

The Framingham Circuit

Newsletter of the Framingham Amateur Radio Association April 1997, Vol. 64, No. 4

In This Issue

President's Message
Field Day Planning
Flea Market Needs Volunteers
FARA Needs Rohn 25 Sections
Food Suggestions Sought
Marathon Volunteers Needed
Mass QSO Party
Dues are Due!
and more...

Thursday, April 3

This Month's Meeting

Marjie, KA1HIA

Bruce Blain, K1BG will talk to us about what to look for at flea markets. How to find those hidden treasures and get the most bang for our buck!

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 Saturday following the FARA board meeting.

by phone
(508) 877-6933 (before 9:00PM please!)

by mail
Rick Commo, K1LOG

President's Message

The flea market is upon us and we can use your help to make this the best market yet. The flea market is scheduled for Sunday, April 6, 1997, at Framingham High School. If you would like to help please get in touch with Martin, AA1ON, and he will be glad to assign you a position. Or this will be a perfect time for you to clean out the shack of all the boat anchors that have been gathering dust for years. If you would like a table give Martin a call. Remember, tables for club members are half price!!

This past weekend, we had another successful License in a Weekend class.

The class netted 13 new techs and 6 more that have passed element 2!! Great job to all the instructors, VE's, and support staff for a great weekend. I think that the club has found a great formula for getting folks started in HAM radio. Thank you to all involved and congratulations to all our students!!

Believe it or not, Field Day is just around the corner and I know Dave and Martin have been busy analyzing all of last years data in order to come up with a plan for this summer. There are planning meetings for Field Day and all are invited to attend. Please, check the newsletter for the current dates and times. Last year was a great time and this year promises to be even better.

The Mass QSO Party is scheduled for May 3 & 4, 1997. I have heard of several different groups planning treks to other areas of Massachusetts for the event. I think that the club will be activated this year after a two year rest. We will need operators and you are invited to enjoy in the fun.

Also, mark your calendar on May 10, 1997, for our annual dinner out. As in the past several years we will be at the Bella Costa in Framingham and the buffet will be served again, back by popular demand. See flier enclosed. Don't forget to enter the contest on the flier, fill in the conversation bubbles and we will choose the best caption that night and the winner will get a really neat prize!!!

Have a great month and enjoy some of the many activities the club has to offer.

Field Day Planning

by Dave Hoaglin, K1HT

Planning for Field Day 1997 is moving ahead. Martin AA1ON and Dave K1HT have held two planning meetings. Several improvements have already emerged that should allow us to build on last year's outstanding effort and do even better this year. If everyone pitches in, we may be able to break the 10,000-point barrier! Two meetings are scheduled during April (both on Wednesday at 7:30 p.m. at the Club Shack). April 9 will be a working session, taking inventory of the items in the storerooms that we'll need for Field Day and testing equipment such as antenna rotators. On April 23 we'll firm up detailed plans for radios, antennas, tents, and all the other major equipment. Please mark your calendar and come join in the planning.

Our Field Day operation seems to have an insatiable appetite for tower sections! If

Flea Market Needs Volunteers

by Martin, AA1ON

FARA stills needs a few more volunteers to help at the spring Flea Market. Please give Martin a call or see him at the meeting - FARA can use *your* help.

FARA Needs Rohn 25 Sections

FARA is looking for Rohn 25 tower sections. The goal is to collect enough to fill FARA's Field Day needs and to be able to store them at the club. Having them stored at the club decreases setup and takedown times since the sections are all located at one spot. Our current situation is that someone has to drive to a number of different places to gather what's needed.

So if you know of any old (but in decent shape) sections lying around unused please contact Martin, AA1ON, or any of the club officers. The FARA board will even consider taking down unused towers for people in return for the sections.

Remember: "Rohn was built in a day!"

Food Suggestions Sought

FARA cook par excellance - Dick, K1KTK is asking for suggestions as to what to serve at Field Day. If you've ever been to Field Day and had a hankering for something that wasn't on the menu let Dick know so he can take it under consideration.

Marathon Volunteers Needed

Bob Salow, WA1IDA, is organizing the radio operators to support the BAA Marathon. He is looking for volunteers. If you can lend a hand please give him a call at 650-9440.

Dues are Due!

Each year the club dues come due on January 1st. Here is is April already and a lot of people still have not paid. If you still owe dues please send them directly to the club. Members not paid up by May will be dropped from the rolls and will no longer receive any mailings from the club.

Board Meeting Moving Back

Beginning in May the monthly FARA board meetings will be moving back to be the second Monday before the club meeting rather than the third Monday.

FARA License In A Weekend

Dick Marshall K1KTK
Director of Testing

What a superb effort was given to the License in a Weekend course given the weekend of 21-23 March!! The guys and gals who run this course, do the food and snacks and provide VE support amaze me every time we do this!! Makes one very proud to be a member of

You don't want to hear: "one more meeting"
But remember: "time is a-fleeting"
Dave and Martin will lead,
but help they will need!
Else our score will take quite a beating

FARA.
Members of this outstanding team were:

- Bev Lees N1LOO
- Jim Weckback W1EQW
- Ed Weiss W1NXC
- Mary Weiss KA1HGL
- Karen Brothers N1XAK
- Dennis Brothers KE6DPL
- Lee Gartenberg KA1USL
- Pete Simpson KA1AXY
- Lizzie Simpson N1XAG
- Rick Commo K1LOG

We had 1 Tech Plus (congratulations to N1XAK who not only passed her 5 wpm code but was one of the instructors), 13

- Teddy Ben Harav
- Joshua Burchard
- Carol Dossa
- Pritama Haeusgen
- Charles Howe
- Daniel Kronick (Age 11 - my Grandson!)
- Brian Maeder
- Marilyn McCormick
- Brent Otto
- Glenna Richards
- Russell Sandow
- Phyllis Smalley
- Richard Wiik
- Those passing Element 2 are:
Ronn Ben Harav
- Robert Dossa
- Jamie Gartrell
- Andrew Otto
- Nanci Shaffer

Congratulations to all and we look forward to some or all of the latter group completing their Tech License at the upcoming Exam Session at the Flea Market on April 6th.

