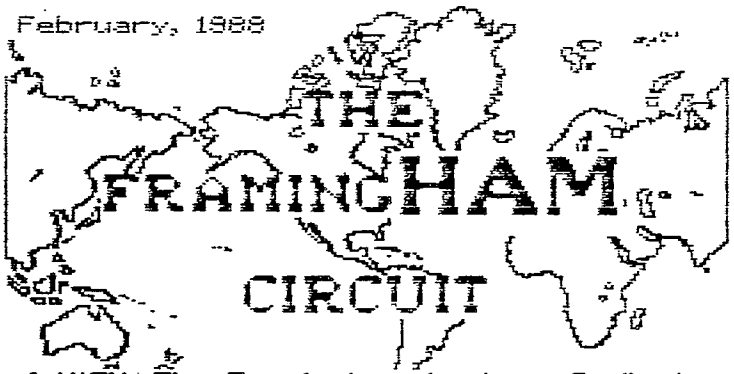
February, 1988



The Monthly Publication of W1FY, The Framingham Amateur Radio Association
F.A.R.A., P.O. Box 3005, Framingham, Ma., 01701 Volume 55 No. 2

Meetings

The club meets on the 1st Thursday of the month at 7:30pm at the Danforth Museum entrance on Lexington St., Framingham, Ma.

NEXT MEETING
FEBRUARY 4, 1988

From The Podium!

On a recent trip to Florida, Toby and I had an experience we would like to share with you. We were about to cross over the Florida line from Georgia when we came upon an accident with a man lying on the road with an apparent severe injury. We were one of the first vehicles on the scene and our motorhome is equipped with a CB and a 2 meter rig. We tried channel 19 and 9 with no success. Realizing the urgency of the situation I immediately started scanning 2 meter frequencies until I heard a QSO. With a BREAK! BREAK! I interupted and got the N4 station to call the State Police for assistance. I'm sure you have heard similar stories of HAMS assisting in times of emergency, but it is quite an experiencec when it happens to you. I don't know what the outcome was since we had to clear the area to free up traffic. We felt gratified that we had contributed as much as we could to someone's well-being.

I would like to thank our VP Don Morse, KA1MLM, for doing an excellent job of presiding over the January meeting and Dick Landau, W1IBN, for his efforts on banquet arrangements and also for volunteering to be Flea Market Chairman.

73's Burt, N1DDO

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MINUTES OF THE JANUARY, 1988
MEETING OF THE FRAMINGHAM AMATEUR
RADIO ASSN. INC.

The January meeting of the Framingham Amateur Radio Assn., Inc., opened at 1942 EST with Don Morse, KA1MLM, vice president, presiding over the meeting. President Burt Shaffer, N1DDO, was in Florida on a holiday trip.

The meeting began with a long discussion of the upcoming banquet. The discussion was opened because of the time factors involved and the need to make a decision.

Banquet Committee Chairman Dick Landau, W1IBN, and his YF (wife) Cheryl, did extensive research into the various restaurants available for the banquet.

The choices that Dick presented to the club included:

-- Indian Meadows in Westboro, which offered a choice of buffet-style or seated dinners and accesss to dancing.

-- The American Legion hall.

-- Chi Chi's, the Mexican food restaurant.

-- Wildwood, which was reasonable, but which can only seat 55 people and the dates were limited.

-- The Officer's Club at the Natick Research and Development Command (formerly Natick Labs), which offered only two dinner choices.

-- El Torito's.

The club quickly narrowed the choices to Indian Meadows and the NARADCOM Officer's Club.

Several polls were taken of the members to determine the following things:

1. The amount that the club was willing to spend per plate.

2. The type of dinner that was to be held.

Generally, it was agreed a price range in the $17 range was acceptable; the buffet style dinner was also okayed.

Several members asked for further explanations of the menu and a comparison

between sites and the committee obliged.

Altogether, it took more than and hour to reach the folowing decision: The membership voted to hold the club dinner at Indian Meadows in March. The buffet dinner was also favored.

With this decided, various reports were heard, including the Flea Market, Scholarship, and Education Committee reports.

One of the highlights of the meeting was the presentation of certificates of achievement to the latest group of Novice class students who have passed both the code and theory portion of the course. The list includes the folowing people:

Meredith Brassard
Peter Brassard
Carl Chellquist
Barbara Corley
Elaine Getter
Claire Ledder
Scott Ledder
Andrew Luke
Patti Luke
Catherine Simpson
Richard Sliney
Adele Sobel
Francis Towne
David Recchia
Richard Winchester
Robert Winchester

Those Novice candidates who have successfully completed the code portion of the course include:

Sidney Geller
Hairon Gil
William Rohde

Ed Weiss, W1NXC, Chief instructor and chairman of the Education Committee, expects everyone to have passed the theory portion of the course soon.

