CLALLAM COUNTY AMATEUR RADIO CLUB

QTC

OCTOBER 07

BV Rambles:

Well the rains have come. Guess for those of us who did not get all their antenna work done, we will be getting wet! Actually for others, and myself whose "honey do lists" get smaller in the rainy months, that is when there is time to do antenna work!

For those of you who may not have caught it, KOMO TV news had two rather unflattering broadcasts of an interference problem in the Everett area, between a Ham and multiple neighbors. Granted the news folks got things rather distorted and out of context, but the Ham's son did no good with an on the statement to the effect – if you think it is bad now, be lucky dad is not running all the power he could! If your interfering with one device around you, then it most likely is not a fault of your station, however if everyone in your neighborhood hears you on multiple devices then it stands to reason you should look into your station. While under today's FCC regulations the owner of the device being interfered with is responsible for contacting the manufacture for rectification, reality says something different.

You need to be proactive in helping solve this type of problem, without putting yourself in the position of touching the devices being interfered with, otherwise as taught in the Technician class you could be leaving yourself open to becoming involved in the "it worked better before you touched it" syndrome.

On the brighter side K7WA was interviewed on KOMO TV see http://www.komotv.com/news/local/10130626.html Jim is a member of the Seattle Auxiliary Communications group and spoke about the recent Simulated Emergency Drill on September 29th. He was quoted as saying "This has been my hobby for 50 years and it's important to me, and it's a way I can help the community".

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Did you know we passed the 50th anniversary of Sputnik on October 4th; we can all be amazed at what has transpired in those intervening years.

I hope to convince Bob, K6MBY to write an article on the use of the program WSJT using the JT-65 mode, which was written for moon bounce operations, but has been adapted for use to receive terrestrial signals 20-25 db below the noise floor. Bob has worked ZS6 (South Africa) on 40 meters at –17db. What does this mean? Well he worked a station that he couldn't hear, but could only see the results of a decode on his computer screen. I have this loaded on my computer and also see signals that I cannot hear. To me this is simply amazing. Wonder what the next fifty years will bring?

Thanks for the time and space.

73, Chuck

WASHINGTON, D.C. - U.S. Senator Jim Inhofe (R-Okla..) today praised the passage by unanimous consent of his bill (S.1877) clarifying U.S. law to allow veterans and servicemen not in uniform to salute the flag. Current law (US Code Title 4, Chapter 1) states that veterans and servicemen not in uniform should place their hand over their heart without clarifying whether they can or should salute the flag.

"The salute is a form of honor and respect, representing pride in one's military service," Senator Inhofe said. "Veterans and service members continue representing the military services even when not in uniform. "Unfortunately, current U.S. law leaves confusion as to whether veterans and service members out of uniform can or should salute the flag. My legislation will clarify this regulation, allowing veterans and servicemen alike to salute the flag, whether they are in uniform or not.
"I look for ward to seeing those who have served saluting proudly at baseball games, parades, and formal events. I believe this is an appropriate way to honor and recognize the 25 million veterans in the United States who have served in the military and remain as role models to others citizens. Those who are currently serving or have served in the military have earned this right, and their recognition will be an inspiration to others." This Bill was passed 25 Jul 07. Let your veteran friends know about the Passage of this Bill.

"If you can read this, thank a teacher.
If you are reading it in English, thank a veteran."

VOC Frank Doherty ARRL ARES VE

Treasurers Report

As of September 30th, 2007, the balance in the CC-ARC Account at First Federal Savings & Loan of Port Angeles is $5,901.44.

David R. McCoy
CC-ARC Treasurer,

Remember Coffee!

We will break for coffee (decaf) and socialize for a few minutes or so during the meeting. Several of us will bring coffee in thermoses or carafes to share.

PROGRAM FOR OCT.

Mike Marz, N6MZ, re DXpedition to
The Scarborough Reef in the South China Sea.

2 METER NETS

CCARC :
Every Thursday 7:00 pm on the W7FEL Repeater.

ARES/RACES:
Every Tuesday except 1st Tuesday of the month at 7:00 pm on W7FEL Repeater.

W7FEL Repeater: 146.76 MHz., offset down 600 KHz. with a tone of 100 Hz.

