



QSP



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Amateur radio operator tracks signal to find payload

By Chuck Gysi/Editor

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BLANDINSVILLE - A high-altitude balloon launched by Kansas college students was tracked to have ended its almost 400-mile flight in a field near Blandinsville, thanks to amateur radio.

The experiment by the Kansas Wesleyan University Physics Club was launched at about 8 a.m. Saturday with some help from the Salina Ham Radio Club from the school's football field in Salina, Kan. The radio club added a payload to the balloon that transmitted the balloon's location via ham radio.

The balloon initially headed in a south to southwest direction because of surface winds, but took an easterly and then northeasterly turn as it rose in altitude. The balloon had been expected to stay in the air for about three hours - two hours for the ascent and one hour for the descent - but the balloon actually stayed aloft longer and traveled farther than expected.

"We were unable to find the balloon and traveled as far as Missouri looking before we lost the GPS (global positioning system) signal," Dr. Susan McDonald, chair of the Department of Physics, said in a news release issued Saturday.

"The balloon ascended slower than anticipated so it spent more time in the upper-level winds. It was tracked through friends of (amateur radio operator) Pete Sias in Iowa and Illinois using the GPS beacon to near Blandinsville, Ill. So our little balloon crossed the Mississippi today and we are hoping that a kind soul will find it and mail it back to KWU."

With word of the balloon's landing in the Blandinsville area, Macomb area ham operators started looking for the balloon by tuning in the beacon's signal on their radio equipment.

Mark Garrett, a ham operator who is assistant director of technology at Western Illinois University's Tri States Public Radio, was alerted to the downed balloon by a fellow ham who coordinates balloon launches nationwide and went out looking for the payload's weak radio signal on Monday after work. At that time,

December Christmas Meeting on the 18th

- Western Sizzlin Steak House
- 1708 W. Crawford
- Installation of Officers for 2007
- Joe Addison Trophy Award

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Garrett was searching in a wide 10-mile radius.

Garrett consulted other hams interested in balloon tracking and with new information from his readings on Monday, went out looking in a narrower area on Tuesday afternoon. The payload's battery was nearing the end of its life on Tuesday, so it was critical to look for it while it still was sending out a signal on ham radio.

"The balloon was found due east of LaHarpe, 2.5 miles north of Blandinsville, in an open farm field bordered by 2100th Road North and 200th Road East," Garrett said. "The package was about a quarter-mile in the field and I was assisted by Larry Bailey (of rural Tennessee) who saw me stopped on the road and taking readings with a home-brew beam antenna. He volunteered to take me into the field with a four-wheel drive vehicle and we quickly zeroed in on the package. "The package was in excellent condition for being out in the field since Saturday. Even the little Intel astronaut attached to it made it through OK without a scratch."

Garrett reported that the beacon's 9-volt lithium battery still was running the radio equipment since its Saturday launch, but had dropped to 5.63 volts.

"I'm glad they found it," Leslie Eikleberry, director of public relations at KWU, said of the ham radio recovery effort when contacted Wednesday. Back at KWU, McDonald estimated that the balloon cruised to an altitude of about 95,000 feet based on the balloon's ascent of about 350 feet per minute for about 4.5 hours. In addition to the ham radio and GPS tracking equipment on board, the balloon also carried a payload of a video camera and temperature logger.

Garrett added that the balloon got caught in a jet stream and traveled to Illinois at more than 110 mph. The balloon and its payload was in flight for more than four hours, plopping down near Blandinsville at about 12:35 p.m. on Saturday.

McDonald said KWU's experiment was multifaceted and was a fun way for students to learn. The group planned to use data from the flight to develop a temperature profile of Earth's atmosphere. Some of the pre-engineering students also used the experiment as their final design project. Additionally, the experiment allowed the group to learn about basic electronics, including GPS, temperature loggers, video cameras and antennas. The experiment also allowed the group to videotape a balloon ascent and descent.

"This project was made possible by borrowing some equipment from the Salina Ham Radio Club and through funds from KWU's Student Government Association, the Department of Physics and the Department of Computer Science," McDonald said.

VE Team Report

No one showed up for testing at either session in November! Better luck in the future!

December test session: Because of the short period between the club board meeting and the December meeting, the VE report will be included in next month's report.

