

The OVH ARC Newsletter
"OLE VIRGINIA HAMS" AMATEUR RADIO CLUB, INC.
Post Office Box 1255, Manassas, Va. 20108
FM Repeaters - W4OVH - 146.970- & 224.660- & 442.200+
D-STAR Repeater - W4OVH - 442.5125+
OVH Packet - Port 1: 145.730 Mhz, Port 3: 223.540 MHz - Sysop: Bill/N4SV
<http://www.w4ovh.net>

OLE VIRGINIA TIMES

March 2011

Next Meeting: Monday, March 21, 2011

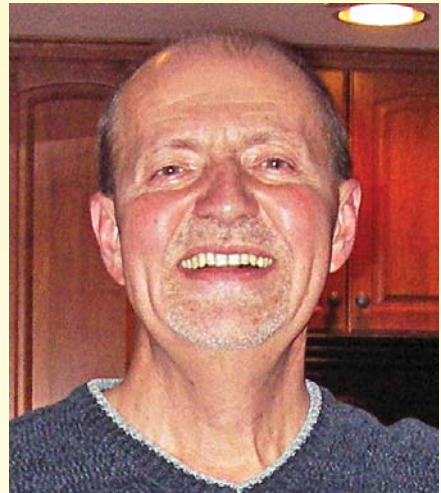
PRESIDENT'S LETTER:

Greetings to all! Sorry I missed the last meeting; work required out of town travel.

The OVH office elections were held at the last meeting. I would like to thank all of you for the confidence in your elected officers who were all re-elected. I'm sure I'm speaking for your officers when I say "we'll do the very best we can for OVH". The OVH club has a long history of community service and dedication to Ham Radio, let's keep the momentum going.

At the upcoming OVH meeting on March 21st, we will have a speaker and a program on the JT65 signal signalling system for use on HF skywave as well as EME. The speaker / presenter will be Bill / KJ4VTH. If you're not familiar with JT65 already, take a look at <http://www.physics.princeton.edu/pulsar/K1JT/> - and check out the links there to the "free" WSJT and SimJT software. Also, Google JT65.

The 2011 Hamfest season began in January. As reported at the January meeting the PWC fairgrounds have been secured for the 2011 OVH Manassas Hamfest which will be held on Sunday, June 12, 2011. With the help of Roberta Recor the flyer was updated and printed. Some background on how we get vendors and Hams to come to our Hamfest. Each year a group of us travel to every local Hamfest handing out flyers and "schmoozing" the vendors to insure we have a successful event. This year is no different, so far we have been to Vienna Wireless hamfest and the Richmond hamfest; we also sent flyers to the Virginia Beach hamfest and the Shelby North Carolina hamfest. Next we'll be at the Timonium hamfest and finally Dayton. I must say it is inspiring to walk these events and have folks come up to you and ask for a flyer. Even more so, to see our commercial dealers recognize us and say "please reserve the same spot as last year for us;" I've heard this many times during the flyer distribution. I hope every OVH member will be able to help with setup, operations and tear-down this June and, of course, to enjoy the Hamfest itself. As a volunteer organization the OVH counts on your support and help, please give it your thoughtful consideration, we really need your help.



Cont'd on Page 3

Ole Virginia Hams Amateur Radio Club, Inc.

Post Office Box 1255
Manassas, Virginia 20108

OFFICERS

President:	George Tarnovsky	K4GVT	791-5956
Vice Pres:	Wayne Kline	AG4ZZ	791-2100
Secretary:	Theresa Heartney	KG4TVM	257-3556
Treasurer:	Gary Gilham	WG4ARC	932-1118

DIRECTORS

Don (Butch) Blasdell	W4HJL	369-2877
Arthur Whittum	W1CRO	791-4330
Charlie Dale	WA4YGI	361-3091
Bob Zaepfel	K4HJF	282-2451

WEEKLY NETS

Thursdays - 8:00 PM	JOHN H	257-3566
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HAMFEST 2011

Bruce	AB8CI	361-8873
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FIELD DAY 2010

John	KG4NXT /	257-3556
Theresa	KG4TVM	257-3556
Wayne	N7QLK	393-8447

CLUB ROSTER / DATABASE

Arthur	W1CRO	791-4330
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EDUCATION

Mark	WA4KFZ	818-8033
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CLUB EMERGENCY COORDINATOR

David Meola	KI4AZX	393-6681
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ARES AREA EMERGENCY COORDINATOR

David Lane	KG4GIY	361-3042
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F.A.R. REPS.