September Honor Roll

N7BV Chuck
KE7DRT Nita
KE7KWG Becky
KC7LTW Donald
K5MTW Don
K7NIA John
K7RGR Roger
KD7TFK Al
K7WZ Bill

Thanks to those who made 100% this month. Good job!

Amateur Radio Classes and Exams:

We are organizing for a class October 13, 20, 27.

We are trying to figure out if we can actually do two classes at the same time a General and a Technician class.

73, Chuck

Your Article could go here.

We need articles for the QTC newsletter. This is after all your newsletter.

Tell us how you became interested in Ham Radio. What did you do over the summer (just like school) huh!

The more you submit the less we have to do, or think of. Or less blank space!

Thanks, the staff!

Clallam County ARES/RACES

Clallam County ARES/RACES is actively seeking new members and would like you to consider joining. This is a chance to prepare to be part of a solution during an emergency.

All RACES members are required to pass the FEMA/NIMS training IS-100, 700 and IS-200, 800. These courses are free and have been mandated by Homeland Security. They are available on-line at http://training.fema.gov/EMIWeb/is/.

Chuck Jones, N7BV, EC Clallam County

THE ROOSTER

John the farmer was in the fertilized egg business. He had several hundred young layers (hens), called "pullets", and ten roosters, whose job it was to fertilize the eggs (for you city folks).

The farmer kept records and any rooster that didn't perform went into the soup pot and was replaced. That took an awful lot of his time, so he bought a set of tiny bells and attached them to his roosters. Each bell had a different tone so John could tell from a distance, which rooster was performing.

Now he could sit on the porch and fill out an efficiency report simply by listening to the bells. The farmer's favorite rooster was old Butch and a very fine specimen he was, too.

But on this particular morning John noticed old Butch's bell hadn't rung at all!

John went to investigate. The other roosters were chasing pullets, bells-a-ringing. The pullets, hearing the roosters coming, would run for cover. But to Farmer John's amazement, old Butch had his bell in his beak, so it couldn't ring.

He would sneak up on a pullet, do his job and walk on to the next one.

John was so proud of old Butch, he entered him in the County Fair and he became an overnight sensation among the judges.

The result...

The judges not only awarded old Butch the No Bell Piece Prize but they also awarded him the Pullet surprise as well.

Clearly old Butch was a politician in the making: Who else but a politician could figure out how to win two of the most highly coveted awards on our planet by being the best at sneaking up on the populace and screwing them when they weren't paying attention.

Your Article could go here.

Forty eight foot fiberglass masts...

This information was passed by Matt Lawson KC7EQO (thanks). Bill Carter picked up some on Sunday. They appear to be well worth the money.

http://seattle.craigslist.org/kit/spo/429137481.html

http://www.armysurpluswarehouse.com/product/camo-support-system-2883.cfm

These can be converted into guyed antenna support masts for wire antennas, without much too much additional costs.

If you want to see one, I have one un-boxed that you can view.

73, Chuck

CLALLAM COUNTY AMATEUR RADIO CLUB
Minutes of the General Meeting Sept. 12, 2007

The meeting was called to order at 7:00 P.M. by club president, Chuck, N7BV.

The Pledge of Allegiance was given, and then introductions were made around the room.

Chuck N7BV reported on a visit to the repeater site. He also announced that classes for Technician and General Class licenses will be held October 13th, 20th and 27th. He then talked about "Ham of the Year" nominations; paper was made available for members to write down nominations.

It was moved and seconded that the Minutes of the last General Meeting be approved as published. Motion passed. Members were asked if there were any questions on the Board of Director Meeting Minutes, also recently published. (There were no questions.)

There will be a presentation at the Oct. 2nd A.R.E.S. meeting, given by Hams from the Victoria area, on their emergency communication system, which involves Winlink 2000.

The program was a presentation by Burt KN7R, who gave instruction and information about soldering coaxial cable connectors, such as PL-259s. He talked about tools, procedures, and some tips to help. He expressed willingness to teach Hams personally if requested.

The raffle drawing was held. The kitty was $15.

Next month there will be a presentation of the N6MZ DXpedition.

It was moved and seconded that the meeting be adjourned. Motion passed. The meeting adjourned at 8:20 P.M. (Twenty-five members and guests were present.)

