



www.marc-radio.org

PO BOX 2154
SOUTHEASTERN, PA
19399-2154

REMARCS

July 2007

MARC BOARD MEETING HIGHLIGHTS

The MARC Board held a meeting earlier at Paoli Hospital (Willistown Meeting Room) on June 19th at 7:30 PM EST.

The following Board members were present: **Bob N3JIZ**, **Dennis K3DS**, **Dieter K3DK**, **Ed KB3JGU**, **Foster K3FXS**, **Jim W3DCL** and **Lou WX3I**.

The items below were discussed:

Treasurer's Report: **Dieter K3DK** reported that the MARC bank balance in June was \$15,324.01, expenditures were \$378.88 and, deposits were \$48.16.

Membership Services: **Jim W3DCL** will contact former MARC members that have not renewed with the club.

Hamfest/Kimberton Fair: **Mike KF3CD** still needs volunteers for assisting at the Kimberton Fair. Board members reviewed the schedule and possible contacts to call for additional help. **Dennis K3DS** proposed giving a few free MARC memberships as door prizes at the upcoming hamfest. The drawing of these particular door prizes must be done only for those that are attending and interested in winning a membership. The Board agreed on this.

Field Day: On June 5th, **Dennis K3DS**, **Dieter K3DK** and **Ron W3ZV** met with **Bill Coffey** from Verizon at the training field in Audubon to discuss the site layout. Most of the poison was gone from the field thanks to treatments by Verizon's landscaper. Some extra chairs and a table may be needed for Field Day and a tent would be purchased to replace one of the old ones that was discarded after last Field Day. All necessary paperwork was filed with Verizon.

Upcoming General Membership Meetings: On **July 17th**, **Dieter K3DK** will do a presentation and show a few short videos of the 2007 Dayton Hamvention that he attended earlier in May. The **August 21st** meeting will feature a video on the 3Y0X Peter I Island DXpedition and their operations in Antarctica.

Traffic Nets: The club has lost one of its net control ops due to his busy schedule. It was proposed that one of the traffic nets may need to be eliminated. Net Manager **Lou WX3I** will follow up in that area.

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THANKS TO K3RIZ!

We would like to thank **Ray Kiesel K3RIZ** for his fantastic May presentation on a Navy communications installation in Iceland from 1971.

Ray had a number of interesting slides and diagrams that showed the transmitters, amplifiers, etc. and the enormous rhombic antennas that were utilized at this installation in the "Land of Fire and Ice".

Ray also used one of the big rhombics for his HF amateur station and made many arm-chair copy contacts with hams that were state-side and elsewhere on the globe'.

Additionally, he gave a brief and informative primer on the developments concerning digital television prior to his main presentation. Thanks again Ray!

VOX

Four new members have joined MARC. Please welcome **Anthony Bucciarelli N3ANT**, **Nicholas Strauss KB3OEP**, **Fred Eicholtz N3IF** and **Kristin Greenberg KF4ZOH** !

Thanks to **Josy WQ3E** and **Phil KB3MAW** for distributing our MARC hamfest flyers earlier at the Warminster hamfest.

Will KB3IEL is now **K3WIL**. **Susan K3SUE** was fortunate enough to work the BS7H DXpedition in Scarborough Reef, in the South China Sea. Back in May, **Lou WX3I** drove across the mid-west in search of tornados. Ask him about his awesome experiences.

Special Note: As most of you may know, **Carter N3AO** had major surgery earlier in May and had a mass removed from one of his lungs. Fortunately, the surgery went well and the pathology report indicated that the mass was non-cancerous (i.e. benign). **Carter** and **Kay N3KN** both send their heartfelt thanks for all of your calls, letters, cards and prayers.

It has been a gradual and at times, painful road to recovery for Carter – take 2 steps forward... take 1 step back'. Many thanks and acknowledgement apply to his dedicated wife **Kay**, family and the doctors that have been directly involved with his ongoing recovery. He is making progress.

UPDATE: Carter has stated that he will make the long trip up to PA and will be present at the upcoming MARC Hamfest on July 15! He will be around briefly, from about 9-10 AM and will lead the Roosters with their 10 AM crow-in!

BOARD MEETING HIGHLIGHTS - continued from page 1

MS-150 Event: The Multiple Sclerosis 150 mile bicycle riding event is still on track according to **Lou WX3I** (assistant coordinator) and he is assisting MS Event Coordinator **Carmen KE3QB** with this event. Other MARC members are also assisting with this upcoming event in September and more assistance is still needed.

