Lanierland ARC Newsletter
W4ABP www.lanierlandarc.org

March 2007

President's Corner

Doyle Gantt, W4DJG, LARC President

Hello everyone,

Boy did February get away in a hurry. From what I understand, the tour of Mayfield Dairy was a huge success. I was unable to attend due to commitments I had made to my daughter to sit with her during the Technician Class that Terry W4TL and Ed KF4HPY made available. I am very pleased that the entire class earned their Tech ticket (a full week early). Among these new "hams" are Gerald Brown KI4TQB, Kaitlyn Gantt KI4TQC (my daughter), Mimi Bowden KI4TQD (Todd Bowden's Mother), Tim Moore KI4TQE (son of Eddie Moore W4REV), Matalee Patel KI4TQF (a friend of Todd's), Sean Toles KI4TQG, Kasey Martin KI4TQH (the grandson of Clyde, N4FCL) and Thomas Hornick Jr KI4TQI. In addition of those individuals a second round of exams were given to a group of folks that had put together a self study group led by our own Ron Mulberry KI4RBE. These folks also earned their Tech ticket. David Bassett KI4TQJ, Mark Weaver KI4TQK, Robert Weaver JR KI4TQL and Gary Niedfeldt KI4TQM. Many thanks go out to Terry and Ed for holding the class and all the VE's that made themselves available to administer the exams. In all, twelve new "hams" were welcomed into the hobby. One upgrade to General and one upgrade to Extra were also earned at the testing session along with element 3 credit for 2 individuals. On February 25, Alfred KT4VP and his VE team held a special testing session to accommodate the influx of upgrades from the FCC dropping code requirements. Joseph and Jacob Thompson earned their Tech ticket. Woody Parr W2BBQ, Dorothy Guest KI4NLR, David Hulsey W4PSL, Andrew Whittle KE4SNT, Carl Sticher W4CJS, Eddie Moore W4REV, Casper Morgan KG4AOX, Robert Gregory KD4VDJ, Alan Ricotta W5FOX, Charles Wallace KI4PMA, and Troy Thompson KI4SHM upgraded to General Class.
Beverly Lewis W4BCL and Francis Woodside upgraded to Extra Class. Many thanks to Alfred and his VE team for their time and efforts. Congratulations to the new "hams" and the folks who upgraded. "Well done" to all.

We're off to a great start in 2007. Let's all get energized and continue to pull together to make good things happen. In my opinion, it is up to us all to push forward and promote, practice and mentor our hobby.

On a closing note, as Spring approaches, another thunderstorm season will arrive with it. Are you prepared for a WX related emergency? If not, now is a good time to do so. Discuss with your family
what should be done in case of severe weather. Also plan a course of action in case of a home fire including escape routes and assign a place to meet away from the fire. Check the batteries in all your home smoke detectors, portable FM radios and all flashlights to ensure you're not caught without these items. Learn what to do in case of a tornado and

discuss this with your family as well. Beware of flash floods and how to protect yourself against this threat.

I hope to see each of you at meetings and other activities. Until then, take care.

73
Doyle, W4DJG

Your 2007 Officers and Committee Members

Vice President	Alfred Westbrook, KT4VP
Treasurer	John Brandon, KE4PCF
Secretary	Bob Aldrich, KI4QVN
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2 Year Director	Terry Jones, W4TL
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JOTA Committee	Alfred Westbrook, KT4VP
	Gary Morgan, K4GRM
Web Site Editor	Chuck Leming, W4EDT
Nominating Committee	TBA
	TBA
	TBA

CQ CQ Field Day de W4E W4E

Submitted by Terry Jones, W4TL, LARC Director

Put these dates, Friday June 22, Saturday June 23 and Sunday June 24 on you calendar. LARC will be making preparations for participating in the annual ARRL Field Day on those dates. We need a lot of participation from a lot of individuals to make this Field Day successful.

We have secured a great location for this years Field Day just off Friendship Road in Southern Hall County. This is a farm with a beautiful rural setting and all sorts of places to string up antennas and do some “old time Field Day Hamming.” Just a few of the things planned, we will be operating with a “Special Event” call-sign, W4E. We have made arrangements to have both of the Georgia Baptist Communications Units (GA 5 &

GA 14) available for use (provided they are not deployed to a disaster somewhere). Plans are to operate an HF station out of each of these units and to put a third station operating on six and two meters somewhere at the field day site. That will have us operating three (3) stations for field day. We have arranged to borrow a 25KW generator from Hall County (thanks to Chief David Kimbrell).

