

WA4WHB

1950-1995

I have been asked to give you a few words about my closest friend and now silent key, Jim Marino; Whiskey Alpha 4 We Hunt Bandits (a particularly appropriate phonetic set for a police detective - or "police defective" as Jim put it himself). Jim died at Rexx Hospital on Monday July 31st at about 10 am after less than a week in the hospital. His immediate family (living in this area) were all present. Jim had been diagnosed with cancer a scant 5 weeks or so previously.

His legendary humor continued right up to his death. If you did not know Jim, ask Harry (AB4T) about Chinese food some day or ask Ed (AB4S) about hearing "CQ" from a police car horn! Jim was an early member of the informal Apex International Dinner Society (name changed because of abbreviation conflicts) and was surely as responsible for all the resulting restaurant closures as were any of the rest of us.

Jim was a "traditional ham". He believed very strongly in the ARRL Code of Conduct and frequently cited such local personages as Herb (N4UE) and Will (K4IWW) for examples of how hams should behave. To Jim, displaying courtesy and personal restraint on the air was the primary "backbone" of ham tradition. Additionally, helping others, especially other hams was a principle that Jim believed in and practiced. He had always felt that his ham community was a special part of his life.

Jim was originally licensed in 1968 as a Novice while serving in the Navy. He quickly dropped into the "Technician Trap" and became well known in New York City with the call of WB2CHM. He came to North Carolina in 1976 and received the call WA4WHB. He upgraded to General, then Advanced and was working on his Extra. He kept in pretty regular contact with his original New York group of hams.

He is survived by his wife Karen, son Tony and his father Jim (WB2RQF). To say that he will be missed is just too much of an understatement.

73 88 OM QRT WA4WHB DE KB7LX SK

CARC Minutes

July 27, 1995 meeting called to order at 7:38 p.m., by Pres., Bob, KB9MS. Introductions followed.

SILENT KEYS

Lou Metz, WA4LGQ June 30, 1995

Jim Marino, WA4WHB July, 31, 1995

The Cary ARC lost two members recently.

Lou Metz, WA4LGQ, succumbed to cancer after a long battle. He was a very versatile man with a number of interests. Each of them put him in contact with an entirely new set of people and situations. He truly was a multi-faceted man. His desire to help others and his sense of humor endeared him to all who knew him. His leadership and volunteer work will be sorely missed in the many organizations and causes he adopted over the years. Lou is survived by his wife, Myrtle Metz, and daughters Donna and Linda.

Jim Marino, WA4WHB, was diagnosed with cancer just before Field Day. He was a detective on the Apex Police Department. Jim's radio activities provided a good change of pace from police work for him. Jim is survived locally by his wife, Karen, son, Tony, and his father, Jim, Sr., WB2RQF, also a CARC member.

Treasurer's Report - Will, K4IWW, reported: Savings \$2,117.72 Checking \$2,839.90 Total: \$4,957.68. Dues still being received (\$9/yr.).

Wake Digital Communications Group (WDCG) - Lee, N4AJF. KM4OX-01 down that is RNC. Piedmont-Coastal Repeater Network (PCRN) - 147.15 MHz is up after 1.5 days from a lightning strike!!!

Pete, KS4XG, mentioned the IOTA (Islands On The Air) contest this weekend. He has diskettes with special programs for logging, etc.

MS (Multiple Sclerosis) Bike Tour, Sept. 23-24. They need communications support. Good chance to provide wide-coverage radio support.