MARC Website: The website is still in need of updates and **Foster K3FXS** is working on that issue. Joomla software and its intricacies are not well known by most webmasters, so there is a learning curve there. New MARC member **Kristin Greenberg KF4ZOH** has expressed an interest in assisting with the website. **Dennis K3DS** also suggested the possibility of eliminating Joomla. So noted.

Public Service Events: **Bob N3JIZ** noted that there was a sparse showing of volunteers (2) for the MS 5 K Run held earlier at West Goshin Park – 2 MARC volunteers didn't show up as scheduled. The other event was the Radnor Memorial Day Parade and a nice showing of eight MARC volunteers was most helpful. If volunteers offer to assist with a public service event and fail to show up, it hurts our effectiveness at assisting with the event as promised and places MARC in a poor light'.

Possible HF MARC Net: **Ed KB3JGU** stated that he's interested in establishing a 75 meter phone net. He is looking for suggestions on frequency and times.

AMATEUR LICENSE EXAMS

Bob Lees W3ZQN reported the following stats for the last amateur test session: 2 Technician, 6 General and 2 Extra licenses were granted. A total of 12 candidates were served and 12 elements given (2 of the elements failed). 3 MARC members took advantage of their free test session.

Thanks to the following Volunteer Examiners that assisted with this test session: **Bob W3LIA**, **Dick K3ITH**, **Susan K3SUE**, **Walter WA3PPW**, **Bob W3ZQN**, **Ron W3ZV**, **Bob KA3NIQ**, **Paul NX3Q** and **Dennis K3DS**.

The next test session will be held on August 4th at First Presbyterian Church in Bryn Mawr, PA. You MUST contact **Bob W3ZQN** first, via 610 265-6032 or RJLees@AOL.com if you want to take a test at the next session.

RADNOR MEMORIAL DAY PARADE

Our Public Service Chairman **Bob Palin N3JIZ** reported a nice showing of MARC volunteers and good weather for the annual Memorial Day Parade that was held in Radnor.

This is one of the largest public service events that the club has been assisting with for many years and the township greatly appreciates our assistance. **Ray KB3NFE** drove his spotless, black SUV in the parade as the MARC float. His wife **Lori** and their sons **Brandon** and **Ethan** rode in the truck and did a great job representing MARC in the parade [see photo on next page].

Thanks for everyone's assistance and, thanks to Bob for organizing and running net control [see photo below of volunteers].



From left to right: Bob N3JIZ, Beth KA3GKI, Floyd KA3OXA, Will K3WIL, Ray KB3NFE, Bob W3ZQN, Dieter K3DK, Alex KA2VLP and Ned WQ3Z (kneeling)

MARC INFO

[HTTP://WWW.MARC-RADIO.ORG](http://www.marc-radio.org)

MEMBERSHIP MEETINGS:

3rd Tuesdays, 7:30 PM
Tredyffrin Twp. Bldg.
Berwyn, PA – Guests Welcome
Smoke Free, Handicapped-accessible

BOARD MEETINGS:

2nd Tuesdays of even months, 7:30 PM (Willistown Room)
Paoli Hospital, Members may attend as observers.

WB3JOE REPEATERS (CTCSS or PL = 131.8 hz):

145.130 - / 147.060 + / 224.420 - / 445.675 -
Dennis Silage K3DS is trustee for WB3JOE.
The 2 meter repeaters are linked.

WEBMASTER:

Foster Schucker K3FXS k3fxs@arrl.net 302-363-7347

MARC BOARD:

PRESIDENT / VICE PRESIDENT / PUBLIC RELATIONS
(Above positions are open)

TREASURER

Dieter Hauer K3DK dhauer@gis.net 610-489-1920
Trustee for W3NWA.

SECRETARY

Ed Oswald KB3JGU kb3jgu@arrl.net 267-241-9067

PUBLIC SERVICE

Bob Palin N3JIZ 610-687-4587

TECHNICAL

Dennis Silage K3DS silage@temple.edu 610-353-4829

MEMBERSHIP SERVICES CHAIRMAN

Jim Biddle W3DCL w3dcl@arrl.net 610 353-0880

MEMBERS-AT-LARGE

To 9/30/2008 -

Lou Ruh WX3I lou@wx3i.net 610-630-9146

To 9/30/2007 -

Foster Schucker K3FXS k3fxs@arrl.net 302-363-7347

NETS

- Club Net, Sunday, 8:30 PM
- Traffic Net, M/W/F, 8:30 PM
- Roundtable, Thursdays, 8:30 PM
Net Manager: Lou WX3I lou@wx3i.net 610-630-9146
Nets occur on linked 145.13 R / 147.06 R

DUES

\$15 Full (licensed Amateurs)
\$5 Associate (unlicensed persons)
Family rate \$5/ham (after first member pays full dues)

NEWSLETTER

The REMARCS editor is Dieter K3DK.
610-489-1920 dhauer@gis.net
Do you have anything for REMARCS? Please let me know.

