

THE ZARC CARRIER



The Newsletter of the Zanesville Amateur Radio Club

The man from MARS: ham radio buff helps airmen and families keep in touch - Ray Scheffler and the Military Affiliate Radio System

Airman, Feb, 2003 by Capt. Carrie A. Seydel

Communicating with MARS isn't what it used to be.

When Ray Scheffler started patching morale calls through the Military Affiliate Radio System more than 40 years ago, the Vietnam War kept him busy.

"E-mail access and cell phones have cut down on our morale calls," he said. "And about one-third of the calls MARS volunteers patch through are official."

In those days, connecting more than 100 calls a day to stateside families wasn't unusual. Today, Scheffler--known as AFAIEN on the radio--sees much less traffic, just 100 to 150 patches per week.

The system gives airmen, sailors, soldiers and Marines the chance to place free five-minute phone calls home from overseas, military aircraft and ships.

Scheffler and other radio operators provide the "phone patch" that connects phone lines to radio equipment. Using designated high frequencies, the radio link acts as the long-distance carrier.

Although 3,000 people are part of the radio system, Scheffler and his wife, Jean, are two of 26 volunteers qualified to patch calls through Air Force designated frequencies for up to 18 hours a day. Jean is the only woman working on the military network.

Though free and appreciated, the system isn't automatic and not exactly private. It's not like making a phone call. The radio operator must flip a switch to change the person talking. And the person talking must say "over" when done speaking. That's the signal for the radio operator to toggle the switch.

"We hear both sides of the conversation," Ray said.

Over the years, Ray's accumulated countless stories. One he remembers was a patch to NASA from a helicopter clearing the coast of Florida for the space shuttle. And several were from fathers wanting to hear their newborns' first cries. Even survival school students have used Ray's skills to call back home from field radios while traipsing through the woods.

Ray, a retired Air Force Reserve lieutenant colonel, has been there during tough times, too. The World War II B-24 Liberator pilot--with 51 combat missions under his belt--has helped aircraft with radio problems or that needed refueling. And he recently helped a C-130 Hercules crew out of a jam.

"When we discovered our airplane had severe rudder damage in flight, Ray patched us through to the right agencies," said Capt. Nathan Allerheiligen, a C-130 pilot with the 61st Air-lift Squadron, Little Rock Air Force Base, Ark. "He held the line open and re-routed our phone patch requests through other frequencies. He was a lifesaver."

Jean's seen her share of excitement too. She patched through a conversation between a mother in a stateside delivery room to the airman daddy overseas.

Through the years the couple has dealt with serious issues--and some that were funny. Like the woman who passed out when Jean patched through a call from Vietnam.

"I told her I had a call from her son," Jean said. "Then I heard her fall. The next thing I know, the husband was on the phone asking, 'What did you tell my wife?'"

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The Peanut Butter Jar

By Dick Kelly, W6BKY

Have I mentioned that, for several years, my home was a sailboat? Well, it's true. Living aboard a sailboat on the California coast is a wonderful lifestyle, and I'm happy to have had the opportunity to do so.

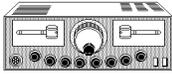
One day during the summer of 1980 (good heavens, was it really twenty years ago?!) I had a few people aboard for an outing on San Francisco Bay, and a woman remarked: "How sweet, you keep peanut butter aboard for your kids." While it's true that the peanut butter was available to kids, or to anyone who appreciates the virtues of peanut butter, the real reason I had it aboard was that I love the stuff. Peanut butter is high in protein and contains no cholesterol. Not only that, it is cheap, requires no refrigeration, and when mixed with various other foods, makes a quick meal. What more could you ask of your groceries?

Having said all that, what is r-e-a-l-l-y neat about peanut butter is the jar it comes in. It almost always comes in a large-mouthed jar that, when emptied and thoroughly washed, can serve many useful purposes around the Ham Radio station and workbench. (You were wondering what all this had to do with tinkering, weren't you? Well, now you know.)

Perhaps the most obvious, and one of the most useful tasks served by peanut butter jars is that of storage. I have dozens of peanut butter jars of various sizes holding nuts,

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THE ZARC CARRIER

The Zarc Carrier is the newsletter of the Zanesville Amateur Radio Club, located in Zanesville, Muskingum County, Ohio and is published January, March, May, July, September, and November.

Send in your items of ham related interest, such as swap n shop ads, new hams in the area, birthdays, anniversaries, silent keys, ham fests, special events, and original written articles. Deadline is the first of the month before the month to be published. Enclose a SASE if your material is to be returned to you.