Minutes by Rich N7NCN

BBL in Port Angeles

FYI and please download **Todd Ortloff Show** http://www.konp.com/podcasts/ September 13, 2007 Broadband over power lines - coming to Clallam County?

We all need to be aware of this encroachment into our area, and monitor for interference. It appears that BPL has been part of the downtown high speed ring for several years!

The company is Power Stream and it doesn't appear they have dispersed any equipment in our area, but has down in the Bremerton area for two years and is state wide. I am waiting a call from the ARRL guru on this subject to tell us how worried we should be.

During the interview the company Rep says they are looking for partnership with local utility companies and the communities. He mentions problems with ham radio, but glossed over it.

73, Chuck

Reply to earlier article….

The recent article about a heart and its care causes me to write about my own experiences with my wife's [Gen] heart. In our case we had an inside track via a daughter who is a cardiac echo stenography. A murmur was detected in Gen's heart when she was in college [many years ago].. Our daughter became concerned about this murmur and did an echo on her mother and did so every year for about ten years. After the last exam she told her mother she needed her aortic valve replaced and would set it up. She picked the heart surgeon and a review was made, a date was set and even the nurses assisting were hand picked. The replacement went well with a ST. JUDE 22 artificial valve installed. She was home in a day and that valve has been clicking for over ten years and is expected to out-live her.

since then our daughter has helped two other family members to translate "doctor talk" into plain English. It is great to know someone who understands how things work. The same applies to our radio club because everyone can't know everything but the combined membership knows a lot and help is only an "ask" away.

Lew WB0NAI

FOR SALE OR TRADE

Complete station……

Kenwood TS440S/AT Transceiver and Kenwood SP-230 speaker, with automatic antenna tuner and crystals.

40 ft. Universal Aluminum free standing Antenna-Tower, complete with H.D. Rotor, mast, and new legs. (Tower, four 10 t. sections)

TH6DXX Hy Gain 6 Element Beam 10, 15 and 20 Meters, with coax.

Dentron Antenna Tuner MT3000A

Heathkit SB200 Amplifier

Astron 20 amp Power Supply

Mirage MP-1 Watt Meter

Vertical antenna 10/40 meters

10 element 2 meter beam

Bencher electronic Keyer

Plus Misc. items, cable, etc.

Package Price $1, 800

For additional information
Don Woods NIOY
Phone #360-683-3621

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WANTED:

I am looking for any antenna books that might be available. I have started playing around with wire antenna's around the property, and I was hoping that someone might have an extra antenna book lying around collecting dust. It really doesn't matter what year, type or anything else. I just want to learn more. Please contact Theron (KC7NPP) at (360) 928-0127, or catch me on Striped Peak. Theron

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Your Article could go here.

COMING EVENTS

The Clallam County Amateur Radio Club monthly meeting is scheduled for 10 October at 7 pm. The meeting is at the Port Angeles Fire Station at 5th and Laurel in Port Angeles.

The program this month is by Mike Mraz, N6MZ, one of the operators on the April 2007 Expedition to Scarborough Reef in the South China Sea.

All Amateur Radio, and potential operators are invited to the meeting.
Any questions please call Chuck Jones at 360-452-4672

CLUB OFFICERS For 2007

President: Chuck Jones N7BV

360-452-4672 n7bv@yahoo.com

Vice President: Bob Sampson K6MBY

360-582-9116 k6mby@olypen.com

Secretary: Rich Golding N7NCN

360-683-9309 n7ncn@myfam.com

Treasurer**:** David R. McCoy KE7JEJ

360-457-8550 mccoy.d.r@olypen.com

Board Member: Bill Carter W7WEC

360-681-4375 bcarter@olypen.com

Board Member: Tom Newcomb

360-452-8228 ke7xx@arrl.net

Board Member: Bob Kennedy AC7RK

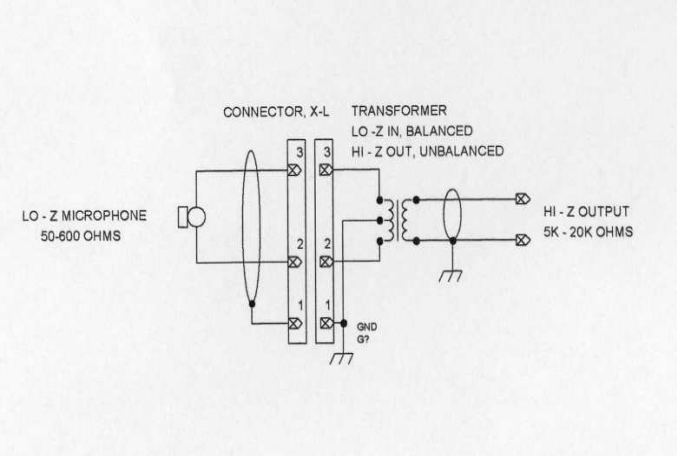
A Preamplifier for balanced-line microphones