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Ray Jones KB3NFE [in driver's seat] with wife Lori and sons Brandon [holding pinwheel] and Ethan in the 2007 Radnor Memorial Day Parade.



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Getting Started in QRP and Other HF Tidbits by Bob Woish, WR3K

Last time I hoped to stir up some curiosity toward QRP operation. It looks like this is a subject that some MARC members have pondered – I received several emails regarding the subject, and a 2-meter QRP and HF operating info net has been suggested. Let me know if this would interest you. Thanks to those who wrote! This time let's talk about getting started with QRP, or HF operating for that matter if you have yet to explore the world between 3 and 30 MHz.

All HF bands, and elsewhere in the radio spectrum, are used for QRP. In fact, if you've ever used a 2-meter HT to participate in club nets, guess what, you're already a QRPer! And if you operate simplex, all the better, you've done it without the range-boosting power of a repeater. Don't you think it's kinda cool that you can fire up a small palm-sized radio and converse with someone many miles away? I once worked the Easton-Bethlehem machine from here in Plymouth Meeting using 350 mW (a tad over a third of a Watt) and my homebrew 4-element 2 meter Yagi sitting in the attic. I had no trouble holding the QSO for ten minutes. But what if you could fire up a similar sized and powered radio and work Michigan? Germany? Africa? That's where HF comes in.

*I once worked the Easton-Bethlehem
machine from here in Plymouth Meeting
using 350 mW.*

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Getting Started in QRP and Other HF Tidbits

Let's take a look at the fast track to HF QRP so you can try your hand. Most commercial HF transceivers manufactured during the last 30 years or so already employ some method of controlling output power. My Kenwood TS-440S, for instance, has an RF Out control that can be cut back to QRP levels. This is very common for a broadband solid-state rig. Even the older tube or hybrid rigs (solid state driver with tube finals) can be throttled nicely using the loading control. Simply tune up as usual, then reduce the loading knob until you measure under five watts. Granted, many of the advantages of QRP that I mentioned last month are short cut using a full-power rig in this way, but I did say fast track! And I will be delving into commercial and home-brew QRP-specific gear next time. For now, let's get you running...

Now that you have your faux-QRP rig tuned and ready, you'll need to know where to operate. QRPers are eager to work other QRPers and generally hang out on certain QRP calling frequencies. Although there are a few others, the major HF QRP calling frequencies are listed below:

80M – 3.560
40M – 7.040
30M – 10.106
20M – 14.060

And for good measure – the QRP calling frequency for 2M is 144.060, should you want to try some simplex QRP CW on VHF.

My favorites are 7.040 and 10.106. 40 meters and 30 meters are very QRP-active. Our friend Carter Craigie N3AO, tends to hang out around 7.043 +/- QRM, running QRP. You might give a listen!

These two bands are easy to work, open during both day and nighttime hours, and very antenna-friendly. It's simple to construct a basic center-fed dipole for either band. 30 and 40 are excellent places to start. For a 30-meter dipole, center feed a 46-foot, 4-inch length of wire (12 to 24 gauge, depending on how visible or invisible you want your antenna to be) with RG-8, RG-58, or other 50-Ohm feedline. I like RG-8X – it's inexpensive, easy to work with, and at these frequencies, low loss. Your antenna will measure 23 feet 2 inches per side. If possible, drop the ends (but no lower than about 10 feet off the ground if possible) to create an inverted V, which is 50 Ohms and will match the feedline and transceiver output. For 40 meters, 66 feet 6 inches total length (33 feet 3 inches per side) will do the trick. Keep in mind – dipoles, including the inverted vee variety, are very forgiving. They can be bent, routed around obstacles, etc. and still maintain resonance and yield very good performance.

So now you're tuned up, set for five watts or less, connected to your antenna, and listening on one of the above mentioned frequencies. How to make a contact?

