

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>

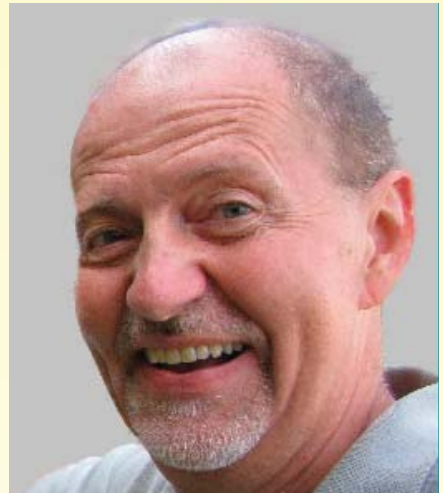
OLE VIRGINIA TIMES

November 2010

Next Meeting: Monday, November 15, 2010

PRESIDENT'S LETTER:

Greetings to all. Getting right down to business, the November meeting will be filled with OVH business as well as an interesting program about using HF to send short emails. We have several business issues relating to repeaters and other matters open for discussion that need your input. Please come to the meeting and share your thoughts. If you don't attend, the attending members may be able to choose course(s) of direction contrary to your liking. Also, John / KG4NXT will present a short program about using HF to send email - with a computer soundcard and the WINMORE software to communicate with the Winlink system - without a Pactor modem. Generally some of us meet at 6:30 pm for dinner at the pizza place next door before the 7:30 pm meeting, please join us. I hope you all can make the upcoming OVH meeting on Monday, November 15th at 7:30 p.m. at the meeting room at the Prince William County Red Cross at 9930 Liberia Avenue, Manassas.



Planning for the OVH Hamfest is underway. We have many open positions, please volunteer, your help is essential in our success.

Ev and I will be hosting the OVH Christmas Party at our home again this year and invite our entire OVH family. Please mark your calenders for December 11th, 6:00 PM. Because this is a pot luck event, please bring your favorite dish to share. The past events had wonderful selections and lots of great eats! We are looking forward to your company. Thanks to Theresa / KG4TVM, we will have a collection point for Toys for Tots too at the party.

The DV-Board project is still on the back burner until time allows, hopefully in the next few weeks.

73 George K4GVT

Sunshine Corner:

A very happy birthday this month to Wayne / N7QLK, Austin / KJ4EOW, Theresa / KG4TVM, Butch / W4HJL, Gene / KD4RHC and Charlie / WA4YGI.

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) Blasdel	W4HJL	369-2877
Art 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 2010

Chris	KI4POT	361-3257
Bruce	AB8CI	361-8873

FIELD DAY 2010

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

CLUB ROSTER

Blaine	KB4RKL	369-2877
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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
Mary Lu	KB4EFP	369-2877

FINANCE

Mary Lu	KB4EFP	369-2877
Joe	KI4OHR	369-2639
Ruth	KU4WH	331-1234

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

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
Art	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 © 2010 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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Approx. Circulation - 170.

Last Rev: 11/5/2010

Happy Veterans Day! We have many veterans in our club and we thank you all for your service.

Thank you to Patty / KI4FQF and the Red Cross for treating us to Strawberry Shortcake at the October meeting; it was great!

Congratulations to Bob / K4HJF on being elected as the newest director of the OVH!

I still have of some of Harry's / W4PVA's collection of ARRL Handbooks for sale. Please contact me if you are interested in purchasing one. All proceeds will go to the Scholarship Fund, which is named after Harry.

Girl Scout Adventure Day on Saturday, October 16th at the Prince William County Fairgrounds was an amazing success. The turnout by the scouts was incredible and we were able to get over 100 girls to talk on the air! A few pictures from the event appear later in this Newsletter. Very special thanks goes to John / KG4NXT, Al / KB4BHB, Ken / KJ4VTP, Mark / WA4KFZ, Patty / KI4FQF, Gary / WG4ARC and Mark / WA4KFZ for spending their Saturday with me at the Fairgrounds.

Special thanks also to George / K4GVT and his wife, Ev for agreeing to host our club Christmas party again this year on Saturday evening, December 11th. Hope you all can make it, this will be a potluck and we will be collecting new, unwrapped toys to donate to Toys For Tots.

Best wishes for a Happy Thanksgiving to you and yours!

Just a reminder, the Thursday night net is going strong at 8:00 pm, please join us on the OVH repeater! If you would like to be a net control just let John / KG4NXT know.

