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NFARL

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squelch tales

Squelch Tales Squelched?

Well, friends, first of all, I'd like to apologize to you for not putting a newsletter in your hands in July. Both Doug and I were out of town for several weeks, and we gave Murphy a chance to get into the loop--well, it just didn't get out.

Maybe it's just as well, because if it had gone out to you last month, I wouldn't have anything to bring you this month. Doug really felt that "this newsletter thing is a losing battle," so he's bowed out. I don't blame him. It's a lot of work to pull articles together month after month. I wish I still had time to do it, but my work causes me to travel to the point that it's all I can do to get it typeset.

So here's last month's news, along with this month's minutes (thanks, Morris). Also have to thank Morris and the others of you (Jim, Dan, Gary and the rest) who have been regular contributors. If someone wants to pick up the ball here and pull some reporters and articles together, then the NFARL can continue to have a monthly newsletter. Otherwise...this may well be the last Squelch Tales.

Here are Doug's parting words to me regarding Squelch Tales: "For this newsletter thing to work, we need some things. Some ... already ... suggested:

- 1) Reporters
- 2) "Regulars" that we can DEPEND ON to get the regular news (meeting minutes, treasurer's report, president's comments, events, next meeting announcements and programs, etc.) on a routine basis without CONSTANT hounding and followup!
- 3) "Worker ants" to fold, spindle and mutilate each month.
- 4) Someone that can take responsibility to have it printed and get such things as PAPER and POSTAGE every month on a routine basis."

I agree, Doug. Thanks for all your hard work over the last eight months. I hope we can keep Squelch Tales going from here.

If you'd like to help pse QSL to WA4BRO or to me.

73, Joel - KE4SW

NFARL MINUTES OF MEETING

7/10/91
BY N4YAH

- 1.) Fred Moore, N4CLA, opened the meeting. Morris Lundberg, N4YAH recorded the minutes for Hal Meyers, K4JHM.
- 2.) Fred gave a through discussion of the N4CLA repeater's speed dialing and emergency use.
- 3.) Al Stern, N4OXII, talked about:
 - A.) A club 2 meter net; when and at what time to have it? Monday evening at 8:00 PM was suggested. Club members are asked to think about this and give their suggestions to Al.
 - B.) Al asked for volunteers for the Georgia State games to be held at the Ga. Tech campus on 7/18/91 through 7/22/91. Contact Al if you can help.
- 4.) The following new members were welcomed into the club: Mac Brown, K0MCA and Jeff Weinberg, AA4RC.
- 5.) Name tags were given out when everyone came in for the meeting. A nice touch, as it helps us older guys.
- 6.) Minutes of the last meeting were read and approved.
- 7.) Steve Knittel, KC4YBO, gave a report on the Field Day activities, just past. Our club achieved about 1,100 points, near the top of the scores in our class, based on previous results.
- 8.) Fred, N4CLA, gave out a listing of club expenses to date and, from this, projected what annual expenses would be. He proposed that club dues be increased for this reason. Several arrangements of new club dues were discussed, however, no vote was taken as this is additional discussion and the question is yet unsettled. The range discussed was from \$25/year to \$35/year. Comments should be directed to Fred or any other club officer (not N4YAH). Those present at this meeting agreed that an increase in dues is needed.
- 9.) Fred closed the meeting without a presentation (probably my fault as I didn't have one ready).

N4YAH.

PRESIDENT'S CORNER

by Dan Turner, WA4BRO
(Intended for July Newsletter)

Fellow Members,
The June meeting at our new meeting location at Sonny's Bar-B-Que was better than expected. I underestimated our numbers and we really worked our one waitress. The ribs were great and everyone seemed happy with the room, food and service. A vote was taken to continue the meetings at this location. Please join us next month at Sonny's.

Field Day will have [long since - hi hi] passed by the time you read this article. Many thanks to Steve Knittel for grabbing the bull by the horns at the last minute and making field day a "Fun Day".

The Albany Hamfest and South-Net Packet Forum was a great success with numbers much greater than last years event. Again, growing pains hit another hamfest and it is highly likely they will have to move the event into larger surroundings next year.

The subject of the budget and dues were again touched on briefly at the last meeting. A suggestion that a proposed budget be published in the newsletter before final suggestions of dues levels be adopted was approved.

Look forward to seeing you at the next meeting.

Meeting Notice

The next club meeting will be August 14th, @ Sonny's BAR-B-Q 1830 for dinner. 1930 for meeting.

Ya'll come on down!

On Club Membership

de KC4WGK

Why do you belong to NFARL?

