



MARC Times

Newsletter of the Murgas Amateur Radio Club and K3YTL

Volume XXIV Number 5

May 2012

President

Bob Michael N3FA

Vice-president

John Mehalick W3MTP

Secretary

Elaine Kollar K3VQR

Treasurer

Herb Krumich K2LNS

Board of Directors

Rick Bunton KB3MIS

Bob Folmar KB3VS

Rich Manta N3TDE

Rick Rinehimer K3TOW

Bill Sweeney KB3KUJ

Newsletter

Editor

Ron Hillman N3KGC

Publisher

George Wiencek N3WV

WEBMASTER

Rick Rinehimer K3TOW

www.murgasarc.org

Librarian

Rick Bunton KB3MIS

Club Station – K3YTL

Trustee Bob Michael

Club Repeater

145.450 PL 82.5

Packet - WBLAN

145.05

MARC NET

Every Thursday 9pm

Club Repeater

145.450/PL 82.5

The Murgas Amateur Radio Club meets on the first Wednesday of each month, 8:00 P.M. at the PPL Business Center at 1190 East Mountain Blvd near the intersection with SR 115 in Wilkes-Barre, PA. Guests are always welcome. Articles for publication may be submitted to the club post office box, given to me at a meeting, or sent by e-mail to news@murgasarc.org.

de N3FA

First on the agenda for May is the Fox Hunt May 6, Sunday after the meeting this month. There are hamfests listed in the news letter that need to be hit with our fliers. Might I mention there is only 2 months left to go before our hamfest.

Hopefully we will make a trip up the mountain to put K3YTL on the air in June after our absence last September for the flooding conditions. We really can use some bodies for relief as well as teardown even though we probably will not be putting up our full complement of antennas. Most of us who still go up there, with little support from the locals, who only operate repeaters, are getting old.

More on the mountain and Field Day next month which I refer to as the crazy month with too much to do with not enough time to do it. We need fliers delivered to Wrightstown which is the day of our Fox Hunt. If you are not hunting, do something for the club. I was running late this month and I got an e-mail from our editor saying I need it now so this is all you get.

HAMFEST FLIER LITTERING RUNS!

These need to be littered with our fliers this month!

- **May 6** - Warminster Hamfest Warminster Amateur Radio Club Wrightstown <http://www.k3dn.org/hamfest.htm> Talk-In: 147.09 & 443.95 (PL 131.8)
- **May 12** - GSARA Hamfest Garden State Amateur Radio Association Trenton Falls NJ <http://www.gardenstateara.org> Talk-In: W2NJR Link System & 147.045+ (67.0)
- **May18-20** - DAYTON
- **May 26** BARA Spring Hamfest Bergen Amateur Radio Association Washington, NJ <http://bara.org> Talk-In: 146.19/146.79 (PL 141.3)
May 27 - Memorial Day Hamfest Maryland FM Association West Friendship, MD <http://www.marylandfm.org> Talk-In: 146.76, 224.76, & 444.00 (PL107.2)
- **June 9** (date change) - Skyline ARC's Summer Hamfest Skyline Amateur Radio Club Cortland, NY <http://www.skylineradioclub.org> Talk-In: 147.180 +600 (PL 71.9)

The Annual Fox Hunt

The Annual Fox Hunt will take place on Sunday, May 6th rain or shine with the fox being activated at precisely 12 NOON. Participants are encouraged to check in (so the fox isn't waiting for no shows) prior to hunting from 11:00 AM on the K3YTL 145.450 Club repeater.

The playground is as follows: Predominately middle of the Wyoming Valley with the boundaries being:

To the north: Starting in West Pittston, the back Road in Exeter, West Wyoming, Swoyersville, Kelly St in Luzerne, Courtdale Ave through Courtdale, E and W State Sthrough Larksville, all of Plymouth, south on Route 11 stopping at the South Cross Valley (SR 29). To the west: SR 29, (South Cross Valley)

To the south: SR 81 To the east: West Pittston Boro, Pittston using William St as a boundary, Yatesville and Laflin Using SR 81 as a boundary. A detailed map will be

forthcoming if hair splitting is needed.

Mr Joseph BETZ (KF3DI) and Mr Tony DENNIS (KB3PKW) will be presenting a program at the May 2nd about Fox Hunting and demonstrating the Fox and several pieces of Fox Hunting equipment. Also Bob, (N3FA) will re tell the story of how fox hunting caught a criminal who stole and transmitted on an HT.

Interested members and non-members may contact Mr Joseph BETZ at the following e-mail:

kf3di@ptdprolog.net

Tpr Ronald S. Zukosky N3VTH

Let's Go T-Hunting by Joe Moell KØOV

VHF/UHF enthusiasts often install yagis and quads at their home stations. Many take them out on camping trips and use them on public service events. But did you know that some enjoy flying the freeways and beating the back roads with one hand on the steering wheel and the other on a rotating antenna mast?

