



# Arc Over

Fox River Radio League  
PO Box 673  
Batavia, IL  
60150-0673

October, 2004

---

## President's Traffic *by Bill Schaben, W9AX*

---

Everyone has the right of free speech up to a point. Yelling "Fire!" in a theater is a no, no. But short of that, I can say what I want, you can say what you want and Gary can say what he wants. Heck, we can even say things that are not true and it's OK (up to a point). We can say them, but the listener does not have to believe them.

The reason I'm bringing this up is that there is a force out there that is intending to cause unrest in the FRRL. Check out the clandestine website [www.frrl.net](http://www.frrl.net). This site is owned by someone that is not a club member, but certainly has opinions about the leadership of the club, their "hidden agendas", "power struggles" and the "civil war going on" within the club.

Visit the site yourself. You make the decision if Gary has anything creditable to say. If you think he does, I would like to hear about it. If you don't think he does, don't try to correct him. He's looking for that. Also, the election of officers will be in December. The rules of which are published in our by-laws. And if you think a change is needed, stand up and volunteer to run for one of the offices or at least let us know your wishes.

We are involved in ham radio for a number of reasons. But the underlying fact is that we like it. When someone begins to try and take that fun away from us, we should take the path of least aggravation and ignore the source. Any rebuttal made towards his comments only will give him a feeling of accomplishment and spur him on further. Gary, I don't like what you are saying, but I will defend your right to say it. By the way, Gary's call is KE9ZM. Mine is W9AX .

On a different note, the Sirius Satellite radio the club recently donated to the American Red Cross is already hard at work in hurricane-ravaged Florida. The radio was installed in the local chapter's emergency response vehicle a few weeks before the truck was called to assist with recovery operations.

At present (October 5), the truck is still on location in Florida, providing communication links for the Red Cross and hurricane victims.

Also, we've heard from Maurice. He survived the hurricanes with very minor damage. He hopes to have some antennas up shortly so he can get back on the air, so give a listen for W4CEO.

---

## FRRL Elections in December

*by Dick Illman, AH6EZ*

As provided for in our by-laws, a three member Nomination Committee was formed by the President at the September Board Meeting. Dick Illman AH6EZ, Kermit Carlson W9XA, and Denny Barfuss W9HI are all looking for volunteers to be nominated for President, Vice-President, and two Directors, as well as more competition for the Secretary and Treasurer slots.

Feel free to contact any of us if you are interested in giving back to the FRRL with a little of your time. We will present a slate at the November meeting, where nominations from the membership will also be accepted. Write-ins are allowed on the ballots.

If you will be unable to attend the December meeting you can take advantage of the absentee voting process that is provided for in the bylaws. Complete details will be published in the December ArcOver that will be delivered prior to the December meeting.

### HF Challenge for September

The QSO Party stations are definitely alive and well. Although not good for DX or Ragchew, it makes getting that state pretty easy. Even if you don't need the state get in there and participate. First, you help add to some other ham's QSO count for the QSO Party. Second, it keeps our bands in use and helps protect them. Third, it keeps you active on the air. It is also a pretty easy contact to make. Those new to HF have it easy since the exchange is usually just your state and contact number in that QSO Party. If it were your first contact in the party it would be Illinois 01 (your first contact, 02 for the second etc). What could be easier? If it is the Illinois QSO party, then the exchange is your name, county and contact number.

One noted contact this month was made by Keith, N9YA, who with his marginal 20-meter station got into a net to make an Australia contact on his small vertical (which is between 2 fairly close buildings on top of it all!) Nice going Keith.

