PVRC Newsletter December 2013

President's Letter – Rich NN3W

Greetings all in PVRC land!

Wow! The past month has capped off what has been an amazing season for PVRC, for contesting, and for amateur radio in general. We have had a historic weekend with the CQWW CW contest – amazing conditions, a cooperative Sun, and throngs of signals on the air - literally thousands of them. Many records will likely fall as a result of this weekend, and many of them will take years to be broken. Whether you had stacked monobanders and phased arrays or simple dipoles, you got a wonderful opportunity to see Radiosport at its finest. This will be a weekend to remember.

We also had a historic weekend unfold over the prior three weeks – the November Sweepstakes. Based on current scores and exit polling, PVRC may very well be on its way to a sixth straight victory in the ARRL Club competition for the Sweeps. I am very proud of the nearly 140 logs that we churned out in the CW leg of the Sweeps and the 170+ logs that have come in so far from the SSB leg. Over 300 logs and over 20,000,000 points is simply a tremendous accomplishment. It's all up to the log checkers now, and we feel confident that we'll place at the top of the heap. Well done, all!

The activity and buzz generated by the Club reminds me much of what drew me towards PVRC back in 1996: pursuit of excellence, high competitive spirit, adherence to the highest regards for fair play and honesty, and willingness to impart knowledge onto the next generations of contesters. This year's Sweepstakes personified all of these ideals. I know that these ideals will continue to be held in regard long into the future.

Be sure to remember that while we've passed the most frenzied period of the fall contest season, it is far from over. There are two specialty events coming up before the end of 2013 that have something for the "big" and the "little" contester alike. First, the ARRL 160 Meter contest. While 160 Meters sounds like a challenge, most anyone can have fun in this event. Load up your 80 meter dipole; toss an inverted-L over a tree; unspool some copperweld for radials. You

should be able to work stations with most any antenna out to a range of 100 to 350 miles. Indeed, when I operated this event with an 80 meter quad in 2008, my highest run rate ever from my home QTH (165 an hour) happened during the ARRL 160 test. Second, moving to the opposite end of the spectrum, the following weekend holds the ARRL 10 Meter contest. With any luck, if conditions are as they were during the CQWW CW weekend, there will be piles of QSOs to be had (DXMaps shows the path to Europe to be wide open right now)! Go out, and have a ball. Remember, these are both full 5M program events…

While we're on the topic of the 5M program, I wanted to convey a couple business matters to be announced to the membership:

The Club officers have instituted two changes to the 5M program.

First, we're revising the rules of the 5M program to allow host station owners to receive credit for multiple operations that take place at their QTHs during a particular contest. For example, in the past, if NR4M hosted two single op efforts from his M/M QTH for the CW leg of the Sweeps (say, K4ZW on one console and K7SV on a second console), NR4M would receive only the point value credit (as a host) from the highest scoring operator. The revision being made is to allow NR4M to receive point value credit for both operations. This change seeks to encourage host stations to allow guest operators to enter a contest from a competitive station and confer a benefit to the operator, the host, and to the club.

Second, based on a lot of feedback, we are excited to announce that we're adding – on a trial basis – the three National Contest Journal North American QSO party ("NAQP") events to the 5M program. There are six events in total: the winter CW, RTTY, and SSB tests, and the summer CW, RTTY, and SSB tests. The top "reference" score in each event will receive 250,000 points (owing to the short duration of the NAQP), and other scores will be scaled against that reference score.

The introduction of the NAQP is being tested on a two-year basis. We want to see at least 25 PVRC scores in each test in each season over the next two years in order for us to adopt them into the program on a full-time basis. So, it is up to you, the membership, to determine whether you want these events to be included in the pool or not.