Perhaps you have seen these hams on weekends, intently driving and turning their beams. What are they doing? They are competing in hidden transmitter hunts.

If you've never experienced one of these mobile radio direction finding (RDF) contests, you have missed some of the greatest excitement a ham can have. While there are several names for it such as "fox-hunting" and "bunny chasing," in southern California this sport is almost always referred to as "T-hunting."

Transmitter hunting seems to be one of the best kept secrets in ham radio, even though dozens of hams here consider themselves to be regular hunters. They range in age from the teens to the eighties. Besides keeping the coordinated two-meter hunt frequency (146.565 MHz FM) hopping, some hunters love to hash over their exploits by the hour on their favorite repeaters.

The idea is simple: One or two hams take a transmitter, antenna, and some sort of distinctive audio source to a carefully selected spot, then make continuous or intermittent transmissions. Usually they remain stationary, though mobile "bunnies" are popular with some groups. Sometimes there are more than one "T" to be found. Surplus ammunition cans are often used as hidden transmitter enclosures. The hunters, as individuals or in teams, do their best to home in on the hidden station(s) with their mobile and portable RDF gear.

Fun, But Beneficial

T-hunters think their events are more fun than any other ham contest. You get to meet and socialize with your competitors both before and after the event. Usually, you'll find out your score and how well you placed before you go home. You may encounter your competitors along the way, with opportunities to try to "psych them out" or misdirect them. (Hence the southern California maxim: "Never trust anything said by a T-hunter or hider.")

"Techies" like the thrill of finding the hidden T with gear they made themselves. They relentlessly work to improve their setups. Mystery lovers and dyed-in-the-wool contesters love the challenge, because every hunt is a fresh start to a new adventure. Your past performances are forgotten. It's just your team and your equipment against today's hider and the other hunters.

At some point, every ham will find knowledge of RDF techniques useful, because it simplifies such chores as finding a neighborhood source of power line interference or TV cable leakage. T-hunters here frequently are called upon to track down sources of "spurs," intermodulation and noise that can plague amateur (and sometimes commercial) repeaters.

RDF plays an important part in Amateur Radio self-policing. In many areas of the country, including southern California, there is an active Amateur Auxiliary organization in contact with ARRL and district FCC offices, permitting volunteer ham RDFers to gather evidence leading to prosecution in serious cases of malicious interference.

There are several competitive hunt opportunities to choose from every month in Los Angeles, Orange, Riverside and Santa Barbara Counties. They are all different in some way, such as time or mileage scoring, day or night start, single or multiple transmitters, intermittent or continuous signal, wide or narrow boundaries. (Or perhaps there are no boundaries at all!)

Most hunts are on two meters with FM signals, but there are occasional FM hunts on the 50, 223, 440 and 1200 MHz bands. There have even been hunts for Amateur Television transmissions on 434 MHz.

Winning Isn't Easy

There are many ways to score mobile T-hunts. Due to traffic problems, "First-In-Wins" hunts are less common than "Low-Mileage-Wins" hunts in southern California. Odometer calibration differences are resolved by requesting hunters to obtain an odometer correction factor by driving a standardized course in advance of the hunt. This correction factor is called the [Crenshaw Factor](#) because the course runs along Crenshaw Boulevard for approximately 9 miles. T-hunters have become very sophisticated at finding dastardly hiding places. With the right combination of location and antenna, they make it difficult for hunters to get reliable bearings. Like a ventriloquist, a good hider can make the signal

appear to be coming from some other location. With careful planning (and a little luck), the signal's characteristics can cause the hunters to approach the transmitter from the most difficult direction, with impassable roads or other obstructions, even though the T may be easily accessible via other routes. Perhaps the hider will camouflage the setup so well that the hunters won't find the transmitter unless they literally trip over it.

The most challenging of all southern California 2-meter RDF events are the All Day Hunts. Despite their difficulty, many enthusiasts like them best of all. The name is a misnomer, because these marathons often last the entire weekend. The transmitter(s) can be anywhere in the continental USA. The hunt starts in Rancho Palos Verdes. Hiding spots have included locations near Yosemite National Park (California), Las Vegas (Nevada), Yuma (Arizona), and St. George (Utah). The record path distance for a two-meter hidden transmitter signal to be heard at the starting point was set on the St. George hunt, well over 300 miles!

Not every T-hunt is this arduous, of course. Several clubs have sponsored [hunts just especially designed for beginners](#) to get things started. In some cases, the hidiers make brief transmissions on a repeater, encouraging hunters to come out and find them. After a while, they give clues to narrow the search area. The idea is to give every participant a good first-time experience, including a story-telling session at a restaurant after the hunt.

