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B-Plus

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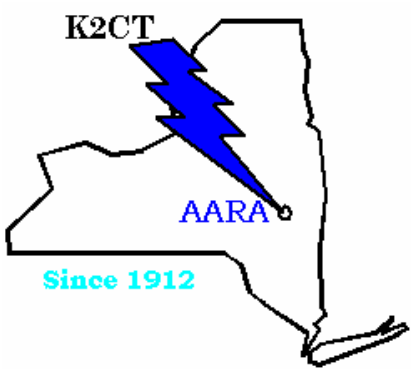

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Affiliated with the American Radio Relay League

An ARRL Special Services Club

AARA

Meets at the
Colonie Community Center
1653 Central Ave. Colonie

Friday DEC. 8

Social Hour 6:55 PM
Meeting begins 7:47 PM

Holiday Refreshments
soda, diet soda, coffee and more

DEC Meeting

ELECTIONS of Officers

Holiday Party
Food and drink will be on the house.
Any food donations for the meeting will be appreciated

AARA ANNUAL 10meter SPRINT
Thurs. DEC. 7, 2006 7 - 8PM
see page 2

K2CT Repeater
Talk-in repeater
145.19 (-) MHz
pl tone 103.5Hz
or
444.30 (+) w/pl tone 100.0Hz

AARA Dues

Dues are $15 with B-PLUS available at the K2CT Web page in .pdf format **www.k2ct.net**
OR $20 for first class mailing of the newsletter Checks should be made out to AARA and sent to: Saul Abrams, K2XA, 307 Maple Rd., Slingerlands, NY 12159

ELECTION OF OFFICERS

The Nominating Committee of

Ernie, K2EP
John, N1JP
Guy, WK2H

Have designated the following:

President George Wilner, K2ONP
Vice-President
Fred Fitte, WA2MMX
Secretary Bill Nettleton, K2BX
Treasurer Saul Abrams, K2XA

Nomination from the floor will be accepted at Election Meeting

Public Service: Volunteer CONTACT
Frank, N4ZHG 473-9256

AARA *WE Need YOU to Volunteer* **AARA**

www.k2ct.net

WE are looking for pictures of your Ham Shack

Send pictures to Peter, N2KAD

Please try the site and let me know what you think. If you have any feedback please let me know.

73, Peter Hines, N2KAD, webmaster
hines@nycap.rr.com with any suggestions.

2006 *AARA 10 METER SPRINT ANNOUNCEMENT*

It's once again that time of year for the premier operating event of the contest season!
This year's AARA 10M Sprint will be the evening of **Thursday, December 7 between 7pm and 8pm local time.** (For diehard contesters, that's December 8 between 0000 UTC and 0100 UTC.)
Frequencies for the Sprint are 28.4-28.5 MHz.
Give a signal report (always 59 for diehards) and your first name (or nickname).
Use the same name for every contact!
Be on the lookout for the AARA club call, K2CT, because a complete QSO with that station is worth 10 points. All other complete contacts are worth one point each.

Your log should record the time of each complete contact (in UTC), the call sign of the station worked, and the exchange sent to and received from that station (signal report and name).

Also record the points for each complete contact and the total claimed score.

Be sure to put your own call sign on the log you submit!

Send a copy of your complete log to us via e-mail (plain text only) at:

sue.walt@verizon.net

Or, bring a copy of your log on paper to the December meeting.

See you on 10 Meters!

73,
Walt, WA1KKM and Sue, N2LBR

3 Element SteppIR Product Review Bruce, WA3AFS

After much research I settled on the 3 element SteppIR beam with the passive 6M extra (4th) element. (I had actually wanted the model with the 40M dipole, but it was not available at the time of ordering, and I was not willing to wait the several months that were estimated. The SteppIR antenna is unique in that there are no traps, yet coverage goes from 13.800Mhz to 54.000Mhz. Each element length is computer controlled through a step motor that moves a copper beryllium tape along the hollow fiberglass element tubes to the proper length. Since the elements are computer controlled, it is possible to:

- Adjust the element lengths for the lowest SWR every 50 KHZ.
- Switch the directivity 180 degrees at the press of a button.
- Switch to a bi-directional mode which is very handy when having a multi-station QSO
- Create your own 'custom' antennas (would be especially handy if you were listening to general coverage frequencies or a MARS participant.)

I placed the order very early in August and SteppIR estimated that the antenna would arrive in about 6 weeks. SteppIR does not charge your credit card until they ship.

