



# CUYAHOGA AMATEUR RADIO SOCIETY

## *The Wobbly Oscillator*



**August 2003**

**Volume XXXII**

**Issue VIII**

### FROM THE PREZ

Thanks to the 27 who attended our 2nd outdoor meeting on July 16, 2003. Kayla KC8RYH, collected \$40.00 for the 50/50 drawing this month Mike KB8UGT, was the winner. His share was \$20.00. Toby provided his usual great refreshments.

Here are some pictures from our July 16 meeting, send your guess on who "SPAM" is and which Spam he is advertising to me via e-mail.



Pavilion at the Oak Grove Picnic Area



July meeting attendees



Whose head is under this hat ?

Please try to attend our last outdoor meeting this year, August 20, 2003 as we will have a very special guest, Jim Weaver K8JE, ARRL Director, Great Lakes Division. With all the new regulations and changes for Ham radio I hope you come armed with both questions & suggestions for Jim to pass on the ARRL headquarters.

Other CARS special events coming up soon: a lighthouse event, October ??, going to the Arrowhead Elementary school in Copley for a ham radio demonstration and October 18 we will have a JOTA (Jamboree On the Air) set up at the Kiwanis pavilion in Elmwood Park, Independence. We expect at least 50 Scouts for this years JOTA event. If you want to participate in a lighthouse outing contact Toby KC8TID, and for the school or JOTA events contact Steve N8IS.

That's it for another month, lets have a great turnout at our next meeting in the park on August 20, 2003.

de, Bob W8GC

**Minutes of the CARS Meeting of July 16, 2003**

President, Bob Check, W8GC, called the meeting to order at 7:32 PM which was held at the Oak Grove Picnic Area of the Metro Parks in Brecksville, Ohio.

A motion to accept the minutes of the June 18, 2003 meeting was made by Lynn WD8SDP, seconded by Mike K8EHP. A vote was taken and passed.

The treasury report was given by Mike, KB8UGT. Bob W8GC reported on the last Board Meeting.

The SS Mather antenna is installed but needs more work due to a high swr, per Bob W8GC.

Dave KD8V reported that the mother of Bruce N8DJX has passed away and that a card was sent.

Gordon W8GTK reported on the Wednesday night net, stressing the low check-ins and that was followed by a discussion.

Upcoming Light House activities were announced by Toby, KC8TID. A discussion followed.

Dave K8DAV reported on the Website and informs us on the CD produced by himself for the Extra Class License.

Articles are requested for the WO by our Editor Tom WB8N, Tom also reported on Field Day 2003. The club total this year of 4488 points was down 2400 from 2002.

Jim Weaver K8JE ARRL Director, Great Lakes Division, will be our speaker at our last outdoor meeting this year on August 20, 2003. Get your questions and comments ready!

Steve, N8IS, reported on the club jackets and the JOTA activity to be held on October 18, 2003.

The old club 5 kw generator will be sold in a silent auction at the close of tonights meeting. It has been listed in the WO.

If you have not signed up for the extra class go to [www.cars.org](http://www.cars.org) and sign up on-line. The cost for non-members will be \$30.00 and members will pay \$25.00. August 27 is orientation day and classes will run every Wednesday at 6:30 PM thru October 8.

Gary, NI8Z, reported on the VE session of July 13, 2003 and also on the club Christmas Party to be held on December 19, 2003 at the Independence Civic Center in Independence, Ohio.

The 50/50 raffle was won by Mike KB8UGT, his share was \$20.00. A motion to adjourn the meeting was made by Terry, KB8DTC, and seconded by Dave, K8DAV. A vote was taken and passed. The meeting was closed at 8:25 by Bob, W8GC.

After the meeting Gary, NI8Z, gave a demo on installing coax fittings.

Respectfully submitted by Secretary: Ron Borkey, K8VJG.



Meeting visitor, just hanging around on a beam in the pavilion.

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Check into the CARS weekly club net on Wednesday evening, 7:00 p.m.

## VICE PREZ'S MEMBER INTERVIEW

By VP Steve Riley, N8IS

I hope all of you will enjoy this article about Dave Dressler KD8V. You might not realize it but he is our Sunshine Chairman. Many of you have also had the pleasure of meeting his four grand sons that are also licensed amateur radio operators!

