



# The Monitor

April 2002



## Preidents Message

It is hard to believe that on March 31st it could be sunny, warm and enough UV rays in the air to get a sunburn. Well it was, and while I personally enjoyed one of the most pleasant Easter Sundays in quite some time, I did get a dreadful sunburn on my arms and nose. Not quite as painful as some in the past, but quite uncomfortable none the less. Spending the day with another Amateur Operator and his family, a roasting chicken on the BBQ rotisserie and watching the dogs play with the kids in the yard makes me reflect on this months 'psychobabble' (as the other ham called it...) SAFETY.

What if I couldn't enjoy the dogs and the kids in the yard? What if they couldn't benefit from the companionship I could provide or the support I should give as the primary wage earner? Think about yourself and the situation you may be in...all it would take is one slip on a tower, or one distracted QSO while mobile, and it could all be gone. Life is not fair, and it doesn't care who it will take away from us next. Personally I think not of myself, but of the budding young ham in my family. Who would be there to teach him the code, or to provide him with his first rig?

We are all smart enough to know what we SHOULD do versus what we CAN do. The problem is, (with myself especially) is that we get lazy. I know I can climb my tower much more quickly if I don't go thru the trouble of digging out my belt and all the other safety equipment necessary for tower work. It is just 60' to the top... But all one needs is an eight foot fall to be killed. I know this is drastic, and a bit perverse to even think of it, but yet that is what we MUST do, think of it all the time. We must also practice what we preach, because you never know who may be watching and listening. We need to think differently about safety, that way we can easier incorporate it into our routines and help show others. Safe practices extend into our non-ham lives as well, and thinking safety turns into acting safely, which shows others that we care.

How many of you wear safety glasses while soldering? How many have installed VOX circuitry or a remote mic and hand PTT switch in your vehicle? How many of you properly ground your antenna installations? How many have their shack wired to NEMA code? Do you unplug your rig or computer while working on them? I could go on and on here, but I think you get the point. I know that personally I fall short on several accounts, but at least I have consciously made an effort to change. I know I must, or those who might like to follow in my footsteps may never get the chance.

With public service events coming up (Summer is not that far away...) this is the perfect opportunity to show yourself as well as others that we can lead as well as follow by insuring that we not only set a good example, but insure the safety of ourselves as well as others when we participate in these events. Field Day will be our premiere event, and will prove to be a perfect chance for all of us to insure it is a safe as well as fun event for all. We have plenty of hard hats, and even a safety officer to insure that no one knowingly does something in an unsafe manner. Those on the Field Day committee have placed safety first and foremost above everything, and I will even bet they will have some sunscreen on hand.

Safety isn't expensive by any means, it is a concept rather than an item you could purchase. Problem is, it takes a conscious effort to implement it, and unless you are willing, chances are it will have escaped you long ago. It only takes a second or two to put on the safety glasses, or not much at all to put down the mic while driving. Operate safe, think a bit about safety, and show others how to be safe and we will all be better for it in the end.

Micky - K1XH

## WIET 2-meter IRLP Node

The 2-meter IRLP node is now working!!! It is officially the W1ET, Dartmouth College, IRLP node (#493). It is accessed on the Norwich, VT N1CIV repeater: 145.130 MHz (-600 kHz, 88.5 Hz PL). The IRLP is open to all to use. To access IRLP, it works just like the one on KA1UAG's repeater - you dial the node number plus "0" to turn a link on. You dial the node number plus "1" to turn a link off. The web page describing our node is at this URL: <http://engineering.dartmouth.edu/~w1et/irlp.html> The list of all nodes available around world is at this URL: <http://status.irlp.net/>

Enjoy! Now people with 2-meters access only (Don Kollisch, Dave Landry, etc.) can use IRLP too!!!

73's,  
Todd, KB2BCT

## Disclaimer

Opinions expressed in The Monitor are those of the individual authors and do not reflect the opinions or policies of The Twin State Radio Club, Inc.

## TSRC AT THE RIVER BEND EXPO 2002

*or "What's that big antenna outside the building?"*

Once again, TSRC members sogged through the mud and snow (well, there was a little snow next the school..) to demonstrate Amateur Radio to Oxbow High School students in Bradford, VT.

Each year, the River Bend community Expo is held at the High School and Technical Center to make students and parents aware of career opportunities and the public safety and community service organizations active in the area. The event also raises funds to present scholarships to area students. Last year, 13 high school students benefited from this scholarship fund.

