

WRC Update -NOVEMBER-

OCTOBER 31, 2003

Radio Amateurs Serving
the Western Communities

remember to **ZOOM IN**
on the photos... 200% recommended



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November 3rd Meeting Preview:

TERRY REDDING W6LMJ, Educator and Entrepreneur "RADIO CLUBS... THE ROAD TO RADIO HEAVEN"

WRC's October Newsletter introduced you to Terry W6LMJ of Lake Worth. He stepped up to the plate during Hurricane Isabel as a Net Controller of the 20 meter Hurricane Net and did a first class job under the pressure of emergency conditions.

We are pleased to welcome Terry as our November guest speaker... but on an entirely different theme. Visitors to his website cannot help but be impressed by Terry's background and how he can apply many concepts from the social sciences, education and business to ham radio. This Monday, Terry will help us look at radio clubs from a different perspective.

Imagine... Being encouraged by neighbors to put up a tower, being treated as heroes by our communities, having new people flock to be hams and gaining frequency spectrum. Doesn't this sound like a "Radio Heaven?" But how do we get there and how do we start our journey? Can the journey begin at the club level? How can you as members, the club as a whole and our communities benefit the most from our great hobby?

Terry, a Ph.D. in Education, has studied radio club growth and development and his papers have been published in the ARRL's Educational Proceedings. He is particularly knowledgeable on "marketing" amateur radio to the public and the club to new members.

Set aside Monday evening to meet Terry and his wonderful family. Learn from this renown ham and educator what we can do to find the path to "Radio Heaven!"



The Redding Radio Club: Terry W6LMJ, XYL Barbara W5HKY and daughters Mary Elizabeth KC5UFZ & Sarah Lynn KC5YYT.



SOUTH/CENTRAL FLORIDA IRLP NODE OWNERS CONFER IN WELLINGTON

On October 19th, Florida's first gathering of key IRLP people occurred at the Wellington EOC. This event was hosted by the WRC and partnered with the Village of Wellington. About 20 node owners, operators and their staffs attended representing a dozen nodes or nodes-to-be from throughout South & Central Florida. Representatives of the *National Hurricane Center* attended as well.

The conference was amazingly productive... focusing on mutual needs, problems and resources. The second quarterly meeting was set for February in Miami and/or Orlando. (Continued pg. 6)

Wishing You a Happy Diwali and a Prosperous New Year

FROM SARA VU3RSB

These holiday greetings are very special to us because they come from a distant WRC member and remind us about the basic nature of our hobby.

Many readers may remember Sara VU3RSB as our correspondent from India. In 2001, he kept us up-to-date after the devastating Gujarat earthquake when 20,000 died and 600,000 were homeless. Sara did an outstanding job of reporting the victims' suffering and needs as well as the sacrifices and heroism of his ham colleagues. His dedication and knowledge so impressed the Board of Directors that he was elected an *Honorary Member* of the Wellington Radio Club.

HAM RADIO AND DIWALI

There's a parallel between amateur radio and the Diwali holiday. Diwali is India's Festival of Lights and marks the beginning of the Hindu new year. It is one of the most important nonreligious Indian national celebrations and celebrates the symbolic victory of good



The NIAR is on the right track letting officials know of their achievements. Sara VU3RSB, right, operates the handheld while Secretary K.K. Jaswal of India's Dept. of Information Technology talks to Australia, Kuwait and Canada over ECHOLINK. The EchoLink, a New Revolution in Amateur Radio demo for officials and hams took place on 9/18/03.



Email greeting card from Sara VU3RSB to the Wellington Radio Club.

over evil... the victory of the *light of goodness and knowledge* over the *darkness of evil and ignorance*. For those reasons, Diwali is one of the most joyous of India's many festivals.

It's not farfetched to say that a great many people are drawn to amateur radio because it is a hobby of *goodness and knowledge*. They may not be conscious of it... but think about it. Those virtues are seen every time we are needed by the community or a fellow ham. Indeed, *The Amateur's Code* is based upon those principles. So it is fitting, even in the USA, to celebrate our contributions to the general and amateur radio communities made in the past year and to commit ourselves to do more in the next year.

THE SPECIAL CHALLENGES

By committing ourselves, we face a dual challenge... not only to perpetuate amateur radio but also to see it grow. To achieve those goals, we need to keep focused on *goodness and knowledge* and make sure that our neighbors, community leaders and government officials know what we are doing. We must not only develop our technical and operating skills but also apply them to the benefit of the community.