The meeting adjourned at 8:40 and Ed, W1NXC, gave us an interesting talk on electrical safety.

Respecfully Submitted
Marc Stern, N1BLH, Secretary

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THE SEASON OF VIOLENT STORMS IS HERE!

People may not realize it, but they already have a reliable warning system in their home. Television sets and portable radios make excellent tornado detection devices, according to a Perth County 4-H newsletter. If a radio is tuned to 550 khz, lightning will cause intermittent static. A tornado will cause continuous static. To use a television as a tornado detector, warm up the set, and tune it to channel 13. Turn the volume down, and turn the brightness control down until the screen is almost black. Switch over to channel 2 and leave the volume turned down. Lightning will produce momentary light bands of varying widths across the screen of a black and white TV set. Colored bands will appear across the screen of a color set: A tornado that is within 15 to 20 miles will produce a totally white screen, and will produce a single color in the case of a color set. Should this occur, switch off the set, take a portable radio and immediately seek shelter.

How does this TV detector work? Channel 2 has a frequency of 55 mhz. Lightning and tornadoes generate a signal near this frequency which overides the brightness control. Channel 13 is the high end of the vhf band and is therefore not effected. That's why the darkness must be set on channel 13!! The next time a serious storm threatens your area, try this trick. It just might save your life. (Thanks to VE3AMZ in Waterloo, Ontario.) (from QRZ November, 1987)

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Eliminating POOP from Packet

by Peter Eaton, WB9FLW,
and
Lyle Johnson, WA7GXD

Overview:

A lot of POOP has been discovered on packet frequencies across the nation and around the world! Indeed, in addition to its health and welfare implications, POOP is both unnecessary and oftentimes offensive.

While other four-letter acronyms have been used to describe the characteristics of POOP, it is hoped that POOP is sufficiently recognizable by packeteers to eliminate the need to express the others!

What, exactly, is POOP? How does one eliminate it? How can one help others to cause it not to be propogated? The answers to these questions form the basis of this paper.

POOP - What is it?

POOP is simply an acronym for Poor Operating On Packet. While it may evoke other thoughts in one's mind, the relationship betwen those other thoughts and poor operating practices is probably pretty clear and will not be further elaborated upon.

POOP - How does one eliminate it?

In order to eliminate POOP, one must simply not generate it. If it is generated, it will be passed onto packet channels, needlessly clogging them.

While there are many varieties of POOP, and it would be impossible to describe them all in this paper, several of the more obnoxious and prevalent forms of it are described.

Frog POOP

If you have ever been around a pond, you have undoubtedly heard the loud and constant noise put on by frogs. It seems amazing that so small a creature can make such a disturbance!

If you have ever monitored a busy packet channel, you may have probably seen plenty of beacon messages. Here again, a large disturbance may be caused.

Beacon features were included in TNC software in the early days of packet when staions were few and far between. Like the frog on the pond, the noises were made to attract attention of like species -- in this case, other packet stations. Unlike the frog, who settles down after he gets what he was looking for, many packeteers continue to send beacons, often on crowded channels.

Some packeteers contrive clever beacons, to sound bells, clear screens, or print multi-line declarations on the screens of all who can decode the beacon.

The proper rules governing beacons are simple:

1) Determine why you need to beacon.

Beacons declaring that you are unavailable, or on vacation, are perfectly useless and mark you as a real POOPer. If the information you are attempting to convey is important, perhaps leaving it as a message addressed to all on the nearest packet bulletin board station (PBBS) is a better alternative.

On the other hand, if you are living in tornado alley and see a funnel, an urgent beacon may be appropriate.

(In-search-of POOP)

If the purpose of your beacon is to let folks know you are around and want to connect, it may be better to just turn on the radio and let your TNC decode a few packets from other stations. This way you can see who is on and then simply send a connect request rather than a beacon.

Many new TNC software releases include an MHEARD function, allowing you to see the contents of a buffer containing the last several packet stations heard by your station.

If you are convinced that you must transmit without listening for a few minutes (or if the channel really does appear dead), dropping into UNPROTO mode (CONVERSE mode from COMMAND mode without first connecting) and typing a short CQ message (which may be as simple as a carriage return if UNPROTO is set to CQ) is preferable to beaconing one.

2) Compose the briefest possible beacon text.

Cute beacons that fill a screen, sound bells, or clear screens will only mark your station as obnoxious. It is a classic way to lose friends and increase your count of enemies!

3) Use the BEACON AFTER mode rather than BEACON EVERY.

If the channel is busy, one-way broadcasts (which is, after all, what a beacon really is) are not welcome. It's bad enough to try and maintain a connection through a digipeater or two without having having a channel clogged by transmissions from unattended stations that come on the air every few minutes. Beacon AFTER with a value of thirty minutes will assure you do not add to busy channel bedlam.

