



# SPECTRUM



The Voice of the Humble Electron

Founded 1962

**PRESIDENT'S MESSAGE:** This is **The Bruce NI1X** – As you have probably heard by now – the FCC has issued an order that will eliminate the Morse code requirement for amateur radio licenses. This order will probably go into effect sometime in February. This means that all current no-code Technician class operators – present and future - will be granted Technician Plus privileges on 80, 40, 15 and 10-Meters - identical to those of the Novice License. This will also rejuvenate the urge to upgrade and **Bill N1FRE** is planning a General Class Study Group that should start up in Whitman in February.



**Bruce NI1X, Paul KB1MTW** and **Jim WG1L** attended a **W1AA** Fessenden / Point Allerton Lifeboat Station Museum Special Event in Hull, MA. **Bruce NI1X** gave a presentation on Fox Hunting at the Taunton Area Communication Group's December meeting. Whitman Club members participated in RADIOGRAM training at the Taunton and Whitman Emergency Operations Center.

At the January meeting **Jim WG1L** talked about his solar powered emergency battery power supply and we saw **Greg's KB1NLX** home made Morse code key. **Bill N1FRE** talked about the history of the Whitman REPEATER and we had another fun auction. We currently have 98 members and we started the New Year right with 26 attending the January meeting. Come to the next meeting and share with the other members present your latest radio acquisition or radioactive projects.

## DONATED EQUIPMENT

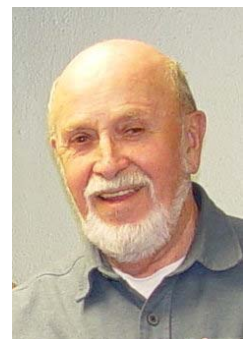
**Arthur Bradford W1EQK** of Duxbury donated 60 milk cartons of miscellaneous radio parts to the Whitman Amateur Radio Club. Thank you **Arthur W1EQK**.

**FOR SALE:** **Arthur W1EQK** also has a Hammarlund HQ 129X receiver for sale (with one broken knob) for \$40.00 Tel: 781-934-2756



Arthur Bradford W1EQK

**REINSTATED FORMER MEMBER:** **Neal Harrington KB1LXL** of Rehoboth has been licensed for 2 years and is a RACES Volunteer with the City of Taunton. **Neal KB1LXL** is a part time EMT in Rehoboth. **Neal KB1LXL** has a T90A handheld and has installed a YAESU FT-8800 mobile rig in his truck. **Neal KB1LXL** volunteered to help out at the Boston Marathon, the past two years, and they assigned him to the medical bus. He has acquired a 40 foot tower and has been offered a 75 foot tower. **Neal KB1LXL** has offered to install the TACGroup 447.225MHz REPEATER at his home QTH.



Neal KB1LXL

## SECRETARY'S NOTES OF THE MEETING OF JANUARY 3, 2007 de KB1CYV

**OPENING:** The members started gathering at the Whitman Public Library, Whitman, MA around 6:15 p.m. **President Bruce NI1X** opened the meeting with a roll call at 6:43 p.m.

**ATTENDANCE:** Twenty-seven members / guests were present, including all elected Officers and Directors. A quorum was present.