Related to the topic of the 5M program, is the issue of finances. Your Club officers and trustees have worked diligently over the past twelve months to ensure the Club's financial viability and soundness going forward. We think we've done a lot. In that regard, I want to remind you all that the 5M program stands, by far, as our largest expenditure each year. According to our Club treasurer WR3L, we expended nearly $1,200.00 in intra-club plaques and endorsement plates – our single largest expenditure item in 2013. Each plaque costs approximately $57.00 to procure. Please do remember that the Club operates on a no-dues basis, but needs your support in order to continuing to offer these programs.

On a final note: this is my final newsletter as President of the PVRC. I've enjoyed my two-year run as President, and as Vice-President for the two years before that. I know that the club will continue forward under KE3X's leadership as one of America's contest clubs. I'd also like to thank our outgoing treasurer, Dave Baugher WR3L, who has been part of the Club's leadership as since 1998.

Your incoming officers and trustees for 2014 are as follows: President, Ken Low KE3X; Vice President, Ethan Miller K8GU, Vice President, Bud Governale W3LL; Secretary, Al Knight AA4FU; Treasurer, Bill Hider N3RR; Trustees, Tyler Stewart K3MM, Don

Lynch W4ZYT, Guy Olinger K2AV, Pete Smith N4ZR, Brian McGinniss N3OC, Don Daso K4ZA, Jim Nitzberg WX3B, Tom Gregory N4NW, and Joe Palsa K3WRY.

Your officers value your feedback, and work at your behest. Do give them your support. 73 and good luck in the contest,

Rich DiDonna NN3W

PVRC Officers:

President:	KE3X	Ken Low
Vice President:	K8GU	Ethan Miller
Vice President:	W3LL	Bud Governale
Secretary:	AA4FU	Al Knight
Treasurer:	N3RR	Bill Hider

Trustees:

K3MM, N3OC, WX3B, W4ZYT, N4NW, K2AV, N4ZR, K4ZA, K3WRY

PVRC Charter Members (all SK):

W3GRF, W4AAV, W4KFC, N0FFZ, W4LUE, W7YS, VP2VI/W0DX, W3IKN, W4KFT

PVRC Website: http://www.pvrc.org

Sweepstakes Log Report – Guy K2AV

Logs with club ID in ARRL hands as of 0100Z 1 December, which is after the log deadline for both contests:

PVRC CW	138
PVRC SSB	171
Total	**309**

NCCC CW	105
NCCC SSB	115
Total	**220**

Filtering Reverse Beacon Network Spots by Quality – Pete N4ZR

This beta version of AR Cluster Version 6 is the first DX cluster node software to incorporate user-configurable RBN spot quality filtering. It provides all the features of the public Version 6 software, with the option of adding filtering using the CT1BOH algorithm to improve spot quality from the Reverse Beacon Network. These filters only work against Skimmer/RBN spots, and may be combined with other Version 6 filters with the usual Boolean operators.

The CT1BOH algorithm Comment tags, added at the end of the Comment field of each RBN spot, are:

? = unverified
B = busted
Q = good call, frequency change noted, may be QSY
V = valid - verified OK

Sample Skimmer spots displaying CT1BOH quality tags:

DX de W4AX-#:	18070.5	K7ERQ	CW	23 dB	23 WPM	CQ ?	2118Z
DX de SE0X-#:	7033.3	F5VDY	CW	10 dB	25 WPM	CQ B	2119Z
DX de PJ2T-#:	18070.5	K7ERQ	CW	15 dB	23 WPM	CQ V	2118Z
DX de DR1A-#:	10106.7	EA5FP	CW	18 dB	12 WPM	CQ Q	2119Z

Spot Quality Filter Options

SkimValid - Filter on the V tag., which is assigned by looking back to see if there are two more spots of the same call, on the same frequency (+/- 0.3 KHz).

Examples: Set DX Filter SkimValid (displays only spots identified as Valid
Set DX Filter NOT SkimValid (displays only spots identified as not Valid

SkimQsy - Filter on the Q tag, which is assigned because the call was found to have been previously verified but the new spot frequency is +/- 0.4 KHz different from that last reported.