Steve: How did you become interested in Amateur Radio, what got you started?

Dave: My son-in-laws family have a farm in Belize, Central America and I became interested so I could contact them during the winter months.

Steve: How long have you been licensed and what class license do you currently have?

Dave: I have been licensed since 1992 and currently hold an extra class license I earned in 1998

Steve: What do you like about Amateur Radio?

Dave: I enjoy visiting with people around the country and using amateur radio to serve the community.

Steve: What are your favorite bands to work?

Dave: 10, 15 and 20 meters.

Steve: Do you collect QSL Cards, If so, how many confirmed countries do you have?

Dave: I haven't collected too many and only have a few countries.

Steve: I've learned that the school events you participated in have been really successful. I hope that we can get together to do more in the future.

Dave: Yes we had a successful special event at Arrow Head School Elementary School in Copley. Three stations with six operators were set up on the air, celebrating the Nature Zone. Other hams like Dave KD8V, Tom WB8N, Ron K8VJG, Roger N8TCP, Gary NI8Z and Glenn W8GTK all contributed time and equipment. I spoke directly to about 400 students in an assembly, giving them the history of radios and communications from the writing and the pony express to modern satellite usage. Groups of students were then escorted to the radio stations in the Nature Zone, where they learned the fine arts of voice, morse code and PSK communications. Contacts were made with countries including Canada, Moldavia, Peru, Nova Scotia, East Germany, Mexico, Croatia and

Algeria. We are hoping to have another school event in the beginning of October. If anyone is interested in volunteering please let me know.

Steve: What other hobby's do you have besides Ham Radio?

Dave: I make and repair jewelry. I enjoy working with my bull dozer in the woods. I also enjoy wind surfing and going to my grandchildren's activities. Four of my grandsons are licensed amateur radio operators.

Steve: What would your dream station be / consist of and where would it be?

Dave: I like my station where it is and would like to add a 75 foot tower and couple of amplifiers.

Steve: What type of work do you do? Or if retired, did you do?

Dave: I practiced Dentistry for 41 years, including 3 years as a Dental Officer in the Air Force.

I hope you all got to learn about a great new things from Dave. I'm looking forward to helping this year for his school event. It will be great to share our hobby with so many.

Stay tuned for our member interview next month. 73, de Steve N8IS

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### **AUGUST BIRTHDAYS**

N8IS Steve Riley 8-11

WB8N Tom Wayne 8-17

KA8EEW Richard Engum 8-21

KC8LAU Gerald Purcell 8-24

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### **NEW MEMBER APPLICATIONS**

Family member for Jim Barbour, WD8CHL  
Dawnn Barbour, KC8WBG, Technician  
2852 Cleveland Blvd., Lorain, OH

Mark Butler, KC8WLZ, Technician  
696 Canterbury Lane, Sagamore Hills, OH

## **2003 PEDAL TO THE POINT**

The Buckeye Chapter of the National MS Society has scheduled the annual Pedal To The Point for August 16th and 17th Saturday-- Sunday this year! I need approximately 25-35 volunteers for this event who have a mobile radio or amplified HT radios on two-meters (UHF a plus). Those of you who volunteer will be assigned to various locations along the 100 mile route on day one and 75 mile route on day two. I need so many volunteers for this event that I will accept ANY time commitment you wish to make. If you contribute a minimum of eight hours to this event you will be eligible for discounted tickets for Cedar Point! All volunteers get really nice t-shirts, food all along the route or at rest stops, dinner at the finishes, and flying pancakes if you show up early Sunday morning. (They literally throw them in the air and you get to eat what you catch) Camping available in Sandusky, or bring a sleeping bag for the Gym floor.

This event is A LOT of fun and GREAT radio experience. Unlike most events, p2p is strongly focused on the medical safety of every rider, and most logistical event traffic is handled off the air. Hams with first aid experience or certifications are encouraged to point out their skills when you volunteer. Please share this information with everyone you know since we need NUMEROUS volunteers. My primary goal right now is to staff every rest stop, and then assign individuals to "roam" the route in their personal vehicles if they're comfortable doing so. If you are still interested in volunteering for Pedal To The Point, please contact me immediately either via email or by telephone. I can be reached at:

(216) 552-4368 - Voicemail\*

(216) 496-3928 - Cellular

e-mail: [jeff@cia.net](mailto:jeff@cia.net)

Thanks, de Jeff Garvas, N8YNR

## **INFO FROM THE ARRL**

### **7 MHz Realignment Compromise Makes Radio History**

In an 11th-hour compromise, delegates to World Radiocommunication Conference 2003 (WRC-03) agreed to move broadcasters out of 7100 to 7200 kHz in Regions 1 and 3 to make room for the Amateur Service.