<b>N1ZZN</b>	<b>Jeff Lehmann</b>	<b>K1WGU</b>	<b>Bob Bass</b>	<b>KB1CYV</b>	<b>Roy Logan</b>
<b>N1VTI</b>	<b>Paul Burbine</b>	<b>KB1MTW</b>	<b>Paul Moss</b>	<b>N1WIG</b>	<b>Sam Webber</b>
<b>WQ1L</b>	<b>John Coombs</b>	<b>N1NTZ</b>	<b>Ed Meehan</b>	<b>KB1OEP</b>	<b>Mike Supple</b>
<b>KA1PJX</b>	<b>Don Keene</b>	<b>K1REL</b>	<b>Bob Loring</b>	<b>WG1L</b>	<b>Jim O'Rourke</b>
<b>KC1FZ</b>	<b>George Davis</b>	<b>N1OGP</b>	<b>Frank Hayes</b>	<b>KB1OEQ</b>	<b>Ron Stundze</b>
<b>KB1OEU</b>	<b>Rick Petersen</b>	<b>K1BAR</b>	<b>Bob Barbour</b>	<b>K1XRB</b>	<b>Peter George</b>
<b>N1FRE</b>	<b>Bill Hayden</b>	<b>N1SOM</b>	<b>Jeff Tracy</b>	<b>NI1X</b>	<b>Bruce Hayden</b>
<b>KB1NPH</b>	<b>Bill Anstead</b>	<b>KB1OAW</b>	<b>Greg Noyes</b>	<b>KB1ODS</b>	<b>John Chase</b>
<b>N1EY</b>	<b>Bill O'Hara</b>	<b>KB1OAY</b>	<b>Dan Noyes</b>	<b>SWL</b>	<b>Dan Chase</b>

**TREASURER'S REPORT:** The treasurer's report for December was read by **Jeff N1SOM**. **Ed N1NTZ** made a motion, seconded by **Paul N1VTI**, that the treasurer's report be accepted as read. The motion was approved.

**SECRETARY'S REPORT:** A motion was made by **Ed N1NTZ**, seconded by **Paul KB1MTW**, that the secretary's report be accepted as published in the December Newsletter. The motion was approved.

**HEALTH & WELFARE:** **Vic N1OEH** reported that **Bernie Snow N1OQW** is recuperating from pneumonia and has been transferred to the Sinai Rehab center in Stoughton. **Bob K1REL** reported that **Barbara Rice K1MRH** is recuperating from foot surgery. Hope to hear you on the air soon.

**OLD BUSINESS:** **Bruce NI1X** reported sending 37 of 51 Plimoth Plantation QSL packets to date. Packets include a certificate, newsletter, QSL card and Plimoth Plantation informational handout.

**NEW BUSINESS:** **Bill N1FRE** gave an interesting talk on the history of the **WA1NPO** repeater, accompanied with a handout on the latest repair activities. **Bruce NI1X** made a motion seconded by **Paul KB1MTW** that following the business meeting an auction of recently donated items would be conducted for those in attendance. The motion was approved. **Paul N1VTI** served as auctioneer with many bargains realized.

**CLUB ANTENNA ANALYZER LOCATION:** **Bill Hayden N1FRE** / used at REPEATER Site then back to Pine Street Clubhouse.

**NEW MEMBERS:** **John WQ1L** made a motion seconded by **Sam N1WIG** that **Neal Harrington KB1LXL** be accepted as a reinstated former member. The motion was approved. Welcome back to the WARC, **Neal**.

**TECHNICAL TOPICS:** **Bruce NI1X** circulated a low cost code key constructed by **Greg KB1NLX** from an article which appeared in the September, 2006 edition of QST. Copies of the article were distributed. **Jim WG1L** discussed a 45-Watt solar panel he has erected at his QTH to charge his emergency battery power source.

SECRETARY'S NOTES OF THE MEETING OF JANUARY 3, 2007 de KB1CYV Cont:

**NET CONTROLS:** 1/7 Bruce N1X 1/14 Bill N1FRE 1/21 Jeff N1SOM 1/28 Roy KB1CYV  
2/4 Bruce N1X Experienced net control operators will gladly assist anyone interested in running a NET.

**CLOSE:** President Bruce N1X closed the business portion of the meeting at 7:12 p.m. following a motion by John WQ1L seconded by Sam N1WIG. The auction ended at 8:00 p.m.

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HELLO FROM BOB SCHILLINGER KR6EC of San Diego, California

Bob KR6EC made a brief appearance at Plimoth Plantation and caught John Coombs WQ1L and Paul Burbine N1VTI installing antennas at the administration building on Friday while in Massachusetts visiting family over the Thanksgiving holiday.

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UPCOMING FLEA MARKETS: Feb 17<sup>TH</sup> Marlborough, MA. (Middle School) \$5.00 @ 9 a.m.

