

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 - Coming by September 2009: 442.5125+  
OVH Packet - Port 1: 145.730 Mhz, Port 3: 223.540 MHz - Sysop: Bill/N4SV  
<http://www.w4ovh.net>

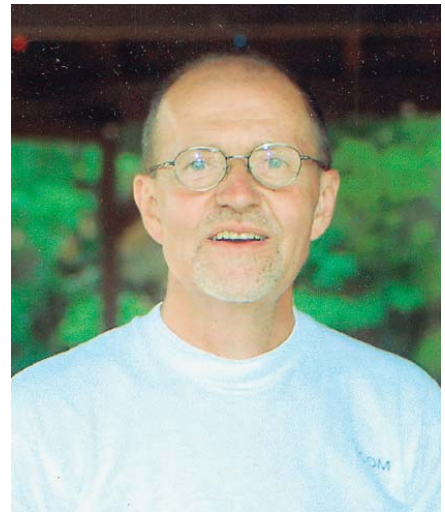
# OLE VIRGINIA TIMES

## October 2009

### Next Meeting: Monday, October 19, 2009

#### PRESIDENT'S LETTER:

Greetings to all. As most of you know, lately our main focus has been the installation and test of the OVH D-Star repeater on Mt. Pone. For those not D-Star equipped yet, I'll cover the current activity details. We installed the repeater on Mt. Pone and initially had good success. We made contacts with stations and received very good feedback regarding signal strength and readability. John (KG4NXT) was able to link to the US reflector. The party quickly came to a halt when the receive signals began to sound like R2D2 (a term used to describe the out-of-sync digital data - as heard). This condition was intermittent and caused addition headaches for the crew. My personal thank you to Keith / KM4AA, Joe / KI4OHR, and Butch / W4HJL for the hours spent on Mt. Pone helping troubleshoot.



We began testing hardware looking for the root cause. I would like to point out this is no easy task, the only information we can retrieve from the repeater is that the power is on. Consequently, we began to review and test each element of the system. We eliminated several system components, still the problem(s) persisted. After contacting ICOM, discussed the issues, I ask if there was a way to directly loop back the receiver to the transmitter, thus taking the controller out of equation. The answer was yes, we proceeded to make the loop-back cable and began testing the radio portion only. This localized the problem to the RF deck (receiver and transmitter). However, we could not isolate the problem to receiver or transmitter. Since the schematics on hand do not match the radios we have, and the system is under warranty, we made the decision to send the RF deck back to ICOM for repair.

During the down time, to facilitate testing of the antenna infrastructure we placed an analog repeater into service at Mt. Pone. These tests would consist of the antenna, cables, duplexer, preamp and the existing power supply. We received approval to move the

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# 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:	Wayne Phillips	N7QLK	393-8447
Treasurer:	Joe Dobes	KI4OHR	369-2639

## DIRECTORS

Don (Butch) Blasdell	W4HJL	369-2877
Art Whittum	W1CRO	791-4330
Charlie Dale	WA4YGI	361-3091

## WEEKLY NETS

Thursdays - 8:00 PM	JOHN H	257-3566
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## HAMFEST 2008

Chris	KI4POT	361-3257
Bruce	AB8CI	361-8873

## FIELD DAY 2008

Joe	KI4OHR	369-2639
Butch	W4HJL	369-2877

## 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

## 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 telephone numbers listed above are for Area Code 703 unless otherwise noted.

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The OVH ARC meets at 7:30 p.m. local time every third Monday of the month at the NOVEC Tech Center, 5399 Wellington Branch Road, Gainesville, Virginia 20155. 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: 03/25/2009

K4GVT repeater from the Lake Jackson area to Mt. Pone for a period of one week. Analog repeater operations were conducted on 443.500 Offset +5MHz and CTCSS of 123. This was temporary to determine the coverage area and stability of the antenna system. I hope most of you had a chance to try the FM repeater. We asked folks to test its operational range and report any anomalies as well as signal data. At this time we have signal reports from as far as Route 66 and the Beltway. We hope to have signal information from all areas before the conclusion of these tests. At the time of this writing, we have had rain and heavy wind without new issues. This gives us great confidence in the antenna system. I learned that if further testing is required we can reprogram the analog repeater to 447.875 -5MHz. Keith / KM4AA will fill us in on the estimated D-Star repair time and progress of the repair based expected feedback from ICOM.

