

# The Ragchewer

OCTOBER 2004



## The Monthly News Letter of The Lancaster & Fairfield County Amateur Radio Club

### **Club Meetings:**

1st Thursday of  
every month at  
7:30 p.m. at the  
Club House on State  
Route 37 (Granville  
Pike) next to Beavers  
Field.

### **Radio Night:**

Every Thursday  
of every month  
(Except 1st Thursday)  
at the Clubhouse,  
6:30 p.m.  
to 8:30 p.m. on State  
Route 37 (Granville  
Pike) next to Beavers  
Field.

### **Net:**

Mondays 9 p.m.  
147.030 MHz (+.6)  
146.700 MHz (-.6)  
Alternate Freq.  
443.875 MHz (+5)

### **Club Packet BBS:**

145.53 MHz  
K8QIK-1 BBS  
K8QIK-2: OHIO53  
(Club Node)

Subject: Fwd: Bruce in Century, Fla.

Hi Ya'll

My name is Scott Hillman and my ham radio Callsign is WA4TYH in Brewton, Ala.

I have been in touch first by Ham Radio, then in person with your SBC Disaster Relief feeding unit in Century, Fla. Your loved ones are doing a wonderful service in a very destitute part of Florida for the victims of Hurricane Ivan. Thanks to Ham Radio, I have contacted them and now send this message to you in the form of the attached photos. Our heartfelt thanks to all the workers who have done so much to help a very poor and ravaged community. God has blessed us with many such workers from many, states, who have tirelessly worked to ease the suffering of their fellow man here in the southland.

We thank God for each and every one of you who have supported the work of your

loved ones to help our people, many of whom are in great need. Just this past weekend, a different relief unit brought 200 noon and 300 hot evening meals into our Church home in Castleberry, Alabama. This was an area, not unlike Century, Fla, that had been overlooked by officials. Many of the people in this dying town are old and/or disabled. The outpouring of love and support from workers such as these, were truly a God-send to our Church, and the community as a whole.

Any of you desiring to get a message to your precious loved one at this site, may send your message to me and I will hand-deliver it to them. My work with BellSouth carries me near the site Daily. They are located at the Old Century, High School in Century, Fla. Century is just 40 miles north of Pensacola, Fla, on U.S. Hwy 29 just south of the Fla-Ala state line. Your loved ones are all safe and rejoicing in being of service to their fellow man.

I cannot possibly tell you in this letter what a blessing God has sent to me through this tragedy. I know that God has his reasons for everything and in this one, he has opened more doors for me personally, than I can ever express to you.

Among other things, God has revealed to me through this tragedy just how temporary the physical things of this world are and just how quick they can be taken away. The only eternal thing we have is our soul. Everything else can be gone in just a heartbeat. Even our bodies are only temporary housing for our souls until we pass into the next world for eternity. We should live every precious moment to the fullest in service to our God and to our fellow man.

