

The Framingham Circuit

Newsletter of the Framingham Amateur Radio Association September 1997, Vol. 64, No. 9

In This Issue

President's Message
DX Cluster Node
FARA Flea Market
Getting Started in SSTV
License in a Weekend Notice
and more...

Thursday, Sept. 4

This Month's Meeting

Marjie, KA1HIA

Come to this month's meeting as Mark, WA1R talks antennas.

Submitting Material to the Circuit

Material may be submitted for publication by sending it directly to the editor. This can be done by phone, by US Mail, or via the Internet (preferred). The deadline for each issue is the Thursday, one week before the monthly meeting.

by phone
(508) 435-2055 (before 9:00PM please!)

by mail
Robert Hess, N1UVA

President's Message

Where did the summer go? All those ham projects in which I had all summer to do are still there. Like the reflector on my thirty-plus year old Mosley yagi that got twisted a bit during one of those late winter ice storms. Yep, it's still twisted a bit. Not too likely another ice storm will come along and straighten it out this coming winter. And there's also my G5RV that turned into a sloper during that April Fools 32" snow storm. It's still a sloper. Why should this year be any different. I'm sure I can wait until the first few flakes start falling and that biting wind comes along, then I know it's time to tackle those projects.

Flea's coming. The FARA Flea Market that is. Bring the whole family, bring a friend, bring the friend's whole family. But come, whether you're a volunteer worker, a seller, a buyer or just there for an eyeball QSO with an old repeater friend. Sunday September 28.

Know someone who might be interested in getting their ham ticket? Tell her or him about the upcoming License-In-A-Weekend. The masterful tutelage of Ed, WINXC, and his crack team of instructors will help get them prepared for the Sunday exam given by Dick, K1KTK, and his VEs. License-In-A-Weekend, September 19, 20, & 21. For more info, call Ed 881-2301. 73
Jim, W1EQW

Committee To Study Establishing DX Cluster Node

by Charlie, NC1N
nc1n@tiac.net

The FARA board has authorized the creation of a committee to investigate establishing a DX cluster packet node. There's particular interest in providing service to FARA members in our southern membership area, who are having a particularly difficult time getting or staying connected to the network.

After the committee develops a specific plan as to the hardware, software, and logistics involved, the results will be brought back for discussion.

If you would like to participate in this committee, please contact Charlie Ross, NC1N. The best way to contact him is via e-mail: nc1n@tiac.net. Or, you can call evenings before 9 PM at 508-533-7680.

FARA Flea Market

by Bev, N1LOO

Mark your calendar now for Sunday, September 28th, and come to the FARA Fall Flea Market. Look forward to many dealers with a variety of hamradio and computer goods. This is always a great day for all who attend. We are looking for vendors and buyers alike. Is it time to clean out your shack to make room for some new treasures? Why not get a table and turn your old treasures into hard cash? Are you looking for one more thing to get that project finished? If so, stop in and look on the 28th.

The flea markets are the club's main fund raisers for the year and we can use your support by working the day of the flea also. In exchange for you working a 2 hour shift you get free admission!! A great deal!!! If you can help on the day of the

Getting Started in SSTV

by Sumner, W1VIV
sweisman@gis.net

Amateur Radio Slow-scan television (SSTV) and I go way back. This mode has always fascinated me, because, instead of a 4.5MHz video bandwidth to send good pictures, all you need is a 2KHz audio bandwidth! I built my first SSTV monitor about 25 years ago. Instead of building it from scratch, I modified an old vacuum tube Eico 5 inch oscilloscope. That way, I already had the low voltage and high voltage power supplies, horizontal and vertical sweep circuits, and a chassis to mount everything on, saving a lot of work. I built up a solid state circuit board with all the decoding circuits on it, and replaced the original CRT which had a P1 phosphor with a surplus unit with P11 phosphor, a very long persistence. This came from an old radar PPI scope. As I recall, the old SSTV mode had a horizontal sweep rate of 8 seconds, and the long persistence was needed to keep the beginning of the picture from fading while the system was still writing the end of the picture. In a slightly darkened room, you could see pretty good picture. That is, if you didn't mind the fact that the entire picture was amber or green, depending on the phosphor you happened to have in your CRT.