Attaching PL259s to Coax

by John Broshnahan, W0UN
Submitted by Dave Hoaglin, K1HT

I was surprised at the number of private responses asking for more details and clarifications on my note on installing PL-259s. I also noted that my original posting had some minor problems, so I have decided to write up the entire procedure in a bit more detail. Hope it is of some use. If anything is still unclear let me know and I will revise my note.

73 John W0UN
Installing PL-259s on RG-8 or RG-213

Requirements:
1) Good quality coax with a high percentage of braid--96%. Also note that good quality coax has better control on overall diameter of the jacket. Some cheap brands have a jacket that is too thick and won't screw into the PL-259 properly.

blade

5) High quality, small diameter solder such as Kester 0.031 inch diameter Sn63/Pb37 (or 60/40) with a 282 flux and a 66 core--the critical part is the 0.031 diameter

6) A steel rule can be used for measurements but there is only one critical dimension and it can be determined from the connector body itself

7) Use decent cable cutters to cut coax to length. Cutters with semicircle blades that slide past each other. Radio Shack has some adequate ones for about \$5.95. The flat bladed cutters smash the end of the coax and take a lot of force. Real cable cutters make a nice, clean end and require little force.

Procedure:

1) Slide the outer shell over the coax first--nothing is worse than doing a great PL-259 installation and forgetting to put on the shell first!

2) Measure 1 inch back from the end of the coax and, with the utility knife, cut through the coax jacket, the braid, and most of the dielectric. Try not to nick the center conductors. You don't need to cut all the way through the dielectric, only 80 or 90% of the way. If you hit the center you can feel the drag of the knife increase. The 1 inch dimension is not too critical since the center conductor will be trimmed later--just make sure it is at least 1 inch.

3) Slide the 1 inch piece of jacket and braid off the cable. Take the dielectric and bend it from side to side a bit to break the last bit of uncut material and pull the dielectric off. This can get a bit tricky depending on the brand of coax--on some coaxes the dielectric is held to the center conductor better than on other brands. The dielectric wants to spiral since the center conductor is stranded. You can use either gas pipe pliers and unscrew the dielectric or you can make a little

main length of coax at least 18 inches away from the end. If the coax is held too close to the end there is a tendency to have the jacket and braid slide back from the end--exposing more of the dielectric. When the jacket and braid are removed properly, the remaining braid and jacket should remain flush to the end of the dielectric.

4) Measure back 1/2 inch on the remaining jacket and very carefully cut through the jacket in a circle around the coax without cutting into the braid. This involves a certain amount of "feel" and "finesse". With a sharp knife the jacket cuts like butter, but the braid has drag. It takes a very light touch to cut the jacket without cutting into the braid. How tight the jacket is on the braid is a function of the manufacturer and the day on which the coax was made. If the jacket is loose then just slide it off the braid without disturbing the braid. If the jacket is held tightly onto the braid (i.e., the process temp was higher and the jacket tended to melt into the braid a bit) then make a lengthwise cut in the 1/2 inch piece of jacket so that the jacket can be peeled from the coax without disturbing the braid. The key part here is to remove the jacket but to keep the braid intact so that it stays woven and tight to the dielectric.

5) Check again to make sure that the shell has already been placed on the coax!!! Screw the body of the PL-259 onto the end of the coax very carefully in order to make sure that a) all 7 strands of the center conductor come out the hole in the center pin and b) the braid is not disturbed. The braid should go past the solder holes in the connector body and the dielectric should bottom out on the Teflon part of the PL-259. Check to make sure that each of the four holes has intact braid inside. If things don't go perfectly it is possible to rotate the connector body a bit until all of the holes show full braid.

6) Using a hot soldering iron with a small

tip, try to heat the braid in one of the solder holes without heating the PL-259 body until the braid is tinned in the hole and then start heating the shell so that it takes solder and add just enough solder so that the inside of the hole is filled but no solder is on the outside of the connector body. This first hole is tough since the body is cold--the result may not be as pretty as one desires but this first hole can be touched up after the other holes are soldered and the connector body has gotten warmer. Proceed to the next hole and try to tin the braid before the solder starts to melt onto the connector. A good connection will have a nice dimpled look to it--shiny and smooth, filling the hole but with no extra and a bit of sunken look since the solder has wicked into the braid.

7) Once the braid is soldered in all four holes, quickly slide the shell over the body and partially screw it onto the threads of the body. This will help to heat sink the PL-259, cooling it down faster. Note: the center conductor has not yet been soldered. It is left for last so that the hot air generated while soldering the braid can escape--otherwise you have a lot of bubbling at that fourth hole when doing the braid.

8) Using sharp cable cutters, cut off the center conductor flush to the end of the center pin on the PL-259. Heat the center pin and center conductor simultaneously and solder--allowing the solder to wick inside the center pin. With finesse one can make a bit of a solder bubble on the end of the center pin. Try not to get solder on the outer part of the center pin. If you do, use a rag to wipe it off while the solder is still in the liquid state. With good cable and connectors and the right tools it is possible to install PL-259s in only a few minutes. Knowing how hard PL-259s have been to install you can now sit back and admire the beauty