MIDLAND AMATEUR RADIO CLUB PO BOX 1049, MIDLAND, MICHIGAN 48641 www.w8kea.org

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	Pat Mullet KC8RTW	(989) 828-6657
Swap Committee	Mark Rodgers, KC8GRQ/Ch	(517) 672-1060
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LIFE MEMBERS

Larry K8SQB (SK), Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Larry N8CGP, Denny WD8BPT

Midland County Public Service Net, Thursdays at 9 PM W8KEA Repeater — 147.000 MHz+ PL 103.5 ● W8QN Repeater — 443.325 MHz+ PL 103.5 W8KEA Digipeater — 145.090 MHz

Next ARES®/RACES Meeting — Cancelled Next CLUB Meeting — Cancelled Salvation Armmy Building 330 Waldo Rd. Talk-in 147.000+

July 2013

Static Discharge

Kevin Martin, KD8QAM

I would like to thank everyone who helps every week with the Thursday night nets. Without your willingness to be net control, we wouldn't have a large group checking in every week. I also would like to thank all those folks that helped with the swap and Field Day to make it so successful.

For Field Day, Chippawassee Park seems to be a bit soggy. We are looking at several alternative sites close to the park. It will be an announced Thursday night on the net, when we get everything in order.

The club has been doing a great job in getting out into the community and letting the area know we are here to help. Great job everyone.

Kevin KD8OAM



MARC Minutes

Dorie French, N8WTQ

The meeting was called to order at 7:45 by Kevin, KD8QAM with 38 members and guests present.

- The minutes were posted in the newsletter and any corrections should be directed to Dorrie, N8WTO.
- John, W8ON gave the treasurer's report. He also mentioned that there were only two Skywarn® emergencies this

MARC MEETINGS

Mark Rodgers, KC8GRQ, is in charge of special events and topics for the MARC monthly meetings. If you have any agenda items, or topics for the meetings, please contact Mark at (517) 672-1060, or via e-mail: kc8grg@yahoo.com

COMMUNICATIONS

Pat Mullet, KC8RTW, is in charge of communications and publicity for the club. If you have any questions or ideas regarding these areas, please contact Pat at kc8rtw@arrl.net

EXAMINATION SCHEDULE

Saginaw - All future VE testing will be done on an appointment basis only.

Corunna - Contact Thomas Carpenter (517) 579-0599 ki8as@charter.net.

Bay City - All future VE testing will be done on an appointment basis only.

Isabella/Clare Counties - Contact Gus Glass, K8GUS at k8gus@arrl.net

With all examinations, your original license, a copy of that license, a second photo identification (drivers license, etc.) and a check or money order for \$15.00 made out to "ARRL/VEC" are required.

The address listed below gives testing sessions scheduled for Michigan. http://www.arrl.org/arrlvec/examsearch.phtml?State=MI

SUBMISSIONS FOR NEWSLETTER

Contact Pat Mullet, KC8RTW at kc8rtw@arrl.net if vou want to submit anything for the newsletter.

I need your items by the 15th of the month. Anything received after that may not make it into the newsletter for that month.

If you prefer to download the MARC newsletter from our web site, or have trouble with delivery via USPS, contact Keith, KB8SOE, at kb8soe@arrl.net.

MEDIA HITS!

Have you seen or heard mention of the Midland Amateur Radio Club in the news or in the paper? If so, please forward it, or mention of it to either Pat, KC8RTW (kc8rtw@arrl.net) Kevin (cherryredirocz@sbcglobal.net)

month. The ARES®/RACES meeting is being moved to the LEC on the first Thursday of the month from 6-7 p.m. A motion to give N8WTQ \$300 for food for the swap was made by N8WTO and seconded by Pat, KC8RTW. Motion passed. We will also reconfirm the building for the swap. The flags will be put up to show where the sprinklers are. There will be a VE session at the swap.

- · Midland High School ARC report from Dennis, N8ERF -we have received money from several grant organizations. We still have \$15,000 requests outstanding. The tower has been ordered. There will be three stations in the classroom to give more opportunity for students to be on the air. They met with the students at MHS who had interest. In addition, they went to Lowell and reported on the great club the students have there (ARGYL-**AMATEUR** RADIO **GROUP** YOUTH) and some of the things they have accomplished.
- The last meeting for the Central Middle School ARC has been held. The teachers thanked the six people who helped with the classes. In addition, the Central all-girl computer club launched their balloon. It was launched on June 4th and traveled 163 miles over Michigan and into Canada. N8ERF told about the projected landings and the help received from the Canadian hams that retrieved the balloon. The girls want to do another
- · Ryan, KB8RCR said there was interest in MARC also launching a balloon. Bill, AB8JF said he has a balloon

he will donate to the club if they want it. KB8RCR also asked if the club could purchase signs for the vehicles participating in the parades.