Examples: Set DX Filter SkimQsy (displays only spots flagged as Q)
Set DX Filter NOT SkimQsy (displays only spots not flagged as Q)

SkimBusted – Filters on the B tag, which is assigned by looking back and determining that there is a similar spot already tagged as V, spotted on the same frequency as the new spot, +/- 0.1 KHz. A "similar" call is one which can be transformed into the new spot by character insertion, deletion or substitution.

Examples: Set DX Filter SkimBusted (Displays only B spots)
Set DX Filter NOT SkimBusted (Displays only spots not flagged as B)

SkimUnknown – Filter on the ? tag. Any spot that is not given a V, B or Q tag is tagged "?" until/unless it qualifies for one of the other tags.

Examples: Set DX Filter SkimUnknown (Displays only "?" spots)
Set DX Filter NOT SkimUnknown (Does not display any ? spots)

SkimCtyCnt – Filter on the number of Skimmers currently spotting stations in a given country or (in the case of the USA) ITU zone. This filter is useful in determining which areas do not have adequate Skimmer coverage for effective working of the CT1BOH algorithm.

Examples: Set DX Filter SkimCtyCnt < 3 (displays all skimmer spots from countries being spotted by fewer than 3 active Skimmers)

Set DX Filter SkimCtyCnt > 3 (displays all skimmer spots from countries being spotted by 3 or more active Skimmers). It's not likely you would want to limit your reception of spots this way, but the filtering capability is there for debugging and evaluation.

Compound Filters

As with all Version 6 filters, standard Boolean operators AND, NOT and OR, together with nested parentheses, can be used to construct filters to meet your specific needs.

These filter setup strings are not case-sensitive. You can also mix these RBN quality filters with non-RBN spots and other filtering types.

Examples: Set dx filter not skimbusted and not skimqsy will filter out busted spots and images, while passing all spots as soon as they are made by a single Skimmer (before they are verified).

Set dx filter band=40 and (skimvalid or skimctycnt <2) will only display 40-meter spots that have been assigned the V tag and those 40-meter spots that are spots of stations in a country heard by only one Skimmer.

Set dx filter not skimbusted will only display spots that the system thinks are not busts. This could be very useful for an assisted or multi-op on Sunday afternoon when most calls heard by the RBN have already been worked

Commands

Show Skimmer – Displays a list of all Skimmers that are currently reporting, along with CT1BOH algorithm totals

Example: SHow Skimmer

[add example of current display]

ShowSkimCty [Band] - For a selected band, displays the countries recently spotted and the Skimmers spotting each country.

Trying It Out

While users will see the new tags in spots coming from the RBN ARC6 Telnet server, in order to use the filters the node they are connected to must be running the beta server software as well. Users can test with the RBN node at arcluster.reversebeacon.net, port 7000. Node sysops who want to try the beta are encouraged to contact AB5K.

Membership News – Bud W3LL

PVRC added two new members since the last newsletter. Please welcome Tony WR3T in the Laurel Chapter and Len AB3RY in the No Affiliation chapter.

Chapter leaders please remember to complete the Meeting Attendance Report.

Deutsches Museum Shows Radio's Beginning – Eric W3DQ

From Radio World

MUNICH, Germany — The Deutsches Museum in Munich is one of the world's largest technology and science museums, covering an area of more than 50,000 square meters and displaying some 28,000 exhibits from 50 fields of science and technology.

Founded on June 28, 1903, the museum attracts approximately 1.5 million visitors per year. The museum's telecommunications section, which features an exhibition space of approximately 800 square meters, dates back to 1906. The telecommunications division was originally a subsection of the physics division, under the name "Telegraphy and Telephony," but became a separate section in 1968.

