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# B-Plus

DAVE GALLETTY, KM2O  
PRESIDENT  
767-9103  
km2o@arrl.net

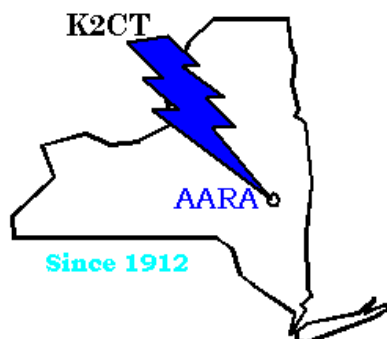
RANDY WOESSNER, KC1NN  
VICE-PRESIDENT  
374-0597  
kc1nn@arrl.net

SAUL ABRAMS, K2XA  
TREASURER  
439-5700  
k2xa@arrl.net

WALT LEGOWSKI, WA1KKM  
SECRETARY  
456-3637  
sue.walt@dososaur.com

BUD HOVEY, WF2B  
283-2337  
DIRECTOR

JACK NORRAY, KC2ZDC  
872-1957  
DIRECTOR  
jack.norray@us.army.mil



SUE ROTHSCILD, N2LBR  
456-3637  
DIRECTOR  
sue.walt@dososaur.com

MIKE BERGMAN, WD2AJS  
489-3110  
B-PLUS EDITOR  
wd2ajs@nycap.rr.com

GEORGE WILNER, K2ONP  
279-4025  
TRUSTEE of K2CT  
k2onp@arrl.net  
JOHN FRITZE, K2QY  
PAST PRESIDENT  
439-4240  
k2qy@arrl.net

[www.k2ct.net](http://www.k2ct.net)

Affiliated with the American Radio Relay  
League  
An ARRL Special Services Club  
**102<sup>nd</sup> Year**

## AARA

AARA Meets at the  
**Bethlehem Town Hall**  
**445 Delaware Ave**  
**Delmar, NY 12054**

**Friday Oct 10th**

Social Hour 6:55 PM

refreshments  
soda, diet soda, coffee etc.

## OCT MEETING



Pumpkin Patrol

We are coming into  
Contest Season.

Bruce, WA3AFS will speak about  
coaxial inverted L's

November will be a SkyWarn refresher

### 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.com](http://www.k2ct.com)

Checks should be made out to AARA  
and sent to:

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

## Announcing the **Capital Region Amateur Radio Events Calendar**.

A collaborative Google Calendar with other Capital Region ham groups to showcase ham radio public service events, meetings, hamfests, VE sessions and things ham radio. Import events directly into your personal calendar. Visit directly at: <http://k2ct.org/events.html>

## ARRL Again Asks FCC to Elevate Amateur Service to Primary on 2300-2305 MHz

The ARRL Letter 10/2/14

In [comments](#) filed in response to an AT&T Mobility *Petition for Rule Making* seeking a new air-to-ground communications system on 2.3 GHz Wireless Communications Service (WCS) spectrum, the ARRL has once again asked the FCC to elevate the Amateur Service allocation at 2300 to 2305 MHz from secondary to primary. The *Petition* ([RM-11731](#)) asked the Commission to authorize an LTE-based in-flight connectivity service in the WCS "C" and "D" blocks (2305-2315 MHz and 2350-2360 MHz, respectively) for airlines and airline passengers. AT&T has asserted that restrictions on out-of-band emission and power limits to protect adjacent-band users make the use of the C and D blocks problematic. The wireless provider asked the FCC for rule changes to permit deployment of its service "using currently fallow spectrum" while also "preserving adequate interference protection to users of adjacent bands."

"Notwithstanding this broad and nebulous claim, there is no showing anywhere in the four corners of the *Petition* that the proposed rule changes would permit *any* continued Amateur Radio operations on a secondary basis in the shared A block (2305-2310 MHz)," the ARRL commented on September 22. More to the point, the League said, there is no showing in the *Petition* that Amateur Radio operations in the adjacent 2300-2350 MHz band would be protected from increased out-of-band emissions, if the FCC were to implement the changes requested.