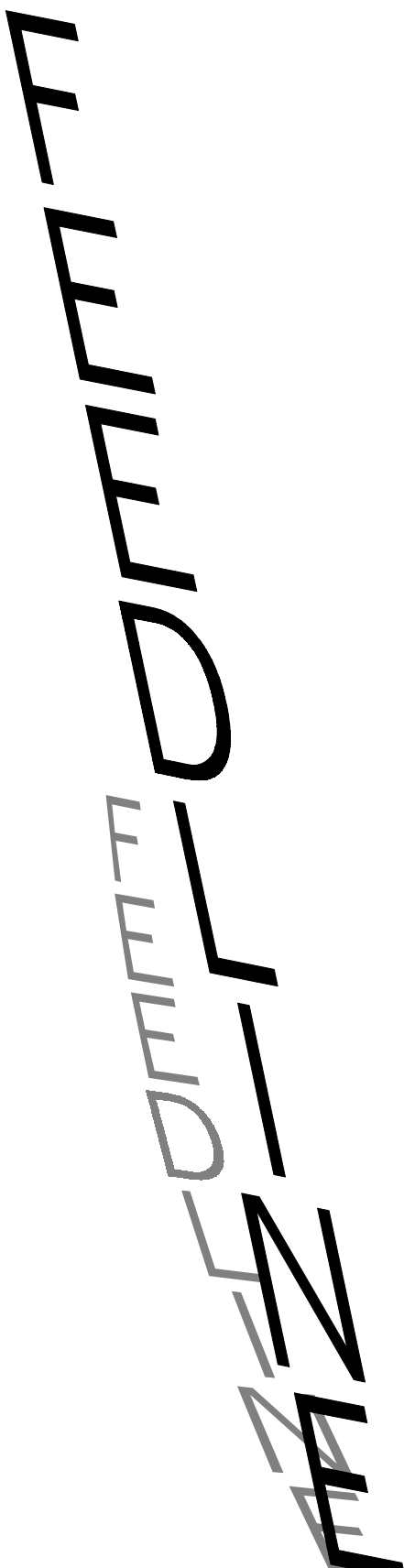
Dana, KE4NQA, won the Larson antenna system prize from the SWAPFEST.

Field Day Report - Good effort. Got 9,300+ points WITHOUT bonus. Only a little bit of tweeking is needed for a max effort, next year. Stay tuned! Cost to CARC for FD: approximately \$350 (including 150 soft drinks).

SWAPFEST Report - 1) The missed mailing was vital. It cannot be missed next year. 2) The missing food service was vital. It cannot be missed next year. 3) Not having the whole Center (upstairs) was vital. We need to work to get it next year.

Next Meeting: August 24th - **FOX HUNT- FOX HUNT**
Sept. 28 Program will be on Amateur television.

n4ue



HELP!!!

There are two more installments of the Condo-Communicator to be reprinted, after that these pages will be kind of sparse without your article. Share your experiences with the rest of the club. Projects, humor, reflections, operating techniques, hints and tips are all welcome. Remember, Feedline is reader-supported!

Condo Communicator - Volume IV

More tips on operating from restricted locations.

Hoo, there's a lot of stuff this month. No wonder this is getting too big to distribute on packet!

RFI

Although contributors are the stars of this newsletter, I thought it was about time I put in my two cents worth regarding some RFI experiments I've been tinkering with. Here's one of them.

I ran a simple test this weekend. I dug the old DX-20 out of the closet. Placing it on top of the television, I fed its 30 watts into a dummy load. No matter which band I tuned up on, interference was extremely difficult to detect. However, I did see some loss of color in the picture when the rig was tuned up on 10 meters. From this I concluded that the rig itself was RF tight.

When I hooked up a long, shielded cable between the transmitter and the key, there was a bit more TVI. However, as soon as I carried the transmitter back into the bedroom and connected it to the tuner (which is connected to an artificial ground), tuned up on 20 meters and fed RF to the 20-meter wire loop in the attic, the television set practically exploded on channel 2. There was considerable interference on the other channels as well.

A low-pass filter between the DX-20 and the tuner had no effect. I even replaced the coax between the DX-20 and the low-pass filter with coax that had ferrite beads on it, to no avail. I don't think this is fundamental overload, as the interference doesn't show up on all tv channels with equal ferocity. What do you think is the explanation?

SATELLITES

Would you believe you can work the satellites on as little as a quarter watt? Well, you can, though not directly. One way to do it is on packet, using pacsat gateways.

There are a couple of kinds of pacsat gateways that I know of: a live gateway and a bulletin-board gateway.

