

VWOA NEWSLETTER

Email Issue #61

Francis T. Cassidy Editor

2011



President Alan Ehrlich announces that the **VWOA AWARDS LUNCHEON 2011** will be celebrated **Wednesday, May 25, 2011** at:

DON PEPE RESTAURANT
844 Mc Carter Highway
Newark, New Jersey 07102

12 NOON TO 4 PM

Our Guest Speaker will be Trey Taylor, President of Verdant Power Inc., who will make a presentation on:

“Why We Need to Consider Off-shore Alternative Energy Now.”

Reservation forms with further details will be sent to the VWOA Membership in a few weeks.

MARK THE DATE & TIME ON YOUR CALENDAR



President Alan Ehrlich

Your Editor asked VWOA Member Fritz Raab, W1FR if he could provide the VWOA Members with an update of his investigation of amateur 500-kHz activities and provide some recent photos of him and his equipment. He postponed the delivery of photos of him and his equipment, but did provide an interesting update response to our VWOA Members, which is attached in the next 6 pages of this Newsletter.

Update on amateur 500-kHz activities by
Fritz Raab, W1FR
Coordinator, ARRL 500-kHz Experiment
February 25, 2011

I had the pleasure of giving a presentation on amateur activities on 500 kHz in April of 2008. This is an update on recent activities and happenings. A lot has happened in the last couple of weeks.

Background

My involvement in the quest for a new amateur band near 500 kHz began in 2004 following a discussion with ARRL CEO David Sumner K1ZZ. This led to organizing a group of operators and applying for an experimental license in 2005. Experimental license WD2XSH was issued on September 13, 2006.

The initial WD2XSH license allowed a group of 23 experimenters to operate from 505 to 510 kHz with a maximum of 20 W ERP. This was the upper guard band to the maritime distress/calling band from 495 to 505 kHz. Initially, only CW and slow CW (QRSS) were permitted.

A few stations were on the air almost immediately and started making contacts. Many others followed over the next year. Getting on the air was a challenge for everyone, as there was no commercially available equipment for transmitting or tuning the antenna. In the best tradition of amateur radio, our operators have used a wide variety of technologies to put their stations together. The transmitters include modern solid-state designs, modified vacuum-tube equipment, and vintage equipment. The antennas are mostly top-loaded verticals, but loops and some other antennas are used as well.

In 2007 the various amateur delegations to WRC-07 successfully introduced a resolution to consider a new MF amateur band at WRC-10 (which became WRC-11 and then WRC-12). This resolution is what enables our representatives to discuss the new band at WRC-12. Narrow-band digital modes including PSK-31, FSK-31, and MSK-31 were added in 2007.

Amateur Activities

In 2008, the ARRL applied for an expansion of the license, roughly doubling the number of stations and adding coverage in western US, Alaska, and Hawaii. Also included was access to the maritime distress and calling band from 495 to 505 kHz. This modification was approved in July 2009 and many of these stations are now on the air, as shown in Figure 1. One of the stations is long-time VWOA member Mike Shaw K2LRE - WD2XSH/42, who has written of his experiences in a previous issue of the *VWOA Newsletter*.