The League asserted in its comments that the FCC has, to date, "failed to protect Amateur Radio operations at 2300-2305 MHz from WCS out-of-band emissions." The ARRL said the band is "regularly and substantially utilized by radio

amateurs" for weak-signal, long-distance communication and, only by circumstances -- a lack of a primary occupant -- has it been able to enjoy that segment as a *de facto* primary user.

"The Commission's rules are quite clear that WCS licensees enjoy no entitlement to disrupt adjacent-band radio service operations," the ARRL commented. But, the League pointed out, previous FCC actions to expand mobile broadband devices left 2300-2305 MHz vulnerable to increased out-of-band interference that would be difficult or impossible to mitigate. The ARRL said amateur stations operating in the 2300-2305 MHz band would be unable to avoid interference from AT&T Mobility's proposed system, and that the FCC has refused to clarify the obligation of WCS mobile providers to avoid interference to Amateur Radio operations there.

The ARRL objected to what it called the FCC's "practice of making allocation decisions which place incompatible uses in close proximity to amateur stations and then place on the amateur licensees the burden of avoiding the interference." Read [more](#).

## Ham Radio Saves the Day in the Yukon

The ARRL Letter 10/2/14

According to a Radio Amateurs of Canada (RAC) [report](#), Amateur Radio bridged the gap recently for members of a search-and-rescue team attempting to locate a missing teenager in Canada's Yukon Territory. SAR team member Terry Hauff, VY1MAP, was unable to contact the team's headquarters in Whitehorse during the September 21 activation. He was out of cell phone range, and the satellite phone the team had was not working. VY1MAP was, however, able to reach a 2 meter repeater from his mobile station.

Hauff reached out to Ray Fugard, VY1RF, and Ron McFadyen, VY1RM, on the 146.88 MHz repeater in Whitehorse, and they were able to relay a report on the search status from the SAR command center some 35 km north of Whitehorse at Lake Laberge. The missing teen was eventually located unharmed. According to the RAC report, this marked the second time in as many months that Amateur Radio and Yukon Amateur Radio Association members and repeater infrastructure had proved invaluable in an emergency.



Vincent Charron, VE3XU, RAC's Director of Communications, commented, "Whether it's a natural disaster, major weather event, planned community event, or a missing person search, we at RAC receive numerous reports of Amateur Radio interventions when traditional communication systems fail. Ham radio is most certainly still relevant and provides a crucial communications back-up option, often in challenging/dire situations." -- *Thanks to Radio Amateurs of Canada via Mark Bowers, VY1MAB*

[WWW.K2CT.ORG](http://WWW.K2CT.ORG)



6m beam FD 2014  
by Dave, KC2RPU

## Product Review – MFJ-1760 Dual-Band Beam

Bruce, WA3AFS and Adam, KD2ERU

The MFJ-1760 is a 3 element beam on 2M and 5 elements on 440.

I chose this beam based on:

- Both myself and Adam, KD2ERU needed a better means to access the 147.120 repeater which seems to have some selective hearing problems from both our QTHs.
- Price (was less than other similar beams like a Hy-Gain model that looked very similar but was \$10 higher)
- Availability
- Free shipping (The only vendor at the Saratoga hamfest did not bring any beam antennas to the hamfest.)



On opening the box, I found the following on the inside of the carton and the parts pack!



### The driven element:

The first steps in the instruction manual are to build the 2M driven element. If one builds the antenna according to the manual, the elements (both sides of a dipole) do not sit properly in the insulating bracket. The only way the elements seat properly is to leave out the nuts and lock washer that is called to go under the elements in the bracket. After several attempts, these parts were skipped.