In that light, you can understand why the WRC Constitution requires us to strive to: *"maintain an honorable, wholesome and harmonious image of the Radio Amateur in our Community by conducting the Club, its programs and activities in the spirit of The ARRL Amateur's Code."*

MORE ABOUT OUR CORRESPONDENT: SARA VU3RSB - REPRINTED FROM MARCH 2001



About OUR TOWERING TIMES' Correspondent in India: "Sara", Rayaprolu Sarath Babu VU3RSB

Researching earthquake related happenings in India was like trying to find the proverbial needle in the haystack. After days of surfing the Net and being very frustrated, I sent Sara an email requesting help. One of his websites had great coverage of the 1999 Super Cyclone disaster... but not much about January's Gujarat earthquake.

Bing-Bam, within 24 hours he made available to us a wealth of information upon which a good part of our coverage is based.

Sara is an extraordinary, 26 year-old ham dynamo. He is active in many HF and VHF nets, a skilled emergency communications volunteer, a motivator of hams and a promoter of our great hobby. Sara is shown receiving his second *RAJIV GANDHI AWARD* from Sonia Gandhi VU2SON. He represents the best of the internationally recognized **Amateurs Code**: *"Station and skill always ready for service to country and community."*

IN THIS HI-TECH AGE, DREAMS CAN COME TRUE! THE RADIO AMATEURS OF INDIA ON THE VERGE OF A GOLDEN AGE

Amateur Radio operators worldwide know they can contribute to the good of their countries but have been frustrated in their efforts. The hams of India are no different!

Sara VU3RSB sent us a interesting newsletter from the NIAR, *National Institute of Amateur Radio...* the "ARRL" of India. Many years of efforts by NIAR, other radio amateur groups and individual hams appear to have brought amateur radio in India to the verge of a Golden Age.

After suffering many natural disasters and acts of terrorism, striving to improve the lives of its one billion citizens and being in the midst of a national effort to be a world leader in information technology, India now seems to appreciate that there is a core group of selfless and technologically savvy emergency communicators ready, willing and able to help achieve national goals.

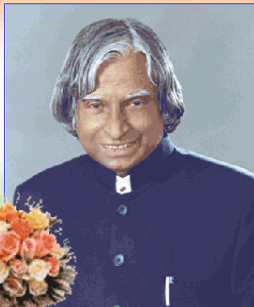
NIAR Chairman, Dr. Shrikant Jichkar VU2SJA beautifully describes Indian radio amateur achievements in his report below. India is about to launch its own ham satellite and Echolink is being deployed. Dr. Jichkar emphasizes that the convergence of technologies... Internet, satellites and amateur radio has brought great benefits to India. This has not gone unnoticed by Indian officials.

**Presentation to
His Excellency
The President of India**

Sharing The Vision of
Developed India

People's Movement in
Communication &
Information Technology

Igniting Minds of youth

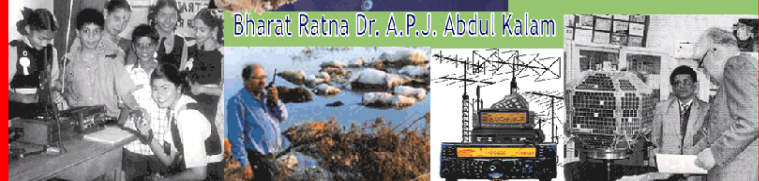


Bharat Ratna Dr. A.P.J. Abdul Kalam

An approach to
Technology Vision - 2020
Based on TIFAC Guidelines

Socio - Economic benefits
through Amateur Radio
Communications.

Amateur Radio Leading
path to information and
knowledge society



The President of India, Bharat Ratna Dr. A.P.J. Abdul Kalam will hopefully assist the Indian amateur radio community achieve the important goals depicted above.

The NIAR is recommending to the Government many changes in regulations that U.S. hams have long enjoyed. Those changes will stimulate the growth of amateur radio and bring India even greater benefits.

In the spirit of Diwali, we wish Indian radio amateurs continued success in their quest for "goodness and knowledge". We thank Sara VU3RSB for bringing the NIAR newsletter to our attention.