Next ARRL-VEC Test Session Wednesday January 10, 2007 7:00 PM Sheriff's Office Classroom

Next W5YI-VEC Test Session Saturday February 3, 2007 1:00 PM Sheriff's Office Classroom

Treasurer's Report

CKARC December Treasurer's Report

Checking:

November balance: \$212.35
December Expenses: \$136.28
December Income: \$326.25
December 13 Balance: \$402.32

Savings:

November balance: \$3,630.97
December Expenses: \$ 0.00
December Income: \$ 0.00
December 13 Balance: \$3,630.97

Total

November balance: \$3,843.32
December 13 Balance: \$4,033.29

Expenses- ARRL dues paid to the club and club supplies

Income - 2007 club dues for 15 club members and t-shirt purchase.

November Meeting Minutes

CKARC Nov. 24th 2006 meeting minutes

Held in the Saline County Sheriff 's training room

Meeting called to order by Pres. Mark KBØMQX followed by a round of introductions

18 members and guests were present.

Announcements by Mark:

Club meeting (our annual Christmas party) Dec. 18th at Western Sizzlin on West Crawford

\$10.16 each and \$9.62 (Seniors).

A big thanks to all who remembered to make it to this meeting and a Special Thanks to Ron for getting the key so we could get in the room!

Minutes for Oct. meeting approved as printed on web site and QSP.

Repeater working and NØKSC working on the 146.73 machine.

Sid NØOBM now the official web master--QSP Editor.

Mark and his committee membership drive to get started after first of the year.

EC Report: ICS training started at November ARES meeting.

VE report: Now have ARRL and W5YI testing (W5YI Quarterly on Saturdays).

Actives Report: Dec. 2nd Balloon launch, Pete, NØOY and the group he is working with at KWU.

New business:

Approved 7 Life Members in CKARC.

Each Full or Life Member may have a **FREE** e-mail address (@centralksarc.com) Sid, NØOBM will provide details at the Dec. meeting. (*Ed note: Also see Page 7 of this issue of QSP.*)

Treasurer's report

Club dues are now due !

2 items for bid on bid table: Antenna hardware and club shirt.

Meeting adjourned at 7:52 PM

League Asks FCC to Postpone, Modify Part of 75-Meter Band Change

From the ARRL Web Site December 11, 2006

NEWINGTON, CT, Dec 11, 2006 -- In separate petitions today, the ARRL asked the FCC to postpone the change in allocation for 3600 to 3635 kHz while it considers a request to maintain the status quo in the segment. The so-called "omnibus" Report and Order (R&O) in WT Docket 04-140, which included moving the lower edge of the Amateur Extra 75-meter phone band to 3600 kHz, is set to go into effect Friday, December 15. The League wants the Commission to rectify the "unintended consequence" of the expansion by moving the dividing line between the narrowband and wideband segments of 80/75

meters to 3635 kHz. This would keep 3600 to 3635 kHz available to General and higher licensees for RTTY, data and CW and open to Novice and Tech Plus licensees for CW. The requested change also would maintain access to the automatically controlled digital subband, 3620 to 3635 kHz. In a Petition for Reconsideration, the League emphasized that it was not seeking reconsideration of the entire 75-meter phone band expansion.

"Rather, we ask only that the Commission restore the privileges unintentionally withdrawn from those who operate and who utilize automatically controlled narrowband digital stations between 3620 and 3635 kHz," the League said. The ARRL pointed out that while the R&O left unchanged rules permitting automatically controlled narrowband digital in that segment, it eliminated RTTY and data as permitted emissions above 3600 kHz. The ARRL also filed a Petition for Partial Stay of Effective Date of Rule pending final action on its reconsideration petition.

To justify its far greater-than-requested expansion, the League asserted, the FCC relied on the flawed logic of a handful of commenters who specifically asked for a 3600 to 4000 kHz phone band. Some commenters had made the case during the proceeding that the "CW subband" is vastly underutilized while space for SSB is at a premium.

"It affects considerably more than just those two operating modes," the ARRL said of the expansion. "Narrowband RTTY and data modes are increasingly used at 80 meters as well, and substantial numbers of RTTY and data users stand to be displaced, as well as precluded entirely, by the extent of the telephony subband expansion there."

The League contends the FCC contradicted itself by saying the rule revisions wouldn't result in any licensee losing spectrum privileges. "But operating privileges have been lost by the extent of the expansion at 80 meters," the reconsideration petition states. The expansion also significantly burdens and adversely impacts CW nets above 3600 kHz -- including emergency and public service nets -- most, if not all, of which will have to cease operating or change frequency, the League added.

