

The Jersey Broadcaster

NEWSLETTER OF THE NEW JERSEY ANTIQUE RADIO CLUB

March 2005

Volume 11 Issue 3



MEETING/ ACTIVITY NOTES

Reported by Marv Beeferman

The February meeting, prompted by President Phil Vourtsis' talk on the history of the 45 rpm record and a mini-auction featuring various communication receivers, miscellaneous parts and test equipment, brought out a very nice turnout of NJARC members. For the March meeting, the program will be member-driven as RCA-related electronics and ephemera forms the basis of a "show-and-tell." For new members, participation is easy. An interesting find traceable to the history of RCA and a few descriptive words is all that's needed. You'll find a non-judgmental audience that is receptive, respectful and interested in anything you have to offer.

Good progress is being made with organizing the National Broadcaster's Hall of Fame exhibit at the InfoAge cottage supported by the recent work of Steve Goulart, Dave Snellman, Harry Klancer, Al Klase, Phil Vourtsis and Marsha Simkin. One room has been populated with displays and another room is almost ready to be set up. Photos of the project's progress, courtesy of Harry Klancer, are included in this month's *Broadcaster*. InfoAge Director Fred Carl was very happy with the way the cottage is taking shape and is planning to include the cottage in an upcoming newspaper photo-op. Fred has also reported the following good news:

- NASA has accepted InfoAge's application to be part of the NASA Digital Learning Network and will donate \$3,000 to purchase the equipment needed to participate in the program.
- Dr. Connie Zimmerman has arranged for



MEETING NOTICE

The next meeting of the New Jersey Antique Radio Club will take place on Friday, March 11th, at the David Sarnoff Library in Princeton, NJ. Contact President Phil Vourtsis (732-446-2427) for directions. With RCA playing such a central role in New Jersey radio history, this month's program will feature an RCA "show-and-tell" where members talk about interesting pieces and ephemera in their collections. Hopefully, NJARC member and Sarnoff Library Director Alex Magoun will treat us to some treasures hidden in the RCA archives.

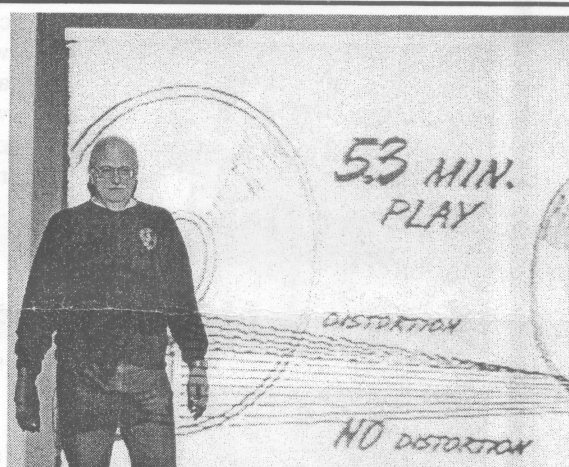
the National Science Center's "Science Discovery Van" to visit the Diana site on May 24th and a lot of work is taking place to get the site ready. Three hundred students are expected to visit and see exciting science under the TIROS antenna.

Steve Goulart is requesting volunteers to help with NJARC participation in this year's Trenton Computer Fest on April 16th. He'll need a few people to fill up a few tables worth of NJARC radio, TV and phono displays and a few extra to help man the tables. This event almost always leads to new members and donations to the club.

Although the show is organized around computer vendors, it's always a lot of fun to comb the aisles for those hidden finds. Steve may be reached at sgoulart@att.com.

The NJARC will also be participating in an antique radio display at the Conference Center for the IEEE Operations Center in Piscataway. The exhibit will be viewed by some 700+ IEEE employees at the Center and visiting volunteers. We need to fill two display cases some time at the end of April. If you're interested in contributing a few pieces (credit will be given) or artifacts for about a year, please contact Phil Vourtsis or Marv Beeferman.

With regard to other upcoming events, the NJARC swapmeet at Hazlet is set for Sunday, March 13th. By the time you receive this edition of the *Broadcaster*, all "free tables" will be taken but we still have plenty of room for new reservations. We are also planning a Summer meet, tentatively set for July 30th, at a new trial venue in Parsippany. Our next "open house" Repair Clinic is scheduled for April 23rd at the Sarnoff Library in



NJARC President Phil Vourtsis takes us on a trip to the "distortion zone" during last month's 45rpm history presentation.