God bless ya'll (southern  
or you guys)  
In his service:  
Scott



for you all

- Meeting called to order by the President
- Pledge of Allegiance - Led by Richard.
- Visitors - No visitors
- Applications - No applications
- Secretary's Report - Jon read report
  - KI8JM motioned (Bob), Richard seconded. Report accepted.
- Treasurer's Report - Ed read the finances.
  - Richard moves to motion, Mr. Gaffney seconded.
- Vice President (Tom Moore) - No report
- Activities Manager (Connie Snoke) - December 18, 6:30-9:30 is the Christmas Party at Donatos on West Fair.
- Station Engineer (John Hillard) - Thanked club for sending sympathy card due to his father passing.
  - Did not get time to look at the antenna analyzer. Richard has a wattmeter that we might be able to use and the slugs needed. Is going to donate it. Mr. Hillard will look on case and slugs.
  - Installed repeater at the hospital, worked just fine. Repeater wouldn't come on after turning it off. Controller was set to be shut off. Won't seem to come on after a period of time. Ed disconnected it, and Mr. Hillard took a look at it and decided it could be a lot of RF causing problems. Bug box ordered with batteries. Took care of it seems to be working. 102 dollars and thirty six cents. Found a scematic to a test set to hook a telephone to it to touch tone program it. Built it for twelve dollars.
- Net - Mrs. Numbers can't do the net.
- Ragchewer - Next Thursday
  - Next week is the fair. Everything will be here to do it.
- Emergency Coordinator (Ed Campbell Snr)
  - 5k run is the 13th of November, keep it in mind. 9 am.
  - Tom Mo wants to know if anyone wants to help with EMA display?
  - Parts for antenna were reordered.
  - All the antennas are in here need to be put someplace.
  - Need to find out when the antennas can be put up.
  - Anyone near the areas try and see if and when we could get these up.
  - Where to head the beams? Aiming toward repeater? Hospital? Fire toward Lancaster, lay out a map and find out?
- Safety (Scott Snoke) - Post and steps all done by Gary. Works pretty well!
- Fundraising (Hannah) - KC8HJW Not present.
- Old Buisness - swap meet last Saturday. Alan was well pleased. Not a huge crowd, but it went well. Alan had thirty dollars in the meet itself. Turnout about sixty or so people. PSK demo done.
- New Buisness - Club has one of the members Lenard Scholtz down in Florida working as an emergency coordinator. FEMA.
  - Salvation Army X-mas money/food? Going to do it. Newspaper, and Ragchewer.
  - Money for Christmas Parade, and party? Maybe check with those who would be doing it. Find out if we are going to bring the Trailer.
  - CERT Class coming up. (Citizens Emergency Response Team) - Roof on this place. Needs some work done on the roof. Get three or four guys and do a section at a time. Look at spring, see if the county would pay for the shingles and tar paper? Think about this? Wait till spring.
- Closing
  - Richard made
  - Hollywood Seconded

Subject: WEAVER'S WORDS -- WATCH OUT FOR GOBLINS

BPL -- THE FAT LADY HASN'T SUNG, YET!

The FCC did pretty much as we expected. They put their blessing on the national roll-out of BPL. In doing this, they actually recognized (for the first time) the possibility of QRMIing Amateur Radio bands, and in theory established procedures that could force BPL suppliers to clean up their act. The jury is out on this, of course.

Even though FCC Commissioners forced their non-technical will on us, we are not "out," yet. With the help of our burgeoning Grassroots Action system, there is at least one more ploy we can attempt to force the Commissioners to stop the roll-out until after they have conducted scientifically-sound data that will determine the degree, if any, of interference BPL is likely to cause not only to us, but to all other users of the involved spectrum.

I thank Michigan amateurs K8CQF and N8DJP who so willingly came to the front in emphasizing public safety interests in avoiding interference. We will see fairly soon how this new effort pans out.

#### REGULATION BY BANDWIDTH

I thank each of you who wrote to me or ARRL HQ to share your views on this proposal. I read each of these regardless of where they were directed. I saw a number of good recommendations. Thanks for them. I also saw some misunderstandings. Thanks for these as well.

One point I wish to make is that I attempted to answer each comment very soon after I received it. This worked in most instances, but in a few my E-mail was rejected as undeliverable, apparently because of security setting some place along the line. If this is intentional, this is OK with me, but it means I will be unable to discuss issues with you.

The status of the proposal is that a summary of comments received on it have been reviewed by the Executive Committee. The EC met just this past weekend so I don't know exactly what changes were made as a result of them. I believe I can guarantee everyone that changes are being made and that the basis for these changes is input from members. Great job, folks.

One additional comment is that there is very misleading information being spread by a former member of the ARRL HF Digital Committee concerning this Committee's report and how some recommendations in it were put into the Bandwidth proposal. I don't want to make this issue of the newsletter longer than it already is certain to be, but let me attempt to assure everyone that most of the information in this individual's claims are inaccurate or are taken out of context so that they misrepresent the facts.

#### GRASSROOTS PROGRAM

Little by little there seems to be growing understanding among Great Lakes Division members of the need for them to become involved in our Grassroots Lobbying program. I am able to begin putting volunteer's names on the list for the several Congressional Districts in our three states. If you are willing to consider making as many as two contacts a year with your US Representative or Senator, please notify me. The task will be to provide basic information to them and ask them to support legislation ARRL has had introduced into Congress. This legislation is on such topics as protecting our amateur bands and on Federal guarantee of the ability of amateurs to have antennas. Background information and handout material will be provided to members of the Grassroots team. The reality of modern times is that we can no longer rely on the FCC to do the right thing. We must become involved on a non-partisan basis with Congress. Please contact me for more information.