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

73 Theresa KG4TVM

Minutes of the Ole Virginia Hams Amateur Radio Club Meeting October 20, 2010:

George / K4GVT called the meeting to order at 7:30 pm. Meeting was held at the Prince William County Red Cross Chapter House in Manassas, Virginia.

Following the Pledge of Allegiance, all present stated their names and call signs. There were 25 OVH members and 3 guests.

Charlie / WA4YGI made a DVD of CQ magazine to be handed out to members; George / K4GVT handed out several items from Bird, mouse pads, leather portfolios, handouts and travel mug; the Red Cross handed out Strawberry Shortcake to everyone in attendance; Art / W1CRO donated 4 brochure holders to be used at special events.

Art / W1CRO submitted Bob / K4HJF as a new director for the OVH, George / K4GVT called for a vote and Bob was elected unanimously.

BUSINESS MEETING

Minutes from the September meeting were approved as read.

Treasurer's report was given by Gary / WG4ARC, report was approved as read.

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Committee Reports:

Membership – Joe / KI4OHR read in Robert Cole / KJ4SDD, Richard Shannon / no call sign yet and Clyde Duren / KJ4YHA.

ARES – David / KI4AZX reported that the last Mini Tri of this year is on November 14th and he is looking for Volunteers to help; also there will be ARES training session the 3rd Saturday in November (Nov. 20th).

D-Star and FM Repeaters – Keith / KM4AA reported that D-STAR is up and running, still needs some work and he may need to take down the system to work on it; George / K4GVT has the cable for the duplexer and he also wants to put together a 5 year plan for equipment, George also asked for more people to get involved in the technical side of maintenance.

Training – Mark / WA4KFZ will start a tech class on October 20th at the Red Cross Building in Manassas; he has 8 people signed up so far. George / K4GVT thanked Mark for conducting the class and thanked Gary / WG4ARC for arranging the classroom; the exam will be scheduled at another time.

Hamfest – George / K4GVT is still looking for a chairperson for next year and would like to have that chair person by next meeting.

Field Day – Also needs a chairperson for next year.

Winter Field Day – Joe / KI4OHR gave us some background on the event and it will be held again at the Manassas Museum. Joe will start soon sending out information on the OVH reflector; Gary / WG4ARC advised that the Emergency Manager came out to the event last year and was very impressed with the set up; George / K4GVT thanked Joe for taking this event on.

Sunshine Corner – Theresa / KG4TVM announced the birthdays for the month; reminded everyone that she still has some of Harry's ARRL Handbooks for sale; and thanked everyone for helping with Girl Scout Adventure Day on October 16th.

Joe / KI4OHR announced that there is an open part time position available at HRO if anyone is interested.

BREAK

OLD BUSINESS – None

NEW BUSINESS – Keith / KM4AA attended the recent TMARC Meeting. Previously TMARC was going to try to come up with more frequencies but now they are now not going to revamp the banks plan. OVH's request for a 2 meter D-Star frequency allocation is way down the list; Keith / KM4AA wants to know if we want to make some other use of the site currently hosting the D-Star repeater and the digipeater and offered suggestions of APRS or a 1.2 Ghz D-Star voice repeater. A long discussion followed; George / K4GVT made a motion to move towards a 1.2 Ghz D-Star system, asked for a dollar amount on the cost. John / KG4NXT asked for the discussion to be tabled until a written estimate is provided, this was seconded and approved.

Finance Committee – ART / W1CRO asked for a budget by the end of the year from all committees so the budget & finance committee can meet.

Christmas Party – George / K4GVT announced that he will be having the party at his house again this year, this time on Saturday evening, December 11th.

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George / K4GVT has received an email from a club member asking if we could do the net on a different night because the newsline information is 7 days old, discussion followed, John / KG4NXT who records the newsline for the net stated that it is very seldom there is something that would be outdated and cause a problem.

George / K4GVT wants club members to come up with a drawing for our club logo so he can produce stickers; George also asked for someone to consider taking the President position at election time.

Drawings were held for the Bird Cup (\$3), Mystery Box (\$7) and the 50/50 (\$6)

George read a letter from Ken / KJ4VPT who thanked club members for their help on his site work.

Meeting Adjourned at 9:12 pm

Reminders about some upcoming events / calendar dates:

HAMFESTS:

Saturday, February 5, 2011, Frostfest, Richmond, Virginia. More info at <http://frostfest.com> This excellent hamfest got frosted out by the blizzard in February, 2010.

