

THE HARG PIONEER

**Official Newsletter of the
Hardee Amateur Radio Group**

**ISSUE #1
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WELCOME TO THE HARG PIONEER ***By Darrell Davis KT4WX***

Welcome to the inauguration of THE HARG PIONEER, the HARG (Hardee Amateur Radio Group) monthly newsletter. I hope you enjoy the new format of this letter. This newsletter will replace the HARG E-LETTER that I have been producing for almost the last year. Instead of the E-LETTER you will be receiving a newsletter once a month as an attachment. It will be in PDF format so anyone can read it regardless of what platform they are running (Windows XP, Linux, or even Windows Mobile, yes you can get a PDF reader for Windows Mobile).

The newsletter will be disseminated, two ways: (1) Via email on the new HARG email list at freelists.org. If you are already on this list, you will receive it automatically. It will come as an attachment and you will receive an HTML version as email text. (2) Via the new club website, which will be in its new home shortly. Also the newsletter will be on the section web page at <http://www.arrlwcf.org> as well. There are quite a few hams in other counties who are interested in the activities here in Hardee County.

If you have any content that you feel would be useful or interesting for others to read in this newsletter, please send those to me at kt4wx@juno.com and I will be glad to include them in the next edition of the newsletter. Also if you would like to contribute a column on a regular or even an occasional basis, please send those to me as well. Again welcome and hope you enjoy reading THE HARG PIONEER.

NEXT CLUB MEETING – MONDAY SEPTEMBER 10, 2007

The next Hardee Amateur Radio Group monthly membership meeting will be on Monday September 10, 2007 at the Hardee County EOC, 404 West Orange St., in Wauchula. The meeting was moved to the 10th, due to the first Monday of the month being Labor Day. Your attendance at the meeting will be sincerely appreciated. Our club cannot function properly without support from its members.

The following topics will be up for discussion at this month's meeting

- Presentation of Certificates – Pandemic Exercise Participants – 6/08/07
- Dissemination of the new Hardee County ARES Plan, which has been rewritten
- Finalization of the schedule for HARG members to take the Incident Command System courses – ICS 100, ICS 200, ICS 700, ICS 800.
- HARG Christmas/End of the year party.
- Updates on the Repeaters and Communication Room ongoing work.

NEW HARG EMAIL LIST SERVER

Late last month the new HARG email list server went on line. This new list server is for dissemination of HARG newsletters, bulletins and information to the members and associates of HARG. The number currently on this list is about 25. If you are not currently on the email list send an email to the following email address harg-list-subscribe@freelists.org and I will add you to the list. The list is closed and new members must be added by the moderator (KT4WX). This prevents unauthorized users from spamming the list and clogging all your email boxes with mail you do not want. The list is a low traffic list so you also not have to worry with you box being overloaded either. If you have any problems being added to the list email me at kt4wx@juno.com and I will add you to the list manually.

NEW HARG WEBPAGE

Also by the time you read this the new HARG web page will be up and running at a temporary location while it is being debugged. You may go to <http://harg.drivehq.com> and view the HARG web page. You will find pages explaining what HARG is about, HARG Constitution and Bylaws, directions to our club meetings, N4EMH station layout and N4EMH Repeater Site (with pictures). Also you will find a page there with the new Hardee County ARES plan, past editions of the HARG E-LETTER and this newsletter there as well. As soon as the page is debugged we will move it to its final home. We will let you know the domain name as soon as we have one.

Repeater Upgrades Coming Soon

By Darrell Davis KT4WX

It has been a long time in coming but we are now making progress. Construction has begun on retrofitting the Regency MCCU01R UHF Repeater we have to our new pair on 442.325 MHz. In the next issue we will have pictures to show you of how the work being done.

We now have acquired a new repeater controller that will control the new 442.325 MHz N4EMH Repeater and the current existing 146.625 MHz N4EMH Repeater. It is the Arcom RC-210 made by Arcom Communications out of Aurora, Oregon. Arcom is operated by Ken Arck AH6LE. If you wish more information on this controller you can go to the company website at <http://www.arcomcontrollers.com> Show below is a picture of what the new controller board looks like.