Dr. Shrikant Jichkar, VU2SJA
Ex-MP & Chairman, NIAR

From the Desk of Chairman....

Dear Friends,

Season Greetings...



Amateur Radio has made enormous contribution to the development of Communication and Information Technology and particularly to Wireless Communication over the years. The convergence of technologies like Internet, Satellite and Amateur Radio has brought several innovations that make communication more accessible, affordable and reliable in the future. The NIAR since its inception has been working to benefit the community by passing on these developments and bring about People Participation in Communication and Information Technology and Disaster Management in the country.

The very acceptance of the Indian Space Research Organization to support the Amateur Radio community with an exclusive satellite speaks volumes of support by Government of India and ISRO to Ham world. We need to specially thank Dr. U.R. Rao, Dr. K. Kasturirangan, Mr. G. Madhavan Nair, Dr. P.S. Goel, Mr. J.P. Gupta, Mr. Nagesh Upadhyaya, AMSAT-India and Bangalore Hams for their continuous support to the "HAMSAT" project.

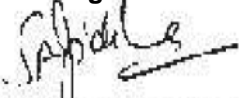
It was a dream comes true for all Indian Hams and NIAR when ISRO earlier announced the launch of "HAMSAT"- The First Indian Amateur Radio Satellite at a pre-launch workshop in Bangalore. Tremendous efforts were put by NIAR's founder, Mr.S.Suri over the past two decades and pursuing the launch of and Indian Amateur Radio Satellite with several agencies of Government, Private including Political, Scientific, Bureaucracy and policy makers in India and abroad is a stupendous task.

My own initiative to support an Indian Amateur Radio satellite through Indian National Foundation for Amateur Radio and Satellite (INFARS) at Nagpur is to demystify any apprehensions on the knowledge of Space and Satellite sciences to the students/citizens and utilize its resources for development of Science and Technology and Disaster Management in the country.

It was a defining moment for NIAR and Hams that The President of India, Bharat Ratna Dr. A.P.J. Abdul Kalam appreciated the work done by Amateurs for furthering Communication and Information Technology in the country. He spent considerable amount of time with the delegation and learnt about various technologies used by Radio Amateurs. He was also apprised of NIAR's role in sending several IAS officers, Scientists, Technocrats, ISRO officers to AMSAT programs abroad.

We wish, with the concerted effort of all the agencies, the country will progress to become a leader in Communication and Information Technology. We request for your continuous support in the future.

With Regards.



Dr. Shrikant Jichkar, VU2SJA
Ex-MP & Chairman, NIAR

THE SMALL WORLD OF HAM RADIO AND... KILO FOUR VILLAGE OF WELLINGTON

K4VOW... that's the Club station license callsign heard most often on the WRC's repeaters and during events and activities associated with Wellington's Emergency Operations Center.

About six months ago, Larry KS4NB called CQ on the Indianapolis IRLP reflector and Ben K4QF responded. When Ben learned that Larry was in Wellington, he told Larry that he was the original holder of K4VOW and wondered if he knew of the

Club station.

Ben nearly fell off his chair when Larry told him he was the Trustee! Ben sadly said he was forced by the old FCC rules to relinquish the call letters when he had moved and was happy that his cherished callsign was put to good use.

Ben has taken the time to record his illustrious ham career as K4VOW... a career where his hobby was successfully interwoven with his profession, electrical engineering. Here's the rest of his very interesting story!



THE AUTOBIOGRAPHY OF K4VOW By Ben K4QF

K4VOW had a somewhat non-dramatic beginning in 1958, actually with the issuance of KN4VOW in the spring of 1958 as shown in Figure 1. At that time, the Novice license was issued for one year only to someone who had never been a licensed ham. Since KN4VOW was a young teenager with not much guidance in the Amateur world, no efforts were made to set up a station or get on the air until the license arrived. The next three months was devoted to assembling a transmitter and power supply at the station QTH in Tennessee.