The live gateway consists of a complete ground satellite system, with OSCAR type antennas for uplinking on 2 meters and downlinking on 70 cm and about 170 watts or more of effective radiated power. Coupled to the radio is a multiport terminal node controller, capable of connections to regular 1200-baud packet signals on 2-meters as well as to the satellite. The fun starts when the station operator has the satellite in view and has connected to it.

After the operator has connected, then packet operators connected to that node can also connect to the satellite. A local ground station operator here, Paul, NONBH, runs a Net/Rom setup. All I have to do is read his bulletin board from time to time to find out when the next few passes will occur of a satellite (in our case, usually the Fuji satellite, FO-20). Then, I connect to Paul's node and wait. If Paul is at the controls and hooks up to the satellite, I just connect to the satellite port and read the bulletins stored on it. I download messages for later reading. Offline, I type up replies then, at the next pass, connect to Paul's station and upload them. All this with an HT, a homemade modem, and Poor Man's Packet

software. Sometimes I even have to connect to another mode first just to reach Paul's node! But the point is, the messages get passed, and I don't have to trot an antenna array out onto the sidewalk to do it (although I am looking into that).

The bulletin-board gateway looks similar to the one I just described except it is all automatic. You connect to the ground station to see what files have already been downloaded to the ground station or to see a menu of what is still available on the satellite. If you need a file from the satellite, you submit a message to the BBS at the ground station. On the next satellite pass, the file you want is downloaded from the satellite for you to pick up later. Uploading messages is just as easy. You post your message for satellite delivery and the station does it automatically. The software is in control, and the ground station operator need not be present to make everything run smoothly. The computer even tracks the satellite! The March issue of 73 magazine has a writeup on just such a station. Maybe someday we'll get one here.

Ask around on the local nets to see if anyone in your area has a pacsat gateway. It may be possible for you to reach into space from your condo using equipment you already have.

COVENANTS

If you've listened to RAIN lately (the Radio Amateur Information Network), you've heard the story about the ham involved in a legal problem with his town-home association. The gist of this particular situation is that the ham, who rents the townhome, had been warned by another resident that he couldn't leave up his ground-mounted vertical antenna. However, the ham obtained verbal permission from a member of the association to keep the antenna as long as he painted it the same color as the exterior of the unit, which he did. Now, four years later, he is in trouble. Why? His landlord, years ago when he purchased the unit, signed an agreement which expressly forbade outside antennas of any sort. Verbal agreements notwithstanding, the townhome association is moving against the landlord (and the hapless renter, consequently). They are doing so at this late date probably because other hams wanted to install antennas, too. Listen to RAIN on your local net (or dial 708-299-INFO) for further developments.

The lesson for us is to carefully read any restrictive clauses in rental agreements or covenants (if we're buying) before signing anything. If we don't like what we see, then we should decide if we're willing to abide by those rules. And if the radio bug bites after you've settled in, then you might want to consider moving if you're not interested in covert ops. But this topic brings up yet another:

WHY BOTHER?

Why do we cave dwellers bother with amateur communications? It sure seems like a lot of trouble to go through. Instead of packet, for example, you could use the forwarding telephone bulletin board system to pass messages and postings, just like on packet,

and they're a lot faster, too. Internet, CompuServe and Prodigy have more info flow than you could use in several lifetimes. Except for occasional use in emergencies when telephone and power lines are interrupted, why bother with packet?

The point I'm slowly approaching here is: why bother with amateur radio given the restrictive conditions in which we live?

As a friend of mine said when she sat in on a QSO: "Well, it's neat you can talk to a retired guy in Orlando, but you certainly didn't have much to say." Well, didn't I feel foolish, who had just gone down to Radio Schlock to buy a box with a microphone on it for the expressed purpose of talking to retired guys in Florida. I got a license for THIS? It's not like I'm some EE grad student who wanted to test out an idea for deep-space transponder buoys and needed a license to keep from getting arrested.

Or, I show up at work bragging about talking to a guy in France.

"So, what's his opinion on France's recent reversal of their monetary policy?"

"Huh? I dunno."

"Well, did you ask him about the effect the Euro Tunnel will have on his business?"

"Er, no."

"Hmmm. Perhaps it wouldn't have mattered. What did he say hedoes for a living?"

