



Philip Loggins K4PDL

Hope everyone is well and has survived the winter and all the health bugs that has gone along with it. I'm living proof that no medicine is available for any of it. My Dr. is tired of seeing me. They called to let me know the Dr. is going on a long vacation, so don't call him, he'll call me.

Moving on, Spring is just around the corner. The Garden Centers will to be at full swing, and it's time to plant the seeds in the garden. It's also time to plant the seeds in the club too. An idea has to take root and grow, so plant your ideas for the club now and let them grow into the future. Remember the ole' saying, "You reap what you sow".

I challenge every LARC member to bring one new amateur into the fold between now and the end of this fiscal year. Check old rosters for long lost members.

And above all, email me at <u>k4pdl@bellsouth.net</u> with your thoughts, ideas, or criticisms. This is your CLUB, be an active part of it. Help us preserve the good and build for tomorrow. Start today!

Until next time, 73 Congratulations to the following NEW "hams" as of 3-27-09 Eddie E. Grace, Sr. kj4czd Lewis E. Gilbert, Jr. kj4cze William W. Whittington kj4czf Michael J. Riemann kj4czg Eva R. Riemann kj4czh Jared T. Garfield kj4czi William H. Leming kj4czj "Hunter" (son of ChuckW4EDT) Terry E. Kearns kj4czk R. Joye Thompson kj4czl

Special thanks to Ron KI4RBE and Mr. Ed KF4HPY for teaching the class and to Roger WB4T, Mr. Ed KF4HPY and John KE4PCF for providing the testing session.

#### PSK-31, How To Start Receiving. Ed Cravey, KF4HPY

\_ \_\_\_\_



Many times I have asked fellow hams if they do PSK-31. They answer, "I've never heard of it"; or "I'd like to try it one day". Many think it takes much costly equipment; no, it does not! To aid you in learning about PSK-31, I am going to tell about RECEIVING the signals on your very own equipment already at home. If you have HF radio, computer with earphone and mike jacks, you are almost ready. Next, you must canvass the "junk box" for a cable with a 1/8" stereo miniplug on each end. If your radio uses 1/4" earphone jacks, then a 1/4" stereo plug to 1/8" stereo plug adapter is needed as well. You don't have the cable or adapter? Visit RadioShack. I am looking at such a cable now. RS # 42-2387A; 6-Ft., Shielded Stereo Audio Cable. Greater lengths are available also, if needed. The last piece of the RECEPTION puzzle is software. I favor DigiPan 1.7 and 2.0 as they are very simple programs. Also, they are free. Go to www.digipan.net for downloading. DigiPan 1.7 is set up to scan all the waterfall tracks in turn; and is suggested for use on older PC's. DigiPan 2.0 is the latest and shows all the QSO's in progress on a half screen with CQ's on yellow bands. The other half screen has the QSO that the cursor is locked onto. A mouse click on either program will utilize one QSO on one full screen complete with waterfall and TX portion. Let's imagine you have downloaded and installed the program, what now? Load the program and turn the radio on, seeking a PSK signal. Look for signals on 3580 USB, 7040 USB and 14070 KHz USB, active at this stage of the sunspot cycle. You will hear warbling. Set the volume at a moderate level. Plug one end, of the stereo cable into the phone jack of the radio. Plug the other end into either the mike, or line input to the sound card. The basic setup for RECEIVING is finished.

At this time you should see a mottled vellow/blue waterfall at the lower area of the screen. Bring the cursor over one of the tracks on the waterfall, and watch the words flow across the upper screen, as you click on it with the mouse or touch pad. If you have DigiPan 2.0, you can also click on one of the many QSO's in progress in "Multi" mode to move the cursor to that point. I would now print out the Help pages and bind them into a book. This will aid you in using DigiPan. The pages alone, on the receiving of PSK -31 number three; far beyond the scope of this simple article. Play with the program; click on "View" on the upper task bar and play with Control Bar, Log Bar, and Phase Scope. See what each control button does; when you get to "TX /RX" on the task or T/R on the Control Bar, you will be SIMULATING the sending of text. Press "CQ" or "CALL 3"; as long as there are no cables to the mike or accessory jack of the radio or sound card output of the PC; there will be NO accidental transmissions on the air. With the PC speakers on, send a message. Hear the warble? Send same message on another frequency, different tone. When all the cables and interfaces are in place you will not hear the tones, unless you want to by plugging in extra equipment. Check it out; enjoy. The next few months I hope to review a few of the interfaces I have used, giving a brief article on each. This is an introduction by RECEPTION only. I will try to help you if needed; contact: kf4hpy@arrl.net