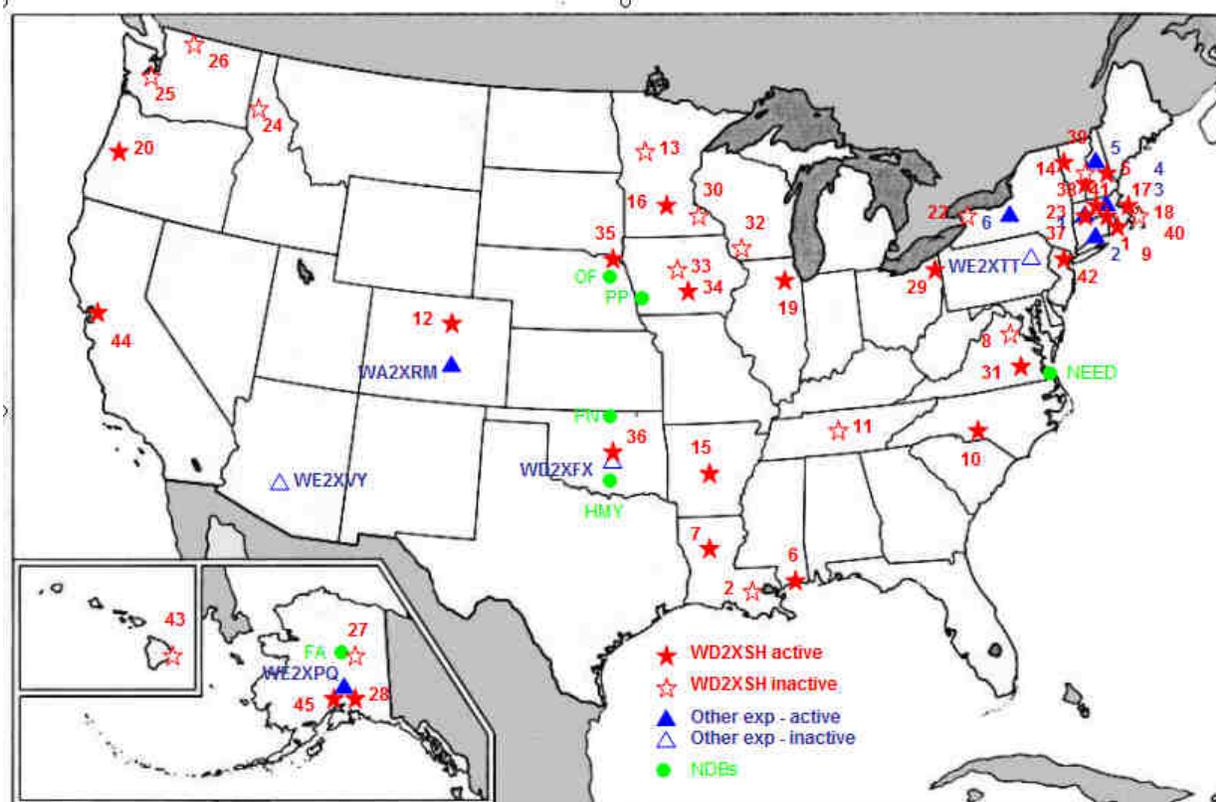


Figure 1. Locations of US 500-kHz amateur/experimental stations.

Following ARRL's lead, amateur experimenters in seventeen other countries have obtained permission to operate. The mechanisms include experimental licenses, amateurs with special permits, and in some cases access by any amateur with a top-grade license. The frequency bands differ and currently range from 493 to 515 kHz,

as shown in Figure 2. Three other US experimental licenses are also operating near 500 kHz.