Hams helping hams is a good way to let this column stray for a second. On October 2<sup>nd</sup>, Denny, W9HI, and Mike, K9FE, Spent a few hours helping out Gene, WA9SIJ, and a long time club member

with his HF antenna. It was a long wire, but the support post guys had broken after years of corrosion (rust). His antenna works again and tunes to a flat SWR. Now Gene still has one problem, static caused by what we think is a power transformer in his backyard. With S9 static on 20 and almost 20 over on 40 it will be difficult to work HF. This will now require a letter to the electric company AND a letter to Riley Hollingsworth at the FCC if the utility ignores Gene's request for repair and suppression of the noise

Are you a Ham that has antenna/radio problems? Has your family or your doctor restricted your roof or tower work for safety or health reasons? Feel free to give me a call or any of the elmers in the club. If you don't know the elmers, then call me and I will put you in touch with the correct person. We have quite a few willing to help you out with your problem.

See Page 5 for the standings.

73 de K9FE Mike Urso

---

### JAMBOREE ON THE AIR (JOTA) IS OCTOBER 16-17

*From the ARRL Letter, October 2, 2004*

The 47th Jamboree On The Air (JOTA) takes place October 16-17. Details on JOTA also appear in September QST, page 104. JOTA is an annual event in which Boy and Girl Scouts and Guides from all over the world speak to each other via Amateur Radio to share experiences and ideas. Since 1958, when the first Jamboree On The Air was held, millions of Scouts have become acquainted through this event.

Amateur Radio clubs and individual licensees make it possible for Scouts to get on the air, and your club is invited to be a part of JOTA 2004. If your club is planning a JOTA activity, register it on the ARRL Youth Skeds Database page <<http://www.arrl.org/FandES/ead/youthskeds/>>. There, youngsters and parents can search for scheduled on-the-air activities in which to participate. You also can contact your local Boy Scouts of America Council <<http://www.scouting.org/nav/enter.jsp?s=xx&c=lc>> and let it know that you're planning a JOTA activity.

With assistance from ARRL HQ staff members, Education and Technology Program Coordinator Mark Spencer, WA8SME, will operate Maxim Memorial Station W1AW on Saturday, October 16, for JOTA. "This year the focus will be on achieving the radio merit badge," he noted. Spencer has set up a program that should allow Scouts participating at W1AW to walk away from the JOTA experience with the merit badge, "with some preparation and a little homework on the Scout's part," he added.

## Share the Excitement!

by Dick Illman, AH6EZ

Here is what I have heard of recently. If you had fun with ham radio, share it. If you have not been having fun with ham radio, why not?

### IT WAS SLIM PICKINGS THIS MONTH

N9CHA has been having a lot of fun with his revised and enhanced satellite setup in his driveway. He is working towards a Winterized version in his attic.

KC9DMS is working on alternate plans for a big tall HF antenna in his back yard, once he upgrades his license and get a Kenwood TS2000.

AH6EZ heard the ISS operating as an FM repeater for the first time. It is supposed to operate that way until Oct 20. 437.8 +/-10KHz doppler uplink and 145.8 downlink. Dick has solved the attic rotator vibration problem so late night satellite passes so not keep Becky awake.

Let me know of fun you are having with ham radio by email ([AH6EZ@aol.com](mailto:AH6EZ@aol.com)), on the Fox Repeaters, or telephone 630-584-4388. I will share it in the next Arcover. If I do not receive any input for this column, I may discontinue it.

---

## October Program Notes

by Dick Illman, AH6EZ

I understand that there was some discussion about BPL at the last meeting. I learned a lot about BPL it's proponents at the UPLC meeting in Washington DC. I learned more at the neighborhood demonstration in Maryland. This battle is far from over. I have a large slide show with audio recordings. Although BPL is not in Illinois yet, I want us all to be conversant and knowledgeable when the FCC rules come out in October.

As I mentioned earlier in the Arcover, I am still planning a two part program about antennas. I would like to be able to do these programs in consecutive months but considering that December is our Christmas party, it might need to wait until early next year. I even won a book about antenna myths at the W9DXCC conference. It must be my good karma.

