

Spring 2007

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Checking In

Your source for W2KGY news every semester.

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Contact Information:

USMA Amateur Radio Club
ATTN: HAMS OIC
Dept. of EE&CS
Bldg 601, Thayer Hall
West Point, NY 10996

Tel: (845) 938-2200
Fax: (845) 938-5956
E-mail: w2kgy@usma.edu

Web: www.eecs.usma.edu/webs/clubs/hams

Scoutmasters' Council Camporee by CDT Wiley Grant, KC2PCV

The 2007 Boy Scout Camporee was by far the best camporee the club had participated in during its 3 year history of helping the Scoutmaster's Council (SMC) hour with the event. Cadets in attendance were Wiley Grant, Andrew Thompson, Rob Corless, Josh Mauldin, Mike Hill, and Matt Sherburne. LTC Schmoyer, Dr. John Rogers and Mr. Roy Spells also aided in pulling off the well executed camporee.

The club's main task during the first day of the camporee was to provide voice and data radio communications over the mountain between Lake Fredrick, the camporee's main site, and Camp Natural Bridge, the in-processing site. The club's duties increased however when LTC Graham, the SMC OIC, requested the club run a 24 hour communications cell for the entire camporee and keep a log of injuries and any other major events



CDT Sherburne puts Scouts visiting W2KGY to trade brass through a vigorous physical test: "Be physically fit."

that occurred at the camporee. The new tasking put W2KGY right in the middle of the action for the first time since it had attended the camporee.

The weekend's festivities were wrapped up with a visit from the Commandant, BG Caslen. He was very impressed with the club's setup and was very pleased at the job that the club was performing.

When it all comes down to it, where would W2KGY be if the club didn't have a little fun? There was plenty of opportunity for that as club members actively engaged the scouts in trade for brass and other articles. CDT Matt Sherburne tested the scouts on their motto "Be physically fit" by subjecting them to a PT session. No scouts were given brass, they *earned* it.

W2KGY, Mount Up! by CDT Joshua Mauldin, KD5FUM



Left to Right: CDT Andrew Thompson '09 (KC2PCW), CDT Michael Hill '07 (KC2PCU), and CDT Robert Corless '08 (KC2RME) with LTC Schmoyer's trailer which provided a mobile ham shack for the club.

The club tried out a new field maneuver during its tour at Lake Frederick during the SMC Camporee. Taking advantage of CDT Andrew Thompson's skill on the bicycle and CDT Robert Corless' desire to do legitimate work, the club had these two "Mounted Warriors" bring out their bicycles for rapid deployment to emergency situations.

This was the first time the club had tried

to provide its roaming communications with any type of rapid maneuver capabilities, and the results were even more astounding than expected. CDTs Thompson and Corless were able to travel the entire area of operations for the camporee just as quickly as the mounted medical units, and their ability to provide rapid communications proved invaluable time and again.

Election & Patch Party by CDT Joshua Mauldin, KD5FUM



This artist's interpretation of the club patch may or may not be accurate to the actual patch design.

With the graduating seniors leaving, several club officer positions were open for new leadership. There was a general consensus that the club should elect new officers using traditional "circle the

name" style ballots to avoid any issues with hanging chads and late ballot reports.

In addition, the W2KGY patch was presented at the annual Patch Party at LTC Schmoyer's mountain-side villa on 16 April 2007 to Cadet Michael Hill '07.

Cadet Hill earned his FCC Amateur Radio Technician license and received his call sign: KC2PCU. He supported several special events over the years he has been a member and qualified on the Bartlett Hall tower.

Graduating Firsties

Matt Sherburne (President/CIC)
Shawn Mosely (VP/ACIC)
Micheal Hill

Upcoming Club Staff

President/CIC - Wiley Grant
VP/ACIC - Andrew Thompson
Secretary/S1 - Robert Coreless
Treasurer/S4 - Richard Kubu
PAO/S6 - Josh Mauldin



(L to R): CDTs Mauldin, Kubu, Grant, Thompson, Corless

A Friendly QSL Card from Our Friends Above by LTC Tim Schmoyer, W2JIG



The International Space Station (ISS) is a common project of many nations in Europe like our Canada, Russia, Japan and the USA. Who truly controls the ISS will decide of about 75 major components and hundreds of smaller ones that are to be assembled in space by the year 2010. Some of the major components are:

- Zarya, also called Functional Cargo Block (FCB) - arrives from the Russian term - includes the energy block, computer bus storage, payload and multiple docking ports.
- Zvezda, also called Russian Service Module - provides life support and utilities, firesters and habitation functions (toilets and hygiene facilities).
- Canadian Mobile Servicing System - includes a 55-foot robot arm with 125-ton payload capability as well as a mobile transporter that can be positioned along the truss for robotic assembly and maintenance operations.
- US, European and Japanese Laboratories - together provide 30 International Standard Payload Modules with additional 1000 experiments available in the two Russian Instrument Modules.
- The Amateur Radio station - which is frequently used to allow ISS crews and visitors to talk with school children and hobby amateurs around the world.