- Harris Corporation sent a structural engineer to check the TIROS satellite antenna on the Diana site. The corporation will give InfoAge the report as a gift and they are considering donating funds to help complete the painting of the dish and repair weather damage to the sheet metal.

THE JERSEY BROADCASTER is the newsletter of the New Jersey Antique Radio Club (NJARC) which is dedicated to preserving the history and enhancing the knowledge of radio and related disciplines. Dues are \$20 per year and meetings are held the second Friday of each month.

The Editor or NJARC is not liable for any other use of the contents of this publication.

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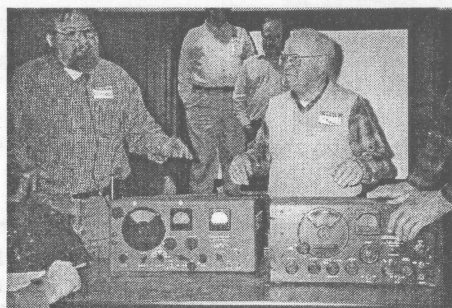
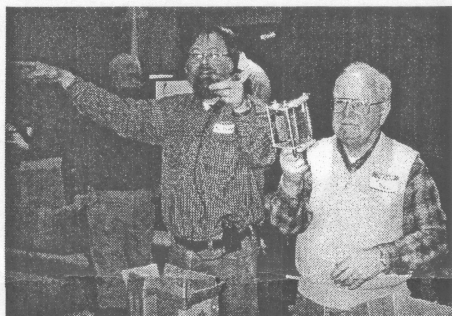
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Marsha Simkin
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(609)-660-8160

Princeton New Jersey.

We've gotten a little behind in dues collection, which provides support for all of our club activities and the publication you are now reading. Please help us cut down on next month's "Final Notice" mailing by checking your address label for a "1/05" date. This is your invitation to send a \$20 check to our membership secretary Marsha Simkin at 33 Lakeland Drive, Barnegat NJ, 08005. We still have time to achieve a 100% renewal by March 30th.

February's Mini-Auction



Special thanks to Al Klase, Ray Chase, Sal Brisindi and all those who helped obtaining and displaying some very nice items.

AN UNUSUAL TV FIND

As told by
Steve Goulart

After a trip to a local flea market, the call when out from member Steve Goulart:

"I picked up an orphan TV receiver this weekend. It has an inductotuner or continuous tuner. I believe they were made by Dumont. It tunes from channel 1 to 13 (50-216 MHz or so). The set does not seem to be a piece of production equipment. To me, it appears to be a prototype rather than a home-brew. The sockets are mounted with screws not rivets and there are no indications of a manufacturer."

"The interesting thing about this set is that it is a TV receiver not a TV (i.e., no CRT). There are four controls - sensitivity, on/off, tone and sound; plus the tuning. The back panel has multiple UHF connectors - antenna in and at least two video out plus audio terminals. The tubes are a mix of octal and miniatures and the wood cabinet has the look of 1940s TV construction. The top has a two level rounded section so it wasn't stackable."