FROM THE START

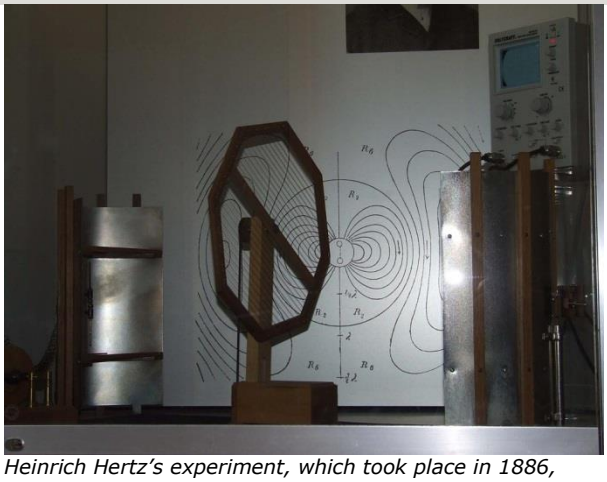
The museum covers the history of radio, from the first pioneering research of possible ways to send live messages to a destination out of a sender's visual sight (mid 1800s) to the present digital age. The exposition presents the various objects with a logical connection between each item on exhibit, from past to present, illustrating a seamless evolution.

Modern radio broadcasting has its origins in the first studies regarding electromagnetism. In 1831 Michael Faraday demonstrated the mutual effects of electricity and magnetism, and put forward suggestions for a theoretical explanation. In 1833 professors Carl Gauss and Wilhelm Weber used an experimental set-up (originally designed for measurements of terrestrial magnetism) as an electromagnetic binary-coded telegraph.

The transmitter consists of an induction coil with a magnetic core. The reception is carried out by means of a long pivoted magnetized rod deflected by the electrical signals in the reception coil. The deflection was read off against the image of the scale reflected in a mirror, using a telescope. Gauss and Weber used this telegraph to communicate between their departments, at a distance of about one kilometer.

In 1863 school teacher Philipp Reis succeeded in transmitting individual notes by means of a device he called the telephone. In designing it, he used his knowledge of the human ear and how it perceives sounds.

TRANSMITTING SPEECH



Heinrich Hertz's experiment, which took place in 1886, demonstrates the existence of radio waves and their polarity.

As a transducer (i.e. microphone), he built a wooden box in which sound waves were focused by a funnel onto a membrane. Its vibrations created an electrical contact so that the circuit was completed, to a greater or lesser extent. In the receiver (earpiece), the changes in the currents caused a knitting needle to vibrate as a result of magnetostriction. The vibrations were made audible by means of a further wooden box, which served as a resonator. Speech was very indistinct, however.

In 1886 Heinrich Hertz successfully proved the existence of electromagnetic waves. The Deutsches Museum exposition allows the visitor to repeat Hertz's groundbreaking experiment, combining it with the possibility to assess the polarity of radio waves. An instrument measures the amplitude of the received signals, which varies periodically according to the position of a rotating "grid" placed between the transmitting antenna and the receiving one.
Tests with spark gap transmitters started in 1894, and allowed for the possibility of the wireless transmission of telegraphy signals. Guglielmo Marconi's transmissions were based on a spark-gap transmitter, unable to produce continuous waves and then to perform voice transmission. Arc transmitters, invented in 1903 by Valdemar Poulsen, generated continuous waves, thus posing the basis for voice transmission.

In 1906 the first radio transmission of speech was performed using a sound-modulated arc transmitter. The microphone is fed directly into the antenna circuit.

Radio transmitted speech for the first time in 1906, over a distance of 40 kilometers (from Berlin to Nauen) using an experimental sound-modulated arc transmitter. The microphone was fed directly into the antenna circuit. This method was soon abandoned because there was no way to amplify the sound at that time.