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SCUTTLEBUTT -- SCUTTLEBUTT -- SCUTTLEBUTT

Ray Bolduc KB1ODU attended a Weymouth Emergency Management Agency general meeting in January. They are held every other month. Weymouth and Braintree are part of the Pilgrim Nuclear Power Plant evacuation drill and Ray KB1ODU is assigned to the Reception Center in Weymouth during the drills. See Ray KB1ODU if you are interested in helping out.

Paul Burbine N1VTI received a Curtis Chip for Christmas that is used to make an electronic keyer.

Sam Webber N1WIG picked up a Cushcraft R-5 vertical complete with portable vehicle supported mounting frame and mast from Paul N1VTI.

Bill Hayden N1FRE and Paul Moss KB1MTW had been authorized to purchase a cabinet (some assembly required) to store radio equipment at the Whitman Emergency Operations Center. They reported that they also installed wheels for easy portably use.

Mike N1FRV reports that Irving Spector W1RQW is interested in getting Echolink up and running so that he can get back into HAM radio. Help may be needed.

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TECHNICAL TOPICS - A 160-METER WINDOM By: Ken Kavajlian KB1KVL

Ken Kavajlian KB1KVL is making a 160-Meter Windom antenna. Ken KB1KVL reports that a 160-Meter Windom antenna is an offset antenna with 64% of the antenna on one side and 36% of the antenna on the other. You can feed it with a 50-ohm coax and a 4:1 balun. A matching device such as an antenna tuner is required to make this an all band HF antenna. The recommended feed point is 40 feet high. No radials are required. The overall length is 260 feet. You can either install it as a flattop or inverted Vee. Ground space needed – 260 feet as a flattop or 235 feet as an Inverted Vee. It will not hurt the efficiency if you bend the ends of the antenna slightly to make it fit into the space you have.

**TECHNICAL TOPICS - TECHNICAL TOPICS - TECHNICAL TOPICS**

**A VERY UNIQUE LOW COST CODE KEY:** Do you recognize this simple homemade Morse code key made from a door hinge ?? The design of this unique low cost Morse code key, by **Steve Lalonde WA7WKX**, was detailed in the September issue of QST Page 37 & 38. **Greg Glynn KB1NLX** put this one together.



**Greg's KB1NLX Key**

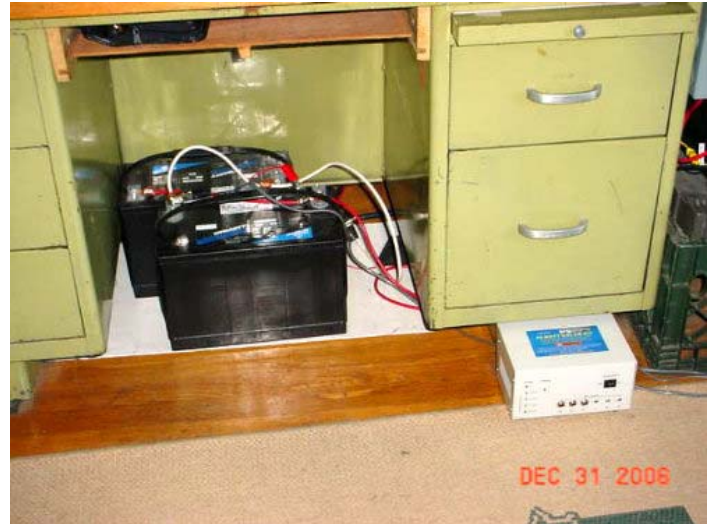
Now we can learn and use Morse code just for the fun of learning a second language. One of the goals of the FISTS CW club is to further the use of Morse code.