OPERATING EVENTS AND CONTESTS

November 20-22, 2010. ARRL's Sweepstakes Contest, Phone. The ARRL's Sweepstakes Contest has large numbers of participants and provides an opportunity to complete "Worked All States" or even work all States in one weekend. Complete information is available on the ARRL's web site.

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/>

OVH CHRISTMAS / YEAR END PARTY

Saturday evening, December 11, 2010 at the QTH of George / K4GVT and his wife, Ev. If you don't know how to get there, get the address from QRZ.com and driving directions from Google Maps. Everyone is invited, potluck food and refreshments. Lots of fun!

PUBLIC SERVICE / TRAINING / ARES EVENTS

Sunday, November 15, 2010. OVH comm support for the MiniTri event at the Freedom Aquatic & Fitness Center, Manassas, Virginia. Contact Dave Meola / KI4AZX, 703-393-6681 if you can help out.

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.

A USEFUL / INTERESTING ONLINE RESOURCE

Bell Telephone Laboratories was recognized as the preeminent industrial research laboratory for all things relating to communications (radio, wire, optical, satellite, theory, data, telephony, devices, etc.) during most of the Twentieth Century as a subsidiary of AT&T - until the early 1980's when the Bell System was broken up. It survives today on a different scale as a subsidiary of Alcatel-Lucent. See <http://www.alcatel-lucent.com/wps/portal/BellLabs/AboutBellLabs> From 1922 through 1983, the Bell System Technical Journal published by Bell Telephone Laboratories was a leading technical journal chronicling the development of all aspects of communications. Alcatel-Lucent has now made scanned versions of those journals available online at <http://bstj.bell-labs.com> The scans are high resolution so the downloads are slow, but tables of contents by month and year are provided to aid in finding items of interest.

A few pictures from the Girl Scout Adventure Day event
at the Prince William County Fairgrounds - October 16, 2010



Some Notes / Observations About VHF / UHF Repeaters.

FM voice through FM repeaters on 2 meters became a popular voice mode in the mid- to late 1960's for local operation; prior to that, most local voice mode operation on 2 meters was on AM with crystal controlled transmitters and tunable receivers. By the mid-1970's 2 meter FM repeaters had proliferated to the extent that unused frequency pairs were difficult to find in densely populated areas, and commercial PL tone systems were used to minimize unintended access interference between nearby repeaters. By then, FM repeaters for local operation were also common on the 430 MHz band. Commercially available FM equipment (handheld transceivers, mobile rigs, and home station rigs) could tune to multiple repeater frequencies (either by crystal or frequency synthesizer) and use PL. The basic designs of the early repeater systems were solid and have not changed much at all in 40 years. There are also FM repeaters on 10 meters, 6 meters, on 220 MHz, on 1.2 Ghz, and on other ham bands too but these are relatively few and far between compared to what is available on the 2 meters and 440 MHz bands.

Early FM repeaters supported autopatch operations which enabled users to make local telephone calls through the repeaters. This capability existed long before affordable cellular telephones in motor vehicles became popular (about 1984) and long before pocket cellular telephones were available. The ability to make autopatch telephone calls through ham band FM repeaters was not only a convenience, but a very valuable feature in case of an emergency. The widespread, effective use of pocket cellular telephones today, however, has made ham repeater autopatches all but obsolete.

In the late 1970's, 1980's and 1990's, the level of usage of FM repeaters was much higher than it is today even though there are more repeaters today. In this area, the major local FM repeaters used to be tied up almost continuously during weekday commuting (driving) times by hams holding mobile roundtable QSOs. That pattern of activity no longer exists. Ham operators now can easily dial up and talk on their pocket cell phones to anyone they need or want to speak with from their motor vehicles, not just other ham operators, and apparently now prefer the convenience of cell phones.

As the usage levels of ham repeater autopatches faded, new systems to connect ham repeaters to the Internet were developed. Echolink (echolink.org) and IRLP (irlp.net) represent current, large scale, widely deployed (worldwide) systems using VOIP approaches to connect Internet based voice users to (FM) repeaters, and to connect repeaters to repeaters. D-Star and D-Star repeaters represent a more recent variant which has become somewhat popular, but with relatively few users because the vast pool of working FM [only] equipment is not compatible with D-Star; however, new (relatively expensive compared to FM only) commercial D-Star capable equipment from ICOM does also support FM operation. D-Star repeaters can be connected to other D-Star repeaters over the Internet, and certain of the 1.2 Ghz D-Star equipment from ICOM offers medium speed (*e.g.* 100 Kbps), point to point data capability.

