



# the RARRA RAG

Published by

**ROCHESTER AMATEUR RADIO ASSOCIATION, INC.**

VOL. 47

OCTOBER 1994

NO. 2

## OCTOBER PRESENTATION

Last month we had great fun seeing live Amateur Fast Scan Television presented by George Lloyd, N2UIO; and Bill Hanes, KB2BLS. They enjoyed addressing RaRa and were pleasantly surprised with the amount of interest shown by the audience. Both George and Bill were given complimentary memberships as tokens of our gratitude for their fine performance.

From their micro-power UHF MHz equipment, we go to the other extreme for our October presentation. Dick Burkhardtmeier, N2TOY, is going to explain how he controls, as his vocation, multiple transmitter sites, each of which is capable of many Mega-Watts of output. They are all synchronized in frequency, and linked together by networks of transmission lines that span the eastern seaboard. Furthermore, his transmitters are powered by coal, water, and nuclear reactors! Dick's transmissions are literally heard around the world, and at all times. Unfortunately, Dick is not allowed to modulate his carrier, and he is restricted to a single frequency of 60 Hz. He fascinated me when he first began to explain how "his" new control center operates, so much so that I asked him to come and 'share' (Oh! How I hate that word) his experience with us. If you like anything at all about electricity, you should definitely attend the next meeting on October 7th. May I suggest you bring an extra pair of socks? Your first pair will be knocked off!

## RDXA PROGRAM:

### DXing in the Caribbean by Larry, KE2VB, from the SCDXA

Date: October 18, 1994 - 7:30 p.m.

Larry's presentation will be a slide show and discussion of DXing and contesting from the Caribbean. Larry will tell us about his DX operation during the 1993 CQ WW, with the ins and outs on how to set up your own DXpedition, including tips from his own experience. This is one RDXA program you will not want to miss!

## MEETING NOTICE

October 7, 1994

Henrietta Fire Hall

3129 East Henrietta Road

8:00 p.m.

*Electrical Transmission Systems*

## HENRIETTA DUATHLON A SUCCESS

The Henrietta Duathlon was run on September 11th and started at the Sperry High School in Henrietta. The Duathlon consisted of a 3.5 mile run, followed by an 11 mile bike ride, ending up with a 1.5 mile run.

Many thanks to the amateur radio operators who made this yearly event another success. The public service event was headed up by Dave Payne (KA2J), with assistance from George Platteter (AA2FO), David Weiss (N1DOU), Mike McNamara (KB2CHP), and John Dickason (N2JAC).

## RARRA AUCTION ANNOUNCED

REMEMBER that the meeting of November 4th will be our annual auction, so start thinking about gathering up all the great junk that you've accumulated, then take it to the curb. Bring what good stuff is left that you no longer need and put it into someone else's hands by an exchange for some legal tender. A lot of new hams need ways to get on the air, so demand will certainly be up. Repeat after me, "November 4th ... Auction ... November 4th ... Auction ..."

## RARRA RAG CLOSING DATE

October 14th. Please submit all articles and ads prior to this date.

# the **RARA RAG**

Published by  
**ROCHESTER AMATEUR RADIO ASSOCIATION, INC.**  
P.O. Box 93333, Rochester, NY 14692-8333

**Editor** ..... **Neal Eckhardt, WB2EKP**  
80 Authors Avenue, Henrietta, NY 14467 (716-359-2672)

**Managing Editor** ..... **Dick Goslee, K2VCZ**  
24 Elaine Drive, Rochester, NY 14623 (716-334-1762)

**Advertising Manager** ..... **Dick Goslee, K2VCZ**  
24 Elaine Drive, Rochester, NY 14623 (716-334-1762)

## STRANGE MILITARY DEVICE WORTH MORE THAN \$75.00

Isabelle Ledford of Cooleemee, N.C., didn't know what to make of the strange device her longtime friend Roger Spillman bought for \$75 at an auction from a salvage dealer.

Spillman thought it might be an amplifier he could use with his company's business band radio system. He brought the 85-pounder to Ledford, who is radio amateur AB4UX.