Today, everything has changed for the better. SSTV is now all computer based, and all you need is a small amount of hardware and a decent amount of software. The hardware is an interface module to connect the audio output of your transceiver to the serial (RS-232) port of your computer. I built a clipper circuit using a common 741C op amp, which cleans up and squares the received pulses. Everything else is software!

The software I now use was written by Ben Vester, K3BC. I had been collecting his entire series of articles in QST, knowing that some day I would use them, starting with January 1994. There were more updates in June and December 1994, and July 1996. Ben is a nice guy, and has provided a lot of assistance and additional software and pictures to me by email. His next-to-latest version, rev. 1, (that's lower case L, not One) is available on the Internet. You can download it from the University of Oakland, which mirrors the ARRL BBS, at <http://oak.oakland.edu:8080/pub/hamradio/arrl/BBS/programs/>. (There's

lots of other great stuff there too.) His program is called Vester_1.zip, and is actually written in good old GWBASIC. Why not QBASIC? Quoting the author, "QBASIC is larded up with pull-down menus, etc, and uses 195kB of low memory, where GWBASIC occupies only 80 kB. New computers with higher speeds and large amounts of RAM change the tradeoffs somewhat, but there are still a lot of older machines around being used by hams." I like it because I find it easy to make changes and experiment with the program using GWBASIC. I'm not a software person, and it's the only programming language I ever learned. I'm rusty, but it's coming back.

K3BC has mailed me rev. m, which adds the capability of superimposing your call letters or anything else you wish to write on any picture. Both revs also have the capability to convert TGA, JPEG, PCX, and GIF, and TIF files.

Now the fun begins! Just tune to 14.230 MHz, where all the slow-scanners hang out. (The hams aren't slow, only their scan rates!) Most of the time, you'll hear a musical, chirping signal. A voice will break in and say, "I'll send the next picture in Scottie 1" (or Martin 1, the two most popular modes, or occasionally others.) Then you'll hear more chirping for a minute or two. Other hams in the round table will comment on the received picture, and then proceed to send their own. In the early evening, I often turn the beam toward Europe and receive lots of nice pictures, all in the Martin 1 mode. If you have a good VGA display, the pictures are in beautiful color with excellent resolution. They can be saved if you wish to look at them later or retransmit them.

What about going on the air with my own pictures? I haven't gotten around to that yet, but will do so this fall and winter. There's not much time for ham radio in the summer, when there are too many outdoor activities. I simply have to add a transformer to my circuit board, and all the rest is already in place.

SSTV is a fascinating mode that can bring lots of enjoyment to ham radio. I'm having fun with it, and will be getting further into it in the future.

Hamerick by, W1VIV

I got out of Slowscan TV - -
The reason seems valid to me;
Just hearing your voice
Is a pretty good choice.
It's your face that I'd rather not see!

FARA T-Shirts

Everyone must get their hands on one of Fara's official T-shirts with the club's "key" logo. They are available at the club shack. Cheap at \$10, most sizes available.

FARA Horizons

Sept 4: Monthly Meeting
Sept 19-21: License-In-A-Weekend
Sept 22: Board Meeting
Sept 28: Flea Market

FCC LICENSE IN ONE WEEKEND!

NO CODE REQUIRED!

**SIGN UP NOW FOR TECHNICIAN
HAM LICENSE CLASS**

Dates: Sept 19-21, 1997

Sponsor: Framingham

Amateur Radio Assoc.

Fee \$16.00

Info: Call Ed W1NXC 881-2301

Name:

Address:

Tel No:

**Return this form with \$16 fee
to FARA PO Box 3005 Framingham Ma
01705 --by Sept 5, 1997**