Much to my pleasant surprise, the antenna was shipped early and I received it the end of August.

As soon as I completed the installation of the 9 foot Glen Martin aluminum roof tower, I started constructing the SteppIR beam. I hired my grandson, Zachary, to supervise and assist with quality control.

The above picture shows one of the step motors mounted on top of the boom.

Construction was reasonably straight forward with a couple of instructions that were slightly confusing as engineering changes must have been made, but not reflected in the instructions. Actually, I found that the instruction manuals online (after construction was completed!) were much better since the pictures were in color and much sharper.

- The boom was drilled at SteppIR while completely assembled which made for very quick and easy assembly.
- Mounting the 2 of the 3 step motor boxes was very quick; the third had one mounting hole that took a mild amount of 'convincing' to line up.
- Once the 3 step motors were installed, I used a permanent marker to label the elements (Driven, Director, and Reflector). I also added a notation for 'True North' on the underside of the boom to help the antenna find its way when installed. ('True North was determined using a combination of owls, moss on trees, portable sundials, topographic maps, guess of where the Polar star was hiding behind all my trees, electronic compass, and magnetic compass).
- Construction took less than 10 hours, much of which involved the weather proofing of the fiberglass tube sections (which are shipped telescoped).
- 1 large hose clamp was missing, but easily found at the nearby hardware store.

Only one testing instruction was really unclear and misleading.

- The test mode provides a method to verify that the 12 control wires are connected properly and that the step motors work properly. Since the control cable (you order the length you need) comes with the computer connector (D25) already installed on one end, I had the control box installed in the shack and the antenna in the back yard with the control cable snaked from the shack down through the basement and outside. I followed the instructions and tested each motor but when I ran back to the back yard it appeared that nothing was working. A quick ('panicked') call to SteppIR was promptly transferred to someone who explained that the test mode required a second person (a video camera would work in a pinch!) to view the antenna while someone else was at the control box. (The elements only popped out for a couple of seconds each in the test mode!).

The antenna weighs in at a feather weight of about 42 pounds (almost all of the weight is the boom since the element tubes are fiberglass) and was easily installed by the team of K2BX, K2EP, W2UV, and K2XF. Took approximately 1.5 hours which involved lowering the rotator shelf so that the antenna would be mounted immediately above the tower and then the rotator shelf remounted.

View of the tower and antenna looking SW towards the Helderberg Escarpment. It appears that my signals will have to drill through the escarpment. The land starts up towards the escarpment across the street from my QTH.

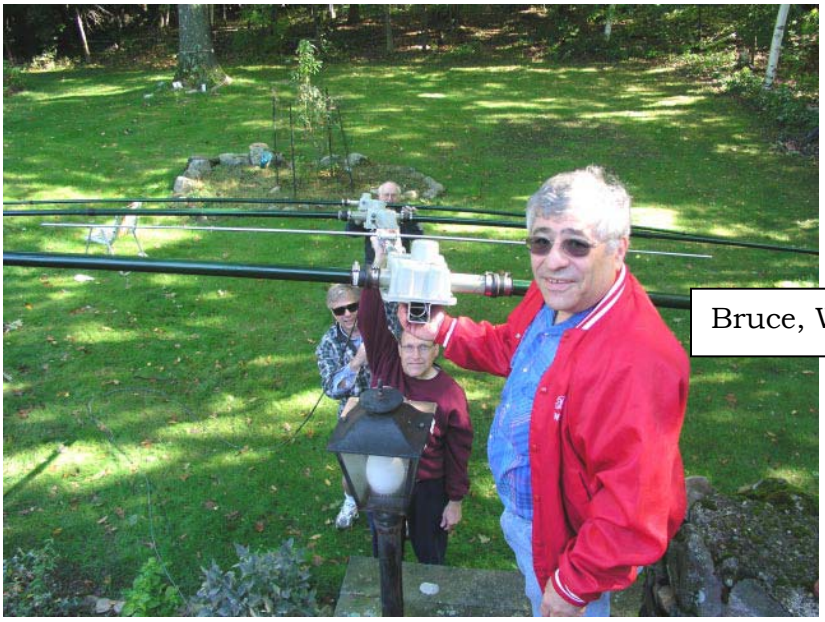
I deliberately did not mount the last PL-259 on the antenna coax where it would go through the remote antenna switch so make sure that any RFI complaints would not be justified. I managed to wait (really difficult!) 5 days before mounting the connector (I did not receive any comments or complaints in those 5 days). No RFI complaints have been received from outside the house to this date (15M at 600 watts does set off the wireless doorbells in the house!). Telephones in the house are now a problem, which I will have to work on. My other 13 HF antennas (verticals) are in the woods well behind the house and away from the power, telephone, and cable lines and have not caused any RFI problems.

