



# BARK Newsletter

## BARK Board Members

Bill Gustavson	KG6GNI	Pres	04-07
Ken Wilson	KI6BWM	Vice Pres	06-09
Gary Ford	N6GF	Secy/Treas	04-07
Jack Hendrick	K6JAC	Director	06-09
Hal Stoner Jr.	WB6KXV	Director	05-08
Val Thomsen	W6LED	Director	05-08
Gary Ford	N6GF	Trustee	

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Berryessa Amateur Radio Klub

September 2007

## 2007 Annual Meeting

The BARK annual meeting will be held at 10am on Saturday, October 6, 2007 at the Red Cross, 120 Court Street, Woodland, one block north of Main Street. The tentative meeting agenda:

- Call to order and introductions
- Approval of minutes of 2006 annual meeting
- Treasurer's report
- State of the repeater system
- Director and officer elections
- Old business
- New Business

For the director elections, the positions of Bill Gustavson, KG6GNI, and Gary Ford, N6GF, expire this year. Both are expected to be willing to serve again. Nominations can be accepted in writing or from the floor at the meeting.

Enclosed with this newsletter is a proxy form. If you are unable to attend the meeting and you do not have a proxy form on file with the secretary, or you wish to declare a different proxy, please fill out this form and see that it will be available to your proxy at the meeting.

The proxy form is used to assign your vote to a member who will be able to attend the meeting.

Your proxy will be able to vote in your stead on any business items voted on during the meeting. This proxy form will remain in force until you rescind it or submit a new form. Family members holding a current FCC amateur license of any class have full voting rights and they should also send in proxy forms. Ask your proxy to bring the proxy form to the annual meeting.

## The President's Corner

### *HAM 440 Repeaters and PAVE-PAWS Radar*

During my last report, our 440 repeater was in the failure mode and we were in the process of replacing it. After much discussion, donations were collected, numerous phone calls were made, e-mails exchanged, and then, through the hard work of several members and especially Hal, WB6KXV, a new 440 repeater was ordered. For some of us, it was going to be like Christmas in July with a new toy to play with.

Then like the elementary school teacher, who during recess playtime, blows the whistle and ruins your fun, along comes the PAVE-PAWS interference issue. Somehow, it appears that our government's ability to be able to monitor an early barrage of submarine launched ballistic missiles from just off our coast or continually track the thousands of pieces of space junk or the satellites

we so heavily depend on, makes our need to “gab” pale in comparison to the need for a good national defense. The Department of Defense could have just told us to shutdown all 440 usages, and that almost happened. Much to their credit, DoD has been very patient in allowing us an opportunity to mitigate our interference. Much to the credit of the very hard work of the ARRL (Dan Henderson in particular, who was always very helpful, informative and congenial during my bi-weekly phone calls) some of the repeaters may survive through stringent mitigation measures.

However, beware and mark my words carefully. I will not mention sources, but it has been plainly stated that this problem isn’t necessarily created by repeater use alone. Repeaters are simply a convenient list of offenders. Loss of signal acquisition of targets by the PAVE-PAWS system has also resulted from HAM simplex and sideband use. There is not much difference between a 40-watt repeater and a 40-watt mobile or base unit. Interference is interference. Therefore, if we want to maintain some use of the 440 band in other areas, we had best do a good job of self-policing.

If DoD wants us to promote a 440 quiet area around Beale, this can be done by all of us acting as responsible operators or it can be mandated by the Feds, with little to no recourse. I personally would rather take the proactive approach and self-police, than to have some government agency just shut it down. This is the federal government folks. We are just the little people. Let us take advantage of the fact that they are listening, at least for the moment.

#### *Open Options for BARK Repeater Operation*

Given the current situation, the members of BARK have been presented with a *de facto* opportunity to explore the future operational mode of our repeater system. We can make the best out of a bad situation by making some positive decisions as to what to do next. Thus, it is important that you attend the BARK general meeting to provide your input, add your expertise and opinion to the discussion, as to the direction of the BARK repeater system. At the meeting, be prepared to discuss the numerous options available to us, but not limited to: a new 2 meter unit to maximize reliability of the site for general and

emergency use; the installation of a 6 meter repeater; the installation of a 220 repeater; how about a 900 MHz system; do we go digital; is it time to look at some form of internet use; or, some hybrid of the above?

