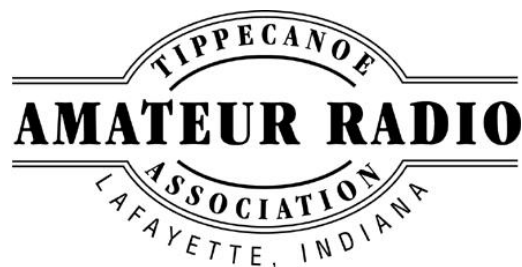


The Official Newsletter  
of the

Tippecanoe Amateur  
Radio Association

Serving the  
community since  
1951

# TARA TATTLER



210th Edition

OCTOBER 2004

**\* CLASSIFIED \***

*Business Meeting:*  
2nd Tuesday of each month  
at 7:30 p.m.

*Program Meeting:*  
4th Wednesday of each  
month at 7:30 p.m.

*Meeting Location:*  
Tippecanoe County  
Chapter of the Red Cross  
111 S. 7th Street  
Lafayette, IN 47901

Visit us on the web at:  
<http://www.w9reg.org>

Email us at:

[tattler@w9reg.org](mailto:tattler@w9reg.org)

**For Sale: MFJ 890 DX BEACON MONITOR**

It is about a year old and used sparingly. It is complete with box, power cord (12v) and the instruction manual. I looked on the R & L website, and their price is 87.95 and I am asking \$70 for this one. You can contact me evenings on the 147.135 repeater or at 447-0147.

Thank you and 73s

Jim, WA9LYC

**Wanted:** HF SSB transmitter (not a transceiver) such as a Drake, Hallicrafters, or Johnson. Want to mate it with a Drake R-8B receiver. Also looking for a Heathkit HX-30 six-meter SSB transmitter. Not interested in a restoration project. Bob, k9foh, 477-1280

**Wanted:** QRP and six-meter equipment. Always interested in models that I have not used before as well as old favorites.

Bob, k9foh, 477-1280

**Wanted:** Drake VHF converter for the R-8 series receivers. Drake accessories for the TR-270 FM transceiver including the TNC-270, Demod 270, and the carrying handle.

Bob, k9foh, 477-1280

**Kit building service:** Will build any of the Elecraft transceivers and/or accessories for a

nominal fee. Special price for Senior Citizens and anyone with a physical disability. You purchase the items you want and I will build it for you. You must include the pre-wound toroids.

Have built two K-2s, two-K-1s, one KX-1 and most of the accessories for these units.

Bob, k9foh, 477-1280

**This classified ad service is free to TARA members and placing an ad is easy. Just contact WR9A or K9HER, or email us at: [tattler@w9reg.org](mailto:tattler@w9reg.org)**

## TARA Birthdays

KA9NYW	October 2
KF9CT	October 8
N9VLW	October 12
KB9OQC	October 29

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*from the editors, WR9A and K9HER:*

We're working hard to make the Tattler *your* newsletter. We'll try to keep you up to date on all the latest ham radio news, events, contests, hamfests, and club activities. Have an idea for an article that you think others might be interested in reading? Write one and send it to us! Like to see something new and different in the Tattler? Let us know what you're thinking!

Email us any time at: [tattler@w9reg.org](mailto:tattler@w9reg.org)

## Making Contact with the International Space Station

by Stephen M. Parker, WR9A

Since writing last month's article about amateur radio on the International Space Station (ISS), I've received many emails and been asked many questions. It seems there's a lot of local interest in the subject! In last month's article, I talked a lot about how fun it is and what can be accomplished with simple equipment that most of us probably already have and use daily. Now, we'll get into the details!

If you play around with computers quite a bit, you may have already found yourself a good satellite tracking program. I recommend either Nova for Windows, or SatPC32. Both are excellent programs and are actively maintained and updated by their respective authors. They are not freeware, but if you plan on operating the satellites very much at all, they are an absolute necessity.

Even if you're not using a computer to track the space station's location, you can still use the good old method of just listening! Monitoring 145.800 MHz will tell you when the ISS is in range. If you hear packet bursts, then you will know that it is in digipeater mode. APRS users transmit their location beacons through the space station, and "live" keyboard to keyboard QSO's also take place in the UNPROTO (or unconnected) mode. You old packet users will recognize that term. Try copying some packets for a few passes, then try getting in on the fun yourself.

In packet/APRS mode, you'll want to transmit on 145.990 MHz and receive on 145.800 MHz. Do not attempt to connect to any other station. It is a fruitless exercise and will only add QRM to a very busy channel. Set UNPROTO to CQ VIA ARISS. (How that is done will vary depending on the type of TNC you have.) Then go to converse, and TYPE greetings or messages to others that you see on the downlink. If you see your packet digipeated via ARISS, so did everyone else!

If you're set up for APRS, change your path to ARISS,SGATE,WIDE. That's the only change you'll need to make to digipeat through the ISS, other than transmitting on 145.990 MHz. Using that path will allow your packet to be gated easily to the internet servers. Then you can visit [www.ariss.net](http://www.ariss.net) and see your callsign and location!