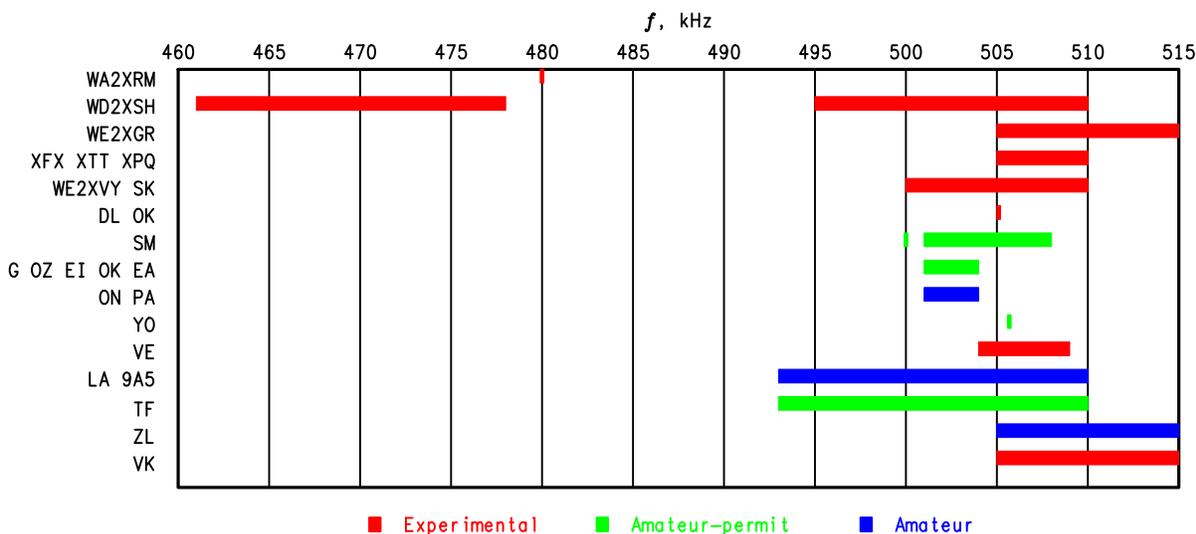


Figure 2. Worldwide amateur/experimental bands.

A new amateur band near 500 kHz will offer amateurs a unique opportunity for reliable regional emergency communications. Ground-wave signals are not subject to interruption by ionospheric disturbances. Tests conducted by WD2XSH operators have demonstrated that distances of 150 to 200 miles can be covered reliably, day or night. We envision that one or more transportable stations can be deployed to provide a communication node using narrow-band digital modulation.

In the past year we have begun to make use of MSK and WSPR modulation. Minimum-shift keying (MSK) is used by many LF and VLF stations because it provides the minimum bit-error rate for a given signal-to-noise ratio, has a compact spectrum, and has constant amplitude. Since it has constant amplitude, it can be produced by a nonlinear but efficient RF-power amplifier. The software for MSK only recently became available. WSPR is a slow-speed FSK transmission developed by Joe Taylor K1JT and is used for propagation analysis.

Our current band plan is shown in Figure 3. Beacon operations for midwest stations are at the low end of the band to avoid interference to a 510-kHz NDB in Nebraska. Other stations use the high end of the band for beaoning. QRSS and

WSPR are at the low ends of the band. QSOs can be made on any frequency available to the stations involved. Initially we avoided using 500 kHz itself to ensure that we did not interfere with the heritage stations. On November 3, 2010 we marked the anniversary of the Berlin treaty with a special event and used 500 kHz as a CW calling frequency, to be followed by QSY to another frequency to complete the QSO. Silent periods were also observed. This event was a success and caused no problems, so we now allow any station to use 500 kHz as a CW calling frequency, subject to these rules. There has not been time to develop a band plan for 461 to 478 kHz.

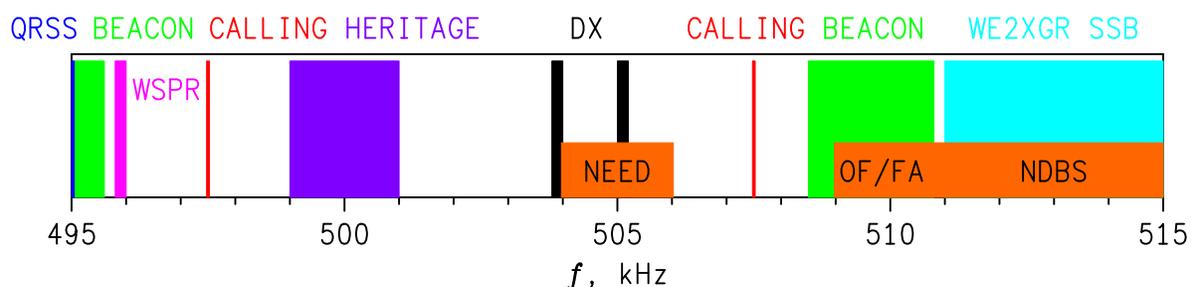


Figure 3. WD2XSH band plan.

In the winter months, several stations can be heard almost every night at most locations in the continental USA. The operating modes include CW, slow CW (QRSS), WSPR, PSK-31, and MSK-31. Stations may either engage in QSOs or transmit as "beacons", hoping for reports from listeners. The web site www.500kc.com provides a wealth of information on the experiment and place to file reception reports and to ask for QSLs. QSOs over distances of 500 to 1000 mi are common. However, QSOs have been made at distances of 3,100 mi and reception has been reported at 6,700 mi.