I look forward to a great discussion and hope to see all of you at the meeting.

#### **BARK Directors Meeting, March 10, 2007**

The BARK Directors met in Woodland on Saturday, March 10, 2007, called to order by President Bill Gustavson, KG6GNI. Attending were Vice President Ken Wilson, KI6BWM; Secretary/Treasurer Gary Ford, N6GF; Directors Hal Stoner, WB6KXV; Jack Hendrick, K6JAC; Val Thomsen, W6LED; and member Pete Perata, KA6SHE.

Gary, N6GF, provided a treasurer’s report. He explained that member dues were adequate each year to offset our major annual expenses for electricity and insurance. We have annual income and expenses of about \$800 and we maintain a balance of about \$1,400. Our expenditures are expected to be the same for 2007. While it is good that we are breaking even, this means that we do not have excess funds that we could apply to upgrading our repeater systems.

There was a suggestion that we have a uniform dues collection date. Gary commented that while using the month of initial dues payment as the collection date is somewhat complicated for him to manage, it has been easier for members. If a member wishes to adjust his or her collection date to January, they could pay an additional two dollars per month of adjustment. We agreed that the current process would be continued.

We had a long discussion of capital improvement. Bill presented copies of a draft of a list of equipment owned by BARK, with the thought of estimating both a date and cost of replacement. The directors agreed that our most pressing current need was for a new 440 repeater. We approved a plan to announce on the net and by email that we were taking donations for a new repeater, with the intention of buying and installing a new repeater by late June of this year. Several possible repeater

suppliers were suggested and several directors offered to gather detailed information on specifications and costs. Hal and Jack suggested a Yaesu/Vertex repeater, with the possibility that it would be self-contained with a power supply and battery backup capability. Gary pointed out that an additional battery would be needed, as the current 440 repeater is not on our battery backup system.

Bill announced the creation of a repeater maintenance committee. Jack was asked and he agreed to lead the committee. Jack will recruit four people who would be able to get to the repeater site on short notice to resolve problems. Access to a 4-wheel drive vehicle is needed, due to the condition of the road. Jack will also prepare a short list of items to check during each visit to the site. Bill noted that several groups are gaining access to the road to the site. Ken recommended that we install a lock on the battery box. Bill will look into having a new sign made for the door, with a phone number so that we could be notified by anyone who observed any problems.

Bill provided copies of the executed memorandum of understanding between BARK and Yolo County ARES that had previously been approved. The BARK 2m repeater will serve as the ARES secondary repeater in the event of an emergency.

Bill provided Ken and Gary with copies of the materials in his President's file. Ken reviewed some of the documents to discover that our non-profit status is 503(c)(4), civic leagues or social welfare organizations. As 503(c)(3) is the more common status, we will need to research the conditions and benefits of our status.

We had a short discussion of the possibility of email newsletters and expanded features on our website. Gary will determine the file size quota for our website and see if we are able to run interactive scripts.

### **BARK Directors Meeting, June 2, 2007**

The BARK Directors met in Woodland on Saturday, June 2, 2007, called to order by President Bill Gustavson, KG6GNI. Attending were Vice President Ken Wilson, KI6BWM;

Secretary-Treasurer Gary Ford, N6GF; and Director Jack Hendrick, K6JAC.

Gary, N6GF, provided the treasurer's report, which included a new equipment expense of \$575 for a 440 repeater. This purchase was then on hold due to the PAVE PAWS mitigation study. This cost is balanced by member donations.

Bill provided an updated listing of equipment owned by BARK. We discussed estimates for the service life of this equipment.

Jack reported on the repeater maintenance committee, saying that he had not been successful in finding member volunteers who could travel to the repeater site on short notice to help with maintenance issues. He plans to take a group of members to the site during the summer, as considerable clean up is needed. We need to prepare a checklist of actions that should be taken each time the site is visited. If we need to go to the site in the evening, a trouble light is needed to check on the antenna systems and the batteries. Gary will check on the cost. We discussed key access to the road to the site. Jack will have keys made so that several of us will have keys.