Of course the big question is does this antenna work? Comparison to my former beam (Force-12 C4) is difficult since that antenna was used 1100 miles to the west of my present QTH and I have not had any beam antenna for a little over a year. Being a 3 element beam antenna I was expecting good performance, but not quite as good as the Force-12 (had more elements) which I found was a very good antenna. The Force-12 was mounted at about the same height and manner above the roof as this SteppIR. I have been surprised. My signal reports have been very good and what I consider to be a true measure is what I call "first call". Several times I have broke DX pile-ups (some the first day of a DX operation) with only 1 call! The Force-12 seldom broke the DX pile-ups in the first couple of days of any DX operation). I am extremely pleased and recommend the SteppIR antennas.

It takes about 40 seconds to extend the elements from the 'retracted' position to the lower end of 20M. Reversing the direction of the antenna 180 degrees (electronically) takes only a couple of seconds. Moving the elements 50 KHZ (up or down) takes about a second. The antenna controller comes with pre-sets for each ham band. At this point, I have not felt the need to set up my own pre-sets. Going to the band and depressing the 'up' or 'down' buttons a couple of times is sufficient for me.

Another advantage of this antenna is the elements are enclosed in fiberglass tubes, I no longer experience rain static, which was always noted with exposed metal elements in my previous beams (Wilson SY-36, Force-12C4)! (which was very noticeable in the Midwest since many of the rain/snow storms seemed to be 'charged' (and some also had funny shaped clouds!). Also the fiberglass tubes are supposed to be relatively inexpensive (about $20.00) to replace (If one retracts the elements when not being used which is highly recommended). My fingers are well crossed waiting for the first ice storm of the season. The antenna does not show any noticeable movement in the wind (40 mph has been the strongest breeze since the antenna was installed).

I also compared the SteppIR to my 4-square ground mounted verticals on 20M and the BigSteppIR vertical. The 3 element beam easily outperforms those antennas with signal strengths several DB stronger.



Bruce, WA3AFS

Ed, W2UV and

Ernie, K2EP

Seymour. K2XF

3 Element SteppIR

SWAP SHOP Send items to B-Plus editor, Mike, WD2AJS at **wd2ajs@arrl.net** or call 489-3110

FOR SALE:

1. Yaesu 180600 FT-101 E Needs repair $50.00
2. Kenwood TS8305 180 Watts Needs repair to switch.
3. Yaesu2100 B Works fine 1200 Watts 500.00
4. Kenwood TS-820 Remote VFO & Speaker $300.00
5. Wood Vibrplex box. $10.00
6. 3 Band Quad New $100.00
7. Other free gear-cleaning house.

Call Lee Califano W2FYA
436-1296

ATVET ALBANY TROY VOLUNTEER EXAM TEAM

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

2006 CQWW DX CONTEST -- PHONE RESULTS

STATION	CATEGORY	QSOs	COUNTRIES	ZONES	Claimed Score
K2XF	SO(H)A	703	277	81	707,766
W2GDJ	SO(H)A	628	- 378	-	639,954
K2BX	SO(H)A	661	- 330	-	612,150
N1JP	SO(H)A	562	254	76	516,450
N1EU	SO(H)A	467	409		515,340
N2LBR (+WA1KKM)	M/S	547	244	76	470,400
K2ONP	SO(H)A	410	- 312	-	350,688
K2XA	SO(H)A	232	- 244	-	144,692
WK2H	SO(H)A	256	139	43	130,000
NA2NA	SO(L)A	240	-	-	120,208
KM2O	SO(L)	208	- 168	-	91,056
WB2KLD	SO(H)A	202	- 170	-	89,590
WF2B	SO(H)	116	70	30	29,300

Send your CQWW CW score,
your ARRL SS scores (both modes),
and MOST IMPORTANTLY, your entire AARA 10M Sprint log (all in plain text) to:
sue.walt@verizon.net
You can also bring a copy of your
AARA 10M Sprint paper log to the December meeting.

73,
Walt, WA1KKM and Sue, N2LBR

3 Element SteppIR
Photo by Bill, K2BX

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@arrl.net