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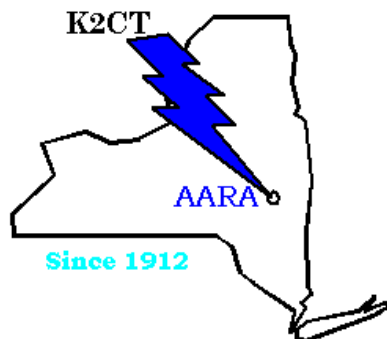
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Affiliated with the American Radio Relay
League
An ARRL Special Services Club
102nd Year

AARA

AARA Meets at the
**Osterhout Community
Center is off RT 85 at
7 Old (New Salem) Rd,
Voorheesville**

Friday March 14th

Social Hour 6:55 PM

refreshments
soda, diet soda, coffee etc.

MARCH MEETING

John, K2QY, will do an Update on
NBEMS and fldigi

John asks if you would like to get set up to use
fldigi and NBEMS, to bring your laptop. After the
presentation he can do a short workshop getting
the software to work.

Skywarn Training in April.

NOTE: March meeting will be held in the
Osterhout Community Center off RT 85 on
7 Old Rd, Voorheesville. [map page 4](#)

K2CT Repeater

Talk-in repeater 145.19 (-) MHz
pl tone 103.5Hz

AARA Dues

Dues cheerfully accepted,
Dues are \$15.

B-PLUS Newsletter sent via the K2CT
Web page in .pdf format
www.k2ct.net

Checks should be made out to AARA
and sent to:

Saul Abrams, K2XA
307 Maple Rd.
Slingerlands, NY 12159

***** **AARA CONTESTERS ON THE AIR** *****

2014 ARRL DX CONTEST -- CW RESULTS

STATION	CATEGORY	QSOs	COUNTRIES	CLAIMED SCORE
W2GDJ	SO (H) A	1080	355	1,150,200
N1CC	SO (L)	1120	281	944,160
WC2L	SO (H) A	566	266	451,668
WK2H	SO (H) A	511	237	363,321
K2EP	SO (H) A	407	246	300,336
K2ONP	SO (H) A	471	181	255,753
N1JP	SO (H) A	476	178	254,184
K2BX	SO (H) A	333	199	198,801
K2XF	SO (H) A	284	154	130,746
WF2B	SO (H) A	207	125	77,625
WA3AFS	SO (H) A	77	77	17,787

73, and thanks for all the scores!
 Walt, WA1KKM and Sue, N2LBR
sue.walt@dososaur.com

KickSat CubeSat to Deploy Smallest Earth-Orbiting Satellites

ARRL.org 03/07/2014

When the third SpaceX ISS resupply mission launches on March 16 from Cape Canaveral, it will carry the 3U KickSat CubeSat into orbit. [NASA TV](#) is scheduled to broadcast the launch live. If all goes according to plan, KickSat, in turn, will release 200 "Sprite" satellites — each about the size of a small cracker — into orbit. They will become the smallest Earth-orbiting satellites ever. Zac Manchester, KD2BHC — a Cornell University PhD student in aerospace engineering — is heading up the project, which was funded via [Kickstarter](#).

"Our goal is to dramatically lower the cost of spaceflight, making it easy enough and affordable enough for anyone to explore space," the KickSat [project website](#) proclaims. "We can do this by shrinking the size and mass of the spacecraft, allowing many to be launched together."

The tiny Sprite spacecraft will be single-function, short-lifespan units operating on 437 MHz. Each is essentially a double-sided printed circuit board measuring 3.5 cm x 3.5 cm, incorporating a microcontroller or two, radio, and solar cells. Each can carry single-chip sensors, such as thermometers, magnetometers, gyroscopes, and accelerometers.



All Sprites operate on the same frequency — 437.240 MHz — and use Code Division Multiple Access (CDMA). Transmitters run 10 mW output of minimum shift keying (MSK) modulated binary data, with each data bit modulated as a 511 bit pseudo-random number (PRN) sequence (The ITU emission designator is 5K0G1D).

Andy Thomas, G0SFJ, points out that the Sprites will only operate when in sunlight.

"Characteristically they have a 60 kHz bandwidth, and so narrowband receivers are not of any use to receive them," he [explained](#) in a tutorial that describes plans for a simple Earth station.

"Therefore, the receiver of choice is a software defined receiver."

When KickSat reaches orbit, it will perform a "de-tumble" maneuver and establish communication with Cornell University's ground station. After everything has been checked out, the spacecraft will be put in a sun-pointing attitude and spun up to maintain that attitude. Then a command signal from the ground will trigger deployment, and the Sprites will be released as free-flying spacecraft. The Cornell ground station in Ithaca, New York, will monitor telemetry and sensor measurements from the individual Sprites, with assistance from several other Amateur Radio ground stations around the world.

Due to their low orbit, the Sprites will have short lifetimes, perhaps as long as six weeks in a best-case scenario but possibly a lot shorter, depending on atmospheric conditions.

KickSat is being planned as a technology demonstration mission for the Sprite spacecraft. It's being launched through NASA's Educational Launch of Nanosatellite ([ELaNa](#)) program. The KickSat project was founded in 2011 by members of the [Space Systems Design Studio](#) at Cornell University and is an outgrowth small spacecraft research that has been conducted there since 2007.

The British Interplanetary Society offers a [KickSat Technical Summary](#) on its website.

Attention all Elmers!

