still are awaiting a final reply. But, we have some substitutes waiting in the wings if this falls thru, so be sure to attend. That's Friday, June 16th, 7:30 pm at Rock Valley College. And, of course, bring your projects along to earn those points for having a display at the meeting. Note: The July meeting will be the family picnic on Saturday, July 15th. There will be no meeting on the usual meeting nite in July. ETH and XYL are in charge of the picnic arrangements.

NEWS

ETH recently received a QSL from W8FCC in Michigan. Funny, this QSL demanded a reply within 10 days. Wonder if we all try that?? Strange thing is... Jim never even remembers having a QSO with the guy.

The Starved Rock Hamfest is this Sunday and I'm sure many plan to attend. Then upcoming is the Radio Expo on July 8 & 9, at the Lake County Fairgrounds. Noted that there are some new exhibition halls at the Boone County Fairgrounds... with the added space, our BelRock Hamfest will truly be a rain or shine affair.

FM News: Regency has another new xcvr out... the 212 with 25 watts out on two meters. And their new amplifier with 50 watts out received good reviews in 73, while DyComm has been black-balled by that journal for "lousy" treatment of customers. Many commercial manufacturers are bringing out all Solid State 25 watt rigs for business radio users... surprise, many are made in Japan including E.F. Johnson.



JUNE MEANS FIELD DAY!
MAKE YOUR PLANS TO PARTICIPATE.