## TRI COUNTY REPEATER ASSOCIATION NEWS LETTER

NOV 28,09

Club President W9MM called the meeting to order on or about 7PM Oct 6 09 at the Mains Street Cafe with the following members in attendance K9YLI, N9XMU, KC9GYR AND CHRIS a visitor who came with Marv. Chris was welcomed and an informal discussion relative to Ham radio developed regarding different aspects of the hobby.

Treasurer reported \$162.86 as the present balance.

Old Business: W9MM reported that combining the three local clubs for Umbrella Insurance coverage will not work, no further discussion on the matter. A discussion developed regarding our outdated Web Site and W9MM stated that he would speak with the Web Master.

New Business: The next meeting and Christmas Party will be held at the home of N9XMU at 6PM, Dec 12,09, if you don't know how to get here and don't have GPS I will talk you in on the repeater. This will be a pot luck so bring a dish to pass. Salads and Desserts will work if in doubt contact N9XMU. Enclosed with this letter is a nice article written by WB9WKT concerning the International Space Station and Satellite Operation. Thanks Rod, hope to see you all at the party.

## **73 N9XMU**

You can SEE the International Space Station (ISS)

Over the last several years the astronauts have been very busy putting together the International Space Station ISS. With each piece of equipment added the ISS gets easier and easier to see. What you actually see is the sun light reflecting off the ISS back to earth. The best times to see the ISS is at DUSK or just before sunrise (DAWN) when the we are still in the Dark and the ISS (which is 240 miles up) is still in the sunlight.

What you will see is a pretty bright light moving across the sky at a pretty good clip. Don't confuse the ISS with an airplane--an airplane will have blinking lights around it. The ISS will be a steady bright light. In real time the ISS is moving at 17,500MPH but when it cuts across the huge sky it has a lot of miles to put on while we are watching it. Don't expect to see solar panels or any shapes--you will just see a bright SPOT moving across the sky.

The viewing times vary from early morning to early evening (to not at all)--you will need the WEB to determine when to see it.

Get your account set up on <a href="http://www.heavens-above.com">http://www.heavens-above.com</a>. Go down on the left column to "SATELLITES". Then click on "10 day predictions for: ISS

Here is a snap shot of the screen you will see of one pass:

date MAG start alt Highest alt end alt 13 Oct -1.0 05:54:52 10 SSW 05:57:12 22 SE 05:59:34 10 E

What this is saying is: On Oct. 13th at 5:54CST the space station will be coming out of the South South West SSW at 10 degree's (alt). At 5:57 it will be at 22 degree's in the South East SE and then will disappear at 5:59CST in the East E. The ISS follows this line across the sky.

The MORE negative the "MAG" number the brighter the ISS will be. A -1.0 is very bright. The highest alt of 22 may not be the greatest to see if you have lots of tree's in your viewing area. Once again 90 degree's alt will be directly over your head, where as 10 degree's alt is about a "fist length" off the horizon. So an Alt of 30 degree's or higher is OK to view---unless in my case I have to look to the NORTH and things get lost in the city lights of Chippewa Falls.

There are times when you click on "10 day predictions for: ISS" and won't see any data, this is times when the ISS doesn't pass over durning the optimum view times of DUSK or DAWN. Keep going back to the web page and eventually you will get a time to see it. Remember to tune to 145.800Mhz and you may even hear the astronauts calling CQ.

Any other question just let me know. WB9WKT