# UNIVERSITY of PENNSYLVANIA AMATEUR RADIO CLUB



# Minutes of the Amateur Radio Club University of Pennsylvania Philadelphia, PA 19104

http://www.seas.upenn.edu/alumni/amateurradioclub/home.html

Monthly Meeting: Wednesday, April 30, 2008 at Houston Hall.

#### Attendees:

In attendance at Houston Hall:

Burnell Brown – WA3OXY; Mike Feeley – KB3NDC; Reuven Gevaryahu – KB3EHW; Sam McGarity – KB3DZU; Russ Miller – WA3FRP; Henning Olesen – W1YS; Hesham Wahby (Wharton MBA '09)

In attendance by telephone:

Bob Bartlett - HP3FTD, Boquete, Panama; Jan Carman - K5MA; Perry Habecker - KB3SVQ, Coatesville, PA, Jim Talens - N3JT

# President's Welcome, Update and Comments

President Russ Miller called the meeting to order at 6:00 PM and welcomed everyone to the April Club meeting. The meeting was held in room 313 in Houston Hall.

Russ briefly talked about the cover of the May issue of CQ Magazine and the short article on page 82. The cover photograph is a color shot of Russ standing next to his very impressive restored, rack mounted Collins T440/FRT-24 AM / CW transmitter built for the US Navy in 1959. The receiver is a restored Collins R-390A and the teleprinter is a Model 28ASR, which includes a tape perforator and reader. His antenna system is a simple trapped dipole covering 40-10 meters.

Russ has worked 207 countries on RTTY with 198 confirmed and is just one zone away from Worked All Zones - RTTY. He is lacking only Zone 28.

Russ indicated that this is the final club meeting before August. The Club currently includes seven student members, seven faculty and staff members and 47 alumni members.

While waiting for all members to arrive, Bob Bartlett, HP3FTD, began a discussion of activities from the W3ABT station in the Moore School in the 50's. He was able to secure some funding to purchase equipment during his undergraduate years. My own personal experience with the W3ABT station in the 60's while I was both an undergraduate and graduate was excellent. A lot of what Bob accomplished in the 50's made the 1960's era W3ABT station the success it ultimately became.

Bob also described some of his radio-related activities from his home in Panama. He enjoys working DX stations in Europe and also in the Caribbean and Pacific islands. He has good propagation conditions to Europe and is able to work lots of stations in the southern US and Mexico even on the 10-meter band. The 20-meter band is also an active DX band. Bob has won several contest awards for #1 Panama station in CQ WPX, 10-meter contest, plus several ARRL competitions. Most of his contest and DX activity is on SSB mode, although he does work the occasional CW QSO as well as a few CW contests.

### Approval of the March Meeting Minutes

A motion was made and seconded to approve the March Club meeting minutes.

# Challenge from the Schools of Engineering

A challenge was put forth by the chairman of the Electrical Engineering Department to the Club's Faculty Advisor, Prof. Sarkar. The challenge is for the Club to provide the Senior Design Project with three new ideas each year for development of radio related technologies that are within the capabilities of the UPenn ARC to influence, develop, and implement. My personal opinion (K5MA) is that this challenge should be accepted and acted upon in the coming months. We have within our Club membership the knowledge and experience to contribute to faculty expectations as issued in the challenge. A further part of that challenge is that there must be the potential for large-scale participation before any physical space in the Engineering complex of buildings is allocated to the Club.

One source of ideas for Senior Design Projects that Russ has already explored is the ARRL Technology Task Force, where ARRL First Vice President and Club member Kay – N3KN participates. The discussion moved to senior projects that might be feasible for completion by the end of 2008.

Kay N3KN mentioned to Russ via e-mail that Club member Dennis Silage, K3DS, 1974 PhD EE from Penn and Trustee of the radio club at Temple University was

another great source of ideas for this Challenge. Note was made that Dennis was the author of the article "Amateur Radio – A Perfect Fit for Engineering / Computer Students" published in the November 2004 issue of QST magazine. The main point of the article is that "opportunities abound for undergrads to use ham radio in their courses and projects".