In 1911 Otto von Bronk developed a circuit arrangement with a vacuum tube, which made amplification of high-frequency radio signals possible. The development of thermoionic tubes during World War I provided the basis for radio

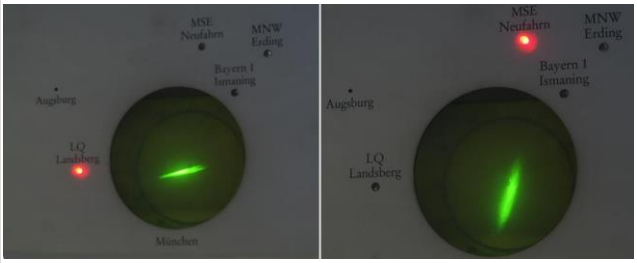
broadcasting, which started in 1920 in the United States and in 1923 in Germany.

MODERN DAY

A Philips water-cooled transmitter tube from 1924 with a 300 kW Telefunken water-cooled tube (right). The name Telefunken itself is a tribute to spark-gap transmitters: "funken" in German means "sparks."

The Philips water-cooled transmitter tube from 1924, and a Telefunken water-cooled tube with a transmission power of 300 kW on show at the museum testify to the early years. By the late 1920s, long-wave, medium-wave and shortwave ranges were available; ultra-shortwave (FM) radio, which made stereo transmission possible was introduced after World War II. Simultaneously, storage methods were improved, particularly with the invention of the sound-recording tape in 1928.

After the end of World War II, radio broadcasts became a part of private and public life, and military research into radar systems played a considerable part in this development.



A radio frequency direction finder based on the Watson-Watt principle, showing a glowing-red mark, which indicates the active transmitter and its location with respect to the listening point.

Robert Watson-Watt developed a radio frequency direction finder to determine the direction of the incidence of electromagnetic waves. This device scans the electromagnetic field using a crossed-loop antenna (two loop antennas mounted at 90 degrees), amplifies it and displays its component. These appear on the oscilloscope as an ellipse whose axes represent two opposite directions. The additional information from an auxiliary antenna allows the suppression of the "wrong" half of the ellipse.

Soon after the conclusion of the World War II, the transistor was invented and high-frequency signals were first used for broadcasting, paving the way for modern radio broadcasting.

Davide Moro reports on the industry for Radio World from Bergamo, Italy

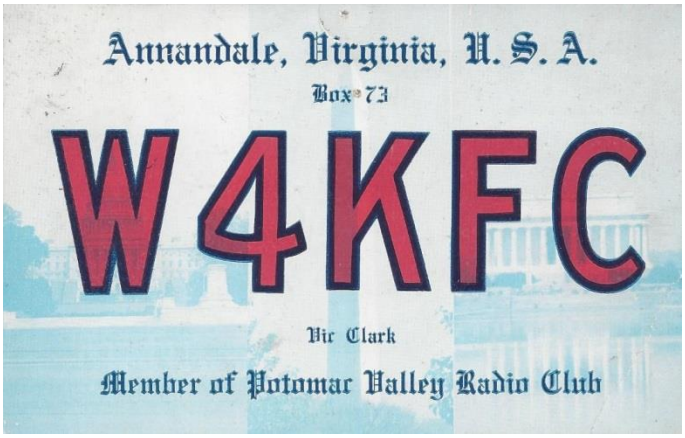
The Way We Were: 50 Years Ago – Art K3KU

This is from the MDD (Traffic Net) Picnic, July 1963. Note the PVRC members:

K3JYZ = K3XE (SK)
Person at left TBD.
K3QFG is still in FCC database, but I have not heard from him in decades.
K3QDD = N6XI
K3OAE = your faithful servant
(*Photo enhancement by John N3AM*)

Remembering Vic Clark W4KFC – Pip WB4FDT

Seems appropriate, with Sweepstakes fresh on our minds, to honor the memory of W4KFC – ed.



If somebody ever came up with a short list of a “Hall of Fame” for ham radio operators, certainly Vic Clark, W4KFC, would be on it. Vic was a world class CW operator and contest operator. He held many positions in the ARRL, including that of President, and helped to found what has become one of the largest contest clubs in the country, the Potomac Valley Radio Club (PVRC). Hams will never know how much Vic contributed to ham radio and the American Radio Relay League. Vic did not have a big ego, and frequently gave credit to others for his ideas.