The expanded worldwide allocation at 40 meters goes into effect on March 29, 2009. Amateurs in the US and the rest of Region 2 will continue to enjoy the 7000 to 7300 kHz band they now have, but with greatly reduced broadcasting interference. The compromise marked the first time in the history of internationally coordinated radio spectrum allocation that an HF broadcasting band was shifted to accommodate the needs of another service. The compromise cuts in half the incompatibility between amateur and broadcasting use of the 7 MHz band and doubles the 40-meter spectrum available to amateurs in Regions 1 and 3. While the result falls short of the IARU's goal of a 300-kHz worldwide exclusive band for amateurs, the cooperation of broadcasters, opposing delegates and many others was required to make a positive step for ham radio. Spectrum between 4 and 10 MHz is on the agenda for WRC-07, but further changes to 7000-7200 kHz will not be considered.

The conference also dropped the international Morse code requirement, leaving individual countries to decide if they want to retain a code proficiency requirement, and adopted a number of improvements to the other international regulations for the amateur service. The delegates also agreed to allow a secondary allocation for satellite borne synthetic aperture radars at 70 cm and made amateur call sign assignment more flexible.

### **ARRL urges improved RFI immunity standards for consumer electronics**

The ARRL has told the FCC that improved interference standards for consumer electronic devices is the most pressing need as the

Commission considers the interference immunity performance of receivers comments July 21 in response to an FCC Notice of Inquiry (NOI), "I Radio Receivers" (ET-03-65), released last March. Stating that no receiver immunity standards are necessary or practical in Interference Immunity Performance Specifications for the "essentially experimental" Amateur Service, the ARRL said that the real need for receiver immunity specifications is in the area of consumer electronics and the FCC must establish stronger interference rejection standards for such devices. In its 21-page reply to the NOI, the ARRL recited the recent history of efforts to come to grips with interference from RF sources, including amateur stations, to receivers used in other services, such as TV and radio broadcasting, and to consumer electronics. "ARRL continues to believe that receiver immunity should be on the order of 3 V/m [which is pretty low. -ed] for receivers that might be in the near field of an Amateur Radio station," the League said.

The ARRL suggested the FCC mandate a standard for all consumer electronics or adopt a labeling or grading system, and that the FCC not rely exclusively on manufacturers to set standards.

### **Illegal 10 Meter Band Operation**

The FCC has asked the ARRL's Amateur Auxiliary for help in identifying unlicensed operation in the 10-meter band, including truckers and others. In a memo to the ARRL, the FCC's Riley Hollingsworth, K4ZDH asked for auxiliary members to provide, where possible, the names and locations of illegal operators, and license plate

numbers of vehicles.

The Amateur Auxiliary program is an offshoot of the ARRL's Official Observer program.

### **VEC's Get Involved**

The National Council of Volunteer Examiner Coordinators (NCVEC), the umbrella group that writes the amateur radio licensing exams, today filed a petition with the Federal Communications Commission to eliminate Morse code testing for amateur radio licenses in the United States and other FCC-administered areas. Citing the decision by the 2003 World Radiocommunication Conference to make Morse testing optional on a country-by-country basis, the NCVEC noted that the United Kingdom and Switzerland had already acted to end Morse examinations; stated that the Morse exam continues to be a barrier to "otherwise qualified individuals" who want to become hams; that it is a burden to applicants and examiners alike, and that code proficiency should not be used to determine who may operate voice. It asked for the immediate elimination of the Element 1 (code) exam requirement for any class of amateur license. The NCVEC petition also calls for the FCC to grant Novice HF privileges to current Technician Class licensees.

The FCC has not yet given the proposal a rule making number, so it is not yet possible to file comments. We will keep you posted when this occurs.

### **More From IARU Conference**

While the decisions regarding 40 meters and Morse code as an international licensing requirement (see previous messages) were the major actions affecting amateur radio at the 2003 World Radiocommunication

Conference (WRC-03) in Geneva, Switzerland, there were also several minor changes that will impact our hobby/ service in the future.