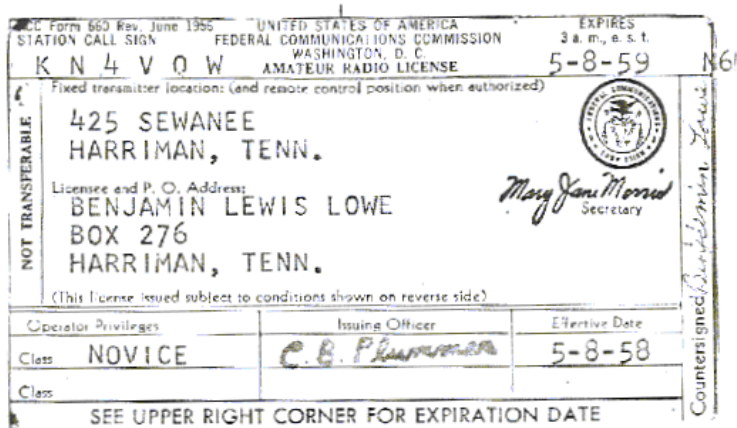


FIG 1 – The original KN4VOW novice license signed by the “Godfather” of a huge generation of hams: C.B. Plummer.

At the time, an inexpensive way to get on the air was to use World War II surplus military equipment. While this gear could easily be converted for Ham radio use, the Novice license did present somewhat of a problem in that an additional step was required to convert the transmitters to crystal control of the frequency; another requirement for the Novice license. While KN4VOW utilized a Heathkit AR-3 receiver, the picture in Figure 2 shows an ARC-5 40 meter transmitter along with an ARC-5 receiver actually used by K4VOW after receiving a General Class license. The first station utilized by KN4VOW consisted of the Heathkit AR-3 receiver and a 40 meter ARC-5 transmitter converted to crystal control as was the requirements for a Novice Class station at that time. This station yielded a number of contacts using the 3 crystal frequencies avail-



FIGURE 2 – 40 Meters Station Used By K4VOW In 1960 able to KN4VOW. Power supply limitations produced only 25 watts input to the transmitter with approximately 15 watts output.

The winter months early in 1959 brought new opportunity to K4VOW. With a Christmas gift of an International Crystal receiving converter for 6 meters to go with the newly acquired Technician license, February of 1959 found K4VOW on phone operation on 50 MHz. As this was at the end of the 11-year sunspot cycle peak, K4VOW heard, but did not work, a station in Quito, Ecuador. This event sparked an interest and love of VHF operation that lead to many interesting Ham radio activities later during the use of the call.

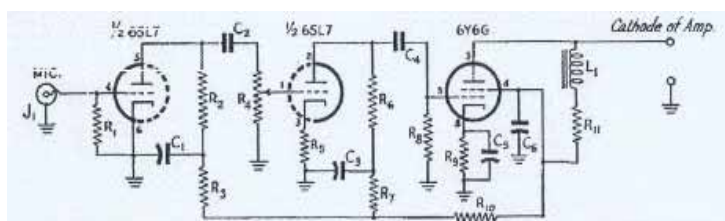


FIG 3 – Cathode Modulator For K4VOW ARC-5 Transmitter

After a several more years of 6 meter operation, the acquisition of a General class license, and assembling a 40 meter phone station, operation by K4VOW was somewhat curtailed by the years of attending college. As a side note, the 40 meter phone station, on AM as most phone operation was during that era, the

transmitter consisted of another ARC-5 surplus transmitter with the cathode modulator shown in Figure 3. While the cathode modulator provided adequate modulation, it did have the disadvantage of dropping the output power to half that available on CW.

Leaving college with a degree in Electrical Engineering, K4VOW accepted employment at Collins Radio Company in Texas. This opportunity afforded K4VOW to receive extensive training in RF design and measurements, as well as be provided state of the art test equipment for Ham radio projects. A QSL card, issued to all Amateur radio employees, is shown in Figure 4. This event also afforded K4VOW to complete

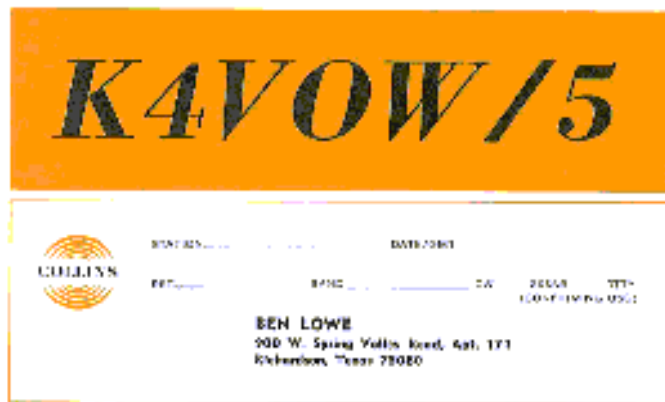


FIG 4 – K4VOW QSL Card Issued By Collins Radio Co. graduate school.