Any material in *The Zarc Carrier* may be reprinted as long as you give credit to the newsletter, the original author, and the original publication, if given.

Sample copies are available upon request and a SASE. If your club receives a complementary copy of *The Zarc Carrier*, we would appreciate a copy of yours in exchange.

ZARC MEMBERSHIP

The Zanesville Amateur Radio Club is an incorporated not-for-profit association. Membership is open to anyone interested in the purposes of the organization and who agrees to abide by the by-laws and other rules and regulations that may, from time to time, be established by ZARC.

ZARC Membership Application

Date New Membership Renewal

Name Call Sign

Address

City, St, Zip

Phone ARRL Member - Yes No

Prorates apply to new memberships only. Jan-Mar Apr-Jun Jul-Sep Oct-Dec

- Full (*Licensed Amateur*) ... 20.00 ... 15.00 ... 10.00 ... 5.00
- Family (*Of Full member—Licensed Amateurs—1st person, then \$5.00 for balance of family*) ... 10.00 ... 7.50 ... 5.00 ... 2.50
- Junior (*Licensed Amateur, 16 yrs. old or younger, still in school, not in same household as Family member*) ... 6.00 ... 4.50 ... 3.00 ... 1.50
- Associate (*Un-Licensed*) ... 10.00 ... 7.50 ... 5.00 ... 2.50

If Family Membership, Name and Call Sign of Full Member:
.....

E-Mail Address

Share E-Mail Address With: Members Only Anyone No One

Send ZARC CARRIER by: E-Mail (Adobe) USPS

Make check or money order out to ZARC and mail to:

Don Wahl, WA8BOV, ZARC Treasurer, P. O. Box 8203, Zanesville, Ohio 43701-8203



ZARC Net Control Stations

The Zanesville Amateur Radio Club 2 meter net meets every Wednesday night at 9 PM on 146.610 PL 74.4. The PL and time out are off during the net. All licensed Amateur Radio operators are welcome to check in.

June 2007

6th Mary Grandstaff, KB8ZXH
 13th Sonny Alfman, W8FHF
 20th Danny Grandstaff, KB8RIM
 27th Zippo Gillogly, K8CYN

July 2007

4th Mary Grandstaff, KB8ZXH
 11th Open
 18th Danny Grandstaff, KB8RIM
 25th Zippo Gillogly, K8CYN

Any ZARC club member is welcome to take an *Open* week as net control. Let me know that you are interested and I will see that you get a copy of the ZARC Net Preamble and assign you a Wednesday. Danny Grandstaff, KB8RIM, zcw8zzv@prodigy.net or 740-453-0400.

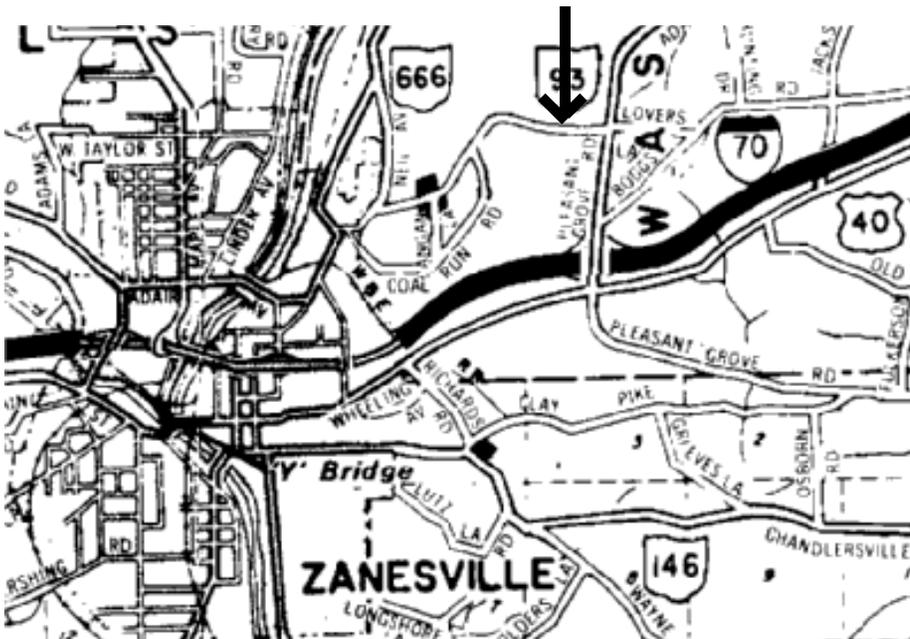
Printing Donated by Dan's Barber Styling, 819 Linden Ave., Zanesville, Ohio