According to the International Amateur Radio Union (IARU), some of these included a modernization and clarification of what modes of communication are permissible, what types of content are permissible, a loosening of restrictions on international third-party communications, and encouragement for international cooperation in emergency communications. The only negative for amateur radio, it appears, is the approval of satellite-based synthetic aperture radar (SAR) as a secondary allocation on 432-438 MHz.

Old rules requiring that all international communications be in plain language are under question in some countries about the legality of using certain digital modes for DX contacts, was replaced by a statement that, except for satellite control stations, international contacts "may not be encoded for the purpose of obscuring their meaning." In addition, the same rule had limited the content of international contacts to "messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified." This has been replaced by the less restrictive "transmissions between amateur stations of different countries shall be limited to communications incidental to the purposes of the amateur service ... and to remarks of a personal character."

The previous absolute ban on international third-party communication in the absence of a specific agreement between the countries involved was replaced by blanket authorization for international third-party traffic in cases of emergency or disaster relief. Routine communications remain banned; however, it is now up to each country to "determine the

applicability of this provision to amateur stations under its jurisdiction." So any country may now decide that the rule will not apply to its amateurs, freeing them to conduct third-party contacts with stations in any other country that has made the same decision. This eliminates the need for individual, country-by-country, agreements. In addition, there is now a new provision in the international rules stating that "Administrations are encouraged to take the necessary steps to allow amateur stations to prepare for and meet communication needs in support of disaster relief."

### **Be On Guard Against BPL !**

BPL is Broadband over Power Lines. At the request of the electric utility companies, FCC is considering loosening the rules for transmitting signals over power lines. If this is done, the result would include using power lines for the Internet. If this is done following current plans, the result would be catastrophic. Think of the current situation on 40 M with all the foreign broadcast stations running rampant. Multiply this situation by hundreds of times and you will approximate the amount of QRN/QRN we will face on HF bands. Even if you have no connection to the Internet, you have connection to an electrical generating and distribution company. Their power lines could carry interference to nearly every house and roadway throughout the country. Our only representative organization to FCC (and Congress, etc.) is ARRL. Only ARRL will fight to prevent BPL from taking away our frequencies by filling them with garbage.

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### **DIVISION/SECTION E-MAIL BULLETINS**

You can receive Division and Section E-

mail bulletins, which are being used by Jim Weaver (Great Lakes Division Manager) to keep in touch with you and as the situation arises to learn your opinions. If you are an ARRL member, you can sign-up for these bulletins at: <http://www.arrl.org>, go into the Members Only Page and sign up.

### **Iraqi War Silent Keys**

Two recent casualties of the war in Iraq were amateur radio operators, one American and one from Sri Lanka. The ARRL Letter reports that Specialist Jon Fettig, KC0HSQ, of Dickinson, North Dakota, was killed in an ambush on July 22. The following day, Nadisha Yassari Ranmuthu, 4S7NR, an International Red Cross aid worker, was killed and his Iraqi driver was wounded after their vehicle, marked with the Red Cross emblem, came under fire south of Baghdad. Ranmuthu was 37 and well-known in the Indian/Sri Lankan ham community. He was first licensed in 1988. His XYL is 4S6CR, Priyadarshi.

### **Ohio Bicentennial QSO Party**

The Ohio Bicentennial running of the Ohio QSO Party will be Saturday, August 23, 2003. It runs from noon to midnight, local time. Activity will be on the low bands, 10 through 80 meters, CW and sideband.

Stations inside of Ohio can work anyone in the contest. Stations outside of Ohio (anywhere in the world, and yes, we do get entrants from Europe most years) can only work stations in Ohio -- so we buckeyes are the hunted, not the hunters for a change!

There are numerous awards (certificates and plaques) available -- including a club competition (club members compete for both individual and club awards). We plan to activate all 88 counties, many with fixed stations, and many, if not all, with mobile

operations. There should be plenty of activity for all 12 hours. Operate for a short time or the whole contest period -- whatever suits your time budget. Full details are on the official OQP web site, [www.mrrc.net/oqp](http://www.mrrc.net/oqp).