Ev and I are planning again this year to host the OVH Holiday party at our home on Saturday, December 12th beginning at 6:00 P.M.; further details will be provided on the OVH email reflector when we get closer. We ask that everyone bring their favorite dish to share with others; as with past OVH parties, we also would like to get an accurate, expected head count in advance!

The regular OVH meeting this month will be on October 19th at 7:30 PM at the NOVEC Technical Center in Gainesville. Hope to see you at there!

73 George K4GVT

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## Sunshine Corner:

Some of our club members are enjoying their birthdays with the terrific weather this October: Doc / W1IMX, Judy / KC4WES, John / W4ICX, Scott / KB8NUM, Ruth / KU4WH, Keith / KM4AA, Bob / KC4TNC and Phil / AC4PL. Hope you all have a great day!

Condolences to Paul / W4ZB on the death of his mother in late September at age 91½. She had two sons and two grandsons who were hams.

Mark WA4KFZ will be conducting a Tech class starting October 24th in Nokesville; if you know anyone interested in participating, please let Mark know. Thanks to Mark for taking on this project.

Thanks to Art for printing the QSL Certificates from the Special Event commemorating the Second Battle of Manassas.

Please mark your calendars for Thursday evenings at 8 p.m. and tune into the OVH Net. Pick up that microphone, check in and say HELLO!!! The net control for the evening would really appreciate hearing from you.

Happy Halloween, watch out for those Trick or Treaters!

Please send your news for next month via email to kg4tvm@hotmail.com or telephone me at 703-257-3566.

73 Theresa KG4TVM

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## Minutes of the Ole Virginia Hams Amateur Radio Club Meeting September 19, 2009:

George / K4GVT called the meeting to order at 1930 Eastern Time on September 19th.

Following the Pledge of Allegiance, all present stated their names and

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call signs. There were 21 OVH members, and one guest present.

## BUSINESS MEETING

The minutes of the August 2009 were approved but the cash balances in the OVH's bank and CD accounts are to be redacted from the online version.

Treasury report: No corrections. Report approved.

## COMMITTEE REPORTS

Membership: No report. Bill / N4SV recommended a mail out to former members (who have not paid dues), suggesting that they join again - in addition to using the club web site, newsletter, and weekly net for that purpose. Bob / KC4TNC recommended that suggestions be placed on the reflector.

ARES: Steve / N4OGR: Volunteers to support the October 25th Marine Corps Marathon are sought; 1.2GHz D-Star will be used. Manassas Park "Parade Of Lights" requirements not finalized; dates to be announced.

Repeaters: Butch / W4HJL: 440 not working right and needs work.

Training: Mark / WA4KFZ: a General Class course is in the planning at the Nokesville Fire Department (older station) beginning on October 24th. Two 4 hour classes will be held on two Saturday mornings followed by the VE session; flyer to follow. A VE training course was also suggested.

Scholarships: No report.

Hamfest: the Richmond Frostfest is upcoming on Saturday, February 6, 2010. Steve / N4OGR suggested that a "stuffed" bake potato be offered at the next Manassas Hamfest, and that it be advertised on the flyer.

Field Day 2010: A Chairman or Chairwoman is still needed.

Sunshine: Theresa / KG4TVM – Announced September birthdays; Alan / WA2GTT is recovering from surgery.

Webpage: Bill / N4SV: the webpage is functioning.

Packet: Bill / N4SV: Working. New server in the future.

Steve / N4OGR: October 10th at noon – 3 p.m., Manassas Fire Department will host an open house.

