

PEAKS & NULLS



MORRIS RADIO CLUB

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FEBRUARY 24, 2011

A Short History of Electronics in Morris County

In 1891 the Loanda Hard Rubber Company was founded by Edwin A.Scribner in Boonton, New Jersey. Seven years later, Mr. Scribner died and the firm was taken over by his son-in-law Richard W. Seabury. In 1906 while looking for new materials, Mr. Seabury learned of the synthetic resins made by Dr. Leo Baekeland for which the material "Bakelite" would later be named. In the 1920's the growing radio market created a demand for molded parts and attracted the attention of Richard W. Seabury who started Radio Frequency Laboratories to produce among other things the Bakelite bases for vacuum tubes. In the 1930's and 40's the area around the town of Boonton was the Silicon Valley or Route 128 of the day.

Spawned by that original company many radio and electronics firms were formed in the area. One of the best known was Boonton Radio Corporation located in nearby Rockaway, the manufacturer of the famous Q meter. Other companies formed in the area included Aircraft Radio, Measurements Corporation, Ballantine Laboratories and Johanson Manufacturing. In 1959 Hewlett Packard bought Boonton Radio and ran it as their Boonton Radio Division, still manufacturing their Q Meter and Signal Generator lines. Later on they merged the Harrison Power Supply division into the Boonton Radio Division and created the New Jersey Division. They moved Harrison into the same building on Green Pond Road. Measurements Corporation was sold to the Edison Company after WWII.

In 1947 Jack Frucht and John Young, two former Boonton Radio employees, founded Custom Electronics in Morris Plains, NJ. Custom did contract work

and was very successful. They were located above Duffields Hardware store on Speedwell Ave.

In 1948 Hewlett Packard introduced the first HP Power Meter. It used a self-balancing bridge and an audio voltmeter. It required an external bolometer that was not supplied with the instrument. Two models were available. One that was usable from 300 to 1000 MHz and one from 1000 to 4000 MHz.

In 1953 two other Boonton Radio employees, Jack Mennie and Ernie Porter, founded Boonton Electronics and specialized in electronic test equipment with the Model 101 Grid Dip Meter, Model 74 100 kHz Capacitance Bridge and Model 85 Distortion Meter.

In 1956 Frucht, Young, Mennie and Porter merged their two companies and kept the name Boonton Electronics to keep a link with the rich history of electronics in the Boonton area. This required expansion to other buildings on Speedwell Ave. The Engineering Department was located above what is now Arthurs Tavern.

Frucht and Young were businessmen with histories of purchasing and manufacturing while Mennie and Porter had the engineering background. Jack Mennie had worked on the famous Boonton Radio Q Meter and developed the Boonton Radio RX Meter and this led into Boonton Electronics starting in the Impedance and RF measurement field.

Jack Mennie was later quoted as saying that it was a perfect match, Custom had the manufacturing and financial know how and Boonton had the products and engineering.



Field Day 2004

Prior to WWII crystal detectors were mostly of the Galena cat-whiskers type and could only be used at very low frequencies. During the war, crystal technology grew and produced more rugged devices that could perform at higher frequencies and up into the microwave range. Although these new devices were available, thermal measurements were the standard. In fact, until fairly recently broadcast stations were still required to measure their output power using an RF Ammeter in the transmission line.

Jack Mennie took the detector from the model 85 Distortion Meter and turned it into the first Boonton RF Voltmeter. He then developed the Model 75A 1 MHz Capacitance Bridge and the Model 33 Admittance Bridge and the 63 series of Inductance Bridges.

In 1960, Ray Lafferty joined Boonton Electronics and developed the Model 91DA RF Voltmeter and later on the Model 71A Capacitance/Inductance Meter. He became Vice President of Engineering upon the retirement of Jack Mennie and later served as President of Boonton Electronics. He is one of the experts on Impedance

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UPCOMING MEETINGS

FEBRUARY 28, 2011

AGENDA: Regular Business Meeting

PROGRAM: Video "1935 TOUR OF ARRL HQ"

MARCH 21, 2011

APRIL 18, 2011

MAY 16, 2011

JUNE 20, 2011

2011 DUES

2011 DUES

Noel NO2EL is now accepting dues payments for 2011. \$15.00 for full membership, \$10.00 for associate.

SHOW US YOUR SHACK

If you have a JPEG of your shack, antenna farm or mobile send it to WA2VQF@ARRL.NET and we'll publish it in future issues in the order that they are received.