The Armstrong Radio Repeater System

	<i>Licking County</i>	<i>Muskingum County</i>	<i>Guernsey County</i>	<i>Perry County</i>
VHF	146.835	147.075	147.000	146.820
UHF	443.925	442.250	444.375	none
PL	91.5	91.5	91.5	100.0

ZARC Meeting Place

From Rt. 40 at Pleasant Grove Rd. go north (Rt.93) on Pleasant Grove Rd. 1.1 mile, turn left on Adamsville Rd. and go about 0.3 mile. You will see a building on the right with multi-antennas. Stop here. Coming from Underwood St. go north on Hall Ave. from the traffic light about 2.5 miles and the building is on the left. Call in on 146.610, pl 74.4.



Area 2 Meter Nets

Sunday

147.045 Coshocton 9 PM

Monday

146.730 New Philadelphia 8 PM
 147.030 Lancaster 9 PM
 145.230 Coshocton 9 PM

Tuesday

146.760 Columbus 7:30 PM
 146.850 Cambridge 8 PM & 8:15 PM
 146.670 Millersburg 9 PM
 146.880 Newark 9 PM

Wednesday

147.345 Logan 8:30 PM
 146.610 Zanesville 9 PM
 147.210 Wooster 9 PM

Saturday

- * New Lexington 8 PM
- * © Multi-County Coalition 9 PM
- * The Armstrong Radio Repeater System
- © Alternate Frequency 146.610

Other Area Nets

Daily

147.240, PL 179.9 Columbus 7 PM

Wednesday s

- 1st - 8:30 PM 146.460
- 2nd - 8:30 PM 52.540 Simplex
- 3rd - 8:30 PM 28.390 SSB
- 4th - 8:30 PM 24.980 SSB
- 5th - 8:30 PM Wildcard (Any of the above)

Thursday

ZARC Six Meter Net 9 PM
 51.135 FM Simplex

Friday

Johnny Applesced 9 PM
 28.450 USB

Multi-County Coalition N C S

- First Sat. - Licking County
- Second Sat. - Guernsey County
- Third Sat. - Muskingum County
- Fourth Sat. - Open
- Odd Fifth Sat. - Coshocton County



Ohio Section News

By *Joanne Solak, KJ3O*
 Affiliated Clubs Coordinator
June 2007 News



Smokey Mountains Message

ALWAYS REMEMBER HAMVENTION IS OHIO'S BIG TREASURE

The eyes of our amateur radio community were on Dayton in May. The 56th Dayton Hamvention, like the others before it, is always sure to be a part of all radio amateurs dreams. Dayton gives you the chance to meet many ARRL officials whom you do not get the chance to meet much of the time. There is the Great Lakes Division Reception Area where, I'm sure, you will meet many friends and made new ones. I had planned to be a part of Hamvention this year - especially since the theme in 2007 was all about clubs. But plans have a way of changing, and mine had to be changed. I do hope all of you had a wonderful time at Dayton, found lots of goodies, met lots of friends, and came away with lots of good information. Hope you found the ARRL Expo 2007 a showcase to remember. I can't wait to get all the NEWS about the entire weekend!

I was very glad to hear that Amateur Radio Operators played such an important part in the Kansas Twister in Greensburg May 5 & 6th weekend. The town lost so much that weekend. A team of amateur radio volunteers arrived in the town Saturday morning and set up communications.

Effective May 14th., the United States Post Office raised the rate of first class mailing from 39 cents to 41 cents. This is another reason to utilize the internet for sending news bulletins to members and all others on your mailing lists.

Remember Field Day coming up June 23 & 24th. Some clubs treat Field Day like a "contest event" and others use it as an emergency communications exercise, and others use it as "both". Still, it is an all around "social gathering" no matter which way you call it. There is always the good food you seem to "find" at most Field Day sites each year. Remember you still have time to order your Field Day tee-shirts and pins for those participating in your club's Field Day event.

As usual I want to remind you to check with your secretary and make sure the annual report form has been filed with Headquarters. I want to congratulate those clubs that have been keeping current with their SSC renewals also. Check and make sure I am on your club mailing list, it makes renewals so much easier if I receive your bulletins and can just "sign off" for renewals since I have all the information I need to renew your status.

