



QSP



**Central Kansas Amateur Radio Club
P. O. Box 2493
Salina, Ks. 67402-2493**

November 2006

Election Results (CKARC Version)

President:	Mark	KBØMQX
Vice President:	Sid	NØOBM
Secretary:	Alvin	WØME
Treasurer:	Marty	KGØMT
Activities:	Pete	NØOY

ARRL VE Report:

The November CKARC ARRL VEC testing session was held on Nov. 8th. Nobody came to request a test for a new license or upgrade at this session.
Marty, KGØMT CKARC ARRL VEC Liaison

The December Exam is scheduled for December 13, 2006 in the “usual” location. (Saline County Sheriff’s Office Classroom at 7:00 PM CST)

W5YI-VEC Report:

The first of what we hope will be at least Quarterly **Saturday** Exam sessions was held on November 11, 2006. Sadly, we had the same results as the Wednesday session (No test takers, but plenty of VE’s). The next Saturday session will likely be in either January or February of 2007.

Sid, NØOBM. W5YI-VEC Team Leader.

From the Treasurer:

Treasurer's Report

A fill-able form in MS Word has been developed for membership applications and renewals. I am in the process of entering the data for each member that is included on the current club membership roster. Within the next week or two, each person whom I have an email address for will be receiving a copy of the fill-able form with this data entered. Please complete the items that have not been completed, and make any changes to the data that are incorrect so that I will have a readable copy for the club files. This should minimize errors in the data found on future club membership rosters. The completed form can be emailed back to me or printed out and given to Alvin, WØME or me (hopefully by Jan. 1, 2007)

Remember dues are due by the end of December. With the exception of LIFE membership, dues are \$15.00 for first member and \$5.00 for each additional family member. Checks, or as last resort USA tendered paper currency (cash), is still accepted; but at this time credit and debit cards will not work (sorry).

Although we dropped the requirement to be a 100% ARRL membership, we agreed to maintain Special Club status with ARRL. That means that we need to maintain at least 51% of the members belonging to ARRL. Therefore, if possible, please maintain or join the ARRL. Input any missing data on your membership application pertaining to ARRL (membership number if it is missing, and expiration date)

Be sure to check how you want the QSP to be sent to you and if we can include your phone number and email address on the club roster. I will be blind copying those that do not want others to know their email address.

Marty, KGØMT

CKARC Treasurer

Minutes of the Last Meeting:

CKARC Club meeting Oct.27 2006 Minutes

Meeting called to order by Mark KBØMQX at 7:30 PM Followed by Pledge of Allegiance to the flag.

Then Mark asked for a round of introductions

Mark said the November 24th meeting would be held sheriff training room and the December meeting will be **Monday evening December 18th**, which will be our Christmas party at the Western Sizzlin Steak House on West Crawford.

Sec. Alvin WØME read minutes of September 29th meeting with two corrections, add Alvin WØME to Nomination list as Sec. Again, and on help with 146.73 repeater after give (up to) \$200 Corrections approved and seconded carried.

Treasurer report read by Marty, KGØMT with Oct 27th Bal. as \$4108.17 Approved as read.

ARES report by Sid, NØOBM

Nov. 2nd ARES net 146.73- repeater,

Nov. 6th Siren test net if above 32 degrees,

Nov. 8th VE testing and board meeting.

Nov. 11th W5YI testing on Saturday 1:00pm,

Nov. 16th ARES meeting,

Nov. 24th CKARC club meeting in the Sheriff's Office Classroom.

VE report Marty 2 tested and passed General

WAØPSF Ron said the repeater is working better after some work and that the Club has received approval for the Hamfest for next year.

Ron also said that Sid NØOBM was taking over web site, and a big thanks to Ron for his Years of work on the web site.

NØOY Pete needs two volunteers for Dec. 2nd Balloon launch, subject to the WX. He has been working with the physic class at Kansas Wesleyan

Old business

Mark wants anyone who would like to help with membership drive to contact him. He will be appointing the Joe Addison Trophy committee

New business

New web master and bulletin editor is NØOBM Sid

NØXRS Virgil had a call from ADM about paying or getting Mike Makkins name on the mailing list so he can get newsletter.

Nominations for office as follows Mark Pres., Sid V. Pres., Alvin Sec., Marty Treas., and

Pete as Actives. Motion accepted as read.

Pete reported that the last 3 Saturdays at 11 AM local time he was able to make contact With Andy 5N9 on 21230 + or –

John, KCØJNK reported 3 students are interested in getting licensed.

Meeting adjourned 8:03 PM

WØME Alvin Sec.

NØOY Activity chairman report.

KWU and the High Altitude Balloon Project.

As I reported at our last meeting, work continues with the KWU physics club students on a weekly basis. For those who missed the meeting I am helping the physics club build a high altitude balloon system. Meeting once a week at the physics lab, there are about 10-12 students involved. Some of the students are working on the PC tracking software configuration for laptops, researching cameras, building the payload packaging, and doing a pre-flight check list. Also they are learning how ham radio plays a critical part in the system. They are doing all the work and my job is that of an adviser and furnishing some of the equipment. They are sharp students and fun to work with, maybe I can get them to a club meeting sometime.



