

CROSSTALK -- Official Publication of the  
 GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD  
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President	Ginny Martin, N2FJM
Vice President	Jerry Barnish, WB2CAK
Recording Secretary	Beth Barnish, KB2EAL
Corresponding Secretary	Gary Fau, KB2BYL
Treasurer	Ed Wargo, KA2KMW
Chaplain	Ed Stetser, K2JJC

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Dan White	N2FKT
Al Trueblood	N2FJQ
John Zaruba, Jr.	WB2VOH
Walt Ashton	WB2OYQ

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Harry Jackson	WB2GSF
Ed Sumek	W2GSN
Mike Lizzio	WA2TOP

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Contests: George Munns, KB2GW	Historian: Charlie Sketchley, K2PQD
Hamfest: Harry Spiece, NJ2B	DX: John Fisher, K2JF
Field Day: Art Strong, KA2DOT	A.R.E.S.: Harry McCormick, WA2SEA
Legislative: Chuck Ellis, KB2AZW	Publicity: Joe DiNovi, WA2GFK
Data: Charlie Sketchley, K2PQD	Repeater: Joe DiNovi, WA2GFK
Demo: Walt Ashton, WB2OYQ	Business Mgr.
VHF: Ray Martin, WB2LNR	Banquet: Virginia Macrie, KA2ZZA
Help and Welfare: Charlie Sketchley, K2PQD	

CROSSTALK STAFF

Tony Starr, WA2FZB	Editor	John Fisher, K2JF	Circulation
Ed Sumek, W2GSN	Publisher	Jim Mollica, K2OWE	Circulation
		Len Kravitz, KD2CR	Circulation

AREA NETS

GCARC RTTY NET:	Tuesday, 8:00 PM 147.78/18 Rptr
ARES NET:	Sunday, 8:00 PM 147.78/18 Rptr

Club Repeaters: 147.78/18, 223.06/224.66, 447.10/442.10

General Meeting: First Wednesday of each month at the V.F.W. Hall in Woodbury, NJ. Meetings begin at 8:00 pm sharp.

Contributions: CROSSTALK, Tony Starr,  
 Deadline: Ten (10) days before each general meeting.

PRESIDENT'S MESSAGE-- OCTOBER 1987

The October meeting is a very important one as this is the month for nominations of new officers. I urge all of you to come out and help select the slate of officers who will do the best for the club. Please keep in mind the club's interest as you nominate the person of your choosing. This year there will be absentee ballots by request only.

The nominations for 1988 are as follows: (By meeting of Past Presidents, held Sept. 25, 1987. -- Ed.)

For President-- John Fisher, K2JF  
For Vice President-- Ed Sumek, W2GSN  
For Recording Secretary-- Beth Barnish, KB2EAL  
For Corresponding Secretary-- Mike Lipnitz, N2FKS  
For Treasurer-- Sonny Gutin, WB2DXB

For Director (3 yr. term, exp. 1990)-- Emmett Ross, WA2ZND  
For Director (3 yr. term, exp. 1990)-- Bob Layton, KB2COB

For Trustee (4 yr. term, exp. 1991)-- Joe DiNovi, WA2GFK

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The Banquet is fast approaching so please send in money for your tickets or purchase them at the meeting. There is a fine selection of food for our buffet, music for dancing, awards and door prizes, and our Master of Ceremonies will be Harry Jackson, WB2GSF.

The MS-150 Bike Hike is now history. The skeleton crew who operated did an outstanding job. Thanks to Walt Ashton for chairing this event.

The DXpedition to Auckland and Campbell Islands will be in early 1988. Ron Wright, ZL1AMO, will be visiting these mountainless South Pacific islands 450 miles south of New Zealand, to which they belong. Although they are only 30 miles in circumference, the semi-circular islands have, in the summertime, good harbors which are used for provisions depots, but they are not permanently inhabited.

Campbell Island is rich in fur seals. The total area is only 64 square miles. Hopefully Ron will arrive by boat. If not, he may have to be flown in by helicopter. Because of the expense of the expedition, the Board of Directors voted to donate \$100 to help defray some of the costs.

HAMFEST 1987

To all club members-- let it be known that these are the people who really did a great job for this year's Hamfest. Ginny Martin, N2FJM, after all other duties as club President, went so far out of her to help that she even cleaned the rest rooms. Hey gang, where is all that help that is needed to make this club the greatest?