#### MICHIGAN SECTION ARRL CONVENTION

The 2003 Michigan Section Convention was the first I had attended for many years. To say it was a good one is an understatement. Even saying the 2004 Convention will be better understates expectations. For one thing, ARRL President Jim Haynie, W5JBP, will be the speaker at the Friday evening banquet and will hold forth at the ARRL forum on Saturday.

The Convention is Friday evening, November 5 and Saturday, November 6. The Holland ARC's hamfest is Sunday, November 7. For more information: <http://superswap.hollandarc.org/>.

#### KENTUCKY SECTION ARRL CONVENTION

Congratulations to the folks in the Louisville area for a fine convention. It shows promise of growing in future years.

#### GREAT LAKES DIVISION CONVENTION

This will be the second of our bi-annual Division Conventions. It will be held on Saturday, March 19, the day before the Toledo Hamfest. Featured speaker for the Saturday evening banquet is Riley Hollingsworth, K4ZDH. He will also hold a forum earlier in the day. Riley, of course, has been extremely active in enforcement not only of Amateur Radio rules, but of rules against QRM caused by power companies, etc. The representative from ARRL HQ for this convention will be Wayne Mills, N7NG. Wayne probably is best known for his work in the DX community, but he is more than this. He is Manager of the ARRL Membership Services department.

CONVENTION AWARDS: Now is the time to submit nominations for the George S. Wilson, W4OYI, the Amateur of the Year, the Technical achievement and the Newsletter awards.

For information on the Convention and the awards, go to: <http://greatlakes.arrl.org/>.

FINAL THOUGHT: Continued on page4

Subject: WEAVER'S WORDS -- WATCH OUT FOR GOBLINS  
FINAL THOUGHT

It seems that some amateurs look to ARRL to enforce FCC rules. Frankly, we don't. Moreover, we can't. The rules are established and enforced by the FCC. If one looks at the staffing level of the Commission, it is readily apparent they cannot be everywhere at any one time. Riley Hollingsworth, for example, has few people on his staff and still they must attempt to cover the US and its possessions to enforce the Commissions' rules. Simply put, this is an impossible task. Riley and his folks do a great job, but they cannot do it all. We, radio amateurs, can assist Riley; however, by being his eyes and ears. The ARRL Official Observer Corps is the specific group that he looks toward for help. OOs simply collect information and pass it up the line where it is reviewed for completeness and is passed on to Riley. I encourage each of you to consider becoming an OO. This is easy to do and the job required is pretty simple, also. The job done by OOs is of great help in getting at least the worst offenders off our ham bands. To learn more about becoming an OO, go to: <http://greatlakes.arrl.org/>. Click on the link to your Section's web site where the OO Coordinator for your Section is listed. He will be happy to describe the hows, whys and whats of OO work. Keep in mind that if we don't help, we will have no one but ourselves to blame for many of the operating problems on our bands.

Jim Weaver, K8JE

Director, Great Lakes Division ARRL; <http://www.arrl.org/>

5065 Bethany Rd., Mason, OH 45040

Tel.: 513-459-0142; E-mail: [k8je@arrl.org](mailto:k8je@arrl.org)

ARRL: The reason Amateur Radio Is!

MEMBERS: The reason ARRL Is!

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ARRL Great Lakes Division Director: James Weaver, K8JE [k8je@arrl.org](mailto:k8je@arrl.org)

The ARRL Letter Vol. 23, No. 41 October 15, 2004

IN THIS EDITION:

- \* +FCC adopts rules for BPL
- \* +ARRL calls for shutdown of New York BPL system
- \* +AMSAT-NA Symposium gets greeting from space
- \* +ARRL invites input on digital systems
- \* +Repeater coordinator drops controversial all-tone policy
- \* Solar Update
- \* IN BRIEF:

This weekend on the radio

ARRL Certification and Continuing Education course registration

Amateur Radio Emergency Communications Course registration

ARRL Web site glitch

+No news is . . . no news

+RAC Board appoints new President, First Vice President

New world record set on 47 GHz

Amateurs join Air Force Space and Missile Pioneers Hall of Fame

Alan B. Caplan, K4AVQ, SK

Former landline telegraphers to gather

DXCC Desk accredits DX operations

==>FCC ADOPTS NEW BPL RULES, ACKNOWLEDGES ITS INTERFERENCE POTENTIAL

As expected, the FCC this week adopted revised Part 15 (unlicensed services) rules to specifically regulate broadband over power line (BPL) systems. Meeting October 14 in open session, the Commission adopted a Report and Order in ET Docket 04-37. In comments before voting, three members of the Commission, including Chairman Michael Powell, specifically cited the concerns of Amateur Radio operators and expressed either assurances or hope that the new BPL rules will adequately address interference to licensed services. Republican FCC Commissioner Kevin Martin mentioned Amateur Radio's and broadcasters' interference concerns in a written statement. ARRL President Jim Haynie, W5JBP, said he was encouraged to see the Commission acknowledge interference to amateurs as a genuine issue in the proceeding.

"What the League has done in the last year and a half on this issue showed in the Commission's public meeting today," Haynie said Thursday. He cited the FCC's approval of three major points that the League had been pushing for: Certification of BPL equipment instead of verification, a requirement for a public BPL database--something the BPL industry did not want--and mechanisms to deal swiftly with interference complaints. Haynie conceded, however, that the devil is in the details of the R&O, which likely will not be made public for at least a few weeks.

Anh Wride of the FCC Office of Engineering and Technology (OET), acknowledged that Access BPL devices "pose a somewhat higher potential for interference to licensed radio services than typical Part 15 devices."

But, Wride continued, "we believe the specific benefits of BPL warrant acceptance of a small degree of additional risk, and that this interference potential can be satisfactorily managed."

Commissioner Michael Copps, a Democrat, said he remains concerned about interference to Amateur Radio users. "I take the concerns of this community very seriously and believe that the FCC has an obligation to work hard to monitor, investigate and take quick action, where appropriate, to resolve harmful interference."

Copps said if interference occurs, "we must have a system in place to resolve it immediately," and he expressed the hope that the new rules would include such "rapid turnaround" provisions. Copps, who dissented in part with the R&O, raised the question of whether utility ratepayers should have to "subsidize an electric power company's foray into broadband."

The Commission's other Democrat, Jonathan Adelstein, said the interference question made the proceeding a challenging one because it had to accommodate concerns raised by Public Safety licensees, federal government users and Amateur Radio operators. "These are important services that we need to protect from harmful interference," Adelstein said.

Adelstein also said that while it's clear that some BPL systems can co-exist with existing licensees, others "haven't fared so well." He said those systems shouldn't be deployed commercially until it's assured that they won't cause harmful interference.

Commissioner Kathleen Abernathy, a Republican, said the FCC had to "make some hard compromises" to deal with questions about interference. But she expressed confidence in "technical solutions."

Continued on next page

Chairman Powell called it "a banner day" for communications in the US because, he said, BPL promises "ubiquitous service to all Americans at affordable rates." The chairman, a Republican, conceded that BPL will affect some spectrum users--including "all those wonderful Amateur Radio operators out there." Powell said the FCC has taken Amateur Radio interference concerns seriously from the start and has put protections in place "to allow that service to continue." At the same time, Powell implied that the FCC must balance the benefits of BPL against the relative value of other licensed services.

Powell said BPL's potential for the US economy "is too great, too enormous, too potentially groundbreaking to sit idly by and allow any claim or any possible speculative fear" keep the Commission from promoting adoption of BPL technology.

ARRL CEO David Sumner, K1ZZ, suggested that Powell was overstating the necessity of yet another broadband pipeline. "It's astonishing to me that the chairman of the FCC can talk about needing a 'third way' to provide broadband to consumers when multiple technologies already are available, including wireless broadband," he said.

The United Power Line Council (UPLC) applauded the FCC's action, saying the new rules should encourage BPL deployment while protecting licensed services from harmful interference. "We didn't get everything we wanted," said UPLC President and CEO William R. Moroney, who called the R&O "the result of close cooperation and compromise" with the National Telecommunications and Information Administration (NTIA) to address its concerns about potential interference.