- Pat, KD8IVZ reported that an Ohio radio station had contacted him regarding a 70 ft pneumatic tower from one of their news trucks, for sale. No one was interested in purchasing it.
- Field Day will be at the Tridge this year, but we will have a contingency place if it is too wet. A porta-potty will be ordered by passage of a motion made by Linda, KC8MUD and seconded by Cindy, WD8BDM. Band sign up will be done at Field Day. N8WTQ will get the turkeys and have them ready for the potluck.
- · John, WB8RCR gave a presentation on the Raspberry PI computer and some applications for amateur radio

Net Controls:

June 13 W8QN June 20 KC81TI June 27 KB8S0E July 11 KD8QAM July 18 WB8FYR July 25 KC8GRQ

• There will be no meetings of either MARC or ARES®/RACES in July due to the holiday.

A motion to adjourn was made by Larry, N8CGP and seconded by Art, K0ACP. Meeting adjourned at 9:20 p.m.

> Respectfully submitted Dorrie French, N8WTQ MARC Secretary

Pat Mullet, KC8RTW

My Two Cents

Most of my time this month has sic 6 to the current standard. Microsoft's been taken up with PR matters, so I haven't been on the air much. I have been in contact with the ARRL, so I now

know how to start the hybrid WAS application process. Once I get that submitted, I'll mail in my QSL cards so they can be verified, and that should be that.

One thing I have been able to do is participate in beta testing Scott Davis', N3FJP re-write of Amateur Contact Log. Now that he's retired, Scott is reworking all his programs from the old Visual Ba-

.NET framework. When he's done, all of Scott's programs will be networkable, offer limited rig control and able to use online call book databases to complete your entry. Additional features include award tracking and easy setup for LoTW and eOSL up- and down-loading.

Scott's pricing is incredibly reasonable. You can buy individual logging programs or the entire library for a low price. Moreover, he pro-rates your purchases, so that once you hit the price of the library, you can download it and receive the passwords. You can learn more about Scott's work at N3FJP.com.

That's it for this month. See you on the air!

73, Pat, KC8RTW

ARES®/RACES John Wolters, W8QN

There will be no ARES®/Races meeting Thursday July 4th.

The August 1st meeting of ARES®/RACES will occur at the Law Enforcement Center, 2727 Rodd St. here in Midland at 6 pm. The meeting will end at 7 pm, at which time we will drive to the Salvation Army Center for the August club meeting.

At this meeting we will restart the

activities relating for the use of FLDIGI to transmit information over the air digitally. This will be in preparation for the annual Simulated Emergency Test (SET) that occurs every year in October.

Hope to see you there.

John Wolters W8ON

Great Lakes Bay Marathon

I wish to thank all who assisted with the Great Lakes Bay Region Marathon Run on Sunday, May 19th. My sleepless nights and anxious days are over.

The race director gave me good marks for our assistance to the event.

I met some new hams and they as well as our veterans did a great job. This wouldn't have happened without all of their help.

Operators from Gladwin, Flint and Bay City came up, down, and over to help as well.

The list is here, I hope I didn't leave out anybody: Jack, NX8A; Joe, N8OSL; Lee, KC8ITI; Jim, KC8HTH; Gail, KD8UJK, Cody, KD8QXJ; Kevin, KD8QXL; Jack, W8ZSX; Cindy, WD8BDM; Denny, WD8BPT; Steve,

WA8Y; Dean, KC8BGK; BRUCE, N8LYL and Philip, KD8PAE.

Jack, Lee, Jim, Kevin, and Dean-- a special thank you for carrying equipment in and out of the stadium. Jack assembled the station before and moved it during the event. Lee brought and assembled the banner holders he built.

Cody was commended by the race director as being the model shadow for this event.

Kevin was introduced to public service at maybe not its finest.

If anyone did not get their shirts, see me at the next meeting or call me and we can arrange to get them out to you.