Earlier, I told you about using professional balanced line microphones with your ham equipment, (***Say "hello" to your microphone, April 2006 QTC)*** Now I'll show you how to do it. Assuming the output signal from the intended microphone is sufficient to drive your rig, a balun matching transformer can be used. The standard connections for a professional X-L microphone connector are:

Pins 2 and 3 = Balanced microphone output to transformer low impedance input.

Pin 1 = Ground (must be soldered to the connector shell and to the microphone cable shield braid.)

(Figure 1)



A high quality transformer with netic/co-netic shielding is a must. Even so, care must be taken to avoid hum pickup from nearby AC wiring. An exact impedance match is not critical but to avoid distortion the microphone impedance must be equal to or lower than the input impedance of the transformer and the transformer output impedance must be equal to or lower than the input impedance of your rig. Line matching transformers such as *Switchcraft 9129* (female connections) and *Switchcraft 9229* (male connections) are typical examples.

(Figure 2)

If you use one of these transformers, you'll have to wire the output with a suitable connector to match your rig's microphone input. Make the lead as short as possible to prevent hum pickup in the unbalanced line. You can avoid the pesky problem of magnetically induced hum by eliminating the transformer altogether with a simple preamplifier using an OP-AMP (operational amplifier) with a differential input.

See picture on page 8

I wanted a "universal" amplifier that could accept a variety of microphones left over from my motion picture recording days so a minimum gain of 40 dB was needed to raise the weak output from my *Shure 350 ribbon* microphone to 100mv to drive my *Elecraft K2* to 100% modulation. I chose an RCA 725 OP AMP for the job. The 725 tends to be unstable but it has an extremely low noise figure so it's worth fiddling a bit with compensating capacitors to make it work reliably. In any case, an oscilloscope is essential to check for spurious oscillations and to ensure the audio output is clean and noise-free.

If you want to match a high output dynamic microphone, an amplifier of 10 dB or less will do and stability will be improved. You could also substitute a noisier amplifier since transistor noise won't be amplified as much in the low gain circuit. Gain can be adjusted downward by reducing the values of feedback resistor **R4** and bias resistor **R3.**