For more information on BPL, visit the "Broadband Over Power Line (BPL) and Amateur Radio" page on the ARRL Web site <<http://www.arrl.org/bpl>>.

#### ==>ARRL ASKS FCC TO SHUT DOWN NEW YORK BPL FIELD TRIAL

The ARRL this week asked the FCC to shut down a BPL field trial system in Briarcliff Manor, New York, that has been the subject of past interference complaints. The ARRL says the system, operated by Ambient Corporation under an FCC Experimental license, continues to cause "harmful interference" to amateur stations and that the FCC must require it to cease operation immediately.

"The operator of the system has attempted what it referred to as 'adjustments' in this system in order to reduce the severe interference potential to licensed radio services such as the Amateur Service," said ARRL General Counsel Chris Imlay, W3KD. "These 'adjustments' have come to be inaccurately referred to as 'notching' of certain bands, and as a solution to interference to Amateur Service stations, they are incomplete and inadequate." The ARRL's October 8 letter of complaint asserts that the Briarcliff Manor system not only is currently causing interference but fails to comply with either applicable FCC Part 15 regulations or with the terms of its FCC experimental authorization.

ARRL said the BPL facility at Briarcliff Manor should not be permitted to resume operation until it can demonstrate "full compliance" with FCC rules. The League also called on the FCC to impose "appropriate monetary forfeitures" against Ambient.

Accompanying the League's complaint were technical exhibits substantiating the degree of interference the League alleges. One exhibit shows the results of frequency-shifting adjustments Ambient made to the system in the wake of "multiple interference complaints from licensed radio amateurs." The complaint maintains that the adjustments failed to reduce interference on "a substantial portion" of the HF amateur allocations. The ARRL study says Ambient has been trying for more than a year to mitigate interference by using "notching" techniques, "but to no avail."

The ARRL said measurements taken at 14.3 MHz at one point in the system "revealed 30 to 40 dB of degradation to Amateur Radio operations along a stretch of road over a kilometer in length." A sweep at another location showed that BPL signals occupying the entire 15-meter band remained strong more than a quarter mile from the BPL injector.

"The levels of interfering BPL signals are sufficient to obscure virtually all Amateur Radio received signals and preclude Amateur Radio communications in the areas and on the bands identified in the report," the ARRL concluded.

ARRL member Alan Crosswell, N2YGK, a resident of the community, has documented interference, complaints and related information on his "BPL in Briarcliff Manor" Web site <<http://www.columbia.edu/~alan/bpl/>>.

The Briarcliff Manor BPL system, which is operated by the electric utility Consolidated Edison, was the focus of a March 2004 front-page Wall Street Journal article, "In This Power Play, High-Wire Act Riles Ham-Radio Fans," by technology writer Ken Brown. ARRL staff members accompanied Brown to the BPL site so he could hear the interference firsthand.

The Lancaster  
and Fairfield County  
Amateur Radio Club

# Public Service Communications



Edward Campbell, **WD8PGO**  
Fairfield Co. EC

2002/2003  
Officers:

*President:*  
Charles Snoke  
N8KZN

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*Trustee:*  
Richard A. Schleiffer,  
W9ZZX

*Flower Fund:*  
Marie Moore, KB8VOL  
653-9092

*Editor:*  
Bob Bickel  
N8UTE

## OCTOBER BIRTHDAYS

KC8OSC Connie Cote  
W8MYR Ronald Braden  
K8EHK Leo "Dex" Steible  
KB8GUN Raymond Webb  
W8EZE David Harrington  
WD8SCN Andrea Steible  
W9ZZX Richard Schlieffer  
N8WLT James Neymeyer



**Drop in and see us on Radio Night,  
Thursday evenings at 6:30 PM.**

Check out our Club Web Site at: [www.qsl.net/k8qik](http://www.qsl.net/k8qik)

## ***CENTRAL OHIO CW LEARNING NET***

The CW Learning Net is Every Friday night at 8:00 P.M. on the W8CMH repeater 145.490 (-). Portion of 2 hour net is devoted to letter learning and the balance to QSO designed to promote speed development. Carl, AA8YY is Net Control.