## Jota on the Air

(Continued from page 2)

The ARRL New Hampshire Section, the New Hampshire Amateur Radio Service Club (WB1BSA) and the Lawrence L. Lee Scouting Museum <<http://www.scoutingmuseum.org/>> have announced that the Max I. Silber Memorial Station will be on the air during JOTA 2004 using special event call sign N1S--primarily using SSB and SSTV on 20 and 40 meters.

Scouts and scouters worldwide also can participate in JOTA via Internet Radio Linking Project (IRLP) Reflector 9205. There's more information on the IRLP Web site <<http://www.irlp.net>>.

If you hear any participating JOTA stations on the air, be sure to make a contact--and don't forget to QSL. There's more information about JOTA on the Web <<http://www.scouting.org/international/jota.html>> and <<http://www.arrl.org/FandE/ead/jota.html>>.

## FOR SALE

Pick up items at my home unless otherwise noted.

1. Hy-Gain **18-AVT/WB-A** HF Vertical Antenna Covers 80, 40, 20, 15, and 10 Mtr bands. NEW - Used only once for Field Day. In original box with instructions. Asking \$200

2. Video Interface Products **VIP Hybrid-8 Video Processor**. Analog Switcher, Enhancer, Stabilizer, Editor, and SEG. NEW - less than one hour use. In original box with instructions. Asking \$75 \*

## FREE

1. Approx. 40 ft. of USED 75 ohm hard line.
2. Approx. 25 ft. of USED 1.5" Heliac with PL-259 fittings.
3. Large surface-mount four 48" 40 watt fluorescent tube light fixture.
4. White enameled power vent kitchen stove hood.
5. Styrofoam insulated container and matching corrugated cardboard shipping box. Used once. Dimensions: 13"H x 15"D x 19"W \*

\* Will bring this item to October FRRL meeting if you contact me ahead of time.

- Dick Isely, W9GIG  
St. Charles, IL  
[dick@pobox.com](mailto:dick@pobox.com)  
630-584-3510

## MEMBER INTERVIEW: KB9YSI

As our club grows it becomes harder to get to get to know individual members. It seems there is never enough time at meetings or events to sit down and figure out exactly what makes our fellow hams tick. In order to try and make things easier, we put together a series of interviews with members of our club. Bill Muhr, KB9YSI, the Club Newsletter Editor, volunteered to be the "victim" this month.

*Q. When were you first licensed, and when did you join the Club?*

**A.** I was first licensed in 2001 as KB9YSI, and I joined the FRRL right after I got my license.

*Q. When did you get interested in ham radio and what interested you about it?*

**A.** The father of my best friend in high school was a ham and I spent a lot of time in his basement watching him operate CW and helping him to build gear. My buddy got his novice license, but I had trouble with the code and never took my test. I finally got around to it when I semi-retired in 2001. I think I liked the neat glow of the tubes and the fact you could talk to someone on the other side of the world from your basement.

*Q. What class of license do you hold now and what classes have you held?*

**A.** I started out as a Tech Plus, and am now a General. I'm studying for the Extra Class test.

*Q. What are your favorite bands and modes?*

**A.** I loved 10 meters when I started out due to the great DX. Now that the higher bands are fading I'm working a lot on 20 and 40. I enjoy CW, mostly because that was the way I was introduced to the hobby, and it seems to be the most challenging and rewarding mode for me.

*Q. What equipment are you using in your station?*

**A.** My station consists of an Icom IC-746 and a 706MK2G running into a G5RV or a GAP Challenger vertical. I also have a Yaesu FT-817 and I'm having a great time working QRP with it. I also have the usual collection of HT's and mobile rigs for VHF/UHF.

*Q. What do you do for a living or if retired what did you do?*

**A.** After starting out as a music teacher, I ended up in the Army and then in banking. I was an internal auditor for a California bank for almost 30 years. In the late 1970s I got involved with computers and the online world and by the 90's I was managing internet communities for GE and Microsoft. I've also written product reviews and road tests for a motorcycle magazine. Right now I'm semi-retired, doing some web design work, teaching web design, and consulting.