### **ID-10-T ERROR**

(Author's Title) Author's name withheld by request

The long and short of it was that I was on an early morning 75m net earlier last month, not paying attention to the wx, when all of a sudden there was a loud "boom" of thunder overhead and rain was pouring down. Well, first, I have yet to install the antenna switch I bought, so I had to unscrew the connector from the tuner... and it was just at the moment that I removed the connector that I realized that in my haste I hadn't turned my radio or amp off... and the VOX was on...! Can you imagine if that VOX had triggered, and the 500 watts out of that amp had been looking for a place to go.....!!! That could have gotten ugly in a hurry. Ya know how momma always said to wear clean underwear, in case ya get hurt and have to go to the hospital...

Well, it wouldn't have done any good..... 😕 ... I did get that antenna switch installed...! Don't wanna chance the possibilities again.....

### QST – To all Amateur Radio Operators in NE Georgia From: KA7APJ – Jim Smith - Habersham County EC, ARES (Amateur Radio Emergency Service)

Ref: Formation of ARES organization for NE Georgia including the counties of Habersham, Stephens, Banks, Franklin & Rabun – Open to all Amateur Operators whether signed up for or new to ARES.

<u>Message</u>: The recent storm events of the past month has put deadly tornadoes on our doorstep – Fortunately none so far have reached NE Georgia – BUT we can see how devastating such storms and other natural disasters can be and what an ever increasing importance Amateur Radio has in supporting the First Responders and providing communications and support in the aftermath.

We are inviting all Amateur Radio Operators to attend an ARES formation meeting on Saturday April 5 at 10am at the Habersham EOC located in Mt Airy. This one hour meeting will introduce ARES program and both discuss ARES activities and answer questions. The need for volunteers is great in our area of the State of Georgia and anyone able to provide communications support either at home, in your mobile or at a local shelter / hospital emergency site.

The meeting will be held at the Habersham EOC in Mt Airy – Space is limited so we need you to call to reserve a space at 706-778-9500 – address is 175 EOC Drive, just off Chase Road in Mt Airy. If you have any questions you can e-mail <u>KA7APJ@arrl.net</u> <<u>mailto:KA7APJ@arrl.net></u>.

We look forward to greeting any and all Hams on April 5<sup>th</sup>.



As spring approaches, the chances of tornado activity will increase. Visit the below link to refresh yourself on steps you can take to be prepared.

http://content.gannettonline.com/gns/tornado/tornado.html

### Courtesy of Cal Neff K4JSR ARES EC Barrow County.

To those of you who would like to have attended a SkyWarn class but could not, here is the NOAA URL for online SKYWARN classes.

The way things are going weather-wise lately it is highly recommend the use of these

#### online study tools.

#### http://spotterguides.us/advanced/advanced03.htm

### **CLUB LOGO ITEMS**

(See John Brandon KE4PCF, supplies are limited)



### **TRIVIA QUESTION ?**

- 1. What club organized the First Official Radio Club and when?
- 2. What was the original NAME of the Radio Club?
- 3. Who was the LEADER of the originating club who became honorary president of the newly formed Radio Club?

First member to email <u>k4pdl@bellsouth.net</u>, with ALL 3 correct answers, wins a free lunch!!



CHEROKEE CAPITAL AMATEUR RADIO SOCIETY

## **SATURDAY APRIL 26, 2008** *8 AM – 2 PM*

**LOCATION** 

SUGAR VALLEY COMMUNITY CENTER

3295 SUGAR VALLEY RD NW

SUGAR VALLEY, GA

### GRAND PRIZE – YAESU FT 7800R Dual Band 2M/440 Includes the YSK 7800 Remote mounting kit

(You do not need to be present to win)

**> TALK-IN:** 443.675+ 146.745- 146.805+ (NO PL TONES HAMFEST DAY)

> \$5 ADMISSION includes; FREE PARKING, FREE TAILGATING WITH PAID ADMISSION & YOU ARE INCLUDED IN ALL PRIZE DRAWINGS BY PLACING YOUR TICKET IN THE PRIZE BARREL.