While some hunters prefer to go it alone, most have more success by teaming up. The driver concentrates on handling the vehicle, while the DFer turns the beam and reads the meters. The DFer also handles maps and plotting, unless there is a third team member for that task.

Inexpensive Beams Work Fine

In the Los Angeles basin, most hunters use some sort of beam antenna. Three to five element cubical quads are most popular. Usually they are built in "diamond" form with a PVC pipe or wood boom and elements made of thin wire strung on fiberglass spreaders. Variations include the "stiff wire" version, which is much more tree-resistant. (It can get mashed, but is easily re-shaped and returned to service, as compared to "strung-wire" quads which more readily suffer wire breakage.) Yagis are second to quads in popularity. Commercial models work fine, provided that the mast is attached at a good balance point. Occasionally you will see some other kind of gain antenna, such as a "ZL special." Small-diameter loops are rarely used for RDF above 54 MHz because of their bidirectional pattern and low sensitivity.

Hunters need sensitive mobile RDF setups for events like the All-Day hunts. They achieve it with their long beams, plus GaAsFET preamps, noise-quieting meters, and SSB receivers (even when the hider is transmitting FM). Homing Sets Sniff Well

No matter which gain antenna is used, it is important that to allow for quickly changing polarization. Hidiers can use any wave polarization on most hunts, so hunters must attempt to determine the correct polarization and hunt with it. Hunting a horizontal signal with a vertically polarized beam, for example, causes the direct signal to be attenuated. Reflections and scattered signals (multipath) from buildings and terrain features are enhanced relative to the direct signal when the wrong polarization is chosen. There are mechanical and electronic ways to select polarization on VHF beams.

Another type of RDF instrument, called the homing or dual-antenna RDF, has its place in the arsenal of the well-equipped hunter. These units have a pair of vertical antennas, a switching circuit, and a direction sensor with some sort of left-right indicator, such as a meter or a pair of LEDs. They are easy to use: When the indicator says LEFT, turn the unit left; when it indicates RIGHT, turn right. There is a sharply defined crossover at which the unit points toward the signal source direction. There are two types of dual antenna sets. One type is called a switched-pattern set and requires a receiver with AM detection. It is used mostly on the aircraft band. More popular with hams is the phase-front detector or Time-Difference-of-Arrival (TDOA) set. It is designed to work with any narrowband FM receiver that covers the frequency of interest. While they could be used in vehicles, these dual-antenna sets are used mostly for on-foot RDF, such as closing in at the end of a hunt ("sniffing") or for wilderness search/rescue work. Be sure to build or buy one with left-right indicators, or you won't know if the signal is coming from ahead of you or behind you.

Dopplers Have Their Place

An ideal RDF system would not require constant manual antenna turning. It would take directional readings hundreds of times per second, and continue to indicate the bearing after the signal leaves the air. Doppler type RDF sets, though far from ideal, fulfill all these wishes. The typical four-whip antenna system can be mounted without drilling holes in the vehicle.

Doppler readouts usually feature a ring of at least 16 LEDs, and may also include a three-digit display in degrees relative to the vehicle. In the clear, a well-installed doppler has about +/-5 degree bearing accuracy. This accuracy is degraded by multipath, just like it is with the homing RDF, but "eyeball averaging" while the vehicle is moving helps counteract this problem. Although popular in places such as Cincinnati and the San Francisco Bay area, doppler RDF installations have not caught on among most southern California competitive T-hunters due to their lower sensitivity

compared to beam setups. Vertically polarized doppler antennas are at an extreme disadvantage if the hider transmits horizontal polarization, especially if the signal is weak and non-direct.

On the other hand, dopplers are a popular choice of jammer hunters, who are usually tracking strong vertically polarized signals. They like the rapid indication update rate and the ability to quickly get bearings on short-duration signals. Occasionally, you may see RDFers using both a beam and a doppler set on the same vehicle.

How To Learn More

While commercial RDF equipment is available, the majority of southern California T-hunters prefer to build their own gear. All you need to get started is a directional antenna, an attenuator to knock down strong nearby signals, and a receiver with S-meter. You may have it all right now! If so, it will only take a bit of installation work on the family car to get you going.

For equipment information, installation ideas, and hunting techniques, read [*TRANSMITTER HUNTING---Radio Direction Finding Simplified*](#) by KØOV and WB6UZZ, published by Tab Books (#2701). This book is available at many electronics and ham radio stores. It is also available by mail from ARRL Bookstore and [from the authors](#).

