

*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: Monday, September 24, 2007 at the Moore School of Electrical Engineering.

Attendees:

Jan Carman\* – K5MA, Russ Miller – WA3FRP, Dave Pascoe\* – KM3T, Tim Potens (SEAS '09), Terry Smith\* – K7YNO, Jim Talens\* – N3JT, Hesham Wahby (Wharton MBA '09)

Participants attending the meeting via conference telephone call are noted with \*.

President's Welcome and Update

President Russ Miller called the meeting to order at 4:30 PM and welcomed everyone to the September Club meeting. He noted that the Club was started in 1909 and was one of the earliest amateur radio clubs. The Club was restarted in 2005 by our alumni group and is now growing with student participation. He also introduced the idea of the internet-based, remote HF station facility currently under consideration by the Club. Russ also noted that Donald Ying, Club Vice President, would be taking this semester off in Japan.

Russ reviewed the history of the old W3ABT station in the Moore School including some of the problems with RFI and other issues. Dave agreed to send Russ an email with some club history from his viewpoint.

The previously published meeting minutes for the August 2007 club meeting were accepted.

## On-Campus Station

Terry reviewed the strategic plan to develop a remote HF Club station accessible by Club members through an Internet-based control system. Terry noted that there is remote control software available from W4MQ that we can consider for our Club application. The software uses a virtual terminal for radio control and VOIP for bi-directional voice or digital data. Ultimately, we will implement a remote computer controlled facility with remote access. The physical remote station would be located on the rooftop of the University high-rise north dormitory building in the vicinity of 39<sup>th</sup> & Spruce Streets. Permission for roof-top antenna access has yet to be secured, although financing does not appear to be a big issue. The primary issue at the moment is trying to get the right people to say YES!

One idea brought forth is to approach the Holmesburg ARC, which has been granted roof-top access for their repeater system on the University high-rise north building. Mike Feeley will be handling the liaison with HARC to resolve this issue.

A question was raised as to whether or not Terry could test the W4MQ remote station control software for our application. Russ indicated that he has a password and has tested it on receive.

Dave led a general discussion about the issues involved with establishing an effective remotely controlled HF station on a high-rise building. One of the primary issues with a 2-way HF station on a building that also contains multiple VHF/UHF transmitting facilities is de-sensing in the HF receiver caused by the close proximity to other high-power transmitters. The suggestion was made to develop a short list of HF transceivers and antenna systems that might be suitable for roof-top service in a hostile RF environment. HF multi-band verticals would be preferred to horizontally polarized yagi antennas on tall buildings because horizontally polarized antennas depend on ground gain for best performance, and ground gain is greatly reduced when the antennas are placed on tall buildings. Another thought is to do an RF survey at any potential roof-top location to determine the severity of potential RFI problems prior to planning a specific installation. Most urban tall buildings host many VHF/UHF transmitting facilities.

There was a general discussion on which multi-band HF/VHF/UHF radios can be remote controlled. Russ also noted on the HF antenna issue that there are some QST advertisements from Hy-Gain for half-wave, ground-independent HF multi-band vertical antennas that might be good candidates for our roof-top application.

Russ suggested that Club member, Tom Archer, N3MZV, who works in the University Hospital, be engaged by the Club to identify the appropriate University facility person to assist the Club with our roof-top antenna installation issues. The Club needs to obtain digital photographs of the potential roof-top antenna locations and also the elevator rooms or other possible locations for electronic equipment racks/containers as well as convenient sources for A/C power. Another subject is that equipment racks might require cooling and air-filtering equipment if located in a non air-conditioned environment. Also, rooftop access is currently not as easy

as it was years ago. The Holmesburg Club might be helpful with this issue. It was suggested that all of this facility information be gathered and documented (photographs in particular) prior to any negotiations with the University.

### Licensing for New Students

Russ indicated that students with an interest in amateur radio want to know what they need to do to begin the process of getting licensed and becoming active. The Club needs to provide the interested students with information on how to obtain license study materials and general information on amateur radio. The Club needs to make its presence known at the Student Activity Fair. Mention was made that it would be helpful if there was a working ham station at Penn to be used for recruiting purposes, demonstrations, occasional use, etc. The question was raised about the old Franklin Institute station, W3TKQ, which might be useful as a demo tool. Unfortunately, a ham station no longer exists at the Franklin Institute. W3TKQ is now located in a Philadelphia high school, and the license is held by the Phil-Mont Mobile Amateur Radio Club.

### General Discussion of HF Ham Radio for New Club Members

Russ initiated a general discussion for new Club members on HF DXing, DX-peditions, contesting, award chasing and other issues. Contesting can be an obsession (just ask Club member K5MA!) Other interesting activities were mentioned including preparing for ham radio operating in emergency situations as well as the always popular topics of HF operating including antennas and towers.

Russ mentioned that once the Club is a student-run organization, it can apply for University funding. He also initiated a general discussion of members who entered into radio or electronics related careers. Other topics of interest included ham radio social networking, ham vacations and meeting with other radio amateurs from around the world. Another idea is to encourage Club members with active ham stations to arrange for our members to visit their stations or the stations of other hams who would like visitors.

The meeting was concluded at 5:51 PM. The date for the next Club meeting will be determined shortly, probably Monday October 29, 2007.

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