Continued on page 8

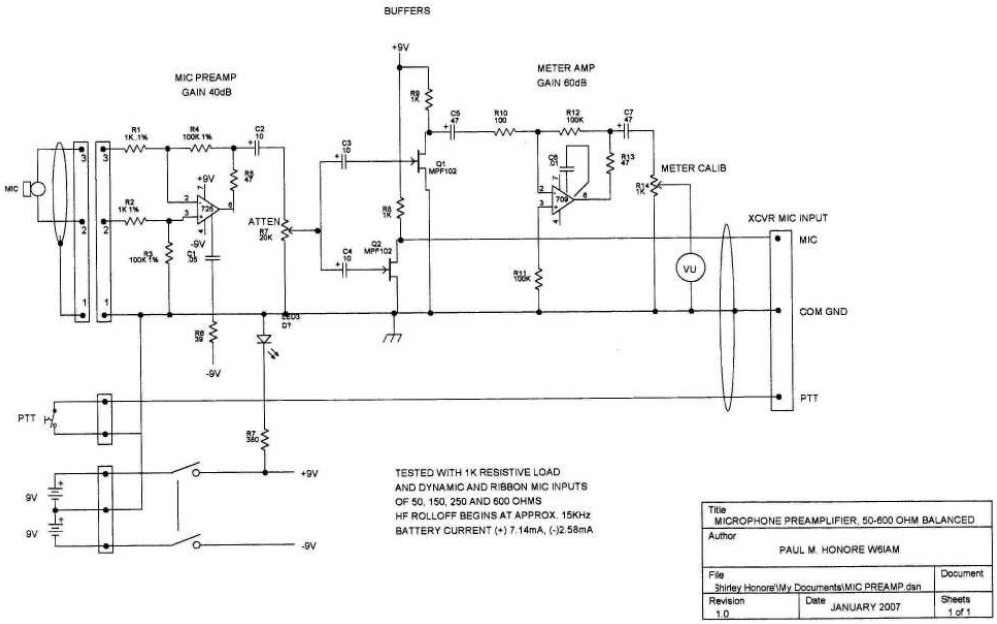


Figure 3

Microphone continued from page 7…

The exact values of these resistors are not critical but they must be matched as closely as possible to minimize amplifier noise. Input resistors **R1 and R2** must also be matched to reject common mode signals. Make all the wiring in this stage as short as possible and use shielded twisted pairs to the microphone jack and the attenuator potentiometer **R7.**

If you like, you can stop right there and feed the output directly to your rig. I wanted a VU meter, however, to monitor the modulation percentage and to help match levels when different microphones are used. The meter I pulled from the junk box requires 2 volts P/P for full scale deflection, so a driver amplifier with 60dB of gain was added. An RCA 709 was chosen for this stage.

Almost any amplifier will do since noise is not a factor nor is absolute precision. A *Radio Shack* MFP 102 field effect transistor provides isolation to prevent the meter circuit from loading the audio output. A second FET does the same for the xciever input. Audio output is direct coupled since the K2 has an internal de-coupling capacitor at the audio input. If your rig doesn't have one, add a capacitor of 1mf in series with the audio output.

(Figure 4)

For awhile, I used a +/- 12 volt switching power supply salvaged from an old computer for DC power. It worked very well but I wanted the preamp to work during the many power outages we have on the Olympic Peninsula, so I opted for a pair of MN1604 9Volt batteries in the final version The entire circuit draws less than 10 mA of current so they last a long time in operation. The preamp is housed in a *Radio Shack* 2" X 4" X 6" "Project box." and took about 6 hours to build.

Paul Honore' W6IAM

Decoding signals below the noise level

A number of stations around the world have been experimenting terrestrially with a mode called JT65A, part of a moon bounce application written by Joe Taylor, K1JT. Joe has been instrumental in writing applications that decode tones received below the noise level. The JT65a mode will decode signals down to -26 db below the noise.

The main application, WSJT (Weak Signal by Joe Taylor) is free and can be downloaded from http://physics.princeton.edu/pulsar/K1JT/. There are several modes within WSJT. FSK441 is used for meteor scatter work. JT6M was developed specifically for 6 meter meteor scatter. The JT65 modes were developed for moon bounce. Small stations on two meters, 100 watts and a single 17-18 element yagi, have been successful working moon bounce using JT65 and its ability to decode signals down at -26 db. Granted the second station has to be one of the "big boys" with 1.5 KW of power and large antennas.

The WSJT applications use the computer sound card to develop and decode the required tones for transmission. A typical JT65 digital exchange is call signs and grid, a signal report in db below noise, and acknowledgement that the

Continued...

Because each sequence of tones takes one minute, the digital QSO is several minutes long.

The application has several windows that allow the operator to monitor the frequency on a waterfall, establish and transmit a messages, and to display the decoded QSO.

Most hams use low power…. 10 to 25 watts. One station back east routinely runs 100 mw and easily works Europe, the west coast and Japan. The ZS station that Chuck mentioned was running 50 watts to a wire antenna on 40 meters. Depending on the time of day and band you will find DX from around the world as well as locals. Most day activity is on 14.076 MHz. and night on 7.076 MHz.

If you want to give terrestrial JT65 a try; download WSJT from the above link, also download "The bozos guide to JT65A" from http://www.obriensweb.com/596bozoguidejt65a.htm. Take a look at http://www.chris.org/cgi-bin/jt65talk and see what real time activity is.

If all else fails; call me.

Bob

K6MBY

This picture shows ZS6BUN (Johannesburg, So. Africa) calling CQ.