Plans are underway to establish a wireless computer logging network for the event. We are also planning on having digital modes (PSK 31, Winlink, and some may even operate CW).

For this event to be successful LARC needs YOU and YOU and YOU. This needs to be a Total Team Effort and I can assure you it will be a fun event. YOU are needed to help in getting the equipment to the location and installing antennas, checking to be sure everything is working properly, etc. YOU will be needed to operate the stations and assist with logging, etc. This is an ideal opportunity for us “old timers” to hone up our skills and is also an opportunity for “newcomers” to see how equipment works and actually get in a lot of operating. Not just observing, but real “hands on operating.” YOU will also be needed to break down the equipment and police up the area. As you can see it will be a Total Team Effort for us to pull it off. We will all work a little and have a whole lot of fun doing so. Additional details about Field Day will be forthcoming.

LARC NEEDS YOU FOR FIELD DAY THIS YEAR!!

The Phonetic Alphabet Habit

Submitted by Doyle Gantt, W4DJG, LARC President

FCC Rule Part 97.119(b)(2) says, for station identification using a phone emission, *"Use of a standard phonetic alphabet as an aid for correct station identification is encouraged"*. However, today a large number of amateur radio operators use self-invented phonetic alphabets that range from the fanciful to the obscure, and many of them are confusing.

Phonetic alphabets were used in radio communications as early as World War I (1916), as aid to clarity of verbal communications. Police organizations soon followed with variants, a few of which are still in use today. Shortly after World War II, the International Civil Aviation Organization (ICAO) designed a phonetic alphabet that would be easy to understand by non-native English speakers, and adopted it for use in all aviation voice communications by all signatory countries. It was adopted in quick succession by the US military, NATO (North Atlantic Treaty Organization), and finally the ITU (International Telecommunications Union) in 1956.

This phonetic alphabet is *the* international standard in use today, by the US military, civilian aeronautical and maritime, search & rescue groups, and other public safety organizations. The only possible competing "standard" in the USA is the old police alphabet, which is only used by police departments (which is ironic considering that most

of their personnel come from a military background). Virtually all of these organizations **require** the use of their adopted phonetic alphabet, because all of these organizations are involved in operations where confusion in communications can compromise safety. For example, FAA controllers have been known to discipline civilian pilots **on the air** for using non-standard phonetics.

FCC Rule Part 97.1 says, *"Basis and purpose. The rules and regulations in this Part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles: (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications. ... (c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art. ... (e) Continuation and extension of the amateur's unique ability to enhance international goodwill."*

So, what do we amateur radio operators do? We are the only radio communications service that purports to have an emergency communications purpose, where operators feel free to use any phonetic alphabet they chose (or, in many cases, different phonetic words for the same letter in the same transmission). This is not only poor communications practice; it bodes ill for our ability to assist in times of emergencies. To think that we can use any old phonetic that comes to mind in daily communications, and then switch to using standard phonetics in a time of crisis, is a fantasy.

So, why should amateur radio operators **always** use the ICAO/ITU phonetic alphabet when phonetics are desired?

- We develop habits that will serve us well in times of emergencies.
- We enhance international goodwill by not making non-native English speaking amateur radio operators guess what words we are using (self-invented phonetic alphabets seem particularly popular in DX contacts).
- Words derived from foreign locations (e.g."America", "Brazil", ...) not only invite confusion with the operator's location, but are commonly spelled and pronounced differently in different languages.
- Using a self-invented phonetic word that is not carefully designed as part of a standard alphabet can be confused with other words. Probably the most common example is the "cute" phonetic "Kilowatt" for "K" callsign prefixes, which can be taken to be a "KW" prefix.
- Finally, in an era where amateur radio band privileges are threatened by commercial and foreign interests, we can appear to be operators that are actually interested in *"... advancing skills in both the communications and technical phases of the art."*

Tornadoes!!!! Nature's Violent Storms

Submitted by Bob Aldrich, KI4QVN, LARC Secretary

We have had some close calls as far as tornadoes in Georgia. We have been lucky, but we all know, luck usually runs out. The time of year is here for us to be alert and most of all prepared. I hope this article will help "tune in" your weather awareness and help you become prepared in the event of violent, tornadic weather. I come from the number 1 rated county in Indiana for tornadoes. I am familiar with them and they are deadly. The following article is prepared from a guide that includes safety information from the U.S. Department of Commerce National Oceanic and Atmospheric Administration National Weather Service September 1992 (NOAA, FEMA, American Red Cross). Let's be safe this season.

T O R N A D O !!!!!