SELECTED UPCOMING CONTESTS

ARRL INTER. DX CONTEST, SSB	0000Z, MAR 5 TO 2400Z, MAR 6
DARC 10-METER DIGITAL CONTEST	1100Z, TO 1700Z, MAR 6
EA PSK31 CONTEST	1600Z, MAR 12 TO 1600Z, MAR 13
NORTH AMERICAN SPRINT, RTTY	0000Z—0400Z, MAR 13
BARTG HF RTTY CONTEST	0200Z, MAR 19 TO 0200Z, MAR 21
CQ WW WPX CONTEST, SSB	0000Z, MAR 26 TO 2400Z, MAR 27



PREDICTED SUNSPOT NUMBER AND RADIO FLUX FOR MARCH 2011

*****SUNSPOT NUMBER*****

*****10.7 RADIO FLUX*****

PREDICTED HIGH LOW

PREDICTED HIGH LOW

46.9 54.9 38.9

103.2 110.2 96.2

JANUARY MEETING MINUTES

Morris Radio Club – Meeting Minutes
January 24, 2011

Attendees (4) NO2EL, K2EMJ, KC2ITU, WA2VQF

Opening of Meeting
President Ed Peters K2EMJ opened the meeting at 7:42 PM

Bill WA2VQF was appointed Acting Secretary for the meeting

Noel NO2EL made a motion to elect Bill WA2VQF Secretary to replace Bill WB2RIS

The motion was seconded by Paul KC2ITU and the vote was unanimous.

Reports:

Acting Secretary – Bill WA2VQF reported that the November Minutes were issued in the Peaks and Nulls Newsletter and that no corrections were received. The minutes were accepted

Treasurer – Noel NO2EL reported the account balances. After a discussion it was agreed to not publish

the balances as part of the minutes published in the newsletter. Numbers are available from Noel upon request.

Paul KC2ITU moved that the Treasurers report be accepted. It was seconded by Ed K2EMJ and unanimously accepted.

Noel also reported that there is still a problem with the IC-736. The finals were replaced and after a short time they failed again. He does not think that it is repairable and will sell it for the club.

New Business:

Noel NO2EL reported that the server for the club web site failed. It was repaired but the location was not going to be available anymore. Noel moved the server to his QTH and it is now up and running faster than before.

Ed reported that the New Providence Radio Club is having a VHF/UHF FM Sprint Contest for beginners and experienced hams on Sunday February 13.

Details are on their WEB site <http://www.nparc.org>

Noel NO2EL reported that he has obtained equipment from a silent key. He is going to sell his IC-706MKIIG. If anyone is interested contact Noel. He also has an IC-281H, IC-2100H, Astron RS-50M, and a Triplite 40 amp power supply for sale.

He has obtained an IC-756Pro that will be available for Field Day. There may also be a Force 12 antenna available to use instead of the beam we usually use.

Motion to Adjourn Paul KC2ITU

Second Ed K2EMJ
Ed closed the meeting at 8:10PM

Respectively Submitted,

Bill WA2VQF
MRC Secretary

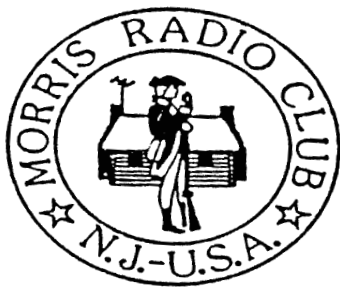


MORRIS RADIO CLUB

K2EMJ ED PETERS PREDISIDENT
 KC2RDX ROB BRABANDT VP
 WA2VQF BILL LOFTUS SECRETARY
 NO2EL NOEL SCHEFFEN TREASURER

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WWW.MORRISRADIOCLUB.ORG



THE MORRIS RADIO CLUB IS AN ORGANIZATION OF AMATEUR RADIO OPERATORS WHICH HAS BEEN IN EXISTENCE FOR OVER SIXTY FIVE YEARS. AS A HOBBY, AMATEUR RADIO SERVES AS A PUBLIC RESOURCE FOR COMMUNICATIONS AS WELL AS AN EDUCATIONAL EXPERIENCE.

ALTHOUGH MANY WHO BECOME INTERESTED IN AMATEUR RADIO ARE INVOLVED IN AN ELECTRONICS RELATED FIELD, THE HOBBY APPEALS TO A WIDE VARIETY OF INDIVIDUALS.

THE MEMBERSHIP OF THE MORRIS RADIO CLUB IS A DIVERSE GROUP MADE UP OF MEDICAL, BUSINESS, EDUCATION, AND LAW ENFORCEMENT PROFESSIONALS, AMONG OTHERS, WHOSE COMMON INTERESTS ARE COMMUNICATION, EDUCATION, AND PUBLIC SERVICE.

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measurements in the country and still advises Boonton Electronics and capacitor manufacturers.

In 1963 the Boonton Radio Division of Hewlett Packard introduced the first Peak Power Meter, although they called it a Peak Power Calibrator the Model 8900A. It was developed by Ray Polen W2WCF (SK. We use his beam and rotor on Field Day) who in 1970 came to Boonton Electronics and developed the analog Signal Generator line starting with the Model 102A. Ray later became Vice President of Engineering for Boonton Electronics in 1984.

In 1964 Jack Mennie wanted to develop a power meter based on the detection principles of the RF probe, and Boonton Electronics started in the RF Power measurement field.

HAMFEST CALENDAR

MARCH 6, 2011

BARA AUCTION
 TOWNSHIP OF WASHINGTON, NJ
<http://www.bara.org>

MARCH 19, 2011

CHERRYVILLE REPEATER ASSOCIATION II
 CLINTON, NJ
<http://www.qsl.net/w2cra/>