On Thursday, Joe KB1FDA arrived at my home and towed the small tower trailer away to pre-position it at the rear of the school. After a couple of trips to World HQ, I had our little GMC SUV loaded with coax, the big club tribander, a club HF rig and the 2M allmode, banners, cables and a three poster-board display explaining Amateur Radio. AND OF COURSE— we had a couple of rolls of black tape in the tool box!!

Friday afternoon came and Joe and I pulled all the pieces of the tribander off my SUV and layed it out on the ground next to the trailer/tower. I don't know who did the color tape "coding" of the antenna elements and the boom, but he or she should receive a special club award! We put the antenna together in short time and proceeded to attach it to the mast on the rotor attached to the tower. Now, this is the critical time in setting up the antenna in that you want the antenna to point west when the rotor control box indicates west! I glance at the antenna and twisted the rotor into position, confident that I had the antenna looking west. Well, in spite of the color code, I failed to note that this tribander was different! We confidentially raised the antenna to 35 ft and stood looking at it. At this point, Dave ZCN had arrived and looked up and said, "Oh, the antenna is pointing east". I said "no, I think it's pointing west". There followed a detailed discussion in which I learned that this antenna wasn't like a standard yagi and the driven element is not where common sense would tell you it should be.

So.... down came the antenna and we set up a step-ladder, loosened the bolts and spun the antenna. Finally back in business (yes, we did connect the coax before we raised the antenna), with the tribander and a small 2M vertical dipole at the top of the mast, we strung the coax and rotor control cable through a window into the operating setup.

## WANTED

WANTED: Novices, Technicians, generally inactive hams of all license classes, and interested persons who are not currently licensed.

The annual Field Day operating event (June 22/23) will introduce a new feature this year- the Get On The Air, or

GOTA, station. This additional station to the club operation is to encourage newcomers and inactive old-timers alike to do just that- get on the air. Unlike previous years, the new GOTA station is not restricted to Novice/Tech Plus frequencies. All amateur bands are permitted, with of course a control operator of appropriate license class overseeing the operation.

Even unlicensed folks can sit down and use the microphone or keyboard to make contacts in voice, digital modes, and perhaps, even Morse code (sent by keyboard)! The GOTA station is permitted to make up to 400 contacts for Field Day credit, and if we achieve that goal, we also receive a 100 point bonus toward the club score. But, WE NEED OPERATORS!

I am not asking anyone to give up their weekend. Each operator is limited to a maximum of one hundred contacts. If you can spare an hour or two, we can use you. If you can stay longer, great! If you really enjoy operating and make the 100 contact limit, we may be able to move you to another operating position so you can continue the good work. Are you "mic shy"? Don't worry. One of our goals for the GOTA station is to explore the digital modes. Communicate via the keyboard and monitor screen, just like the Internet.

Are you interested? Please contact Ken, W1KRT at 603-763-9087 or W1KRT @ arrl.net for more details. See you at Field Day!

## WORKING THE INTERNATIONAL SPACE STATION USING PACKET

Recently, the packet station on the International Space Station (ISS) was upgraded to eliminate a problem with the call sign stored in memory. The new system consists of an Ericsson H/T operating on 2m, a Paccom Picopacket 1200 baud TNC and the antennas are a pair of external co-phased 2M antennas. This new system is performing much better than the original with much stronger downlink signals and it is much easier to make packet contacts through the ISS now with standard 2M equipment.

Typically, you can make contact using a 2M FM rig with 30-50 wts out into an omni antenna. If you have less power, a small yagi is needed. Currently, I'm using a 10 wt 2m rig into a yagi, with an MFJ TNC-2, and receiving ISS downlink signals 20-60db over S-9.

The current ISS crew has left the packet system on automatic and there have been no significant voice contacts other than scheduled school contacts.

As a refresher, the operating frequencies are: Voice and packet downlink worldwide: 145.800 FM, 1200 baud; Voice uplink for Region 2 (thats us): 144.490 FM, 1200 baud; Packet uplink worldwide: 145.990 FM, 1200 baud

Note that the 145.800/145.990 split is an odd one and your radio needs to allow you to set the split in 10 Khz steps to make it work on ISS.

## ARRL FIELD ORGANIZATION

Section Manager  
By Paul Gayet AA1SU

The operation on the ISS packet system has some limitations due to the unique situation with a packet station a couple hundred miles above the earth. Radio communications from any spot on earth is usually no more than 15 minutes on a pass, so they are requesting that you not connect to the ISS digipeater or to the BBS.