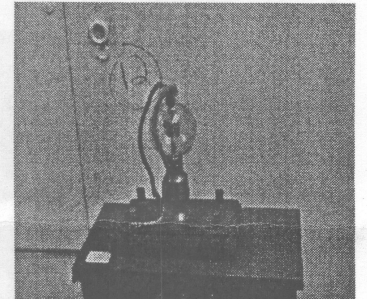
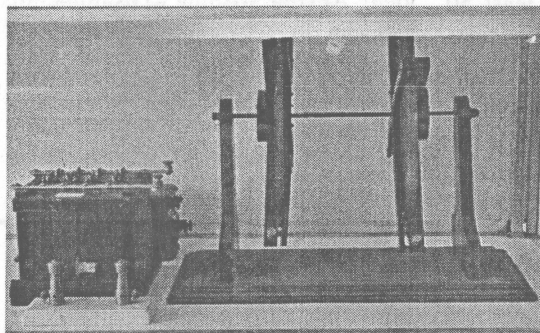
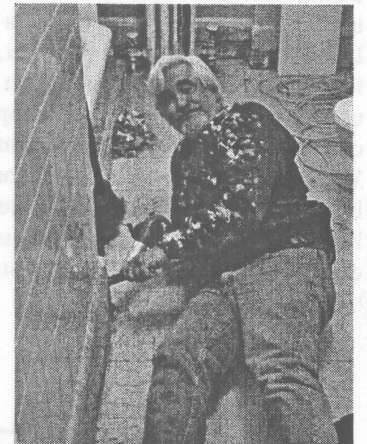
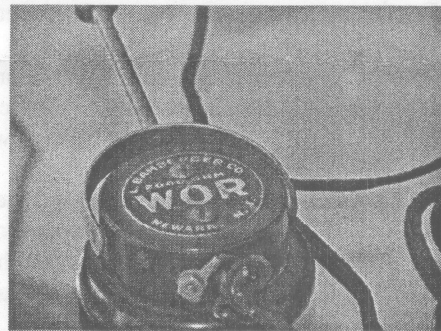
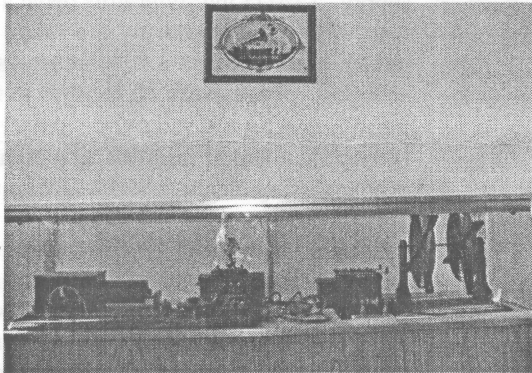
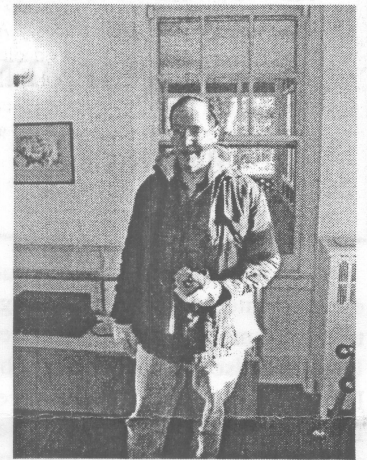
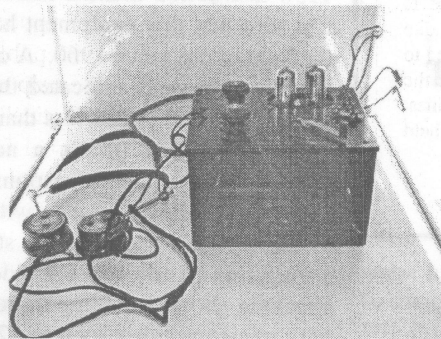
"Anyone have a clue as to what this is?"

The NJARC reflector had no takers, but the following analysis from the Early Television Foundation may hold the answer:

"You have a late 40s demodulator, possibly for use in a TV station. It would have been connected to a video monitor and audio amplifier. The continuous tuner was used by DuMont from 1947 to about 1951. It looks like the tube sockets are riveted in, so it is a factory made unit rather than a kit. Often wooden cabinets were used in TV stations where the equipment was in an executive's office. We have a late 40s studio monitor like that."

For pictures of Steve's demodulator, see page 8 of this month's *Broadcaster*.

SHAPING UP AT INFOAGE



AN UNUSUAL PIECE OF TEST EQUIPMENT

By Ray Chase

At a recent auction that included some electronic items, I noticed a strange piece of test equipment. It was a Model IG-102 UHF Impulse Generator made by Empire Devices, Bayside, NY. I have seen Empire Devices equipment before - they mostly manufactured instruments used for measuring RF radio noise. This one was filthy and I had no idea what it was good for, but it did have some interesting parts that could be used to make common power supplies; I decided to wait and see what it would go for. Well, I was able to purchase it for \$5.00 so it came home with some other "junk" that I bought. (Why do I keep doing this? I really don't need to add any of this stuff to my

hoard.)

Upon closer scrutiny, I found a June 1950 instruction manual inside the unit. I'm sure that this equipment has not seen the light of day since 1960. A check of the specification sheet indicated that the generator produced pulses less than 0.001 microseconds wide (that's a nanosecond) covering a frequency response of 0.01 MHz to 1,000 MHz flat to within 1/2 db. Whoa!! That's pretty heady stuff for not seeing any exotic tubes inside. Further checking showed nothing more than ordinary miniature tubes such as 12AU7's and 6X4's but there was an odd mechanical assembly that looked a bit out of place in an electronic impulse generator. Where would they get those nanosecond pulses and a 1,000 MHz coverage with 1950's technology?

