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The monthly Newsletter of the Monongalia Wireless Association Morgantown, West Virginia

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Secretary/Treasurer: Norene Arnold, N8TJM

Vice President: Jack Averill, N8NQW

Newsletter Editor: Jack Coster, WF8X

Co-Editor: Bill Jacobs, WA8YCG

Next meeting will be the third Tuesday
September 17 at 7:30 in or near room G34 of the
Engineering Science Building of WVU.

Our program will be Building the K2 HF
Transceiver

John Mori, N8TA will offer the program on
"Building the K2 HF Transceiver -- an adventure
in kit building."

Amateur Radio Emergency Service

State and federal agencies will conduct an
emergency drill starting at 8:00 AM September 10
to run through 8:00 AM September 12. Amateur
Radio along with many other agencies will be
participating. More information will be
promulgated by news agencies, radio nets, and
email. It is time to check out your equipment,
emergency kits and be prepared to assist on short
notice.

Some notes on MONOWV

I am pleased to report that the DAREN node
MONOES is back up and operational. MONOWV
was also removed from the mountain, checked out
and

returned. Thanks to Mike/K8LG for his assistance
in accomplishing both tasks. Now is a great time
to clean the dust off your packet equipment and
check it out! Anyone needing to update their
ARES information should call me at 292-0742 or
email at n8hgl@arrl.net.



This is MONOWV

It consists of a power supply, radio, and TNC in a mouse proof cabinet. It is located in the little white building on sand springs road near but not in the TV site. The location including electricity is a



gift from Lloyds Electronics.

Thanks N8HGL for the pictures.

Bob/N8HGL Monongalia County EC
ARES – providing communications in time of need

Covered Dish SwapNic

A swap meet and picnic is scheduled for 21 September 2002 at Bob/N8HGL and Chris'/N8ZJZ. Swappers will need to provide own table if needed and may set up anytime after 11:00 AM. Eaters are requested to bring a great covered dish and chair. Tables for food will be provided along with coolers and ice. A grill will be available if anyone wants to cook. Eating time will be plus or minus 1:00 PM. If additional information or directions needed, call 292-0742 or email n8hgl@arrl.net. Pass the word and hope to see everyone here.

Bob&Chris

553 HARNER RUN ROAD

MORGANTOWN, WV

The HF Operator - by Rich, W8PT

Question: What do seasoned HF operators recognize as the best HF antenna for serious DX work?

W8PT: Well, as the HF spectrum is generally recognized to include 160M through 10M, it then really depends on what bands that you are most concerned with. If you want to operate the lower bands, i.e. 160M and 80M, then verticals or arrays of verticals are king. From 40M through 10M it would have to be yagis (or quads) or stacks of yagis (or quads, but it is mechanically much easier to stack a pair of yagis than it is a pair of quads).

However, building arrays (of verticals) or setting up stacks of yagis can be a huge and expensive undertaking. Likewise, building an array of 160M verticals takes a minimum of approximately 400 feet by 400 feet or just under 4 acres! So you can understand why very few amateurs have arrays for the top band. More common is a modest size (100 feet tall) tower with several stacked monobanders. Monobanders are usually the long-boom, high-gain type with the stacking distance determined by a formula that maximizes gain while preserving front-to-back and operating bandwidth. For example, if you have only a 30 foot high tower you could stack two 10M monobanders (say 4 elements each). You'd place the bottom antenna at 15 feet (1/2 wavelength above ground level) and the top antenna at 30 feet (1 wavelength high). This configuration would yield a gain increase of around 2.5 db over the single monobander. Additionally, there is switching hardware available that allows you to select any one of three combinations: top only, bottom only, and both. Sometimes band conditions are such that the bottom yagi in a pair of stacked yagis performs better than the one at the higher level.

Often 3 or even 4 or more yagis can be stacked. N7ML has a 200 foot tower where he has stacked seven tribanders at approximately 30 foot levels! Stacking tribanders is a compromise as the stacking distance is always different for each band. Here are some common stacking arrangements: 40M with two yagis - 140' over 70'; 20m with three yagis - 90' over 60' over 30'; 15M with three yagis

- 135' over 90' over 45'; or 10M with four yagis - 120' over 90' over 60' over 30'. Notice that for the 10M, 15M, and 40M examples that the stacking distance is one wavelength while the 20M example calls for a stacking distance of 1/2 wavelength. Both are acceptable; which stacking distance you use often depends on how high the tower is for a given individual band.