The following is a list of all who showed up when needed. Sorry if I missed anybody. Thanks to all of you from the bottom of my heart. When it came down to it, you really pulled off the best job ever.

73-- Harry Spiece, NJ2B

Treasurer-- Ray Martin, WB2LNR

Talk-in-- Walt Ashton, WB2OYQ; Mike Lizzio, WA2TOP; Art Strong, KA2DOT; John Zaruba, WB2VOH.

Tailgating-- Jim Clark, KA2OSV; Tony Starr, WA2FZB; Norm Williams, WB2HVJ.

Food-- Chic Naylor, WA2USI; Beth Barnish, KB2EAL; Irma Colabrese, N2FNF; Roslyn Marder, N2AKL.

Hospitality-- Virginia Macrie, KA2ZZA; Chuck Ellis, KB2AZW.

Club Table-- Jerry Barnish, WB2CAK; Ed Loveland, WA2PFC.

Parking and Ticket Sales-- Chuck Colabrese, WA2TML; Ken Newman, N2CQ; Jose Lopez, WB2OZE; Don Smith, WB2ZJF; Howard Marder, WA2IBZ.

PA System and Announcers-- Sonny Gutin, WB2DXB; Jim McDonald, N2AIV; Doug Gehring, WA2NPD; Mike Black, N2FIZ; Pete Bent, N2CME; Chuck Ellis, KB2AZW; Harry Jessen, N2DUZ; Russ Glans, N2ASV; Ray Martin, WB2LNR; Ken Bozarth, KN2U; Tom Wright, WA2KOB; Jack Zaruba, K2ZA; Bill Isherwood, KA2VTR; \*Len Kravitz, KD2CR.

Testing-- Bill Helmetag, WA2VQG; John Fisher, K2JF; Jack Zaruba, K2ZA; Jim Mollica, K2OWE; Hy Friend, KB2GH.

Clean-up-- Dan White, N2FKT; Walt Ashton, WB2OYQ; Harry Spiece, NJ2B; Jim Clark, KA2OSV.

Mailing-- Charlie Sketchley, K2POD.

Club Copier-- Ed Sumek, W2GSN.

Printing-- Ed Kephart, W2SPV.

Electrician-- Ray Metzger, AI2B.

ARRL Coordinator-- Doug Gehring, WA2NPD.

M.C.-- Phyllis Stetser, WA3OWG.

Cable Ads-- Norm Williams, WB2HVJ.

Secretary-- John Fisher, K2JF.

SWAP & SHOP

## FOR SALE:

Complete base station (2 meters) consisting of:

Icom 290A All-Mode Transceiver with desk mic and encoder mic  
CDE Quiet Talk 13.8VDC Power Supply  
Heathkit 2102 VHF Wattmeter  
Isopole 144 2 meter antenna

Also, 2 meter FM Handheld Transceiver (Alinco)

2 EBP-5N Battery Paks

Wall Charger and Mobile Charger

FSC-3 Leatherette Case

ELH-230D Linear Amplifier for Hand Held

Mag Mount antenna

EMS-20 Speaker Microphone

Complete package \$600.00. Please contact Rev. James E. Thompson,  
N2EDK.

THE F LAYERS -- Part 3

**F LAYER.** At heights between 90 and 240 miles (145 to 380 km) above the earth's surface is another region of ionization, known as the F layer. Ionization exists at all hours, usually with two well defined layers during the daytime and one during the night. In this region, at night, the single F layer lies at the height of about 170 miles.

**F1 and F2 LAYERS.** During the daylight hours, especially when the sun is high, as in tropical latitudes and during summer months, the F region splits up into two distinct layers -- the F1, with a lower limit at a height of approximately 90 miles (145 km), and the F2 with a lower limit at a height of about 160 to 220 miles, depending on the seasons and the time of day. The F2 layer is the most highly ionized of all the layers and is the most useful for long distance (DX) radio communication.

The intensity of ionization reaches a maximum in the afternoon and gradually decreases through the night. The rise of ion density is very rapid in the morning, and the low recombination rate permits this high ion density to persist.

**OTHER LAYERS.** In addition to these regions of ionization which appear regularly and undergo variations daily, seasonally, and from year to year in height and ionization, other layers occasionally appear, particularly at heights near that of the E layers, much as clouds appear in the sky. Frequently, their appearance is in sufficient intensity to enable good radio transmission to take place by

means of reflection from them. At other times, especially during disturbed conditions in polar regions such as those that cause the aurora borealis, diffuse ionization may occur over a fairly large range of heights and may be detrimental to radio transmission because of excessive absorption produced.