I guess everyone is enjoying the beautiful warm weather and making their plans for this year's Dayton because news has been scarce and the Club Spotlight information just hasn't arrived here. I waited a couple of extra days but "nothing" and I know I have several Clubs sending me their information. So those of you who want to be Spotlighted here in the Section News, get your information to me by the 10th of June for the July Section News.

Well, I guess that's it for this time around. Hope Dayton was a success for all of you! Remember, sometime, somewhere, when you least expect it, I will be seen' YOU. Until then, Enjoy your Freedom and God Bless our TROOPS! Best 73, Joanne, KJ3O, ACC OHIO

*The Ohio Single Side Band Net meets 3 times a day
 (10:30am-4:15pm-6:45pm) on 3.972.5MHz.
 Why not join in on the fun and learn to pass formal traffic.*



Happy
 Father's
 Day
 June 17th

Hello to Lynn, Sonny, Billie, Bryce, Dick, Bruce, Joe, Chad, and any of the other CARA folks that stopped by to visit with Jim (WE8W) and myself at the Four Landers (W4NH) base of operations at the Dayton Hamvention flea market.

Truly good to see the Cambridge folks each year and catch up on things when we make the annual Hamvention trip. Also got to see a few of the folks from Zanesville and drank a few 807s with Phil (KJ8N) who set up camp right behind us.

Well, W4NH is now preparing for the June VHF contest effort and we will again be operating from Soco Bald (5500' el) in NC. Will be running unlimited multi-op again with all bands from 50 Mhz through 5 Ghz. Getting all the equipment packed now and tower trailers about to hitch up.

I've attached a couple of pictures from last June so you get an idea of how mountain toppers really do this and how beautiful it is to operate from on top of the Smokey Mountains just about 10 miles east of Cherokee, NC. Those of you that enjoyed VHF contesting at W8VP many years ago would really enjoy the high altitude of Soco Bald.

Be sure to visit our web site sometime at www.fourlanders.org to see more pictures of previous contest activities.

73 to all
Ron Rogers
 WW8RR
 (ex WB8ERB)



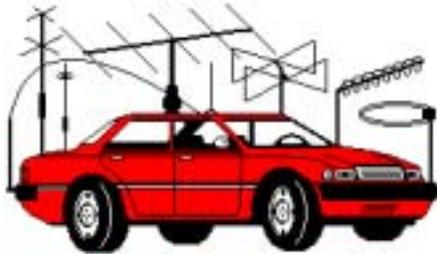


Handihams Courage

From the Handi-Ham E-Letter, October 20, 2005

Dear Elmer

Elmer gets feedback on antennas for mobile use: Dear Elmer, Nice article regarding mobile antennas -- but I have to mention a reason NOT to go with a trunk mounted antenna -- though I have done it on a number of installations. The roof mounted antenna (magnetic or drilled hole) is MUCH better for RF Safety -- and the extra height of the antenna can make the difference when you are not in a "saturation zone." It may also reduce the need for the high power setting on the rig. I prefer the roof shield to preserve whatever intelligence I have left, rather than having an antenna at head height on the trunk (only a few feet away from heads on most vehicles). With the new emphasis on Maximum Permissible Exposure (MPE) in the exams, maybe that would be a future topic for you to address and you could introduce the trunk mounted antenna as a source of increased exposure. Maybe a caution to use the low power setting on the 35W 2M (worst frequency for RF exposure) rigs more often, ESPECIALLY for those of you using a trunk-mounted antenna. What about your passengers in the back seat -- who are even closer to driver? A kid in a rear away! Oops... good work! I always have to say... Bill Courage North worried about drilling place" -- I always and drill a small pilot passenger single metal surface then finish the job by drilling the 3/8" hole DOWN from the top. The coax can go down the same path the power for the light comes up -- or easily fish coax between the headliner and roof panels to under the plastic covering the windshield window post to get under the dash, where the radio is often mounted. OR, to the floor and then under the carpet to a center console, etc. PPS: Though I am comfortable with drilling a hole in the roof, I use a mag mount antenna on my Tahoe SUV (car washes and municipal parking garages dictate the mag mounts use) and route the coax off the roof by attaching it to the roof luggage rack, then UNDER the weatherstripping for a better seal. You can write to Elmer with your questions, which he may or may not answer here, but it's worth a try!



the RF source than the car seat could be only 3' Anyway, keep up the enjoy reading what you Vokac -- K9BV -- Instructor PS: For those a hole "in the right take the dome light down hole UP from the compartment through the usually found there --



Zanesville 1913 Flood

Multi-County Coalition Meeting

From Lyn Alfman, N8IMW

The next MCC meeting will be held on Sunday, July 15th at 2 PM in little pavilion #4 near the "duck pond" (city lake) at the Cambridge City Park in Cambridge, Ohio. The meeting will be a covered-dish picnic. Bring your family and / or guest. Hamburgers and hotdogs will be provided.