You may well ask— well, what's left? Actually communications is done in the "Round Table" mode or the "unproto" mode in most TNCs. Setting up the unproto mode allows you to have the ISS system repeat your transmission without actually connecting. This means anyone in the ISS footprint at that time will see your signal and may respond.

To operate in unproto, you do need to change a few settings on the TNC. These software changes may differ in name depending on the type of TNC you use-

```
AUTOOCR OFF
BEACON OFF
LFADD OFF
MAXFRAME 4
MCON ON
MCOM ON
MONITOR ON
PACLEN 72
RETRY 6-8
TIME STAMP ON
Uproto CQ V RS0ISS
converse (on the MFJ TNC)
```

These settings should get you into the ISS station. You might try this mode on a local digipeater when it is not busy to see if your CQ etc is echoed. Some stations are now including their names in the call— CQ V RS0ISS, Bill, FN33

As always in Amateur Radio, it's best to listen for a while once you get your station up and running. Watch the calls and messages as they come in- if there is an asterisk after RS0ISS\* then the call has been heard by ISS. In city areas, you might hear some nearby station calling directly, even though it looked like it came through ISS.

Usually when I get on, I just announce my presence— WB1BRE>CQ, RS0ISS\*: good morning from Bill in VT

If someone comes back to you, make your response short and don't send packets too often as the system can get clogged. And remember— don't Beacon under any conditions.

While this "Round Table" approach is limited in contact opportunities, it does allow everyone an equal opportunity to access the one channel. You will find 4-5 quick exchange conversations occurring on a typical pass and many school groups are now showing up on RS0ISS.

Give the "new, improved" ISS packet station a try— it's another part of the fun of this hobby!

73, Bill WB1BRE

Ref;

How to use the Amateur Radio "Round Table" via the International Space Station Alpha, G. Miles Mann, WF1F, Feb 27, 2002

As some of you may have heard by now, my continuing effort to inform Vermont Hams of the many ways that they can help out in the ARRL Field Organization has garnished me the sole nomination for Vermont Section Manager. I initially turned it down, although I was quite flattered. However, I soon realized that if nobody ran for the position (which they weren't) then the league would have to appoint someone for a six-month period. I felt that this would not be healthy for our amateur community, and I graciously accepted the nomination. As I am running unopposed, I will be declared elected without opposition for a two-year term beginning July 1, 2002. I hope to serve you all to the best of my abilities, and meet more of you at your upcoming club meetings from time to time.

This month I was going to write about two more boring appointments. I had picked out Net Manager and Bulletin Manager. But instead, I feel like talking about what the League will be expecting of me. That way you can keep a keen eye on me throughout my term (ha ha).

One of the things that I will be doing is making Section-level appointments in several key ARRL programs. They are emergency communications, message traffic, official observers, affiliated clubs, public information, state government liaison (remember that one?), technical activities, and on-the-air bulletins. Now, highly qualified people already fill some of these appointments, while others are open. This is the main reason that I started this series; to get more people interested in applying for an appointment, thus making Bob WE1U's job a little easier. Now it's your turn to make my job easier (tee hee). By the way, all appointments are now up for renewal, so if you want to apply for a currently filled position, that is okay too.

I will also be doing other boring managerial stuff, like making periodic reports to the Division Director. On the fun side, I will be making visits to club meetings and hamfests around the state: this where I hope to meet more of you. I will be available to answer your questions and concerns during my term. If I cannot answer them, I can refer them to someone in the ARRL that can.

The other thing that I will be doing is writing the "Section News" for QST magazine. It looks like space is limited to a small paragraph. Hmm, I wonder how I'll get around that.

## Upcoming Events

TSRC Meeting April 13, 2002, 9:00am  
Ramada Inn, WRJ, VT

Hosstraders May 3-4, 2002  
Hopkinton, NH

TSRC Meeting May 11, 2002, 9:00am  
Ramada Inn, WRJ, VT

Armed Forces Day May 18, 2002, 8:00am  
Naval Reserve Center, WRJ, VT

CQ WW WPX (CW) May 25-26, 2002

TSRC Meeting June 8, 2002, 9:00am  
Ramada Inn, WRJ, VT

ARRL June VHF QSO Party June 8, 2002

ARRL Field Day June 22-23, 2002

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\*ARRL Website <http://www.arrl.org/>

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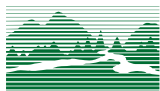
\*Bob DeVarney WE1U-VT SM [we1u@arrl.org](mailto:we1u@arrl.org)

Part 97 <http://www.arrl.org/field/regulations/news/part97/>

Don't forget to check the TSRC Home Page!

Make it your default start page!

<http://www.w1fn.org>



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