To broaden your knowledge in amateur radio, to reduce stress and divert your attention to a worthwhile hobby, to just 'get away' for a night, to enjoy meeting with your friends, to meet and perhaps help a new ham or just to sit down, relax and enjoy a night at the local amateur radio club? We all have our reasons.

Someone once said, "If you go out looking for friends, you're going to find they're very scarce. If you go out to be a friend, you'll find them everywhere."

When you're at the next club meeting and see someone you don't know, introduce yourself. He may be looking for a friend and makes him feel good. Not only that, but it makes you feel good.

We now have a new member photo board. At each meeting new member will be introduced and photographed so they can be warmly welcomed by all. We will also have a welcome desk when you arrive at club meetings. Sign in, complete a name badge and enjoy an evening of entertainment.

We need more members. Have any suggestions? Do you know someone who might be interested in becoming a ham? If so, guide them along. Call me if I can help.

KC4WGK
Dave Vanderwall,
New Member Liaison

LOCAL HAMS RESPOND TO HOSPITAL EMERGENCY

by Jim Willis - KG6TW

At about 7:15 p.m. on May 15, a 2700 pair telephone cable was cut about 1/2 mile north of the North Fulton Regional Hospital disrupting telephone service to the hospital. Soon after, Larry Collet, the hospital's engineering supervisor called Dan St. Andre, a member of the Roswell/Alpharetta Hamwatch organization and asked for emergency communications support.

By 7:40 nine hams had responded and an emergency radio net was organized. Soon after Jim Stafford arrived in the MATPARC emergency communications van which was used for the net control station. In all over 15 metro area hams responded and provided communications from the hospital to Roswell and Alpharetta police departments as well as communications support inside the hospital. At 8:30 a.m. the following morning, Southern Bell announced that the phone service to the hospital had been restored and the net was deactivated.

Among those who participated are: Alan Stern, Jim Ferguson, Paul Hause, Patty Smith, Jim Stafford, Phil Specht, George Price, Delaine McCarthy and Fred W2IOA of Roswell, Dan St. Andre and Doug Watson of Marietta, Jim Willis of Alpharetta, Dave Fellows of Cumming and Leigh Discon of Canton and N4UTH.

73's Jim KG6TW

FIELD DAY '91 IT WAS GGGREAT!!!!!!

First of all, THANK YOU to: Carl Jackson & Jack Sanders for the generators, Radios and equipment; Fred Moore, Hamp Smith, Dave Walls, Bill Slayton, David Fellows for the battery and other equipment, Alan Stern for rods, handling the talk in and for knowing who to call to get what ever we needed. A very special THANK YOU to Chuck McGinniss, ND4D for the use of his call. For all of his time and expertise he added to the weekend. Sure hope his pictures came out well and he will bring them to the July meeting.

For those of you who did not make it out to *FUN DAY* here is a recap:

The antenna fun began about 10 AM. Big loop up first. Sure glad it was rolled up right 2 years ago. Jim Willis, Fred, and David F. were the 'pole monkeys'. (I'm happy it was y'all and not me.)

Next the 2 dipoles toward the street and the 10 m vertical were put into place. Running power cables, ground wires, etc. into the 'control center' and hooking up the radios followed.

Then "MURPHY" to visit. One of the generators developed a few problems. Dave W. and others solved that little hitch.

We were on the air at approximately 1800Z. As many of you know band conditions have not been the best, however as long as we kept calling "CO FIELD DAY-- THIS IS NOVEMBER DELTA FOUR DELTA IN GA-GAAA," we could get those contacts.

Bill S. was our main man on the Novice-Tech station. He picked up 50+ contacts, mostly on Sunday. His station was a 25 W mobile. (Remember he has only had

his ticket since April} Great job Bill.

We managed to always keep at least 1 station on the air, most of the time 2. Could have used more ops & loggers. When the 10 PM crew came in they were VERY welcome.

On Sunday about noon we discovered the secret weapon to running up the score: Patty Smith came in and took over the 20m station. I mean she *TOOK OVER* whatever part of the freq. she wanted. Within 10 minutes she 'owned' a slot. It was all one person could do to log for her!! Two of us were needed at one time to catch up. The power of the female voice, especially a southern one is simply amazing. Next year lets do whatever we have to convince the YL's & XYL's to come on out and join the *FUN*.

We had approx. 45 visitors and workers out for the weekend. With only 2 weeks notice I felt that was SUPER. The main people missing were the CW ops. A station or two will be available just for C W next year. Any volunteers????

This year we joined the computer age thanks to a program from Jim Stafford, W4QO, and a laptop from Fred. Now, that is the way to log calls and avoid those dupes. (For some of us slower operators the old dupe sheets work just fine.)