Delving further into the manual, it included a theory of operation section. Voila! Rather than 1950's technology, the backbone of the generator was based on technology that was by then at least 50 years old. The Empire Devices engineers had designed a unit that developed the ul-

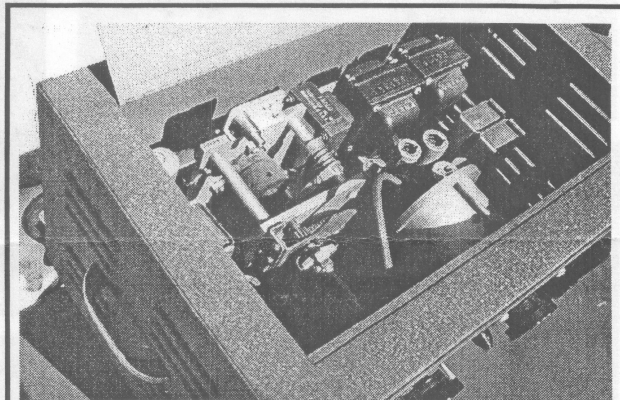
tra narrow pulses by charging and discharging a very short length of transmission line with a mechanical interrupter. In other words, a low-level "spark gap" transmitter. The transmission line would act as a pulse-forming network where the length of the pulse would be proportional to the propagation length of the transmission line (estimated at about 10 inches).

Power comes from two supplies, one for normal B+ and one used as a charging supply. 12AU7 multivibrators drive a coil that vibrates contacts to discharge the transmission line and a relay reverses the charging voltage every 10 seconds to minimize contact point migration. Shades of Marconi!...a simple solution to a complex problem using old established techniques.

I don't know what I'm going to do with this thing. Although I have not fired it up, externally it cleaned up rather nicely as the pictures show but I do not have a bench for a UHF Impulse Generator. It seems a shame to part it out which was my initial idea. Anyone wishing to examine this device can do so by contacting me and I can bring it to a meeting.



The IG-102 UHF Impulse generator - size is 10 X 12 X 17 and weight is about 20 lbs., finished in a nice blue crackle paint.



Interior of the IG-102: The mechanical interrupter assembly is on the left; the round item in the center is a turret RF attenuator.

OLD FM TO NEW AM - A VISIT TO THE ALPINE TOWER

By Richard Lee

On a rainy Saturday morning this past November, 16 members of the New Jersey Antique Radio Club and the Hudson Valley Antique Radio and Phono Society shared a fascinating visit to the former "Armstrong" FM tower in Alpine, New Jersey. On a 15 acre site, high upon the Hudson River palisades (920 feet), stands a 400-foot steel trussed tower with three 150-foot intersecting crossarms planing East to West. Not by coincidence, the tower was located by Major Armstrong adjacent to and across the river from his boyhood home at 1032 Warburton Ave. (now demolished) in Yonkers, NY.

After a friendly tailgate of coffee and donuts, we assembled at the base of the tower. In 1992, a 6900 square foot communications equipment building was constructed, straddled by the four tower legs. The tour began with greetings from the President of tower owner CSC Management Inc., Charles (Chuck) Sackermann Jr. The Alpine tower is one of the largest privately-owned structures of its kind in the United

States. Chuck could not have been more patient and cordial with our troop and answered contemporary and historical questions about the site with candor.

A pleasant surprise to our members was seeing a collection of vintage receivers, transmitters, test equipment and ephemera, displayed in the original 1937 FM transmitter building with the Major's W2XMN call letters chiseled in stone above the entrance. This two-story brick building also houses his original second floor office. As a thank-you gift and donation to Mr. Sackermann's collection, we presented him with the April 1939 issue of *Radio Craft* magazine. The cover photo is of the two-year-old Alpine Tower featuring the inside story "Static Free Radio."

After the "9-11" destruction of the World Trade Center twin towers, WNBC, WABC, WPIX, WNET and WNJU quickly built backup transmitters at the Alpine site. The networks had no choice, since the Empire State Building was overcrowded and under-powered. We are all familiar with the story of Major Armstrong's battle with RCA and can appreciate the irony in WNBC's use of the tower. The station is the offspring of W2XBS, the RCA experimental TV station that caused the removal of Armstrong's experimental FM station from the Empire State Building 65 years previous.

