# Zero Beat Hampden County Radio Association, Inc.

Our 44th ARRL affiliated year Special Service Club

Serving Greater Springfield, MA

#### **President's Comments**

It's that magical time of the year again! It's time for an annual event. Well, I'll keep you guessing for a while. No, it's not turkey day! No, it's not Christmas! No, it's not New Years Day! Speaking of new Years day, how are all of you doing on your resolutions? As you can recall, I had a few. Well, I still don't know where the shack is. NR1L, N1GXR, KA1QAS, and KC1SS operated the ARRL DX contest and I guess I haven't found the shack since then. They did have a good time and managed to work more than 2,000 QSO's with our little Cushcraft A4 tribander. The OSL cards still haven't been ordered. But, remember how my dog almost hung himself on my outside wires? Well, that resolution got taken care of when the crew came over for the DX contest. Oh well, where was I? Oh yes! This magical time of the year. I'm sure some of you super-sharp HCRA'ers must have figured it out by now. It must be April fool's day! Right! But wrong! That's not what I had in mind. Get ready... here it comes! It's the annual HCRA flea market. The dates are about the same as last year, the same weekend as Dayton, and the last Sunday in April. Please consult the flyer enclosed in your Zero Beat for more information. Last year great bargains were to be found and lots of great ham equipment was sold.

For those new hams who have never been to a flea market, our own HCRA flea market will be a great opportunity to start. Items both small and large will be there. Specialty items such as coax connectors, relays, and electronic parts will be there. Thousand dollar transceivers, computers, and clunkers all will be there. All you have to do is come. Bring your stuff to sell or just bring yourself, your cash, and the willingness to bargain. Many hams wonder weather or not they should purchase major items at flea markets. I would like to share with you the fact that I have bought and sold items exceeding \$500 with complete strangers. I have had very good luck and have picked up some excellent pieces of equipment and very good values. All it takes is an old-fasioned ability to judge one's character. Don't be afraid to ask lots of questions. Ask if it works, ask why it is being sold, ask if there would be any objection to paying for the item by check, ask if they would allow you to try the item at home. When selling big ticket items, tell the truth about it's condition. Maybe suggest they try it and if not satisfied, they could bring it back. My experience has been that most hams are not trying to stick you. Listen to what they say, and you be the judge. Have fun!

73, Stan.

#### Next VE exam will be at the HCRA Flea Market on April 28th

Next meeting will be April 5th, 8:00pm at the Feeding Hills Congregational Church

Next board meeting will be April 11th at Charlie, K1II's house

#### **Club Officers**

President—Stan Hilinski, KA1ZE Vice President — Bob Lafleur, NQ1C Treasurer—Greg Stoddard, N1AEH Secretary —Jim Sebolt, N1DUY

#### **Directors**

Charlie Dunlap, K1II Larry Lemoine, N1EPE Steve Nelson, WA1EYF Cliff Junkins, W1UWX Bob Cohen, K1CPJ Fred Stefanik, N1DPM Frank Potts, NC1I Scott Cohen, KA1QAS

Articles from this newsletter may be reprinted as long as credit is given to Zero Beat

Although we modern persons tend to take our electric lights, radios, mixers, etc for granted, hundreds of years ago people did not have any of these things. Which are just as well, there was no place to plug them in. Then along came the first electrical pioneer, Benjamin Franklin, who flew a kite in a lightning storm and received a serious electrical shock. This proved that lightning was powered by the same force as carpets. But it also damaged Franklin's brain so severely that he started speaking only in incomprehensible maxims such as "a penny saved is a penny earned". Eventually, he had to be given a job running the post office. After Franklin came a herd of electrical pioneers who's names have become part of our electrical terminology: Myron Volt, Marylouise Amp, James Watt, Bob Transformer, and etc. These pioneers conducted many important electrical experiments. For example, in 1780, Luigi Galvani discovered (this is the truth) that when he attached two different kinds of metal to the leg of a frog an electrical current developed and the frog's leg kicked. Even though it was no longer actually attached to the frog which was dead anyway. Galvani's discovery lead to enormous advances in the field of amphibian medicine. Today skilled veterinary surgeons can take a frog that has been seriously injured or killed, implant pieces of metal in it's muscles, and watch it jump back into the pond just like a normal frog. Except for the fact that it sinks like a stone.