Ham repeater systems of all types, even relatively simple FM repeaters, and their components require maintenance, almost continuously, to keep operating effectively on a 24/7 basis. A repeater which is down or inoperative when needed is worse than useless because the users have come to depend upon it and expect it to work. The maintenance effort required to keep each repeater working can be expensive money-wise as well as very time consuming for

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the volunteers who provide the services. Many users who are not involved with maintenance do not appreciate the levels of effort and dedication required to keep each repeater working.

The OVH has long supported and operated VHF / UHF repeaters. What decisions should the OVH now make about its four existing repeaters: FM on 2 meters, on 220 MHz and on 440 MHz and D-Star on 440 MHz? At the October, 2010 OVH meeting there was some contentious discussion following a proposal to add a 1.2 Ghz D-Star voice repeater after OVH's repeater trustee, Keith / KM4AA, advised that T-MARC is very unlikely in the foreseeable future to give the OVH a 2-meter allocation for a previously approved (by the OVH membership) D-Star repeater. The strongest selling points for the approval of a 2 meter D-Star repeater more than a year ago was that the 2 meter band would offer better coverage than the 440 MHz band, and that much of ICOM's commercial 440 MHz D-Star equipment also supported D-Star on 2 meters.

Questions were raised about the costs (money-wise) and the potential benefits because 1.2 Ghz voice D-Star would require additional equipment (for potential users) which would be usable only on that band - when those same users already had good OVH FM repeaters available on 2 meters, 220 MHz and 440 MHz and one D-Star repeater on 440 MHz. Discussion was deferred until money estimates were provided.

But shouldn't more than just money estimates for a 1.2 Ghz voice D-Star repeater be considered? Have the advantages / capabilities of D-Star yet been sold / explained sufficiently to the general (*i.e.*, the not yet D-Star capable) OVH membership to make pushing more for D-Star repeaters (other than on 2 meters) viable at this time? For those not yet D-Star capable, how much actual use is occurring on the 440 MHz D-Star repeater? Is it enough to be viable as an emergency resource? Better than the FM repeaters? How? Who would actually use a new 1.2 Ghz voice D-Star repeater?

Shouldn't a systematic, wider range of possible technical and capability improvements for the overall OVH repeater systems be considered / evaluated before any action / decisions are made that require money? If technical activity is desired, other possible incremental technical and capability improvements exist which would appear to have a much higher value than simply adding a new 1.2 Ghz voice D-Star repeater. For example, provide telephone and/or VOIP Internet access to the existing repeater(s), including dial-in or dial-up access (via passwords), Echolink, IRLP, and/or AllStar links; add back autopatch / telephone access via a VOIP connection (from D-Star site) / microwave link to FM repeater site, etc.

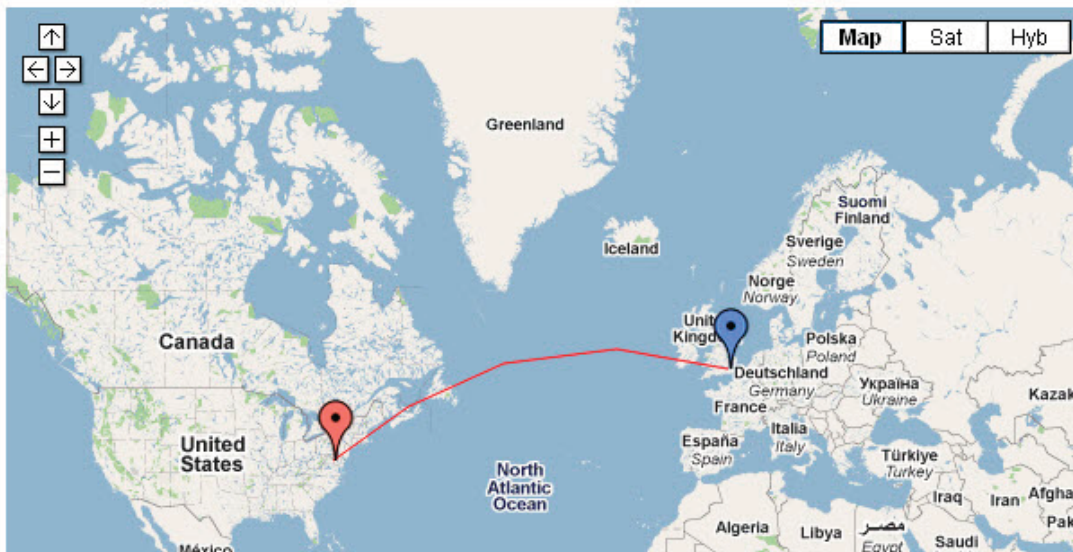
Also to be considered in planning should be: what is the scope of the likely and expected upgrading / maintenance requirements and costs to keep the four existing repeaters functioning? This continues to be a mystery area to OVH members not involved in the repeater technical committee operations; no one is hiding anything and those active in that work are highly dedicated, but there always seems to be something new or unexpected going on which requires money and effort to resolve. Why is that? Is there a one year, two year and five year maintenance and replacement plan? Or is some maintenance done on a squeaky wheel, *ad hoc* basis, mostly when something unexpected happens?