She noted the device's unusual connectors, rugged construction and internal cooling system and surmised that it wasn't intended for ordinary communications. "Looks like we have a boat anchor here", she told Spillman. The two believed they might be able to resell the unit and share in the proceeds - if they could find out exactly what it was. AB4UX called Raytheon, the device's manufacturer, with the serial number. They received no response for several weeks.

It wasn't until after Air Force agents and sheriff's deputies - armed with a search warrant - arrived at Isabelle Ledford's home that the pair learned the mission of the mysterious product.

### EHF SECRET SATELLITE SYSTEM

It was an amplifier, not for business or amateur use, but for the Extremely High Frequency spectrum. The unit was part of MILSTAR, the secret Military, Strategic and Tactical Relay Satellite designed to convey launch codes to U.S. missile forces for up to six months after Washington is destroyed by nuclear attack.

The officers explained the purpose of the amplifier - "They always treated me fine", Isabelle told us - and took it with them. Spillman's \$75 bargain turned 'out to have cost the Pentagon a cool \$363,735.

The \$35 billion MILSTAR is the most sophisticated satellite system ever built, costing \$100 million a year to operate. Controlled from Colorado Springs, MILSTAR communicates with user terminals in missile silos, submarines, bombers and convoys of hardened trailer trucks traveling the nation's highways during periods of high military alert. Operating in the EHF band keeps communications unaffected by propagation disturbances that would follow nuclear detonations on Earth. A lower-frequency UHF link is incorporated into MILSTAR, however, for compatibility with older systems.

Details of the classified program have been difficult to come by, but huge cost overruns, technical set-backs and whistle blowers' charges recently brought it into the public eye. According to inves-

VOL. 47      OCTOBER 1994      NO. 2

### OFFICERS:

President: Roger Harnaart, WB2BWQ      292-6665  
Vice President: Chris Reich, WB2DYJ      254-2906  
Secretary: James Hood, N2HHV      581-1256  
Treasurer: Richard Goslee, K2VCZ      334-1762

### BOARD OF DIRECTORS:

Lloyd Caves, WB2EFU      671-7079  
Neal Eckhardt, WB2EKP      359-2672  
Keith Freeberg, N2BEL      458-8246  
Edwin Holdsworth, N2EH      624-1929  
Joseph Hood, K2YA      865-9092  
George Muller, WA2IEO      381-6151  
James Shipkowski, WB2WWV      781-1432

Club Historian: Bruce Kelley, W2ICE  
Public Service Coordinator: Edwin Holdsworth, N2EH  
License Testing Directors: Barbara Rae Weirich, AA2CX  
George Platteter, AA2FO  
Membership Chairman: Alex Piccirilli, NV2Y  
Licensing Course Director: Neal Eckhardt, WB2EKP  
Hamfest General Chairman: Harold Smith, K2HC  
K2JD Engraving: Edwin Holdsworth, N2EH

The RaRa RAG (USPS 605-440) is published monthly except August by the Rochester Amateur Radio Association, Inc., 24 Elaine Drive, Rochester, New York 14623. Subscription is \$5.00 per year (included in the \$10.00 annual membership dues). Second class postage paid in Rochester, NY.

POSTMASTER - Send address changes to The RaRa Rag, P.O. Box 93333, Rochester, New York 14692-8333.

Full permission is granted for reprinting articles provided a credit line is given to the RaRa Rag. The Rag exchanges with other organizations' publications.



Amateur Radio News Service

tigative journalist Tim Weiner, author of Blank Check: The Pentagon's Black Budget, the MILSTAR network of frequency-hopping satellites and ground stations "will be the most complicated system the human mind ever has created".

### UNIT FELL OFF A PALLET

It was not a nuclear command truck that started the amp on its erroneous way to Cooleemee it was a delivery truck headed in December 1992 from a Massachusetts factory to McClellan Air Force Base in Sacramento, California. The unit fell off a shipping pallet and was lost for a year, until it turned up on the unclaimed freight market. Roger Spillman is still out his \$75, but has been sent government forms that might help him get his money back.

