



KARS KEY KLICKS



JOURNAL OF THE KANKAKEE AREA RADIO SOCIETY

Volume 91 Issue 6

Editors: K9NR, K9QT, N9IO
Photos: K9NR, K9QT, W9IE, KD9AUK
Contributors: W9KVR, W9IE, KD9AUK

June 2016

Fox Hunting and Field Day in June

The next KARS meeting will be June 7th, 7PM at the public meeting room in St. Mary's Hospital. Use the South Main Entrance

After the general meeting, there will be planning for Field Day and a program on Transmitter Hunting.

If you are an experienced hunter bring along something to show...your hunting antenna, attenuator or describe hints and tips that have worked well for you. If you are new, this is a great chance to learn techniques.

TRANSMITTER HUNTS

The next foxhunt will be Saturday, June 4th at **11:00AM**. Usual rules and start location apply. N9DWE to be the fox. Another foxhunt will be held on June 18th.

KARS MEMBERS RECEIVE THEIR MAESTRO'S

W9IE and N9IO received their long awaited Maestro control heads for their Flex SDR Radios (as did a number of other Illinois Contester/DXer hams). While it certainly adds knobs to the popular SDR radio, it's Ethernet connectability adds a new world of operating possibilities. (check out pg 2 for news on the WB9Z station)



The "Maestro" control head from Flex Radio



Large turnout at KARS May meeting featuring antenna construction

KARS KALENDAR

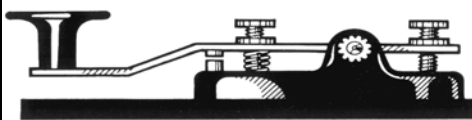
June 4.....	Transmitter Hunt
June 5.....	Starved Rock RC Hamfest
June 7.....	KARS General Meeting
June 11-13.....	ARRL June VHF QSO Party
June 18.....	Transmitter Hunt
June 19.....	6 Meter Club Hamfest
June 21.....	KARS Board Meeting
June 25-26.....	FIELD DAY
July 5.....	KARS General Meeting
July 9-10.....	IARU HF World Championship
July 10.....	Fox River RL Hamfest
July 16-17.....	CQ Worldwide VHF
July 16-17.....	NAQP RTTY
July 17.....	KARSFEST
July 19.....	KARS Board Meeting

The Kankakee Area Radio Society operates repeaters on:

146.34/.94 107.2 PL Access
449.8/444.8 100.0 PL Access
145.130 107.2 PL Access

Additionally, KARS sponsors:

144.39 2 Wide Area APRS digi-peaters
145.53 KARS DX Cluster



W9AZ

KARS FIELD DAY

Attention all KARS members:

Field Day setup will start at 10AM Saturday. KARS operations will commence at 1PM local and run around the clock till 1PM Sunday. We will be operating portable with emergency power. All members are invited to participate.

Camp all night if you like or come and go as you please.

Dues paying KARS members who participate in the setup, teardown, or operation are entitled to participate in the Saturday dinner cookout! The cookout will feature free burgers and brats (or whatever you prefer to bring) with Will K9FO manning the charcoal grill. Remember to bring chairs, (a small folding table is a good idea) table service, mosquito spray and beverage as well as a side dish or dessert to share with your fellow hams. See you at Field Day.

Come to the meeting for directions or check out the ARRL Field Day operations map on the League web page.

A big thank you to Kevin N9REG and his family for again hosting KARS Field Day at their lovely location. Please don't drive on the grass.

ARRL Field Day is the largest operating event in ham radio, so don't miss out!

NCS FOR JUNE

The net meets every Monday at 8 PM local time on the 146.34/.94 repeater. All stations with or without traffic are invited to check in.

June 6	N9RJM
June 13	N9OE
June 20	N9FD
June 27	K9NR

Don't forget the net!

JOIN THE FUN AT ARRL FIELD DAY!