Ruth	KU4WH	331-1234
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FINANCE

Arthur	W1CRO	791-4330
Ruth	KU4WH	331-1234
Gary	WG4ARC	932-1118

GENERATORS

Steve	N4OGR	361-0008
Keith	KM4AA	909-1512
Al	KB4BHB	368-4794

HISTORIAN

Theresa	KG4TVM	257-3566
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WEBMASTER — W4OVH.NET

Bill	N4SV	590-9562
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EMAIL REFLECTOR — w4ovh@googlegroups.com

David Lane	KG4GIY	361-3042
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JOTA

John H.	KG4NXT	257-3566
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LEGAL

Pete	KB4RME	369-2436
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MEMBERSHIP CHAIRMAN

Bruce	AB8CI	361-8873
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NEWSLETTER

Paul	W4ZB	754-0910
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NEWSLINE

John H.	KG4NXT	257-3566
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PACKET

Alan	KD4KBX	330-8844
Bill	N4SV	590-9562

PROGRAMS

TBA

WINTER FIELD DAY 2011

Joe	KI4OHR	369-2639
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PUBLICITY

Trisha Wells	KI4PCM	335-1096
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QUARTERMASTER

Steve	N4OGR	361-0008
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REPEATER CONTROLLERS

Keith	KM4AA	909-1512
Art	W1CRO	791-4330
Butch	W4HJL	369-2877
Steve	N4OGR	361-0008
David	KG4GIY	361-3042
George	K4GVT	791-5956
Alan	KD4KBX	330-8844
Russ	WB4HHN	368-6435

W4OVH / W4PVA — TRUSTEE

Keith	KM4AA	909-1512
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SCHOLARSHIP

Jim	W4JTP	392-0150
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SUNSHINE

Theresa	KG4TVM	257-3556
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TECHNICAL COMMITTEE

George	K4GVT	791-5956
Arthur	W1CRO	791-4330
Alan	KD4KBX	330-8844
Bill	N4SV	590-9562
Butch	W4HJL	369-2877
Karl	W4KRL	802-1527
David	KG4GIY	361-3042
Bob	K4HJF	335-1939

All tel. numbers listed are for Area Code 703 unless otherwise noted. This is the official monthly publication of the Ole Virginia Hams Amateur Radio Club, Inc., a §501(c)(3) organization, dedicated to the promotion and enhancement of Amateur Radio. Copyright © 2011 by the Ole Virginia Hams.

The OVH ARC regular monthly meeting is at 7:30 p.m. every third Monday of the month at the Prince William County Red Cross Chapter House at 9930 Liberia Avenue, Manassas, Virginia. Members, prospective members and all other interested persons are invited to attend. Local information can also always be obtained through the OVH's FM repeaters on 146.97 & 224.660 Mhz. Up to date information about OVH activities and meetings is also available on the OVH web site at <http://www.w4ovh.net>.

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Last Rev: 3/13/2011

The first OVH meeting about the June 25 – 26, 2011 Field Day event was held recently. At the past OVH meetings we have discussed alternative locations for Field Day that would provide better exposure for the event, OVH, and hopefully gain local recognition and support. Randy / WB7RAV, our Field Day chairman (thank you Randy), presented several location options for our Field Day, some require additional facilities support while others fill all our needs. Gary / WG4ARC has volunteered to provide needed shelter and more based on availability (thank you Gary). All options are being reviewed by the committee. Regardless of the selection, our standard site at the Nokesville Park is secured in the event we can't arrange for a new one in time.

I look forward to seeing all of you at the upcoming OVH meeting on March 21st!

