"OLE VIRGINIA HAMS" AMATEUR RADIO CLUB, INC

Post Office Box 1255, Manassas, Va. 22110 Repeater--WA4FPM--146.970/224.660 Out--146.370/223.060 In OVH Nodes--Port 1: 145.030 Port 2: 223.660 Port 3: 223.540 MHZ BBS--BBSHRG/N4WJN (SYSOP--BILL)



SEPTEMBER 1994

WHAT'S INSIDE THIS MONTH:
THE PREZ SAYS
MASTHEAD
THE VIEW FROM HERE - THE TOP OF THE TOWER
REPEATER NOTES
THE MARCONI RADIO SITE
CALENDER OF EVENTS

THE PREZ SAYS

Jim, WD4OJY

Hi All!

Labor Day is finally here and summer is officially over. Although it was a hot one, it ended to soon for some. For me it couldn't come fast enough. Having the kids return to school is something I always look forward to each fall

We must say our fond farewells to another club member. Jay, NS5N, is leavingfor Venezuella. Jay has always been active in the club volunteering to helpwhenever possible. He always seemed to know (continued on page 3)

OLE VIRGINIA HAMS AMATEUR RADIO CLUB, INC. OFFICERS AND COMMITTEES DIRECTORS

NR4L	REPEATER CONTROLLIRE		Ð	WAPOIST	YLOU KB4EPP	80%	WB4HHN703	71; KB4OF!	KBINE	STEVE N4COR 703 301 0008		REPEATER TRUSTEE	ART WECRO 703 701 4 3:0		PETE KB4KME		COMMETTEE	BERNICE KA48CA 703.791 3839	TERREMINO INDIVIDUE	808 (335 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	THE WHILE.	WARROLD	TIM RETURE		THE REPRESENTED	T.B.D	Y VIIF NET	HARRY W4PVA703 308 0050	
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OFFICERS PRESIDENT JIM WD4OJY VICE PRESIDENT ERVIN KD4DFB SECRETARY IVAN KD4DFD TREASURER JIM WAAQEJ	1005 HAMISET CHAIRMAN	4.00TT KEEK (1. 1. 703.764.825)		1995 PHED DAY CHAIRMAN			CLUB ROSTER/MAD. LIST	BLAINI KBARKL		COMPUTIER COMMITTEE	DICK WD4AZG /03 791 3839	・・・・・・・ といせん	2NTCZ	EDUCATIONAL COMMITTEE	T.B.D.		IMERCENCY COORDINATOR	HARRY WHPVA		LAR REPRESENTATOR		では、一つのことを見られている。	CLAB TWINSTRUM	34117P	PHTE KB4RME COUNTY AND 389 3430	TIM NB4NK 703 494 27 37	CHNERATORS	TOMMY KA4AFF 703 369 2741	

PLEASE TAKE NOTE OF THIS NEW MASTHEAD AND ADVISE ME OF ANY CHANGES/DELETIONS/ADDITIONS.
S. BELLEPERENE, 1994

where help was needed and wouldjump in and fill the gap to get the job done. Filling the void on the packet committee recently is a good example.

I have always felt the busiest people in the club are those folks that provide us with the clubs newsletter each month. Last year Jay took over the writing and editing of the newsletter. No small task. The paper continued to go out on schedule without missing a beat. A few changes in the format that personalized the paper to the new editor were the only noticeable changes.

Jay, you will be missed. Not only during club activities but your daily presence on the repeater will not be forgotten anytime soon. THANK YOU for allthat you have done and we wish you and Maureen all the best in the future

Lets see now, what else is going on. The clubs' picnic is coming up the 25th of September. Check inside for more details...Mikey, WV3H IS ALIVEAND WELL IN Great Britain. His new call is G0VEZ and he can be reached on packet...His address is: G0VEZ @ GB7BAN.#49.GBR.EU and I would to request all that can please write him a note and say hello. It only takes abt 24 hrs to get there.

Gotta go, see you at the meeting and....

...73 for now

The View From Here...The Top Of The Tower

It is with sadness and a smile that we all must say our last farewells to Jay/NS5N. It doesn't seem all that long ago when I first met J.Edgar at the OVH pienic with the rest of the gang. For some reason though, I still distinctly remember "Butchie" flipping hamburgers and hot dogs on the grill!