The best first approach is to *listen*. Tune in any station near your QRP frequency and copy. Once the QSO is over, you can call either of the two stations you've been listening to. The advantage here is that you already know someone is tuned to this frequency, and will certainly notice his or her own call sign being beckoned, even if the operator is filling out a log, or whatever. This technique is called *tail-ending* and has proven to be very successful.

Another way to make contact is, of course, calling CQ. This does require a bit of patience, since many stations copying your signal at a distance may doubt the ability of their own equipment to make the trip to such a "distant" station. What they don't realize is that distance is not the reason your signal isn't blasting their receivers, and you will have no trouble copying them. It is often helpful to sign (in my case, for example) CQ CQ CQ de WR3K/QRP. This tells any operators on frequency that I am running low power, in the same way that one might call CQ de WR3K/M for mobile operation, or CQ de WR3K/1 if I were calling from New England. What follows the slash tells other operators something about *my* station.

This is different, of course, from calling CQ QRP CQ QRP CQ QRP de WR3K, which means I am calling for *QRP stations only*. In fact, I don't have to be running low power on my end to make contact with a QRP station! This transmission would be similar to calling "CQ DX," meaning you are only interested in DX contacts, or "CQ FL," meaning you are looking to work Florida. You don't have to be in FL to call CQ FL – by the same token you don't have to be a low-power station to call CQ QRP, or even qualify for some QRP awards! (See the April issue of ReMARCS.).

QRPers are eager to work other QRPers and generally hang out on certain QRP calling frequencies.

To combine both – say if I was looking for a *two-way* QRP contact – I could call CQ QRP de WR3K/QRP. That says it all! Too confusing? Just call CQ until you get the hang of it. In any case, you'll be pleasantly surprised at how your log book will fill up, and at the signal reports you will receive. Triple the fun factor for homebrew equipment! For those of you who would like to experience the thrill of HF operating with your own homegrown rig, tune in next time! A club project may also be in store, depending on interest. Until then, here's wishing you many sunspots.

**72,
Bob, wr3k@aol.com**

FROM THE EDITOR'S SHACK

By Dieter Hauer K3DK

This past spring and now summer have been very busy here on the homefront. In May, one of the events that I attended was the annual Dayton Hamvention. My selected mode of transportation was the KC2Q Bus Trip that was hosted by Mike DiPersio, and we experienced an "interesting trip" on our way to Dayton.

There are always interesting people and things to see at Hamvention, and, as they say... "variety is the spice of life".

Some aliens invaded the event and charmed the hearts of strangers... Meanwhile, other attendees were not afraid to show their wild side.



And, let's not forget the main reason for being at Hamvention. **RADIOS!** Plenty of neat variety there too!



I'll be presenting more about Hamvention 2007 at the upcoming MARC meeting on July 17th. Stay tuned.

NOTE -

In the past, REMARCS was published every-other-month (on odd months). Unfortunately, due to career demands, etc. I will have to revert to publishing REMARCS on the odd months. The goal is to ensure that this newsletter has something that is ham-centric, informative, useful and appealing for most. Remember, this is your newsletter and your input and contributions are always appreciated.

MARC FIELD DAY 2007

The ARRL sponsors its annual Field Day event on the fourth full weekend in June.

This year, Field Day started off on a bit of an ominous note. Yours truly was supposed to meet **Ron W3ZV** at the club's storage locker in Oaks so we could retrieve the club's HF yagi antenna, haul it out to the Field Day site a day early and do some assembly and much needed tuning on the elements.

Sadly, things didn't work out as planned. The core lock for the storage locker's rollup door was frozen solid with rust. No amount of jiggling with the key would do anything!

The operator of the storage locker site was present and didn't have an answer either – "We could drill out the lock on Monday morning... is that okay?"

NO! He relented and assured us that he'd have the locker open first thing on Saturday morning.

Incredibly, no one had a can of WD-40. So much for tuning up the yagi!

An hour later, **Ray KB3NFE** met me at the locker – with special tools (blow torch, etc). One way or another, we were going to get our stuff out! As it turned out, a nice blast of WD-40 got the lock operating smooth as warm butter and it was decided that the yagi could be tuned up on Field Day. Good enough.

Smile as the gods were watching, because the weather that followed on Saturday and Sunday was gorgeous. Saturday had crisp conditions with temps in the mid-high 70's with a slightly overcast sky and no rain. Sunday was a bit warmer and very sunny. This also made up for the incredible rain storm that we had endured at times last year.

