



ORANGE COUNTY RADIO AMATEURS
(an ARRL Special Services Club)
Orange County, North Carolina



Orange County Radio Amateurs (OCRA) Newsletter
July 2009

From the Editor

Happy July everyone, OCRA FD 2009 has come and gone.

It was a delightful get together of two fine groups and lots of great talent on one large and very hot field. Many thanks to Steve Ahlbom for the provision of his air-conditioned home on four wheels (or more) and for sharing very clean AC supply from his generator.

I did do something for Amateur Radio last month by participating at Field Day; a very tiring but satisfying cause. My ole Kenwood performed admirably as did Gerry's (KD4YJV) Cushcraft MA5B beam and our 40m dipole; all in spite of the horrible 40m band conditions. Oh! Yeah! Somehow somehow I landed on page 13 of the news of Orange County.....umm....who do I thank for that (Woody, Wayne)!

As I don't seem to have located the brakes on this runaway spending train, I spent too much money on the hobby (added a couple of couple of Bird dummy loads, a Ham II rotator, more Andrew Heliax and a high-voltage 15-150 pF air cap (for a future project) to my pile of stuff).

73, Adriano KV7D

July Board Meeting Notes

Items presented/discussed at the Board Meeting were:

Inclusion of yhr OrangeCounty ARES EC to the OCRA board, that is if EC is an OCRA member, board made motion for OCRA members to vote on said proposal.

Orange ARES EC will provide monthly updates/reports to OCRA body and to secretary for newsletter.

EC will contact Red Cross Orange county chapter to have a representative provide a training session to OCRA members at the August meeting.

W4BOH proposed (presented by KV7D and K3VSA in absence of W4BOH) for OCRA to acquire ownership of Orange County EOC older bus (now replaced with newer trailer?) to be used as an OCRA mobile communication vehicle. Board will present to the body for further discussion.

Treasurer's (Dan KR4UB) report: Bank balance as of 7/13/09 was \$6,551.37

Repeater Mgr. (Dan KR4UB) report: New 145.230 MHz repeater to ship from manufacturer in mid July.

de KV7D



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July Meeting Notes

The scheduled presenter from Piedmont EMC was unable to attend and make his presentation.

Orange ARES EC Laurie Meier (N1YXU) Presented updates OCRA's communications committee progress (see below for further details)

VE session was held at the EOC. Four candidates traveled to Hillsborough for the test session, and I'm very happy to report all four acquired their Technician licenses. Examiners led by Dave (W4SAR) were Tommy (AI4MW), Gerald (KI4MXP) and Adriano (KV7D).

Wilson (W4BOH) proposed to the general membership that OCRA acquire the Orange County EOC older communications bus. After some discussion, Wilson said he would obtain more info on what, if any, the county would be willing to pay for its ongoing maintenance.

de KV7D

Newsletter format (going forward)

Newsletter format will start with:

- 1) Secretary's opening remarks
- 2) Board meeting report
- 3) General meeting report
- 4) QSL Card(s) of the month
- 5) Editorial write ups
- 6) Community involvement by our club
- 7) Miscellaneous information

Until next month.....