Jay made his presence known from the start by taking over as the editor of the OVH newsletter and then stepping forward to assume a position on the packet committee, and finally head up the 1994 OVH field day activities at Long Park. I'm sure I speak for the entire club when I say " "Thank you, J. Edgar!" If we had more people like Jay, we certainly wouldn't have some open slots on the committee posts. Jay could always be counted on, whether it was to be there or simply someone who had an idea or answer to a question. I hope we all

keep a little of this trait from Jay, and become more active with our amateur radio club. There is a saying that in any organization, that only 10% of the group does 80% of the work. Jay, you were a 10% er, without a doubt. I personally thank you for all the questions that I put forward to you, and that you took the time to answer. We all wish you luck and success in your new endeavor, and hope that sometime in the near future you will return. Good Luck!

As you might have guessed by now, I have been entrusted to carry on the time honored tradition of putting forth the OVH Times. I volunteered for the position because all the other volunteers were busy at the time!

The Editor\KJE4HCT

Repeater Trustee Notes

From W1CRO

The following information is taken from OVH ARC Repeater Trustee files. Some information is found in various flyers, hand-outs and newsletter articles; other information is taken from license applications and repeater coordination forms.

The Blue Mountain ARC formally commenced operation of the WB4URR repeater (146.37/146.97) at Buil Run Mountain with an FCC license dated 03 November 1971. Philip Poole, WB4FQR was the Trustee. Dick Keil, WB4TEL, replaced Phil Poole as Trustee on 10 November 1972.

The Blue Mountain ARC merged with the Ole Virginia Hams ARC in September 1973. The "37-97" Repeater was a part of that merger. The Repeater trustee was Dick Keil (WB4TEL): the Technical Committee was jointly chaired by Tim (WA4GVX - now KB4NR) and Dick (WB4TEL). At that time, the repeater was located on Bull Run Mountain with call sign WR4ADZ. The GE Progress-Line equipment ran 30 watts output to 6dB gain antenna at approximately 1170 feet Above Mean Sea Level! Repeater access was a short tone burst at 1447 Hz or "whistle-up."

In 1974, the club purchased four new Phelps-Dodge cavities (for the duplexer) and upgraded the "Time Out" and "Emergency Shutdown' timers to solid state. Club members were still having trouble figuring out how to "whistle up" the repeater. Station identification continued to be an overworked item.

In 1976, the repeater was replaced with "a solid state machine" (except for the final amplifier). The repeater timer was set for 90 seconds; "whistle-up" was still in use.

In 1977. Dick Keil notified the FCC (14 March 1977) that the repeater was being moved from Bull Run Mountain to Herb Plummer's (W4PJP) place. Although records are sketchy, the repeater site was apparently repossessed. For several months, the repeater was located at Herb's place up on Route 234 in Catharpin. Harry Vorhauer (W4PVA) replaced Dick Kiel (WB4TEL) as Chairman of the Repeater Committee.

Finally, we relocated to the Prince William Electric Cooperative site on Lomond Drive in Manassas. Russ Stevens, WB4HHN, applied for a new station license on 21 December 1977. The new license formalized a repeater location change and trustee change, all in one submittal. New cavities were added and, of course, new heliax cable for the antenna. The repeater was still a GE Progress-Line with a 30 watt amplifier. The antenna was side-mounted on a 150° "Monotone." The center of our antenna was 141° above ground level.

In 1978, Russ Stevens (WB4HHN) was the Repeater Trustee and Ed Flaming (WD4AVU) was the Repeater Administrator. The repeater was re-coordinated with T-MARC on 22 February 1978.

In 1979 the auto-patch was beeping along. The timerout timer was now set at 132 seconds. Autopatch was available only during the hours of 0630 - 2200/2300 daily and ALL calls were taped remotely. Repeater Controllers were: Russ (WB4HHN), Jeff (K4ZKU), Tim (WA4QQT), Cleo (WB4NNV), Gene (AI4W) and Tim (WA4GVX). Working on this machine was slightly shy of cruel and unusual punishment (my opinion); most of the control circuitry was wire-wrapped construction and the schematics and logic diagrams were all pencil sketches and drawings contained on many sheets of paper (photo-copied to "improve clarity."). We had a good repeater, but it was bear to work on sometimes.

In late 1980, the repeater call-sign changed again as a Trustee change was made. I don't have the exact date, perhaps Tim, KB4NR has it. The FCC Rules had relaxed a bit during this time-frame, and reporting requirements were easier, so no formal change notification was required. Anyhow, Art Whittum, W1CRO, replaced Russ Stevens, WB4HHN, as Trustee. The diode matrix was changed and the "37/97" repeater started beeping "W1CRO." This caused more than a little excitement occasionally, when atmospheric conditions permitted "DX" reception. We fixed that by adding "/4" to the CW ID.