Briefly, during the 50 years Vic was licensed, he served the ARRL as Arizona Section Communication Manager from 1937-1939, as Virginia Section Communications Manager from 1952-1954, as an ARRL Assistant Director from the Roanoke Division from 1952-1966, as Director from 1967-74, as IARU Vice President 1974-6, , as an IARU Region 2 (South/Central America) President 1976-80, ARRL First Vice President from 1974-80, and ARRL President from 1982-until his death in November, 1983,

Vic won numerous contests, taking first place in CW Sweepstakes in 1947, 1950, 1952, 1958, 1964, and 1965 in the single operator, high power class. Just before he passed away, Vic was speaking at a New York hamfest and he asked the audience how many if them had worked him on the air. Fully three quarters of the audience raised their hand to indicate they had worked him!

Vic was licensed in 1933 as W6KFC. He was 16 years old, and living with his parents in Arizona. Just three years later, in 1936, Vic came in second in the ARRL CW Sweepstakes. Vic was an active contester and traffic handler. In 1936 the ARRL awarded Vic the first Hiram Percy Maxim award to him for his amateur activities.

Vic served with the Federal Aviation Administration from 1941-62, directing the establishment of the Instrument Landing System (ILS) airports throughout the U.S. And assisting with the implementation of the system in others countries, He then became Director of the US Coast Guard's Electronics Engineering Laboratory in Alexandria Virginia, and retired in 1973. Some of our members may have worked the K4CG station in contests in the mid 1960-s and 70's. This station was located in the same building as Vic's office, and certainly Vic helped to initiate and build it.

Vic had a saying that “Activity breeds activity”. In other words, any action would encourage more action and reactions-- like a pebble being thrown into the water. Thus Vic spent much of his time encouraging amateur radio activity of any kind. New ham clubs, new repeaters, new contests, anyway to broaden the many aspects of amateur radio he would support.

Some years after Vic's sudden death of a heart attack in November, 1983, a number of PVRC members got together and stories to tell about Vic. These are some of the stories told which everyone connected with swears is true!

From Bill Levitt: “To help celebrate Armed Forces Day, hams were invited in to operate the Pentagon short-wave station WAR, work other hams, and exchange QSL's. Vic and others from the PVRC would go over and work shifts on such occasions. Vic amazed everyone by operating a shift two handed: Using separate receivers and transmitters, he'd write down an signal report being sent to him on one frequency with one hand, while sending “CQ de WAR” with the other hand on another frequency. As soon as the

report was complete Vic would acknowledge by sending an “R” followed by “QRZ” and so hook up with the next guy in the queue.”

From North Richardson, W4KFT (sk) “I was operating in an SS contest calling “CQ de W4KFT”. When I went to listen someone came right back but not to me, but to W4KFC. Vic was right on my frequency, so I moved off and tried again, but again someone came back to W4KFC and Vic responded. This time, I moved again slightly off frequency, and set the equipment so I could hear between the dots and dashes. What do I hear: “CQ de W4KFT” and in perfect anachronism a DIT DAH DIT was being inserted by Vic after the “T” in my call. Vic and I had a good laugh about that at the next PVRC meeting.”

Vic himself once told the story to the PVRC club about him accompanying his XYL to the doctor. The doctor said he thought Vic's wife might be expecting. Then he asked Vic “when could that have happened”? Vic looked puzzled and said, “Well, I'll have to go home and check my log!!” The PVRC group knew it was true because he was on the air so much!”.

From Jack Colson, W3TMZ: “One day in the 1950's a group of us went over to Vic's to help repair his beam. Vic called CQ on his repaired antenna and a Russian UH8 came back. The UH gave Vic and terrific report and immediately asked him to test his phone on 14250. This was a standard practice for many DX stations in those AM days. Vic, in those days, was CW only and did not have a mike. Vic told the UH station he had no mike, but the UH kept coming back and requesting the QSY. Vic had a 8-inch outboard VFO, So Vic got on 14250, held down his key, and banged the top of his VFO to modulate it. The UH comes back and says “no copy, QRM try again” so this time Vic really gives the VFO a series of bangs and thumps and the UH comes back and says, “solid copy, please QSL”. 50 years after the event, the group is still laughing about the event.