We ended up running a 2-Alpha configuration. This was comprised of 2 HF stations and one VHF station. One station was dedicated for HF phone and the other for HF CW operations. The HF antennas were an 80 meter dipole, G5RV and the 3 element yagi.

A single, free VHF station is allowed according to the rules, so up went the 6 element, 2 meter quad on one mast and a 4 element, 6 meter quad on the other mast.

Bill Coffey (from Verizon) was on-site with both trucks as promised and worked with **Bill KN3EUF** and **Bob N3JIZ**. **Ray KB3NFE** was thoughtful and resourceful enough to bring his powerful weed wacker for the high grass that was present. **Josy WQ3E** exercised surgical precision in using the weed wacker to trim the grass around the tents.

MARC's Field Day captain was **Dieter K3DK** and the co-captain and safety officer was **Bill KN3EUF**. **Ray KB3NFE**, **Alex KA2VLP**, **Ron W3ZV** and **Bob N3JIZ** were a big help with their trucks in hauling items from the storage locker to the Field Day site. Others were also involved with transporting items.

Other helpers that assisted with tents, antenna assembly and installation etc. were: **Dennis KA3QOT**, **Yak N3MQM**, **Josy WQ3E**, **Dan KA3KHR**, **Alex KA2VLP**, **Bob N3JIZ**, **Mitch W2MBH**, **Ron W3ZV**, **Bill KN3EUF**, **Steve KD3WK**, **Bill WB3EKY**, **Lou WX3I** & **Sam KF3G**.

Mike KF3CD and **Steve KD3WK** grilled some hot dogs and hamburgers for the hungry workers. **Lou WX3I** made a food-run at the nearby Giant prior to the cook out.

HF Phone operations were initially headed up by **Mitch W2MBH** and he came with a self-contained setup + a borrowed van. **Ned WQ3Z** and friend **Vicki Lightcap** also operated on HF phone as did **Ed KB3JGU** late into the evening hours.

MARC FIELD DAY 2007 - continued from page 5

HF CW operations were done by **Josy WQ3E** and **Dieter K3DK** in a new tent that the club recently purchased.

The VHF tent was active on 6 meters and 2 meters with **Alex KA2VLP** and **Bob N3JIZ** manning the radio.

FYI – Alex’s son **Aden Montare** did us the honor of scoring 20 bonus points when he made an HF phone contact on Sunday morning as a youth operator. Thank you Aden!

Oops!! Something else occurred unexpectedly this Field Day, besides the locker issue... The 5 KW generator conked out on us at 3:00 AM, Sunday morning. **Bill KN3EUF** peeked at the trucks fuel gauge and determined that we had run out of gas. The rotator for the 6 meter quad also failed, so strong arm methods had to be used to turn the quad.

At this point, we decided to give it a rest and called **Bill Coffey** later, at a more reasonable hour of 7:00 AM. He instructed us on how to use the other generator (on the bucket truck).

Back in business and the QSO counts resumed upward. Our scores did suffer because of this, but keep in mind that this can and does happen under temporary, emergency conditions. Isn't that part of what Field Day is about?

Other club members visited during Saturday and part of Sunday and some acquaintances were renewed. **Red W3RED** made an appearance and a few hams from down south also stopped by to chew the fat and inspect our setup.

Please see the following pictures of Field Day 2007. Many thanks to the photographers for these pictures.



Installing the 6 meter quad – photo by Dennis KA3QOT

A lot of hard work went into high-quality antenna installation. Especially, regarding the VHF quads and the 3-element HF yagi that was given special TLC and a fine tune up.

Ron W3ZV brought his antenna analyzer which helped to verify proper adjustments on the yagi.



Our new tent [CW station] – photo by Mike KF3CD

MARC FIELD DAY SCORE –

Below is our score. Band conditions were initially poor and affected our ability to make contacts. Ten meters was pretty dead and 15 meters could've been in better shape too. Eventually, conditions did improve somewhat, but only about halfway into the event.

THANKS TO ALL THAT PARTICIPATED!

BAND # Phone QSOs # CW QSOs

80 M	241	83
40 M	69	13
20 M	212	60
15 M	43	0
10 M	1	0
6 M	35	0
2 M	<u>10</u>	<u>0</u>

Totals = 611 156 (x2 CW multiplier)

Total QSO Points = (611 + 312) x2 (multiplier) = 1,846

Bonus Points = 470

FINAL SCORE = 470 + 1,846 = 2,316 Points

MENTORING SERVICE

Mike KF3CD and **Ron W3ZV** have expressed an interest in mentoring any club members that are getting started in amateur radio or, are getting involved with HF or setting up a station for the first time, etc. They are interested in providing any helpful advice and tips.