During WW II, the site was used as a radar facility. A 100 foot self-supporting tower was added to the site for this purpose with two rotating dish antennas which have been since demolished.

We continued the tour within a complex of station rooms containing modern transmitting gear used by tenants involved in TV, FM radio, two-way cellular communications, TV-ENG (electronic news gathering) and satellite uplinks and downlinks serving XM radio.

Towards the end of our tour, the group was introduced to a real "Radio Experimenter," Steve Hemphill from the Philadelphia area. Over a years time, Steve has restored an impressive GE Phasitron 250 watt wide-band FM transmitter which uses two Eimac 4-250-A finals. Steve and Chuck plan to use this unit for a 70-year anniversary program of music and airchecks. The old FM broadcast, made legal with a temporary FCC license, will transmit on 44.1 "megacycles" in late Spring or early Summer. The anniversary broadcast's date and time will be announced in the *Broadcaster*, on the NJARC website and in the Reflector.

After a round of handshakes and "see you agains," our visit to Alpine Tower was ended. In the 33 years of my daily commute to New York City, driving past Alpine Tower, I never imagined the extent of New Jersey radio history housed at this site! For further Alpine Tower information, you might try the following: Radio Craft, April 1939, "At Long Last - Static Free Radio"

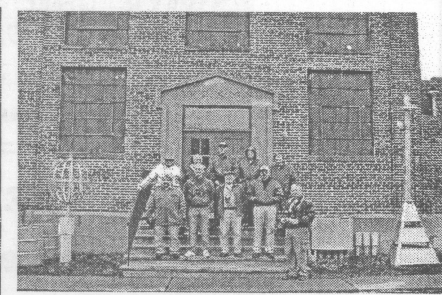
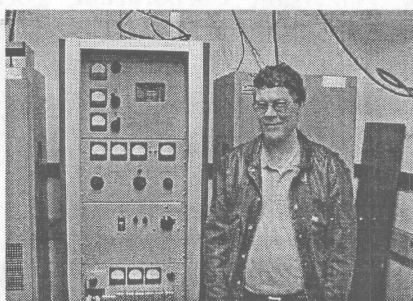
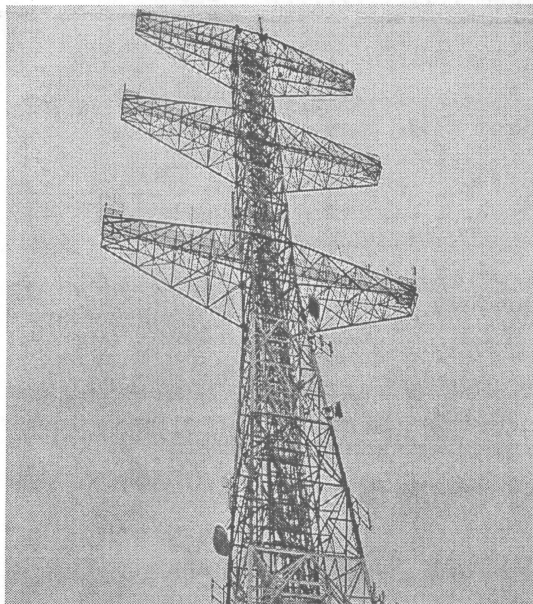
www.fybush.com

www.cscmgt.com

www.erols.com/oldradio

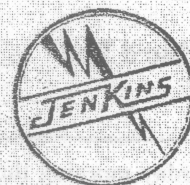
www.harpsny.tripod.com (link)

www.w9gr.com (see Phasitron link)



This Jenkins television station listing is courtesy of Jerry Simkin. Some of the stations are easily recognized, but are you familiar with a few others. What's the history of the United Research Corporation, Harold E. Smith, Radio Pictures Inc. and WAAM Inc. out of Newark, New Jersey? You'll have to do your homework on these (and perhaps end up with a short submittal to the *Broadcaster*?) Also, can you pin down the year (+/-1) this listing was issued?

TELEVISION STATIONS NOW BROADCASTING



2000—2100 KC.