But the greatest electrical pioneer of all was Thomas Edison who was a brilliant inventor despite the fact that he had little formal education and lived in New Jersey. Edison's first major invention in 1877 was the phonograph which could soon be found in thousands of American homes where it basically just sat until 1923 when the record was invented. But Edison's greatest achievement came in 1879 when he invented the electric company. Edison's design was a brilliant adaptation of the simple electrical circuit. The electric company sends electricity through a wire to a customer then immediately gets the electricity back through another wire. Then (this is the brilliant part) sends it right back to the customer again. This means that an electric company can sell a customer the same batch of electricity thousands of times a day and never get caught, since very few customers take the time to examine their electricity closely.

In fact, the last year in which any new electricity was generated in the United States was 1937. The electric companies have been merely reselling it ever since, this is why they have so much free time to apply for rate increases.

Today, thanks to men like Edison and Franklin and frogs like Galvani's we receive almost unlimited benefits from electricity. For example, in the past decade, scientists developed the laser, an electronic appliance that emits a beam of light so powerful that it can vaporize a bulldozer 2000 yards away, yet so precise that doctors can use it to perform delicate operations on the human eyeball, provided they remember to change the power setting from "vaporize bulldozer" to "delicate".

#### Join Us At This Year's Banquet!

The annual HCRA banquet will be Friday, June 7th. Based on responses from the surveys that we received, the board decided it was time to try something different this year. So we're having this year's banquet at The Warehouse in Holyoke, MA. The Warehouse has an excellent reputation, and should provide for an interesting atmosphere, as there are many unique items hanging from the walls and ceiling of The Warehouse.

We're also going to have some nice door prizes this time around. Donated from Advanced Receiver Research is a switching GaASFET preamp for the band of your choice. Thanks to Rutland Arrays, we will have a certificate for a 17 foot antenna for 2m, 220, or 432, whichever you prefer. Downeast Microwave has generously donated a loop yagi and transverter kit for the band of your choice, from 903 up. We'll also be giving away a Kenwood TH-45 70cm HT!

Each meal ticket purchased will count for one chance at these great door prizes. Tickets will not be sold as chances for these prizes.

Tickets will be on sale at the April meeting, or you can contact any board member if you would like to purchase tickets.

The annual meeting/election will be held at 8:00pm, and The Warehouse will be open to those members who would like to come for the business meeting only.

And don't forget our guest speaker, Dave Sumner, K1ZZ! Hope to see you there!

# HIMARKHII

# AMATEUR RADIO - COMPUTER - ELECTRONICS HAMPDEN COUNTY RADIO ASSOCIATION SUNDAY APRIL 28, 1991

SOUTHWICK RECREATIONAL CENTER - SOUTHWICK, MA

Doors Open (General Admission) at 9:00 AM Talk In Frequencies: Doors Open (Sellers Only) at 7:00 AM 146.520 Simplex Exam Registration 9 - 9:30 AM 449.175 AC1T/R FIRST COME - FIRST SERVED! N VF Fxams at 10:00 AM Mass Turnpike 1-90 EXIT 4 Tables: \$7:00 each in advance EXIT 6 West \$10.00 each at the door Springfield I-291 Admission: \$2.00 C 10 & 202 O City of For more info Springfield Contact: RT 57 Abt EXIT 3 N1DPH Fred Stefanik 413-786-7943 Powdor I-91 Mill Rd or Southwick E VB1FVS R Ton Delnicki REC 203-644-0026 CENTER orall Connecticut To advance order tables, send \$7.00 per table to: Number of tables:\_\_\_\_\_ Fred Stefanik, N1DPM Name: 50 Witheridge Street Times  $$7.00 \text{ per: } \times 7$ Agawam, MA 01030 TOTAL: Call:

Make checks payable to the Hampden County Radio Association.