Again, thanks to all for your help.
Chris Rose, KB8UIH

Item Left at the Swap

A piece of equipment was purchased at the MARC club table and left to be picked up later. Later came and went and the item was still there. Please contact me at (989) 374-0032 or kc8iti@arrl.net to identify your item and make arrangements to pick it up.

Lee - KC8ITI

Hamfest VE Session Results

We had another successful VE session at the swap, with nine Volunteer Examiners proctoring nine candidates, seven of whom were successful.

Sitting VEs were: KC8ITI, Lee; WB8FYR, Del; N8CGP, Larry; K6VWE, Stan; KD8IVZ, Pat; AA8EJ, Glenn; KD8MMH, Mike; KB8PGW, John and N8ERF, Dennis.

The candidates succeeding in earning their technician license were Mark Kennedy; Denise Fink; Mark Fink; Suzanne Marshall and Kenneth Morse. Those who upgraded to General were Laurence LeCodet, KD8ULC and Darlene Dean, KD8ULY.

Congratulations, everyone.

Upcoming Events

6/22-23 Field Day 7/11-14 Lupton

Michigan Hamfests

7/20	Utica
7/27	Lansing
8/3	Escanaba
8/24	Owosso
9/7	Wyoming
9/15	Adrian
9/21	Utica
10/5	Petoskey
10/6	Madison Heights
10/19	Muskegon
10/20	Kalamazoo
12/8	Harrison Township

^{*} Denotes date based on 2012 event

Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET Gladwin; Tu, 147.18 MHz, 2000 ET BAARC; Tu, 145.31 MHz, 2100 ET Tri Co ERN 146.72 Mhz, 2100 ET Canadian Lks, Wed,146.8, 2100 ET Edmore, Th, 146.8, 2000 ET MARC; Th, 147.00 MHz, 2100 ET District 3 ARPSC; Su, 145.31 MHz, 1830 ET Mi VHF Trffc Net; MWF, 145.15 MHz, 0900 ET TMMTN; Mon-Sat, 147.30 MHz, 2130 ET MACS; Sun-Sat, 3953 kHz 1100 ET MIARPSC; Su, 3932 kHz, 17:00 ET UPN; Sun-Sat, 3920 KHz, 17:00 ET MITN; Sun-Sat, 3952 kHz, 1800 ET QMN; Sun-Fri, 3563 kHz, 1830 & 2200 ET WSSBN, 3932 kHz, 1900 ET UP-ARES; Fr, 3932 kHz, 1930 ET GLETN; Sun-Sat, 3932 kHz, 2030 ET SEMTN; Sun-Sat, 145.33, 2215 ET MiDTN - 1900 local Tu, Th, Sat 3.583 +waterfall, Oivia 8/500

MARC MERCHANDISE

S- XL	\$10
2X - 3X	\$12
S- XL	\$12
2X - 3X	\$15
S- XL	\$18
2X - 3X	\$20
S- XL	\$24
2X - 3X	\$26
S- 3X	\$30
S- XL	\$42
2X - 3X	\$45
S- XL	\$32
2X - 3X	\$35
	\$10
	2X - 3X S- XL 2X - 3X S- XL 2X - 3X S- XL 2X - 3X S- 3X S- XL 2X - 3X S- XL

All garments are royal blue with white print and embroidered name and number. Extended sizes available.

Please call Bill Lee at B&C Sportswear with questions @ (989) 839-4537.

Midland High School Amateur Radio Club News

Wow, it has been an incredibly busy month. Lee, KC8ITI and I, have been working with Steve, the son of W8AWS, to help liquidate Charlie's ham radio estate. Steve donated 13 parts cabinets (about 750 drawers) most of them with components. We sold a lot of stuff at a three-day open house and even more at the swap this weekend. Steve took the bigger items that still have some value and will try to sell them on eBay. However, there was a pile of miscellaneous stuff that he donated to the club. Lee and I will be going through it to see what we might be able to use with the club. There are some things the kids are going to love to tear apart! Thank you, Steve for the donations!

Since the last newsletter, we have also received a \$10,000 grant from the Rollin M. Gerstacker Foundation. We have received have also received a \$5,000 grant from the Midland County Youth Action Council. The Midland County Youth Action Council (MCYAC) is a project of the Midland Area Com-

munity Foundation, and is made possible through the Council of Michigan Foundations and supported by a grant from the W. K. Kellogg Foundation. The Midland Area Community Foundation strengthens our community by providing leadership, fostering collaboration on local needs and issues, and encouraging a legacy of giving through grants, scholarships, and events.