4) Don't send beacons more often than every thirty minutes, preferably less frequently. (TNC 1 and TNC 2 users, B A 180 is the recommended setting.)

5) Digipeat beacons with care!

Digipeating may cause a large number of local packeteers to be subjected to screens full of your beacon text. This may be desireable. Then again, it may not. Consider your motive and objective for your particular beacon, then set up the path.

Squid POOP

As Amateurs, we admit to occasional spelling errors. We meant Scwid (Sending CWID)...

Sending CWID is somewhat akin to using class B (spark) trans-missions on the lower end of 20 meters when the band is open. It's annoying and serves no useful function.

The CWID feature was included in earlier TNCs to help uninitiated masses of Amateurs identify a station that was making "packet racket." The decoder of the CW would (hopefully) contact the station sending the CWID and inform him of the strange noises eminating from his radio, upon which the proud packeteer would politely inform the bearer of the bad tidings that the noise was intentional. In the ensuing conversation and demonstration, another convert would be won over to the new way of communi-cating

Besides, the FCC once required a CWID every ten minutes or so!

Nowadays, the FCC has recognized our heretical behavior, packet is state-sponsored and CWID is no longer required of packet stations.

As a final note, most packet operation occurs on VHF, and everybody knows that most folks on VHF can't copy code anyway!

Bull POOP

Try entering a field containing a bull. While many bulls are mild mannered, some are very territorial and will chase you away.

The same is true of a packet BULLetin board station. Many are mild mannered, aware of other packet stations and the channel and content to share the channel with them.

Others, however, are not. They will chase you away unless you came to feed them.

They do it quite simply, and often are ignorant of their ferocity.

A skilled matador, however, can soon tame a ferocious bull. So can the operator of a PBBS tame his BULL.

The keys are TNC setup files. Most PBBS software contains a file (or files) describing the characteristics of the TNC(s) attached to the computer serial port(s). The magic commands are PACLEN, MAXFRAME and DWAIT.

If a PBBS is operating on HF, PACLEN should be fairly short, perhaps 40 or so. Since this parameter describes the length of the information field, not the header and control bytes, a setting in excess of 80 (the length of one line onmost computer displays) is probably the longest needed.

MAXFRAME can be the cause of a lot of useful bandwidth reduction. If the PBBS is on a channel shared by other users, MAXFRAME 1 is reasonable. We have heard PBBS's sending packets of many frames to stations that were having a hard time decoding anything, and the channel was reduced to usefulness for other stations. Similarly, we have often heard PBBS's on HF sending long packets of multiple long frames, getting and ACK on the first one only (if any), and repeating the process over and over. Computers are infinitely patient, but humans wanting to use the channel may not be!

DWAIT is perhaps the strongest medicine to apply to an overly possessive BULL. PBBS stations should set DWAIT to 320 milliseconds. For a TAPR TNC 1 running 3.x software, this corresponds to DWAIT 8;for a TNC 2 it is DWAIT 32.

If you are not the owner of a BULL, but venture into territory where one lives, you can help tame the beast! The folowing suggestions are highly recommended:

1) DO NOT DX A PBBS! In this case, DX means multi-hop digipeating to a PBBS on VHF.

2) Don't send the PBBS a command before it has responded to your previous command!

Hitting a key twice (or hitting it harder !) WILL NOT improve your chances of getting through! The nature of a packet system is that the message gets through accurately, or not at all. Sometimes it may take a while, especially if a digipeater or HF link is involved, but it will get through. If not, you will get a ***DISCONNECTED message.

Untimely POOP

POOP can't easily be made timely, but TNCs can! And TNCs that aren't timely can sure contribute to the level of POOP on a packet channel!

In the January, 1986 issue of PSR Quarterly, Tom Clark, W3IWI, made a convincing argument for the setting of the DWAIT parameter for all packet operations. His recommendations are:

User type	Time msec	TNC 1 DWAIT	TNC 2 DWAIT
Digipeaters	0	0	0
Keyboard Users	160	4	16
PBBS, Hosts	320	8	32
File TRansfer	480	12	48

Digipeaters wind up with the highest priority. Since these stations are the most susceptible to collisions, and generate the most congestion on a retry, they deserve first shot at an empty time slot.

Keyboard users, operating in a keyboard-to-keyboard QSO, generate little traffic. After all, one can only type so fast! They get the next priority.

PBBS and host stations generally produce a fair amount of data out for a little data in. Thus the keyboarder has priority geting into the PBBS, but the PBBS waits for other keyboard users before dumping what will probably be a longer packet onto the channel.

File transfers; generating the most data and hence requiring the most bandwidth, are requested to be more polite and give other users a fair shot at the shared channel. Thus, they are held off the longest.

Wide adoption of this scheme may not significantly reduce congestion on a channel, but it should help the channel operate on a fairer basis than otherwise.