Directions:

Going south on I-77 take the first Cambridge exit (US 40). Turn right. Go several miles. At the second traffic light turn right onto Steubenville Ave. Turn right onto Eighth St. Go just past the City Park sign and turn right into the park. Pass the covered bridge on left. There will be two pavilions. We are the smaller one.

Going north on I-77, take the Cambridge exit, not the Old Washington exit. Turn right, go 5 traffic lights and turn right onto Eleventh St. which turns into Clark St. north of Steubenville Ave. Turn right onto Eighth St. Then follow directions above going past City Park.

Going east on I-70, take Rt. 209 exit, turn left. Go north on Southgate Parkway 6 traffic lights. Go slightly to the left and proceed on W. Eighth St. (west side of courthouse). Turn right, then almost immediately to the left on N. Eighth St. Then follow the directions above going past City Park.

Going west on I-70, turn north on I-77 and take the Old Washington exit and follow directions above for Old Washington exit.

For a map and more look on www.w8vp.org/mccannouncement or <http://zarc.eqth.org>



Air Force MARS *From page 1*

Jean also laughs when recalling her exchange with a Southern woman with a heavy drawl. "When I told her she had a three-minute limit, it took her a while to tell me, 'I not only talk slow, I listen slow too,'" she said.

The Schefflers love their volunteer work. And depending on conditions, they can connect almost anyone with a phone or a radio, anywhere on the globe. And all it takes is the flip of a radio switch.

Ray knows where to point his antennas--depending on who he wants to talk to across the globe. And he has charts that show him the short and long path to get the right radio beams. Beams that connect people regardless of their locations.

"Most of the people we've run phone patches for say our equipment sounds better than other agencies they talk to," Ray said. "I think they're pulling our leg a little bit because this is just amateur equipment."

A 40-year amateur? Not likely. Because from antennas to receivers, it's evident this hobby-gone-haywire surrounds the Schefflers.

It all started in 1959, when the couple's oldest daughter, Vicky, joined a radio club at school. Then, when Ray's Reserve unit encouraged all licensed amateur radio operators to get qualified in the military program, he jumped at the chance.

Now, with more than \$30,000 worth of equipment, the 10- by 12-foot room the Schefflers operate from looks like a radio station control room. Letters, cards, unit patches and mementos cover the walls. Evidence of many thanks for years of assistance.

The radio system, sponsored by the Department of Defense, has been around a lot longer. It evolved from the Army Amateur Radio System, which served a similar role from 1925 through to the start of World War II. In 1946, the present system went on line. Amateurs weren't allowed on the air during the war.

Now, each branch of the services operates and manages its own part of the program. Running it are licensed amateur radio operators. These ham operators contribute to the system's mission, providing auxiliary or emergency communications on a local, national and international basis as an addition to normal communications.

Our mission is to back up for the Air Force's MARS communication system," Ray said. "We patch for morale."

The Schefflers don't plan to quit patching any time soon. They consider themselves part of a group of dedicated fellow radio amateurs participating in meaningful public service. And they enjoy knowing that their linking of families and friends enhances airman morale.

And over the years not only have they made lifelong friends, some of the people they've patched have visited the couple in their Shelbyville home, just south of Indianapolis. That's reward enough for what they do.

"The happy voices are the best," Ray said. "Hearing little kids talk to dad. Sometimes the kids talk better than the adults--and remember to say 'over.'"