KARS HOMEPAGE— **WWW.W9AZ.COM** —KARS HOMEPAGE

KARS EXPEDITION TO THE DAYTON HAMVENTION 2016



Representatives from the Qatar
Amateur Radio Organization



ARRL Card Checking and
Logbook of the World



Representatives from the Japanese
Amateur Radio League



Just one of many standing room only forums
on every radio subject you could want

TROY W9KVR RECEIVES EDUCATORS AWARD

Troy W9KVR, Science Teacher at Glen Raymond School in Watseka was recognized with a prestigious award in Science Education. Troy has been directly responsible for several students obtaining their ham tickets!

"As the Central Section chair of the National Association of Geoscience Teachers (NAGT) Outstanding Earth Science Teacher Award (OEST), I am pleased to inform you that Troy Simpson has won the NAGT's Central Section Outstanding Earth Science Teacher 2016 award!

The award is for "exceptional contributions to the stimulation of interest in the Earth Sciences at the pre-college level." The Central Section includes eight states (IN, IL, IA, WI, MN, OH, KY, MI), and the committee received many strong nominations. However, Troy was unanimously selected as the Central Section winner; we were particularly impressed with his pioneering of classroom technology, his ability to incorporate outdoor fieldwork and the relevance of earth sciences into his classroom, and his passion for science education.

What a wonderful honor for Troy, for Glenn Raymond School, the district and the state!
-Susan Wolf"



Yep! That's Greg WR9L pointing out
the Dayton ARRL EXPO Booths



Jerry WB9Z & Val NV9L get (one-on-one) tutoring from local KARS Flex guru Ken W9IE

The WB9Z/NV9L station inventory now includes a Flex 6700 / Maestro combo. Over the years, the radio gear at Jerry's world class DX/Contest station south of Crescent City has been state-of-the-art fine, competitive equipment.

The Flex equipment will be Jerry's first foray into the world of Software Defined Radios. It's a sure bet the new radio will get a good shakedown by Jerry and Val in the Contests and DXing to come!

KARS BOARD MEETING

The meeting will be held on June 21st in the private dining room at El Mexicano's Restaurant by the Hilton Hotel and Walmart south of town near the I-57 exit. Eat at 6 P.M. Meeting at 7 P.M. All members and spouses are welcome.

TUNING THE BANDS

As we leave the Spring Equinox behind and move towards the summer Solstice, DXing on the HF bands often drops off a bit.

However, summertime 6 meter propagation is cranking up with openings from the Midwest to the deep south, the far western states, the east coast and even to Central and South America.

Single hop E Skip and occasional double hop is common now. Keep an eye (ear) on the Magic Band. Also, check out 2 meter SSB/CW for tropo propagation. Lots of fun to be had!

HAPPY BIRTHDAY

June 2	W9EJM
June 5	KD9CGC
June 5	KD9CBG
June 10	N9OQC
June 17	KD9FVO
June 20	KC9LBZ
June 26	KF9DM
June 26	W9IOU
June 30	K9BAK

*If we miss your birthday or
get it wrong, please let us know!*

BALLOON LAUNCH and RECOVERY MAY 31st



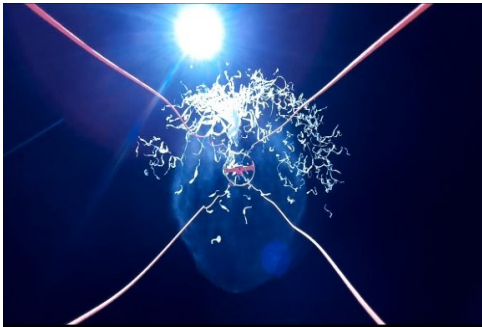
High altitude balloon launch at Koerner's Airport



The payload packages rise one after the other



An actual shot of "Astronaut Bob" at the edge of space in HD



Capturing the moment the balloon explodes at about 100,000 feet!