Most important, however, is the loss of spectrum for automatically controlled digital modes. The ARRL petition cites the comments of several League members decrying the loss of spectrum for PACTOR, CW and RTTY. "The Winlink 2000 system was cited as a best practice by several post-Hurricane Katrina reviews, including the Congressional 'Failure of Initiative' report," remarked ARRL South Texas Section Emergency Coordinator Jerry Reimer, KK5CA.

The ARRL says shifting the band edge slightly upward would provide a "simple and equitable fix" to the obvious error in the R&O.

"This is neither a minor matter nor an academic exercise in future band planning," the ARRL concluded. "It is an urgent problem which, unless corrected, affects a substantial number of existing Amateur Radio fixed facilities and an even more substantial number of mobile facilities."

Kansas Side Band Net Time Change

Due to poor band conditions at the normal time we are temporarily moving the SSB net to 5:45 PM beginning Saturday night **Nov. 25** until further notice. We realize that this will require us to adjust our schedules but we hope it's not too inconvenient.

KBØDTI Kansas SM

From the WA7BNM Contest Calendar

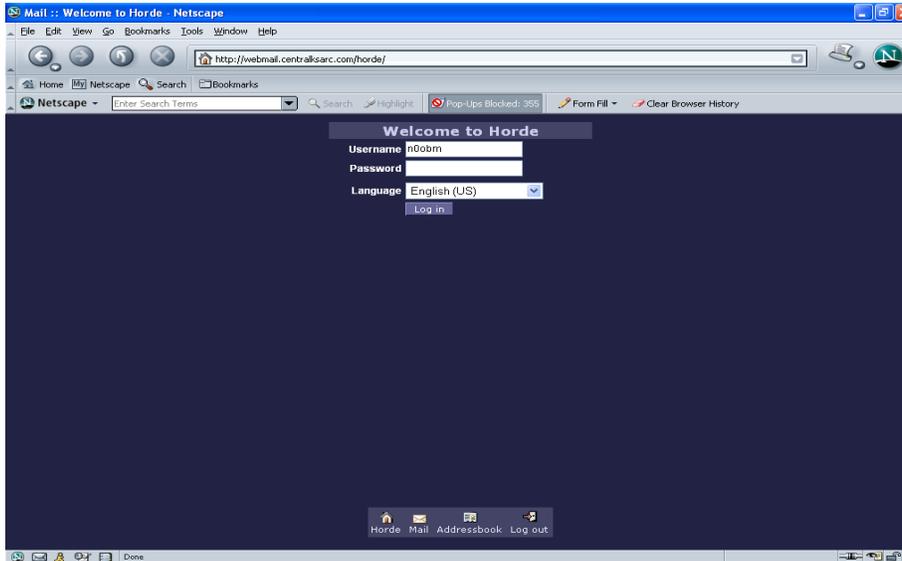
January, 2007

SARTG New Year RTTY Contest	0800Z-1100Z, Jan 1
AGCW Happy New Year Contest	0900Z-1200Z, Jan 1
AGCW VHF/UHF Contest	1600Z-1900Z, Jan 1 (144) and 1900Z-2100Z, Jan 1 (432)
ARS Spartan Sprint	0200Z-0400Z, Jan 2
Original QRP Contest	1500Z, Jan 6 to 1500Z, Jan 7
ARRL RTTY Roundup	1800Z, Jan 6 to 2400Z, Jan 7
EUCW 160m Contest	2000Z-2300Z, Jan 6 and 0400Z-0700Z, Jan 7
Kid's Day Contest	1800Z-2400Z, Jan 7
Hunting Lions in the Air Contest	0000Z, Jan 13 to 2400Z, Jan 14
070 Club PSKFest	0000Z-2400Z, Jan 13
MI QRP January CW Contest	1200Z, Jan 13 to 2359Z, Jan 14
SPAR Winter Field Day	1200 local, Jan 13 to 1200 local, Jan 14
Midwinter Contest, CW	1400Z-2000Z, Jan 13
North American QSO Party, CW	1800Z, Jan 13 to 0600Z, Jan 14
NRAU-Baltic Contest, CW	0530Z-0730Z, Jan 14
Midwinter Contest, Phone	0800Z-1400Z, Jan 14
NRAU-Baltic Contest, SSB	0800Z-1000Z, Jan 14
DARC 10-Meter Contest	0900Z-1059Z, Jan 14
NAQCC Straight Key/Bug Sprint	0130Z-0330Z, Jan 18
LZ Open Contest	0400Z-1200Z, Jan 20
UK DX Contest, RTTY	1200Z, Jan 20 to 1200Z, Jan 21
Hungarian DX Contest	1200Z, Jan 20 to 1200Z, Jan 21
North American QSO Party, SSB	1800Z, Jan 20 to 0600Z, Jan 21
ARRL January VHF Sweepstakes	1900Z, Jan 20 to 0400Z, Jan 22
Run for the Bacon QRP Contest	0100Z-0300Z, Jan 22
CQ 160-Meter Contest, CW	0000Z, Jan 27 to 2359Z, Jan 28
REF Contest, CW	0600Z, Jan 27 to 1800Z, Jan 28
SARL Youth for Amateur Radio	0700Z-1100Z, Jan 27
BARTG RTTY Sprint	1200Z, Jan 27 to 1200Z, Jan 28
UBA DX Contest, SSB	1300Z, Jan 27 to 1300Z, Jan 28