To:	W2KGY					
From:	Day	Month	Year	UTC	MHz	
<input checked="" type="checkbox"/> NAISS <input checked="" type="checkbox"/> ARIS	26	JAN	2006	13:13	144.	
Mode:	<input checked="" type="checkbox"/> Voice <input type="checkbox"/> CW <input type="checkbox"/> RTTY <input type="checkbox"/> APRS <input type="checkbox"/> Packet <input type="checkbox"/> Other					

The QSL card and a nice ARISS flyer have arrived from our contact in [Jan 2006 with the International Space Station!](#)

W2KGY and Girl Scouts Troop 118 by LTC Tim Schmoyer, W2JIG

On 21 March 2007 the USMA Amateur Radio Club (W2KGY) supported the Sarah Wells Junior Girl Scout Troop 118 in earning the Ham Radio Patch.

The club ran four stations in a round robin to provide the Scouts the opportunity to learn

about radio theory, the Amateur Radio hobby, operate the radios and climb the radio tower.

Cadets Robert Corless (KC2RME), Wiley Grant (KC2PCV), Richard Kubu, Joshua Mauldin (KD5FUM), Matthew Sherburne (KF4WZB)

and Andrew Thompson (KC2PCW) conducted the training and acted as control operators for the Scouts. The cadets were assisted by Dr. John Rogers (KC2PCX), LTC Tim Schmoyer (W2JIG) and Mr. Roy Spells (KC2NDQ).



CDT Andrew Thompson (KC2PCW) tries to explain that it is indeed possible to communicate without a cell phone or internet.

Contests

School Club Roundup by CDT Matt Sherburne, KF4WZB

The School Club Roundup (SCR) was held 12- 15 February 2007.

The members who participated were cadets Matthew Sherburne (KF4WZB), Michael Hill (KC2PCU), Andrew Thomspson (KC2PCW), along with LTC Tim Schmoyer (W2JIG), Dr. John

Rodgers (KC2PCX), and Mr. Roy Spells (KC2NDQ).

The SCR is sponsored by the Council for the Advancement of Amateur Radio in the New York City Schools (CAAR/NYCS), ARRL and its Hudson Division Education Task Force. Experienced operators

are encouraged to chat with newcomers beyond the contest contact to help them gain confidence on the radio.

In just under 4.5 hours of operation, we made 30 QSOs across 18 states and two countries, to include 2E0PDX in Manchester, England. W2KGY's unofficial score was

2,670 points. Notable W2KGY contacts this year include Arizona State University, the Naval Post Graduate School, and a dozen other high schools, middle schools, and elementary schools from across the country.

OIC Ragchew

“An Outstanding Year” by LTC Tim Schmoyer, W2JIG

W2KGY had an outstanding year! The list of accomplishments large and small are too numerous to list here and I want to thank each club member that contributed to our success as officers, during contests,

supporting special events, working on equipment, getting their license and bringing in new members ... just to name a few things.

This summer, the club will continue to work on putting the

satellite arrays and repeaters back on the air. We'll also continue to coordinate with the Scoutmasters concerning improvements for next year.

Finally, the

trailer will get another work out during ARRL Field Day 23-24 June.

Congratulations to all our graduates and keep in touch. It's great to get a QSL from an alumni!

CIC Ragchew

New members by CDT Joshua Mauldin, KD5FUM



The club welcomes the following cadets to its membership:



*Robert Corless,
KC2RME*

Class of 2008

C-3

*Joshua Mauldin,
KD5FUM*

Class of 2010

H-2



VEC Ragchew

W2KGY Licenses New Hams by CDT Joshua Mauldin, KD5FUM



On 5 MAY 2007, history was made. That's correct, CDT SGT Robert W. Corless passed the FCC Amateur Radio Technician exam (element 2) and is our newest Ham!! CDT Corless' call sign is KC2RME, and he is

added to the long gray line of amateur radio operators.

In addition, LTC Schmoyer (W2JIG) upgraded to Amateur Extra and Mr. Roy Spells (KC2NDQ) upgraded to General class operator.



CDT Corless thought the examiner congratulated him on his new "License to Kill"

Team Ragchew

An idea new to the club this semester is assigning members to teams who are responsible for the communication systems in the club. There are a total of eight teams: 3 base station teams, 3 repeater teams, a repeater controller/handhelds team and a wireless camera team. In this issue, we'll introduce 5 of those teams, the team's responsibilities and their accomplishments.