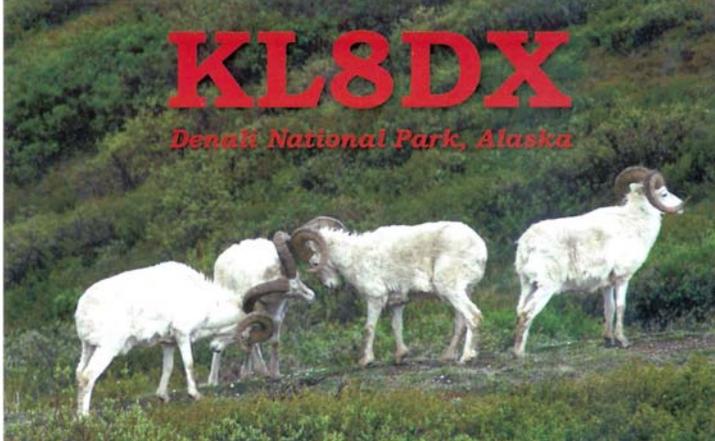
Adriano – KV7D
KV7D@ncocra.org



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QSL Card of the month



KL8DX
Denali National Park, Alaska

KL8DX
 Phil Sauvey
 P.O. Box 108
 Denali National Park
 Alaska 99755-0108

NORTHERN OHIO ASSOCIATION INC.
SK/CC
 Straight Key Century Club

Confirming QSO With:
 Radio: **W4PAH / QRP**

ITU Zone: 1 • CQ Zone: 1 • GRID: BP53lu
 Denali Borough, 4th Judicial District

DAY	DATE			UNIVERSAL TIME UTC	FREQUENCY MHZ	2-WAY MODE	REPORT		
	MO	YR					R	S	T
3	July	09		0332	14	PSK31	5	5	9

Please QSL Remarks: **John - your QRP did a**
 Thanks QSL **Bring up job into Alaska. Good DX! NX QSO**

This month's QSL card was brought to you by our very own W4PAH. He decided to forego our great companionship at FD and take his family to the beach instead. While working QRP he managed to snag this Alaskan contact as well as a 1,000mi/watt ARRL award on only 5W or less. Way to go, John.

2009 Field Day Summary

By Dave Snyder, W4SAR

Thanks to everyone for a most successful and enjoyable Field Day operation. The final scores were submitted to the ARRL and receipt acknowledged by them well before the deadline. The band captains did an excellent job of logging! I received no illegible or incomplete entries, all ARRL/RAC abbreviations used were official, and only perhaps a half-dozen or so duplicate entries had to be culled out of those who submitted results on paper logs. It was an excellent job by all involved. Without further ado, here is the detailed breakdown of the scores:

Summary for CW mode of operation:

BAND	# QSO X	Points X	Multiplier	=	TOTAL
80	69	2	5		690
40	188	2	5		1880
20	209	2	5		2090
15	74	2	5		740
<hr/>					
All CW	540 X	2 pts X	5	=	5400

Summary for DIGITAL mode of operation:

BAND	#QSO X	Points X	Multiplier	=	TOTAL
40	99	2	5		990
20	100	2	5		1000
15	10	2	5		100
<hr/>					
All Digi	209 X	2 pts X	5	=	2090



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Summary for PHONE mode of operation

BAND	#QSO	X	Points X	Multiplier	= TOTAL
80	132		1	5	660
40	49		1	5	245
20	77		1	5	385
15	58		1	5	290
10	10		1	5	50
6	25		1	5	125
<hr/>					
All Phone	351	X	1 pts X	5	1755

Total Score (Less Bonuses): 9245

Bonus Points are as follows:

- Emergency Power 100 points per HF Station: 900
- Information Booth: 100
- Natural Power: 100
(40M CW solar-charged batteries)
- Publicity: 100
- NTS Message to SEM: 100
- Copied W1AW FD Message: 100
- Educational Activity: 100
- Public Location: 100
- Visit by Elected Official: 100
(Alice Gordon, Orange County Commissioner)
- Visit by ARES Served Agency Official: 100
(Tim Bothe, Red Cross Disaster Services)
- Youth Operator (1): 20
- Web Submission of Results: 50

Bonus Point Total: 1870

Grand Total: 11,115

Again, this has been our best score ever, beating last years score of 10,530 points by a margin of 585 points!

Now for the good news, the old record for 9A Battery was 9190 points in 2006 set by the West Valley Amateur Radio Association. We beat that record by 1,960 points!

The not-so-good news: The West Valley Amateur Radio Association also was 9A Battery this year, and posted a score of 14,405 points, more than 3,000 points ahead of us! Oh well, they also beat us last year in the 8A Battery category.

The really great news: The Durham FM Association and Orange County Radio Amateurs, in their first major joint operation, worked seamlessly together! By far, most if not all of the participants I spoke to had glowing



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reviews about how well Field Day went, and that it was probably one of the most enjoyable Field Days in which they participated. This is due to the dedication of all the participants in making it work. In this matter, we came out the hugest of winners! I am so looking forward to next year, and the West Valley ARA should watch their backs!