Centralksarc.com email options:

Option #1:

A “Full **POP3 Email account** that you log into at <http://webmail.centralksarc.com> and see the following screen: (shortened to conserve page space)



This will require a Log-in name and a Password, and you can reach this from any computer with Internet access.

As an example, my main POP3 email account is sashen@swbell.net, where n0obm@arrl.net is a mail re-director that is auto-forwarded to my main POP3 account. (see Option #2 below)

Option #2:

E-Mail re-direction to your existing POP3 account – mail to N0OBM@centralksarc.com is automatically re-directed to sashen@swbell.net. Yours would be auto-forwarded to your existing POP3 account. Will show up with your “regular email” in Outlook, Outlook Express, Eudora, or whatever you normally use to view and reply to email now.

Option #3:

In addition to #1 or #2 above, a “**Group**” email can be sent to everyone that is included in a group. As an example: CKARC@centralksarc.com could go to all the members who have signed up for Option #1 or #2, but would NOT go to any members that are not signed up for a @centralksarc.com address.

You can have “anything”@centralksarc.com, but what is being recommended is your callsign followed by @centralksarc.com.

Recommended is Options #2 and #3.

Groups that can be created include (but are not limited to): **CKARC** (all members on the list), **BOARD** (all CKARC Board members), **ARES** (all CKARC members that are also ARES members), **WEBMASTER** (goes to the web master only).

IF most of the membership elects to do this, the **QSP** and other announcements could be distributed via this means, in addition to being posted on the web site.

**CENTRAL KANSAS
AMATEUR RADIO CLUB**

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Salina, Ks. 67402-2493**

Contact Information:
Sid Ashen-Brenner
Email: NOOBM@centralksarc.org



<http://www.centralksarc.com>

«Callsign»
«First Name» «Last Name»
«Club Name»
«Address Line 1»
«Address Line 2»
«City», «State» «ZIP Code»

**Submission Deadline for the January
QSP is January 16, 2007**

**ARRL Outgoing QSL Service revises rates
(Dec 4, 2006 [REVISED Dec 6, 2006 10:05 ET]) --**

The ARRL Outgoing QSL Service has announced a new rate structure, effective January 1, 2007. The new basic rate will be \$5 per half-pound (8 ounces -- or approximately 75 cards) or any portion of a half-pound. That's a change from the current rate of \$4 per half-pound or any portion. The new rates are in response to a major postal rate increase and price restructuring in early 2006, after which our postage costs nearly doubled. One pound will now cost \$10, and larger packages will be assessed \$5 for each additional half-pound (or portion thereof). For example, a package containing 1.5 pounds of cards will cost \$15, while a package containing 1.75 pounds of cards will cost \$20. For smaller packages, the new fee is only \$1.50 for 10 or fewer cards, \$2.50 for 11 to 20 cards and \$3.75 for 21 to 30 cards. The new rate structure will help to cover increased postage and basic handling costs for smaller packages while continuing to offer a price break to moderate-volume users submitting less than one-half pound of cards. The ARRL Outgoing QSL Service is available only to ARRL members. The last rate revision went into effect in March 2001