We still have two outstanding grant requests, one from the ARRL and one from the ARRL Foundation. We should be hearing about these grants sometime in June. To date we have raised \$41,592! I am extremely grateful for all of the tremendous community support of this project. I have to admit to being a little choked up today when I opened the letter with the check from the Gerstacker Foundation!

The tower for the club has been ordered due to its long lead-time. John, W8QN and Denny, WD8BPT continue to work toward a solution to the installation of the tower. On the inside, the

benches in the physics classroom have been removed to make room for the operating stations that will be at the back of Andrew's classroom. I am working on the design and construction of the operating stations. We may have found a donor for the computers we will need at the operating stations. Lee and Larry are working to specify the computer requirements. More on that next time.

Andrew has been working on a publicity and recruitment campaign for the fall so we can reach as many high school students as possible. At the same time Art, Lee and Andrew are working on a plan to hold licensing classes for the students to earn their licenses.

I want to thank John, W8QN; Lee, KC8ITI; Dennis, WD8BPT; Andrew, KD8ULJ; Art, K0ACP, and Larry, N8CGP for all of the hard work that has gone into making this happen. We still have a long way to go and a lot to do while time is running shorter and shorter.

Best Regards, Dennis, N8ERF

Michigan Section News

Larry Camp, WB8R

Things have been very busy this spring with a great many new opportunities coming down the pike. Our ARPSC group has been called upon a number of times for events both actual and exercise. We are working closely with MSP on fleshing out a new program called Aux-Comm (Auxiliary Communications) which will include the following organizations:

Amateur Radio Emergency Service (ARES) National Traffic System (NTS) Military Auxiliary Radio Service (MARS) Radio Amateur Civil Emergency Service (RACES)

Civil Air Patrol (CAP)
Salvation Army Team Emergency Radio Network (SATERN)
Radio Emergency Associated Communication Teams (REACT)

As you can see, the bulk of Aux-Comm is amateur radio, so we have a large leadership role to fulfill. John, WB8RCR is providing that leadership. As this develops, I will have additional information to share.

Here in the 5th District we are working on a project to improve our hospital to hospital communications capability as well as to improve communications between the EOC's in the District. More information will be forthcoming on that project in the near future as well.

The next paragraphs are the same as what was printed last month, but still bear repeating: Field Day is fast approaching and the last minute plans are coming together. This year's ARRL FD will be held on June 22 – 23, 2013. This is a great event for both new and not so new hams and is an excellent opportunity to showcase the capabilities of your club to set up multiple stations in the field with all the support features to operate for 24 hours in conditions that may vary from mild to wild.

Be sure to gather amateur radio promotional materials and set up an information table at which visitors can be greeted and provided with information about participation and becoming a ham. Information and sign-up sheets for those that would like more information on ham radio and classes is good to have on hand. It is a good idea to gather email addresses for continued communication and be sure to have your club's website prominently noted. Don't forget to send out your press releases to local media.

Speaking of visitors, be sure to invite various community officials (government, emergency management, police, fire, etc) to come out to your FD site to see what all the fuss is about. Make arrangements to get as many visitors as possible in the operating seat and have them make a few contacts!

Above all, follow all safety protocols and have fun!

> 73 until next month, Larry, WB8R Michigan Section Manager

Storm Chasers Killed in Oklahoma Tornado

(ARRLWeb—06/03/2013) Professional storm chasers Tim Samaras, WJ0G, his son Paul Samaras and fellow investigator Carl Young were killed on May 31 near El Reno, Oklahoma when an EF3 tornado suddenly changed paths and slammed into their vehicle; they were unable to escape. According to ABC News, Tim Samaras -- an ARRL member -- was found dead in his car, still in his seat belt; Paul Samaras and Young were pulled from the car by the tornado; one of the men was found a half-mile away.

National Geographic Society Vice President for Research, Conservation and Exploration John Francis told The Washington Post that he fears that there are too many people jamming the roadways in pursuit of twisters and that this might have contributed to Friday's fatalities. In a May 2013 online interview with National Geographic, Samaras told of the increase in the number of storm chasers in recent years. "There's lots and lots of storm chasers out there, but you can probably count on one hand the number of people who go out into the field and collect data from tornadoes," he said. "We run into [storm chasers] all the time. On a big tornado day in Oklahoma, you can have hundreds of storm chasers lined up down the road. Oklahoma is considered the Mecca of storm chasing. We know ahead of time when we chase in Oklahoma, there's going to be a traffic iam."