By this time, K4VOW had become heavily involved in weak signal operation on 2 meters and 432 MHz. As an experiment, K4VOW also designed, built, and assembled a station for 2304 MHz. This low power station provided contacts across Dallas at ranges up to 8 miles.

After a few more years in Dallas, K4VOW moved to Huntsville, AL and a new job with Stanford Research Institute. At this point, two other significant events changed the course of K4VOW's ham radio activity. Due to work and personal circumstances, K4VOW began a series of trips to international locations. This afforded the opportunity for entry into the world of international operation. At first, these DX operations were conducted on 2 meter FM. At the time before frequency synthesizers, a new set of crystals for the 1-watt, Drake TR-22 transceiver was necessary for many different countries. In picking the best repeater pair for each trip, a survey before each trip was necessary for available frequencies and coverage areas. This survey also took into account that many countries did not share the same 4 MHz of spectrum as in the U.S. nor did they use the same input/output frequency split. None the less, many "spare" crystals remained after synthesizers arrived.

Later, some HF operations took place, at first using a Radio Shack HR-2600 and later a Kenwood TS-120. K4VOW DX-peditions took place as K4VOW/VK, K4VOW/DL, K4VOW/DL, K4VOW/HB, K4VOW/HB0, G5EPZ, ZL1AQC, and numerous trips as ZF2BL.

Also after moving to Alabama out of normal troposcatter range to any station on 432 MHz and having the opportunity to visit with several prominent moonbounce operators, K4VOW designed and built an EME station in the 1976 time frame. At that time, there were approximately 50 stations active worldwide on 70 cm. EME, so the number of contacts was rather sparse. However, each contact was a great thrill and very exciting. The first several stations to achieve Worked All States on 432 MHz all had to go through K4VOW, and this resulted in operation and phone calls at any time during the day or night. It was a pleasure to accommodate them all! K4VOW's coffee mug, used to assist in QSO's at all hours of the night is shown in Fig. 5.



Figure 5 - Ben's favorite coffee mug is a reminder of Wellington.

Sometime in the late 1970's, 1978 if the memory is correct, the FCC offered the opportunity for Extra Class Amateur Radio operators to obtain a 1x2 call sign. In the 4th district, it became apparent that the large retirement community of hams in Florida would absorb all of these preferred call signs. In other words, it was then or never if a 1x2 call sign was to be obtained. For about 5 years, the FCC allowed a licensee to hold two preferred call signs, so K4VOW and K4QF were both used at the same time. K4VOW was used while visiting parents in VA, and K4QF was used in Alabama. When it was necessary to have only one call sign, K4VOW was relinquished and remained dormant for a number of years.

One day about a year ago, an online check showed that K4VOW had been obtained by the Village of Wellington. With that, it's very gratifying that K4VOW will remain in operation for many years as a club call. During its prior use, K4VOW strived to conduct activities always within the rules of the FCC and ethical operation for good on-the-air conduct. As a club station, it's satisfying to know that this type of operation by K4VOW can continue for decades to come.

73's to K4VOW from ex-K4VOW (Ben K4QF)

(Editor: Ben is an experienced writer having published a number of QST and Ham Radio Horizon articles.

The next time you operate K4VOW, contact or hear it, you will know the callsign's heritage and be proud of it! It's ironic that his callsign was inherited by a group equally committed to operating in the spirit of the Amateurs Code).

Ben, thanks for another well written article!

SOUTH/CENTRAL FLORIDA IRLP NODE OWNERS CONFER IN WELLINGTON...

A SUMMARY BASED ON THE CONFERENCE REPORT BY ROB WE4B

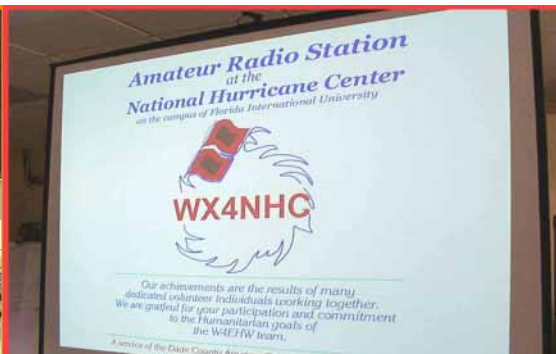
The meeting got underway at 1 PM and was bought to order by Larry KS4NB and an agenda was established. We all introduced ourselves and our IRLP Nodes. Most all the State of Florida was in attendance. From Orlando south to Miami, East from West Palm Beach to Melbourne, West from Naples to Tampa.

