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BARA Facts

Newsletter of the Binghamton Amateur Radio Association

May 2004

Website: <http://www.wtsn.binghamton.edu/bara>

Hamfest 2004

A Grand Round of Thanks and General Salute to everyone who helped with the 2004 Hamfest! Hedy, AA2MU, and Bob, WS2U, our co-chairs of the Hamfest did a fine job pulling together a memorable event under the ever-vigilant eye of Paul, N2NCB. But let's be honest, these three are only the tip of the iceberg and the Hamfest would never have come off as well without the overwhelming support of Our Members and of Others in Our Community who stopped by to lend a hand.

The turnout for Friday Setup was greater than in any other year and we had the 4-H Building ready in no time at all. By 2:30 the task was well-completed, the tables were arranged, and everyone went home. On Saturday Morning we began to get together and by 5:30 Ticket Takers were in place and the Vendors were arriving. By 7:30 the day was really getting under way, the 4-H Griddles were turning out Hot Breakfast Sandwiches, and the Coffee Pot was steaming. The Weather cooperated in style and we had the makings of a Hamfest that will not soon be forgotten.

Thanks to the publicity and advance work done by the Hamfest Team we had a very nice selection of Commercial Vendors and they all did a brisk business the entire day. Gene of KJI was there as was Minuteman Antennas/Quicksilver Radio Products. John (as in John the Weller Guy) was with us as always and Ohio Inkjet Products rounded out the inside vendors in the 4-H Building. The Ham Shop in Syracuse set up a trailer outside and completed the Commercial Lineup. One comment from the Commercial Vendors really needs to be heard by each and every BARA Member: "Lots of Clubs talk, but you guys deliver!" Friends, that comment is worth a million dollars and our Team does everything we can to make our Commercial Vendors happy. We feel that it they

are willing to drive to Owego we are going to make sure that we go the extra distance to make them comfortable and I think that we succeed. Paul, N2NCB, makes sure that someone is there if a Vendor arrives late at night — even if it means driving over himself — and we try to make the setup/teardown as painless as possible. Our Vendors appreciate everything you do!

Outside the 4-H Building the feedback was also positive. Business in the Flea Market was brisk with the law of Supply and Demand receiving brisk exercise and economic redistribution was operating smoothly.

Around 12:30 Saturday we were beginning to seriously wind down and with the help of a very large group of volunteers we cleaned up and tore down in record time. Thanks Again!

Before closing, we need to mention the food which was outstanding! The 4-H really does a fine job and is very appreciative of the opportunity we offer them. Many positive comments were heard from the consumers and it is probably safe to say that the BARA Hamfest has a well-earned reputation for good food at reasonable prices.

A Round of Thanks, Please

Our Sincere Thanks to everyone who helped make the 2004 BARA Hamfest a success. We tried to keep track of all the helpers and the list follows. If it happens that someone was missed, please excuse the omission and accept your editor's apologies.

Hamfest Setup (Friday): John, N2YZI; Bob, WS2U; Doug, (Came with N2YZI); Al, WA2FBT; Elmer, N2PQX; Jack, KB2YEN; Bob, K2FU; Paul, K2ABX; Jack, WB2GHH; Ed, KB2SCF; Ford, AB2HS; Bill, N2BC; Brian, K2DLB; Mel, WE2K; Don, N2NON; Paul, N2NCB; Victor, N2LZM; Malcolm, KC2EOV; Bob, KC2DSS; Jack, KB2YEN; Brian, K2DLB.

Hamfest Day (Saturday): Ed, KB2SCF; Dean, W2DLO; Sharon, N2WGM; Ray, KC2GIL; Ford, AB2HS; Bob, K2FU; Malcolm, KC2EOV; Paul, N2NCB; Bill, K2OH; Jerry, KA2WQR; John, N2YZI; Mark, KC2AVX; Rich, N2MGM; Hedy, AA2MU; Bill, N2BC; Bob, WS2U; Bob, KC2DSS; Blake, KC2GQX; Jack, WB2GHH.

Recall Alert

We learn that the Fluke Corporation has announced a voluntary Safety Recall of certain Modular Test Leads in the TL221, TL222, and TL224. Specific details can be found on the Fluke Website at <<<http://www.fluke.com>>>, however the recall only affects Modular Test Leads (i.e., those with a removable probe) manufactured since January 2003. Current manufacture Test Leads (those which have the “SureGrip” symbol) are not affected.

The mode of failure is a faulty connection which might not permit current to pass. This creates the possibility that a meter might indicate no voltage or current when a voltage or current hazard is present.

