



ARRL Affiliated since 1912

The Amateur Radio Club of Texas A&M University

October, 2015

Volume 1 Number 1 (other

New Shack Opens Doors

The new W5AC Home is now open. "The Shack" is located on the campus of Texas A&M University at floriculture Road between the Hensel apartment complex



and Hensel park. (30.62972 N 96.3434 W). More pictures of the building, tower and antennas can be found on the W5AC web site.

http://w5ac.tamu.edu.

Club current activities are posted on our Facebook page "tamuarc" Where we comment on activities of the club and enjoy communicating with those interested in the activities of our club and amateur radio.

In This Issue

- New Shack Opens
- Tower and Antenna
- Sidebar Info Spelled Out
- Fox Hunting
- Ron Hambic Speaks about Christmas Parade and ARES Ops.



From the President

Howdy!

There has been a huge amount of good changes happened over the summer. Our Force-12 Antenna is finally up in the air and our shack has been freshly renovated. I believe all these changes will help us to face new challenges in this upcoming academic year. However, our club cannot go forward without receiving help from our members. Therefore, I would like to invite all available W5AC members to come to the meeting and discuss club items. Any suggestions will also be helpful if you are not able to attend.

This past month we proposed new constitutional provisions for adding a no cost Associate member category, so that those who are interested in Amateur Radio but are not licensed can participate in club activities and see how they like it. The changes propose a \$15 student membership, and a \$25 full membership. The paid memberships have unescorted access to the shack while associate members must be guests of a member.

Our open house and recruitment efforts at the MSC open house day were very successful. I personally made several presnetations about amateur radio to other student organizations and received a lot of interest. One example of that interest is that we have been contacted by the AggieSat Lab to see how we can help with the new AggieSat that is to be launched soon. The AggieSat lab invites W5AC members to join and the invitation works the other way too.

"There has been a huge amount of good changes happened over the summer. Our Force-12 Antenna is finally up in the air and our shack has been freshly renovated."

- Yucheng Guo KG5GDV



First Contact

On August 22, 2014 at 3:32PM Central time, W5AC made first contact from the new shack on HF...! Dave Gent, W5QZ worked W0ZQ mobile on 14.336 MHz using Single Side Band. Signal reports both ways were 5 by 5. This contact marks a new beginning of operations at the W5AC shack on Floriculture Road where the new tower and club building are located.

The shack moved to the new location after being relocated from the Texas A&M Memorial Center. The move coincided with a \$125 million renovation of the MSC which required the removal of all the club antennas from the roof.

New HF array

The club HF antenna is a brand spanking new Force 12 Delta-C 6BA, High Performance 14 Element Yagi-Uda covering the 40/20/17/15/12/10 meter bands. It was

assembled principally by Dave Gent and Marty Hollandsworth. They mounted it atop a self-supporting crank over tower thus replacing the venerable TH -6DXX that had stood atop the Memorial Student Cengter for many years.

The Force 12 is a massive antenna with performance to match. First indications are that the club will be well served by this awesome new addition to the HF radiation department.



New Building

The new club house is a prefab building containing several radio rooms, storage, a meeting area and a kitchen area. Restroom facilities are included in the building, but no water or sewer is available in the facility yet, so plan ahead. Parking is limited during construction of adjacent facilities, so park along the road that winds around the telecommunications building next door.

Sidebar Explanation

Each newsletter will have a sidebar on Page Three just to the right of this article. From time to time there will be features inserted there, such as the graphic depicting the sunspot cycle as shown this issue. There will also be updates on the activities of the ARRL, the local ARES group, the Bryan Amateur Radio Club and other University, Community and Nation Ham oriented events.

ARRL News

The worlds largest Amateur Radio Association is the ARRL (which used to stand for American Radio Relay League, but is now simply ARRL). W5AC is affiliated with the ARRL and benefits greatly from being part of this important organization

ARES

The Amateur Radio Emergency Service (ARES) is the organization that coordinated amateur radio activities in the region for emergency purposes. ARES works with various agencies of government and Non-Governmental Organizations, including W5AC to develop their emergency plans and assure that they have the proper training and equipment to help during an emergency.

When the plans call for communications, there is always a role for Amateur Radio to play. In fact, the Texas emergency plans for hospitals requires that ham radio be part of their plans. ARES recommends the equipment and the hospitals procure what is needed, expecting that when the time comes, ham radio operators who volunteer, will arrive and use the equipment to communicate voice and data messages between the hospitals and other emergency facilities.