"I didn't ask."

"Does he have a family? Did you talk in French or English? If English, where did he learn it? Does he talk other languages? What does he like to do on vacations? What's a typical day like for him? Criminy! What DID you talk about?"

"Well...I was number 340 in the contest."

Back in the '20s and '30s, when people were experimenting with simple, one-tube transmitters, regenerative receivers and a long wire out the window, a contact with someone 500 miles away seemed truly magical. That impressed the neighbors. They didn't ask if you engaged in any deep philosophical conversation with the fellow in Florida. Just to reach Florida with a little pile of mostly homemade junk seemed a miracle. You MIGHT be able to call someone there with the telephone, but it would be pretty expensive and the connection not all that reliable. And the radio was sure faster than the mail. But now, where's the magic? You can call the guy in Florida on his car phone from your cordless phone as you relax in the swimming pool.

Maybe McLuhan was right: the medium IS the message. We build, or usually buy, a bunch of equipment so we can talk about the equipment (or watch it on fastscan TV, or see pictures of it in fax, etc.) We cram our modest, yardless habitats full of electronic marvels with which to enrage the neighbors so we can discuss radios (maybe the weather) with retired guys in Florida. Cheesh.

I wish I could explain it. It makes as much sense as catching fish and throwing them back, or painting pictures that will never be sold, or writing stories that will never be published, or collecting stuff we don't need, or flying an airplane to no place in particular, or restoring old cars that are too valuable to drive around, or climbing mountains just to climb back down, or any of the other absurd things we do

because we don't have to work 'til we drop like our ancestors did. We condo communicators try to get a 50-ohm match off of a chimney flue, or string 28 gauge wire to trees across the street, or load up rain gutters so we can ask retired guys in Orlando what kind of rig they're running or ask hams in France to repeat their exchange number.

So, given what we're up against, why do we bother? Maybe because we condo types enjoy the challenge of lashing some junk together with a makeshift antenna and doing what most hams think is impossible ...communicating.

TECHNICAL SECTION

I saw the following Internet posting and reply, and thought it germane to our interests. Here 'tis:

Hello

I have been playing with a linear loaded 80 meter dipole because of >property size limits. I have been looking for articles about linear loading of dipoles and even verticals with no success. Does anyone know where I could find information about linear loaded antennas? One source has been Low Band DXing however, it doesn't explain how you derive the spacing and fold back length. Why is linear loading not a popular method of making antennas? From everything I have read a linear loaded antenna, has less radiated power loss than an inductively loaded or trapped antenna. Is it a problem of mechanics (construction problems)?

To which Gordon, AB5DG, of Stillwater, OK replies:

If you are loading a quarter wave element try to do it on the end furthest from the feed point. In quarter wave elements the current is high at the feed point and most of the radiation occurs near the feed point. Just hang as much wire as you can horizontally and hang what ever you need to resonate the antenna down or tied off in some other direction. As a general rule high is better if you are horizontally polarized. If you go vertical the ARRL antenna book has a short 40 meter vertical that works well with a big capacitance hat.

I have had better luck with vertical antennas if I could not get my antenna very high. I currently use a piece of 1/2 inch pvc 8 feet long with a coil on each end and a long replacement rabbit ear element on each end that is perpendicular to the rest of the dipole. An alligator clip attaches the capacitance hats (rabbit ears) to the coil at each end of the pvc. I feed it in the middle and tune it with the coil taps and adjusting the length of the capacitance elements. It is rather tricky to tune but it can be tuned to the point that swr is acceptable: 1.5 to 1 on the Icom 735 or 3 to 1 on the Heath 101. I usually run about 25 watts CW or 100 watts ssb.

The antenna leans in the corner of a first floor apartment made out of concrete blocks. It works ok for CW (no flames please) and so so for SSB. I have worked Italy, Mexico, Canada, New Zealand and Australia with it.