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**SOLAR POWERED EMERGENCY BATTERY BACKUP SYSTEM By: Jim O'Rourke WG1L**



**Jim O'Rourke WG1L & solar panels**



**Batteries and controller / charger**

**Jim O'Rourke WG1L** has installed three solar panels at his home QTH and is running his HF gear from solar powered batteries. The controller-charger has three outlets that provide 3, 6 and 9 volts DC for small equipment and **Jim WG1L** has added two 12-volt lights to be used in the event of a power outage. **Jim WG1L** also reports that he has a 12 Vdc to 120 Vac - 300 watt power inverter. The system includes two 88 amp hour batteries in parallel. The three solar panels are a little over 3 foot by 1 foot in size and are rated 15 watts per panel (45 watts total). The solar panels came from Harbor Freight as a complete kit with mounting brackets and cost about \$200.00 See their WEB site at [www.harborfreight.com](http://www.harborfreight.com) or contact **Jim WG1L** at [wg1l@verizon.net](mailto:wg1l@verizon.net) for details.

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**A SECOND MOBILE BATTERY – By: John Coombs WQ1L**

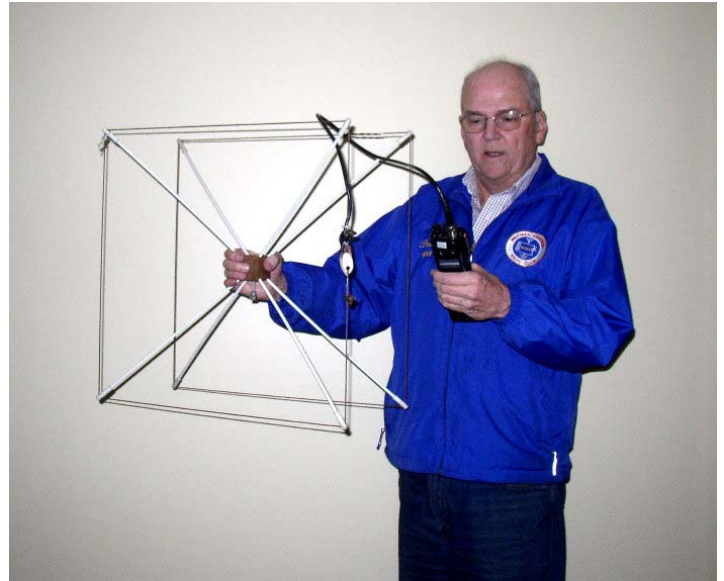
**John WQ1L** reports that he is planning to install a second battery in his truck, tied directly to his ICOM IC-746 transceiver. This isolated battery is designed to block any engine / alternator noise from getting into his receiver while he is listening on HF. **John WQ1L** is designing a circuit of diodes and relays to parallel the new battery with his main truck battery when transmitting – and to connect the new battery to the trucks charging circuit, through diodes, when the transceiver is not in use.

## TAUNTON AREA COMMUNICATION GROUP (TACGroup) - UPDATE

### FOX HUNTING PRESENTATION By: Bruce Hayden NI1X

The Bruce NI1X gave a presentation at the December TACGroup meeting on Fox Hunting – describing the various techniques of directional finding such as relying on signal strength, the use of attenuators or body fading, and showed the design and unique construction of two specialized directional beam antennas.

The South Shore Fox Hunters have had a lot of fun over the past 10 years chasing the elusive Fox. Under discussion is a proposal to involve the members of the Whitman Club and the Massasoit Club and any other clubs like the Taunton Area Communication Group in a one day FOX Hunt to rekindle this flame and introduce the new HAMs to the fascinating hobby of directional finding.



**Bruce Hayden NI1X**  
**the Fox is that-a-way**

One member will be assigned to be the Fox and he or she will transmit on 146.565 MHz simplex for about 30 seconds every 5 minutes between say 10:00 a.m. and Noon on a Saturday morning. The Fox will be hiding in a public place. The old boundaries were Rt. 44 on the south, Rt. 138 on the West, Rt. 128 on the North and Rt. 3 on the East. We would probably pick a smaller area to save on gas.

The Fox Hunters coordinate their activities on the Bridgewater REPEATER 147.180 MHz PL 67. You can listen in from your home QTH or mobile if you are out and about and check in with the Fox Hunters at 10:00 a.m. at the start of the hunt to report if you can hear the Fox or just as important – if you can not hear the Fox from your location. You never know when the Fox will be hiding in your back yard.