73 George K4GVT

Sunshine Corner:

Happy birthday wishes this month to Russ / WB4HHN, Glenn and Jeff / N1SN.

Thank you to Al / KB4BHB and John / KG4NXT for introducing a local Cub Scout pack and several scout parents to ham radio. See pictures to the right. Al invited them to his house for a ham radio presentation. John had them put together an antenna which they were able to hang out in Al's shack and try out. It was great to see such interest and I think they all had a great time.

John and I did attend the Vienna Hamfest; OVH had a table from which flyers for the OVH Hamfest to be held on June 12, 2011 were handed out. John suggested we take some of Harry Vorhauer's old ARRL Handbooks to sell. GREAT IDEA! We took a big box of them and only came back with two. But I still have more and will bring them to the bake sale table on June 12th! All the proceeds are going to our scholarship fund.

The OVH Hamfest will be on Sunday, June 12th this year; if you haven't volunteered yet, please do. We need as many hands as possible to help out.

Happy St. Patrick's Day and most of all, HAPPY SPRING, the cold weather is almost gone!

Please send me your news to kg4tvm@hotmail.com or by telephone to 703-257-3566.

73 Theresa KG4TVM



Minutes of the Ole Virginia Hams Amateur Radio Club Meeting February 21, 2011:

Wayne / AG4ZZ, Vice President called the meeting to order at 7:30 PM in the absence of George / K4GVT, President. The meeting was held at the Prince William County Red Cross Chapter House in Manassas, Virginia.

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Following the Pledge of Allegiance, all present stated their names and call signs. There were 29 OVH members and 3 visitors.

This is the annual election night, Art W1CRO has the ballots, nominations will be taken until the break. Program – David / KG4GIY presented a program on staying safe online, David had a handout and video along with his presentation

BUSINESS MEETING:

Minutes from the January meeting were approved as read.

Treasurer's report was given by Gary / WG4ARC; the fairgrounds will cost an additional \$800; all reimbursements must be presented with a request form approved by the President of the club, this is a must since we are a not for profit club; report was approved as read.

Art / W1CRO made a motion to suspend reporting of other committee reports due to the inclement weather, approved; Art also made a motion to close the nominations, approved.

Ballots were passed out by Art / W1CRO.

BREAK

Sunshine Committee – Theresa / KG4TVM reported the birthdays and informed the members of the passing of John / W4ICX.

ARES – David / KG4GIY let us know about MS Walk the first weekend in April.

NEW BUSINESS:

Jim / W4JTP reminded us about the Vienna Hamfest in Annandale on Sunday, February 27th, this coming weekend, all indoor tables have been sold and no snow in the forecast.

Art / W1CRO announced the election results, all existing officers were re-elected: George Tarnovsky / K4GVT – President; Wayne Kline / AG4ZZ – Vice President; Gary Gilham / WG4ARC – Treasurer and Theresa Heartney / KG4TVM – Secretary.

Butch / W4HJL wanted to know if the club will buy a first aid kit; David / KG4GIY made a motion to buy the first aid kit for \$100 or less, passed.

50/50 - \$6.00 to John / KG4NXT, he donated his winnings to the club.

Meeting adjourned at 8:40 PM.

Reminders about some upcoming events / calendar dates:

HAMFESTS:

Saturday & Sunday, March 26 & 27, 2011, Greater Baltimore Hamboree & Computerfest at the Maryland State Fairgrounds, Timonium, Maryland. More info and directions at <http://www.gbhc.org>

OPERATING EVENTS AND CONTESTS

Saturday (March 19th) 18:00 UTC to Monday (March 21) 01:00 UTC. The 2011 Virginia QSO Party. Lots of fun to participate on the air in this Virginia QSO contest sponsored by the Sterling Park ARC. More details and rules at http://www.qsl.net/sterling/VA_QSO_Party/2011_VQP/2011_VQP_Main.html