Fortunately I won't be using it much longer as the xyl has bought a house that will allow a better antenna. Gordon Couger
AB5DG Agriculture Engineering Oklahoma State University gcouger@olesun.agen.okstate.edu

STATION DESCRIPTIONS

Now, on to the station descriptions! Speaking of antennas, covenants, and RFI, Derrick, KC4WEJ, of

Raleigh, N.C., writes:

I live in a house on a "cheese-wedge" corner lot (yes, we actually bought the place; we like the house, though). Before closing, I checked into restrictive covenants, and was told "we aren't aware of any."

Well, guess what? At closing, we learn "no antennas unless approved by the Architectural Committee." Not COMPLETELY restrictive, but some clandestine poking around leaves me with the "snow-ball's chance" impression.

Commence covert operations! I strung up a 40M half-wave dipole tied off one end of the house, back to a tree and over to another. Completely invisible from the street. Have worked several states, Canada and uth America. No tuner, though (Kenwood 520S), so 40 is pretty much it (for now).

Enter the RFI. At first, it appeared on our cable-fed TV in the living room (but not in the bedroom), and in the telephone. Added a "real" ground (10 ft. ground rod in thanks-to-the-AC soggy soil), which helped the TV a little, but the phone is still bad.

I then proceed eed to rip all the TV/stereo/cable components out and, adding them back in one at a time, attempted to isolate the problem. It turns out the RFI was backflowing into the TV through the connected stereo audio leads BECAUSE of the stereo components' power cords being daisy-chained into one another (to save plugs.) Plugged all power cords into individual (grounded) plugs, added a RadShack filter to the VCR cable input and even terminated all unused cable jacks, and WHAMMO! No more RFI in the TV. Period.

The phone is still havoced when I operate. Save for checking into filters at an upcoming hamfest, I'm clueless as to how to even approach this problem. Any suggestions?

73 de KC4WEJ, Derrick Raleigh, N.C.

P.S. I don't know/haven't checked if I'm interfering with anyone nearby. (I am somewhat estranged with my closest neighbors due to an on-going battle with their back porch light always being on.)

Steve, N2IC/0, of Boulder, CO, tells us that it's possible to run lots of power from an apartment:

Even though I am far from being a "condo communicator" (2 big towers, big beams, etc.) I enjoy reading your writeup. Before the world worried about things like RF causing cancer, I operated out of an apartment with a mostly invisible 120 foot end-fed wire and a KW. I had to be careful to not let my lips touch my metal microphone, or I would get one heck of an RF burn. I even fried my next door neighbor on the metal "ringer level" control that old AT&T wall phones used to have. It's pretty disappointing to see QST articles saying things like "if you must use an indoor antenna, run low power (i.e. 5 watts)". Talk about double-handicapping yourself!

One idea I have seen applied is to use a mobile antenna attached to your car. This assumes that you can park your car near your home, and run coax out to your car. On the high bands (20, 17, 15, 12, 10 meters), an 8 foot whip outdoors will probably outperform anything you can do inside your house. I recall reading about a homeowners association suing for this being a covenants violation, but the ham won.

73, Steve, N2IC/0 n2ic@drutx.att.com

Have you seen the ad in QST for Jim Kearman's book "Low Profile Amateur Radio:

"How to get on the air from almost anywhere"? Well, here's a station description from KR1S himself:

I live on the second floor of a two-story building in a complex, about 1/2 mile from ARRL HQ.

In the past few months, operating in CW Sweepstakes, the CQ World Wide and the 10-Meter Contest (CW only), I've worked 49 states (where is Utah when I need it?) and over 50 countries. I can work Europeans on 40, and out to the Midwest on 80. I managed to work Clipperton on 17 meters.

RFI wise, welllll....I get into just about everything in the place. My girlfriend gives up TV when I'm on the air. My policy is to not tell anyone in the complex that I'm a ham. I don't run 100 watts except in the odd contest, and if I decide to chase DX, which isn't often. Mostly I just SWL between contests. I wouldn't dare operate SSB, for fear of someone figuring out what was clobbering the TV or phone! I've tried RTTY and AMTOR, but I don't seem to have enough soup for those modes. Besides, I just like CW better.

I like loop antennas. If you can keep them symmetrical, you don't have to fuss with RF grounds. I built a clone of the MFJ Artificial Ground box, but I haven't found it particularly useful.