The first of six MILSTAR satellites took off from Cape Canaveral aboard a Titan 4 booster on February 7. Brig. Gen. Leonard Kwiatkowski, MILSTAR program director, praised the program in comments to the Washington Post. "Future conflicts will require a coordinated team effort by joint forces over long distances worldwide", he said. "MILSTAR's design is ideally suited to do just that". But Col. Sandy Mangold, who said his views cost him his Air Force job evaluating the space budget, described MILSTAR as a costly monument to Cold War technology that should be terminated.

### MILSTAR BANDS

	EHF	UHF
Uplink	44 GHz	350MHz
Downlink	20 GHz	250 MHz

*Tnx W5YI Report via The Readout*

## OCTOBER CALENDAR

- 7 - RaRa Meeting - Henrietta Fire Hall  
3159 East Henrietta Road - 8:00 p.m.
- 13 - RAPS Meeting - 111 Westfall Road  
7:30 p.m.
- 15 - RaRa VE Testing - 111 Westfall Road
- 18 - RDXA Meeting - 7:30 p.m.

## FCC RECEIVES AWARD FOR SPECTRUM AUCTIONS

The Federal Communications Commission's "Auction Team" has received the Hammer Award "for reinventing government initiatives".

The Commission said that the award recognized that the auctions (which were for narrowband Personal Communication Service spectrum and interactive video allocations) served consumers by licensing new services faster, served the public by selling rights to the spectrum rather than giving them away, and served industry by awarding licenses to those "who value them most highly".

The FCC Auction Team includes employees who worked on allocation and auction rule makings as well as the team that organized and carried out the actual auctions in late July.

After 47 rounds of bidding, the PCS auction earned more than \$600 million for the 10 nationwide licenses being auctioned. An interactive video spectrum auction earned an additional \$214 million for 574 licenses that will be used for new broadcast services.

Vice President Al Gore made the award presentation. He said "Small and independent (government) agencies have been leaders of reinventing government. At the FCC, which has less than 2,000 employees, reinvention efforts have moved the agency from red tape to real results. Employees of the Commission have set a new standard for government performance, putting their customers, the American people, first", Gore said.

*Tnx ARRL Letter*

## M. ORNSTEIN

WB2YYB

CONTRACTING

(716) 334-3258

**Roofing**

Gutter Cleaning

Residential & Commercial	Free Estimates
Attic Ventilation	Seamless Gutters

## FOUND

Plaid shirt in firehouse after  
September meeting.  
Call Irv @ 671-4430.

## RF HARMONICS TRACED TO UNLIKELY SOURCE

An Amateur radio operator notified a nearby AM broadcast station of harmonic radiation he was receiving at his home. The station Chief Engineer (CE) measured his harmonics at the station and found none to exceed FCC limits. The frustrated HAM called the FCC, which sent an inspector to his home.

Sure enough, excessive harmonic radiation from the AM station was measured. The inspector then went to the station, where the surprised CE asked to see the harmonic measurement demonstrated in his presence. Guess what... no excessive harmonics! Again, there were plenty of measurable harmonics on the second visit to the HAM's residence.

In the end, the problem was found to be caused by a neighbor's loose rain gutter. The spout was acting like an antenna, making intermittent contact - (diode effect) and reradiating the signal.

*Tnx Radio World and N6ZUC  
via The Readout*

## TRAFFIC HANDLERS WANTED

RaRa is looking for a few good amateurs who have an interest in traffic handling, NTS-style. We may very soon find ourselves with a wonderful public-relations opportunity, and it will require the efforts of several traffic handlers and support persons. If needed, we will train you thoroughly in NTS procedure. Traffic handling can be a very rewarding aspect of amateur radio, and the planned event offers great chance for RaRa to put it's good face and name in the public eye. Details will be made available as they develop. Those interested in being involved can contact Chris Reich, WB2DYJ.