Often HF operators who work the contests or do DX'ing on a regular basis have invested in one "killer" antenna, often it is a monobander optimumlly positioned away from other interfering objects and up on a tower as high as practical. I started this way about 5 years ago with a 4 element 10M wide-spaced yagi up at 55 feet. I've kept this same arrangement when I recent moved to a new QTH. KX2A had a 2-element full-size 40M yagi that could work anything that he heard, usually on the first attempt.

So if you want "the best HF antenna" my advice for you is to first decide on your operating goals, determine your budget, and design your antenna as a system with future expansion in mind. Plan on a tower ... I like Rohn towers because you can always add additional sections to them at a later time as long as you have some land for the required guy wires. Start with one good monobander and learn how it works under various operating conditions. Then go with a second monobander and switching hardware to give you flexibility that is needed if you want to really work everything that comes on the airways. Good Luck!

Rich, W8PT, can be reached by email: w8pt@qcol.net

California QSO Party

We received the following from the California QSO party. They are having a special club entry in their upcoming event.

To: West Virginia Club Presidents and Newsletter Editors

From: Northern California Contest Club (NCCC)
California QSO Party (CQP) 2002 1600Z October 5, 2002 until 2200Z October 6, 2002

Start your contest season with a bang and compete for our new club award!

I'd like to personally invite you and your West Virginia clubs to participate in the California QSO Party (CQP). This year we have a new plaque for the highest scoring entry in "Top Club, non-California".

Obviously we would appreciate it if you would advertise the CQP in your club newsletter and your club email reflector (even if you decide to not enter the CQP contest as a club).

All California QSO Party rules, results, county abbreviations, and free logging software are available at:* <http://www.cqp.org/> Read all about the 2001 CQP contest results (only six non-CA clubs entered the 2001 CQP):

- * <http://www.cqp.org/Results-2001.html>
- <http://www.cqp.org/results/2001/01cqp.pdf>
-
- Don't forget about all the awards available in CQP (see <http://www.cqp.org/Awards.html>):
 - * 34 Plaques (wood and metal, not mere wallpaper!)
 - * 40 Bottles of special vintage California wine (with commemorative CQP labels)
 - * Certificates to the top S/O in each and every state, province, country, and CA county
 - * Certificates to each and every ham who makes at least 100 QSOs in CQP

We even have CQP T-shirts available for purchase if you make at least 100 QSOs in the contest.

This year's California QSO Party promises to be a lot of fun!

Marc, W6ZZZ
(sponsor of the CQP "Top Club, non-California" plaque)



NOMINATION OPEN

Nominations will be opened for the offices of President, Vice President, and Secretary/Treasurer during the September 2002 meeting. They will be opened again and election held during the October 2002 meeting, with officers taking office January 1, 2003.

Fluke Corp. Announce Recall

Fluke Corp. Announce Recall of Digital Multimeters Fluke Corp., of Everett, Wash., is voluntarily recalling about 40,000 digital multimeters. The recalled units can take longer than normal, up to 18 seconds, to display readings of AC voltages above 500 volts. Users can misinterpret the delayed reading to mean that high voltage is not present. If high voltage is present, users could be exposed to a risk of shock, electrocution, and thermal burns. The recalled Fluke digital multimeters measure up to 1,000 volts alternating current (VAC) and direct current (VDC). "Fluke" and "175", "177" or "179" are written on the front of the unit. The tester body is yellow and black, and measures about 7.25-inches long by 3.5-inches wide. Recalled units have a serial number below 79000000. The serial number is written on the back of the instrument under the hinged stand. Consumers should stop using these testers immediately and contact Fluke for information on returning the recalled unit for a free repair. Consumers should call Fluke at (800) 260-4819 between 8 a.m. and 7 p.m. ET Monday through Friday or at the Fluke Web site www.fluke.com/170recall.

Home Grown

Everything in this months Solid Copy came from members. No "filler" was added from other sources. We have a empty column here. Help Jack out next month. Send him a note.