Find Articles.com



The Peanut Butter Jar *From page 1*

bolts, screws, resistors, coils, capacitors, relays, and many other small parts. Useful as they are as storage devices, there are other, more exotic uses for peanut butter jars. I will share a couple with you, and I'm sure you can come up with additional uses for these wonderful castaways. In 1991, when I bought my current QTH, I was truly shocked by the sticker price on real estate. My dream of an expansive antenna farm soon wilted and died in the face of asking prices for houses along the California coast. I know, there are less expensive places to live, but I like the Southern California coast; what can I say?! In any event, the XYL and I finally settled for a small house on a tiny lot in Ventura. This is definitely NOT the ideal place for an antenna farm. There is hardly enough room for a modest antenna garden. My first antennas were two attic dipoles for 15 and 20 meters with a common feed point. These worked out surprisingly well until the end of the sun spot peak, then I began hearing fewer and fewer signals. To make a short story even shorter, I decided to erect a vertical for the low bands (160 through 30 meters). Verticals have a relatively small footprint, and are ideal for small areas. The vertical, by the way, works great, even on 160 meters, which brings us to another use for the peanut butter jar. My vertical is about 50 feet tall. It's what I call my "Hardware Store Special", and is fabricated from (mostly) galvanized iron pipe. The antenna swivels at about the twelve foot level, and can be lowered so it rests on my roof. This allows me to tinker with the upper sections. With an impedance matcher (sometimes called an antenna tuner) I got great results on 80, 40, and 30, by simply feeding the base of the antenna with 50 Ohm coax. 160 meters, however was a different

story. My best DX on 160 was Colorado. Through trial and error, I discovered that I could work the East Coast of the U.S., Canada, Mexico, the Caribbean, and Japan if I added a loading coil at the base of the antenna. The problem is that the loading coil had to be switched out of the circuit for all bands except 160. I accomplished this with a simple jumper and alligator clip. This, of course, required going into the back yard to change the jumper. During the long Southern California dry season this is no problem, but it does (occasionally) rain in the winter, so I decided to install remote switching at the base of the antenna. The simplest and easiest way to do this is to install a relay, but this requires weather-proofing of some sort. Enter: PEANUT BUTTER JAR!

I mounted a relay on a piece of sheet aluminum cut to fit the under side of the peanut butter jar lid. I used weather-proof feed through connectors for RF and the relay voltage. The lid is screwed onto the jar, then sealed with caulking (I used some marine grade caulking left over from my boating days). The jar is mounted "bottom-side-up" near the base of the antenna and, presto!, I have my weather-tight relay for switching 160 meters in/out of my vertical antenna feed point.

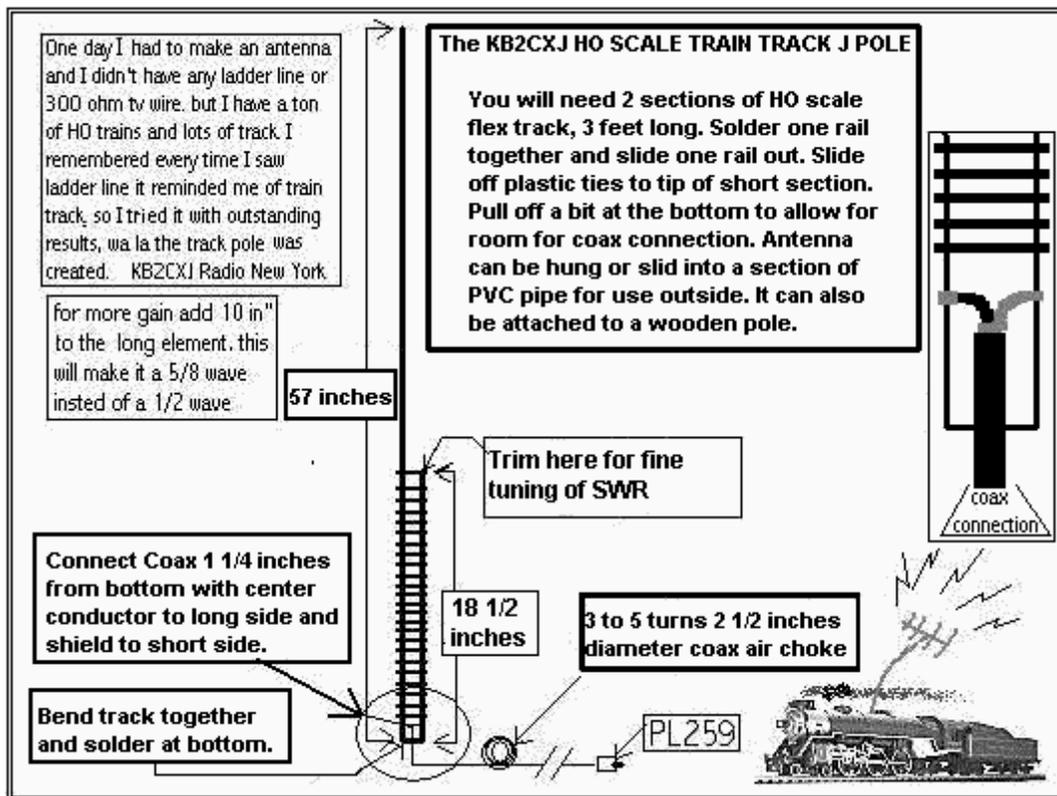
Speaking of 160 meters, loading coils, etc., my very first 160 meter antenna was an indoor random wire. At the time, I was living in an apartment in the San Francisco Bay area. The apartment had no attic, but it did have about 4 feet of crawl space above the ceiling. I wound about 60 feet of wire around the crawl space, then down through a hole in the ceiling to the rig. I used wire salvaged from deflection coils in a discarded TV set. Sixty feet is a puny antenna for 160, and a loading coil was required, but I had no large coil stock on hand, which brings us to yet another use for peanut butter jars: as forms for large coils.