N.B. All reference to RaRa should be read as "the fine, upstanding, wholesome, good-looking, intellectual, MEMBERS of that fine organization, the Rochester Amateur Radio Association".

## Rochester HAMFEST

May 19-20-21

FOR SALE - Yaesu FT 101B with Ext. VFO - \$200.00; Mosley TA33 - \$200.00. Contact Ron Zimmerman, W2MPI - 889-3703.

BIMINI TOPS DODGERS

**VORNRAN MARINE CANVAS**  
at Fabric City



*Our Boat Covers Are Tops.*

1800 N. Clinton Ave., Rochester, NY 14621  
**(716) 266-6440**

UPHOLSTERY Chuck Vorndran  
WB2OZS DRAPERIES

Advertisement

## SNYDER AND SNYDER Attorneys at Law

Accidental Injuries  
Wills & Estates  
Social Security Disability  
Real Estate  
Divorce  
Adoptions  
Stock Broker Liability  
Securities Arbitration

Discount for Licensed Amateurs

*Paul I. Snyder  
Jeanette F. Snyder  
Sherwood M. Snyder, W2KFU*

**(716) 546-7258**

183 E. Main St.  
Suite 1024  
Rochester, NY 14604-1681

**"WANTED" OLD RADIOS**

AM BROADCAST, TABLE TOP  
VINTAGE 1940 TO 1950

WA2ZNC "LEN"  
716-229-5470

122 W. Lake Road, Honeoye, NY 14471  
Advertisement

## "HELP" AND OTHER THINGS

The first 1994-95 season meeting got off to a different start last month. A pop in visit from three officers, and gentlemen, from the New York Guard really got things moving on a subject different from Amateur Radio, but really not so different. They are setting up a search & rescue unit, here in Rochester, and are looking for people who know how to communicate, such as we do in RACES. To me, it seems like an interesting, helpful and fulfilling project. If you would like to know more, please call the Culver Road Armory @ 244-5347 and get in contact with Major Ron Ryan. He will give you full details.

The HELP comes from US, RaRa! That's right, US. We need some talent that I know is out there in our membership, just waiting to be used. Our ongoing license class needs an overseer, (officially called the Director) and an instructor for General Class Theory. If you have any thoughts about getting our next generation of Hams started, please call either Neal Eckhardt @ 359-2672 or Roger Harnaart @ 292-6665 for more details. The classes really do need YOUR help.

You probably read Lia's article in the last RAG. Now that she has broken the ice, why don't some of you other girls wipe the dried ink off the pens and say what you want to by writing other articles for the RAG. You are members too. It's easy to do. Just ask Lia!

A short one. The annual auction is coming up in November. Better start getting your STUFF ready to pop in the car.

See you at the October meeting. More good things are in store. And, if you have a special request for something, ASK. We'll see what we can do to make it happen. (No requests for money over a buck and a half.)

*Roger, WB2BWQ*

**Patrick C. Moyer, N2AIW**  
*Attorney & Counselor-at-Law*

General Legal Services  
ARRL Volunteer Counsel Participant  
AOPA Legal Plan  
Masters Degree in City Planning

**Day and Evening Hours**  
**(716) 427-9907**

2128 W. Jefferson Rd. • Pittsford, NY 14534

Advertisement

## HURRICANE SEASON FREQUENCIES LISTED

Here are some of the major net and emergency frequencies (in KHz) of interest during the summer/fall hurricane season:

3815	Inter-Island 75 meter net
7165	Antigua/Antilles Net
14275	Amateur Radio/Red Cross
14283	Caribus Net
14283	Health and welfare traffic
14303	Health and welfare traffic
14316	Maritime Mobile Net
14325	Hurricane Watch Net
21310	Health and welfare (Spanish)
14185	Caribbean Emergency
7115	Caribbean Maritime Mobile (1200Z)
3808	Caribbean Weather (1030Z)
21390	Interamericas health and welfare
21400	Transatlantic Maritime Mobile
7268	Waterways