We discussed the status of the 440 repeater. The ARRL is working with the Department of Defense to develop a mitigation plan for the PAVE PAWS radar system at Beale Air Force Base. Given our proximity to Beale, our mitigation requirements may be such that the repeater would not be useful. Thus, Bill put the order for a new 440 repeater on hold. If we have to cancel the order, we would be out the \$100 cost for crystals. In the event that we must eliminate the 440 repeater, we will consider buying a backup 2m repeater.

We discussed the memorandum of understanding between BARK and Yolo County ARES that had previously been approved. The BARK 2m repeater will serve as the ARES secondary repeater in the event of an emergency. The ARES primary repeater is another 440 repeater that is also on the mitigation list. We discussed and approved use of the BARK 2m repeater for an ARES Monday night net.

## 440 Repeater and PAVE PAWS

As mentioned above, the Department of Defense notified ARRL that 440 repeaters in Northern California were interfering with the PAVE PAWS radar (PPR) system located at Beale Air Force Base near Marysville. The Amateur Radio Service is a secondary user in the 420-450 MHz band. As such, Amateur Radio licensees bear the responsibility of mitigating or eliminating *any* harmful interference to the primary user, which in this case includes the DoD PPR systems.

Many hams have questioned why, after years of apparent cooperative spectrum sharing the amateur repeaters have become an interference source. Without revealing any specific details, the DoD confirmed that the system had been upgraded and there had been a re-tasking of its mission. This means that interference that they could previously tolerate was now unacceptable. This fundamental change in the PAVE PAWS mission is what has caused the interference issue to be raised now.

In our case, the DoD determined that it is necessary to see a reduction in signal strength of 33 db from our 440 repeater. They point out that it would be very difficult to achieve this level of reduction. For example, if we were to make no changes in antennas, we would have to reduce our transmit power into the feedline to about 10mW. This would effectively make the repeater useless, so the board has made the decision to leave the repeater shut down.

## Membership News

Since the March 2007 newsletter, we lost seven members while gaining three new or returning members. This reduces the total membership to 49.

New or returning members are:

KI6DCQ	Hope Wolf	Strawberry
W6KJX	Lu King	Davis
W6YOB	Jim Crowley	Middletown

Several memberships have expired since the last newsletter. Please check the mailing label on this newsletter to find your membership expiration

date. If your membership has expired, or will expire soon, the date will be highlighted.

Note that the annual dues are now \$30 for both for an individual or a family membership. Please send renewal checks, made out to BARK, to Gary Ford, N6GF, at the return address on this newsletter. If I do not receive your dues by early June, I will send a reminder.

You are encouraged to invite other hams to join the club. Just have them send their dues to the return address on this newsletter and to provide their name, address, and call sign.

## Treasurer's Report, September 11, 2007

Balance 7/07	\$1,684.78
Income:	
Dues	\$117.00
Swap	\$0.00
Patches	\$0.00
Miscellaneous	\$0.00
Expenses:	
Operating	\$64.26
New Equipment	\$0.00
Correspondence	\$0.00
Bank	\$36.05
Resale	\$0.00
Miscellaneous	\$0.00
Current Balance	\$1,701.47

As you can observe from the table above, there was little financial activity over the past two months. The operating expenses were electricity bills. Bank expenses included new checks, something that we need about once every ten years.