WD2XSH has currently logged over 80,000 hours of operation with no complaints of harmful interference. We have demonstrated that we can share the spectrum with nondirectional beacons (NDBs) through geographic and frequency restrictions. These are important statistics for use at WRC-12 and later in a petition to the FCC for a new US amateur band. In January, we filed a request to add 461 - 478 kHz to match the current FCC and CITEL proposals for a new amateur band, and this was approved on February 24. Station /10 was on the air on 461.5 kHz on February 25.

The next World Radio Conference (WRC-12) is currently scheduled to occur in February 2012. It is at this conference that changes to the international frequency allocations are made.

As mentioned, the amateur community succeeded at WRC-07 in passing a resolution to consider a new MF amateur band at the next WRC. This resolution (1.23) calls for consideration of a band of about 15 kHz between 415 and 526.5 kHz.

The best place for this band seemed to be the unused maritime distress/calling band from 495 to 510 kHz. The prohibition on using this band for any other purpose (rescinded at WRC-07) kept this band relatively free of activity. We initially envisioned locating the new amateur band here. This would also provide a home for continued operation of heritage stations such as the Maritime Radio Historical Society KPH/KSM.

The International Maritime Organization (IMO) opposed to any new amateur band at MF and vehemently opposed amateur activity in 495 to 505 kHz. The IMO has instead proposed (WRC resolution 1.10) that the band from 495 to 505 kHz be reserved exclusively for a new maritime data system. This "SYNOPTIC" system would operate somewhat like the present NAVTEX system. Two or three frequencies within the band would be used by multiple stations on a rotating (time-shared) basis. The transmissions use OFDM modulation and the data rate would be considerably higher than that of NAVTEX. A prototype station in France has been operating on 500 kHz for several months. Its signal occupies 498 to 502 kHz.

The amateur community proposed three options ("methods" in WRC parlance) for a new MF amateur band:

- A: 493 - 510 kHz (withdrawn),
- B: 472 - 487 kHz (now method A), and
- C: 461 - 469 plus 471 - 478 kHz (now method B).

The amateur community almost universally favored method A, which is where virtually all activity to date has been. However, given the strong opposition of the IMO we thought it best to hedge our bets.

In September, the FCC endorsed method C and presented this to the WRC preparatory meeting in Brazil. CITELE (the inter-American working group) then decided to back method C as well. At the WRC preparatory meeting 11-2 in Geneva on February 18, method A was withdrawn because it was incompatible with the IMO's proposal and not supported by any administration.

We amateurs are naturally hoping that WRC-12 will approve a secondary allocation for amateurs. In region II (North and South America), these bands are essentially unused at present. However, several NDBs operate in this band in eastern Europe. This could lead to a situation not unlike 160 meters prior to 1980 - with different frequencies of operation for each country. If we do get an international allocation, then we have to petition the FCC to get an allocation within the USA. There may be opposition from agencies such as the FRA who would like to implement a high-accuracy DGPS system in this band.

Elimination of the possibility of a shared amateur/heritage leaves 500 kHz with an uncertain future. If the IMO prevails, the band will eventually be filled with new NAVTEX or SYNOPTIC stations, and CW operations (such as those of the MRHS) will be prohibited. However, a number of us suspect that these proposals are intended mainly to keep amateurs out of this band. With most of the western governments in a state of near bankruptcy, deployment of a new system any time soon seems unlikely.

Conclusion

We will be waiting to see what happens at WRC. Meanwhile, we continue experimental operations on 495 to 510 kHz and hope that the new band will be added to our license. As always, we will appreciate your reception reports filed via the 500kc.com website.

WENDELL'S NEWS CORNER

From: [B H Ballard](#)
Sent: Saturday, December 04, 2010 12:47 PM
To: ftcassidy@optonline.net
Subject: RE: VWOA 2010 NEWSLETTER #60

Francis,

Great news letter. Particularly interesting since I have lived in Marin County for 50 years and confirm there is still, though much abbreviated, rhombic antenna farm at Pt. Reyes.