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I wish to thank those who have asked me to continue these articles. I hope they are useful and informative. At this point, I want to make clear that much of this information is "Bолled Down" from various sources such as THE ARRL HANDBOOK, the chapter PROPAGATION; THE SHORTWAVE PROPAGATION HANDBOOK; by George Jacobs (W3ASK) and Ted Cohen (N4XX); the Navy's BUPERS MANUALS; and the Army's TECHNICAL MANUALS (T.M.'s), and by various thesis written by me.

The next section will be "Ionosphere Characteristics".

C U IN THE PILE-UPS. John, K2JF

HEMISPHERE WIDE AMATEUR RECIPROACITY

CITEL, the Inter-American Telecommunications Conference has concluded in Lima, Peru, with the proposal for a hemisphere wide amateur reciprocal operating arrangement being adopted. The treaty, called the Inter-American Amateur Radio Operators Convention, was immediately signed by Argentina, Bolivia, Brazil, Colombia, Chile, Haiti, Peru, Surinam, United States, and Uruguay. Canada suprisingly is not a member of CITEL, which tends to be primarily a Spanish middle and South American Telecommunications organization. The U.S. delegation was headed by Bill Jahn of the State Department. Tnx K2JF/W5YI

AMATEUR RADIO CALLS

2ND DISTRICT:

EXTRA	ADV	TECH/GEN	NOVICE
NY2U	KE2BX	N2HMH	KB2EGY

HAVING TVI PROBLEMS WHEN ON HF?

AMECO has introduced two new TV/FM High Pass Filters -- one 75 ohm application, the other for 300 ohm twin lead. The filters, which contain 9 shielded sections (with a total of 25 elements is 5 individually shielded compartments) provide 70 db of attenuation below

50 MHz. Price: \$12.95 from AMECO, 220 E. Jericho Turnpike, Mineola, NY 11501. (This is a darn good deal for anyone with TVI or FM problem. JF) Tnx K2JF/W5YI

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Data Quest, a market research firm, reports that with 50 million people expected to be working at home by the year 2000 -- personal photo copiers will develop into a consumer item. 500,000 will be sold annually by 1990. Tnx K2JF/W5YI

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Last month we learned about the FCC boarding the 175 foot Honduran fishing vessel and taking apart the Pirate Radio broadcasting station. They did not take the radio equipment--merely disassembled it and cut cable. But remember they could not move the ship since there was not enough power to lift the anchor. The Federal Court for the Eastern District of New York dropped all criminal charges against the two operators providing they didn't do it again. The ship is still there, anchor and all. Tnx K2JF/W5YI

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Congratulations to K2JF for receiving the Gloucester District Distinguished Eagle Scout Award for 1987. He received this for his contributions to the Boy Scouts of America, and his community work in Gloucester County.

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DX  
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Well, there is some real excitement going on now-a-days. Mt. Athos is up using various calls starting with SV2.../SY, and running on both SSB and CW on 20 and 15 meters. The DX gang is getting their multiband operations satisfied. We expect some real good stuff in October. First, starting on the 6th of October, ZL1AMO, Ron Wright, will be up in Coco-Keeling using the call VK9AB. Second, VU2GDG, Gopal, with his five man operation will be on Andaman Island from the 6th of October to the 26th. TU4BR/5U7 is up and this is a rare one from the Niger Rep. This being the time of the year (Autumn Equinox) when we get some real good DX for a considerable amount of time from most parts of the planet. It will be getting better for two reasons: One, the Cycle 22 is rising; and two, the Winter DX season for the low bands is going to start making itself heard. This is a very good reason to get the Club's station in the trailer working and get those

antennas up before winter comes. As we enter the sharp rise portion of Cycle 22, the VHF/UHF areas are hot by having some weird openings, so let's get those 50, 144, and 440 antennas up so we can get some Grid Squares on W2MMD's chart.