73,

W4SAR

My Beach Vacation: A way to earn ARRL awards and make QRP contacts

By John Shadle, W4PAH

Participation in OCRA's Field Day activities has been a tall order for me the past few years. Last year I was with my wife at UNC Hospitals welcoming our first child into the world, and this year we were headed to the beach for our first family vacation to celebrate our anniversary and his first birthday.

Thankfully, since it was "my vacation" too, my wife was okay with me bringing along some radio gear to take advantage of the near-legendary effects of saltwater ground on antennas!

Planning for the trip began with considerations of antenna options. I began chatting over the repeaters and email with Bruce N1LN and Steve KZ1X about possibilities. They both highly recommended loop antennas. Given the house's layout (3 stories high, 450-500 foot pier into the sound off Topsail Island) the loop made a lot of sense. I could've probably used a single long wire from the house to the pier, but the loop offered quieter reception and more gain.

In my antenna junk box I had a 500 foot roll of #14 AWG stranded insulated wire (the kind you can pick up at Lowe's or Home Depot for pennies by the foot) and some of those white plastic insulators that are ubiquitous at hamfests. One evening, I headed over to Bruce's house to create the loop. Bruce had offered up the use of a balun he had created which was currently not being used. It was either 4:1 or 6:1, but we were unsure of its properties beyond that. We measured out 140+ feet of wire, threaded the insulators on the wire, and soldered each end to the balun to complete the project. After coiling it up, I was ready to pack it in my bags for the beach.



My wife, son, and I had planned to leave on Saturday afternoon and head down east, but my son had a low-grade fever that morning so we ended up leaving closer to dinnertime instead. Field Day was already in full swing by the time I was able to set up my antenna during my son's morning nap on Sunday, June 28th. I attached two of the insulators with 1/8" rope to the balcony of our third floor bedroom and the remaining wire of the antenna was stretched to a point and tied to the side of the pier over the saltwater marsh below. The feed point was at one of the corners of the balcony and a stretch of RG-58 connected my station in the screened-in porch below to the antenna above. The high end of the antenna was at least 25' and the low end was



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probably 8' above sea level in a sloping inverted delta configuration.

After connecting the coax to my SWR meter, antenna tuner, and rig (a Yaesu FT-817D), I was ready to go!

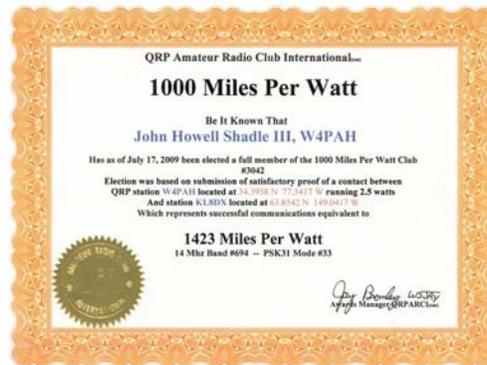
Despite the fact that I had a full-wave on 40m, I operated exclusively on 20m SSB for the duration of my participation in Field Day. My first contact was with W1QI in Connecticut at 14:35 UTC and my 25th and final contact was with K4F in Florida right before 18:00 UTC. I was surprised that my 5w and simple antenna were able to net 14 states and Canadian provinces over the two and a half hour period I operated. Hunt and pounce were the words of the day, and I had a great time with the quick “contest” exchange of Field Day.

A map of the contacts I managed to make can be seen here:

<http://www.flickr.com/photos/shadle/3669789986/in/set-72157620687360544/>

After Field Day had concluded, I decided to add PSK31 to my operating modes, but not before making one last SSB contact on 20m. Right before bed on Sunday night my meager 5w was able to get my voice all the way to N6JW’s station in Riverside, California (near Los Angeles). Perhaps it was the salt water, or perhaps it was the fact that he was running an Elecraft K3, but the contact was made and logged.

During the rest of the week, on 14.070MHz, operators in 22 states and 5 DXCC entities (USA) including Canada, Italy, The and Alaska (yes, Alaska is a DXCC entity). Logbook of the World confirmations have coming in, and I’m proud to state that my contact to KL8DX in Denali National Park in me for the QRP Amateur Radio Club “1000 miles per watt” award. The strange contact is that it was made as my battery beginning to drain. I had to QRP to 2.5w few QSOs of that particular day. Amazingly enough, KL8DX still heard me loud and clear—up until the radio shut off!