Advance table orders need to be received prior to April 20, 1991

### **HCRA BANQUET-ANNUAL MEETING**

FRIDAY - JUNE 7, 1991

6 - 7 PM CASH BAR

W/ HORS D'OEUVRES

7 PM DINNER

#### **SELECTIONS**

Prime Ribs of Beef \$16.00

Baked Schrod \$14.00

Boneless Breast of Capon \$13.00

#### **Dinners Include**

Fruit Cup
Fresh Vegetables in Season
Potatoes
Tossed Garden Salad w/Dressing
Strawberry Shortcake
Tea, Coffee, Sanka

#### **PROGRAM**

Guest Speaker: Dave Sumner, K1ZZ
ARRL Executive Vice President
Publisher - QST

Election of Officers

# W1NY and the Space Shuttle Challenger By

Joe Wolos, WA1OCK

In the summer of 1985, in conversation with Bob McCormick, KA1KPH, I expressed interest in rebroadcasting space shuttle communications on VHF frequencies. This was after the delay of the Challenger caused it to be rescheduled for a date later in the month. On several occasions in the past I had expressed the same feelings to others, possibly as early as when WA1NAN began operation on or prior to the flight of STS-9, when Dr. Owen Garriot, W5LFL, was first to carry amateur radio into space aboard the shuttle Columbia.

As president of the HCRA, Bob's first question was, "Can we do it?" My response was, "I don't know!" His reply: "Let's try!" We did. A decision was made to go for it. Neither of us could have predicted how the following weeks unfolded, with help from so many individuals, (some not hams!), and how successful this operation turned out!

As Bob was spending dollars on the telephone trying to get the authorization in place as required by our FCC waiver, I was hard at work on the hardware aspects. Jim Davis of Continental Cable of Springfield offered us the use of their feed. He had a spare 10 meter dish to aim at a satellite low on the horizon that had the feed "NASA Select" on it. A friend provided the electronics used for the audio demodulator. It fed a borrowed VHF Yaesu Memorizer. A hardware repeater controller board was set up to fire a diode matrix ID board. The HCRA authorized the use of club call W1NY. This pioneering effort was a fitting tribute to a silent key who was well known by many among us. A 60 watt Mirage amplifier was used feeding a bandpass cavity, and an old gain antenna at 230 feet above sea level. A half dozen fans were used to keep the equipment cool, as it was not intended for continuous operation! The hardware worked flawlessly.

Due to the time elements involved, the complete operation was performed under local control with toothpicks to keep the eyelids up. A Motorola Pageboy pocket pager, in conjunction with the Advanced Computer Controls RC-850 repeater controller on KA1KPH/R (449.175) was a successful alarm clock to say the least! Thank you, Bob! Tracking data was provided by John Balboni, AC1T, to be passed over W1NY on 146.595 Mhz. Considerable additional hardware and emotional support was provided by many. To those who are not mentioned here, your help and support was greatly appreciated and was helpful in guiding me through this undertaking. After the third day I was running on nervous energy and feel it was equivalent to several Field Day weekends in a row!

To those who listened to the 16+ hours per day. I wish to

thank you for enjoying the history of the 2nd flight of amateur radio aboard an orbiter. The space shuttle Challenger circled the planet with a project undertaken to benefit all radio amateurs.

WOORE was seen and heard by many hams worldwide! The crew of mission 51F were able to see pictures from the ground through the SSTV amateur operation. It was a warm experience to step out my front door, look up and see Challenger go overhead, listening to amateur radio signals from that orbiting space shuttle. The signals were so loud that I could hear them on a handitalkie, and W1NY could not desense it!