Be sure to attend the November meeting to participate in the ongoing discussion of these topics!

VOACAP, HF Propagation Prediction Tool Now Available Online

Check out: <http://online.voacap.com> for interactive, online HF propagation predictions

Ex 1: Manassas, Virginia to London, U.K. (user positions the red and blue markers)



Date
Year: 2010 Month: November

Transmitter Site
Name: TX
Latitude: 38.74551518488265
Longitude: -77.4810791015625
TX Antenna: Dipole @ 10M (33ft)
TX Power: 100 W
Specials: Swap TX-RX

Receiver Site
Name: RX
Latitude: 51.481382896100975
Longitude: -0.17578125
RX Antenna: Dipole @ 10M (33ft)

Run the prediction!

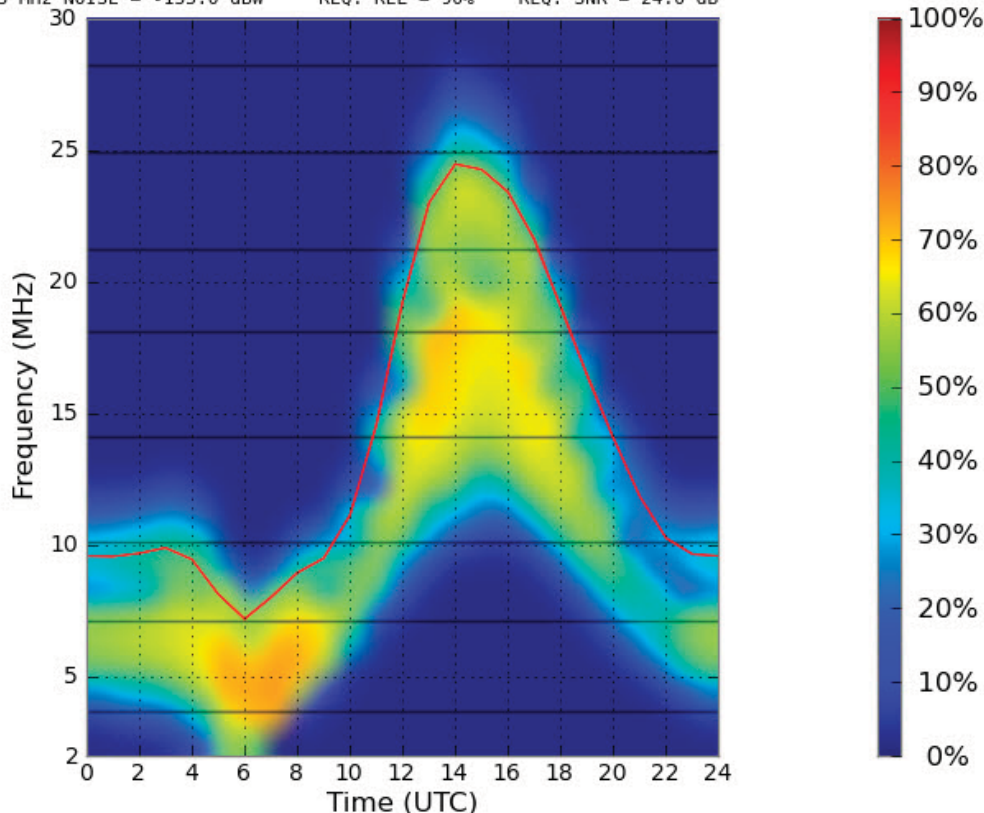
online.voacap.com - Professional-grade high-frequency (3-30 MHz) propagation predictions

This graph shows the probability of achieving a C'W-grade transmission quality on the circuit.