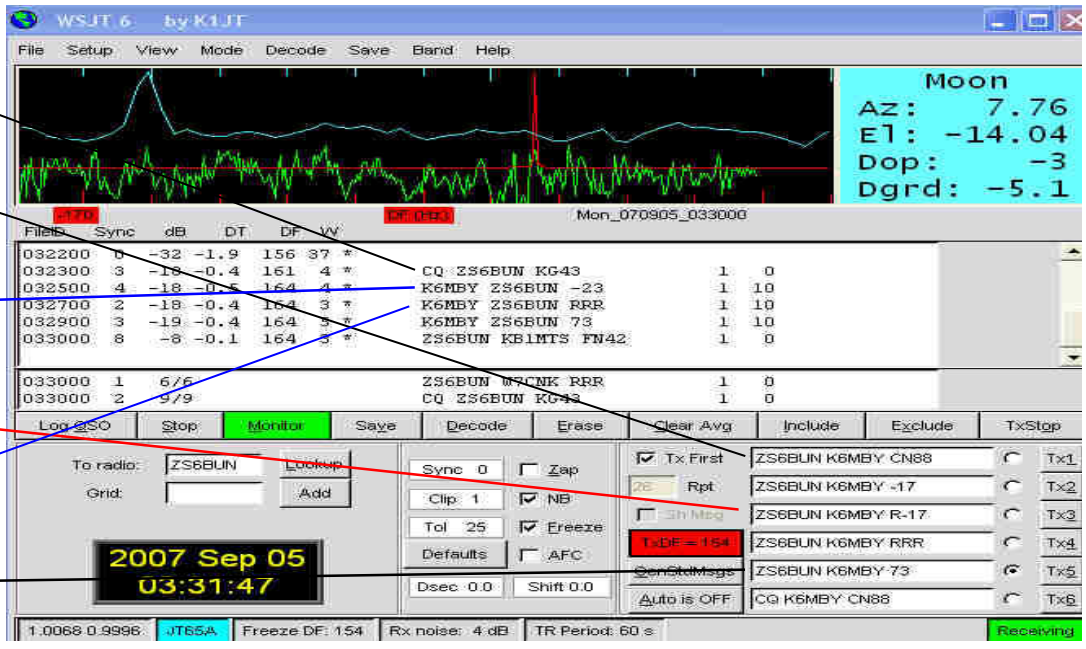
I answered with his call, my call and grid.

He replied with my call, his call and my signal report of -23.

I replied with his call, my call and his signal report—R-17

He replied my call, his call and RRR

I replied with the 73



YL LUNCHEON

Oct 12th
Fortune Star
Sequim: 11:45 a.m.

***Find us on the web* at www.olyham.com**
Check it out. Lots of information about ham radio in Clallam County!

2007 YL Luncheons:
11:45 a.m.

July:	Café Garden
August:	Tarcisio's
September:	Sergio's
October:	Fortune Star
November:	Chestnut Cottage
December:	Café Provence

Description	Time/Date	Location	Contact
Clallam County ARES/RACES meeting	7 pm, first Tue of every month	Clallam County Courthouse EOC, 223 E. 4th St., PA	Chuck Jones N7BV 360-452-4672
Clallam County Amateur Radio Club general meeting	7 pm, second Wed of every month	Port Angeles Fire Station 5th & Laurel Streets, PA	Tom Newcomb KE7XX 360-452-8228
Clallam County Amateur Radio Club social breakfast	8 am, first Sat of every month	Joshua's Restaurant Hwy. 101 & Del Guzzi Dr.	Tom Newcomb KE7XX 360-452-8228
Clallam Country Amateur Radio Club YL social lunch	11:45 am 2d Fri of every month	Rotates - announced on Thursday night Net	

BIRTHDAYS:

Gail Mabbutt N7GAM Oct-03
Allen Lapin KD7JTH Oct-05
Bob Sampson K6MBY Oct-21

Miriam Mitchell XYL of Bud
W7HKF Oct-18
Glo Richard XYL of Richard
WA6CUE Oct-21

Happy Birthday!

Call Sign Badges
By WB8BVK

Don't be a stranger at club meetings, hamfests or public service events. Wear a durable engraved name & call sign badge to let others know who you are. Available in 1" x 3" or 1-3/4" x 3" in as-sorted colors and finishes. Reasonable prices from a local source. Custom jobs up to 5" x 8" (custom front panels, door signs, desk plates, clipboards, etc.). See Paul, WB8BVK, at the CCARC meetings or email at pbenadum@earthlink.net.

Buy local!