I always have an empty peanut butter jar, or two, on hand, so I selected the largest one I could find and wound insulated copper wire around it to fashion a coil. The wire I used was ordinary household wiring, probably about #14. No, I didn't take it from the apartment; it was scrap I had found at a construction site. I removed insulation from several spots to serve as taps to provide for adjustment, then secured the wire to the jar with tape. "What was the inductance of the coil?", you might want to know. I have no clue. I simply would all the turns I could get onto the jar, thinking that, for 160 meters, I needed all the inductance possible. Wonder of wonders, it worked!. "How well did it work?", you might ask. Actually, this simple, quick, and cheap antenna did surprisingly well. Reviewing my log, I see over 40 different stations worked on 160 meters during the first week. Not too shabby for an

Continued on page 8

The KB2CXJ "TRACK POLE"

Al...KB2CXJ "Radio New York"



Footnote: Ho scale track is equal to 16.5mm wide or .649 inches

Editors note:

Al really shows us how a dedicated ham radio antenna experimenter is constantly looking at our world around us and seeing an antenna in just about anything that is conductive!

Al is the engineer of this train and he has the tracks to prove it!

I have just one question....

What happens to the train when it reaches the end of the line and runs out of track? No more SWR?

ALL ABOARD!

73

Hamuniverse.com

ELMER

by Rich Regent, K9GDF



Peanut Butter Jar

From page 6

antenna that cost practically nothing and required only a couple of hours to build and adjust.

Want more used for the peanut butter jar? OK, how about a deluxe, water cooled dummy load. Actually, the peanut butter jar is not the load, it just contains the dummy load. Here's how it works ...

First of all, you need a rather large peanut butter jar if you are going to be using your dummy load for up to 300 watts, or so. For QRP, the jar can be much smaller. I'll give details for the QRO (high power) version, then you can scale yours according to your own needs. The peanut butter jar I use is about seven and a half inches tall and about four inches in diameter. Be sure both the lid and the jar are thoroughly clean.

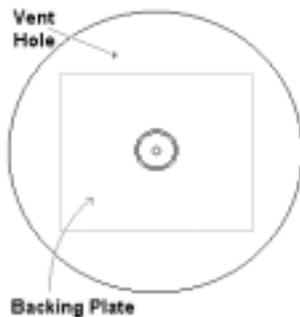


Figure 1

Mount a female coaxial connector in the center of the lid, as shown in Figure 1. Notice the backing plate. Lids are very thin sheet metal, and must have some sort of backing for the Coax fitting. I used a piece of scrap aluminum about one sixteenth of an inch thick, cut to fit the under-side of the lid.

Poke a small hole somewhere in the lid for venting of gas. (A nail makes a nice punch for poking holes into peanut butter jar lids.) Remember, you may be pumping up to 300 watts of RF energy into this thing, so heat will build up if you use it for more than a few seconds.

Two electrodes are required for the dummy load, one connected to the center conductor, and one connected to the shield, or "ground" side of the coax connector. See Figure 2. The electrodes must have a relatively large surface. There are several methods that can be used to fashion the electrodes; three are shown below.

- 1) Strip the shielding from RG-8/U coaxial cable, flatten it, then coat it thoroughly with solder.
- 2) Use strips of aluminum or copper.
- 3) Solder several pieces of bare hook-up wire together in parallel, or use large stranded wire about #12, or so.