I had QSOs with (outside of the Netherlands, Spain, The QSL cards and finally started 2.5w PSK31 Alaska qualified International’s fact about this power was from 5w for the last

All in all, it was a wonderful trip to the beach. I’m hoping to make it back to this location for future vacations and eventually earn the ARRL’s Worked All States award with the endorsement for QRP. The QRP-ARCI also offers an “All States” award for QRP contacts with 20, 30, 40 and 50 states.

More photos of my adventure may be seen at Flickr.

<http://www.flickr.com/photos/shadle/sets/72157620687360544/>

Information about the QRP-ARCI and their awards may be found at their web site.

<http://www.qrparci.org/>
<http://www.qrparci.org/content/blogsection/4/116/>

73, John.



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Our Rich Ham Radio Heritage (Number 13 of a series)

By Raymond Woodward (Woody), K3VSA

What can you do if (1) you're a compulsive collector of radio gear and (2) you've run out of space to shelve all those radios and (3) you still have that unfulfilled urge to collect? One thing you might consider is collecting radio-related postage stamps. As you may already know, stamp collecting, or philately, as it's more properly known, has long been considered an avocation of cultivated gentlemen, as has Amateur Radio.

You can begin your collection with some important examples, and at a very reasonable cost, much cheaper than that K3 you're eyeing! I suppose the first one to acquire would be the five cent US Amateur Radio commemorative (which see), first issued on December 15th, 1964, at Anchorage AK. There were over 122 million of these printed, so you won't have any trouble finding one. For between five and ten dollars, you could even purchase a "first day cover" with additional artwork of Hiram Percy Maxim (the original W1AW) on the envelope--what a deal!

Other radio-related stamps issued by the US include commemoratives honoring Edwin Howard Armstrong, whose genius brought us too many innovations to note here; the audion tube; the spark-gap transmitter; the printed circuit; and Philo Farnsworth's first electronic television camera.

Don't limit your collecting to US postage stamps, however. Nations all over the world have issued stamps commemorating radio in general and Amateur Radio in particular, and honoring its creators. As you can imagine, Italy has engraved Guglielmo Marconi's likeness on a stamp or two. France issued a stamp in honor of Eduard Branley, the inventor of the "coherer," an early detector whose era predated the galena crystal. Russia remembered Alexander Popov, who built a radio receiver in 1894 that he used to detect the approach of thunderstorms. There are many more.

Once you've gathered a few dozen of these, it should be a simple matter in this day of desktop publishing to create some elegant and tasteful display sheets, suitable for framing, in which to hang your collection on your hamshack walls.

For more information on this fascinating philatelic sideline, a gentleman named Bart Lee has some history out on the web at this url:

<http://www.antiqueradios.com/chrs/journal/stamps.html>

Bart gives a good overview of the topic and has this to say about it:

"One nice thing about collecting radio stamps is that they take up a lot less room than radios. An even nicer thing is that they tell us about some little-known radio history."

Well, roger that, Bart!



K3VSA



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The President's QRM

(July 2009)

Sorry, but I missed the deadline last month so there was no "President's QRM" column for the June newsletter. On the other hand, nobody complained about it not being in that newsletter, which is either good or bad, depending on how you look at it. Anyway, onward and upward!

Field Day 2009 was a rip roaring success. According to Dave Snyder (W4SAR), we topped our previous high score by a wide margin. It was great how everybody worked together, and it was great having the Durham FM Association with us, too. It's too early to tell if the dual club Field Day will become a regular thing, but it would certainly have my vote.

Our new Orange County ARES EC, Laurie (N1YXU), has jumped into the job with both feet and is off to a terrific start. Those of us who watched her performance as the OCRA Secretary would have predicted no less. She should request the vanity callsign N1MI ("Miss Indefatigable"). I've had the privilege to be included on the ARES training meetings that have been going on for several months now, and I can tell you that there will be some positive results from them beginning very soon now. Don't be surprised when other ARES organizations in North Carolina and beyond look to us as the model on how ARES should be done.