Call Letters	Company	Location	Power (watts)
W2XB0	United Research Corporation,	Long Island City, N. Y.	500
*W3XK	Jenkins Laboratories,	Wheaton, Md.	5,000
W10XU	Jenkins Laboratories,	aboard cabin monoplane	10
W1XY	Pilot Elec. & Mfg. Co.,	Lawrence, Mass.	250
*W2XBU	Harold E. Smith,	North Beacon, N. Y.	100
W1XAE	Westinghouse Elec. & Mfg. Co.,	Springfield, Mass.	20,000
W8XAV	Westinghouse Elec. & Mfg. Co.,	E. Pittsburgh, Pa.	20,000
W9XG	Purdue University,	W. Lafayette, Ind.	1,500
W2XCD	DeForest Radio Company,	Passaic, N. J.	5,000
W9XAA	Chicago Federation of Labor,	Chicago, Ill.	1,000
*W9XAC	Western Television Corporation,	Chicago, Ill.	500

2100—2200 KC.

W2XBS	National Broadcasting Company,	New York, N. Y.	5,000
W3XAK	National Broadcasting Company,	Bound Brook, N. J.	5,000
*W2XR	Radio Pictures, Inc.,	Long Island City, N. Y.	500
W1XAV	Shortwave and Television Lab.,	Inc., Boston, Mass.	500
*W8XAV	Westinghouse Elec. & Mfg. Co.,	E. Pittsburgh, Pa.	20,000
W2XCW	General Electric Co.,	South Schenectady, N. Y.	20,000

2750—2850 KC.

W2XAP	Jenkins Television Corporation,	portable	250
W2XBA	WAAM, Inc.,	Newark, N. J.	500
W8XAV	Westinghouse Elec. & Mfg. Co.,	East Pittsburgh, Pa.	20,000
*W2XCR	Jenkins Television Corp.,	Jersey City, N. J.	5,000
W2XB0	United Research Corporation,	Long Island City, N. Y.	500
*W9XAP	Chicago Daily News,	Chicago, Ill.	1,000

2850—2950 KC.

*W3XK	Jenkins Laboratories,	Wheaton, Md.	5,000
W2XR	Radio Pictures, Inc.,	Long Island City, N. Y.	500
*W9XR	Great Lakes Broadcasting Company,	Downers Grove, Ill.	5,000
W3XAD	R. C. A.-Victor Company,	Camden, N. J.	500

*These stations are operating on regular schedules. The others are rather irregular due to their experimental nature.

JENKINS TELEVISION CORP.

346 Claremont Ave.

Jersey City, N. J.

NEW JERSEY ANTIQUE RADIO CLUB



ANTIQUE RADIO SWAPMEET

SUNDAY, March 13th, 8:00 AM - 1 PM*

North Centerville Vol. Fire Co. - Hazlet, NJ

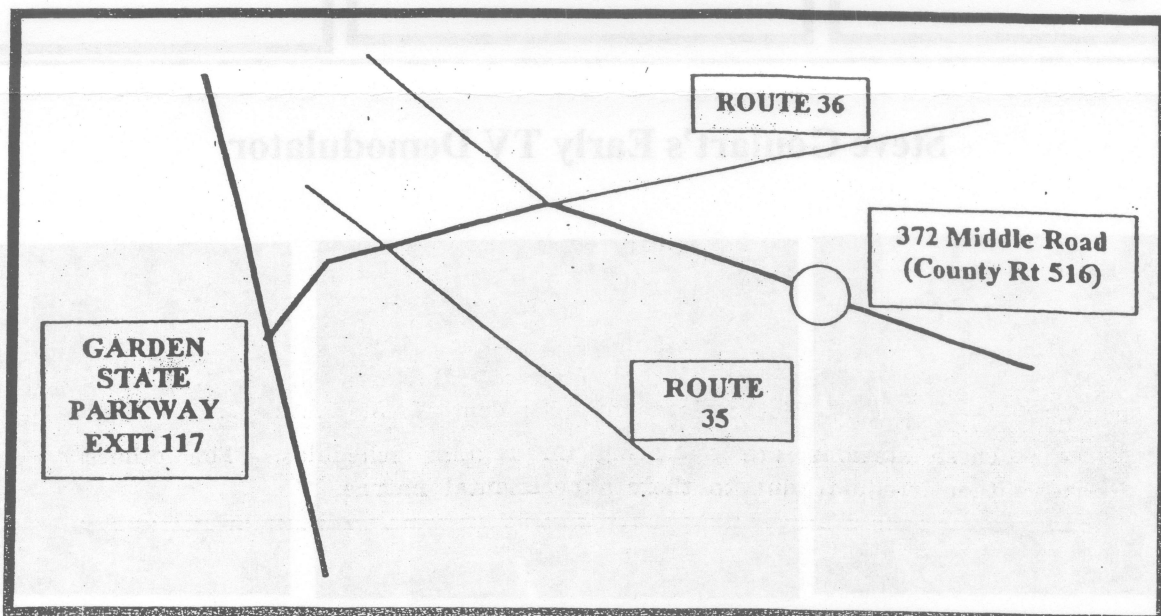
The NJARC presents its Spring swapmeet at the spacious North Centerville Fire Co. banquet hall in Hazlet, NJ. The first 20 reservations receive an 8-foot table at no extra cost. A \$3.00 club donation from buyers is suggested.