In 1982, we were still required to log all third party traffic through the repeater. Initially, a tape recorder had been located at the repeater site, necessitating daily trips to the site to change tapes. One 90 minute tape usually lasted a day. This was improved upon by adding a tone-activated receiver to a cassette recorder and relocating the whole thing to the Trustee's house. Hams had to log third party traffic in their own home or mobile logs during that time, so we had a double logging scheme in effect.

The biggest event of 1982 was our relocation from the 150 foot Monotube to a brand new 170 foot tower (current position) on 22 June 1982. This was not without some aggravation. The tower contractor installed our antenna on the wrong side of the tower (facing South-South-West instead of Northeast as designed); and, as we found out later, the contractor failed to waterproof the connectors. The antenna was relocated to the Northeast face, and the Heliax cable was replaced, in October 1982 (Thanks, Russ!). The Antenna Height Above Average Terrain (HAAT) is 128.5 feet and the Height Above Mean Sea Level is 391 feet. The center of the antenna is 141 feet above ground.

All of these activities had to be coordinated with our host (Prince William Electric Company - now NOVEC). We couldn't interfere with the many functions for which they have antennas (the prime reason for the new tower was addition of more antennas for Load Management and SCADA, otherwise - we'd probably still be hanging off the old Monotube). One unfortunate result of the NOVEC improvements was our disconnection from emergency power. Along with free power for the repeater, we had been connected to NOVEC emergency generator. Now they had so much stuff, they couldn't power us and them too. We added our own back-up power some time later.

During 1983, we replaced the basic repeater with a new GE Progress Line Repeater and an RC-850 Repeater Controller. Finally, in December 1983, we changed the repeater call sign to WA4FPM.

In 1984, we finally straightened out the paperwork and the Club license (WA4FPM) was transferred from Bob McCann to Art Whittum for use with all the repeaters. T-MARC recoordinated the repeater again on 13 June 1984. ERP was set at 400 watts maximum, HAAT at 128 feet with a service area radius of 32 statute airline miles maximum. The intended service area was contained within a 26 mile radius from Manassas (no real change from the 1978 coordination).

In 1987, we sent a request to T-MARC for a 220 MHz frequency pair (15 November 1987). A Preliminary Frequency Coordination Authorization was received from T-MARC on 13 December 1987.

Final 220 frequency coordination was completed

and approved on 20 January 1988. Our authorization covered 223.060/224.660 MHz with 200 watts ERP maximum, for an antenna located 127 feet HAAT. The service coverage area was placed at 28 statute airline miles maximum. Almost a year later, the 223.060/224.660 repeater was placed on air for test (09 November 1988). We finally placed the 220 repeater on line in full operation on 14 November 1988.

We dropped out of the Carolina-Virginia Repeater Association (CVRA - now SERA) in 1989 when T-MARC and CVRA initiated a formal agreement on coordination matters. Up to that time, we had maintained membership in both organizations to prevent us from being "blind-sided" by another southern or western repeater on 37/97.

The Digi-peater history is noticeably absent. That's not to slight the digital side of the house. When Jack, KI4VP, started the "digi," he was the primary digital repeater controller and kept all the records. Then Mike, WV3H, assumed "digital duties," followed by Jay, NS5N. Perhaps we'll get some information down on paper (or disk) and preserve some "modern history" for this facet of our repeater operations. Can anyone help me on this?

The Club License was last renewed on 10 May 1994 and expires on 12 April 2004. The Trustee/Licensee is Art Whittum (WICRO).

The following comments are my recollection of events; other "old-timers" may have slightly different recollections, but I'll bet I'm close.

The repeater coverage area, after relocation to the NOVEC compound, was calculated to allow access from most of Prince William County while concentrating on a radial generally pointed towards Washington, DC for "commuter coverage" (in 1982, we didn't have many people using the Route 28 corridor toward Dulles Airport; most people who didn't work in Manassas, worked in "The District."). Although the antenna was "tweaked a bit" during installation, to favor a little more coverage to the East (Woodbridge) and West (Nokesville), the main radial toward Washington, DC was maintained.

Things have changed in twelve years. More people ply the Route 28 corridor, more people live in Gainesville and Haymarket, and, judging from comments that I have heard - it's time to reassess our coverage. I believe that our primary goal should be to maintain Prince William County coverage. Beltway travelers have several other repeaters to choose among: the Woodbridge are has 147.24; and, of course, to the west of us is 147.30 with excellent coverage.