Have a new ham radio adventure by going out on a hidden transmitter hunt. Be prepared for some pleasant surprises. Remember, every time you set out on a hunt, you never know where you'll end up, and you never know what you will find.

Above article Copyright ©1992 and 2009 by Joseph D. Moell. This article (and only this article on the site) may be reproduced in club newsletters and other non-commercial publications, provided that it is printed in its entirety (either with or without illustrations) and readers are encouraged to visit this Homing In Web site: <http://www.homingin.com>.

MARC MINUTES Monthly Club Meeting For April 2012

The monthly meeting of the Murgas Amateur Radio Club was held on April 4, 2012.

President Bob Michael N3FA called the meeting to order at 8:00 PM. Twenty-nine members were in attendance. Visitors present were Dave Stalker KB3WUA and Janice Curtis WB3BJL. There were no upgrades or call sign changes noted. Herb Krumich K2LNS reported on the club's finances. Frank Wolfe KB3ETK motioned to approve the report. Rich Manta N3TDE seconded the motion. The report was approved. The secretary, Elaine Kollar K3VQR, noted that the club received a number of dues payments by mail. Also, Elaine stated that membership cards are available for those who have paid their dues.

Committee Reports:

Field Day – Signup sheets are available. Please indicate if you will be operating, attending, and/or bringing your family for the picnic supper. Elaine Kollar K3VQR reminded members that there is a club picnic held on Saturday evening during Field Day weekend. It's a chance for members to bring their families to the park and then enjoy a picnic meal with club members.

June VHF – The club may participate in the June VHF contest, if a few more members can help with set up and operating. Please see Bob Michael N3FA or Bob Nygren N3RN if you are interested.

Ham Fest - Bill Sweeney KB3KUJ stated the turnout at the Timonium Han Fest was very low. It was a one-day event this year. There were very few new vendors attending. Most of the selling was at the flea market. Ham Fest fliers need to be distributed. Herb Krumich K2LNS asked if anyone knew of a location that could be rented for a day to hold a "winter ham fest". Herb said he imagined this as a social gathering for area hams during the winter.

Old Business:

Fox Hunt – The annual spring Fox Hunt will be held on May 6th. The "fox" will be turned on at 12 noon. Check-in begins at 11:30 AM on the club repeater (145.450, tone 82.5). May's program will be about Fox Hunting.

Rick Bunton KB4MIS noted that the Club Library has quite a selection of books that are available for members to borrow. A list of available books will be published in the MARC Times every other month.

There were no updates on emergency preparedness.

New Business:

Rick Rinehimer K3TOW stated that the Board of Directors had approved securing the domain name www.murgasarc.org for the club's website. Rick was able to reserve the name for 10 years.

President Michael noted that by the end of the April the club trailer will be taken out of storage. The trailer will be inspected and the brakes checked.

Announcements:

President Michael asked anyone who has digital K3YTL logs to give them (or a copy) to Bob Nygren N3RN. Bob is in the process of uploading the logs to "Logbook of the World".

Frank Wolfe KB3ETK announced that the Jonestown Area Repeater Association is holding a raffle. This is the only fund raising event the club has each year. This year first prize is a laptop computer and second prize is an i-pod Touch. Tickets are \$5.00. See Frank if you are interested in purchasing tickets.

Frank Wolfe KB3ETK made a motion to adjourn the meeting and Bill Sweeney KB3KUJ seconded the motion.

It was then discovered that not all the club's business was finished. President Michael called the meeting to order again. An application for membership was received from Dave Stalker KB3WUA. After agreeing to abide by the constitution and by-laws of the club, Dave was accepted into membership.

Rick Rinehimer motioned to purge the membership roll of anyone who has not paid their dues. Frank Wolfe KB3ETK seconded the motion. The motion passed.

The Murgas Board of Directors meeting will be held on April 18, 2012 at 7:30 PM. The meeting is held in the conference room at the WBRE-TV Building on South Franklin Street in Wilkes-Barre.

The next monthly club meeting will be held on May 2, 2012 at 8:00 PM. The meeting is held in the PPL Business Center on East Mountain Boulevard.

With no further business, Frank Wolfe KB3ETK made a motion to adjourn the meeting. Bill Sweeney KB3KUJ seconded the motion.

Respectfully submitted, Elaine Kollar, K3VQR, Secretary

Board of Directors Meeting April 2012

The monthly Board of Directors meeting of the Murgas Amateur Radio Club was held in the WBRE-TV conference room on April 18, 2012. President Bob Michael N3FA called the meeting to order at 7:30 PM. Directors present were Bob Michael N3FA, John Mehalick W3MTP, Herb Krumich K2LNS, Elaine Kollar K3VQR, Bob Folmar KB3VS, Rick Rinehimer K3TOW, Bill Sweeney KB3KUJ, and Rick Bunton KB4MIS.