This controller is available in kit form and fully assembled form. HARG received several donations to help pay for the basic kit and the parts needed to assemble the controller. The basic kit (which was the printed circuit board, the main micro controller already preprogrammed with the controller firmware (Atmel AT128 Mega), the Digital Voice Recorder IC, Audio Switching IC and the DTMF Decoder IC's. The rest of the parts were ordered and have been received from Mouser Electronics, out of Mansfield, TX.

This controller has the following main features: (1) Control up to THREE repeaters, (2) Varied courtesy beep parameters, (3) Speech synthesizer, which is actually a DVR (Digital Voice Recorder) with a 240 word pre recorded vocabulary, (4) DVR capability for recorded voice announcements, (5) I/O interface for alarms (such as when a weather receiver gets a EAS alert from NOAA weather radio). (6) Remote programming via DTMF or local programming via a serial port and a PC. This controller has many more features that described. This controller has a lot of functions that in many comparable controllers would cost much more.

Our plans are to put the 442.325 MHz N4EMH up with this new controller at the same time and touch up the installation and tweak out any bugs that we find. Then we will take the 146.625 MHz off briefly and interface it to the new controller after any bugs are found.

Summary of the Last HARG Meeting Monday August 6, 2007

Although the attendance at the meeting was slim, the following is a summary of the events at the last HARG meeting:

- Roy Alderman, KI4YIE, was voted into Full Membership of HARG.
- Planning on a future Mobile Communications Unit was continued.
- Voted to file Articles of Incorporation with the State of Florida, Department of State, Division of Corporations, which had been prepared by Darrell Davis KT4WX.
- Forms to allow HARG to conduct fund raisers in the State of Florida will be filed with The State of Florida, Department of Consumer and Agricultural Services, as soon as HARG receives its incorporated status.
- A Discussion of what public service events HARG could provide its services for. It was decided to find out if we can do a booth at the next Hardee County Pioneer Days, next spring. What is unknown is if any booths are still available.
- Voted to move the next club meeting date to one week later, Monday September 10, 2007, so as to not conflict with Labor Day.

WANTED: OLD COMMERCIAL RADIO EQUIPMENT AND OLD LAPTOP COMPUTERS

HARG is looking for anyone who wishes to donate any old surplus VHF Hi Band, UHF, or 800 MHz surplus commercial radios to HARG for future projects. The brand does not matter or even if it its programmable or crystal controlled. If anyone has any GE Master Exec II, GE MVP, Motorola Micor, Motorola Mocom, or Motorola Mitrek, these are the most desired. Any kind of Motorola programmable HT's or mobiles would be useful. The programmable radio's will be used for ARES Portable to go kits we are assembling. Crystal controlled units would be used as spare parts to keep our repeaters going and for data radio's for our ARES Portable to go kits. Also we will use some of this for the new Mobile Communications Unit we are constructing.

Also if anyone has any old Pentium II or III laptop, even if the batteries are bad, we can use them for our ARES Portable to go kits as well. Any donations will be sincerely appreciated.

If you have anything to donate, please let us know!! Please contact Darrell Davis KT4WX via email at kt4wx@juno.com or via telephone at (863) 773-6969. You may also contact our club Vice President Charles Adler KI4SPG via email at ccadler@strato.net or via telephone at (863) 375-4433. Thank you for your help.

TIPS AND TRICKS

By Darrell Davis KT4WX

Welcome to what will hopefully be a column of interest to you in most issues of the HARG PIONEER. If this is of interest and good reading for your benefit or if you have suggestions on what should be covered, please email me at kt4wx@juno.com.

COMPUTER CORNER: In my searching the Internet I have found the following programs for windows that you may find useful for your computer. I am a fan of the Open Source Movement in particular, not only for the price of the software in many cases, but that fact that you have access to the source code and can recompile it to make your own custom programs. The trick is you must publish the source code if you distribute or sell it as well. This is called the General Public License or GPL. It keeps open source software, open source where no one can take advantage of closing it and making it proprietary.