The Fluke Website gives clear instructions for identifying the faulty leads and it would be well to check this information out even if you do not own any Fluke Leads: you might, after all, stumble across a real “bargain” at a Hamfest sometime.

Of CATs and This and That

Apropos of the Fluke Recall it might be worthwhile to review some details of Metering Safety gleaned from the Fluke Website <<<http://www.fluke.com>>> and other sources.

A first and cardinal point of Metering Safety is to make sure that your instrument is equal to the task. To do this properly, there are some unexpected details of Equipment Specification that are well worth knowing. First — of course — is the Voltage Rating of the equipment. Both Meter AND Leads should have a Voltage Rating greater than the highest voltage you plan to measure. Make sure that you are well within the ratings of the equipment and that there is sufficient “headroom” between your expected Working Range and potential Voltage Transients in the circuit. For example, if you are working with circuits that include Electromagnets (Motors, Relays, Inductors, etc.), you may encounter Voltage Transients many times greater than the normal Working Voltages in the circuit because of the “Back EMF” induced by collapsing magnetic fields when the circuit is energized or de-energized or when it changes state. Likewise, if you are

Most of our Amateur Radio “Servicing” is done

working on an Antenna or on a Circuit fed by overhead wires and you are on the wrong side of Lightning/Transient Protection Devices there is a potential for enormous Transients induced by Atmospheric Charges (including Lightning).

Transients must be regarded as potential hazards in any metering situation and the key to evaluating the danger to you and to your equipment is the “Energy Available to Arc”. In other words, does the Transient Voltage combine with a Potential Current Flow that is sufficient to Initiate and Sustain an Arc in the equipment? Remember, Sparking and Arcing are NOT the same: A Spark is a temporary continuation of current flow “through the air” as a circuit is opened while an Arc is a continuous flow. If the circuit is capable of delivering sufficient current (as under Short Circuit conditions), a hazard is created because the resistance across the arc actually decreases as the Arc strikes and begins to burn. As resistance falls, more and more current flows leading to superheating of the surrounding air and eventually a blast. The way to tame an Arc (as in Welding, Arc Lighting, and related applications) is to use a Resistance to limit the flow of current. Voltmeters have high Input Impedances to limit Current Flow, but Ammeters (and Multimeters configured to measure current) have very low Input Impedances and must be protected by an appropriate High-Energy Fuse. If you manage to blow the fuse replace it with an *exact* equivalent (and if you use a “second hand” unit, perhaps it would be wise to check the fuses).

This is where the CATs come in: Current Industry Standards rate equipment from **CAT I** through **CAT IV**. **CAT IV** is on the “Electric Company” Side of the Fuse Box and represents the greatest potential danger from Transients. Lightning, Distribution Network Failures, and similar aspects of the system create potential risk because the system is configured to deliver enormous quantities of current.

As we move to the other side of the Fuse Box and into the system the risk decreases due to Protective Devices and the attenuation of transients resulting from the increasing Impedance of the system. **CAT III** includes Three-Phase Distribution and Commercial Lighting. **CAT II** includes Single-Phase Receptacle Connected Loads.

CAT I, the “lowest” rating includes Electronic Equipment.

at the **CAT I** level, although there is the potential in an

Antenna System for **CAT IV** hazards. The “bottom line” is this: Choose a Meter with a rating appropriate to the circuits you will work with and recognize that the Voltage Rating alone is not a sufficient guide in selecting the proper equipment. Likewise, make sure that both your Test Leads and Meter are rated for the work you contemplate.

A word on technique might be in order. Besides the traditional “One Hand” rule, Fluke recommends a “Three Point” rule for verifying that a circuit is dead: Probe a live circuit to verify the Meter is functioning, check the circuit you are interested in, then check the live circuit again to verify that the Meter is still working.

On the other side of the coin, certain pieces of Test Equipment may be hazardous to the circuit! An example of this is a Solenoid-Type Voltage Tester (sometimes called a “Wabblers”). Using a tester of this type can induce large Voltage Spikes in the circuit to the detriment of sensitive electronic devices connected to the same circuit. Buzzer-Testers are another device that served well on dial-type telephone circuits, but they can be fatal to telephony and data devices on modern networks!

In all these matters Care, Technique, Understanding of the limits of your equipment, and Thought are keys to safety. Sometimes the margin of safety costs a few extra dollars, but as the Fluke literature bluntly suggests: If you have a ten-dollar head, then choose a ten-dollar motorcycle helmet.