Although tornadoes occur in many parts of the world, these destructive forces of nature are found most frequently in the United States east of the Rocky Mountains during the spring and summer months. In an average year, 800 tornadoes are reported nationwide, resulting in 80 deaths and over 1,500 injuries. A tornado is defined as a violently rotating column of air extending from a thunderstorm to the ground. The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of one mile wide and 50 miles long. Once a tornado in Broken Bow, Oklahoma, carried a motel sign 30 miles and dropped it in Arkansas!

What causes tornadoes?

Thunderstorms develop in warm, moist air in advance of eastward-moving cold fronts. These thunderstorms often produce large hail, strong winds, and tornadoes. Tornadoes in the winter and early spring are often associated with strong, frontal systems that form in the Central States and move east. Occasionally, large outbreaks of tornadoes occur with this type of weather pattern. Several states may be affected by numerous severe thunderstorms and tornadoes.

During the spring in the Central Plains, thunderstorms frequently develop along a "dryline," which separates very warm, moist air to the east from hot, dry air to the west. Tornado-producing thunderstorms may form as the dryline moves east during the afternoon hours.

Along the front range of the Rocky Mountains, in the Texas panhandle, and in the southern High Plains, thunderstorms frequently form as air near the ground flows "upslope" toward higher terrain. If other favorable conditions exist, these thunderstorms can produce tornadoes.

Tornadoes occasionally accompany tropical storms and hurricanes that move over land. Tornadoes are most common to the right and ahead of the path of the storm center as it comes onshore.

Tornado Variations

- Some tornadoes may form during the early stages of rapidly developing thunderstorms. This type of tornado is most common along the front range of the Rocky Mountains, the Plains, and the Western States.
- Tornadoes may appear nearly transparent until dust and debris are picked up.
- Occasionally, two or more tornadoes may occur at the same time.

Tornadoes Take Many Shapes and Sizes

Weak Tornadoes

- 69% of all tornadoes
- Less than 5% of tornado deaths
- Lifetime 1-10+ minutes
- Winds less than 110 mph

Strong Tornadoes

- 29% of all tornadoes
- Nearly 30% of all tornado deaths
- May last 20 minutes or longer
- Winds 110-205 mph

Violent Tornadoes

- Only 2% of all tornadoes
- 70% of all tornado deaths
- Lifetime can exceed 1 hour
- Lifetime can exceed 1 hour

Weather Radar Watches the Sky

Meteorologists rely on weather radar to provide information on developing storms. The National Weather Service is strategically locating Doppler radars across the country which can detect air movement toward or away from the radar. Early detection of increasing rotation aloft within a thunderstorm can allow life-saving warnings to be issued before the tornado forms.

Tornadoes can occur at any time of the year.

- In the southern states, peak tornado occurrence is in March through May, while peak months in the northern states are during the summer.
- Note, in some states, a secondary tornado maximum occurs in the fall.
- Tornadoes are most likely to occur between 3 and 9 p.m. but have been known to occur at all hours of the day or night.
- The average tornado moves from southwest to northeast, but tornadoes have been known to move in any direction. The average forward speed is 30 mph but may vary from nearly stationary to 70 mph.
- The total number of tornadoes is probably higher than indicated in the western states. Sparce population reduces the number reported.

What To Listen For...

- TORNADO WATCH: Tornadoes are possible in your area. Remain alert for approaching storms.
- TORNADO WARNING: A tornado has been sighted or indicated by weather radar. If a tornado warning is issued for your area and the sky becomes threatening, move to your pre-designated place of safety.
- SEVERE THUNDERSTORM WATCH: Severe thunderstorms are possible in your area.
- SEVERE THUNDERSTORM WARNING: Severe thunderstorms are occurring.

Tornado Safety
What YOU Can Do Before the Storm:

- Develop a plan for you and your family for home, work, school and when outdoors.
- Have frequent drills.
- Know the county/parish in which you live, and keep a highway map nearby to follow storm movement from weather bulletins.
- Have a NOAA Weather Radio with a warning alarm tone and battery back-up to receive warnings.
- Listen to radio and television for information.
- If planning a trip outdoors, listen to the latest forecasts and take necessary action if threatening weather is possible.

Top: James Campbell; Bottom: Gene Rhoden

If a Warning is issued or if threatening weather approaches:

- In a home or building, move to a pre-designated shelter, such as a basement.
- If an underground shelter is not available, move to an interior room or hallway on the lowest floor and get under a sturdy piece of furniture.
- Stay away from windows.
- Get out of automobiles.
- Do not try to outrun a tornado in your car; instead, leave it immediately.
- Mobile homes, even if tied down, offer little protection from tornadoes and should be abandoned.