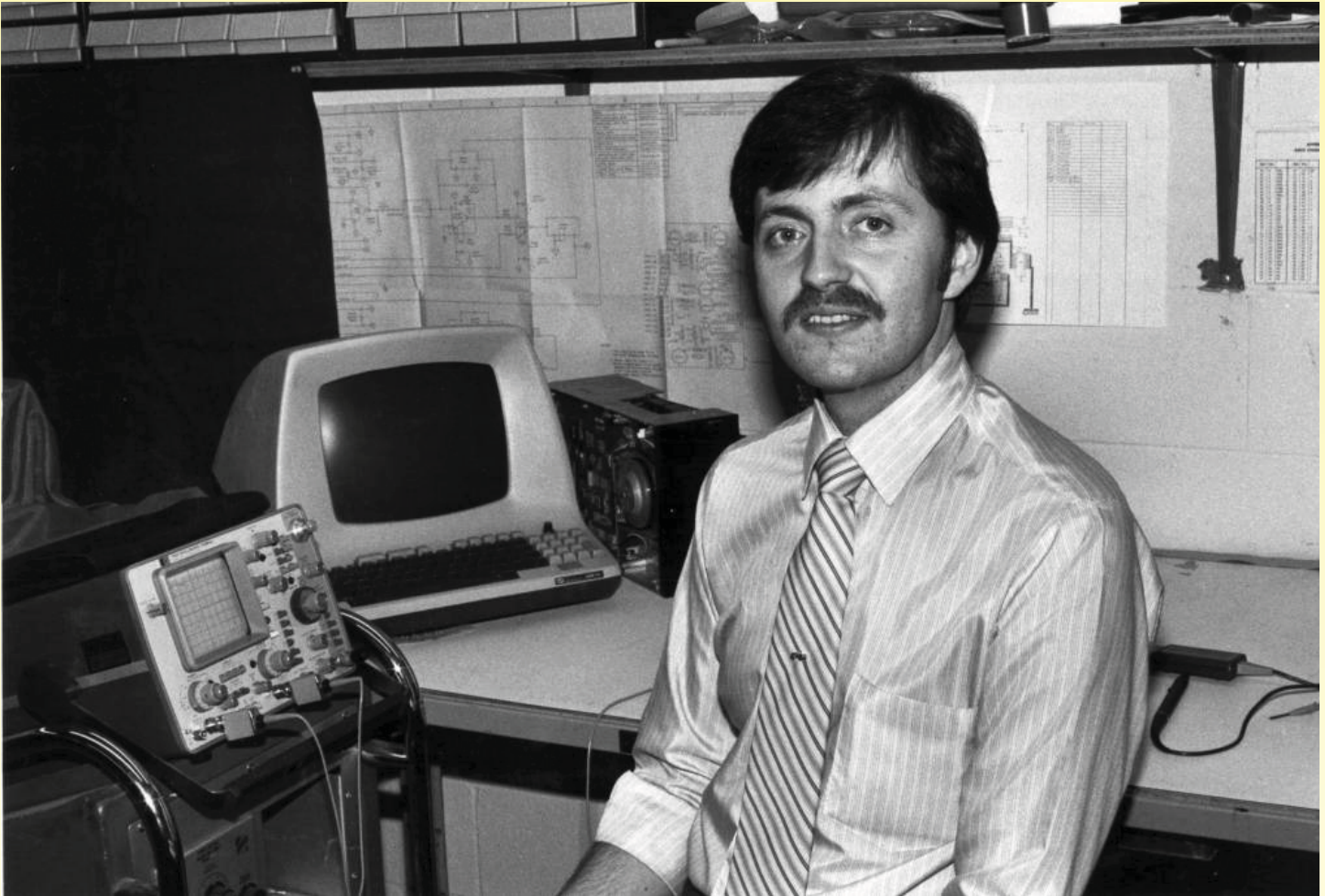
There are many operating contests almost all of the time. The excellent web site maintained by WA7BNM lists most of them! See <http://www.hornucopia.com/contestcal/>

PUBLIC SERVICE / TRAINING / ARES EVENTS

Sunday, March 27, 2011, 7:00 am to 11:00 am. David / KI4AZX needs volunteers to assist at the upcoming MiniTri event [triiitnow.com]. Contact David at 703-393-6681 or meolada@hotmail.com for more info.