## ***SLOW SCAN TV NET***

The COSSTV (Central Ohio Slow Scan TV), <http://www.qsl.net/n8tut/sstv>, Net is the first Sunday of every Month at 7:00 PM. The group meets on the W8CMH repeater 145.490(-). All you need is a 2m radio, a computer with a sound card, and the W95SSTV software. The Software is available on the internet at <http://www.siliconpixels.com/W95SSTV/W95dload.htm>.

## **Weather Spotter Net**

146.76 repeater  
with 123htz. tone  
Every Tuesday at  
7:30 p.m.  
Alt. Freq 147.240

# UNIVERSAL RADIO TOP 80 ITEMS: Prices & Specials

## ▶ ALINCO

Order	Model	Regular	Comment	Price	Pg.
#4238	DJ-196T	\$139.95		\$139.95	67
#1596	DJ-596T	219.95		219.95	67
#0107	DJ-C7T	169.95	New model!	169.95	
#3610	DJ-X10T	329.95		329.95	21
#2020	DJ-X2000T	769.95		499.95	21
#1980	DR-135T	169.95		169.95	62
#4236	DR-135TP	269.95		269.95	62
#3621	DR-605TQ	339.95		339.95	
#0620	DR-620T	369.95		338.95	62

## ▶ AOR

AOR promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#3705	AR5000A+3B*	2499.95	Free SWL book #2984	\$2499.95	22
#0083	AR8200Mk3B	589.95	Free SWL book #2984	589.95	23
#1860	AR8600Mk2B	889.95	Free SWL book #2984	889.95	22

## ▶ DRAKE

Drake promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#0082	R8B	\$1469.95	Free Aero book #0042	\$1469.95	16

## ▶ GRUNDIG - ETON

Grundig promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#4000	G4000A	\$149.95	New! Free book #2984	\$149.95	
#0800	Satellit 800	499.95	Free FR200BNZ #0767	449.95	6
#3500	S350	99.95	Free SWL book #2984	99.95	6
#0400	YB-400PE	129.95	Free FR100SIL #0994	129.95	6
#0550	YB-550PE	99.95	Free SWL book #2984	99.95	7
#0110	E10	129.95	Expected 10/31/04	129.95	
#0100	E100	99.95	New!	99.95	

## ▶ ICOM

ICOM promotion ends 10/31/04.

Order	Model	Regular	Comment	Price	Pg.
#0208	208H	\$309.99	\$20 Rebate	\$289.99	61
#0703	703 Plus-15	569.95	Free Icom Hat	569.95	58
#3450	706Mk2-G	769.95	\$20 Rebate & Free RMK706	749.95	58
#0718	718	594.95	\$25 Rebate & Free UT106	569.95	58
#0074	746 Pro	1699.95	\$200 Cpn. +Hat +PS125	1499.95	58
#1756	756 Pro II	2449.98	\$200 Cpn. +Hat +PS125	2249.98	58
#3756	756 Pro III	2999.95	New! Expected 12/25/04	2999.95	
#1910	910H	1289.95	Free Icom Hat	1289.95	61
#2100	2100H-25N	179.98	\$20 Rebate	159.98	61
#0102	2200H	219.95	\$20 Rebate	199.95	61
#0272	2720H	379.95	\$20 Rebate	359.95	61
#0041	7800	10599.90	Free Jacket & Hat	10599.90	57
#1002	PCR1000-02BON	479.95	Free SWL book & Chart	419.95	17
#3333	R 3-26	349.95	\$10 Rebate + Free Chart	339.95	18
#0005	R 5-06	199.95	\$10 Rebate + Free Chart	189.95	18
#3550	R10-05	299.95	\$10 Rebate + Free Chart	289.95	19
#0020	R20-06	499.95	\$10 Rebate + Free Chart	489.95	19
#0175	R75	549.95	\$50 Rebate +UT106 + Book	499.95	11
#1850	R8500-02	1499.95	Free book #2984 +Hat	1499.95	17
#4429	T2H Sport	99.95	Free Metal Flashlight	99.95	64
#3052	T7H	189.95	\$10 Rebate + Flashlight	179.95	64
#0690	T90A	259.95	\$10 Rebate + Flashlight	249.95	64
#0088	V8	129.95	\$10 Rebate + Flashlight	119.95	64
#4080	V8000	199.95	\$20 Rebate	179.95	61
#0838	W32A	269.95	\$10 Rebate + Flashlight	259.95	64

→ Note that prices shown are **after** mfg's rebate on applicable items.