From WB4FDT: Back in the 1970's I attended a number of “Roanoke Division League Officials meetings” when Vic was Director. A number of times Vic would have a good idea, and rather than introduce it himself, would try to draw out the same conclusions from other individuals in his discussions with them, and then freely credit them with the idea.

For example, the conversation would go something like this: Vic would say: How do you feel about XXXX”. After receiving an answer, Vic would continue saying something like, “Well, maybe the ARRL should be doing this about XXX”. After receiving an affirmative answer, Vic would say, “You know, that sounds like a good idea, how about introducing it as a motion before the meeting so I can take it to Newington to work on?” When the motion was introduced, Vic gave the individual full credit for it. I was brave enough to ask him about this once, and he said that he thought new ideas had a better chance of being implemented if it came from a member rather than from a Director.

A historical note about Vic in Virginia. Vic was a founding member of the Virginia CW Net (still meeting today on 3578.5 at 7pm est) in 1947, and remained active until his death. While he was the Virginia Section Communications Manager (now called simply “Section Manager”) in 1952-4 he published a monthly Virginia newsletter which advertised all the amateur radio activities in Virginia during the period. No doubt this publication encouraged amateur radio activity and today it is a gold mine of amateur radio history during this period.

When Vic was IARU Region II President, Vic got the idea that countries should issue stamps (for stamp collectors) honoring amateur radio. This would be great publicity for amateurs in those countries and would give them some government recognition. When Vic urged the member societies to ask their governments to issue stamps, many of them hesitated. Some told Vic that they did not want any undue attention by their governments toward amateur radio or their societies. Many simply did not know how to come about it. Vic kept urging them, and eventually a number of South/Central American countries did issue the stamps, usually honoring the 25th or 50th anniversaries of their amateur radio societies. In 1983, Vic met King Hussein of Jordan, ham call JY1, and urged him to issue a Jordanian ham radio stamp. A few months after Vic died a set of four stamps was issued showing the King in front of his ham station.

Vic died after a second heart attack on November 25, 1983.

Upcoming Contests and Log Due Dates

Contests This Month

- **Dec 6 – ARRL 160M**
- **Dec 8 – 10M RTTY**
- **Dec 14 – ARRL 10M**
- **Dec 22 – Croatian CW**
- **Dec 22 – Rookie Roundup CW**
- **Dec 28 – RAC Winter**
- **Dec 29 – Stew Perry Top Band**

Logs Due This Month

- **Dec 3 – ARRL SSB**
- **Dec 4 – Ukrainian DX**
- **Dec 15 – 10M RTTY**

See WA7BNM's Contest Calendar for more detail and the latest information.

Eyeball QSO Directions

The latest info on local club meetings and get together will always be sent out on the PVRC reflector and posted on the PVRC web site.

NW Region: Meetings are generally held on the third Tuesday of each month at the Golden Corral Frederick, MD
5621 Spectrum Dr.
Frederick, MD 21703
PVRC Meets in the BANQUET ROOM
(301) 662-5922

From Interstate 270 south of Frederick, MD
take MD Route 85, "Buckeystown Road" NORTH.
First right on Spectrum Drive.
Restaurant is in a couple of blocks. Most arrive about 6 PM for dinner and informal discussions. The meeting begins at 7:00 PM.

Contact: Jim WX3B

Central Region: Meets monthly the second Monday of each month, except June, July & August). The location alternates between the below MD and VA locations. Pre-meeting dinners start at 6:00 pm and meetings start at 7:30 pm.