*Q. What do you enjoy most about ham radio, what do you like to do ( DX, rag chew, contest, etc. )?*

**A.** I'm still fairly new at the hobby, so I tend to bounce around and try all kinds of different things. I enjoyed working DX at the beginning, and that got me into CW, and then QRP. I've also tried a bunch of digital modes, working the LEO satellites, and contesting. Thanks to my auditing background I've always been a "generalist", and I enjoy learning a little about a lot of different things. Or maybe I'm just suffering with ADD and have a really short attention span.

*Q. What was your most memorable experience as a ham?*

**A.** Well, the first contact was a real thrill, as are all my first contacts on a new mode or a new satellite. But my most memorable QSO was a CW contact with W8OHM on 40 meters. I remember my high school buddy working him back in 1959. It stuck in my mind because his call seemed really appropriate for ham radio. Finding him on the air over 40 years later was really neat. It was the same guy; he is in his 80s now. According to his QSL card he'd made over 65,000 contacts by the time we chatted.

*Q. What direction would you like ham radio go or do?*

**A.** We need to grow the hobby by attracting more and younger people. We also need to educate the general public about us and the values we provide through public service work, technological experimentation and international good will. I guess the easy way to say it is that I'd like to see amateur radio "live long, and prosper."

---

If YOU would like to be an interview subject, please contact KB9YSI to arrange for a meeting.

Erickson HF Challenge Standings as of 9/15/04

Ragchew Class	States/Provinces	DX Countries	Total
K9COE	43	21	64
AH6EZ	29	18	56
K9FE	23		23
W9DTR	19		19
K9IH	12		12
NA9A	6/0	6	12

Operator Class	States/ Provinces	DX Countries	Total
K9JE	48/10	109	167
N9YA	50/12	98	160
W9DTR	50/11	76	137
K9COE	50/10	68	128
NT3J	44/8	68	120
KB9YSI	38/8	63	109
J68AR	33/8	62	103
W4CEO	37/4	47	88
W9XA	38/4	37	79
K9IH	39/6	23	68
KA9OBH	0/1	36	37
W9DNJ	11/1	3	15

Limited Class	States/ Provinces	DX Countries	Total
K9MMS	49/7	93	149
M/AH6EZ	3/0	28	31
MM/AH6EZ		11	11
KB9YYX	7	0	7

ORO Class	States/Provinces	DX Countries	Total
NA9A	39/6	222	267
AH6EZ	50/13	181	244
WB90	38/4	101	143
K9FE	21/4	22	47
WOHED	36/2	2	40

## Ham Census for Illinois

by Dick Illman, AH6EZ

After some research the other day, it has been determined that there are about 24 thousand hams in Illinois, 11 thousand hams within the coverage area of our repeater, about 2500 hams in the traditional membership area of the FRRL, and our present membership is 138.

When you hear of a new or non-member on the air or on our repeaters, invite them to join the FRRL and/or the Fox Repeaters.

## Construction News—KC9FPD

by Greg Braun, N9CHA

Wayne, IL - In an all out effort to get a tower installed by the time the snow flies, Joe, KC9FPD is installing a 30 foot Rhone tower at his QTH. However, rather than digging a hole in preparation for a tower base, he has fabricated a custom base plate.

This month Joe found a 2 inch thick, 24" by 24" 150 pound plate of steel which he is using as a temporary tower base. Three machined stubs were turned out of 1" steel round which were then welded to the plate. Joe expects to mount 3 10 foot tower sections to the base then add additional supports to the side of his house during installation.

You can see photos on page 9 of the web edition.

## Solar Flux

by Bill Muhr, KB9YSI

Now that the weather is cooling off, it's time for CONTEST SEASON! Lots of folks think the contest season begins with the California QSO Party the weekend of October 2nd, but that's wrong. The season really begins with the ILLINOIS QSO PARTY on October 17.

