

Richmond Amateur Telecommunications Society
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JULY 2000

RADIOACTIVITY

JULY MEETING

Friday, July 21, at 8:00 PM at the new location – 7291 Atlee Road. The building is just north of Old (or Business) Mechanicsville Pike. There is a RATS sign at the entrance to the parking lot, courtesy of Jay, N9WMU. See June newsletter insert for a map The program for July is RF Safety.

ELECTIONS

This year we will elect the club secretary, treasurer and three directors. In this newsletter you will find biographies of the candidates on this year's slate of officers, and an official ballot. Please read them and mark your ballot. Ballots have postage affixed and should be returned by mail before the August meeting on August 18, or brought to the August 18 meeting.

VE EXAMS

Monday, August 7, 2000 at 7:30 PM Pietro's Restaurant, Jeff Davis Highway and Osborne Rd. Chester. Pre-register with TONY AMATO, KR4UQ, at 717-5237. Tony's web page for test information is: http://www.kr4uq.org/Pages/ve_exams.htm

Saturday, August 12, 2000 9:00 AMJ. S. Reynolds Community College, 1651 East Parham Road, Building B, Room 201. Pre-registration required with PAT WILSON, K4OW at 932-9424 or email at k4ow@arrl.net . Pat's test information web page is: <http://www.mindspring.com/~k4ow/hamtests.htm> .

JUNE MEETING PROGRAM SUMMARY

The program for our June meeting, held at the new Mechanicsville location, was a presentation by two students at Highland Springs High School. Josh Rozovsky, K3YAR, and David Beasley, KF4SVK, are both enrolled at the school's Specialty Center for Engineering, Design

and Future Transportation. Josh and David showed a Power Point presentation and video and talked to the club about a balloon launch that was planned over the last two years with the launch occurring on Dec. 8, 1999.

Students did research, wrote grant proposals, acquired, assembled, and prepared the equipment necessary to launch and track a weather balloon via radio.

The balloon reached an altitude of 59,000 feet and landed in Gloucester, about 400 feet from where the students had predicted it would land. It was recovered and returned at Frostfest. (Josh told me the person who saw it coming down thought it was a drug drop and almost shot it.)

Lessons learned from this project included the importance of teamwork, financial considerations, as well as learning some design and engineering principals from unanticipated outcomes.

Josh and David also made a presentation at the March 26 regional meeting of AMSAT at the Goddard Space Center.

Thanks to Josh and David for sharing their experiences through their presentation. I speak for those who attended the meeting in saying we are all very impressed.

Mr. Rozovsky, Josh's father, was in attendance and won the door prize.

Congratulations to Mike, WD8CHP, on his Tech Plus license and new call sign.

The new callsign belonged to Mike's grandfather. Mike's previous call was KG4FPP

FIELD DAY 2000

Field Day 2000 was held June 24 & 25 at the recreation facility in Amelia. We worked as a 2A station, meaning we used two radio stations working off of battery power. In addition, several operators worked at a novice station. Warren, K04XB, set up a packet station Saturday afternoon. Everyone who attended got some time on the air and/or logging. Between turns operating or logging, we took time to relax and chat with friends and make new acquaintances.

Propagation was fair. We operated on several HF bands using SSB and CW. We logged several hundred contacts, with the emphasis on having fun and providing an opportunity to work HF to operators who do not yet have that privilege. We were able to work most states including Hawaii, and into a few foreign countries. I made a contact with an American amateur who was visiting southern Germany and who had just attended a hamfest in Friedrichshafen, Germany, on the north shore of Lake Constance.

Just over 20 people participated - working on the radio, logging, or helping with setup or takedown. K9DOG was our special guest, accompanying Bill, K4WMA. About 10 or 12 people stayed through the night. Some searched for ZLs while others tried to catch some ZZZs.

Some logged contacts; others "sawed logs".

Andy and Shirley made sure we were well fed, doing their usual outstanding job with the food. They grilled hamburgers and hot dogs for our Saturday evening picnic. There was plenty to eat with potato salad, cole slaw, baked beans, two huge sub sandwiches, a variety of other side dishes, and cookies, cakes, pies and watermelon.

Sunday morning, I accompanied Andy and Pat on the breakfast run to the Golden Arches. When Andy and Pat ordered 22 sausage/bacon biscuits, the cashier looked a bit stunned, and then asked "For here or to go?"

TOP 10 REASONS TO DO FIELD DAY

In the spirit of David Letterman, Arkansas ARRL PIC Bill McEntire, KC5ECB, passes along an ARRL Field Day Top 10 list of his own:

Number 10: Catch up on your microphone keying techniques—20 contacts with left hand keying, 20 contacts with your right, and repeat. Feel the (RF) burn! After 100 contacts, take a break by barbecue grill for the rest of the hour.

Number 9: Two words: barbecued brisket.

Number 8: Practice your untangling techniques with coax that has been boxed up since 1999 Field Day.