The red line across the graph is MUF.

Circuit Reliability (%)

Nov 2010 SSN = 31. Minimum Angle = 0.100 degrees
TX 38.75 N 77.48 W - 51.48 N 0.18 W AZIMUTHS N. MI. KM
XMTR 2-30 2-D P-to-P[voaant/d10m.ant] Az= 0.0 OFFaz= 49.2 49.20 288.58 3204.7 5934.7
RCVR 2-30 2-D P-to-P[voaant/d10m.ant] Az= 0.0 OFFaz= 288.6 0.080kW
3 MHz NOISE = -155.0 dBW REQ. REL = 90% REQ. SNR = 24.0 dB



User sets other parameters
(see above) on the input
window at
<http://online.voacap.com>

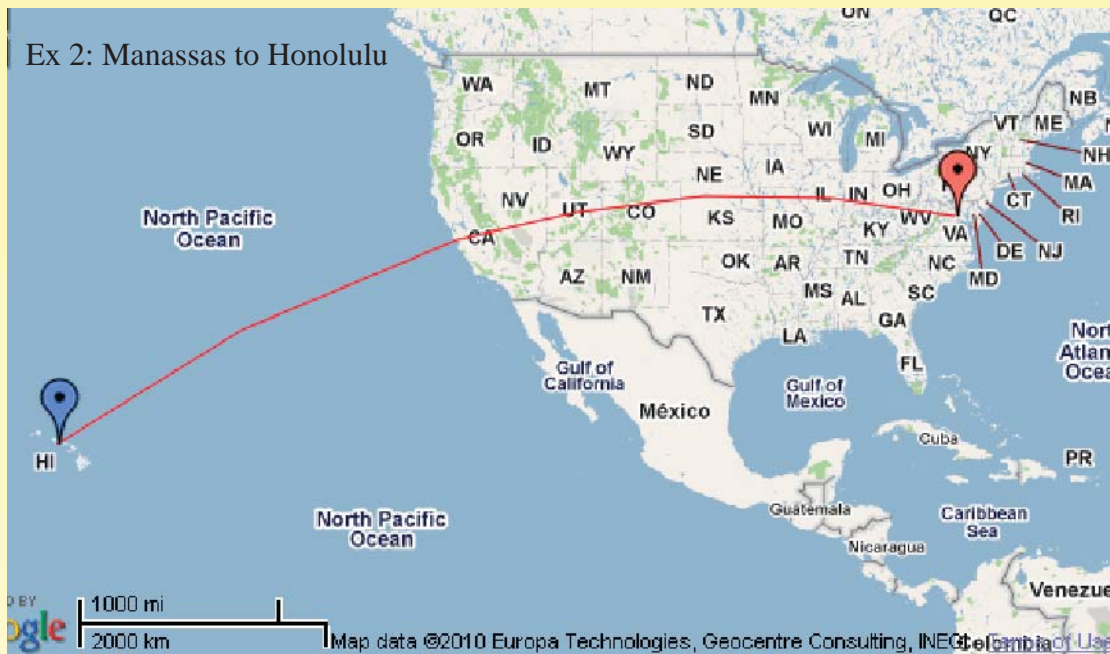
and then clicks on the
“Run the prediction” button
to obtain the
“Circuit Reliability”
prediction.

See prediction for the
Manassas to London (UK)
circuit to the left.

The website contains
explanations for the
prediction process and
how to use information

Another example follows
on the next page.

Ex 2: Manassas to Honolulu



Try this out. It's lots of fun and you'll likely learn something new about HF propagation on your favorite HF circuit!

All of the software and computer setup and configuration hassles with the downloadable versions are avoided.

Circuit Reliability (%)

Manassas to Honolulu

Nov 2010 SSN = 31. Minimum Angle= 0.100 degrees
 TX RX AZIMUTHS N. MI. KM
 38.74 N 77.48 W - 21.21 N 157.85 W 281.36 55.11 4180.4 7741.5
 XMTR 2-30 2-D P-to-P[voaant/d10m.ant] Az= 0.0 OFFaz=281.4 0.080kW
 RCVR 2-30 2-D P-to-P[voaant/d10m.ant] Az= 0.0 OFFaz= 55.1
 3 MHz NOISE = -155.0 dBW REQ. REL = 90% REQ. SNR = 24.0 dB