The directors began the meeting by discussing the club's publicity pamphlet. Bob Folmar KB3VS presented a final draft of the text. Bob also contacted Quick Print in Kingston for a quote on printing the pamphlet. Bob Michael N3FA will get a price from Hullihen's Printery. Bob's daughter will be able to create the document, which will avoid the set-up fee. The directors opted to replace the picture of one of Father Murgas' patents with a picture his towers. It was also decided that the club logo should be printed in red.

Bob Michael N3FA noted that he will be removing the club trailer from storage this coming Saturday. The trailer will be taken to Bryant's RV for inspection and repair on the brakes.

Bill Sweeney KB3KUJ reported that he has reserved tables, chairs, and portable toilets for the Hamfest. Elaine Kollar K3VQR stated that she has received the insurance certificate. A copy will be sent to the Luzerne County Fairgrounds. Bob Michael N3FA contacted QST about our ad in their magazine.

At the present time it appears as though the club will operate in the June VHF contest.

The Fox Hunt is scheduled for May 6th. The program for May will be about Fox Hunting.

With no further business, the meeting was adjourned at 8:20 PM.

Respectfully submitted, Elaine Kollar, K3VQR, Secretary

de K2PG

Der Mai ist gekommen! May has arrived. With the unusually balmy weather in March and April, it seems to have come early, along with the seasonal static on the lower bands. But there have been some good evenings with low noise and good conditions.

Last month, I asked what the callsign of the wireless station was on the *RMS Titanic*. It was MGY. And the reason the prosign SOS, sent as one character, was used is that it is very easy to recognize, making it easy to get the attention of radio operators at coastal stations and on other ships. The weekend of April 13-15, marking the 100th anniversary of the sinking of the *RMS Titanic*, brought some special event station activity. In England, GB100MGY operated from the Fort Perch Rock Wireless Museum near Liverpool, calling CQ on 502 kHz and listening for replies on 3533 kHz. In New York State, WE2XGR/6 was using a rotary gap spark transmitter on 500 kHz, looking for contacts with other experimental stations on the 600 meter band. And one of the ARRL experimental stations in that band, WD2XSH/5, ran a CW beacon with a commemorative *Titanic* message.

I have an experimental license for that band, WE2XTT, at my home in Huntington Township, between Shickshinny and Benton. If any of you has a bucket truck, enabling me to run a flat-top wire antenna from my tower, I would appreciate your assistance in getting my station on the air. An alternative would be something that would allow me to shoot a strong rope into a tree as a support for the antenna. I am also looking for a special connector, made by the E.F. Johnson Company but now discontinued, that looks like a Cinch-Jones connector, but with smaller pins. The transmitter

that I will be using was made by Scientific Radio Systems, a company based in Rochester, NY that is now out of business. I need the connectors in order to run the transmitter by remote control from my house. The transmitter is in the shed with my big AM rig. The 500 kHz transmitter is capable of CW and MCW and was once used at coastal station WSC, Tuckerton Radio in West Creek, NJ. If you can help with either of these items, please contact me at phil@k2pg.com.

For my next trivia question, I will stick to the maritime theme. In the days when CW was king on the maritime frequencies, the station clock in the radio room had two pie slice shaped red wedges radiating out from the center. What was the reason for this?

Phil Galasso K2PG

Editors Note:

I would like to thank all the authors who have contributed to this issue and invite all members to submit an article for publication. I will help with grammar and spelling.

Articles may be published in other amateur publications provided credit is given for the author and the source.

Ads for amateur related items will be published for members without charge. They may be submitted to me at a meeting, by mail to the club box, or by e-mail to N3KGC@arrl.net.

The *MARC Times* is available for delivery by email in the popular Adobe Acrobat .pdf format – you don't miss a thing from the snail-mail version and you even gain color for the pictures. To request the email version just send an email to N3KGC@arrl.net. A reader can be downloaded from the Adobe web site free of charge.