Team Icom by LTC Tim Schmoyer, W2JIG



LTC Schmoyer, W2JIG

CDT Grant, KC2PCV



Team Icom is responsible for the Icom IC-781, IC-4KL 1KW linear amplifier, 45' tower and the hy-gain TH-7DX triband antenna with rotator.

This system has been used for every HF contest, Jamboree on the Air and to support the

Girl Scouts to earn their HAM Radio patch.

Along with Team Kenwood and Team Yaesu, the team installed new cable rungs on the tower and re-cabled all the systems going to Bartlett Hall roof.

Team Kenwood by LTC Tim Schmoyer, W2JIG



Dr. Rogers, KC2PCX

CDT Thompson, KC2PCW



Team Kenwood is responsible for the Kenwood TS-440S, antenna switch and Cushcraft XM240 40 meter monoband antenna with rotator. This system is used during contests when operating in SO2R mode or when two operators are

working HF bands simultaneously. The club is purchasing a microSO2R Pack 6B (2 microHam band decoders and Double Six Switch) to replace the existing Ameritron RCS-8V antenna switch. The team also assists Team Icom with the tower and cables.

Team Yaesu by LTC Tim Schmoyer, W2JIG



Mr. Spells, KC2NDQ CDT Corless, KC2RME



Team Yaesu is responsible for much of the VHF and UHF equipment in the club and has the greatest flexibility for experimenting on these bands.

The team is responsible for the Yaesu FT-736R, 2m vertical, 70cm

vertical, 2m, 70cm and 23cm satellite arrays along with the associated tower and Az-El rotator.

This is also the primary (net control) radio during club meetings and was the system used to contact the International Space Station last year.

Team Scom by LTC Tim Schmoyer, W2JIG



MAJ Radicic, KD7UHR CDT Kubu



Team Scom is the backbone of everyday operations by the club. The team is responsible for programming and maintaining the club's Scom 7K repeater controller, programming and maintaining the Motorola XTS3000 HTs and maintaining

the Kenwood TM-D700A radio kits deployed during Camporee each year.

In addition, the team provides assistance to other club members with their personal HTs to talk on the club's simplex frequency and Mount Beacon's repeater.

Team Hamcam by LTC Tim Schmoyer, W2JIG



LTC Schmoyer, W2JIG CDT Corless, KC2RME



Almost 10 years ago, the club took an interest in Amateur TV. As part of their research and experimentation in cameras, video protocols and radio systems, W2KGY established the first outdoor webcam on West Point.

The club now operates an Axis 2400 video server, 240 camera server and up to eight indoor and outdoor cameras. The heart of the system is a Pelco Spectrum II PTZ dome camera over wireless using Trango FalconPlus and SDR900H radios.

New 40 Meter Rotator Installed Along With Cable Rungs by CDT Rob Corless, KC2RME

With the Boy Scout Camporee mission complete, the USMA Amateur Radio Club set its sights on installing its new Yaesu 40 meter rotator and cable rungs.

Within a couple hours, CDT Robert Corless (KC2RME) was able to free the old 40 meter rotator from its rusty bolts. Unfortunately, the new rotator had to wait for its installation because it did not have enough clearance between the 40 meter mast and its support platform. With some help from a come-along, LTC Tim Schmoyer (W2JIG) raised the 40 meter mast by a couple inches so

the new rotator would fit between the platform and mast.

The following week, CDTs Robert Corless (KC2RME) and Matt Sherburne (KF4WZB) finished the installation of the rotator with a six-conductor cable. After connecting the rotator, the pair used their handhelds to communicate while orienting the antenna--one in the ham shack and the other working on the tower.

After completing the 40 meter rotator, the pair worked with LTC Tim Schmoyer and Dr. John Rogers (KC2PCX) to

install the cable rungs and clean up the cables in the snake hole. Now the club has a professional-looking tower with neatly organized cables and no electric tape. The next task for the club is to color-code the cables for the various antenna systems for easy maintenance and repair.



(Above) Cadet Sherburne installs a cable rung on the Bartlett Hall tower. (Left) The new rotator and cable runs look great! Awesome job, guys.



On the Horizon

“Welcome to the Club” by CDT Wiley Grant, KC2PCV



CDT Wiley Grant, the newly elected club CIC is all about “Tasks, Conditions, and Standards.”

As the club ends the current academic year and looks forward to the next, the future holds many opportunities for W2KGY. The membership in the club is the highest it has been in several years, which is the building point that I plan to focus on in the next year. We have a

full staff and plenty of things to be done.

Among other objectives, finishing the antenna arrays for all the radios and getting the repeaters online are on the top of the list. Also, the club plans to enter into more contests and competitions than in

previous years.

Finally, the last main goal for the year is to increase the size of the club to include more members interested in both building and talking on radios. In the upcoming year, our club will be presented with numerous opportunities to make W2KGY into a club for all to remember.

CDT Wiley Grant, CIC