THE FOLLOWING <u>DEALERS</u> WILL BE ONSITE ALONG WITH OTHERS OFFERING NEW AND USED AMATEUR RADIO EQUIPMENT AND ACCESORYS.

#### ALABAMA RADIO \*\*\* C.T MORGAN \*\*\*TOWER ELECTRONICS

- > ARRL VE TESTING SESSION AT 11 AM.
- > RANDOM PRIZE DRAWINGS DURING THE HAMFEST (You must be present to win)
- ► FOOD AND DRINKS AVAILABLE ONSITE FOR BREAKFAST AND LUNCH.
- ➢ FREE LIMITED INSIDE TABLE SPACE FOR CLUBS, INDIVIDUAL HAMS, OR HAM GROUPS. BRING YOUR OWN TABLE. MUST BE RESERVED.
- > SET-UP ON FRIDAY 1 PM-6 PM, AND 7 AM SATURDAY MORNING.
- DIRECTIONS: FROM INTERSTATE 75 TAKE EXIT 320 AND TRAVEL WEST ON GA HWY 136 (6.5 MILES) TO THE INTERSECTION OF GA HWY 136 AND GA HWY 136 CONNECTOR. TURN LEFT HERE AND TRAVEL 3.6 MILES TO THE HAMFEST SITE ON THE LEFT.

CONTACT: FELTON FLOYD, AF4DN at <u>af4dn@iwispr.net</u>, 706-629-0369 or visit the Club website <u>www.k4woc.com</u> for more information about the CCARS hamfest

### "World Amateur Radio Day"

Each year on 18 April, radio amateurs celebrate World Amateur Radio Day. On that day in 1925 the International Amateur Radio Union (IARU) was founded.

The theme of the celebration this year is: "Amateur Radio: A Foundation for Technical Knowledge".

It is no secret that many professionals in the field of radio, TV, communications, electronics, etc. have started their technical education as young Radio Amateurs. Although Amateur Radio has a different face nowadays – Digital Communications, Voice over Internet Protocol, Satellite up- and downlinks, etc. – it is even of greater value as a foundation for technical knowledge for youngsters. And much more – it is and should be used as a unique attraction for future young Radio Amateurs.

World Amateur Radio Day provides an occasion to promote and publicize Amateur Radio. IARU Member Societies are encouraged to find suitable ways of celebrating World Amateur Radio Day. Many ways can be considered – inviting youngsters to visit radio clubs, showing up on the air with a special call sign, organizing a station in a public area with media coverage, or publicly honoring amateurs who have made significant contributions. Whatever method is chosen, Member Societies should publish a press release for the media giving the background to World Amateur Radio Day and promoting the value of Amateur Radio as a foundation for a technical career.



### ARRL Certification and Continuing Education (C-CE)

Visit http://www.arrl.org/cce/ for more info

### FEMA Independent Study Program (ISP)

For those of us who are emergency responders, it is a prerequisite to have taken and passed independent Study courses IS-100 (Introduction to Incident Command System) and IS-700 (National Incident Management System (NIMS), An Introduction) as a minimum. All ISP courses are designed to allow you to learn at your own pace and at you leisure and are FREE. All it will cost you is a little time.

A list of all FEMA ISP courses and links for each course can be found at <u>http://training.fema.gov/IS/crslist.asp</u>

When you have completed the required courses (and/or other ISP courses) and have your course completion certificate in hand,, please let Ron Mulberry, KI4RBE or one of his assistants know so we can get your training logged. Take as many of the courses as you wish but <u>REMEMBER</u> IS-100 and IS-700 are required.

### Quote of the Month

Without involvement, there is no commitment. Mark it down, asterisk it, circle it, underline it No involvement, no commitment. -- Stephen Covey –

**Chinese Proverb** 

He who smiles in a crisis has found someone to blame.

### BUY, SELL, TRADE "You can list items here"

#### My radio is sick. Who do I call?

We recommend "The Radio Doctor" Milton Lord, N4DA Visit his web site at <u>http://www.n4da.com/</u> Or give him a call at 770-966-1166 While your on his site, check out his Home Brew AMP

#### **April Club Meeting**

April 29 at Curt's in Oakwood. Dinner at 5:30pm with meeting at 6:30pm

### **Meeting Programs**

April 29 Mac Payne, WD4MP, Slide show of trip to Alaska

### LARC dates for 2008 (mark your calendars)

Field Day June 28 & 29 LARC Hamfest July 12 LARC Family Picnic October 25 LARC Christmas Breakfast December 6

**Lunch Bunch** Every Friday at 11:30 there is a lunch get-together at a local restaurant. The location is announced on the Wednesday night net, our web site under the activities tab and under the calendar icon as well as announced on the 146.67 repeater. ALL are welcome

\*\*\*\*\*

### **Reward Offered !**

A reward of 500 Microfarads is offered for information leading to the arrest of Hop-A-Long Capacity. This un-rectified criminal escaped from a western primary cell where he had been clamped in ions awaiting the gauss chamber.