The Samarases and Young were with

TWISTEX (Tactical Weather Instrumented Sampling in/near Tornadoes EXperiment), a scientific field research program founded by Tim Samaras to "better understand tornadogenesis, maintenance and decay processes and to gain insight and knowledge of the seldom sampled near-surface internal tornado environment." The TWISTEX team has been featured on The Discovery Channel's Storm Chasers. Tim Samaras holds the Guinness World Record for recording the greatest pressure drop ever measured inside a tornado (100 millibars near Manchester, South Dakota on June 24, 2003) and is the only person to ever record video from inside a tornado.

In his biography on The Weather Channel's website, Tim Samaras said that he used Amateur Radio equipment when he chased storms. "Being that we are on a scientific mission," he explained, "we carry about 8-10 probes, along with other weather instruments, cameras, laptops, GPS navigation, cellular telephone, ham radio equipment (I'm a ham radio operator), first aid kit -- in case we come across tornado victims (most of our crew is first winches. aid trained), tools, saws...well...the whole garage."

On the Weather Underground blog, Jeff Masters discussed the confluence of factors that might have contributed to Friday's tragedy. "Tornadoes by their nature are unpredictable, and can change course unexpectedly, or pop up suddenly," he wrote. "It's particularly dangerous when a tornado is wrapped in rain, making it hard to see, or if a chaser is operating in a heavily populated area, where roads may suddenly become congested. All four of these conditions occurred Friday during the El Reno tornado."

National Geographic Society Executive Vice President Terry Garcia said that the National Geographic Society made 18 grants to Tim Samaras "for research over the years for field work like he was doing in Oklahoma at the time of his death, and he was one of our 2005 Emerging Explorers. Tim's research included creation of a special probe he would place in the path of a twister to measure data from inside the tornado." Tim Samaras' work on lightning was featured in the August 2012 issue of National Geographic magazine.

"I chase the most powerful storms on the planet," Tim Samaras said in a video on his personal website. "All my life I've been on a quest to figure out how these things worked. Tornadoes have represented the biggest challenge as they are very fleeting in nature and extremely difficult to pinpoint their proposed destruction...At times I have mixed feelings about chasing these storms. On one hand they are incredibly beautiful; on the other hand, these powerful storms can create devastating damage that change people's lives forever."

Amateurs in Oklahoma Respond to Storm Aftermath

(ARRLWeb—05/23/2013) After an EF5 tornado swept through Oklahoma on May 20, radio amateurs in that state assisted the American Red Cross with its communications efforts. "Amateur Radio operators were asked to support voice communications from the American Red Cross Oklahoma City Chapter Headquarters to their feeding station at the Incident Command Post located in Moore," explained ARRL Oklahoma Section Emergency Coordinator Mark Conklin, N7XYO. Moore, located about

halfway between Norman and Oklahoma City, suffered the brunt of the tornado damage. As of 8:30 CDT on May 22, all Amateur Radio operations in support of the American Red Cross ceased.

At least 24 people, including nine children, were killed when the 1.3-mile wide tornado moved through Moore, Oklahoma's seventh largest city. The National Weather Service stated that the tornado traveled an estimated 17-milelong path for 50 minutes, with an estimated peak wind that ranged from 200-210

miles per hour, making it an EF5 storm, the most powerful category of tornados possible.

In addition to the American Red Cross, members of the Salvation Army Team Emergency Radio Network (SATERN) were also in Moore, ready to support and assist with the Amateur Radio response. According to ARRL Oklahoma Section Manager Kevin O'Dell, N0IRW, the tornados disrupted cellular service in the affected areas.

"I have been in regular contact with

Explore the World with Amateur Radio!

Oklahoma Section officials since yesterday morning," said ARRL Emergency Preparedness Manager Mike Corey, KIIU. "Through the ARRL EmComm Twitter feed and regular communication with our national partners, the ARRL has been sharing information on the Amateur Radio response to the Moore tornado. Our folks in Oklahoma who have been assisting the American Red Cross and the Salvation Army have been doing a great job and they have my heartfelt thanks for the work they are doing for their community."