*Tnx ARRL Letter*

# RAMSEY

*Open  
Saturdays  
10 AM-2 PM*

## SURPLUS OUTLET STORE

- Complete line of cable and connectors
- ARRL Publications
- Component parts
- Complete Ramsey kit line
- Large selection of coils and other hard to find RF parts
- Consignment sales
- Plus the usual surplus goodies

**Only 15 minutes from Rochester in Victor**  
DIRECTIONS

*From 490 West (thruway Exit 45)*

*Exit 490 West at last exit - Rt. 96*

*South on Rt. 96 1 mile to Rt. 251*

*Right on Rt. 251 2 miles to Canning Pkwy -*

*O'Neil Associates Building on corner*

*Right on Canning Pkwy to Ramsey Building*

*From Southwest areas*

*Take Rt. 64 to Mendon 4 corners (Rts. 64 & 251)*

*East on Rt. 251 2 miles to Canning Pkwy*

**Ramsey Electronics, Inc.**  
**793 Canning Parkway Victor, NY 14564**  
**Phone 924-4560 Fax 924-4566**

## WHAT TO DO IF YOU ARE SUED OVER RFI

by Ron Moorefield, W8ILC

In rare instances, neighbors take Amateurs to court over RFI matters. If this happens to you, call ARRL HQ immediately and obtain the name of an ARRL Volunteer Counsel (VC) in your area. A VC is a lawyer who is familiar with Amateur Radio. Since law is their livelihood, they are not expected to always give free advice.

VC's have indicted that the initial consultation is always without charge, and they often give reduced rates to fellow amateurs. Never try to defuse the situation without the aid of a lawyer, even when the law is on the side of Amateur radio.

While the courts clearly do not have jurisdiction over RFI matters, preparing to appear before a judge is potentially expensive. A VC can often resolve the matter before the Amateur is taken to court. A neighbor may call the police and try to have an amateur declared a "public nuisance" for causing interference. Only the FCC has jurisdiction over RFI cases!

*Via The Readout*

## BROADCASTERS AND CABLE OPERATORS ARE FURIOUS WITH NEW FEES

Broadcasters and cable operators are furious with the Clinton administration for proposing to increase user and other regulatory-related fees by more than \$2 million per year and to impose a new tax to be known as a "spectrum royalty fee". They say that proposal could cost spectrum users almost \$51 billion. (Being non-pecuniary, amateur radio is excluded from these fees.)

Senator Ernest Hollings (D-SC) charged that "— the administration is trying to make the information super-highway into a toll road when it should be a freeway".

According to the 1995 budget proposal released April 22, the White House plans to use the money freed by a self-funded FCC to cover the costs of jailing illegal aliens who commit felonies in the U.S.

The FCC already raises enough revenue through user fees and application processing to pay for more than 80% of its budget. The FCC's budget for 1995 is \$167.4 million.

*Tnx W5YI Report*

### **GLENWOOD**

594 HAGUE STREET  
ROCHESTER, NY 14606

#### HOURS:

M-F 9:00 AM - 5:00 PM  
SAT 9:00 AM - 12:30 PM

PH: (716) 328-1600

FAX: (716) 328-3630

#### WE STOCK THE FOLLOWING:

AC CORDS  
CAPACITORS  
COAX CABLE  
CONNECTORS  
DIODES  
ENCLOSURES  
FANS  
FUSES  
FUSEHOLDERS

IC'S  
LAMPS  
LED'S  
MOTORS  
POTENTIOMETERS  
RELAYS  
RESISTORS  
SCR'S  
SHRINK TUBE

SOLDER  
SWITCHES  
TRANSISTORS  
TRIACS  
TRIMPOTS  
VARIABLE CAPS  
WIRE/CABLE  
ZENER DIODES  
LOTS MORE

### ELECTRONIC COMPONENT PARTS (NEW AND NEW SURPLUS)

- LARGE SELECTION
- HIGH QUALITY
- LOW PRICES
- IN-DEPTH INVENTORY

**TRY GLENWOOD FOR ALL YOUR COMPONENT REQUIREMENTS**