Then John KU4GY and Julio WD4JR from the National Hurricane Center Amateur Radio Station (WX4NHC) gave a talk on using Voice over IP to augment the communications from effected areas during hurricanes. We learned how the information was received by the Hurricane Center and how it was used by the Hurricane Specialists to give faster weather updates, live from the effected areas. They also wanted to thank everyone for the use of the IRLP system and solicited ideas on how we can improve it. Discussion followed about solutions which spanned operational and technical issues.

Lu KA4EPS then gave a talk on calibration of IRLP node audio. It was especially informative to the new node owners. Lu then started the Power Point presentation on how to set up the node audio without the use of a communications service monitor.

Lu's next talk was on the use of custom scripts on the Linux IRLP computer. This was where a lot of us were able to ask questions, discuss new scripts and the use of the Linux Red Hat upgrade to version 9.0. We then had a demo of PuTTY and remote operation if IRLP Node repeaters. After that we talked about a common set of codes for scripts like, *play the time, is the IRLP connected*, and other user operating commands.

We then planned to have an online meeting in the near future and another get together during the Miami and/or Orlando hamfests in February 2004. This is needed for more Northern Florida IRLP nodes to attend.

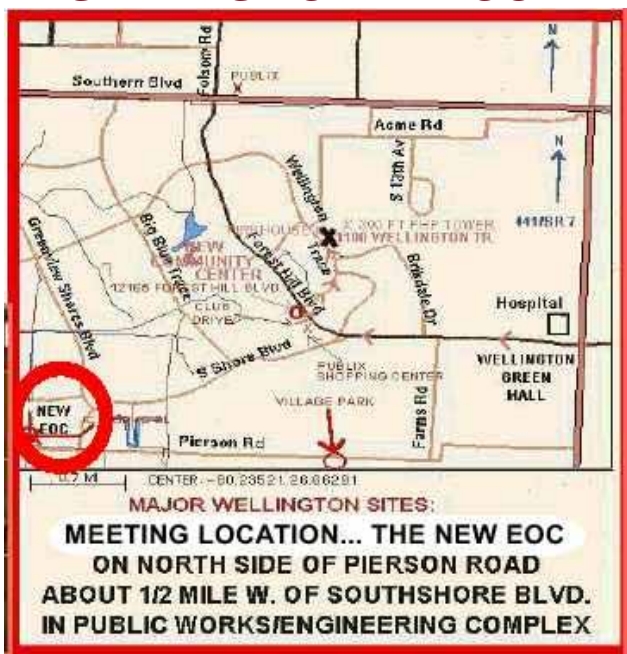


Left: WRC Secretary John KG4JMO, Lu KA4EPS and Dick WB2NBU at the grill preparing for the social hour. Thanks to John for arranging the BBQ and to WRC VP Juan KG4QYY and Jerry N3HVC for their assistance. Center: Guest speakers Julio WD4JR and John KU4GY at WX4NHC with Max Mayfield, NHC's Director. Julio and John gave great presentations which we hope will result in major improvements in hurricane communications.

WELLINGTON RADIO CLUB
Nets Open to All!

Monday....7:30PM - Wellington Emergency Net 147.285
Thursday..7:30PM - Memory Lane Net 147.285
Saturday...7:00PM - IRLP SKYWARN Net 442.050/103.5
Sunday.....7:30PM - Slow Scan TV Net 147.285

GETTING TO THE EOC



THE WRC UPDATE

is the official publication of the
Wellington Radio Club
1213 White Pine Drive,
Wellington, FL 33414

(561) 793-0788 Email: LARRY33414@AOL.COM

President & Editor - Larry Lazar, KS4NB
Vice President - Juan Abellon, MD, KG4QYY
Secretary - John Moorman, KG4JMO
Treasurer - Georg Samulkewitsch, KR4WD
Program/Activities Chairperson - Bruce Fondiller, K2MDF

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