Next, the coax pigtail is to be connected to the driven elements. One of the pigtail leads contained a connector with hole that was insufficient to fit over the screw. We had to ream out the hole in the connector a couple of times to get the proper clearance.





## Element Assembly

The assembly instructions indicate that the elements are to be ‘installed in the location shown in Figure 1’ as shown below

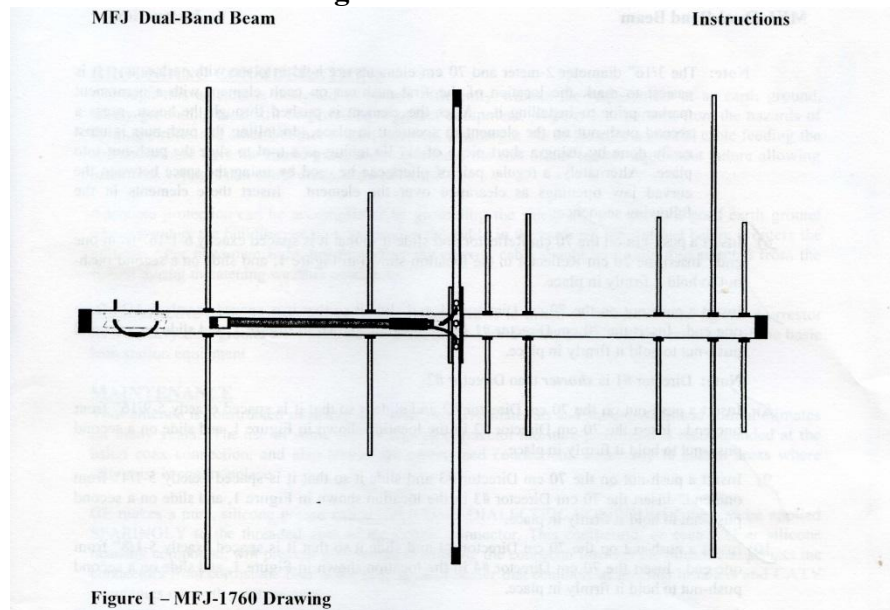


Figure 1 – MFJ-1760 Drawing



The only clue for the element locations are the dimensions listed in the parts list and (hopefully) one's knowledge of beam electrical design. The elements are mounted on the boom by the use of 3/16<sup>th</sup> inch ‘push nuts’.

I had never run across these critters before and neither of us is looking forward to using these ever again. A ‘tool’ is provided to assist the installation of each push nut but the hole in the tool was a little too large and it was easy to bend the push nut so that it would slip through the hole and the push nut had to be straightened out using needle-nose pliers.

The push nuts did not provide a ‘tight’ joint between the elements and the boom.



The antenna rattled very nicely after completion even with our efforts to push the nuts as close to the boom as possible. Even with the use of the tool, installing the push nuts was a struggle especially starting the nuts on the elements.. Several fingers received minor injuries!

Three tie-wraps were provided (presumably to wrap the coax pigtail to the boom); but not mentioned in the installation instructions, other than the parts list. We supplemented the tie-wraps with electrical tape.

Once the antennas were built we could see that the boom element holes were not quite perpendicular to the boom.



On the air...

The antennas work fine and appear to meet our need.

Note: The documentation problems were reported to MFJ and their response was that they comments were sent to the publication department.

My experience with MFJ has been that most items end up going back to the factory at least once... At least that did not occur with our antennas!

Would we recommend this antenna.....well maybe.

Bruce, WA3AFS and Adam, KD2ERU



John, N1JP and the 40m beam FD 2014  
by Dave, KC2RPU

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## **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)
October 25th 2014	Sat.	9:20 AM	10 AM
November 22nd 2014	Sat.	9:20 AM	10 AM

If you can **HELP OUT** on future dates Please Contact:

**ATVET LIAISON:** *Gerald Murray*, WA2IWW [atvet@n2ty.org](mailto: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](mailto: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](mailto:wd2ajs@nycap.rr.com)

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