COMING EVENTS		
04/29/2012	JSARS Hamfest by the Shore Jersey Shore Amateur Radio Society http://jsars.org Talk-In: 146.910 (PL 127.3)	Riverwood Park Toms River, NJ 08753
05/06/2012	Murgas ARC Annual Fox Hunt. See article.	Wyoming Valley, PA
05/06/2012	Warminster Hamfest Warminster Amateur Radio Club http://www.k3dn.org/hamfest.htm Talk-In: 147.09 & 443.95 (131.8)	Middletown Grange Fair Newtown, PA
05/12/2012	GSARA Hamfest Garden State Amateur Radio Association http://www.gardenstateara.org Talk-In: W2NJR Link, 147.045+ (67.0)	MOESC (formerly MAECOM) Tinton Falls, NJ
05/18-20/2012	Dayton Hamfest	Dayton, OH
05/27/2012	Memorial Day Hamfest Maryland FM Association http://www.marylandfm.org Talk-In: 146.76, 224.76, & 444.00 (107.2)	Howard County Fairgrounds West Friendship, MD 21794
06/02/2012	BARA Spring Hamfest Bergen Amateur Radio Association http://bara.org Talk-In: 146.19/146.79 (PL 141.3)	Westwood Regional H S Twp of Washington, NJ
06/9-11/2012	June VHF QSO Party. Set up June 8, Tear down June 11	Red Rock Mt, PA
06/09/2012	Bloomsburg Hamfest Columbia-Montour ARC http://www.qsl.net/cm-arc/ Talk-In: 147.225+ (PL 203.5)	Lime Ridge Comm Center Lime Ridge, PA
06/09/2012	Skyline ARC's Summer Hamfest Skyline Amateur Radio Club http://www.skylineradioclub.org Talk-In: 147.180 +600 (PL 71.9)	Cortland County Fair Cortland, NY 13045
06/16/2012	W2QW Hamfest Raritan Valley Radio Club http://www.w2qw.org Talk-In: 146.625- & 442.250+ (PL 141.3)	Piscataway H S Piscataway, NJ
06/23-24/2012	Field Day & Picnic Set up June 22	Francis Slocum State Park
06/30/2012	Eastern Pennsylvania Section Convention (Electronics Expo & Firecracker Hamfest) Harrisburg Radio Amateurs Club http://www.w3uu.org Talk-In: 146.76 (PL 100)	Harrisburg Area CC Public Safety and Fire Training Grounds Harrisburg, PA
07/01/2012	Murgas HamFest and Computerfest Murgas Amateur Radio Club http://www.qsl.net/k3ytl Talk-In: 146.61 (82.5)	Luzerne County Fair Lehman, PA