Hamfest Schedule

Here are some of the “local” Hamfests (as reported on the ARRL Website) scheduled over the course of the next few months:

- 4-6 JUNE:** Rochester Amateur Radio Association Hamfest in Rochester, NY.
- 12 JUNE:** Skyline Amateur Radio Association in Cortland, NY.
- 3 JULY:** Murgas Amateur Radio Club in Dallas, PA.
- 17 JULY:** Batavia Hamfest and Computer Show, Genesee Radio Amateurs in Alexander, NY.
- 18 JULY:** Jonestown Mountain Repeater Association in Mountaintop, PA (new location?).
- 24 JULY:** Utica Amateur Radio Club at Utica, NY.
- 7 AUGUST:** Tompkins County Amateur Radio Club in Ithaca, NY.
- 18 SEPTEMBER:** Radio Amateurs of Greater Syracuse in Pompey, NY.
- 25 SEPTEMBER:** The Great Elmira Hamfest in Horseheads, NY.

Silent Keys

It is with great regret that we note the passing of two local Hams who made their mark on our community.

Jerry Smith, WA2QEL, passed away suddenly in late April. Those who were involved in RACES/ARES/MARS as well as the many Public Service events organized by SAVARA knew Jerry well and his passing will leave a void in our community. It is fitting to note that Jerry had been very active in running Phone Patches and providing communications for service men and women stationed overseas during the Vietnam Conflict. This service provided a lifeline in the days before Overseas Phone Connections were common and before the Internet made communications immediate and operators like Jerry quietly worked to make it work. Jerry’s quite presence and his skills were central to Amateur Radio Emergency and Public Service Communications up until the very end. He will be missed and we extend our deepest sympathy to his family.

Tom Ichikawa, W7GUN, PAST ED OF TIOGA COUNTY AND FOUNDER OF TRK COMMUNICATIONS — A GREAT HAM AND AN ALL AROUND AND A NICE FELLOW — DIED THURSDAY NIGHT THE 6TH OF MAY AT HIS HOME. THE SADDENESS OF TOM’S PASSING TAKES US ALL BY SURPRISE SINCE MANY OF US SAW AND SPOKE WITH HIM AT THE BARA HAMFEST. TOM WAS 89. — from Ford Drake, AB2HS

Leslie A. Moxon, G6XN, one of the Grand Masters of Antennas and a Tamer of the Skywire passed away at age 93 in late March. Les was a pioneer in RADAR and a master at explaining antennas. His *HF Antennas for all Locations* is a classic and our hobby is richer for his insights and expertise while poorer for his passing

Noted Briefly

We see from the latest *OTB* (Old Timers Bulletin) that Bob, W2V DX, in Owego has been on the air with a 39 Replica transmitter and a HQ129X receiver. Bob participated in the Antique Wireless Association’s “30s Night” and had more contacts than any other participant and the second-highest numerical score. *Good job, Bob, and thanks for letting us use the W2V DX repeater for our Hamfest Talk-In!*

Apologies

Your Editor apologizes for the delay in getting the BARA Facts out this month and notes that our Distribution Arm bears none of the responsibility.. It's been a busy time and a publication of this quality does not "come together" in a day.

Club Officers and Committees			
President	Bob McCabe	KC2DSS	748-9808
Vice President	Ron Reagan	N2RWK	722-6790
Secretary	Allen Lutins	KC2KLC	729-4817
Treasurer	Paul Slocum	N2NCB	687-2057
Directors	Bob Handel	K2FU	693-4310
	Malcolm Heath	KC2EOV	753-7248
	Steve Orzelek	N2MSB	775-0281
	Mel Snitchler	WE2K	723-9612
W2OW Trustee	Frank Scoblick	N2HR	729-4249
Newsletter	Ed Plesnar	KB2SCF	754-3810

BARA, The Binghamton Amateur Radio Association is



an ARRL Affiliated Club

Next General Meeting

7:30 PM, Wednesday, May 19th Town of Binghamton Town Hall,

279 Park Avenue, South of the Ross Park Entrance

Board Meeting

7:00 PM, Wednesday June 2nd

Broome Community College Campus, Office of Emergency Services (West Side of Campus)

Exam Session

7:00 PM Monday, May 24th (Note)

Vestal Public Library, Route 434 Vestal

1:30 PM, Saturday June 12th

Endicott Fire Station, Across from UE High School

BARA Dues

\$18/year Single Member; \$27/year Family

DX Cluster

W2OW on 145.070 MHz with a Data Rate of 1,200 baud; questions to n2bc@stny.rr.com

W2OW Repeater

147.390 MHz, 100 Hz CTSS. BRAT Net every Sunday Evening at 8:00 PM Local Time

Binghamton Amateur Radio Association, Inc.

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