George / K4GVT presented a slideshow of repeater work during the recent maintenance party at the Mt. Poné site.

## PROGRAM

Keith / KM4AA on D-Star. Keith explained the various ways that D-Star works. Digital Voice (DV mode); Short Data message (DV mode); GPS mode (DV mode); IP camera (DD mode); Internet access (DD mode). D-Star is similar to Echolink, but simpler and more streamlined. Keith also discussed routing vs linking. He explained the registration process - register at only one Gateway System repeater site. Other capabilities include D-Chat, D-Rats, DPRS. Keith also provided a list of links for additional information. Keith also recommended the Nifty E-Z Guide to D-Star (available from the ARRL online bookstore) as a good starting reference.

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## OLD BUSINESS

Al / KB4BHB – Thanked everyone for their support with Special Event Station at Signal Hill Monument, for Second Battle of Manassas, on August 29th. Elizabeth / KG4NXV is recognized for developing the QSL card design.

## NEW BUSINESS

Conrad / N4ZQA – can someone give a presentation or class of all digital modes? This was left as a standing action.

50/50 for \$5 (\$10 total received): Winner was John / KG4NXT (again) who donated all proceeds back to the club.

There was no Mystery box raffle.

Thank you card received from Bill South on the passing of his father.

Meeting adjourned at 21:25.

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## Reminders about some upcoming events / calendar dates:

### HAMFESTS:

October 25, 2009 (Sunday) - Mason-Dixon Hamfest, Carroll County Amateur Radio Club, Westminster, Maryland. More info at <http://www.qis.net/~k3pzn>.

### OPERATING EVENTS AND CONTESTS

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

October 25, 2009 (Sunday): Marine Corps Marathon at which 1.2GHz D-Star will be used. Volunteers are still needed. Contact N4OGR / Steve 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.

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## T-MARC Meeting - October 4, 2009 - General Notes from Keith / KM4AA

- Discussion of proposed changes to the By-Laws. No objections noted. Formal vote of new By-Laws to be held at February 2010 meeting. Allows all repeater sponsors ample time to review.

- Discussion of the proposed new 2 meter band plan (digital). Band plan will be voted upon at February 2010 meeting. Allows ample time for all repeater sponsors to review. Note, the new frequencies will use some of the current simplex allotment. Was one comment that they currently use one of these frequencies for their ARES operations.

- Confirmation of Board of Directors. Motion accepted and all voted "AYE" with no dissent. This keeps current BOD in place until election to be held in October 2010.

- Coordination issues presented by those in attendance; none.

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## Summary of many floor comments:

- If RACES uses repeater that is newly designated for DSTAR and repeater "goes down"; then use output frequency SIMPLEX until repeater is restored. Same effect as using a separate SIMPLEX frequency.
- Motion to have T-MARC set up meeting to discuss SERA's 2 meter band plan with SERA. Motion seconded, all voted AYE - no dissent.
- Next meeting will be last Sunday in February 2010 (28th?). T-MARC directors will report on communications with SERA/ARCC prior to this meeting.
- T-MARC president (David Prestel, W8AJR) advised that "there is no problem converting existing/coordinated 2 meter analog frequencies to digital, as far as T-MARC is concerned.
- Comments from the floor pertaining to 2.4, 5.8 and 10 GHz allocations. Need to have T-MARC think ahead to band plans.
- Comment from the floor pertaining to "self-coordination". T-MARC president gave explanation why that would not be a good idea on a large scale. Too many individual coordination's between two other coordinating committees and result would be no visible single point of contact for coordination in Middle Atlantic region. If someone wants to proceed with self-coordination, best bet is to do the initial leg-work and then give to T-MARC to finish.
- T-MARC president asked that anyone knowing of repeater pairs for which there is no repeater, or repeater is not being used (seasonal repeaters not included), please let T-MARC know for investigating actual usage and possible re-assignment.
- Comment from floor that someone in Northern MD, PA or maybe South NJ is using a repeater with GMRS input and 146.46 MHz output. T-MARC requested they notify FCC.
- Freq Coordinator asked everyone to check current repeater listings and update as needed before Dec. 1, 2009.
- Discussion regarding tone transmission from a repeater when input frequency is active. Please do it.