In the past - one HAM would give a heading, with a directional beam antenna, from his home QTH and with your heading - using a directional antenna - from a different location - you could triangulate an approximate location using an area map. Great fun – try it – you might like it.

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**TACGroup - NEW CLUB CALL SIGN AND TECHNICIAN CLASSES:** Carlos Wharton WP4US reports that the TACGroup has a new club call sign **KC1TAC** and that four students passed their Technician class license in December. Graduating were **Wayne Stone KB1OHU**, **Winthrop Richardson KB1OHV**, **Walter “Skip” Newell KB1OHW** (Skip is on the air with a YAESU FT-60) and **Paul Payette KB1OHX**. Congratulation goes to **Carlos WP4US**, the teacher, and to his students for a job well done

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You know you are a HAM, and you have been on the air too much, when you start giving out RST reports (your 5 by 9) when you are on the telephone.

## HELLO FROM BRUCE BEAMAN K1HTN IN OSSIPEE, NEW HAMPSHIRE

**Bruce K1HTN** is a former Whitman Club member from E. Bridgewater who moved out of state and tells us that he was first licensed in 1958 as **KN1HTN** and then dropped the "N" in 1959 after taking the General class ticket at the FCC Office at 1600 Customhouse in Boston.

**Bruce K1HTN** reports: Santa came early to New Hampshire and brought me a YAESU FT-817ND QRP all band / mode rig. My first QSO on 40-Meters CW was PJ4/KV0K, using my home dual band dipole for 40/30-Meters. Running from the NiCad pack with 2 watts output.

I am looking forward to hiking and sitting on the beach and using it this summer. After New Years I plan to pick up an Elecraft T-1 QRP wire tuner for it, and use an inverted "L" wire with a ground counterpoise for QRP Operation.

In the picture of my shack, on the top left is an FT-900Cat. Transceiver. In the middle, under the monitor, is a FT-1000MP Mk-V Field transceiver. To the right is an MFJ antenna tuner and a RCS-4 remote antenna switch box. Further on the right is my new FT-917NP transceiver all band / mode QRP rig.



**Bruce Beaman K1HTN**  
**(Horse Traders Net)**

For antennas I have a 2 element Moxon, 20-Meter wire beam and a 17-Meter delta loop. A 20-Meter dipole made from ladder line and fed with 300 ohm TV lead thru an old Heathkit balun, a 40 / 30-Meter dipole with wires for each band off common feed point and a 80-Meter half square.

Great to see all the newly licensed HAMS in the pictures in the SPECTRUM and now that the code will be dropped shortly that should help some. CW is the way to go !!!

My best wishes to all in the Whitman Club for a Merry Christmas and a great New Years

From: **Bruce Beaman K1HTN**

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### **WHITMAN AMATEUR RADIO PUBLIC SERVICE NET (WARPSN)**

The **WARPSN** NET meets every Sunday morning at 8:30 a.m. on the Whitman REPEATER 147.225 MHz PL 67. Come join in and share your amateur radio related activities with the other area HAMS and short-wave listeners as well.

As part of our training, we encourage everyone to practice sending routine RADIOGRAM messages. In December we had five (5) sessions with an average of 12 area HAMS checking in each week and 9 messages were sent.



**Checking in**  
**with WA1NPO**

## REPEATER UPDATE By: Bill Hayden N1FRE

A problem developed in the REPEATER antenna system. A backup antenna was installed and tested OK.

**HISTORY:** Our records show that on Nov. 19, 1993, **Bill N1FRE** and **Ray N1KXJ** tuned the back up antenna for 147.225, which was then used for a short period of time to determine the condition of the old station master antenna and feed line. This antenna was originally used on the Stoughton REPEATER and then donated to us by **Steve W1WSN** to use as a backup antenna.