"I am in the process of forming an Elmer Support Group. This will entail offering loaned supplies such as video tapes, books and other supplies to Elmers to help you teach and make your "job" easier. I would like to start an Eastern New York Elmer reflector so you can communicate ideas, thoughts and arrange to join in teaching activities. This might also be integral with Amateur Radio licensing classes. Please contact me with your thoughts on this and how you might want to participate. 'Elmering' is certainly one of the most important rolls a person could undertake. It is the future of the hobby."

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Your League: ARRL Board Requests Member Comments about Digital Modes

At the January 2014 ARRL Board of Directors meeting, a resolution (see below) was passed which asked for member feedback and input pertaining to the increasing popularity of data modes. The information gathered by this investigation is to be used by the HF Band Planning Committee of the Board as a means to suggest ways to use our spectrum efficiently, so that these data modes may "compatibly coexist with each other."



As per the resolution, the ARRL Board of Directors is now reaching out to the membership and requesting cogent input and thoughtful feedback on matters specific to digital mode operation on the HF bands. The feedback may include, but is not limited to, the recent proposal the ARRL made to the FCC, [RM-11708](#), regarding the elimination of the symbol rate restrictions currently

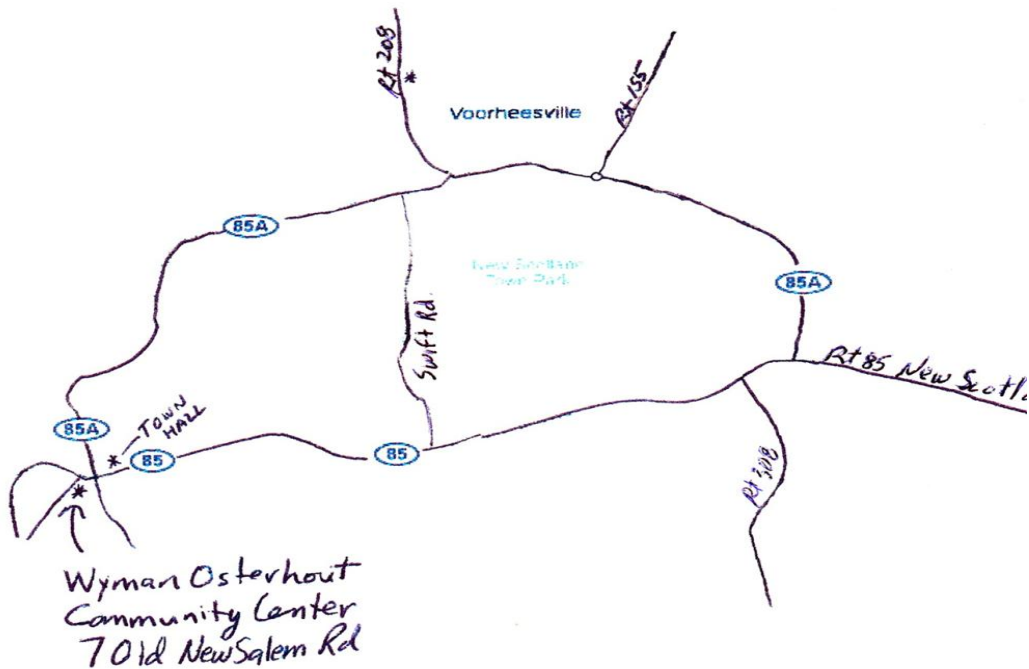
in effect.

The Board of Directors believes that member input in the decision-making process is both valuable and important as well as fostering a more transparent organization. It is to this end that we open this dialogue.

Comments must be received no later than March 31, 2014, to be included in the Committee's report to the Board at the July 2014 ARRL Board of Directors meeting. Please e-mail your comments to HF-Digital-Bandplanning@arrl.org Concerned members may also contact their [Division Director](#) by mail, telephone or in person with any relevant information.

WHEREAS the Board of Directors has received member input regarding the coexistence of various modes in the HF Data/RTTY subbands; and WHEREAS it is important that all member voices be heard; and WHEREAS in the opinion of the Board these issues are best addressed by education and prudent use of spectrum; BE IT RESOLVED that the ARRL Board of Directors instructs the HF Band Planning Committee to reach out to membership regarding concerns pertaining to the increasing popularity of data modes, and furthermore investigate and suggest

ways to use spectrum so that these data modes may compatibly coexist with each other; and FURTHER to report their findings no later than the July 2014 ARRL Board meeting.



ATVET Albany Troy Volunteer Examiner Team

If you are interested in amateur radio, and would like to take the exam, the Albany/Troy VE Team (ATVET) stands ready to assist. ATVET is a joint effort of the Albany Amateur Radio Association (AARA), and the Troy Amateur Radio Association (TARA). ATVET will again be holding their exam sessions in the C.I.I. Building (Low Center for Industrial Innovations), Room 3045, on the Campus of RPI, Troy, NY

Exam Date	Day	Doors Open	Exam Time (Doors will Close)
March 22nd 2014	Sat.	9:20 AM	10 AM
April 26th 2014	Sat.	9:20 AM	10 AM
May 24th 2014	Sat.	9:20 AM	10 AM

HELP OUT and GET INVOLVED

Contact: **ATVET LIAISON:** *Gerald Murray, WA2IWW* atvet@n2ty.org or 518-482-8700

Are You Changing Your Address: Please contact Walt, WA1KKM 456-3637 or via e-mail sue.walt@dososaur.com with your address corrections

edited by Mike Bergman, WD2AJS, 45 Swartson Ct., Albany, NY 12209 489-3110. **Articles** and B-PLUS **Swap Shop items** accepted and solicited via mail, phone, or e-mail to wd2ajs@nycap.rr.com

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