MURGAS AMATEUR RADIO CLUB
Directory 2012

LAST NAME	FIRST NAME	CALL	ADDRESS	CITY	ZIPCODE	PHONE	E-MAIL	CLASS	
ALLEN	JEREMY	N1ZZZ	PO BOX 1294	CUTCHOGUE	NY	11935	n1zzz@arrl.net	E	
BENISH	MIKE	K3SAE	24 HARDING AVE	HARDING	PA	18643	388-6863	mglbions@yahoo.com	A
BETZ	JOE	KF3DI	4170 BEAR CREEK BLVD	WILKES-BARRE	PA	18702	817-0333	kf3di@ptd.net	A
BROWN	GEORGE	N3IKO	149 ESPY STREET	NANTICOKE	PA	18634	655-0481	n3iko@arrl.net	E
BUNTON	RICHARD	KB4MIS	125 PARK PLACE CIRCLE	KINGSTON	PA	18704-4922	814-3168	rebunton@yahoo.com	A
CAFFREY	JOE	W3DZH	79 KELLERS LN	LARKSVILLE	PA	18651	779-2981	jinlaffrey@verizon.net	E
COSMETIS	GEORGE	WA3CCI	RR#1 BOX 173 FRANKLIN VALLEY ROAD	DALTON	PA	18414	563-2753	cosmetis@msn.com	E
CURTIS	DON	W3LR	43 WYOMING AVE	DALLAS	PA	18612	310-1153	dcurtis44@comcast.net	E
CZOCK	FRANK	WB3BOT	113 MALTBY AVE	SWOYERSVILLE	PA	18704	287-7828	tpc113@aol.com	E
DOUGHERTY	TOM	N3VS	6 LAKELAND HEIGHTS	TUNKHANNOCK	PA	18657	836-5384	n3vs2000@yahoo.com	E
FOLMAR	ROBERT	KB3VS	43 LAKEVIEW DR	SWEET VALLEY	PA	18656	477-2486	bobkb3vs@aol.com	E
GALASSO	PHILIP	K2PG	635 STATE ROUTE 239	SHICKSHINNY	PA	18655	542-4629	k2pg@frontiernet.net	E
GANNIS	GEORGE	WB3FKQ	RR 1 BOX 128A	WAPWALLOPEN	PA	18660	379-2643	segtronx@epix.net	E
GUSHER	RAYMOND	KB3ACO	29 EROH ROAD	WAPWALLOPEN	PA	18660	379-3934	dena6@aol.com	G
HERRMANN	GARY	N3WPH	829 SUSCON ROAD	PITTSTON	PA	18640-9537	655-1378	gherrm@hotmail.com	E
HILLMAN	RAYMOND	N3PFH	41 LAKE SIDE DRIVE	HUNLOCK CREEK	PA	18621	477-5308	hillman1@epix.net	E
HILLMAN	RONALD	N3KGC	14 SHOLTIS RD	DALLAS	PA	18612	477-2817	n3kgc@arrl.net	E
JONES	WALTER	WN3LJF	600 CONSTITUTION AVE	DURYEA	PA	18642	457-8320	wn3liff@gmail.com	E
KARCHESKI SR	FRANK	N3WPG	140 LEE PARK AVE APT 421	HANOVER TOWNSHIP	PA	18706	825-7972	shurfrank@aol.com	E
KELLMAN MD	IAN	K3IK	625 HAMPTON RD	SHAVERTOWN	PA	18708-9526	696-4322	k3ik@epix.net	E
KOLLAR	ELAINE	K3VQR	1202 GEMINI ST	NANTICOKE	PA	18634	735-8190	ekollar@verizon.net	G
KOSLOSKI	ROBERT F	N3YMZ	943 BENNET ST	LUZERNE	PA	18709-1119	287-4554		E
KOZLOFSKI JR	AL	N3FLE	149 HILLCREST DRIVE	NANTICOKE	PA	18634	735-4176		E
KRIST	ALEX	KR1ST	836 LACONIA CIRCLE	S. ABINGTON TWP.	PA	18411	604-6487	alex@krist.com	E
KRIST	JENNIFER	KG4KFV	836 LACONIA CIRCLE	S. ABINGTON TWP.	PA	18411		jennifer@krist.org	E
KRUGER	MATT	K2OZO	13 IVY DRIVE	SHAVERTOWN	PA	18708	696-1308	k2ozo@arrl.net	G
KRUMICH	HERB	K2LNS	311 MEADOW RUN RD	WILKES-BARRE	PA	18702	829-2695	wa2fkg@yahoo.com	E
KUBASIK	GEORGE	KA3CWR	71 RAILROAD ST	GLEN LYON	PA	18617	736-7159	ka3cwr@arrl.net	G
KURUTZ	HENRY	W3NDY	1150 SUSCON RD	PITTSTON TWP	PA	18640			G
KWASNICK	JOANN	WB3HBM	75 E BERGH ST	PLAINS	PA	18705-3926	823-7397	jola@evenlink.com	G
KWASNICK	LARRY	KA3GRS	75 E BERGH ST	PLAINS	PA	18705-3926		jola@evenlink.com	A
MANTA	RICHARD	N3TDE	330 SLOCUM	SWOYERSVILLE	PA	18704	287-3537	n3tde@superaccess.net	E
MARTIN	JAMES	N3DCG	511 PARK ST	TAYLOR	PA	18517	562-1473	jmart14@imb.net	E
MARUSAK	JOHN	KA3LVT	16 KEECH ST	NANTICOKE	PA	18634	735-7160		G
MEHALICK	JOHN	W3MTP	55 PROSPECT ROAD	MOUNTAINTOP	PA	18707	678-3093	w3mtp@aol.com	E
MICHAEL SR	ROBERT	N3FA	15 VALLEY VIEW DR	PRINGLE	PA	18704	288-3532	n3fa@verizon.net	E
MIGNONE	MIKE	KZ3O	RR1 BOX 150	NOXEN	PA	18636	639-5156	mikemig@ptd.net	E
MIKLOSI	GEORGE	K3ZK	407 E GROVE	NANTICOKE	PA	18634	735-7794	k3zk@epix.net	E