**December 20, 1993** - A new celwave PD-220-2 was picked up by **John WQ1L** and **Bill N1FRE**, and then installed on top of the old tower with additional help from **Ed N1NTZ**, **Rick N1MJT**, and **Ray N1KXJ**.

**November of 1995** - The present tower was installed and a new run of 9913 was installed in the system as well. The crew was too numerous to list all hands present for this activity for this report. The new tower was modified to give us a center point of radiation height of 85 ft. with the antenna installed at the tower top.



**Paul Moss KB1MTW**

**December 27, 2006** - **Paul KB1MTW**, **John WQ1L**, and myself made up a new length of 9913 coax and connected it to the backup antenna. This backup antenna was then hoisted to a height of 53 feet above ground level where it is now in service.

**NEW SCENARIO** <> On Dec. 28, 2006, the 147.225 REPEATER is now running on two separate antennas. The receiver is listening on the old antenna at the top of the tower, (92 ft.), with the old 9913 coax in service. The transmitter is utilizing the back up antenna which is suspended from the cross arm at (53 ft.) on the North side of the tower about 3 feet from the tower leg with new coax cable. The duplexers are not being utilized in this configuration.

**December 28, 2006** – Shown in the photo (*It really did happen*) is **Paul Moss KB1MTW** securing the coax cables for the wintertime. Special Thanks to **Paul KB1MTW**, **John WQ1L**, **Jeff N1ZZN**, **Gary W1GRC**, and **Shawn Anderson SWL** for all their help with this club repeater project.

**PERFORMANCE:** This should be a performance improvement from recent times. It will be interesting to hear reports from the Hams that use the REPEATER as these reports and suggestions will be valuable to further evaluate and improve our progress during the winter months while waiting for a suitable re-location for our club repeater system that will equal or better the performance that we experience now.

73 From: **Bill Hayden N1FRE**

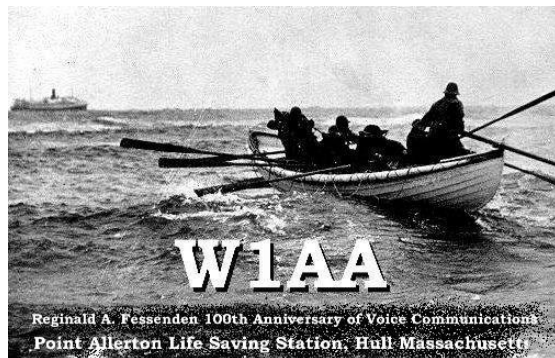
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**Amateur Radio Emergency Service (ARES) Update:** “ARES JUMP TEAMS” are being formed around the country and sounds like our mutual assistance only more organized with designated team members on standby with go kits all packed and ready to go to the adjacent county.

## REGINALD A. FESSENDEN 100<sup>TH</sup> ANNIVERSARY EVENT – HULL – MASS.



Operating in front of Lifeboat Museum



Special Event QSL Card

**W1AA** (Marconi Radio Club ) operated from near the Point Allerton Lifesaving Station in Hull, Mass. on December 30, 2006 in full view of both Boston Light (USA073) and The Graves (USA341). The crew activated both Lighthouses along with the Fessenden Special Event Station that was in operation to celebrate the 100<sup>th</sup> anniversary of the first voice broadcast

The **W1AA** Special Event operation was recognizing the contributions to marine safety at sea made by **Reginald Fessenden's** invention of voice communication. **W1AA** is a member of the Amateur Radio Lighthouse Society, and **Bob "Whitey" Doherty K1VV** and **Don Tanguay N1DT** – know as the "**Cape Crusaders**" - have activated 54 lighthouses and lightships in Massachusetts and Rhode Island over the last three years.



**Don Tanguay N1DT** in the truck operating with **Whitey Doherty K1VV**, **Warren Dickie WA1YKF** and **Jim O'Rourke WG1L** looking through the window. Did you know **Don N1DT** was a past President of the Whitman Amateur Radio Club from June 1982/83 to June 1987/88.