Row of trackers at the recovery site in Indiana



Billie K9QT holds all that remains of the huge balloon

See Page 4 for the flight path and statistics

FOXHUNT May 7th



N9FD & K9KSG at the finish



The K9NR & K9QT team



The N9RJM & K9KSG team



First place went to the N9DWE team

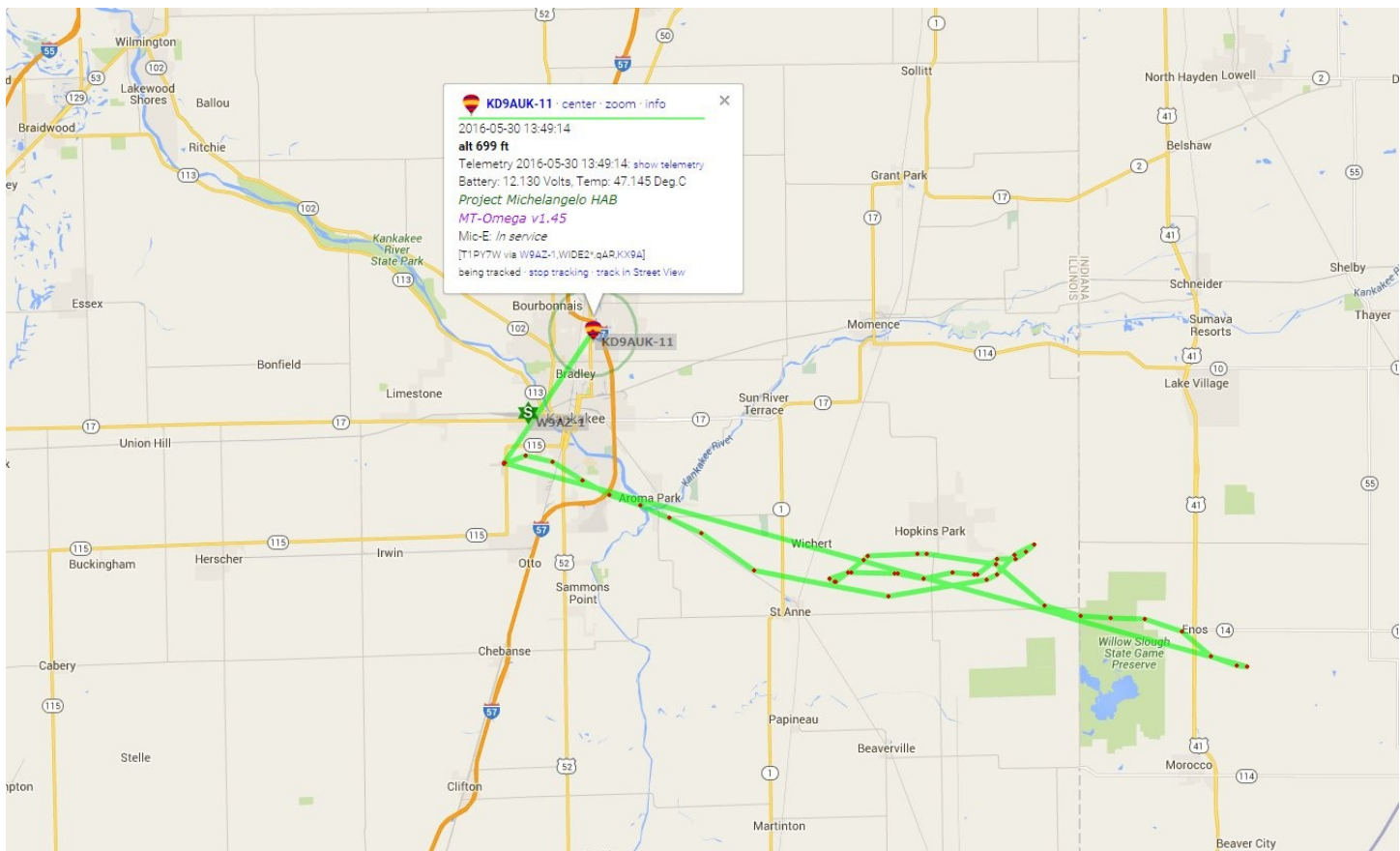
RESULTS OF THE MAY 7TH FOXHUNT

Another great transmitter hunt with Andrew N9BMB and Diane N9DLD as the crafty foxes. The team of John N9DWE and Mark KA9MDJ grabbed first place honors finding our hidden prey at the Aroma Park Field House with the lowest mileage.

Don't miss the June 4th hunt!