I don't think we'd have much luck trying to relocate (re-

coordination required, with concomitant Virginia Beach and York, PA 146.97 concerns - along with adjacent channel users [146.955 & 146.985] and the need for surveys to prove compatibility [intermod data calculations, etc.]) - and wend be losing one heck of a good deal in departing the NOVEC compound. It is not likely that we could change frequencies - last time I checked, they were ALL in use. We already have sufficient approval and clearance/coordination to increase power somewhat, but then we end up with an "alligator" (all mouth and no ears) and previous experience has shown this to be a poor choice.

OK, so what CAN we do? Well, we can adjust ("tweak") our coverage pattern. Our antenna is a four dipole array that, depending on dipole orientation and horizontal distance from the tower leg, varies between 0 dBd and 9 dBd. How we "tweak" the pattern should be the subject of discussion at one or more club meetings. Those discussions should be backed up with facts that we all can see - like an actual coverage pattern. After all, we cannot tweak what we cannot see.

What am I getting at? When we applied for coordination we had to submit coverage data. As long as we stay with the overall envelope, we can tweak without re-coordinating the repeater - and without encountering much additional interference from other repeaters (or interfering with them). So, we need to take a physical survey of coverage on eight radials (every 45 degrees) at 10 miles distance from the repeater; take measurements at each point, fill in with some measurements from selected points in between and then compare to a desired coverage pattern and typical patterns achievable with the existing antenna or a suitable replacement.

The survey is only a first step, but it is a necessary one. If the information indicates that we can't get the desired coverage, then - perhaps - a carefully sited remote receiver would work. We have to balance transmitted Vs received coverage, though (alligator syndrome). So, let is survey and see where we go from there. It'll be asking for volunteers.

Notes From Harry/W4PVA

Harry is set to hold a volunteer examination on Saturday, November 19 1994. Harry plans to have it held at the NVC Campus in Manassas. However, more information will follow later. So, stay tuned!

Harry would also like to get a updated list of volunteer examiners that are currently active with the club and those who are new and willing to donate some time to assist in administering upcoming club exams. If you can help out and have the interest, the club will certainly appreciate your gesture.

Please give Harry a call at home at 368-5050 or contact him on the repeater. Another excellent time to reach Harry is at the completion of the weekly club net on Thursdays. Keep in mind that the net begins at 8:00 PM!

The Want And Sale Corner

Wanted:

Test leads and a copy of a manual for a Tektronix O-Scope Type 54

For Sale:

Ham-M rotor and control box, in very good condition! Rohn 25 Foldover tower section, 10 ft, with boom and hardware

Call Steve/N4OGR @ 361-0008

MANASSAS AIR SHOW CLASSIC '94

Just a quick reminder that Steve/N4OGR is still looking for some volunteers for the "special events station" at the Manassas Airport, which will be held on Sept 17 &18, between 10 am and 5 pm. If you can help operate a packet or HF station, please contact Steve/N4OGR @ 361-0008.

The Wizard Of Wireless..."Did He Know What He Started?"

By Scott/KE4HCT Cape Cod, Massachusetts

On August 30, 1994 I traveled down state route 6 on Cape Cod with the intention of visiting the place where it all started from. This place was the site where the "Wizard Of Wireless" made it all happen. I suppose it's where you and I can say we originated from as amateur radio enthusiasts.

Honestly, I must admit that I was not truly aware that the location of my annual vacation spot was to be the same spot as the location of the Marconi Station Site. spending layover days in the Hudson Valley, at Rhinebeck, NY, I was glancing through the Sunday New York Times and discovered a article on Cape Cod. In that article was a brief paragraph about the Marconi Site. I soon became excited at the thought of visiting the site in person and while on vacation! I thought it was going to be a treat to tie amateur radio into my vacation. I really wanted to learn something about the individual that has driven me to this new profound hobby of mine (spending terrific amounts of money on radio electronic gear) and digging numerous holes in the back yard for my amateur radio tower!

As we drove into the entrance I soon became excited that I had actually arrived at the "birth place" of amateur radio. For some reason I had somehow expected to find Gugliemo Marconi standing in front of his transmitter station surrounded by his four towers, bidding me welcome. Well, that was a long time