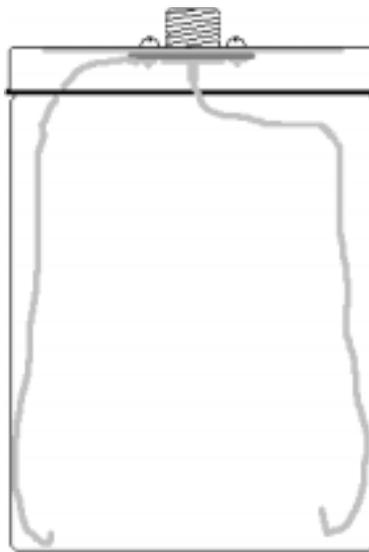


Figure 2

I used a salvaged grounding strap from old TV sets for the "ground" electrode. The strap is very thin (about the thickness of a soft drink can), about three-eighths inch wide, and long enough to reach the bottom of the jar. I suppose strips cut from a large soft drink can serve if you remove the paint or dye (or other covering) from the can. For my other electrode (the one that is soldered to the center conductor of the coax connector) I used two pieces of stranded copper wire, thoroughly covered with solder. "Why didn't you use a salvaged ground strap for the center conductor electrode?" you might want to know. Good question, and here's the answer ...

The ground strap, being aluminum, can not be soldered. Well, aluminum can be soldered, but it's more trouble than its worth to do so. The aluminum is OK for the ground electrode because it is fastened to the connector with a screw and lock washer to provide a good electrical connection.

Whatever you use for electrodes, you will need four of them. I will explain the use of the two "extras", at the appropriate time. The electrodes must be as far apart as possible inside the jar. This is accomplished by bending them outward so they are a bit farther apart than the diameter of the jar. Then, when you insert them into the jar, they will "hug" the walls of the jar and keep themselves separated, as shown in Figure 2. At this point, the curious reader, such as yourself, may be wondering what in the world goes into the jar that turns it into a dummy load. The "secret ingredient" will be revealed next time. 'Til then ...

73, Dick, W6BKY

Part 26 "Wanna Tinker" Construction Project Series

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OF GENIES AND THINGS

A ham operator is operating Field Day alone at a deserted beach. He is taking a little break from the action, walking around on the beach and notices an antique brass bottle mostly buried in the sand. He digs it out and discovers it's a genie bottle! He manages to get it open and a genie appears. "Thank you for freeing me, O Master!" said the grateful genie. "I will grant you any one wish you want." The ham thinks about it and says, "OK, I got it. I live right now in a restrictive neighborhood. I would like to have a 500 foot tower with all sorts of antennas, despite the homeowners association." The genie looks worried. "O Master! That's a big order. The power of these HOAs and their CC&Rs is most powerful! In fact, they are more powerful than even I, O Master! I would beg you to please choose something else for your wish." The ham says, "OK, let's do this." He goes over to his ham station and pulls out his log books. "See this entry? This is a contact I once made with AC6V. I would sure like to get his QSL card after all this time." The genie looks at the logbook. Then he says, "Now regarding that 500 foot antenna tower, do you want it galvanized or stainless steel?"

ANTENNA ROMANCE

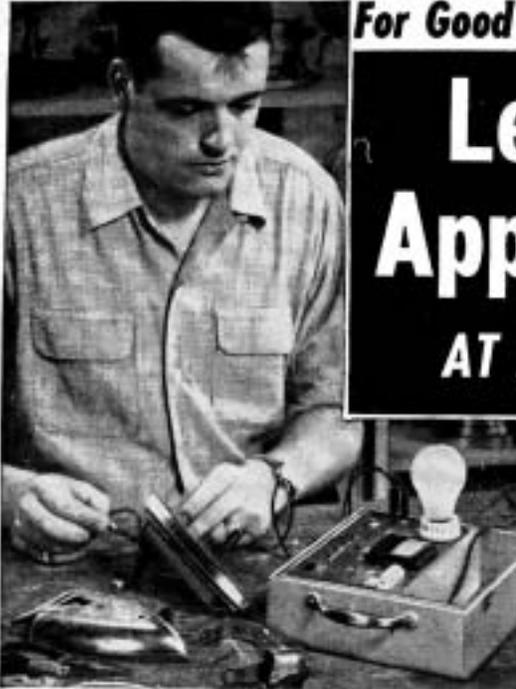
... From The Internet

Two antennas met on a roof, fell in love and got married. The ceremony wasn't much, but the reception was excellent. Since they were a perfect match, soon they generated harmonics. Wrapped the harmonics in dipoles. But later the harmonics turned out to be parasitic elements. The true story -- she was a tri-bander and he felt trapped, so they went on separate beam headings.

AC6V's HAM RADIO AND DX HUMOR PAGE

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YOU'LL JUST HAVE TO WAIT A MINUTE-
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