Did you know that the FRRL holds the all-time record in the IL QRP Local Club category with over 640,000 points? We set that record in 2000, with a total of 20 entries. We could win it again this year. For more info, check the web address at: <http://my.core.com/~jematz/rams.html>

Other big contests include the CQ Worldwide DX SSB event the weekend of Oct. 30, and the ARRL Sweepstakes contests in November. The CW portion of CQWW is the last weekend in November.

CW fans will find a nice selection of smaller contests in the next couple of months, with a couple of FISTS events, the QRP ARCI Fall QSO Party, and the 10-10 CW/DIGITAL 'test all on tap'.

If you haven't yet given contesting a try, this would be the year to fire up the rig and see what you can do. Even if you are not "in the contest" you can still make some contacts, keep our frequencies busy, and rack up some new DX or states for your award collection.

I hope to work you in a contest this fall.

Bill, KB9YSI

## IMPORTANT DATES IN OCTOBER, NOVEMBER, and BEYOND

The FRRL Board Meeting is Sep. 5, and the regular Club Meeting is the 12th. The next VE testing session will be on November 16, 2004.

Nominations for Director and Officer positions will be made at the November meeting, and the election will be held in December. (Wow, December already?????).

The December meeting will be our holiday party. Remember to bring food donations for Hessed House to the meeting.

Of course, our Annual Banquet and Installation of Officers is planned for January, 2005! The exact date should be announced shortly.

## About the FRRL

The Fox River Radio League, Inc., is a general interest amateur radio club serving the central Fox River Valley area. Records indicate the club has been in existence since at least 1924, and has functioned continuously ever since. We are an ARRL Special Service Club, an Illinois not-for-profit corporation, and a 501©(3) tax exempt organization as specified in IRS Statutes.

We sponsor training classes for new hams,

license examination sessions, an annual hamfest, and participate in various public service events. If you have a specialized amateur radio interest, chances are you can share it with one or more of our club members.

The Fox River Radio League meets on the 2nd Tuesday of every month at the Prisco Community Center in Aurora, Illinois. The meeting begins at 7:30 PM. After conducting business, coffee and

snacks are served while we socialize. Following the break, a program of interest will be presented. All persons interested in amateur radio are invited to attend. Families are welcome. *We hope to see you there!*



## License Exams

The Fox River Radio League, Inc., in conjunction with the ARRL VEC, conducts amateur examinations on the 3rd Tuesday of January, Marcy, May, September and November in the basement of the Prisco Community Center, 150 W. Illinois Street, (South East corner of Lake and Illinois) in Aurora, IL. at 7:30 PM. No advance registration is required, but please be sure to

bring your license (if you have one) and a photocopy of it, original CSCEs and a photocopy (if needed), some form of photo identification, and the fee of \$12.00. (The FRRL receives no portion of this fee.)

The next exam session is scheduled for Tuesday, November 16, 2004, at 7:30 pm at the Prisco Center.

## FRRL Dues

Annual dues are payable no later than the January Club Meeting each year. Persons joining during the year will have their first year's dues prorated to the nearest yearly quarter.

Regular dues are \$20.00 a year, Senior Citizen dues are \$12.00. Family dues are \$30.00. You can also help support the FRRL Repeaters by joining as a combined Club/ Repeater member for \$30.00. Repeater dues are \$20.00.

Check with the Treasurer for details and additional dues rates.