The Fessenden Special Event Crew – "On the Beach"  
Temp. about 30 degrees and 10 to 15 mph winds

**Whitey K1VV** had invited area HAMS to stop by and operate and Whitman Club members **Bruce Hayden NI1X**, **Paul Moss KB1MTW** and **Jim O'Rourke WG1L** took him up on the offer. Shown in the Photo at the operating site are L. to R. **Bruce NI1X**, **Paul KB1MTW**, **Jim WG1L** along with **Bob "Whitey" Doherty K1VV**, **Tom Wilson KB1TOM** and **Don Tanguay N1DT**. A portable generator was used and a 33 foot vertical antenna was secured to the trailer hitch on the truck. The crew made 88 contacts (70 SSB and 18 CW).



## RADIOGRAM TRAINING IN TAUNTON

Seen at the Taunton Emergency Operations Center following the January RADIOGRAM training session and shown standing L. to R. are **Don Burke KB1LXH**, **Carlos Wharton WP4US** and **Neal Harrington KB1LXL**. Shown seated L. to R. are **Greg Glynn KB1NLX** (Control Operator for the night), **Peter Ferreira KB1LXG** – The Assistant Director of the Taunton Emergency Management Agency, and **Bruce Hayden N1IX**. All are Whitman Club members.



In January **John Miller N1UMJ** sent four RADIOGRAM messages to the local Emergency Management Agency Directors from the MEMA Region II Headquarters located at the Bridgewater State Prison Bunker facilities. The next RADIOGRAM training session will be on Monday February 5th.

## TAUNTON RACES VOLUNTEERS

Listen in at 7:30 p.m. on the Taunton REPEATER 147.135 MHz PL 67 or at 8:00 p.m. on the Norwell REPEATER 145.250 MHz PL 77 and copy the messages from home. Even better – come to the Whitman or Taunton Emergency Operations Center (EOC) where all are invited to join in and copy the three or four RADIOGRAM messages in a classroom setting – no pressure.

## RADIOGRAM TRAINING IN WHITMAN

**Bill Hayden N1FRE** (The Control Operator for the night) and **Paul Moss KB1MTW** are shown at the Whitman Emergency Operations Center following the January RADIOGRAM training session. Also participating but not shown was **Mike Supple KB1OEP**. The messages were relayed to **Bob Schmitt KB1MTY** – the WEMA Director at 9 p.m. on Monday January 8, 2007. All are Whitman Club Members

**Bill N1FRE** and **Paul KB1MTW** are sitting in front of the new WEMA self contained / portable (they reported that they installed wheels) radio communication center cabinet at the Whitman EOC.



**Bill Hayden N1FRE & Paul Moss KB1MTW  
at new radio communication center cabinet**



# WHITMAN AMATEUR RADIO CLUB, INC.

A Non-Profit Corporation Serving the Public in Time of Emergency



Post Office Box 48  
Pine Street  
Whitman, MA 02382

Telephone: (781) 447-1655  
ARRL Club #0082  
Club Call Sign: WAINPO

## CLUB OFFICERS

### MEETING SCHEDULE

Meetings are held on the first  
Wednesday of each month

The next meeting will be held at the  
Whitman Public Library, which is  
located at 100 Webster Street  
in Whitman, Mass.

#### Next Meeting

Wednesday, Feb. 7th at 6:30 p.m.  
Whitman Public Library

President	Bruce	N1IX
V. President	Bill	N1FRE
Secretary	Roy	KB1CYV
Treasurer	Jeff	N1SOM
Director	George	KC1FZ
Director	Paul	N1VTI
Director	Jeff	N1ZZN

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Editor	Bruce	N1IX
E-mail articles to:	<a href="mailto:ni1x@arrl.net">ni1x@arrl.net</a>	

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Web Master	Jeff	N1ZZN
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Web Site: <http://www.wa1npo.org>

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Club Repeater Station:	147.225 MHz (CTSS 67 Hz)	449.875 MHz (CTSS 88.5 Hz)
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*Whitman Amateur Radio Club, Inc.  
P.O. Box 48  
Whitman, Ma 02382*