My personal thanks to all of you who helped me pull this *FUN DAY* together on such short notice. The really exciting part was all of the VERY NEW hams who came out and joined the "old" timers. Fred, sure glad you have a place to keep all of our club gear, thanks again.

We Will All Be So Blue If We Don't See You In '92.

73's Steve,
KC4YBO

FD COMMENTS

"That 3KQ is 20 over. Why can't he hear me? You mean I've been talking into a dummy load for 20 min?" "My ears hurt..." "80 is lousy, so much noise..." "I really should get home....well, maybe I can get that 3A pacific first!".... "Sorry I'm late, had some honey do projects to get done 1st...." "40 is tough tonight, but when I get through they are in the log..." "Mother nature sure let us know she was still around with that thunder at 6 PM. Then smiled and went on around..." "We need a sloper from that new cell phone tower..." "This is fun but I have to get some SLEEP." "You 3 stayed up ALL night?" "I will even cook and log next year if we can get the GALS to take over the mikes!"

Guidelines for articles submitted to Squelch Tales

Your submissions via packet or landline BBS to the newsletter are welcomed. At this time we are receiving a gratifying number of articles of a technical nature, and a few news-related articles. Whatever the subject, we appreciate your help, and will endeavor to publish all appropriate articles received by deadline in the next newsletter (space permitting).

Articles are typeset using *Ventura Publisher*, which has no problem reading the ASCII text we receive via packet. It can also translate *WordPerfect*, *Word*, or *Wordstar* formats if files are formatted this way when transmitted to the landline BBS (TNT @ 552-0868). There are a few things you can do that will further speed the process, however:

See Articles on Page Three

RF EXPOSURE TO ACTIVE HAMS

by Morris Lundberg,
N4YAH

Have you ever wondered how RF from your antennas might effect you or those you love. Probably not. I didn't either until I had to consider the subject on the job. I then got to thinking about the same situation with respect to my Amateur Radio equipment and antennas.

Is RF radiation exposure worth considering in our case? Let's look at some calculations and the ANSI standard and see. To worry or not to worry, that is the question.

RF exposure to people in the area of our ham antennas (or any other antenna) may be calculated. Let's assume that the maximum power input to the antenna is 100 watts and that the frequency is 14 MHz. Further, assume a vertical antenna which is 17 feet in length (the Cushcraft R5 is such a vertical), and has a 3 dB gain.

The calculations below consider that the person is in the far-field of the antenna. The minimum distance from the antenna to

be in the far-field is calculated as in Fig. 1 to be 8.23 feet.

Power density in the far-field region of the antenna can be determined from the equation in Fig. 2 below.

Using the above assumptions, $P = 100$ watts; $R =$ more than 8.23 feet, say $R = 9$ feet or about 3 meters. Then power density, p , is calculated as follows:

$$p = 100(2)\text{watts} = 200 \text{ watts} = 1.77 \text{ watts/m}^2 = 0.177 \text{ mw/cm}^2$$

If the power is increased to 1000 watts, using the same antenna and conditions as before, the RF exposure to the body becomes:

$$17.7 \text{ watts/m}^2 = 1.77 \text{ mw/cm}^2$$

When you consider the ANSI standard of 2.0 mw/cm, for 20 meters, you can see that the RF exposure is getting very close to the level which is considered unsafe at this frequency. At 10 meters, the same calculations put you in the unsafe zone at only 150 watts.

This is the reason for insisting that you don't operate when people are within 10 feet of your high-power antenna. And, please don't mount your

$$R(\text{min}) = 2L \lambda$$

where, L = length of longest antenna element
 λ = wavelength = $300/14 = 21.4$ meters

$$R(\text{min}) = 2(17 \times 0.3048)/21.4\text{m} = 2.5 \text{ meters} = 8.23 \text{ feet}$$

Fig. 1 - Calculation for distance to far field.

$$p = PG/4\pi R^2;$$

where P = Average Power at antenna feed point
 G = Antenna numerical gain over a dipole
 R = Distance to closest point on antenna

$$p = 100(2)\text{watts} = 200 \text{ watts} = 1.77 \text{ watts/m}^2 = 0.177 \text{ mw/cm}^2$$

Fig. 2 - Power Density Calculations

high-power vertical antenna next to a room which is normally occupied while you operate. With these precautions in mind, good luck es good DX

FOR SALE

Due to numerous equipment failures on my Packet BBS and associated RF Equipment, I must offer for sale the following items to try to upgrade the Packet BBS and RF.