It was noted that Perry Klein – W3PK, would be a great resource for this challenge. It was decided that Jim – N3JT would contact Perry to gather some ideas. One specific project was mentioned by Burnell – WA3OXY relates to radio propagation: recognition of the current solar cycle minimum point.

The discussions that took place during this most recent Club meeting regarding possible remote control of an HF amateur radio station at the New Bolton Center in Chester County represents an ideal subject in which to engage Engineering School students, faculty and management.

### On-Campus Station

A long conversation took place regarding how best to establish an on-campus club station. The general feeling among meeting attendees was that an on-campus station in the short term is impractical. As noted above, the discussion moved in the direction of establishment of a remote controlled station on University property at the New Bolton Center, primarily an agricultural region approximately 35 miles west of the Penn campus in Chester County.

# Option for Remote Controlled Off-Campus Station

Perry - KB3SVQ commented on the possible establishment of a remote controlled HF station at the New Bolton Center property, a part of the Penn School of Veterinary Medicine.

Perry spoke about a potential location for the Club that is located in the vicinity of the farm shops. It is on the highest point on the property near the intersection of Township Line and Byrd Rd, Marlborough TWP, approximately 1.5 miles northwest of Kennett Square, 19348. The site is on the southernmost edge of the 640 acre New Bolton Center campus.

He also noted that there is a 50 / 60 foot tower self-supporting (no guy wires) tower is erected on this site where there is near-zero interference to the routine ongoing farming operations would take place.

However, there is no present Internet connection available at this farm shop site.

The discussion about remote control of a HF station and the way to provide an Internet connection at the New Bolton Center property was long and detailed. Further discussion will be needed to fully determine if this remote location is feasible for establishment of an HF station for the Club. Russ – WA3FRP and Jan

 K5MA will arrange a time to visit with Perry - KB3SVQ over the summer to see the site.

One idea that occurred to this writer (K5MA) while preparing these notes is that the combined knowledge of our Club members, with possible assistance from University EE faculty and other technically proficient University staff and students, might be harvested for ideas on how to effectively develop and implement a remote controlled HF amateur radio station at the New Bolton Center. This isn't rocket science, but neither is it trivial. There are opportunities here for EE students to contribute to solving the many problems of establishing a reliable and effective remote controlled radio station 30-plus miles from the main campus. This is more complex than what is commonly done in the broadcast industry where almost all AM and FM broadcast radio stations are remotely controlled, primarily by computer via a microwave link, with telephone line backup. We (UPenn ARC) will not likely have the financial resources to duplicate the remote broadcast facilities enjoyed by WXPN. We certainly don't have the obstacles to climb that WXPN has successfully solved. But, we must develop the ability to establish a modest, but effective, HF amateur radio station at a remote location. And this, primarily HF, amateur radio station must be accessible by students on the Penn campus, possibly from more than one location, as well as by non-student Club members. The possibilities for a very successful remote controlled and easily accessible HF amateur radio station are very high in my view. (I did not intend to insert an editorial comment of this length in the meeting notes, so I apologize for that, but I feel very strongly that we - UPenn students, alumni and faculty - who have an interest in radio communication seek solutions to the complex tasks we must successfully complete in order to establish the communications facilities we desire).

I made a note during the meeting that Russ would put add pictures of the proposed site that Perry - KB3SVQ has supplied:









# Club Meeting with Provost's Office

Russ had a conversation with Penn President Dr. Amy Gutmann regarding Club activities and our objective to re-establish an active, on-campus Club station. She was sympathetic to our cause. Russ was referred to the Provost Office. The vice-provost is at the highest level of University administration who gets involved with on-campus clubs.