So far we have constructed the flight payload carrier by modifying an insulated drink tote bag. It has a GPS receiver, TNC, and ~ 1 watt transmitter for 2 meters. It will also carry a data logger recording temperatures during the flight and store the data for retrieval after the flight. Also a digital video camera is on board pointing down to 'tape' the flight. At our last noon meeting we tested the electronics portion of the system. By putting the payload package on the roof of Peters Science Hall, we received valid

data in the lab and tested the laptop computers to be used on the recovery. We are still working on getting the serial to USB conversion working so the Delorme mapping software will display the actual position of the payload. Everyone got to see and hear the raw packet data being sent via the 2 meter transmitter. Data is transmitted every 10 seconds and all hardware is working.



We will meet 2 more times before the scheduled launch from the KWU football field. As with all balloon launches from open fields, more than 10 MPH surface winds is the one thing that can scrub a launch, so subject to surface winds / weather, we are planning on December 2nd morning launch.

Contact me for the next meeting time if you want to get involved and meet the students. Pictures are of the payload electronics and the tracking 'kit' in a Pelican case.

Pete NØØY

From the ARRL:

"It Seems to Us . . ." Not Your Grandfather's Amateur Radio

*By David Sumner, K1ZZ
ARRL Chief Executive Officer
November 1, 2006*

Classic radio -- the restoration and tender care of equipment that graced the shacks of prior generations of radio amateurs -- is an enjoyable and rewarding part of our avocation. Whether it's reconstructing our first stations, acquiring gear that we could only dream about owning when it was new, or exploring the history that predates our own Amateur Radio involvement, there is much to be learned and savored. In the era of the universal digital display it is easy to forget how much genius was required to achieve the same end by purely mechanical means.

But our admiration of the past does not mean we are stuck there. Amateur Radio's present is far more exciting. Today we can do more than ever before, because we have far better tools with which to do it.

Think about the lower frequencies. For decades after World War II the principal occupant of 160 meters was the LORAN navigation system. Amateurs were severely restricted, and any DX was rare. Thanks to the phasing out of LORAN and improvements in receiving antennas, 160-meter DX is commonplace today. Not only that, some amateurs are exploring long-distance propagation at 136 kHz using sophisticated signal detection techniques and others will be trying 505 kHz under an experimental license just granted to the ARRL.

Think about the HF bands, 80 through 10 meters. Right after World War II there were just four of them: 80, 40, 20 and 10 meters. Then 15 meters was added in the 1950s and 30, 17, and 12 meters were added as a result of the 1979 World Administrative Radio Conference. More recently we've gained some access to 60 meters (just above 5 MHz) on a domestic, not-to-interfere basis. Our predecessors could only dream of having such flexibility to choose operating frequencies to suit propagation conditions.

At the 2003 World Radiocommunication Conference we gained hard-earned improvements to the 40-meter band through the relocation of broadcasting stations out of the 7100-7200 kHz segment. This process is supposed to be completed in March 2009, but progress is already evident. In September I had the opportunity to operate 40-meter phone from 4U1ITU in Geneva. What a difference it was compared to operating the same station on the same band 30 years ago! US stations that never would have been audible in those days were rag chew quality in between the broadcasters -- and it's going to get even better.

Our modern flexibility extends beyond frequencies. In the "good old days" there were CW and phone, with a bit of RTTY for those who had the space -- and their family's tolerance -- for the big, noisy mechanical teleprinters. We still have CW and phone, of course, but both have improved. Thanks to electronic keyers and computers, CW sending speeds are faster (which has the unfortunate side effect of discouraging fledgling CW operators). HF phone operators are exploring ways to improve intelligibility, including several forms of digital voice. An even greater revolution is occurring in digital data communications, where creative amateurs are concocting an ever-expanding menu of digital "flavors" to be tasted.

And what about the size and weight of equipment? It's fun to admire the 100-pound, 100-watt back buster transmitters of yesteryear, but today we can take high-performance equipment practically anywhere we go. HF mobile antennas have come a long way, too.

At VHF and UHF, the *WSJT* Open Source software authored by Joe Taylor, K1JT, has brought moonbounce and tropospheric/ionospheric scatter within reach of operators with average backyards and has taken the pain out of meteor scatter. The D-Star digital networking concept developed by the Japan Amateur Radio League is catching on as a

means of providing wide-area networks for voice and data at speeds of up to 128 kbit/s. Experimenters' work is pointing the way toward higher data transmission speeds. Several systems using Voice over Internet Protocol (VoIP) bring worldwide communication to amateurs who only have a VHF or UHF FM radio -- or no radio at all!

A dilemma that has plagued microwave operators for years is not knowing what frequency they are on. When listening for a weak narrowband signal while using an antenna with a very narrow beamwidth, operating frequency is one variable too many. Now there are several ways of solving this problem, including locking your frequency to a GPS receiver. Microwave DX is no longer the exclusive province of hilltoppers. Software developed by Andy Flowers, K0SM, has dramatically improved the predictability of rain scatter propagation, which in turn has made operating the microwave bands from home a lot more fun. The greatest amount of activity is on 10 GHz, but the higher bands are attracting more and more amateurs with a pioneering bent.

Cutting across all of these exciting frontiers are developments in Software Defined Radio (SDR) technology. Low-cost SoftRock receiver kits have proved to be hugely popular, while the FlexRadio SDR-1000 and other sophisticated designs have brought new performance capabilities into early adopters' ham shacks. SDR features are now routinely designed into amateur-satellite transponders.

Amateur Radio. A proud past. An exciting present. A bright future!