Occasionally, tornadoes develop so rapidly that advance warning is not possible. Remain alert for signs of an approaching tornado. Flying debris from tornadoes causes most deaths and injuries.

It's Up To YOU!

Each year, many people are killed or seriously injured by tornadoes despite advance warning. Some did not hear the warning while others received the warning but did not believe a tornado would actually affect them. The preparedness information in this brochure, combined with timely severe weather watches and warnings, could save your life in the event a tornado threatens your area. After you have received the warning or observed threatening skies, YOU must make the decision to seek shelter before the storm arrives. *It could be the most important decision you will ever make.*

Follow these basic steps to develop a family disaster plan...

1. Gather information about hazards.
   Contact your local National Weather Service office, emergency management or civil defense office, and American Red Cross chapter. Find out what type of disasters could occur and how you should respond. Learn your community's warning signals and evacuation plans.

2. Meet with your family to create a plan.
   Discuss the information you have gathered. Pick two places to meet: a spot outside your home for an emergency, such as fire, and a place away from your neighborhood in case you can't return home. Choose an out-of-state friend as your "family check-in contact" for everyone to call if the family gets separated. Discuss what you would do if advised to evacuate.

3. Implement your plan
   (1) Post emergency telephone numbers by phones; (2) Install safety features in your house, such as smoke detectors and fire extinguishers; (3) Inspect your home for potential hazards (such as items that can move, fall, break, or catch fire) and correct them; (4) Have your family learn basic safety measures, such as CPR and first aid; how to use a fire extinguisher; and how and when to turn off water, gas, and electricity in your home; (5) Teach children how and when to call 911 or your local Emergency Medical Services number; (6) Keep enough supplies in your home to meet your needs for at least three days. Assemble a disaster supplies kit with items you may need in case of an evacuation. Store these supplies in sturdy, easy-to-carry containers, such as backpacks or duffle bags. Keep important family documents in a waterproof container. Keep a smaller disaster supplies kit in the trunk of your car.

4. A DISASTER SUPPLIES KIT SHOULD INCLUDE:
   A 3-day supply of water (one gallon per person per day) and food that won't spoil• one change of clothing and footwear per person• one blanket or sleeping bag per person• a first-aid kit, including prescription medicines• emergency tools, including a battery-powered NOAA Weather Radio and a portable radio, flashlight, and plenty of extra batteries• an extra set of car keys and a credit card or cash• special items for infant, elderly, or disabled family members.

Ham Paperwork & Organization

Submitted by Ed Cravey, KF4HPY

Have you ever had a problem with a new radio in setting up all the features available to you? Do you use words like “stupid manual”! Or have you ever spent 4 days programming your

radio and then have to give a class in the parking lot of the Disaster Training Site to a bunch of fresh "greenhorns" who just bought the same radio? I have been faced with the same problems all my life, civil and military. When I have complete control, here is what I try to do. I start by tabbing the necessary pages to get the job done. Then I take colored Hi-Liters and highlight the necessary keystrokes for clarity.

You don't like to mark in or deface the manuals in any way! Ok! Go online and download a manual from the radio maker's site or one of the many other sites in PDF format and print it in two sided mode if possible. This will allow you to keep the original manual in top condition.

Lets start with tabs; you can make them from adhesive labels cut to size or buy tabs a the office supply stores. Open the manual to your area of interest; Memory Mode, put a tab on the first page of programming the Memory. Now you will be able to go to Memory Mode by seeking the label "Memory". OK, we have the memory page where we start programming tabbed, what next? We will need tabs for the frequency if not clear, the CTCS Tone, Label, the Set Modes, Repeater and others as we come to them So now the tabs are in place, what now? Key strokes by all means. This is where the Hi-Liters are used. I favor certain colors for "Press" like PINK. For Press & Hold, I use PINK and GREEN; I could also use a different color to denote the "PRESS & HOLD keys. To show which key is P&H, I highlight in YELLOW, the H/L key to enter the Set Mode. So when you complete the tabbing and color coding; you know to PRESS & HOLD the H/L key to enter Set Mode when you see PINK & Green in the manual next to the highlighted H/L. Simple if you have the high lighters and tabs on hand. You can high light the important names or sentences in YELLOW to pick them out quickly. For example, in the specs sheet, the transmitter current drain at high power and the differing power levels in other modes.