I also, used Hammarlund Super Pros at WUUE, at Alexai Pt. on Attu. the AACCS station we erected at the short landing strip on first landing there in June of '43. Our small group of cw ops worked the Aleutian chain, air-ground, and copied coded wx forecasts from Siberian Russian stations RYP (Petropovlosk) and RFL (Khabarovsk) about 1000 miles to the west. These were sent on tape machines that started at 20 wpm. then gradually increased in speed as the tape unwound and were really smoking at the end! Common practice was three of us would line up so not to miss the final key groups necessary to break the msgs for the guys in the weather hut.

73, Ben W6VJ

From: [Wendell R. Benson](#)

Sent: Saturday, December 04, 2010 2:52 PM
To: [Francis T. Cassidy](#)
Subject: interesting site
Frank,
<http://www.rogerwendell.com/maritime.html> a lot of interesting items here
Wendell

From: "stig jokinen"
Date: December 21, 2010 2:50:10 PM EST
To: "Wendell R. Benson"
<WENBEN@NYC.RR.COM>
Subject: seasons greetings
Hello Wendell!
I thank You and All who works for this fantastic association for yet an year with a lot of interesting stuff relayed via the internet.
I wish You and Your colleagues a Merry Christmas and a fine, Happy and Healthy New Year.

SEE \PICTURES\VWOA\STIG
Stig-Olof+

POSTED ON www.QRZ.COM by new VWOA Member
[W2ZRA](#)
Kevin M. MacDonald

I originally learned Morse code from being a USCG Radioman onboard the USCGC Hamilton from Jan 1971 to May 1974 where most of the duty was on Ocean Station in the North Atlantic. I also got involved in Ham Radio

at that time and continued until 1977. After a 33yr "Break" I again became involved only by chance, after meeting another Ham, W2NSF(Jim) and getting information about the next license exam which was July of 2010. I then passed the next level in October 2010. Even in spite of my 33yr lapse, I had no trouble getting back to my code sending and receiving abilities, a testament to my USCG training.

I received my first Novice license in 1972, that call sign was WN2DIZ and since most of my contacts were made while aboard ship, the call was sent as WN2DIZ/MM with the region designator following the MM. After that license expired, I subsequently got the call sign WN2ZRA which expired in 1977.

Anyway, after getting re-licensed this past summer, I purchased a used Kenwood TS-520S on Ebay. With the expert help of NY2NY(Jay) and W2NSF(Jim), we hung up a 66ft dipole between two oak trees and with Jay's help once again, the old rig was once again back on the air. I would also like to thank my new friend Wendell/WW2G who is an amazing storehouse of knowledge.

*Semper
Paratus
Zut (CW Forever)*

A ghostly visit on the RMS Queen Mary hotel

17 January 2011 | By Amy Klein

Visit URL:

<http://www.bbc.com/travel/feature/20110111-a-ghostly-visit-on-the-rms-queen-mary-hotel>

Wendell reports on new bio for RICHARD H. SINGER K6KSG

First licensed in 1958 as KN6KSG in Bell/Maywood, California. I was Radio Operator in the Navy aboard the USS Midway (CVA-41) Aircraft Carrier 1959 ~ 1961. I understand my name is in the book of the U.S.S. Midway. In the early 1960's the Midway caught on fire at Subic Bay, Philippines and the call was to abandon ship, except for the watch. I was on watch at the time.

In the early 1970's I was breaking in at KOK CW shore station in Los Angeles when I first shipped. I was one of the Radio Officer's on the Hughes Glomar Explorer/WCHG, the ship that picked up the Soviet submarine in the early 1970's. After that I was Radio Officer on tramp tankers, the S/S Mount Explorer/KTSY. Later I then went to work for Exxon aboard their tankers as Radio Electronic Officer for 18 years.

Retired from Exxon in 1994. I hold a F.C.C. First Class Radiotelegraph License with Ship Radar Endorsement, Six Month Sea Service Endorsement and ICET Advanced Electronics and Communications option electronic technician certificate.