MIKLOSI	JAMES	K3ZZK	228 PHILLIPS ST	NANTICOKE	PA	18634	735-4149		E
MONTGOMERY	ROBERT	W3ZR	151 MAIN STREET	MUNCY VALLEY	PA	17785	478-0024	w3zr@w3zr.com	E
MORAN	JIM	N3AVZ	523 WASHINGTON AVE	PLYMOUTH	PA	18651	779-9709	jmn3avz@msn.com	E
NAVIN	BRENDA	N3ORF	2840 ALBERDEEN	MOUNTAINTOP	PA	18707-9395	868-0294	bnavin@epix.net	T
NAVIN	MIKE	N3FJA	2840 ALBERDEEN	MOUNTAINTOP	PA	18707-9395	868-0294	n3fja@arrl.net	G
NIZNIK	STANLEY	W3SXT	11AUBURN ST	WILKES-BARRE	PA	18702-2602	823-8336		G
NYGREN	CAROL	KA3EEO	2081 STATE ROUTE 118	SWEET VALLEY	PA	18656-1090	477-2294	cnygren@epix.net	A
NYGREN	DANIEL	KA3ZHT	41 HOLIDAY DRIVE APT 70	KINGSTON	PA	18704		dnygren12@yahoo.com	T+
NYGREN	DAVE	KE3OA	2105 STATE ROUTE 118	SWEET VALLEY	PA	18656-1090	477-2904	ke3oa@epix.net	A
NYGREN	ROBERT	N3RNR	2081 STATE ROUTE 118	SWEET VALLEY	PA	18656-1090	477-2294	n3rn@arrl.net	E
OMALIA	MARTY	N3PF	112 FARRELL ST HILLDALE	PLAINS	PA	18705	822-5225	n3pf@arrl.net	E
PICCHETTI	EDWARD	K3RLI	355 RIDGE RD	LAUREL RUN	PA	18706	824-0458	epicchett@ptd.net	A
PIOTROWSKI	ANTHONY	N3DAP	2261 MOUNTAIN RD	SLATINGTON	PA	18080		tony.piotrowski@cingular.com	A
RENSA	DAVID	KB3MMM	154 SOUTH WALNUT ST	WILKES-BARRE	PA	18702	823-4056	kb3mmm@aol.com	E
RIKOSKI	RICK	W9ZD	107 WEST RIVER ST	WILKES-BARRE	PA	18702		rikoski@earthlink.net	E
RINEHIMER	RICK	K3TOW	PO BOX 74	GLEN LYON	PA	18617	736-6669	k3tow@arrl.net	E
RODGERS	ALICE	KA3KMH	447 N WASHINGTON ST	WILKES-BARRE	PA	18705-1623	822-9711	ka3kmh@verizon.net	G
SEKERA	DANIEL	N3JNS	73 N GATES AVE	KINGSTON	PA	18704	283-5656	dsekera@aol.com	T+
SHEWCZYK	DAVE	KA3WZY	401 E MAIN ST	WILKES-BARRE	PA	18705	825-6540	ka3wzy@prolog.net	E
SHULENSKI	TED	W3NHL	246 SOUTH MAIN ST	ASHLEY	PA	18706	824-2196	flyrfan28@verizon.net	E
SIKORSKI	JAMES	N3PBH	RR1 BOX 99A	WAPWALLOPEN	PA	18660	379-2378		E
SMALLEY	JOSEPH	WA3CKA	54 W COLUMBUS AVE	PITTSTON	PA	18640	654-1927	mymodecw-hamitup@yahoo.com	E
STALKER	DAVID	KB3WUA	8 STERLING AVE	WILKES-BARRE	PA	18702	823-5051	1mdks@gmail.com	G
SWEENEY	WILLIAM	KB3KUJ	15 TEDRICK ST	PITTSTON	PA	18640	655-3277		E
THOMAS	JOHN W	KB3CWK	265 SCHRADER STREET	PLYMOUTH	PA	18651-4206	288-1314		E
WASHCALUS	JOHN	WB3FYT	420 GROVE ST	PRINGLE	PA	18704-1810	283-5701	washie51@aol.com	A
WIENCEK	GEORGE	N3WV	24 UNION ST	HUDSON	PA	18705	823-7563	gewiencek@msn.com	E
WOLFE SR	FRANK	KB3ETK	453 N WASHINGTON ST	WILKES-BARRE	PA	18705	825-8856	kb3etk2@samobile.net	E
YUSCAVAGE	ALAN A	KB3LTT	181 CHAPEL ST	LUZERNE	PA	18709-1321	283-1518	kb3litt@arrl.net	E
ZIEROWICZ	JOHN	WA3JWP	34 HIGHWOODS RD	WYOMING	PA	18644	696-3249	wa3jwp@epix.net	E
ZIGMONT	ANTHONY	N3TKK	1711 WEST 8TH ST	WYOMING	PA	18644	410-1011	1ajz@comcast.net	E
ZUKOSKY	DAVID J	KB3CYS	3 TIMOTHY RD SUNRISE ESTATES	WYOMING	PA	18644	696-3448	daverockin@usa.net	T
ZUKOSKY	RONALD	N3VTH	131 SHADETREE ROAD	SHAVERTOWN	PA	18708		n3vth@arrl.net	G

Murgas Amateur Radio Club
P.O. Box 1094
Wilkes-Barre, PA 18703



ANNUAL FOX HUNT
MAY 6, 2012 SEE ARTICLE

First Class Postage
Meeting Notice Enclosed

CLUB MEETING
May 2, 2012
PP&L Business Center on East Mountain Blvd.

PROGRAM
Fox Hunting with Demonstrations
Joe Betz KF3DI and Tony Dennis KB3PKW
A Practical Application Bob Michael N3FA

BOARD MEETING – May 16, 2012
WBRE Offices – 7:30 PM
68 S Franklin St, Wilkes-Barre
All welcome to attend

Deadline for the MARC Times
June – May 27, 2012