# Club Leadership

Russ mentioned that our current Club Vice President, Donald Ying, will graduate and be leaving the area for New York City in a couple of weeks. Russ proposed that the Club appoint an interim Vice President until elections can be held at the beginning of the fall semester. Russ recommended that Hesham Wahby, who has been very active in the Club this year including arranging for meeting rooms and food / refreshments at all recent meetings, be considered for this position. A motion to this effect was made and seconded. The motion was unanimously

passed and Hesham Wahby is now the Club's interim Vice President until elections can be held in the fall.

## Club QSL Cards

The Club is about to run out of QSL cards. Russ showed an existing Club QSL card to the group at the on-campus meeting. There was a discussion of several options for getting QSL cards printed. There are several European printers of QSL cards, which are used by many amateurs around the world. LZ1JZ is one such printer, but there are several others who produce very high-quality cards. The Club, through Bob Bartlett, has a connection with AI4U, who is an active QSL manager and is well connected with several European QSL printers. The Club has several options for printers, and Bob will pursue the project.

Another issue is the loss of most of the Club's older QSL card collection prior to 2004. This is a very unfortunate situation, which can occur when there is no interest in the Club for a period of years. One suggestion is to contact ARRL and ask that they place a short article in their Strays column making note that all QSL cards in the W3ABT / N3KZ collection dated prior to 2004 have been lost and to ask that readers who have previously worked and QSL'ed QSO's with W3ABT or N3KZ prior to 2004 send a replacement QSL card to the Club.

# Club 100<sup>th</sup> Anniversary in 2009

The 99<sup>th</sup> Anniversary of the founding of the UPenn ARC will take place this coming October, and 2009 will be our 100<sup>th</sup> Anniversary year! N3JT and K5MA agreed to take on the responsibility of proposing projects, new QSL cards in particular, and possibly other options for the celebration of our 100<sup>th</sup> year as a Club. Reports and discussion will take place at future Club meetings. Russ indicated that he had several ideas as well.

A few ideas were tossed around at the meeting, including liaison with other schools, such as MIT, Harvard, Princeton, and Cornell that have active amateur radio clubs. One possibility might be a celebratory meeting between representatives of schools who had active amateur stations in 1909. Another suggestion was a project to build working replicas of transmitters and receivers of the early 1900's. Russ, Mike, Jan and a few others will get together to discuss the possibilities.

# HUP (Hospital of the University of Pennsylvania) Interest in Club

Officials at the University Hospital, including the Director of Emergency Management, have indicated interest in the use of amateur radio facilities, and the UPenn ARC in particular, for public service and emergency communications work. A suggestion was made to establish contact and periodic meetings between UPenn ARC and officials at HUP. Bob, HP3FTD, suggested that management of

the New Bolton Center be contacted regarding the potential of that site as a key element of a UPenn ARC emergency communications facility. In addition, the Director of Emergency Management at HUP suggested that the Club become involved with public safety projects on the Penn campus.

### Club Membership Drive for the Fall Semester

The Club is looking for volunteers for Activities Night in September. Russ and Hesham have agreed to suggest ideas for Club participation at Activities Night. A discussion evolved where suggestions were proposed such as use of VHF/UHF hand held transceivers for coordination during event. Also, there are possibilities for use and/or demonstration of HF amateur radio.

### **Next Club Meeting**

The next meeting of the University of Pennsylvania Amateur Radio Club will take place on Wednesday, August 27, 2008 at 6:00 PM at an on-campus location yet to be determined.

#### General Discussion on How to Build Interest in the Club

An informal discussion took place on how to build on-campus interest in the Club. Some of the ideas put forward included –

- Promote the Club's public service capabilities to the various existing on-campus public service organizations.
- Build publicity for the Club through on-campus publications, such as the DP and publications of each specific school.
- Promote Club activities and solicit membership among incoming freshmen students.

Minutes prepared and submitted by: Jan Carman, Secretary and Russ Miller, President