I have now, three radios on my radio/computer desk and one antenna coax entering a five-position switch box outdoors. I have four coax jumpers coming from the three radios. Three of the cables are look a-likes. So how do I tell the cables and radios apart? I had some colored Vinyl tape from Radio Shack that I cut into little squares. Use green for ICOM-718, red for ICOM –706, and, yellow for a Yaesu FT-90. So what did that do for me? I can use the coax labeled ICOM –718 with Green tape wrapped around it for a quick PSK-31 QSO on 80m connected to the antenna coax. The two identical coax jumpers from the ICOM-706 go to a two into one antenna switch. One cable has a label and two Red bands of tape indicating VHF/UHF. The other has a label and one Red band of tape indicating HF. The last radio has a Yellow square of tape and label for two-band operation. This eases antenna selection and enables the adding of dedicated equipment to the radios. Example: I have two PSK-31 Nomic units. One is jumpered for the ICOM-718, the Green radio and has a Green square of tape on it. The other Nomic has Red tape and different cables for the ICOM –706; this speeds up the mating of radios and the antennas, plus the auxiliary equipment.

If you make any changes to the antennas or equipment, you should document it, as memory gets dim later on. Keep a workbook and draw in it, or use photos instead. There you will be able to find all your comments on performance, cost, special tricks, hints to do better, and other notes. If you have a project, document it so you will have all the notes and will be able to duplicate it and not blunder in the same places again. I keep entries in my book about radio stands, antenna stands, and other items. It helps me to come up with a parts list as well as a set of instructions. In the same vein, keep a tuner book or at least a sheet of paper with the resonant points of the antennas in each band. This will allow you to see changes in the antenna as it ages. In the tuner book, record the settings of the tuner for each band and antenna. It will save time in setting up a manual tuner, and show changes in the system if new cables etc. are added. The other day we made a QSY (frequency change) from 80m to 40m on PSK-31 in a minimum amount of time. My tuner was close to the designated frequency and only needed minor knob turning; one of the other guys consulted his settings for his tuner on a piece of paper and joined us in a minute or so. I even included a reduction in power at the sound card. So you see you can make life easier with paper, tape, tabs, and a composition notebook.

This article may sound familiar. I presented it at ARES and the LARC Club a few months ago. I thought I would write it up for those who like to save articles from the newsletter.

Georgia Ham Events

March 17 2007 - Kennehoochee Amateur Radio Club Hamfest http://www.w4bti.org.
Marietta, GA 30060.

ARRL Yearly Event Calendar:

Date(s)		Contest	Links
January	1	Straight Key Night	Rules
	6 - 7	ARRL RTTY Round-Up	Rules
	20 - 22	ARRL January VHF Sweepstakes	Rules
February	17 - 18	ARRL International DX Contest (CW)	Rules
March	3 - 4	ARRL International DX Contest (Phone)	Rules
June	9 - 11	ARRL June VHF QSO Party	

	23 - 24	ARRL Field Day
July	14 - 15	IARU HF World Championships
August	4 - 5	ARRL UHF Contest
	18 - 19	ARRL 10 GHz and Up Contest
September	8 - 10	ARRL September VHF QSO Party
	15 - 16	ARRL 10 GHz and Up Contest
November	3 - 5	ARRL November Sweepstakes (CW)
	17 - 19	ARRL November Sweepstakes (Phone)
	30 - 12/2	ARRL 160 Meter Contest
December	8 - 9	ARRL 10 Meter Contest

EME Contest dates to be announced

Repeaters:

2 Meter 146.67 MHz - 131.8 Hz tone. Also used for Hall County ARES
1.2 Meter 224.84 MHz - 203.5Hz tone.
70 Centimeter 444.950 MHz + 131.8Hz tone

Nets:

ARES Net – 2000 every Wednesday night on 2 meters.
LARC Net – 2030 every Wednesday night following the ARES net on 2 meters.

Club Meeting Information

Meeting nights are the last Tuesday of each month. As always, the meeting location is at Ryans, on Brown's Bridge Road in Gainesville.

Amateur Radio News:

- **Amateur Radio Newsline**
- **Amateur Radio Newsline w/streaming audio**
- **ARRL News Bulletins**
- **RAIN Report (Radio Amateur Information Network**
- **W5YI News Bulletins**
- **AMSAT News Bulletins**

Newsletter edited and published by: **Bob Aldrich, KI4QVN, Secretary / Newsletter Editor, Lanierland ARC**.

Newsletter inputs are welcomed and encouraged from any member, any time. Please contribute!

Send your inputs to Bob Aldrich, KI4QVN, Secretary, LARC