## ▶ JAPAN RADIO CO.

JRC promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#1545	NRD-545DSP	1799.95	Free JRC ST-3	\$1799.95	12

## ▶ KENWOOD

Kenwood promotion ends 10/31/04

Order	Model	Regular	Comment	Price	Pg.
#4211	TH-D7Ag	\$349.95	\$5 Coupon	\$344.95	63
#2222	TH-K2AT	149.95	\$15 Coupon	134.95	63
#3496	TH-K2AT K2	109.95	New Version!	109.95	63
#0066	TH-F6A	329.95	\$5 Coupon	324.95	63
#3699	TH-G71A[H]	234.95	\$5 Coupon	229.95	60
#0271	TM-271A	179.95	\$5 Coupon	174.95	60
#4116	TM-D700A	499.95	\$5 Coupon	494.95	60
#1621	TM-G707A	279.95		279.95	60
#3565	TM-V7A	399.95	\$50 Coupon	349.95	60
#0480	TS-480SAT	1199.95	\$200 Coupon	999.95	54
#2480	TS-480HX	1299.95	\$200 Coupon	1099.95	54
#0570	TS-570D[G]	964.95	\$50 Coupon +Logbook	914.95	54
#2519	TS-570S[G]	1124.95	\$50 Coupon +Logbook	1074.95	54
#1978	TS-2000	1749.95	\$100 Coupon +Mousepad	1649.95	54
#2797	TS-2000X	2249.95	\$100 Coupon +Mousepad	2149.95	54
#1937	TS-B2000	1549.95	\$100 Coupon +Mousepad	1449.95	54

## ▶ SANGEAN

Sangean promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#3505	ATS-505P	\$119.95	Free Propo book #0027	\$119.95	8
#1069	ATS-818ACS	199.95	Free SWL book #2984	199.95	8
#1909	ATS-909	239.95	Free SR25V AM/FM/TV	239.95	8
#1080	PT-80	159.95	Free SWL book #2984	159.95	8

## ▶ TEN-TEC

Ten-Tec promotion ends 12/31/04.

Order	Model	Regular	Comment	Price	Pg.
#0321	RX-320D	\$328.95	Free SWL book #2984	\$328.95	13
#0340	RX-340	3950.00	Free Passport #1005	3950.00	15
#0350	RX-350	1199.00	Free Passport #1005	1199.00	14

## ▶ YAESU

Yaesu promotion ends 10/31/04.

Order	Model	Regular	Comment	Price	Pg.
#2786	FRG-100B	\$599.95	Free SWL book #2984	\$599.95	13
#0060	FT-60R	194.95	New model!	194.95	
#1817	FT-817ND	639.95	New version +RefCard	639.95	56
#2319	FT-840	599.95		599.95	56
#1467	FT-847	1449.95		1449.95	56
#1857	FT-857D	779.95	New version	779.95	56
#1897	FT-897D	899.95	New version	899.95	56
#2360	FT-1000MPv	2149.95	Free Yaesu Hat	2149.95	56
#2633	FT-1000Field	1799.95	Free Yaesu Hat	1799.95	56
#2800	FT-2800M	159.95		159.95	62
#3780	FT-7800R	269.95		269.95	62
#0080	FT-8800R	379.95		379.95	62
#0890	FT-8900R	429.95		429.95	62
#3120	VR-120D	199.95		199.95	20
#0500	VR-500	299.95		299.95	20
#0050	VR-5000	599.95	Free SWL book #2984	599.95	20
#0176	VX-2R	179.95		179.95	66
#1795	VX-5R BLACK	229.99		229.99	66
#4430	VX-5RS SILVER	229.99		229.99	66
#0777	VX-7R SILVER	329.99		329.99	66
#0778	VX-7RB BLACK	328.99		328.99	66
#3187	VX-150/64B	129.99		129.99	65



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- ◆ *Up coming Events*
- ◆ *And More.....*