Past scores, a Quick Start guide to the OQP, an OQP e-mail list signup, and a regularly updated page showing planned activity county by county are all there for the surfing. If you have any questions, they may be directed to [af8a@arrl.net](mailto:af8a@arrl.net) or [jimk8mr@aol.com](mailto:jimk8mr@aol.com).

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### **INVESTIGATION AND MANHUNT**

On July 6, a Michigan radio amateur by the name of Scott Woodring (KC8JNG) shot and killed a Michigan State Police Officer during a routine arrest on a warrant for solicitation of a minor, resulting in a tense standoff with law enforcement.

Mr. Woodring was a member of the Christian Identity movement, an organization that promotes racist and antisemitic views along with an anti-government agenda. On Monday, July 7, after a standoff that had continued from the previous day, Mr. Woodring escaped during a law enforcement shift change, resulting in a nearly week-long manhunt for the suspect throughout Western Michigan.

Shortly after the escape of Mr. Woodring, James Wades (WB8SIW), the Michigan Section Emergency Coordinator / State RACES Officer requested that the Newaygo County Emergency Coordinator establish an intercept operation in the area of Fremont to identify any possible transmissions from the suspect. This request was based on the fact

that Mr. Woodring had utilized Amateur Radio frequencies and equipment to communicate with fellow members of the Christian Identity movement.

Mr. Woodring was also known to have recruited a number of like-minded individuals into the Amateur Radio Service and may have purchased two-meter FM transceivers for use by fellow members of his organization. Operators were asked to monitor seldom used frequencies both within and adjacent to the VHF Amateur Radio allocations.

An additional announcement was broadcast to Emergency Coordinators and selected RACES personnel throughout Michigan requesting information on any transmission heard from Mr. Woodring.

On Friday, July 11 at 5:18 PM, Mr. Bill Hubbard (WD8MKG) of Holton, Michigan reported an intercept of communications between Mr. Woodring and another radio amateur located in Fremont, Michigan. This was promptly reported to the SEC shortly thereafter. This information was transmitted verbally to Michigan State Police Operations Desk at 5:39 PM. A follow-up facsimile was transmitted to MSP Operations from the West Branch MSP Post at approximately 6:20 PM. MSP Investigators subsequently requested assistance from the Department of Defense and Federal Communications Commission in order to establish radio direction finding capabilities.

When help was not forthcoming, a call was placed to the SEC requesting these capabilities through the Amateur Radio Service. A radio direction finding team was dispatched from Kent County RACES, arriving at the MSP command post shortly thereafter. This team was placed under the supervision of the District 6 Emergency Coordinator, Mr. Tom Vandermel (KB8VEE). Subsequent assistance was obtained from RACES members in Ottawa and Muskegon Counties. In addition to

those resources in the immediate area, a team from Kalamazoo County RACES was placed on standby along with a Civil Air Patrol team from the Mt. Clemens area.

These later teams were not utilized due to the distances involved and the fact that adequate staff was available in nearby Counties. The radio direction finding activities continued until approximately 5 AM on Sunday, July 13 when Mr. Woodring was located based on a tip from a local resident.

He was subsequently shot to death when he leveled an assault rifle at officers and refused to comply with directives. RACES members provided 494 staff-hours to the operation, most of which were contributed during the 36-hour period when radio direction finding activities were being conducted.

Michigan State Police officials expressed genuine appreciation for the efforts of the Amateur Radio teams. Considerable positive feedback has been received from a variety of senior officers who now have an "expanded" view of Amateur Radio capabilities.

It is unfortunate that individuals like Woodring are amidst us, giving the hobby a bad rap. If it were not for the SEC and those Active law abiding Amateurs providing help, the media would have turned a "Hams Assist State Police" to "Criminal uses Ham Radio to Avoid Police" and give the hobby a bad name.



**THE RANDOM WIRE**  
By Tom Wayne, WB8N  
**SUMMER ?**

Where has the summer gone already? We are soon having our last picnic in the park for the season, and it will be back to the Busch Funeral Home Community Room.

Starting with the Dayton Hamvention, we have had rain almost every single day this summer. As I began writing this, it was sunny outside, then it began raining...again!

**WEDNESDAY CLUB NET**

Activity has picked up on the CARS weekly net it seems. Let's keep checking in and keep our net a lively one. Gordon and the other net controllers are doing a great job! Tie a string around your finger to remind yourself to check in at 7 p.m. on Wednesday evenings. There is usually a trivia question to keep you guessing as well.