He is charged with the induction of an 18 turn coil named Milly Henry, who was found choked and robbed of valuable joules. He is armed with a carbon rod and is a potential killer. Capacity is also charged with driving D. C. Motor over the Wheatstone Bridge and refusing to let the band pass.

If encountered, he may offer series of resistance. The Electromotive Force spent the night searching for him in a magnetic field, where he had gone to earth. They had no success and believed he had returned ohm via a short circuit. He was last seen riding a kilocycle with his friend Eddy Current, who was playing a harmonic and singing 'ohm on the range'.

Hop-A Long Capacity has these distinguishing marks tattooed all over him.





If seen, please call the Ohms County Sheriff's office 555-OHMSLAW Your call will be confidential.

**Repeater Info** 

146.67 (-) 131.8 Hz 224.840 (-) open 444.950 (+) 131.8 Hz

Hall County Nets W4ABP repeater 146.67 (-) 131.8 Hz Hall County ARES Net, Wednesday @ 20:00 LARC Net Wednesday @20:30 "Everyone is welcome to check in"

### Upcoming HAMFEST April-August

	Calhoun Hamfest Cherokee Capital Amateur Radio Society
April 26	http://www.k4woc.com Sugar Valley Community Center Sugar Valley, GA
June 7	Georgia Section Convention Atlanta Radio Club (W4DOC) Marietta, GA Jim Miller Park <u>http://www.atlantahamfest.com</u>
July 12	Lanierland ARC <u>http://www.lanierlandarc.org</u> Gainesville, GA
August 9	Ellijay Ham Fest 2008 Ellijay Lions Club Ellijay Amateur Radio Society (W4HHH) <u>http://www.qsl.net/w4hhh/</u>



Answers to last months Crossword Puzzle

FOR THE BIRDS Ham Radio News line

FCC Commissioner Michael Copps says that he is pleased with a decision by a federal appeals court to vacate the commission's denial and dismissal of the Gulf Coast migratory bird petition. Instead, the court ordered the commission to conduct a study of the effect of communications towers on migratory birds.

The commission has an open proceeding on the issue of whether communications towers, such as radio, TV, cell and two-way towers, cause or contribute to migratory bird deaths. Environmentalists say they do; broadcasters say they do not or that the problem is overstated.

The FCC has not decided whether to appeal the decision but Copps called the decision a wake-up call. He says that it is time to stop acting as if a problem will go away if we just keep kicking it down the road.

#### Did You Know? Herman Munster is a "ham" operator. Visit our web site and check out the vintage sound clips from a few of his transmissions.......... http://www.lanierlandarc.org/archives.htm



Herman's QSL card. Very rare and looks great in your collection !

# From Ham Radio News Line ENFORCEMENT: DEATH CANCELS PIRATE STATION FINE

The FCC has canceled a \$10,000 fine against the late Henry Gaye for operating an unlicensed radio transmitter. This, because Gaye has passed on.

The text from the FCC was short and to the point. Dennis Carlton, regional director of the South Central Region of the Enforcement Bureau, wrote: "The Tampa Office has since learned that Mr. Gaye passed away. Because Mr. Gaye is no longer living, we cancel the NAL."

#### HAM RADIO IN SPACE: AO-11 COPIED BUT INTERMITTANT

AMSAT reports that its aging OSCAR-11 ham radio satellite was heard from January 22<sup>nd</sup> to February 1<sup>st</sup> and again from February 11<sup>th</sup> to the 15<sup>th</sup>. Signal levels have been very variable in strength sometimes very strong, and at other time undetectable, even at high elevations. Low signal strength was particularly noticeable towards the end of the transmission periods.

OSCAR-11 is expected to switch back on under control of its on-board timer around March 7<sup>th</sup>. There should be a short period of transmissions before permanent eclipses start in mid March. After that time it is unlikely that the satellite will support any sustained period of operation, and will only transmit for a short time, possibly less than a single orbit, every 21 days.