**BARK Membership Roster  
September 2007**

<b>Callsign</b>	<b>Name</b>	<b>Address</b>	<b>City</b>	<b>Zip</b>	<b>St</b>
KI6ATE	John Gustavson	1339 Harley Way	Folsom	95630	
W6BEM	Ed Lar Rieu	1753 Orion Way	Sacramento	95864	
N6BHX	Jim Brunk	514 Palms Dr.	Martinez	94553	
KA6BTU	Cliff Simes	P.O. Box 906	Dixon	95620	
KI6BWM	Kenneth Wilson	637 Fairview Drive	Woodland	95695	
KI6BZR	Bob Jordan	36588 County Road 21	Woodland	95695	
KA6CSG	Rex Mathews	2332 Edinburgh Drive	Elverta	95626	
KI6DCQ	Hope Wolf	P.O. Box 134	Strawberry	95375	NM
N7DTW	Sam Bledsoe	18080 County Rd 70	Brooks	95606	
K6FLA	Fred Anderson	12296 Stone Canyon Ct.	Paradise	95969	
N6FYM	Bill Warren	1901 University Ave.	Sacramento	95825	
N6GF	Gary Ford	226 Diablo Ave.	Davis	95616	TR
KG6GNI	Bill Gustavson	1733 Tehama Dr.	Woodland	95695	
KF6IMS	Mike Bruss	24524 Co. Rd. 95	Davis	95616	
W6ION	Ione Hendrick	19409 Co. Rd. 93	Woodland	95695	
K6JAC	Jack Hendrick	19409 Co. Rd. 93	Woodland	95695	
W6JJC	Jack Chechowitz	9792 Red Cedar Circle	Sacramento	95827	
W6KJX	Lu King	3344 Chesapeake Bay	Davis	95616	NM
N6KLB	Rick Littlefield	1709 Bidwell Place	Woodland	95695	
N6KMH	Carl Valdrow	1136 Princeton Place	Davis	95616	
WB6KXV	Hal Stoner Jr.	8320 Cranford Way	Citrus Heights	95610	
KM6LC	Harvey DeBoer	2701 Klamath Dr.	Rocklin	95765	
W6LED	Val Thomsen	2562 Stoney Creek Cir.	Acampo	95220	
N6LGE	Jean Brunk	514 Palms Dr.	Martinez	94553	
KE6MBL	James Robb	1313 Sequoia Pl.	Davis	95616	
KF6MD	Dale Lingenfelter	1951 Grand Pheasant Ln	Lincoln	95648	
W6MMG	Alex Newbold	2712 Belmont Cyn	Belmont	94002	
K6QDC	Al Lindquist	808 San Tomas	Davis	95616	LM
N6QOX	Sue Littlefield	1709 Bidwell Place	Woodland	95695	
WA6QPU	Mary Ann Harral	P. O. Box 175	Bethel Island	94511	
W6QPV	Rose Jolly	4618 Crestridge Rd.	Fair Oaks	95628	
KF6QZB	Jason Littlefield	1709 Bidwell Place	Woodland	95695	
W6RLT	Robert Tate	235 Hollow Oak Drive	Cohasset	95973	
KE6ROR	Doreen Appert	P.O. Box 222	Dunnigan	95937	
W6RWI	Jim Jolly	4618 Crestridge Rd.	Fair Oaks	95628	
KA6SHE	Pete Perata	50 Cora Court	Walnut Creek	94596	LM
KG6SJT	Gregory Kruckewitt	3344 Chesapeake Bay	Davis	95616	
KF6SML	Mark Anderson	7100 Shoreline Dr. #42	Stockton	95219	
KG6UEY	Bill Gustavson	1733 Tehama Drive	Woodland	95695	
WA6UIM	Barry Lar Rieu	P.O. Box 2966	Gardnerville, NV	89410	
K6USS	Robert Kawahara	3621 Forni Road	Placerville	95667	
KF6VFF	Eric Bergstrom	5019 Combsville Rd.	Napa	94558	
AB6WB	Damian Appert	P.O. Box 222	Dunnigan	95937	
KC7WCE	Zola Bergstrom	7600 Knoxville Rd	Napa	94558	
WB6YCL	Harry Fredericks	22375 Co. Rd. 88	Winters	95694	LM
KC6YFG	David Nishikawa	39938 Sharon Ave.	Davis	95616	
WB6YNM	Al Harral	P.O. Box 175	Bethel Island	94511	
W6YOB	Jim Crowley	12175 Mead Rd.	Middletown	95461	NM

NM: New member since April 2007; LM: Life member; TR: Trustee

**BARK Repeater**

Band	Input	Output	PL in/out
2m	146.37	146.97	123.0/123.0

**Weekly Net:** BARK Tuesday Night Net:  
Tuesdays, 7:30pm local time, net control  
rotating.

**BARK Website:** [www.bark2m.com](http://www.bark2m.com)

**Proxy Form**

I, \_\_\_\_\_ hereby appoint \_\_\_\_\_  
(name and call) (name and call)

as my agent with full power of substitution for me and in my name, place, and stead, to attend the annual meeting of Berryessa Amateur Radio Klub ,and any adjourned meeting thereof, and thereat, as my proxy to vote upon all matters coming before such meeting the same as I could if personally present.

Signature \_\_\_\_\_ Date \_\_\_\_\_

BARK Newsletter  
c/o Gary Ford, N6GF  
226 Diablo Ave.  
Davis, CA 95616