The foxes! N9BMB & N9DLD



Balloon flight path from launch at Koerner's Airport to landing east of Willow Slough in Indiana

KEY STATISTICS FOR BALLOON MISSION #10 ON MONDAY, MAY 30TH, 2016

Payload Configuration:

Balloon Used Kaymont 3000-Gram Balloon
 Payload Weight 14.35 Pounds / 6,430 Grams
 Neck Lift Used 8794 Grams / 1.367 x Payload weight
 Predicted Burst Altitude 109,390 Feet / 33,342 meters
 Actual Burst Altitude Unknown, but above 98,832 feet
 Target Ascent Rate 5 Meters Per Sec. (984-Feet Per Min.)
 Actual Ascent Rate 6.7 Meters Per Sec. (1,320-Feet Per Min.)
 Target Time To Burst 111 Minutes
 Actual Time To Burst Unknown — Approximately 74 Minutes 28 Seconds
 Volume of Helium Used 405.7 Cubic Feet
 Projected Flight Time 2 Hours 21 Minutes
 Actual Flight Time 2 Hours 6 Minutes 53 Seconds
 Parachute: 96" Spherachute (Fluorescent Orange and White Panels)
 Mounted On Parachute Spreader Ring: Mobius Wide Angle Generation 3 Dashboard Video
 Camera Pointed Down at Payload Containers

- Container #1:
 - One (1) Hexports Zlog Rev 2 Flight Computer
 - One (1) Trackimo GSM GPS Tracker
 - One (1) SPOT GEN3 GPS Tracker
 - One (1) Byonics Micro-Trak AIO APRS Tracker
 - One (1) Byonics MT-1000 APRS Tracker
 - One (1) Mobius Wide Angle Generation 2 Video

Camera Pointed Up At The Balloon

— One (1) GoPro HERO 3+ Silver Edition Camera Pointed at Horizon

- Radar Reflector:
 - Davis Echomaster Emergency Radar Reflector

• Container #2:

— Astronaut Bob Set-Up
 — Two (2) GoPro HERO 3+ Silver Edition Cameras Pointed at Bob

Weather Conditions:

- Temperature at Launch 77 Degrees Fahrenheit
- Winds On The Ground 5-6 MPH
- Wind Direction West Northwest

Maximum Altitude Achieved — 98,832 feet.

This was about 9,000 feet lower than the Burst Calculator program predicted.

Launch Time: 10:03:27 AM CST. **Landing Time:** 12:10:20 PM CST.

Time from Launch to Burst Altitude — (11:11:55) 68 Minutes 28 Seconds.

We had projected a time of 111 minutes.

Time From Launch to Landing: 2 Hour, 6 Minutes, 23 Seconds.

Average Ascent Rate:

Starting Point — 625 Feet to 98,832 Burst Altitude = 98,207 Ascent Traveled in 74 Minutes and 28 Seconds (74:28) = 1,318 Feet Per Minute / 21.96 Feet Per Second / 402 Meters Per Minute / 6.7 Meters Per Second.

Average Descent Rate:

Max Altitude 98,832 Feet to Ground 679 Feet = 98,153 Feet Descent Traveled / 52 Minutes 25 Seconds / (52:25) = 1,869 Feet Per Minute / 31.15 Feet Per Second / 570 Meters Per Minute / 9.5 Meters Per Second.

Descent Rate For Last 10,000 Feet — 10,679 Feet to 679 Ground = 10,000

Feet Descended / 26 Minutes and 38 Seconds (26:38) / 376 Feet Per Minute / 6.26 Feet Per Second / 115 Meters Per Minute / 1.91 Meters Per Second.

Outside Temperature on the Ground — 77 Degrees At Launch Time.

Lowest Temperature Inside The Payload Container — 83 Degrees

Fahrenheit Between 26,764 and 6,906 Feet During Descent.

Lowest Temperature Encountered Outside The Payload Container —

Unknown. Forgot to Route the Temperature Sensor Outside The Payload Container. Oooops!

Highest Temperature Inside The Payload Container — 105 Degrees

Between 14,323 Feet and 24,799 Feet During Ascent.

Maximum Speed Reached During Flight — 89 MPH at 42,345 Feet.

Straight-Line Distance Traveled From Launch Site — 2