## Nets

Net Name	Freq.	Day	Time
FRRL	147.210	Tuesday	7:30 PM Local
10-10 CW	28.150	Monday	8:00 PM Local
10-10 SSB	28.720	Monday	8:30 PM Local

## Fox River Radio League

Founded 1924

### Mailing Address:

Box 673  
Batavia, Illinois  
60510-0673

### Email:

mail@frri.org

### Web Site:

www.frri.org

### President

Bill Schaben, W9AX  
w9ax@inil.com

### Vice President

Dick Illman, AH6EZ  
ah6ez@aol.com

### Secretary

Zack Dempsey  
KC9CLR@yahoo.com

### Treasurer

Larry Shaw, W9OKI  
DatecAviation@cs.com

### Directors:

Jack Ekstrom, K9JE  
jackk9je@aol.com

Dave Holdeman, N9XU  
d.holdeman@att.net

Bob Roehrig, K9EUI  
broehrig@aurora.edu

### License Trustees:

Kermit Carlson, W9XA  
kermit@arr.com

Bob Dillon  
bdillon@aurora.edu

### Newsletter Editor

Bill Muhr, KB9YSI  
arcover@frri.org

### Webmaster

Mike Urso, K9FE  
webmaster@frri.org

FRRL CLUB MEETINGS ARE HELD AT THE PRISCO COMMUNITY CENTER AT 150 WEST ILLINOIS STREET IN AURORA. PLEASE CHECK THE FRRL WEB SITE FOR A MAP TO THE MEETING LOCATION .

<http://www.frri.org>

Send Address Corrections to:  
 Fox River Radio League, Inc.  
 29-W-458 Candlewood Lane  
 Warrenville, Illinois  
 60555-2639

### FRRL Event Calendar

**October, 2004**

FRRL Board Meeting ..... 5  
**FRRL Meeting ..... 12**

**November, 2004**

FRRL Board Meeting ..... 2  
**FRRL Meeting ..... 9**  
 VE Testing ..... 16

## Handy Web Links

FRRL Web Site	<a href="http://www.frri.org/">http://www.frri.org/</a>
ARRL Main Site	<a href="http://www.arrl.org/">http://www.arrl.org/</a>
ARRL Central Div. Site	<a href="http://www.central.arrl.org/">http://www.central.arrl.org/</a>
ARRL IL Section Site	<a href="http://www.central.arrl.org/illinois.html">http://www.central.arrl.org/illinois.html</a>
ARRL IL Section News	<a href="http://www.arrl.org/sections/?sect=IL">http://www.arrl.org/sections/?sect=IL</a>
ARRL Contest Page	<a href="http://www.arrl.orgcontests/">http://www.arrl.orgcontests/</a>
Contest Calendar	<a href="http://www.hornucopia.com/contestcal/">http://www.hornucopia.com/contestcal/</a>
Callsign Lookup (QRZ)	<a href="http://www.qrz.com/">http://www.qrz.com/</a>
Vanity Callsign Info	<a href="http://www.vanityhq.com/">http://www.vanityhq.com/</a>
IRLP Main Page	<a href="http://www.irlp.net/">http://www.irlp.net/</a>
AMSAT	<a href="http://www.amsat.org/">http://www.amsat.org/</a>
FCC Services	<a href="http://wireless.fcc.gov/services/amateur">http://wireless.fcc.gov/services/amateur</a>
SMC Contest Club	<a href="http://www.w9smc.com/">http://www.w9smc.com/</a>

### ArcOver FRRL Newsletter

*Copyright 2004, FRRL*

The ArcOver is published monthly by the Fox River Radio League, Inc. Articles and letters are always welcome. The normal deadline for material is six days prior to the end of the previous month. Articles can be sent by email to kb9ysi@arrl.net or via U.S. Mail. Contact the Editor for details and submission guidelines.

Prior permission is required to republish original ArcOver material.

The opinions expressed in the ArcOver are strictly those of the authors and do not necessarily represent those of the FRRL, Inc. or its sponsors.

### Local Area Repeaters

**W9CEQ—147.210 Mhz. \***  
 +600 KHz, 103.5 access tone  
 Owned by FRRL

**W9CEQ—444.300 Mhz. IRLP Node # 4850**  
 +5 Mhz, 114.8 access tone  
 Owned by FRRL

**W9ZGP—146.580 Mhz.**  
 +1.08 Mhz (147.660)  
 Owned by NIARC

**KC9OEM—145.470 Mhz.**  
 -600 KHz, 103.5 access tone  
 Owned by Kane County OEM

**W9XA — 224.40 Mhz, +5 Mhz, IRLP Node #4846**  
 — 443.65 Mhz, +5 Mhz  
 — 1292.00 Mhz, -20 Mhz (1272.00)

\* Weekly FRRL Net—Tues. Eve. at 7:30 pm local time.