I stay in contact with 30 of the RM's that I was on the U.S.S. Midway with. I found on the Internet 30 of the guy's in our division and we had a 41 year reunion in Branson, MO. in 2001. First time we have seen each other in 41 years. San Diego, CA. bought the U.S.S. Midway CVA-41 and has it open to the public as a museum.

Over the years working CW for a living, I still enjoy working CW on the ham bands. I enjoy working on old equipment such as my old Central Electronics 100V, Gonset GSB-100, Viking Valiant, B&W 5100B, B&W L-1000-A, Heathkit DX-60A & DX-40 & AT-1 and Viking Ranger transmitters. My receivers are a Collins 75A4, Hammarlund HQ-100, Hallicrafters SX-28A, and Hallicrafters S-20-R.

I still use my first transceiver, a Kenwood TS-520 I bought in 1973. When the going gets rough I kick in my 30 year old Heathkit SB-230 linear that still has the original 8873 tube.

I have a new TEN TEC ORION transceiver, TEN TEC TITAN-III Linear, and a new TEN TEC high power antenna tuner. After touring the Ten-Tec factory in 2004, I bought a Ten-Tec Omni 6 plus for our RV when we travel. Wonderful

equipment, and it is made in the good old U.S.A.

My XYL decided that I should upgrade my 30 year old transceiver. So I did with the TEN-TEC gear. My XYL is a licensed Extra (KA7JCT). She used to work me on 15 meters CW when I was on the ships. She is a good CW operator. However do to her hearing loss, she can't work CW anymore.

When we lived in Las Vegas, NV. I had a secondary call of (WB7CPL). When the F.C.C. changed the rules of having a secondary call, I dropped the WB7CPL call and kept my original K6KSG call that I have had now for 50 years.

My antenna's are inverted Vee's for 40 and one for 80 meters, and a G5RV wire antenna. My towers are one Hy-gain 70 foot crank up with a 6-element 20 meter KLM mono-bander. A 55 foot crank up with a KLM 6-element 15 meter mono bander. Also on a 35 foot telephone pole with a 6-element 10 meter KLM mono bander. A 30 foot tower with two 2-meter home brew 5 element antenna's in phase.

Too bad the commercial CW stations are SK now, such as KPH, KLB, KFS, KOK, KLC, WPA, WPD, WOE, WLO, WNU, WMH, WCC, and WSL. I know I have forgotten a few but these were the real CW stations in the U.S., wonderful CW operators. I belong to the Society of Wireless Pioneers (SOWP) #662, QCWA #28734, OOTC #3692, Fists #8589, Veteran Wireless

Operators Association (VWOA), SKCC #4057 and no longer an ARRL member since they are pushing to drop the code requirements, which will be the demise of CW one day. CW is and has been the back bone of Amateur Radio.

From: Ron Farris
Sent: Saturday, February 19, 2011 12:00 PM
To: radio-officers@googlegroups.com
Subject: [Radio Officers, &c] Original Marconi Site on Cape Cod

Some may find this interesting. Marconi Company built WCC 20 miles to the south of the location shown in the video.
<http://www.youtube.com/watch?v=do47EfKtDSM>

73's
Ron Farris (RF) ex-WCC

From: "stig jokinen"
Date: February 5, 2011 9:39:09 AM EST
To: "Wendell R. Benson"
<wenben@nyc.rr.com>
Subject: hello
Hello OM!
Hope UR well!
Thanx for the bill! ;o)
Will send U a snailmail soon.
While surfing the net I came a+ a site made by a former operator at Helsinkiradio/OFJ/OHG.
On this site I found some documents that can be of some historical interest.

The map is showing how the antenna should be adjusted for best signal on voice calls according to ships global position.
The other docs are showing recorded working frequencies of coastal radio stations working in the 8,12 and 16 MHz bands. I believe these were typed in the 70s.