## Additional Notes comparing T-MARC's plans to SERA's plans (<http://www.sera.org/2.html>):

SERA's plan ([www.sera.org/2.html](http://www.sera.org/2.html)) is identical to T-MARC's plan when it comes to standard repeater pairs and to many of the standard simplex frequencies. However, we differ in handling D-STAR and other Digital Modes: Here are the frequencies SERA specifies for use as D-STAR in what we now use for simplex:

1.4 MHz offsets	2.5 MHz offsets
146.420 in / 145.020 out	147.420 in / 144.920 out
146.440 in / 145.040 out	147.440 in / 144.940 out
146.460 in / 145.060 out	147.460 in / 144.960 out
146.480 in / 145.080 out	147.480 in / 144.980 out

However, to the north of us, ARCC uses the following frequencies for FM repeaters, all with 1.0 MHz offsets:

147.445 in / 146.445 out	147.475 in / 146.475 out
147.460 in / 146.460 out	147.490 in / 146.490 out

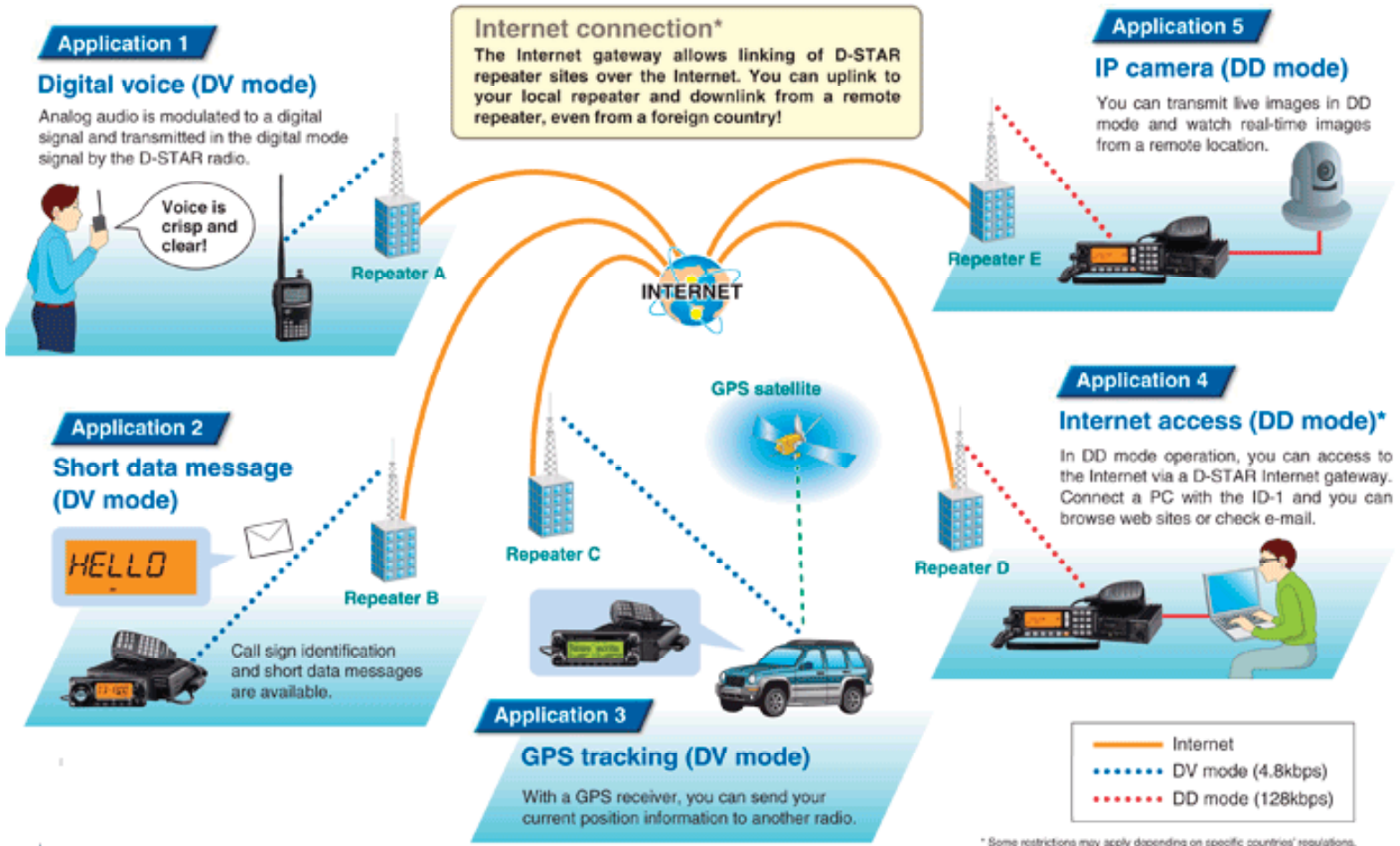
This situation poses a dilemma for T-MARC's area in which output and inputs appear in the 146.400 to 146.500 range; to resolve that, T-MARC now proposes 2.6 MHz offsets for:

144.910 in / 147.510 out	144.930 in / 147.530 out
144.950 in / 147.550 out	144.970 in / 147.570 out

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The frequencies 144.91, 144.93, 144.95 and 144.97 are also used for Digital Simplex (Packet) only in T-MARC's, ARCC's, and SERA's respective areas. Also, T-MARC defines 147.435 to 147.585 as "Replexers (NO Digital Operation)" frequencies. Under T-MARC proposal (described above), T-MARC repeater inputs will be at least 10 kHz away from SERA'S D-STAR repeater outputs, thereby hopefully providing some protection for T-MARC area users.

**A slide (below) from the September 21, 2009 presentation by Keith / KM4AA which illustrates how D-Star's "DV" and "DD" modes may be used to support various "digital" source applications.**

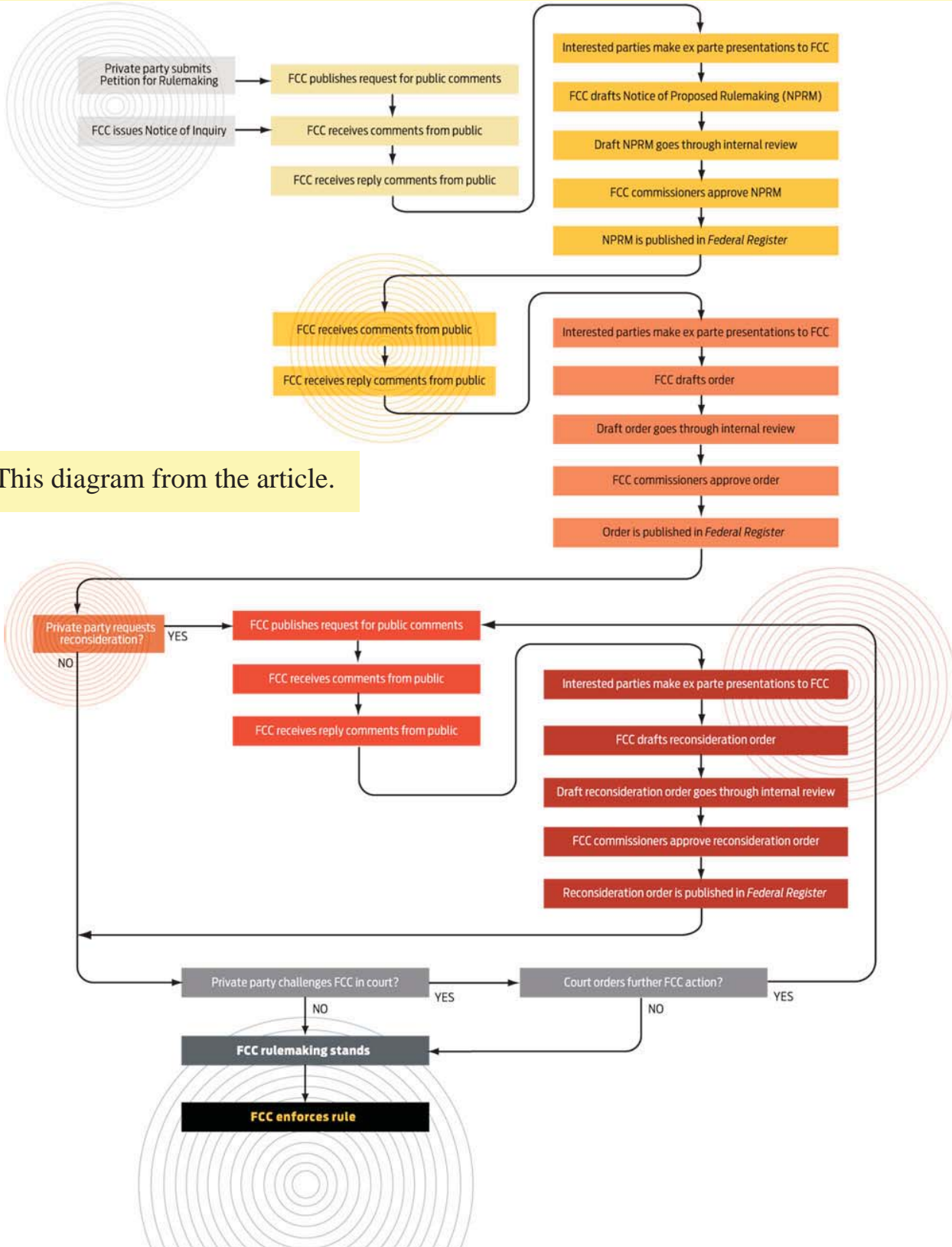


## Some Additional Notes About D-Star Systems

1. The "Nifty E-Z Guide to D-STAR Operation" soft cover book, available from the ARRL's bookstore, is highly recommended reading about set up and basic operation of D-STAR user radios.
2. The web site: [dstarinfo.com](http://dstarinfo.com) has maps showing D-STAR locations in the U.S. and elsewhere throughout the world, and PDF newsletters. A recent newsletter reports that there is now at least one D-STAR repeater operating which is NOT based upon ICOM hardware.
3. The web site: [dstarusers.org](http://dstarusers.org) reports information about active D-STAR users and D-STAR repeaters.
4. The D-STAR system has been criticized by some as using or requiring the use of proprietary hardware and protocols, particularly with reference to the Advanced Multi-Band Excitation ("AMBE") digital voice standard and chipsets employed which originate with Digital Voice Systems, Inc. or its licensees. See the web site at [dvsinc.com](http://dvsinc.com) for information about Digital Voice Systems, Inc., and its digital voice related products (including downloadable product and user manuals) and technologies.
5. For more information (lots and lots), go to <http://google.com/patents>; once there, use search terms such as AMBE, "Digital Voice Systems" and other variations to locate Digital Voice Systems, Inc.'s many U.S. patents; the patents located can be downloaded and read. Recommended but NOT light reading.

# How does the FCC work when making new rules and regulations or modifying existing ones?

This is a complex topic but one of interest or perverse fascination to many hams who regard the FCC as the “Radio Police.” A good and readable short article on that subject by a Washington, D.C. lawyer with an FCC focused practice appears in the IEEE’s Spectrum magazine for September, 2009; that Spectrum article is also available on line at <http://www.spectrum.ieee.org/telecom/wireless/radios-regulatory-roadblocks>. Recommended reading for those with interest in the FCC’s machinations pertinent to ham radio related regulation.



This diagram from the article.