Some DX worked the last week:

PJ2WOL	14165	WB2KBZ/VP9	14175
XE1AN	14180	VKOGC	3796
G4DUW/DU1	14165	7X3AT	7003
SV2UF/SY	21033	WYL/KH3	7006
SV1UF/SY	14183	ZS4PB	7064/198
ZL1AAB	14164	VK9NS	14220
YB3CN	14165	SV2UA/SY	14183
SV2TX/SY	14190	Z62CN	7006

C U IN THE PILE UPS. K2JF

#### ABC WORLD NEWS TONIGHT MALIGNS HAMS

An inappropriate reference to "hams" appeared on the first feed of the ABC World News Tonight program August 17 anchored by Ted Koppel. Koppel reported that a "ham radio operator" was transmitting false air traffic control instructions on a La Guardia airport frequency.

The story went on to say the individual responsible had not been identified, so of course the idea that he might be a ham was pure supposition. In fact, the original story came from AP, which quoted an FAA spokesman as referring to a "phantom" radio operator; somehow ABC turned "phantom" into "ham". The reference was corrected on the second and third feeds of the same program, so only parts of the country heard the slanderous reference. Unfortunately, despite repeated phone calls, telegrams, and other messages from ARRL HQ and individual amateurs, ABC so far has declined to air a clarification.

ARRL EVP David Sumner, K1ZZ, has sent a letter to Roone Arledge, President of ABC News, recounting the incident and pointing out that "simple justice requires that a clarification be carried on ABC World News at least as prominently as the original offending item. While the damage can never be fully repaired, we believe this is the least you can do in recompense." Tnx THE ARRL LETTER

#### FCC DENIES WARNING LABELS ON CELLULAR PHONES

The FCC has denied a request by the Washington Legal Foundation (WLF) that the FCC issue a proposal to require a warning label on cellular telephones reading "Privacy of communications may not be ensured when using this phone." The WLF had argued that warning labels

would be the most cost-effective means of informing cellular telephone users that their calls are subject to interception.

In denying the request, the FCC noted that the Electronic Communications Privacy Act of 1986 passed by Congress had made it a crime to intercept cellular telephone calls. The FCC said that it would be premature to go forward at this time with a rulemaking without knowing the effectiveness of the legislation. Tnx THE ARRL LETTER

THE TREE LOADED ANTENNA by Lee Wecker, W2FZR

We live in a community where outdoor antennas are strictly forbidden. After being here for some time, I began to miss my hobby and tried the attic antenna, which did not work well because of excessive absorption.

It occurred to me one day that a stately southern pine tree standing outside the radio shack window could be used to good purpose.

Years back, I had read something about a loop antenna arrangement that I thought would work in conjunction with that tree. Some #18 heavily insulated wire was obtained and thrown over a limb 30 feet high. The far side of the wire was brought down the side of the tree and attached to a ground rod buried four feet into the earth. The near side of the wire was cut at a height just above my head and an alligator clip attached. At that point a nail was driven into the tree where the clip was hooked. An underground wire from the ground rod was fed through the window to the ground post of the antenna tuner inside the shack. A wire from the antenna post on the tuner was then passed through the window and left hanging outside. When the antenna is needed, this wire is hooked to the alligator clip going up the tree.

The entire system forms a loop by leaving the long wire antenna post on the tuner, through the window, up the tree at an angle where it loops around the branch about 30 feet above the ground and down the other side into the ground. From the ground rod the wire returns to the antenna tuner which completes the loop.