* Vendor setup at 7:30 AM (no early admittance); the meet may extend beyond 1:00 PM.

DIRECTIONS: Garden State Parkway, North or South - Take exit 117 (towards Hazlet (Rt 35)/Keyport/Aberdeen). Bear left onto Route 36 and continue for about 1/2 mile. Turn right on Middle Road (County Route 516 East) and continue for about 1.5 miles. The Fire Co. banquet hall is on the right.

RATES: NJARC members \$15/space; non-members \$20/space. **Note:** Free tables are only available to first 20 registered vendors.

CONTACTS/RESERVATIONS: Marv Beeferman, 2265 Emerald Park Drive, Forked River, NJ 08731 (609-693-9430). E-mail: mbeeferman@cs.com Phil Vourtsis, 13 Cornell Place, Manalapan NJ 07726 (732-446-2427). E-mail: pvourtsis@att.com



CONNECTIONS

Free exposure for buyers and sellers! Unless requested otherwise, each ad will run for two months in both the *Jersey Broadcaster* and the *Delaware Valley Oscillator*. All buying and selling transactions are the responsibility of the parties involved.

FOR SALE

Check out NJARC's capacitor program for those most commonly needed replacements. Contact John Ruccolo at any club meeting or call him at home (609)-426-4568 to find out what's available. All proceeds go to the club.

**NJARC 2005
MEMBERSHIP
\$20.00**

**Marsha Simkin
33 Lakeland Drive
Barnegat, NJ 08005**

The NJARC tube program offers clean, tested, boxed tubes at very reasonable prices with availability at any club meeting (no dealers, please...not for resale). Proceeds go to the club. Of course, donations of radio-type tubes in any condition are welcome. See Gary D'Amico at the next meeting.

National NC100 ASD with manual. Has been re-capped, needs alignment, \$55. Jack Winans, 609-882-9296, WA2LGE@aol.com.

High-end, Philco 37-116 straight front 15-tube console, the one with the large speaker and three passive resonators. Generally in good condition and all there; needs grill cloth. Not tested. Can deliver to a NJARC meeting. \$125.00.

Ray Chase, 1350 Malboro Ave., Plainfield, NJ. 908-757-9741 Web: enprn@erols.com

Are you aware that NJARC now has a resistor program which includes many commonly needed replacements? Contact Walt Heskes at any club meeting for details.

Spring cleaning sale: Shortwave radios - Hallicrafters SX99 \$100, SX130 \$120, SX-43 \$130, Lafayette HA225 \$70, BC348 \$65, Heathkit G4-1680 \$65.

Test equipment - HP 400D AC volt-meters, 1mV to 300V full scale, 4MHz bandwidth, great for measuring gain in broadcast band radios, audio work, etc., good operating condition, \$10. Measurements grid dip meter with book, \$50. Tube testers, distortion analyzers, spectrum analyzer, scopes, etc. available - ask. Near recent (1980s?) stereo equipment receivers, tuners, turntables, \$10 each (working).

Parts available: Tek465, Philips 3052 and various other HP and Tek equipment. Steve Goulart, 732-219-6963, sgoulart@att.com

WANTED

Anybody have a junker BC-344 or BC-314 (that's the low frequency version of the BC-312) or parts thereof? I need the 1st IF can, part number C-293. It's a 95 KHz IF transformer.

Thanks - Ray Chase, 908-757-9741

Steve Goulart's Early TV Demodulator