OSCAR-11 has a beacon frequency of 145.826 MHz where it transmits telemetry. More information is at <u>http://www.users.zetnet.co.uk/clivew/</u> (ANS)

### **Bits and Pieces**

If you would like to see something that will absolutely blow your mind, visit the address at the end of this message:

Florida State University has put up a very interesting Java applet on their

website. It begins as a view of the Milky Way Galaxy viewed from a distance of 10 million light years and then zooms in towards Earth in powers of ten of distance - 10 million, to one million, to 100,000 light years, etc., until it finally reaches a large Oak tree leaf. But that is not all. It zooms into the leaf until it reaches to the level of the quarks viewed at 100 attometers.

http://micro.magnet.fsu.edu/primer/java/scienceopticsu/powersof10/index.html

Certainly puts us in our place.

### **Good Operating Practice for HF**

- 1. Learn the controls on your radio before you get on the air. Read the manual !
- 2. How do you know the quality of your signal and if the transmit audio is okay? Ask another station to give you a signal report. It's a good idea to arrange to meet someone on an available frequency for the sole purpose of checking your transmit audio level and quality. Most HF rigs have one or more controls which effect your transmit signal.
- 3. One very important thing is to learn "K-H-T" "key, hesitate, talk". You must consciously learn to push the microphone button, pause slightly, and then begin speaking. If you push the button and speak simultaneously, the first word or part of a word may be cut off. This does not facilitate effective communications.
- 4. Be sure the frequency is clear before you transmit. Listen for 15-20 seconds before transmitting. If you want to call a station, listen first and if you don't hear another station, key the mic and ask "is this frequency in use?" If no one says anything, go ahead and make your call.
- 5. Stay within your operating privileges. Keep a frequency chart at your operating station and know the frequencies you can operate on.
- 6. Stay at least 2 kilohertz away from other stations to prevent interference.
- 7. To let anyone listing know you are looking for contacts, call CQ CQ CQ, this is (your call).
- 8. Use Q-signals sparingly. Once in a while is okay but don't use them very often. Common ones you will hear most often are "QSY' which means changing frequency and "QTH" which is where you live.
- 9. Avoid CB-style jargon and terms. General conversation using plan English is better. Terms such as "What's Your Personal" should not be used. Simply say "My name is" or ask "What is your name".
- 10. Using the term "for I.D." is not necessary and should not be used.

- 11. Keep your language polite. Profanity and or obscene words should not be used.
- 12. "10 codes" should not be used on amateur radio.
- 13. If you are listening to a conversation and would like to join in, wait for one of the stations to un-key and quickly key-up and give your call sign. That's it ! Don't say anything else. You will usually be acknowledged and allowed to join in the conversation.
- 14. The only call sign your required to know and use is your own. It's not necessary to use any of the other station call signs that you are in communication with when you give your own call sign.
- 15. When required, always use standard ITU phonetics.
- 16. Most operators you meet on the air are courteous and friendly, however, there's always a few that just seem to look for a chance to make trouble. Don't give them that chance. It's best to move to another frequency rather than argue with them.
- 17. Remember, a stranger is a friend you haven't met yet.

Note: Information presented here is just the opinion of one ham. As such, they are intended to be nothing more than a "shopping list" of suggested guidelines presented almost entirely from the perspective of a "rag chewer". DXers, Contesters and hams who enjoy other modes will most likely have somewhat different views. Equipment related issues, being generally well known, are purposely not included here. In any event, it is hoped that this list may prove somewhat useful especially for new operators. The overriding theme is common sense and courtesy to others. Let's always remember what a privilege it is to operate on the ham bands! This will help avoid doing anything that might impinge on the enjoyment of our hobby for others.