Corey also stressed that those who wish to assist with response efforts in Oklahoma should not self-deploy. "The ARES leadership in the Oklahoma Sec-

tion has everything under control and there is no need for volunteers from outside the Section," he said. "If you would like to assist in the overall recovery effort, please check out the website of National Voluntary Organizations Active in Disasters (VOAD)."

Personnel Changes at ARRL HQ

(ARRLWeb—06/04/2013) ARRL Contest Branch Manager Sean Kutzko, KX9X, has accepted the position of ARRL Media and Public Relations Manager. Kutzko joined the ARRL as the Contest Branch Manager in October 2007. An enthusiastic operator in contests and VHF weak-signal work as well as a backpack QRPer, Kutzko holds a BA in Communications from the University of Illinois at Springfield and has worked at several National Public Radio affiliates

in the Midwest.

"After spending the past six years promoting Radiosport to the Amateur Radio community, I'm looking forward to helping promote all of Amateur Radio and what we have to offer, both within our community and to the rest of the world," Kutzko said. "Amateur Radio isn't just a resource to our communities in time of need, it's also a lot of fun."

Taking over as Contest Branch Manager is Mike DeChristopher, N1TA.

DeChristopher started at ARRL last year as a Logbook of The World specialist and Awards and Programs Assistant. "I'm very excited to be taking over the Contest Branch, and am looking forward to the new challenges this will bring," DeChristopher said. He is active in contesting from his Feeding Hills, Massachusetts location.

Kutzko and DeChristopher will begin their new positions on June 17.

Technical Topics and Information

(ARRL Contest Update-May 22, 2013) Paul Harden, NA5N is an electronics engineer for the Very Large Array (VLA) radiotelescope facility in New Mexico. Not limited at all to the "ultrahighs", Paul discussed a neat new project in the recent ARRL Propagation bulletin ARLP0019 with significant implications for HF operators. "My current project is our low-band system (60-500 MHz) and the Long Wavelength Array (LWA) for 10-88 MHz. Though a few years away, one of the science goals of LWA is to make real-time 3D maps of the ionosphere. The prototype system clearly paints the locations of the E/F layers and its depths as it migrates around. Really cool, and when completed, should be made publicly available on the web and a great tool for hams."

- VOACAP Online has been recently upgraded so that the Google Maps portion is now using the API version 3 with some new functionality added. VOACAP is a propagation prediction program for 3-30 MHz. (Thanks, Daily DX)
- The automotive power system is a surprisingly noisy environment, even with that big battery on the bus. Varistors are used to clamp excessive variations this *EDN* article shows you how they are used to do the job. You can make use of that information in your portable or mobile station, protecting your own gear.
- The VLF station WWVB is changing their time protocol, possibly affecting clocks and other instruments that use the time-and-frequency broadcasts. Sharp-eyed reader, Dean W9WGV spot-

ted this information.

• There is more information online from *EDN* - this article is on SAW (surface acoustic wave) and BAW (bulk acoustic wave) filters. Exotic? Hardly - your wireless environment is full of them and probably more than one of your radios!

Technical Web Site of the Week - An alternate source has emerged for HV power transformers, along with Hammond Engineering picking up the Peter Dahl designs. Gary K4AVC gives his customer's recommendation, saying, "My friend Peter Eggiman of Electronic Products Design has been making HV transformers since 1983 and has all of the Dahl data and specs from years ago. He has a nice manufacturing facility in Wendell, N.C."

More Technical Topics and Information

(ARRL Contest Update—June 5, 2013) An "artificial antenna" can be created for tests of transmitter outputs, impedance matching circuits and the like connect a normal antenna tuner backwards with a dummy load on the normal

input. Any number of impedances can be created by changing the tuning. (Thanks, Don W3FPR)

• Rick K6VVA wrote in with word of a new toy - an IOGEAR Model GCS22U 2-Port USB KVM Switch with

a one-touch remote switch to swap the monitor, keyboard and mouse between two different computers. This can even be adapted to use with a footswitch for hands-free swapping.

• Improper connector installation

plagues many ham stations, not only with RG-6 CATV connectors but with all types of coaxial connectors. An improperly installed connector is an invitation to RFI ingress and equipment damage. Frank W3LPL presents this detailed set of instructions for installing type F connectors on quad-shield RG-6 cable, common in home installations and for receiving antennas:

- · Quad cable connector installation requires skills and patience. Compounding the problem, hams often use connectors that are not intended for use with quad-shield RG-6. Improper connector installation is so pervasive in the cable TV industry that CommScope prepared an illustrated paper on improper connector installation. Begin by using the correct connector for quad-shield cable. Proper installation involves five specific steps, each performed carefully and correctly:
- 1. Use an RG-6 stripping tool to remove the jacket. Inspect the braid wires

to be sure none of the wires are damaged. Never use a knife to remove the jacket because inevitably it will damage the fragile braid wires no matter how careful you are.