The flight had almost experienced a major problem as the vehicle had to "abort to orbit", which meant they had to dump some fuel to get into orbit on liftoff. They ended up at a less than optimum height for some of the experiments.

The next shuttle to go up serviced a malfunctioning satellite and repaired it in space. They wore the space suits that Norm Cournoyer, N1AFY builds at Hamilton Standard. I'm sure you recall getting a look-see at the real things at a recent HCRA meeting. I had requested rebroadcasting this audio, but the HCRA board felt that it should be amateur radio operation missions only.

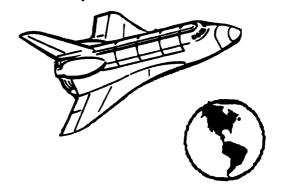
The next flight of Challenger carried DPOSL (the European space lab) into orbit above our heads. W1NY was on, although the level of communications were considerably less.

The next flight of Challenger has left severe hurt for many that began milliseconds after 11:38:73 on January 28th, 1986. The scientific progress of mankind experienced a painful hurt. Seven touched the face of God as many began to shed tears. One could not measure the magnitude of hurt it was so immense.

I had wanted to have W1NY on for this mission. Being so involved in the previous two Challenger missions, both carrying amateur radio, the reality of the 28th hit hard. It has guided me: try a little harder to reach for the stars.

As we say 73 to one another on the ham bands, let us recall forever the seven of Challenger and the three of Apollo-1 who reached for the stars for all mankind.

Reprinted from May 1986 Zero Beat



## HAMPDEN COUNTY RADIO ASSOCIATION, Inc.

POBox 482 West Springfield MtA 01090-0482

#### APPLICATION FOR NOMINATION FOR ELECTION TO OFFICE

•	iame here)	(Callsign)
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	(Circle one candidate office l	pelow)
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	Vice-President	
	Treasurer	
	Secretary/Clerk	
	Director (2 year te	
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91 Feb 16 - JRS - N1DUV

## HAMPDEN COUNTY RADIO ASSOCIATION, Inc.

PO Box 482 West Springfield MIA 01090-0482

#### MEMBERSHIP DATA BASE INFORMATION

Callsign:						
Class:	Novice T	echnici	ian C	àeneral	Advanced	Extra
Accredited	IVE?	No	Yes		Advanced	Extra
Member o	f ARRL?	No	Yes	Life		
Member o	fARES?	No	Yes			
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Date:						

91 Feb 16 - JRS - N1DUY

Return this form when completed to the HCRA Secretary/Clerk

#### Coincidence ?!

Born on the same day, November 20th, 1926, Place Holyoke Hospital. Attended the same high school in Holyoke. Enlisted in the US Navy under the naval radio technician program. Rode the same train from Holyoke to Chicago, saw each other getting on the train and off the train at Holvoke. Both retired the same month 1987. Both licensed radio amateurs. They didn't meet until attending an HCRA club meeting! Can you guess them? Cliff W1UWX, and "pseudo brother" K1WVX, Paul.

New phone number for the editor (Bob) (413) 736-0178

#### **VE Exams**

Exams are sponsored by the HCRA on the first Wednesday of each month at 7:00PM *sharp* at the Agawam High School. VE's are also needed. If you are interested in taking an exam or helping give exams, please contact Jeanette WC1O at 786-1463.

The next VE exam will be at the HCRA Flea Market on April 28th, signup will be from 9-9:30.

#### **HCRA Meetings**

First Friday of each month at
Feeding Hills Congregational Church
Center of Feeding Hills
Intersection of routes 57 & 187
Doors open at 7:30 PM
Meeting starts promptly at 8:00 PM

Next Meeting
April 5th 8:00pm
Feeding Hills Congregational Church
Steve Powlishen, K1FO
"Evaluating Today's Radio"

Hampden County Radio Association, Inc. P O Box 482
West Springfield MA 01090-0482
Editor: Bob Lafleur, NQ1C

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