Number 7: Go by the ham using the Collins tube rig and say, "I wonder if this is this how bug lights were invented".

Number 6: Remember just how much fun you can have on 80 meters at 3 AM with no sleep.

Number 5: Remind your teenager that your laptop computer he borrowed to do "homework" still has that working logging program on it.

Number 4: Rotate old cans of insect repellent spray with the cans you'd left in the deer camp trailer last season.

Number 3: Stop by the CW position and nod your head with the operator as if you can also copy his traffic at 30 words per minute.

Number 2: Debate with other hams on the Field Day antenna setup crew just what formula to use to calculate thunder vs lighting distance.

And the Number 1 reason to go to Field Day: With all that time you spent studying for your ticket, you've earned it!

--Bill McEntire, KC5ECB

Tnx ARRL Letter Online June 23, 2000

ELMERING NEEDS A REVIVAL!

by J. Ervin Bates, W8ERV

After nearly four full months of debate over the FCC's restructuring R&O, between members of our Amateur Radio ranks, I have come to the conclusion that the answer to our problem lies within each of US. I know, "here we go again", right? I certainly hope so.

As someone who has been a direct recipient of the assistance of many Elmers since 1994, I cannot stress enough, the importance of those helping hams. You probably would think it takes a great deal of time to do this, wouldn't you? The fact is, that couldn't be further from the truth. It only takes a little time and a little effort between several of you. Take my case, for example.

One local Club member directed his attention to my knowledge and mastery of the Morse Code. Another interested me in antennas. Still another, to the joy of HF operating. And then, there was the guy who was a die-hard QRP enthusiast - that one has lasted and I find myself enjoying it today! Ah, the list is long and distinguished..and my thanks will never be enough for all their efforts on my behalf. But this was, in its purest form, Elmering.

For the long-time members of this great Hobby, you remember the Elmer well. We hear about him, or her, today, but not as often as you did back then. And please, if you are a practicing Elmer, don't take these comments to heart, as they are not intended for you...rather for the new crop of potential Elmers. The Hobby needs you NOW. Practicing Elmers know that already.

The saddest part of the restructuring debate was the feelings that got in the way. Those who are passionate, with regard to Amateur Radio, versus the melancholy aging masses, decrying the "bad guys" at the FCC-and predicting the doom and destruction of their first love. Setting those battles aside for a moment, maybe we can illustrate a small (or not so small) "plan of action" in the next few paragraphs.

All I can do is offer my suggestions, never pretending to know all there is to know about this vast, incredibly fun Hobby. Even after nearly six years as an Amateur, I learn new things on an almost daily basis. At the conclusion of this article, all you will have to do is take the ball and run with it.deal?

So the ground rules have been laid and now let's spend a few moments discussing what we can do to revitalize Amateur Radio, via Elmering, our Hobby's "oldest profession". I have taken many of the following suggestions from those made by members of my Club (The Central Michigan Amateur Radio Club), where I serve as President and have for more than 29 months now.

First, get involved in your local Amateur Radio Club. It's not enough to show up each month for a dose of entertainment. You really need to get into the action, giving your time and energy to make it grow and to keep it interesting, because nobody likes to be bored to tears at a meeting. Run for the Board of Directors and serve a year or two. Get your hands dirty at Club events; Field Day, Ham Swap, SKYWARN,

ARES, RACES - take your choice. But let them know you have a vested interest, no matter what your age is, or how long you have been licensed, and show them you are willing to dig in along side the older members. This alone will improve the atmosphere in clubs where the "young and old" are at constant odds, trust me on this, ok?

Next, since you have gotten involved at the ground level, check into Club licensing classes. If your club doesn't offer them, why not make them happen? It will take about 6 weeks, if properly prepared. You can teach basic theory and get another helper to teach the code, or a small team of 3-5 will do nicely and that way, nobody gets bored in the teaching process, either. With 5 WPM the only code requirement left, the battle will be easier to win and you are likely to turn several new Generals out, instead of a batch of Technicians (not that Techs are bad. I started at that license class!). Approaching the Club with your eyes ablaze and a fire in your belly will do wonders. They will see that you are truly interested in making it a better Club and before you know it, the classes will have begun.

From this point, consider working at your Club's public appearances, such as our local "Science Day at the Mall", where your fellow Club members turn out for a special "Field Day-type" event. Or how about a demonstration at the local Middle School, or High School? Be sure to have informational fliers for the visitors to your program (you can design these and copy them cheaply) and if you can, secure pamphlets for SKYWARN, ARES, RACES and the like. You could also offer demonstrations of your on-hand station and take names and addresses of your visitors for sending off Club promotions, newsletters, etc.

Now let's fast forward a few months. You have an average turnout of members for your meetings, but suddenly, you are looking at a crop of new faces -VISITORS! But all you did was get involved, right? What a difference a short span of time makes!