- 2. Carefully fold back only the outer braid and spread the braid wires evenly around the circumference of the cable jacket. Verify that no wires are broken. All of the braid wires should lay flat over the jacket, should not be more than 1/4 inch long, and should not be bunched up.
- 3. Remove the foil tape between the two braid shields. Do not use a knife to assist in foil tape removal. This step is time consuming and often ignored. The connector will be very difficult to install if the foil tape is not removed. If somehow you manage to force the connector onto the cable with the foil tape in place, the connector will be intermittent and unreliable.
- 4. Carefully fold back the inner braid and spread the braid wires evenly around

the circumference of the cable jacket. Verify that no wires are broken. All of the braid wires should lay flat over the jacket, should not be more than 1/4 inch long, and should not be bunched up.

5. Be sure the connector is fully seated. If you need to use great force to mate the connector something is wrong, either you used the wrong connector or the cable was improperly prepared. If somehow you manage to force the connector onto the cable, the connector will be intermittent and unreliable.

Technical Web Site of the Week -The equations that we call Maxwell's equations were not really written by Maxwell - at least not in that form. Oliver Heaviside - a self-taught amateur - is responsible for having simplified the nearly two dozen equations from Maxwell into the handful used today. Another interesting but forgotten fact is that Heaviside also invented and patented coaxial cable! (Thanks, Jerry WAØACF)

	Memberships E	xpiring in June	
K8RI N8JBW	KB8QWQ KC8TQS	NX8A KA8HQW	WD8SDX
	Memberships B	Expiring in July	
	KC8 KD8N		
	Memberships Ex	piring in August	
	KB80 KC0	~	
Current Active Club M	embership 57		
	Birthdays Celebr	ated in June/July	
W8LSS 6/2	KC8URV 6/28		WB8RCR 7/21
K8RI 6/16	WD8ODG 6/30		KD8DWX 7/21
KB8VSS 6/21	KB8RCR 7/2		N8LMS 7/27
KD8IWG 6/23	KG8YG 7/6		W8OKN 7/30
K8HP 6/24	K8RRB 7/8		
N8POX 6/25	KA8ORL 7/11		
	Anniversaries Celel	brated in June/July	
N8CGP and N8KRL 6/5	N8STF and Mary 6/16	NX8A and Kristina 6/24	AA8EJ and Beverly 6/28
N8KFE and Cheryl 6/12	N8POX and Kris 6/17	KB8PGV and Connie 6/27	KC8RTU and Brenda 7/2
KB8VSU and Barbara 6/13	W8LSS and WD8AXR 6/19	K8CCE and Clarice 6/28	W8AWS and Delores 7/2
WA8LQD and Kathy 6/16	N8UPP and KC8AVI 6/21	KD8HID and ??? 6/28	KD8MQX and Emily 7/2



If you desire to join the Midland Amateur Radio Club, the dues are \$20 per year for an individual membership. A family membership is available for an additional \$5 per year which covers all of the individual's family members. Family members must reside at the same address as the primary member to be eligible for the family member rate. The membership dues help to cover the operating expenses of the Club, and its radio systems. Membership includes Autopatch privileges on the W8KEA repeater (147.000+), voting privileges at MARC meetings, and a monthly newsletter. Please supply the following information:

Name:	Callsign:	License Class
Address		
City	State _	Zip
Home Phone ()	Work Phone ()	
E-mail address		
Spouse:	Callsign:	License Class
Birthday: (mm/dd)	Anniversary: (mm/dd)	
Desired newsletter format:	Paper copy via USPS or via e-mail	
Are you an ARRL Member?	Y/N Do you want an ARES Application?	? Y/N

We request this information so we can communicate with you regarding MARC business, and periodically send you newsletters and congratulatory birthday & anniversary greetings. We do not sell this information nor will we knowingly publicize private information without your permission. Information that is publicly available may be distributed to Club members for

various purposes, including membership lists, without prior notification.

You may give this completed form to the MARC treasurer, or you may mail it to:

MARC, PO Box 1049, Midland, MI 48641-1049