- **CLAMWIN** = An excellent Windows only (sorry to our Linux users) Anti Virus program that does not take a lot of overhead to run on your PC. It has a good thorough anti-virus scan mode and its quite powerful and easily configurable. If you decide to do a system file scan, initiate it and walk a way from your computer as it will take a while (all night on my laptop). It is a little over a 17 MB Download. You can download it from <http://www.clamwin.com/>
- **OPEN OFFICE 2.2** = An excellent software suite that has the look and feel of Microsoft Office and the best part, it is FREE and Open Source, and sponsored by Sun Microsystems. It has packages that are equivalent to Microsoft Word (Open Office Writer), Microsoft Excel (Open Office Calc), Microsoft Access (Open Office Base), Microsoft Powerpoint (Open Office Impress), and Microsoft Draw (Open Office Draw). You can open Microsoft Office files in Open Office and save them in a variety of formats, including Microsoft Office format or the native Open Office format (which takes less space than the Microsoft Format). This newsletter is done in Open Office Writer. It is a 111 MB download available at <http://www.openoffice.org>.
- **MOZILLA FIREFOX AND THUNDERBIRD** = Are you tired of Internet Explorer and Microsoft Outlook Express that came with your computer (unless you built your own computer and install Linux on it). Try Mozilla Firefox, which is a great web browser, based upon the old Netscape Navigator. Mozilla Thunderbird is a great email client, equivalent to Microsoft Outlook. You can import your existing favorites lists into Firefox and email address book and email files into Thunderbird as well. Mozilla is a private foundation which sponsors the development of Firefox and Thunderbird. It is open source under the Mozilla Public License. You may download each from the following:
 - Mozilla Firefox = <http://www.mozilla.com/en-US/firefox/>
 - Mozilla Thunderbird = <http://www.mozilla.com/en-US/thunderbird>.

TIPS AND TRICKS (Continued)

HARDWARE HELP: Let us talk about Battery Capacity basics. There are two main types of batteries, when it comes to how they are designed.

- **DEEP CYCLE:** This kind of battery is designed to be charged and discharged repeatedly for so many times (usually several hundred charge/discharge cycles). These kind of batteries are used in marine service, home alarm systems, etc.
- **FLOAT SERVICE:** This kind of battery is designed to deliver a high amount of current for a very short period of time without complete discharge. This is the kind of battery that is in most trucks and cars to start the engine. They are NOT designed to be completely discharged.

If you are going to use a battery for a portable emergency station or to back your station at home it should be a deep cycle battery. Here is the formula to find out how long a deep cycle battery will last if you use it with your portable emergency station:

$$\text{Number of Hours of Operation(Hours)} = \text{Battery Capacity (Ah)}/\text{Current Draw of Load(s) (A)}$$

Deep cycle batteries are rated in is measured in “Ah” or Amps per Hour. That means it will deliver so many amps of current for one hour before discharge. For example if your backup battery is 25 Ah rating it would deliver 25 Amps of current for one hour before discharge. If you draw less current, the charge of the battery will last longer naturally. Simple math will determine how long the battery will approximately last. Using the previous example, if you are using 5A of current, that same battery rating of 25 Ah will last approximately 5 hours before discharge. Drawing 1A of current, means the same battery will last approximately for 25 hours before discharge.

The amount of current your equipment will be specified in the owner's manual of your equipment or you can measure the current with an ammeter to find out.

That is all for this month. If you do not have broadband access please email me and I will get you the software mentioned above on a CD or make arrangements to get it to you. You can also go to your local library which should have broadband access and download it there onto a Flash Drive or other media. 73 and Keep your soldering iron hot until next time.

Beware: HURRICANE SEASON CONTINUES

Do not forget Hurricane Season continues until November 30. Keep checking the latest Tropical Weather Outlook which is issued 4 times a day at <http://www.nhc.noaa.gov> or listen to NOAA weather radio. Even though high pressure in the Atlantic has protected the Southeastern United States for the season so far, this is no guarantee of how the season will go from now until November.