1 - Compaq Portable XT-640K, Dual 360K Drives, Green Mono Monitor, Serial & Parallel Ports. Great Condition.
Price: \$ 275.00

1 - RCI 2900 10 Meter Mobile AM/FM/SSB/CW NEW Condition, Less than 10 hrs USE.
Price: \$ 195.00

1 - Complete Commodore 64C System: Commodore 64C (Like New Condition), 1541 Disk Drive, Magnavox Amber Mono Monitor, Graphics Printer Interface, Super Heavy Duty External Cont. Duty Power Supply, AEA Comm PakRat Cartridge (For use with Pk-232), Fast Load Cartridge, Gorilla Printer, plus Other Software and accessories
Price: \$ 275.00

1 - Kenwood TS511 High Power HF Transceiver (NO POWER SUPPLY) VFO Shaft Bent - AS IS : \$60.00

Will consider trades for 2 meter equipment.

Call Dan Turner,
WA4BRO

Day: (404) 992-1181
 Eve: (404) 992-3900
 (Atlanta Dialing Area)

Articles

(Continued from page two)

1. Remember that we reformat text to fit our 4-column style, so don't bother trying to center or indent lines or paragraphs. Extra spaces have to be removed, which takes a good bit of time. In the same manner, try to use only one space between sentences, as these additional spaces also must be removed.

2. If you have tabular text (i.e., text in columns), don't try to format it with spaces. Include -- ONE tab between each column. Don't worry how it looks (as long as I'll get the general idea) because the tabs will all line up when Ventura reads them.

3. Charts and graphs can be scanned and printed. If you can submit them as DOS Autocad, GEM, TIFF or HP Plotter files, please do so on disk (or ZIPPed to the BBS). Otherwise, the best approach is to mail the image to us and we will scan it in. Include an SASE if you want the image returned. Generally, black and white pictures scan pretty well. I'll do the best I can with color; have some new software that should do pretty well enhancing it, but it's a tougher translation.

Hand-drawn diagrams are acceptable, but use your best drafting technique!

4. If your article is very long, consider either cutting it into sections that might be published over a few months (if this is appropriate), or marking sections that you wouldn't mind our editing if space is tight. The reality of the publishing situation is that it is usually feast or famine. We try to maintain a four page format (really 3 1/2 with the mailing fold) and really long pieces just don't fit too well. It may mean that we have to wait one or more months to fit it in, or we may have to cut it to get it in at all.

(Continued from Page 3)
Following these guidelines will help us get the paper out on time, and will help us continue to improve the quality of "Squelch Tales." Thanks in advance. 73, Joel

PS: This article was written for last month's newsletter when we had at least a minimal editorial staff. Until someone (please!!) steps forward to help do the newsletter, I'm afraid I can't guarantee that the newsletter will even get printed. But if enough information comes to me in usual form, I'll get it put together, so send it to me... Via Packet as mail to KE4SW @ WA4BRO, via modem as files or messages to Joel Ackerman on the TNT BBS (at 552-0TNT), or US Mail at 5503 Woodberry Circle, Marietta, GA 30068.

NFARL MEETING OF 6/12/91

Minutes by N4YAH

1.) Correction to the published minutes of last month; Joel will not be giving up his part of the newsletter.

2.) Minutes of last meeting approved as published in the newsletter, with the exception of item #1, above.

3.) The possibility of a club "net" on 2 meters was discussed. No determination was achieved.

4.) Al Stern gave out info on "Georgia State Games" on the Ga. Tech campus from 7/18/91 through 7/22/91.

5.) Dan, WA4BRO, discussed the need for higher club dues. No vote was taken, as this was only a discussion issue, however, \$30.00 per year was mentioned as reasonable, in light of the club's expenses. The breakout of the \$30.00 was discussed, i.e., maybe to cover all club activities, or, maybe part for membership and part for autopatch. Maybe \$20.00 membership, with

\$10.00 autopatch; maybe the reverse. It was stated that the membership should have facts and figures of club expenses (maybe published) and discussion of same. Dan advised that he would see to it.

6.) There was a round of discussion of "Why I joined the NFARL" and many gave their reasons, i.e., "enjoy the people" and "technical discussions" were the two reasons most given.

7.) Steve Knittel, KC4YBO, announced that there will, indeed, be a field day for the NFARL this year. He is running it and needs all the help anyone can give him.

8.) Lew Cason gave a quick review of the improved coverage of the repeater with the new antenna. He pointed out that he gets into it in Alabama and South Carolina.

9.) Gary, KE4ZV, gave the presentation on the subject of "SWR is your friend", with graphs and Smith Charts.

This space is reserved for all the stuff that ya'll were gonna send in, but never did. I didn't have any filler, which would also be nice.

Is anyone out there into drawing cartoons? They'd really liven up the paper... so would an occasional letter to the editor...

-73-

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