Check the online Calendar by David / KG4GIY at <http://www.pwcares.org> for latest updates. David maintains a comprehensive calendar for upcoming events at that web site.

Who is this OVH club member in this late 1970's picture?



Answer and the name / callsign of the first to guess correctly in an email to the editor will appear in the April newsletter.

HEAVY METAL - HOMEBREW EQUIPMENT FROM THE EARLY 1960's. Your editor recently visited the M.I.T. web site, and while there, took a quick look at the ham club station, W1MX, pages. [w1mx.mit.edu] The W1MX pages now include a grouping of "historical pictures" taken at the station in the 1960's when your editor was there as a student. The picture to the right, copied from that site, caught his eye. Those who have been hams for a long while may recognize the machine with the keyboard as an old Teletype Model 14 or 15 machine which could have been 30 to 40 years old at that time in the 1960's. Very few of these old machines still exist. The Teletype controller and terminal unit in the 19" rack next to Teletype Machine, however, really caught your editor's eye because that unit was handmade by him in 1962 for use on RTTY (radioteletype) with a Teletype Model 26 machine at his then station, K1SDX, and later loaned to the W1MX club in the mid-1960's and used by its members who wanted to activate and



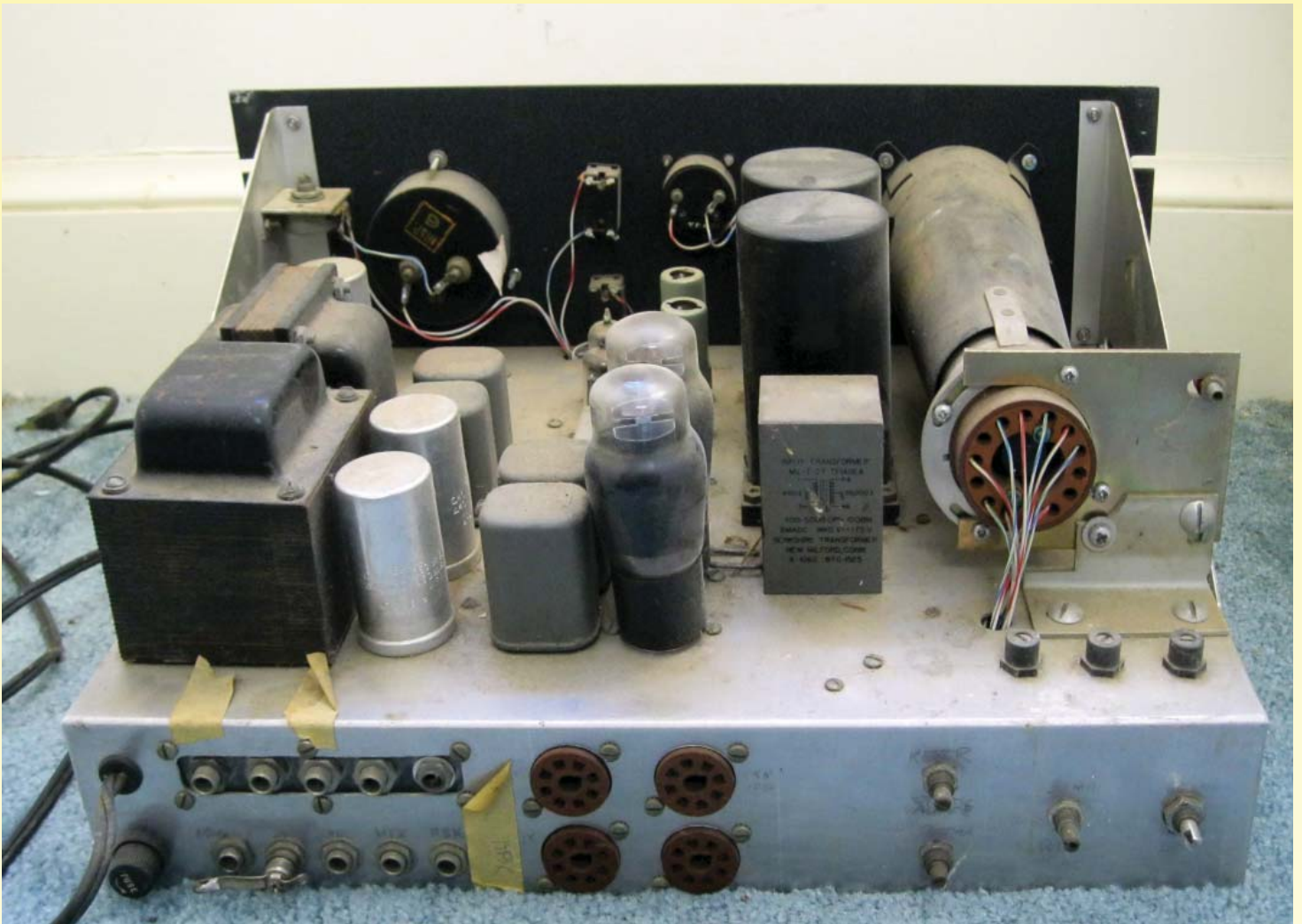
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operate W1MX on HF RTTY. That radioteletype controller and terminal unit was retrieved from W1MX when your editor finished his studies at M.I.T. in 1968; it still exists! Recent pictures, with more description, below:



The front panel oscilloscope, with a front panel focus and gain controls, could precisely monitor incoming FSK (frequency shift keying) signal tuning alignment of the RTTY signal into the mark and space filters. The meter in the center monitored the teletype machine loop currents, the switch to right of that meter **Continued on next page**





selected normal or mark hold operation; it was essential to have a “mark hold” switch readily available to prevent the teletype machine from running wild and printing reams of “junk” when noise or improperly tuned, incoming FSK radioteletype signals were being received. Other front panel toggle switches controlled transmit / receive and in/out selection of a special frontend bandpass filter. The zero center meter on the right monitored polar relay currents. Another toggle switch selected normal or reverse (upside-down) FSK keying. A bank of neon lights monitored the mark / space coupling circuits and the mark / space trigger signals. Finally a balance control permitted fine adjustment of the bias point for mark / space triggering, and there was a switch for wide (850Hz) and narrow shift (170Hz).

This unit uses heavy metal construction and weighs more than 40 pounds. Many of the parts, including the power transformers, electrolytic capacitors, selenium rectifiers and many of the vacuum tubes were scrounged from discarded 1950's era TV sets. Received audio FSK signals from an HF receiver were provided to the unit as input. Only analog filter techniques were used in this unit as this was long before it was practical cost-wise in ham equipment to use analog to digital converters and complex digital processing for signal filtering. The unit generated both an audio FSK output for input to an SSB transmitter (or an AM transmitter) and a switched line signal which could be adjusted to work with a varactor diode modification to a (VFO's) tuned circuit in a non-SSB transmitter to cause the FSK signal to be created right at the transmitter's VFO stage. The top row of 1/4" phono jacks on the rear apron are for the Teletype machine loop current circuits and were mounted on an insulated strip because those circuits were “hot” relative to ground. The octal sockets provided alternative means for input / output and control cabling. The unit includes many internal potentiometers for one time precision adjustments. A hand drawn, as constructed, schematic diagram still exists too for this unit which embodied and combined the “best” designs of the early 1960's and was a very advanced unit at that time.