ago I suppose. What I found was a National Park Service indicating direction arrows for the Marconi Station Site and Marconi Beach. I wonder how many times Marconi found time to go to his beach for a swim? But I was interested in the good stuff, none of that silly beach stuff would do now! I parked the truck, (the one with all the antennas on it) and followed the walk a short distance to a small exhibit shelter. Here in the shelter was a miniature model of the Marconi Station. Soon my mind began to travel back into time and I began to imagine what it must have looked like. I felt that it was I who was now standing near the transmitting station and power house, surrounded by those four 210 ' towers. I also looked out to sea in the direction of England and wondered how Marconi had managed to be the first to make it work at such a long, long distance. Unfortunately, time marches on and so does the effects of the sea. Marconi located his station on top of the steep bluffs overlooking the Atlantic Ocean, and it was this ocean that had taken it's toll on Marconi's Station as I looked at it this day. A good deal of erosion has taken place on the bluffs, since 1901. I would estimate that approximately a couple hundred feet have become the ocean beach below. This includes two of the concrete bases for the towers and the power house foundation. Now. part of the foundation of the transmitting station is beginning to slide down the bluff to the beach below. One can readily observe the red bricks scattered on the side of the bluff. It really doesn't appear that the Park Service is attempting to save the edge of this site. There is a snow fence that separates the edge of the bluff and the beach below, but this appears to be an attempt to keep us tourists from becoming a rolling "sand ball" to the beach below.

What I did think was quite interesting at the site was the presence of what appeared to be the actual concrete and timber anchor points for the towers. For someone like myself, who can relate to constructing "dead men" anchor points for the guys, this was a real treat. Laying on top of the ground, I observed three "dead men" which were constructed of 12" by 12" crossed timbers set in concrete. I later discovered that these anchors were buried 10' down into the sand and then fixed with a 1" thick steel cable for a guy. Twelve guys were needed for each tower. Hey, guys and gals...that still sounds like a lot of digging to me!

At this point of time, all that remains is the concrete base of one tower and the base of the transmitting station. Yes, you can still stand where presumably Marconi stood on that memorable day...January 19,1903. But, you better hurry because the sea is working hard to take the bluffs back.

One can well here the echoes of the past if you stand long enough and listen carefully. You will hear the telegraph key tap out the following:

"HIS MAJESTY, EDWARD VII"

"LONDON, ENG."

"IN TAKING ADVANTAGE OF THE WONDERFUL TRIUMPH OF SCIENTIFIC RESEARCH AND INGENUITY WHICH HAS BEEN ACHIEVED IN PERFECTING A SYSTEM OF WIRELESS TELEGRAPHY, I EXTEND ON BEHALF OF THE AMERICAN PEOPLE MOST CORDIAL GREETINGS AND GOOD WISHES TO YOU AND ALL THE PEOPLE OF THE BRITISH EMPIRE."

THEODORE ROOSEVELT

"WELLFLEET, MASS., JAN. 19, 1903"

While awaiting a acknowledgement of this test message from the relay station at Glace bay, Nova Scotia, as Marconi had intended to actually "jump the pond" at a later date and directly to the Poldhu station in England. Marconi and company were shocked to hear the confirmation signal come directly from Poldhu. History had been

made! Even Edison had stated that this was impossible, that radio waves traveled in straight lines. Yet, Marconi had proved them wrong! Marconi had suggested that radio waves could be reflected off the atmosphere and travel the curvature of the earth. Marconi now had his proof, and soon to follow would be the communication revolution that is

still continuing today.

If any of you find yourself in Cape Cod in the near future, I would recommend that you visit the Marconi Station Site and take a trip back into time. Our Time.

By the way, entry into the Marconi Station Site is free.

Interesting Dates Of The Marconi Radio Station Site

1901	Marconi selects the site at South Wellfleet and begins construction	
1901	Storm arrives in November and destroys the station	
1902	The Marconi station is rebuilt with antenna supported by four towers	
1903	First transatlantic wireless message sent between the US and England	
1906	Marconi engineers warn that beach erosion is endangering the station	
1912	The station receives the distress call from the sinking luxury Titanic	
1917	After 15 years of service, the US closes the station for wartime considerations	
1920	Equipment is salvaged, towers are dismantled and the buildings abandoned	
1961	The Marconi Station Site is acquired by the National Park Service	7



OLE VIRGINIA HAMS AMATEUR RADIO CLUB September 25 - November 05, 1994

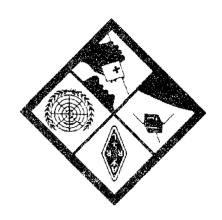


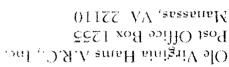
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255/

HIBST CLASS MAIL











O.V.H. PICNIC FORM

WHEN:

Sunday, September 25th

TIME:

3:00 PM

WHERE: W4HJL'S QTH

The club will provide the hamburgers, hot dogs, soft drinks and coffee.

Please bring a side dish (your choice)!

Cut off and bring this form to the Sept. Meeting or mail to the OVH P.O. Box 1255, MANSSAS, VA 22110

(Or call 369-2877 with any questions)

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PLEASE RESPOND:	
How many in your family will attend:	
MEMBER NAME:	
MEMBER CALL:	
MEMBER PHONE:	