## KC9FPD Tower Base Photos

*Photos By Greg Braun, N9CHA*



Joe, KC9FPD, shows off his tower base during loading operations. The top photo shows the base with the welded stubs. Below, Joe fits a short tower section to the stubs to check alignment.

## News and Notes

Miscellaneous News From Various Sources

**New IC-756:** The IC-756PROIII upgrades the popular IC-756PROII with fully customizable DSP filters in both receiver and transmitter and more than 100 audio equalization settings, requiring no additional filters or options. The PROIII incorporates a +30 dBm third-order intercept point, low-distortion band-pass filtering and switching, a fundamental-mode 64 MHz roofing filter, and a new preamplifier design. The spectrum display is now visible at all times as a "mini-scope." Complete information about the IC-756PROIII is available at <http://www.icomamerica.com>, including brochures and photos in the "Downloads" area. (*Contest Rate Sheet*)

**Plastidip:** Kanga US supplies Plastidip products, including a spray-on version, in several colors. Liquid Tape comes with a small brush so the product can be painted on to the joint. Both can easily be removed by slicing it with a knife and then peeling it off. Complete info is available at <http://www.kangaus.com>. (*Contest Rate Sheet*)

**Tech Note:** Tom WA9WSJ notes that, "RTV which cures and out-gasses acetic acid is very bad for wiring, metal etc. I use GE RTV 162. It is their electronic grade compound. When you're not sure of the type of compound, check the manufacturers data sheets, not just the sales blurb. That's where they tell you all the real technical data you need to know." Other correspondents mentioned using aquarium sealer, which doesn't use toxic or corrosive chemicals during curing. (*Contest Rate Sheet*)

**Sputnik I Anniversary:** The world changed 47 years ago when the Soviet Union successfully launched Sputnik I on October 4, 1957. The world's first artificial satellite was about the size of a basketball and weighed just over 180 pounds. Sputnik I took about 98 minutes to orbit Earth on its elliptical path, and radio amateurs around the world enthusiastically tuned in to monitor its 20 and 40 MHz beacons. The satellite's 1 W transmitter fed four antennas deployed at 35° angles, and three silver-zinc batteries powered it for three weeks. In addition to ushering in a new era of political, military, technological and scientific development, Sputnik's launch marked the start of space exploration and gave rise to the birth of NASA. (NASA)

**ARRL WAS/90 Award:** There's still time to make your 50 contacts to qualify for the ARRL Worked All States in the 90th Award. No QSLs are necessary. Just fill out the application showing the contacts you've logged. To be valid for the award, all contacts must be made between 0000 UTC on April 3, 2004, and 2359 UTC on December 31, 2004. WAS in the 90th applications will be accepted through 2005. For more information, visit the WAS in the 90th Web page at: <http://www.arrl.org/awards/was-90>.

**ARISS gear in Mode U/V repeater mode** (Oct 8, 2004) -- The Amateur Radio on the International Space Station Mode U/V (Mode B) FM voice repeater now is operational and will remain up at least until Saturday, October 16. The uplink frequency is 437.800 MHz; the downlink is 145.800 MHz. The RS0ISS packet system is off the air while the voice repeater is in operation. Since the ISS equipment is channelized, it cannot correct for Doppler shift, which can be significant at 70 cm. Earth station operators will have to correct for Doppler. For more information on how to make contacts via the ISS voice repeater, see "Success Tips for Using the ISS Voice Repeater," by Emily Clarke, W0EEC, at: <http://www.arrl.org/news/features/2004/10/06/1/> (ARRL Website).