In the 1960's all Teletype (or teleprinter) machines used for ham RTTY were heavy, heavy duty, complex, clunky and noisy, electromechanical devices which had to be kept oiled, but which ran very reliably if tended properly. Those machines used a typewriter-like mechanism to print in all uppercase letters on a continuous sheet roll of yellow Teletype paper or on a yellow paper strip of the type which could be cut and pasted **Continued on page 8**

onto a telegram form (remember Western Union Telegrams?). It was necessary to control the Teletype machine and utilize its keyboard, generate FSK signals for transmission and extract the information content from incoming, received FSK signals to control the Teletype printer, and provide “one switch” switching between transmit and receive both for the Teletype machine and the separate transmitter and receiver for successful RTTY operation. At that time virtually all HF ham band RTTY operations used 850Hz frequency shift because most ham equipment then in use simply was not stable enough, frequency-wise, to use narrow (170Hz) shift FSK effectively. Narrow shift was just starting to be used with very stable SSB transmitters which were very expensive and still relatively rare. Narrow shift usually could not be used successfully without manual tuning during receive using a precision oscilloscope monitor to correct for slow transmitter frequency drift.

As boat-anchor like and primitive in design (*i.e.*, vacuum tube, no integrated circuits, no microprocessors, point to point wiring, no printed circuits, etc.) as this unit may seem today, it was very sturdily constructed and actually performed very well. K1SDX was able to make HF RTTY contacts with about 40 DX countries in 1962 and 1963; at that time that was almost all countries which had ham RTTY stations on the air! It also saw a lot of use at W1MX in the 1965 - 1968 time period, but mostly by others who had time to operate.

IMPORTANT - from the ARRL web site - February 22, 2011:

ARRL Asks Members to Write in Opposition to HR 607

ARRL is asking its members to contact their US representatives in opposition to the sections of HR 607 that could affect the Amateur Radio Service allocation at 420-440 MHz. HR 607, the Broadband for First Responders Act of 2011, would address certain spectrum management issues, including the creation and maintenance of a nationwide Public Safety broadband network. It was introduced into the US House of Representatives February 10.

ARRL Regulatory Information Manager Dan Henderson, N1ND, clarified that the League opposes

HR 607 in its present form. “We do not oppose the concept of dedicated spectrum for the development of a Public Safety infrastructure and wireless network. We object to the bill because of the inclusion of 420-440 MHz as part of the spectrum to be swapped and auctioned to commercial users.”

You can find a sample letter, “how to find your Representative” and the contact information for ARRL’s legislative consultant, Chwat & Co, at <http://www.arrl.org/sample-letters>.

Some other useful (?) information / observations

1. David / KG4GIY operates the Prince William County ARES web site [www.pwccarea.org] which includes several very useful ham radio information compilations which go far beyond topics relevant just to ARES. Check out the downloadable PDF files: QUICK REFERENCE GUIDE and OPERATING REFERENCE.

2. Wondering why there have been few Sunspots for the last year or two when we are supposed to be in an upswing of the Sunspot Cycle with lots of Sunspots and improved HF radio propagation? NASA researchers think they’ve figured it out at last. Look at http://www.nasa.gov/mission_pages/sunearth/news/solar-cycle23.html

3. Is the FCC disregarding technical reality again as it did with BPL, or has it simply rammed through an (other) benefit for an Obama friend regardless of the harmful interference potential for millions of GPS users? The GPS community, manufacturers, user organizations, including the DOD, are up in arms about the FCC’s recent, hush-hush but rushed approval of a seemingly “out of nowhere” application by a new entity, LightSquared, filed during the yearend holidays. In immediate response, the FCC authorized LightSquared to deploy widely broadband (Internet - WiFi) terrestrial radio systems on frequencies overlapping with GPS satellite downlink frequencies. Google: GNSS LightSquared FCC - to find out more. Who is behind LightSquared and what connections did they misuse to cause the FCC to act so quickly as it has in this matter? This FCC / LightSquared interaction doesn’t pass the smell test.

4. Also relating to GPS: in January and February the DOD conducted tests 50 miles off the coast of Georgia which, according to the FAA, would cause unreliable airborne GPS operation from Southern Virginia to South Florida and west to Mississippi. See https://www.faa.gov/files/notices/2011/Jan/GPS_Flight_Advisory_CSFTL11-01_Rel.pdf and, more particularly the included charts for the interference areas as a function of the airborne GPS’s altitude. What if the GPS interferer / jammer were airborne instead of on a ship in international waters?