> This information has been archived: http://www.lanierlandarc.org/archives.htm

James Rakestraw(KI4NIV) writes: I'm sending this message to several local clubs just to let them know about "Smoked Hams", our group of firefighter/amateur radio operators. Realizing that ARES/RACES operators are written into local EMA plans, and will be absorbed in communications emergencies, we are acting primarily as our own fire service comm back up plan. We desire to fully co-operate, work and train, with local ARES/RACES and other clubs and organizations. We have a weekly repeater net on Tuesdays, 7pm local GA time on the WD4LUQ repeater 146.895+ 77hz tone. It's an informal, but directed net and all check-ins are welcome. I've included a partial schedule of our simplex nets which meets on a revolving schedule, simply because we are on duty and putting field stations on the air from fire stations. Simplex net control is usually in Kennesaw or Acworth. It would really help us out to see what kind of simplex range we can expect, and that way we'll know our limitations when an emergency arises. Would you please announce the information in your regular nets or meetings? Look forward to hearing from as many of you as possible. thx 73,

James KI4NIV ki4niv@bellsouth.net

Smoked Hams Simplex Net 7pm local GA on 146.550 mhz March 9th KI4ZIX KI4ZJE 15th KI4NIV KI4ZIX 21st KI4FSW KI4NIV 30th KI4TUB KI4FSW

### **Word Search**

Courtesy of Ray Sarrio, WB6SIV

List of Words:

AMPS, ANTENNA, ARRL, CAPACITOR, COLLINS, CURRENT, EXTRA CLASS, GMT, HAM, HEATHKIT, HERTZ, LINEAR, MEGACYCLE, MOBILE, MORSE CODE, NEWINGTON, NICAD, OHMS, OSCAR, QRZ, RESISTOR, SINE WAVE, SSB, TUBE, VOLTAGE, WPM.

<u>, U</u>		, Uč		r, u	ΠΖ,	REJ	1914	<u> Эк, </u>	SINE	: **/	VE,	335	), IC	JDE,	VU		<u>GE,</u> 1
R	А	S	W	Е	N	I	Т	С	С	Е	L	D	G	М	Т	ŀ-J	Е
D	А	Е	М	А	G	Y	<b>F-1</b>	S	Q	Е	М	А	S	Р	М	Д,	L
Т	А	ы	R	н	I	А	ĿЛ	S	D	Y	D	в	Е	U	D	F	1
Т	Е	R	Т	U	$\mathbf{O}$	Ο	Т	д	н	Е	R	Т	Z	А	$\mathbf{O}$	$\circ$	ĸ
R	L	А	С	Е	Т	G	L	L	N	Т	S	D	А	С	I	<b>r</b> -1	H
	Ų	Е	Д,	Т	N	Н	$\mathbf{C}$	С	Ο	D	S	$\mathbf{O}$	Т	I	Е	Е	т
	N	Х	P	L	в	N	S	А	N	Y	в	Т	Е	D	A	R	<u> </u>
L	$\circ$	А	Д,	I	А	Е	А	R	в	$\mathbf{C}$	А	Т	$\mathbf{O}$	Т	Е	L	E
L	Т	Т	С	в	I	Y	С	Т	S	м	N	С	н	S	Q	Н	H
1	G	А	I	$\mathbf{O}$	т	Е	S	Х	К	Е	Е	К	I	W	Т	С	М
N	N	Т	Т	М	I	I	U	Е	R	S	I	S	А	Е	D	D	М
S	I	L	$\circ$	U	N	Е	$\circ$	R	R	Т	Т	М	$\mathbf{O}$	I	$\circ$	I	<u>,</u>
I	W	$\mathbf{O}$	R	Е	S	Ο	U	Ο	Y	Ο	U	Х	$\mathbf{O}$	I	P	$\circ$	М
Т	Ε	Y	W	L	Ы	С	h.1	Z	R	Q	Е	в	ы	В	S	h.1	$\circ$
N	N	А	C	$\mathbf{O}$	L	L	I	Ы	Q	Ρ	Ο	Е	Е	С	I	C	E
1	Y	Ε	<u>ب</u> هر	Е	L	С	Y	С	А	G	Е	М	А	М	Д	L	S
E	W	L	I	ы	Е	А	R	Т	I.	Ο	Т	R	Ŷ	R	А	ŀ-1	E
В	D	Ε	M	Ρ	W	<u> </u>	<u>A</u>	P	<u>A</u>	<u> </u>	1	Т	0	P	L	Н	Д,
			۸r			rc i	n r		rt n	201	atk	nc i	cci				

Answers in next months issue

<u>Many thanks</u> go to those who submitted news, information and articles for this edition. Send you newsletter contributions to <u>W4DJG@bellsouth.net</u> As a reminder, the newsletters are archived within our web-site. Each issue is listed with the most recent edition first. <u>http://www.lanierlandarc.org/newsletters.html</u>

73 to all