Good luck and 73, Jim, KR1S

When I had mentioned to Jim that my artificial ground didn't do much to reduce TVI, he replied:

It's supposed to move the voltage node away from the rig and onto the counterpoise, so you don't get RF burns. I noticed it affected the adjustment of my antenna tuner. It became a real pain to tune up! That's why I like the loop.

I knew that if I were just patient, someday, someone would tell me how they loaded up a chimney flue. Mat, N2NJZ, of Boonton, NJ writes about the chimney flue antenna he uses in his ondo:

The chimney flue is fed against ground using a wire going from the tuner to where it [the flue] attaches to the furnace. It is an aluminum flue pipe that goes 30 feet up from the basement to the roof.

The station is located in the basement of the house, right next to the cold water inlet and the water meter. My ground lines are about 3 feet long.

I have managed to work quite a bit of DX on this system, but it is by no means an ideal system. Another point of improvement is RFI susceptibility of the house - during the summer I can turn on the air conditioner by keying up on 30 meters!

73 de Mat, N2NJZ

Perhaps you'll recall the station description of Howard Lester, KE7QJ, of Tucson, AZ. He installed an inverted vee on the flat roof of his townhouse. Well, Howard adds:

Two months ago I worked a UA0, Kamchatka, with 15 watts CW on 17m. My report was 599. A few nights ago I worked Hawaii on 20m SSB with 10 watts. Remember, this 30m dipole fed with ladder line. It CAN be done! But then *P* worked Tahiti just last night!! Amazing. 100 watts and a dipole in a pileup on 20 meters and, after 20 minutes I got through!!!

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Cary Amateur Radio Club

The Cary Amateur Radio Club meets on the fourth Thursday of the month, 7:30 p.m. in the lower level of the Christian Life Center of White Plains United Methodist Church. The June, November, and December meetings are held off-site. Call for location of those meetings. **Next Meeting: August 24, 1995. FOXXXXHHHUNT**

1995 Officers

KB9MS	Bob Lukaszewski	833-0199	President
KB4LFH	Mike Crowder	319-9556	Vice-President
K4IWW	Will Harper	467-0224	Treasurer
N4UE	Herb Lacey	467-9608	Secretary

Feedline

Feedline is a member-supported publication of the Cary Amateur Radio Club and is published monthly. Deadline for submissions is the second Thursday of the month.

Editor: Tom Klimala, KM4LB
1545 Seabrook Avenue
Cary, North Carolina 27511

Tahiti is ONE place in the world I'd really care to visit. Maybe Eddie (FO4OK) has a place for me to stay....

Hmmm. I wonder if you'd have to install your antenna on the roof, though?

John Shalamskas writes us from Hawaii.

Man, out here you practically need the Pope's intercession to get an antenna OK'd. Lots of covenant restrictions. In my case, my Mom happened to be the President of the Board of Directors of our condo, so I got tacit approval to put some low-visibility stuff on the roof. Works darn well, too, must be the 110 foot height above street level :-).

I live in Honolulu, within 1 mile of thousands of transmitters, from TV/FM/AM to Ham repeaters. I have become adept at finding and using ferrite cores to squash the interference they give me. Even managed to DF a power line noise source (which is now fixed!) with a homebrew HF loop.

John promises details later on his DF'ing techniques. Don't forget to pass along your call, John!

Adam Greenberg, N3NKL, of the University of Maryland, says don't forget the dorm residents.

I don't know if you did include us, but you might want to mention those of us working out of RESIDENCE HALLS. (I work for the Department of Resident Life so I've been trained not to say "dorms.")

I am running a Kenwood TR2200GX out of my room, with a max power of 2 watts. I am using a 5/8 wavelength ground plane vertical hanging upside-down from my ceiling (it's one of those drop ceiling tile ceilings). I can reach Virginia okay with the antenna up! My major problems are: I'm on the first floor of my building, and there is a lot of metal in my room (my radiator cover, the 3-foot by 6-foot security grating on my window since I'm on the first floor, and I have one of those 3-foot by 3-foot metal "Lite Beer" signs in my room---College Kids!) 73!!!!