Snake POOP

A snake has a fairly unique characteristic. A snake has no ears!

Too many packeteers seem to have the impression that, by connecting a TNC to the speaker jack on their radio, they don't have to have a speaker connected!

The results can often be observed. Excessive retries on a channel because the antenna isn't oriented properly, leading to multipath and poor reception. The other end of the link simply "goes away" for no apparent reason (unless you are listening!) The other station is over-deviating, or another user on another mode, or... And, on a shared-mode channel (or shared repeater), packet can get a bad name in a hurry!

Kangaroo POOP

A kangaroo jumps around. If you have long files to transfer, you should jump around, too!

A busy channel during the early evening hours is not the place for file transfers, automatic message forwarding or similar bandwidth-hungry procedures. What can you do? Jump off to another frequency, perhaps. If this is not feasible, set your alarm to 3 AM and jump to another time, eating up the channel then.

POOP - the final scoop

The ultimate means to eliminate POOP is to SCOOP! By means of the SCOOP, no one will ever be able to detect packet POOP emanating from your station!

SCOOP means Setting COrrect Operating Parameters. If you heed the advice to avoid POOP given above, this final measure will permit you to have a full clean-air rating!

Happy Packeting!

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Help Wanted!

Field Service Technician

CAD/CAM Textile Systems Manufacturer seeks computer wise field service representative. Extensive travel, working alone, in-house repairs when not traveling. Must have experience with DEC (PDP) and MS-DOS hardware. Good diagnostic skills and customer relations ability. Must show working experience in military/civilian electronics.

Contact Wayne Ledder. Work 359-5626
Home 533-8746

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The End!

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CLUB: Yonkers ARC
EVENT: FLEA MARKET
PLACE: Lincoln High School
DATE: 31 Jan. 1988
DEALER SETUP:
OPEN TO PUBLIC: 0900 untill 1500
ADMISSION: $3.00 Children under 12 FREE
TABLE PRICES: $10.00 for a 3 X 5 Table
TALK-IN:
REFRESHMENTS: Unlimited FREE coffee.
OTHER NOTES: The High School is on Kneeland Ave, Yonkers, N.Y. There is FREE parking. This is an Indoor flea market, with no Tailgating.
If you bring your own table the price is $1.00 per foot. Reserve space in advance, 50% deposit required when reservation is made, balance due at the door. one person admitted FREE with every five feet of table space. If you use the supplied tables a fully paid advance registration is required, there are a limited number of tables available. For further info call 914-969-1053.
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CLUB: Algonquin A.R.C.
EVENT: Flea Market
PLACE: Marlboro Middle School
DATE: 14 Feb. 1988
DEALER SETUP: 0800
OPEN TO PUBLIC: 1000
ADMISSION: $2.00
TABLE PRICES: $8.00 in Adv, $10.00 Door
TALK-IN: 146.61/.01 and 146.52 dir.
REFRESHMENTS: YES
OTHER NOTES: The Middle School is located on Thresher Street off Rt. 85 in Marlboro, Mass. Take Rt. 495 to Rt. 85 South (a Right of the Rt 85 Connector). At the first light at the top of the hill take a left onto union Ave. and then take the next left onto Thresher St. The Cutoff for Advanced tables is Sat. 6 Feb. 1988. For more info contact Dan. KB1WW at 617-481-1587, Make checks payable to the Algonquin Radio Club, P.O. box 258, Marlboro, Mass. 01752.
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CLUB: Northern Vt. Winter Hamfest.
EVENT: Flea Market and Auction
PLACE: Milton High School, Milton Vt.
DATE: 27 Feb 1988
DEALER SETUP: 0830
OPEN TO PUBLIC: 0900 untill 1500
ADMISSION: $2.00
TABLE PRICES: No extra charge to sellers

TALK-IN: 145.47- and 146.85+
REFRESHMENTS:
OTHER NOTES: The Milton High School is conveniently located on Rt. 7 in the village of Milton, 4 Miles north of exit 17 off I-89. Plenty of free parking Avail. There will be FCC exams Avail. (no per-registration is needed for exams) For more info call 802-879-6589 in the evenings.
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CLUB: York Winterfest
EVENT: Flea market
PLACE: Dover, PA.
DATE: 06 Mar, 1988
DEALER SETUP:
OPEN TO PUBLIC: 0800
ADMISSION: $4.00
TABLE PRICES: $10.00
TALK-IN: 146.37/.97 and 147.93/.33
REFRESHMENTS: YES
OTHER NOTES: The event is at the Dover Fire Hall, Dover, PA. There is FREE Tailgating and two floors inside. The XYL is FREE. For advance info. Write YORK WINTERFEST, 2449 Heidlersburg Rd. Gettysburg, PA. 17325, or call 717-528-8412.
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