Here is their contact information: **Ron W3ZV** at 610 666-6828 or w3zv@comcast.net and, **Mike KF3CD** at 610 935-4429 or kf3cd@arrl.net.

UPCOMING CLUB MEETINGS

July 17th, Dieter K3DK will give a presentation on the 2007 Dayton Hamvention that he attended. Some video clips will also be shown.

August 21st, A video will be shown on the 3Y0X DXpedition and their challenging operations that took place on Peter I Island in the Antarctic.

WAS Gets a New Look



(Jun 14, 2007 – ARRL HQ) -- Radio operators applying for the ARRL Worked All States (WAS) award will now receive a handsome, newly-designed certificate, sure to be a nice attraction to the ham who enjoys chasing awards and displaying prizes in the shack. The WAS Award is available to all amateurs worldwide who submit proof with written confirmation of having contacted each of the 50 states of the United States of America. The WAS Awards program includes 10 different awards and endorsements. Complete details, rules and applications for WAS can be found here on the ARRL Web site www.arrl.org. Those who already hold a WAS award can get the new style certificate issued to them at a cost of \$10. Contact ARRL Awards Manager, Eileen Sapko or 860-594-0288.

KIMBERTON FAIR

There are still 3 shifts open at the Kimberton Fair that MARC agreed to assist with (1 for a ticket seller and 2 for parking duty).

If you can help, please do not hesitate to contact **Mike Pilotti KF3CD** ASAP at 610 935-4429 or kf3cd@arrl.net. We really need help in this area and some club members are already working 2 shifts.

If we can pull this off, then the club will save \$900 on the rental of our hamfest site.

Mt. Airy VHF Radio Club Sponsors Major Event

MICROWAVE UPDATE 2007

The Microwave Update 2007 is to be held October 18, 19 and 20, 2007. This replaces the Mid-Atlantic States VHF Conference and is a major international event for the VHF Community. Reserve your spot now.

Call for Papers - Microwave Update 2007. Any topics related to microwave theory, construction, communication, deployment, propagation, antennas, activity, transmitters, receivers, components, amplifiers, communication modes, Laser and practical experiences are welcome. Abstracts should be submitted by June 1, 2007 and completed papers and articles by August 15, 2007. Please submit articles and abstracts to W2PED pdrexler@hotmail.com or N2UO lu6dw@yahoo.com in MS Word or in PDF format. Diagrams, photos and illustrations should be in black and white. Hard copies may be mailed to;

Paul Drexler, W2PED
28 Squan Rd.
Clarksburg, NJ 08510

Hosted by the Mt. Airy VHF Radio Club detailed information and registration can be found at: www.microwaveupdate.org.

Registration, proceedings and Banquet until 9/1/2007 is \$79.00. From 9/1 until 10/1/2007 the cost will be \$89.00. 10/1/2007 and after the cost will be \$99.00.

The hotel (The Inn at Valley Forge - formerly Hilton Valley Forge) conference rate is \$92.00 + tax per night. For hotel reservations call 1-866-795-1995. Be sure and mention "Microwave".

Any questions should be directed to the event chairpersons; Phil@k3tuf.com or kb3hcl@arrl.net.

-END

73, Eric, WB3FPL

ARRL Eastern Pennsylvania Section
Section Manager: Eric D. Olena, WB3FPL
wb3fpl@arrl.org

MARC HAMFEST – JULY 15th !!

Don't forget and bring a friend, family member or a fellow ham. MARC members may have their radio gear sold at the club table. Just remember to settle up and pick up any unsold gear by 12 noon'. No dumping at the Fairgrounds.

The hamfest is open to sellers at 7 AM and to buyers at 8 AM. \$6.00 Admission fee and free parking – tailgating is additional \$6.00 and indoor table is \$10.00/table (plus adm. fee).

You could assist with setup on Saturday, July 14th – starting at 11:00 AM. We also need volunteers to assist at the Hamfest on Sunday, July 15th. Please see **Mike Pilotti KF3CD** if you can help.

Mid-Atlantic ARC
P. O. Box 2154
Southeastern, PA 19399-2154

BULK RATE
US POSTAGE
PAID
PERMIT NO.
00000

Mailing Address
Street Number and Name
City, State xxxxx-xxxx