As of today, our new repeater deck to replace the aging GE Mastr II for the 145.230MHz repeater has not been shipped, but hopefully it won't be too much longer. One nice thing about that machine and the 443.475MHz repeater is that no tower work is needed should maintenance need to be done.

This month marks anniversaries for two significant events in the technological history of the United States. It's the fortieth anniversary of the Apollo 11 mission, which put astronauts on the lunar surface for the first time; and it's the fiftieth anniversary of the submerged crossing of the North Pole by the US Navy's nuclear submarine, the Nautilus. Both of these are being commemorated on the air by special event stations.

I was only about twelve years old when the SSN Nautilus (the "N" in the prefix designating a nuclear powered vessel, the first in the Navy's inventory) completed this secret mission, so I don't remember much about it. At the time, I think more people were concerned about the openly public failures we were experiencing with our space program. However, it was a national confidence booster to learn that our first and only nuclear submarine, the jewel in the Navy's crown, had successfully sailed under the North Pole. Years later, I read the book, Nautilus 90 North, and learned that this had not been a cakewalk. Perhaps that's why it had been kept secret until it was an accomplished fact.

I was, of course, well into young adulthood when Neil Armstrong and Buzz Aldrin landed the lunar module "Eagle" onto the moon. At that time, I was an Air Force enlisted man stationed at Yokota Airbase in Japan. It was early in the morning local time when Eagle became Tranquility Base, and according to the plan, Armstrong and Aldrin were supposed to take a four hour nap before venturing onto the lunar surface. Well, I knew that was about as likely as kids waiting an hour after eating lunch before going in swimming. Sure enough, they were both out the hatch and skipping across the terrain as soon as they could. Somehow, we'd liberated a portable TV and had it up and running at work, tuned to Japan's excellent NHK network. A radio tuned to Armed Forces Radio provided the English language commentary. Glenn, my partner on duty at the time, actually fell asleep in the middle of it all, claiming that it was really a routine thing not to be made much



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of. I, on the other hand, was glued to the TV and radio as though the astronauts' success depended on my positive thoughts. I remember thinking that Michael Collins, the third astronaut on the Apollo 11 mission, alone in the Command Module orbiting the moon, was both the closest to this historic event, but also the last to know about its progress, having to rely on a radio link from Earth.

Even though there was a war going on, these were good times in our national life for many of us. Being an engineer or a scientist, or even a ham, was considered praiseworthy then. We really believed that there was no problem that couldn't be solved if we could only decide collectively to work together and solve it. Were we naive then, or did we just become cynical?

Until next time,

vy 73 de Woody K3VSA

Orange County Amateur Radio Emergency Services (OC ARES) Update

By Laurie Meier, N1YXU

Orange County ARES Emergency Coordinator

Each month, an OC ARES update will be included in the OCRA newsletter. The article will include an update on planning, upcoming events, and *most importantly* activities that you are encouraged to participate in.

Planning:

- First, let me remind you that OC ARES meetings are being held (currently) every other Sunday evening at 6:00 at the Orange County EOC, location of the monthly OCRA membership meetings. You are encouraged to attend any/all meetings to share your ideas, learn of the work that is being discussed, and give your feedback. The next few meetings are scheduled on August 9 and August 23. I hope to see you at a meeting!
- Areas that the OC ARES team is working on include: Emergency Plan, OC ARES training, Skywarn Training, and Memorandum of Understanding (MOU) with the Orange County American Red Cross.

Upcoming Events:

- Be sure to attend the August OCRA membership meeting on Monday, August 10. Tim Bothe, Director of Emergency Services for the Orange County Chapter of the American Red Cross, will be giving an overview of shelter management. Many of you have worked with the American Red Cross in past emergency situations. You know that the American Red Cross shelters are key to assisting local residents. As ARES members, we need to be aware of the logistics of shelters and the information that is most often communicated from a shelter in an emergency.
- The OC ARES team recently met with personnel at the Orange County EOC. Toward the end of October, there will be a planned field event that will involve multiple agencies to ensure communications and other logistics are managed effectively. OC ARES may be invited to participate in the event. This event will not be a drill and will be an excellent opportunity for us to work with several agencies within



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Orange County. There are many areas of training that we will need to cover before the event. Your participation will be the key to our success. Further information will follow shortly.