VA LOCATION: Anita's, 521 E. Maple Ave, Vienna, VA. Tel: 703-255-1001. Meets at this location during the months of February, April and October.
Contact: Rich NN3W

MD LOCATION: Max's Café. 2319 University Blvd W, Wheaton MD 20902. Tel: 301-949-6297 People usually begin arriving at the restaurant around 6:30. Meets at this location during the months of January, March, May, September and November. Contact: Art K3KU

The Laurel, MD Region: Bill N3XL The PVRC get-together is held at the first LARC meeting each quarter at the clubhouse.

The Annapolis Crew: Dan K2YWE Meetings are held on the 4th Wednesday of each month at Broadneck Grill in Annapolis. We gather at about 5:30 PM and order dinner about 6. We break up usually before 8 PM. E-Mail K2YWE to be put on the e-mail reminder list.

PVRC-NC: The PVRC NC-East chapter meetings are held at Manchester's Bar and Grill on the 9100 block of Leesville Rd. in North Raleigh, with "QRM" beginning at 6:00pm and the dinner meeting following shortly thereafter. The meeting is held monthly on the 1st Thursday of most months, cancellations or changes usually announced on the PVRC-NC website. The PVRC NC-West Chapter holds its meetings on the 4th Monday of each month at the Mellow Mushroom, 314 W. 4th St., Winston-Salem, NC. Ragchew at 7:00pm, dinner meeting starts at 7:30pm. All contesters and interested guests are invited!

Central Virginia Contest Club: Ed NW4V Meets the first Tuesday of the month at St. Martins Church, 9000 St. Martin Lane, Richmond VA, (between W. Broad St. and N. Parham Road). Our meeting begins at 7PM.

Over the Hill Bunch: The group meets for lunch at noon alternately in Maryland at the College Park Holiday Hotel Route 1 and the Beltway or in Virginia at the Parkview Marriot near route 50 and the Beltway. Meetings generally are held on the last Wednesday of the month and are subject to change. Meetings are announced by E-Mail. All PVRC members, non-members interested in membership and guests are welcome. For information contact Roger Stephens, K5VRX, 703-658-3991 for Virginia meetings; or Cliff Bedore W3CB or get on 147.00 for Maryland meetings.

Downtown Lunch Group: Meets on the 3rd Wednesday or Thursday of the month in the downtown area of Washington, DC. Locations occasionally change, but are always Metro accessible. Details are sent out on the PVRC reflector. Feel free to contact Eric W3DQ or Brian WV4V for details and directions.

Southwest VA Chapter: The Southwest VA group meets each Wednesday at about 8:30 AM at Hardees at 20265 Timberlake Road in Lynchburg, VA. This is an informal gathering, but normally has about 10-12 attendees..Contact Mark Sihlanick N2QT, Tel: 434-525-2921

SOMD Region Meeting: The Southern Maryland Chapter meets at 6:30PM on the first Tuesday of even numbered months. We meet in the vicinity of Charlotte Hall, MD, with the specific location (usually a local restaurant) to be announced several weeks prior to the meeting (keep an eye on the reflector). These meetings are open to all PVRCers, guests, and those interested in joining PVRC. Contact Tom AB3IC for information: e-mail: GL1800Winger@verizon.net - cell: 240-434-3811

If you'd like to add or correct a listing, contact K3TN for inclusion in the Newsletter!

Now a Word From Our Sponsors

PVRC doesn't ask for dues, but the Club does have expenses. Please send r by snail mail to N3RR's address at QRZ.com. You can also support the Club by buying from the firms listed who advertise in the newsletter, or by getting your company to sponsor the newsletter!

O.D.	Per Foot
.375	$.50
.5	$.70
.625	$.80
.75	$.90
.875	$.95
1	$1.00
1.125	$1.10
1.25	$1.30
1.375	$1.40
1.5	$1.50
2.0	$2.25

6063-T832 Aluminium
TX38 Triband Yagi Antenna
10-15-20 Meter with Monoband Performance
2 Elements on 15 and 20 and 4 Elements on 10
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