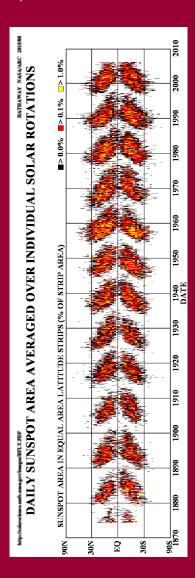
Space Weather

The effect of Space Weather on communications, particularly at HF (3-30 MHz) frequencies is well documented. The NASA Space Weather Communications page is a valuable reference for this kind of information and will be cited in the sidebar as a reference

Space Weather

Solar Cycle Number 24 is beginning. The 11 year cyclic phenomena has a tremendous influence on radio propagation around our earth.

Here is a graphic showing the last few sunspot cycles. HF radio propagation is better during sunspot maximums and trails off during the time when sunspot activity is at a minimum. You can see that each cycle is slightly different. Each spot on the graph represents a sunspot and where it appeared on the sun.



Fox Hunting Right Under Sully's Nose

Foxhunting is going on right here on the Texas A&M Campus. The W5AC Amateur Radio Club members are chasing an illusive "Fox", but it doesn't have a red tail. The Fox is a hidden transmitter that the hunters must find Learning the fundamentals of locating lost transmitters for fun is only the beginning for these aggies.

"We will probably organize the next foxhunt during a



using their home built antennas and receivers. This kind Fox is leaving a scent of sorts, a radio scent that careens off the buildings and structures of the campus leaving wisps of signals that will give away its secret resting place.

Dave Gent, W5QZ organized this hunt, which started from the quad right in front of Sully's statue. He hid the fox for Marc (KF5TYT) and Jesse (a new, and as yet unlicensed club member) to hunt. Ulises (KF5DXO) and Dave both helped Marc and Jesse try various Radio Direction Finding techniques to see how each of them worked.

The fox for this hunt was a voice unit, but Dave also demonstrated an official radio orienteering fox so everyone could get some experience with one. Orienteering fox hunts are now an international sport which is designed to improve the techniques and systems available for finding lost transmitters.

Not Just A Game

Hunting for lost transmitters can be serious business when the techniques and equipment are used for finding lost campers, rescuing sinking ships and locating downed aircraft. Modern day auto location systems include airborne and space borne equipment.

"We had a fun time at the W5AC October Foxhunt on the TAMU Campus."

- Dave Gent W5QZ

Upcoming Events

- Christmas Parade
- ARES Emergency Drill
- Next License Exam Session check the web page or the facebook page for the latest data.

Christmas Parade and ARES

Ron Hambic is the W5AC October meeting speaker. Ron is a member of W5AC from the community and invites our members (licensed or not) to participate in Emergency Communications operations here. Ron serves as the emergency coordinator for Brazos County Amateur Radio Emergency Service (ARES). He also stays busy coordinating the College Station Christmas Parade.

For many years Ron has lead the volunteers who work together using radios to coordinate the set up and operations of the College Station Christmas parade. This years parade will be held on Sunday, December 6th. Ron's group uses amateur and commercial radios to coordinate their activities. Getting a parade organized isn't exactly an emergency, but many of the same skills and equipment are needed just the same. Lining up the floats, closing parking lots and streets, keeping track of the progress of the various activities and always being ready to get medical or public service assistance to anyone who might need it are all the same kind of activities that happen during an emergency Using the parade to practice them is a good idea.

ARES is an ARRL sponsored organization that takes responsibility for coordinating the efforts of area amateur radio operators in preparation for any kind of an emergency. Often, during large scale emergencies, amateur radio plays a critical role in establishing and maintaining communications between incident commands in the field, coordination centers, hospitals and shelters. Links to the state emergency operations center are also supported by Ham radio networks. We have seen the need for such services here at A&M during hurricanes Katrina and Rita when cell phone traffic was severely affected.

W5AC is a vital part of the ARES process locally, since its members are trained radio operators and can easily become effective in emergencies. However, the role of W5AC extends much farther than this area during some emergencies. The HF and satellite communications capabilities of the club can provide communications capability to support disaster relief efforts all over the globe.

The Wireless brings you news from W5AC

Edited by Tom Talley (W5XTT)

Contact Us

Net Every Monday Night 8:00 PM 146.82+ 88.5

Meeting 2nd Thursday 7:30-8:30 Floriculture Rd Shack location. (30.62972 N 96.3434 W) EM10tp

W5AC@tamu.edu

http://W5AC.TAMU.EDU

Search for "tamuarc" on Facebook

PLACE STAMP

HERE

Texas A&M Amateur Radio Club W5AC
Student Organization Finance Center
Texas A&M University
125 John J Koldus Student Services Building
Mail Stop 1236
Slot #427
College Station, TX 77843-1236