If you're hearing voices of other hams when the ISS is in range, then the radio is in crossband repeater mode. While you are receiving on 145.800 MHz, you'll need to transmit on 437.800 MHz. That's the uplink frequency that the ISS radio is listening on, and it will repeat whatever it hears on 145.80 MHz. It's just a simple crossband repeater, using a Kenwood D700. But since the spacecraft is moving, you'll need to take into account the Doppler effect. That means when the ISS is heading toward you, you'll need to transmit a few kHz lower, and as it's moving away, a little higher. In the 437 MHz range, the Doppler effect will shift your frequency by around 10 kHz at the most. It can be quite confusing to try and comprehend this in your head, and that's where computer programs are helpful. But even without them, you can crossband repeat via the ISS. Here's a good way to have a few memory channels set up:

- |                                |                                |
|--------------------------------|--------------------------------|
| 1 - RX - 145.800 TX - 437.790  | 6 - RX - 145.800 TX - 437.8025 |
| 2 - RX - 145.800 TX - 437.7925 | 7 - RX - 145.800 TX - 437.805  |
| 3 - RX - 145.800 TX - 437.795  | 8 - RX - 145.800 TX - 437.8075 |
| 4 - RX - 145.800 TX - 437.7975 | 9 - RX - 145.800 TX - 437.810  |
| 5 - RX - 145.800 TX - 437.800  |                                |

At the start of the pass as the space station approaches your location, begin with the first memory channel, transmitting on 437.790 MHz. As it gets closer, step up through the memory channels, effectively increasing your transmit frequency. Some radios may not allow you to program frequency steps any smaller than 5 kHz, and this will be somewhat of a hindrance, but will still permit you to make a few contacts.

How do you know if you are being heard by the ISS? You will hear yourself on the downlink! Remember, this is a crossband repeater, and if you have a full duplex dualband rig, you will be hearing yourself speak if you are making it in. Keep trying and adjusting your transmit frequency until you hear yourself coming through. Be courteous to other hams, and remember this is a single channel FM repeater covering most of the continental United States. It's liable to be a bit busy!



## Minutes of the TARA Business Meeting - 14 September 2004

by Tim Gardner, N9LF, Secretary

### Members in attendance:

Alex Younts, KC9CYK	Bob Smith, WB9VAL	Joel Mahoney, KC9ETA & Guest
Steve Parker, WR9A	Greg Dean, N9NWO	Bob Lusby, K9FOH
Dave Dull, WB9BRX	Tim Gardner, N9LF	John Parker, KC4YGO
Cheryl Parker, K9HER	Curt Sherwin, WB9SWD	Steve Van Frank, W9TN

The meeting was called to order at 19:30 by WR9A.

The minutes of the August 2004 meeting were read. K9FOH moved to accept the minutes and WB9VAL seconded. Motion passed.

The Treasurers report for August contained some ambiguous information. It was agreed to table discussion and approval until the next meeting.

### Old Business

K9FOH brought up several issues regarding the hamfest.

- Rohrman cars parked in locations we would like to use.
- Scheduling: Is the third Sunday of August the right weekend of the year and is Sunday the right day of the weekend?
- Passers-by who incorrectly assume that the hamfest tailgaters are the monthly flea market.
- Ticket price of \$4 makes it difficult to keep enough change on hand (many tailgaters presented \$20 bills, wanting change for their own use). A change to \$5 would largely eliminate the \$1 bill handling.
- Is the net profit we earn really worth the effort?

We discussed these issues and came to no real conclusions, other than it seemed to make sense to continue the hamfest so long as we do not lose any money. Dave Dull, who has managed the hamfest for several years, wishes to be relieved of this duty and a new hamfest chair is needed. It was suggested that several interested parties meet to discuss ideas and the future of the hamfest.

The offer by KF9UP of countertops to possibly replace the desks in the station was reviewed. There remains no significant support or opposition, but neither has anyone offered to provide the necessary labor.

### New Business

We received two tickets to the October 3 Northern Indiana Hamfest and Computer Expo in Goshen. Contact WR9A if you are interested in receiving these tickets.

The drawing for \$6 was not won by Nancy Koehl, KD9JS.

Meeting adjourned at 20:26.

# October 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
<b>3</b> Bedford Hamfest Northern IN Hamfest	4	5	6	7	8	<b>9</b> Northwest Ohio Hamfest
10	11	<b>12</b> TARA Business Meeting, 7:30 pm	13	14	15	<b>16</b> NWS Indianapolis Open House
17	18	19	20	21	22	23
24	25	26	<b>27</b> TARA Program Meeting, 7:30 pm	28	29	30
31						

## *Schedule of Events*

- October 3: Hoosier Hills Hamfest, Bedford, IN, Lawrence County Fairgrounds, Talk-in 146.73- (PL 107.2), \$8 admission
- October 3: Northern IN Hamfest, Goshen, IN, Elkhart County Fairgrounds, Talk-in 145.43-, \$5 admission
- October 9: Northwest Ohio Hamfest, Fair Radio Sales, Lima, OH, Talk-in 146.67-, \$5 admission
- October 12: TARA Business meeting, Red Cross, 7:30 p.m.
- October 16: National Weather Service, Indianapolis, open house for amateur radio SKYWARN spotters, 11am-3pm
- October 27: TARA Program meeting, Red Cross, 7:30 p.m.

## TARA Officers

*President:* N9GKE  
R. Bruce Stewart

*Vice-President:* WR9A  
Stephen Parker

*Secretary:* N9LF  
Tim Gardner

*Treasurer:* KC4YGO  
John Parker

*Director:* W9TN  
Steve Van Frank



## Contest Corner

Contest “season” is almost here, and October brings the start of some of the major contests for this fall/winter:

- PSK Rumble (Fall Classic), 0000Z-2400Z OCT 2
- California QSO Party, 1600Z OCT 2 - 2200Z OCT 3
- North American RTTY Sprint, 0000Z-0400Z OCT10
- CQ World Wide DX Contest (SSB), 0000Z OCT 30 - 2400Z OCT 31

Because of the large number of contests, we don't have room to list them **all** in our newsletter, but we do try to highlight the major ones.

For a more complete list, visit the WA7BNM Contest Calendar on the web:

<http://www.hornucopia.com/contestcal>