**AUGUST MEETING**

This month (Aug. 20<sup>th</sup>) our meeting will have a special guest, as mentioned several times already in this issue. Please try and make the meeting and show our guest what a great turnout we can muster. Besides, it should prove to be a very interesting evening!

Unfortunately, I am going to have to miss this one. I will be laying in South Point Hospital recovering from surgery on my hip. For the 2<sup>nd</sup> time!. As you may or may not know, I had my hips replaced in 2000. I dislocated my right hip in Aug. 2002, and then again on June 27 while setting up for Field Day. Then I did it again less than a week later! So....the doc says it is time for "revisionary surgery". I was planning on checking into the meeting via hand held radio from my hospital

room, but I probably will be kind of out of it from the pain killer medication. I hate to miss this one, but I'll be thinking of you there in the park.

TTFN

That about does it for this month. Don't forget to check into the net and get out to the meeting! I'll catch you on the net or on the repeater at various times.

73 for now, de Tom, WB8N



The Wobbly Oscillator is a monthly publication of the Cuyahoga Amateur Radio Society, PO Box 31264, Independence, OH 44131-0264. Articles may be reprinted in any Amateur Radio related publication provided credit is given to this newsletter and the author, if known. All Submissions should be e-mailed in .doc, .wpd, or .txt format to: [newsletter@cars.org](mailto:newsletter@cars.org) by the end of the month for publication in the next month's publication.

## CARS 2003 Committees

### American Red Cross Disaster liaison

Everett WA8EYF \*\* 216-581-3657

### ARRL Liaison & media representative

Don KC8NIX\*\* Carol KC8TIE\*\*216-524-4910

### CBARC Liaison

Dwaine K8ME 440-582-3462

### Community Education & School Program

Dave KD8V \*\* 330-666-8721

Steve N8IS \*\* 216-328-0432 , Ron K8VJG

### Dayton Bus

Gordon W8GTK \*\* 330-225-6917, Bob W8GC

### Elmer

George K8KR \*\* 216-941-5304

### Field Day

Tom WB8N \*\* 440-232-4193, Aaron KC8INE

Bob W8GC, Steve N8IS, Gary NI8Z, all members

### Ham License classes

Bob W8GC\*\* Gary, NI8Z \*\* Tom WB8N,  
Steve N8IS, Don KC8NIX, Ron K8VJG,  
Bruce N8DJX, George K8KR, Dave K8DAV

### Independence Home Day

Steve N8IS\*\* Kayla KC8RYH, Bob W8GC,

### Interference & Jamming

W8GC\*\*, NI8Z, N8IS, N8TCP, WB8N

### JOTA

Steve, N8IS\*\* KC8NIX\*\*, KC8TIE\*\*

### Lighthouse events

Toby KC8TID \*\* 440-572-1544, Bob W8GC

### Museum Ship W. G. Mather, W8WGM

Bob W8GC \*\* Lin WD8SDP \*\* Steve N8IS  
Gary NI8Z, Bob W2THU, Mike K8EHP

Dennis AB8NI, Mike KB8UGT, Bruce N8DJX,  
Toby KC8TID, Ron K8VJG

### Membership

Ron K8VJG \*\* Bob W8GC

### NET

Gordon W8GTK \*\*

### Ohio Bi-Centennial year

N8TCP\*\*

### WO/Newsletter

Tom WB8N \*\* 440-232-4193, W8HBI, W8GC

### Program director

Gary NI8Z, \*\* 216-642-8705

### QSL manager-NO8A & K8ZFR

Tom WB8N \*\* 440-232-4193

### Refreshments & 50/50

Toby KC8TID \*\* 440-572-1544

50/50 Kayla KC8RYH

### Sunshine (welfare)

Dave KD8V \*\* 330-666-8721

### Technical

Roy KB8VJF \*\* Bob W8GC \*\*Terry KB8DTC

Vince N8OVW, Dave K8DAV, Tom WB8N

### VE exams

Gary NI8Z \*\* 216-642-8705

### Web Master/e-mail

Dave K8DAV \*\* 440-243-3593, Bob W8GC \*\*

\*\* chairman or co-chairman