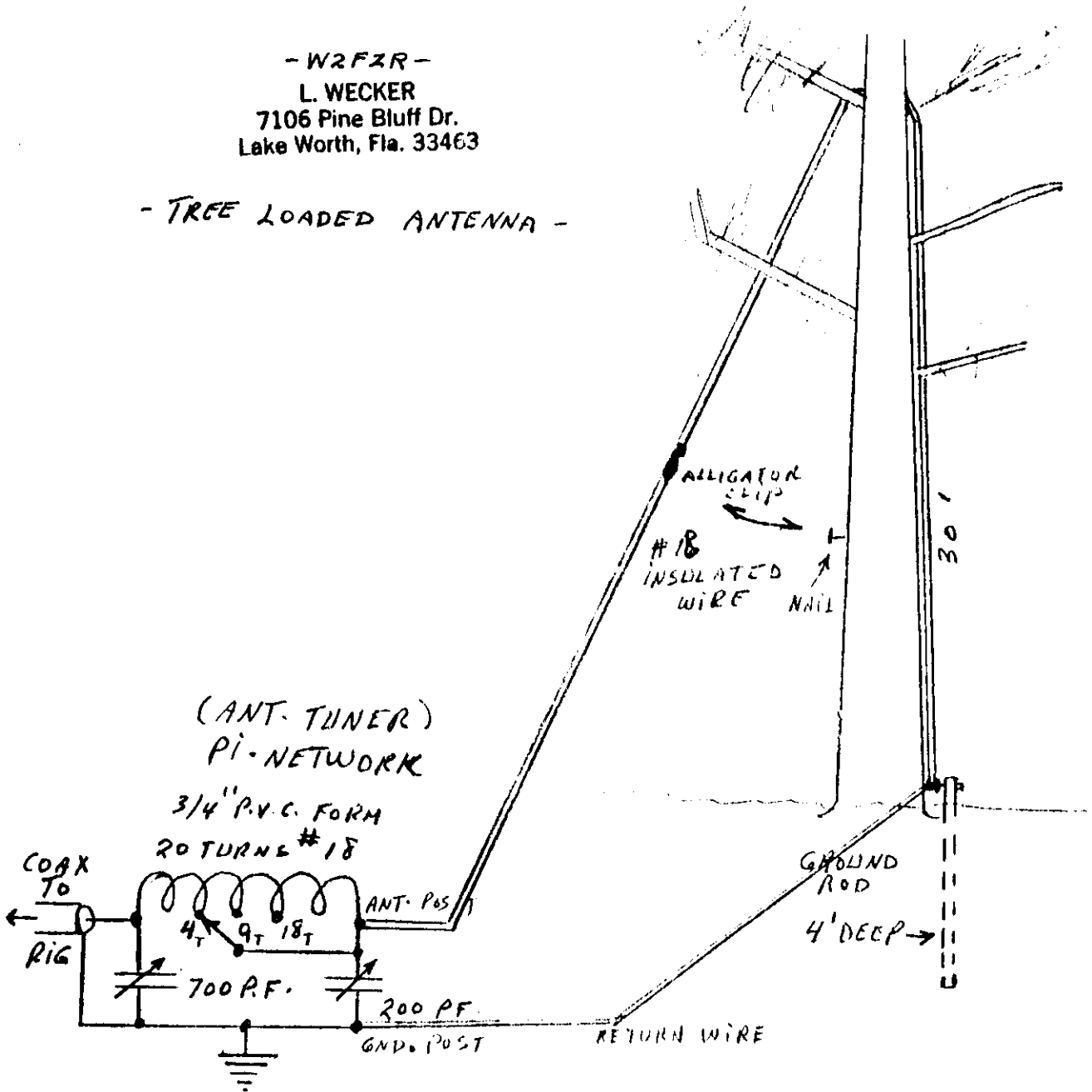
In using this system with my home brew pi network antenna tuner it was found that all ham bands from 10 through 80 meters could be tuned completely flat. Comparative tests showed that the antennas held it's own against some of the best. As an added bonus this antenna might be somewhat safer, because it is grounded.

While talking to a ham in England, I was asked about the type of sky wire I was using. I replied that it was a "tree loaded antenna." He then asked what kind of tree I was using. Tnx Len, KD2CR.



- W2FZR -  
L. WECKER  
7106 Pine Bluff Dr.  
Lake Worth, Fla. 33463

- TREE LOADED ANTENNA -



**OPEQUON RADIO SOCIETY**  
Smoke Signals

## " For Your Information . . . .

**CRT** - A movie about a little alien who forgets his telephone number and must write home.

**Cursor** - An expert in four letter words

**Debug** - The act of placing shoe leather against a small creeping creature

**Downtime** - Coffee breaks, lunch, or Friday mentality in the office

**Dump** - The EPA's answer to health

**Error** - Something only humans can commit

**Fifo** - Common name for a dog

**Gigo** - A movie industry acronym referring to the numerous "Gidget Goes . . ." movies, i.e., GIGO Hawaii, GIGO surfing, etc.

**Hardware** - Typically boots, leather and chains. Contrast with software.

**Interface** - The opposite of "Getouttamyface"

**K** - A term used in employment ads to disguise how much they are really willing to pay.

**Megahertz** - A very large car rental company

**Network** - The occupation of a fisherman

**On Line** - A statement shouted at tennis judges in response to serves being called out.

**Output** - What people who talk backwards do with their cat.

**Program** - What commercials try to do to us.

**RAM** - A male sheep

**Real Time** - Here and now, as opposed to fake time, which only occurs there and then.

**ROM** - A RAM after a delicate operation

(Tnx Steve, KR1M)