73 de
Stig-Olof+

EDITORS NOTE:

Any VWOA Member interested in having these documents of the 1970s, please send your request to:

ftcassidy@optonline.net

We sadly report that we have received notice recently of the following SK VWOA Members:

Former Director & Veteran VWOA Member
Norman B. Mills
SK 01/17/2011

Veteran VWOA Member
Paul C. Demergy W1EYP
SK 01/27/2011

Page 13 of this VWOA Newsletter provides the details of Norman B. Mills published in 1984

Dear Wendell,
I am Paul Demergy (w1eyp) daughter and I wanted to let you know he passed away January 27, 2011

My father lived a very full life right up to the end and passed away peacefully and at home. I thank God he did not end up in a Nursing Home.

He was loved by all who knew him and was so interesting to listen to his stories.

Everyone could not believe how sharp his mind was for a man of 99 years old. In August of this year he would have been 100 years old. He will be greatly missed by his family and many friends

Sincerely

Bette Cole

Paul C. Demergy, 99

U.S. Navy veteran, radio operator/instructor

LYNN - Paul C. Demergy, age 99, of Lynn, died Thursday, Jan. 27, 2011 at his home, after a brief illness. He was the husband of the late Mary (Maniatis) Demergy and the son of the late Charles and Vasilike (Koutarises) Demergy.

Born in Lanconia, N.H., he was educated in Lynn schools. He has lived in Lynn for most of his life. A United States Navy veteran he was with the U.S. Asiatic Fleet from 1929-1930, the U.S. Naval Reserve from 1934-1937 and the U.S. Merchant Marines from 1938-1944 where he was a Radio Officer during World War II. He was an instructor for the U.S. Naval School and the Mass Radio School in Boston.

He worked for the Eastern Steamship Company-American South African Lines, the Maritime Academy in Castin, Maine, the New York Maritime College, the State University of New York, the Empire State Training Ship and the U.S. Maritime Radio School on Gallups Island in Boston as an instructor. He also worked for the Federal Communication Commission. Mr. Demergy was a member of the Society of Veterans Wireless Operations and a member of the Amateur Radio Association with call letters W1EYP.

He was a member of St. George Greek Orthodox Church in Lynn and enjoyed walking and reading books, especially books on history and health. Most of all, he enjoyed spending time with his family and also talking with his many friends, especially those from Oceans Shores Apartments where he lived for 30 years. He will be greatly missed by all.

We at the VWOA Newsletter would like to hear from you and try to pass along to the rest of the VWOA stories of events that you have experienced and that you feel the rest of the membership would enjoy hearing about. Send us a picture or two and we will try to include it in one of our Email Newsletters.

We would prefer to hear from you by Email at:

ftcassidy@optonline.net

MARCONI MEMORIAL GOLD MEDAL OF SERVICE

NORMAN B. MILLS

The award of a Marconi Memorial Gold Medal of Service to Norman B. Mills honors him for outstanding advancement in the radio communication field with his contributions to the United States Merchant Marine.

While attending RCA Institute in 1941 he accepted a position with RCA. He served with the Signal Corps during World War II. Upon returning Norman joined the RCA Frequency Bureau and became active in Frequency Allocation Matters. In 1951 he was recalled to serve during the Korean Affair with the Air Force in World Wide Communications and frequency assignment activity. When he returned to the Frequency Bureau his responsibilities were to include the maritime activities of the Bureau which included licensing of Coast Stations and, at that time, well over 900 ships. This activity also included the alerting of vessel owners and Radio Officers to the various changes in the International and National regulations covering use of Communications equipment. It was during this time that he became active in a number of CCIR Study Groups and was selected as one of the United States representatives to the 1969 conference in Geneva. In addition he was active in the RTCM when it was a government advisory group and later became a member of the Board of Directors when RTCM became a non-profit group representing the Maritime Services. He plans to continue as a member of the RTCM now that he has retired. In addition he served as the RCA representative to the US SOLAS sub-committee on communications, as well as a member of the National Industrial Advisory Committee for emergency marine communications.

After 43 years with RCA Mr. Mills retired this year. He is married and lives with his wife Catherine in Wantagh, NY. The Mills have three sons.