"I didn't Elmer anyone, how can this be?" you ask yourself with a smile. Ah, but you DID Elmer them, simply by being there to answer questions. By handing that young lady an information sheet on the Club. By inviting the local Boy Scout troop to your annual Field Day outing. By taking that one step further and attending the annual JOTA (Jamboree On The Air) in the Fall. You have been successful, by making a step to promote your Hobby. You have made a difference already-You have

Elmered!

~J. Ervin Bates, W8ERV

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President, Central Michigan Amateur Radio Club

Editor, The SCOPE

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RULES & REGS

News from the ARRL and FCC

FCC'S HATFIELD TELLS HAMS TO "WALK THE WALK"

The FCC's Dale Hatfield, W0IFO, predicts a bright future for Amateur Radio. But the Office of Engineering and Technology chief says that amateurs "will be under a certain amount of pressure" to justify their free use of the radio spectrum. As a result, he said, it will be more important than ever that hams actually fulfill their service, good will and educational roles--not just talk about them.

Hatfield offered his observations as keynote speaker for AMRAD's 25th anniversary dinner June 17 in Virginia. Hatfield told the gathering, "the key issue for the amateur service is main- training access to an adequate amount of spectrum." While emphasizing that he was not suggesting any immediate threat, Hatfield said hams will have to do a better job of justifying their current allocations.

Hatfield said hams should actually engage in experimentation to advance the state-of-the-art, provide communication and train operators for emergencies, encourage international cooperation and good will, and offer an important technical educational outlet. "Or, to use a bit of slang, it seems to me that it will be even more important for all segments of the amateur community to 'walk the walk' not just 'talk the talk'," he said.

Hatfield encouraged his audience to explore advanced techniques that conserve spectrum, especially digital techniques. As the rest of the telecommunications world transitions to digital techniques, Hatfield said, "the amateur service will look antiquated if it is not making progress in that direction as well."

Hatfield also said software defined radios could facilitate "a new era of amateur experimentation" and, in many ways, represent "a final merger" of radio communications and computers.

The text of Hatfield's prepared remarks is available on the FCC Web site.
Quoted from ARRL Letter Online June 30, 2000

WORLD AMATEUR RADIO CORNER

ANTENNA DESIGNER LOUIS VARNEY, G5RV, SK

The inventor of the world-famous G5RV antenna, R. Louis Varney, G5RV, died June 28 at his home in West Sussex. He was 89 and had recently been reported in failing health.

The G5RV multiband wire antenna for HF--typically 102 feet on the flattop section--is among the most popular of all antenna designs. Varney first described the G5RV in the November 1966 issue of the RSGB Bulletin. While models fed with coaxial cable have proliferated, Varney's personal recommendation was to use a balanced feed line and a matching network for bands other than 20 meters. (The G5RV dipole is discussed in Chapter 7 of The ARRL Antenna Book.) Varney had a full-size and a double-size G5RV, both fed with open-wire feeders, at his own station.

Varney was an RSGB member for 74 years, and he served as life president of the Mid-Sussex Amateur Radio Society. His wife Nelida is

among his survivors. Services were set for July 4 in Brighton, England.--thanks to Bob D'Imperio, N4XAT, and RSGB for this information
Tnx ARRL Letter Online June 30, 2000

RAINSCATTER RECORD?

On June 17, ARRL First Vice President Joel Harrison, W5ZN, and noted VHF-UHFer Al Ward, W5LUA, completed a 515 km (321 mile) rainscatter QSO on 10 GHz. The contact could be a record for that mode of propagation. Details are at <http://www.ntms.org>. Harrison says the trick was to keep a sharp eye on the weather radar, looking for very strong, appropriately positioned storm cells. "We have tried this a few times before," Harrison reports, adding that the pair once managed a 5.7 GHz rainscatter contact. "This time, everything fell into place!" Harrison says the longest distance he's aware of for a 10 GHz rainscatter QSO is 240 miles. Quoted from ARRL Letter Online 6/23/2000

INTERNET InSITEs

Amateur Radio, Electronics and Technology Related Websites

ARRL Web: RF Exposure Regulations News <http://www.arrl.org/news/rfsafety/> Overview of FCC rules and regulations regarding RF exposure. Links to FCC documents and other sources of information on RF safety.

ARRL Web: RF Radiation and Electromagnetic Field Safety <http://www.arrl.org/news/rfsafety/hbkrf.html> Summary of what is known, and suggested safety precautions based on the research to date; prepared by members of the ARRL RF Safety Committee

Amateur Radio RF Safety Calculator <http://n5xu.ae.utexas.edu/rfsafety/> University of Texas at Austin. This is a main beam power density estimation program intended for use as part of a routine evaluation of RF safety compliance with FCC regulations

RF Safety Program Page <http://www.fcc.gov/oet/rfsafety/> Guide to aid local governmental officials and citizens in understanding safety issues related to radio frequency emissions from telecommunications towers; safety of hand-held cellular telephones

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