What can YOU do?:

- We are in the process of validating the OC ARES membership information.
 - If you attended the July OCRA meeting and filled out the OC ARES sheet that was passed around, you do not need to do anything further. You will soon receive an email, requesting that you validate your detailed membership information.
 - If you did not attend the July OCRA meeting and either (1) are an OC ARES member or (2) are interested in becoming an OC ARES member, please send me an email [lbmeier@bellsouth.net] with the following information: your name, callsign, email address, and phone number. You can also reach me directly by calling our home phone number – 919.942.4641.
- Ensure that you have completed the required, *free* on-line courses that are offered by FEMA. ARES is one of several groups that may be required to work together in an emergency situation. Common terminology and planning allow varying groups to work together effectively. The courses that are offered by FEMA provide the framework of the common terminology and structure. You can access the free, on-line courses by using the following URLs. After you have completed each course, be sure to print the course completion certificate as validation of your work.
 - ICS-100: Introduction to Incident Command System
<http://training.fema.gov/EMIWeb/IS/IS100a.asp>
 - ICS-200: Incident Command System for Single Resources and Initial Action Incidents
<http://training.fema.gov/EMIWeb/IS/IS200a.asp>
 - ICS-700A: National Incident Management System (NIMS), an Introduction
<http://training.fema.gov/EMIWeb/IS/is700a.asp>
 - ICS-800: National Response Framework, An Introduction
<http://training.fema.gov/EMIWeb/IS/IS800b.asp>

Mission Statement of OC ARES:

Orange County ARES provides the leadership, organization, training and infrastructure (in cooperation with the [Orange County Radio Amateurs](#)) necessary to ensure volunteer emergency and public service communications to support Orange County Emergency Services and other community and regional organizations when normal communication methods are inadequate. The success of Orange County ARES is shown by a progressive increase in registered members' training, capabilities and participation; evaluation of performance in drills and events; and formal relationships established with served agencies. Orange County ARES assures success by maintaining an organization with focus on its goals and a vision toward excellence of Amateur Radio emergency communications teams.

I am proud to represent OC ARES and look forward working with each of you.



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Best regards,
Laurie – N1YXU

10 Meter SSB Net – Alive and well

By Bruce Meier (N1LN)

This has been a very good month for the Monday night net. The sun spots are coming back (slowly) and, as a result, the 10 meter propagation is improving. If you made the July 6 or July 27 check-in, and were from the OCRA club, you would have been in the minority. 10 meters was open both nights and we had stations checking in from Maine, Canada, Florida, Kansas, Oklahoma, Texas, Indiana, Illinois, Michigan, Arkansas, Missouri, Louisiana, Pennsylvania, Minnesota, Massachusetts, New York, Connecticut, and of course NORTH CAROLINA. For those of you working on your Worked All States award you would have had 17 states and 2 countries !!!

June 29: 20 check-ins

July 6: 37 check-ins

July 13: No net due to OCRA membership meeting

July 20: 12 check-ins (Frequency change to 28.450)

July 27: 25 check-ins

Come join us and share your comments, thoughts, ideas, and fellowship.

73,
Bruce N1LN

REMINDER:

Location for the Monthly OCRA Meeting is: Orange Co EOC, 510 Meadowland Dr. in Hillsborough.

Direction to meeting site:

From Chapel Hill:

1. Take Martin Luther King ("Historic Airport Road") north toward Hillsborough.
2. MLK becomes Highway 86 (north towards Hillsborough)
3. Turn right onto Highway 70 Business at Hillsborough at the "T" intersection
4. Pass Meadowland Drive at the Triangle Sportsplex entrance to Meadowland office park
5. Turn right onto the second Meadowland Drive (Meadowland Drive is a loop), approximately six tenths of a mile from the intersection of Highway 86 and Highway 70 Business
6. Turn left into second driveway at 510 Meadowland (see radio tower), which is the location of Orange EOC

From Durham:

1. Take Interstate 85 South toward Hillsborough.
2. Exit Interstate 85 at Highway 70.
3. Bear to the left and take Highway 70 Business at Wayside Baptist Church
4. Turn left onto Meadowland Drive
5. Turn left into second driveway at 510