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## **The Houston AMSAT Net**

I earned my Ham ticket in 1993 and immediately found that I wanted to work the satellites and work them I did. I found the Houston AMSAT Net shortly after and started participating on the net each week. It met on the 147.10 MHz repeater in Houston operated by Craig, WD5BDX. Craig began transmitting the net over Telstar 302 in February of 1994. Our net control at the time was Ed, N5EM and Andy, W5ACM and I were contributors. Towards the end of 1994, Craig decided to take a break and he passed the controls to me for doing the uplink to the satellite. On February 7, 1995 I started doing the net on Telstar 302 myself.

We also started trying to get repeater operators around the country to carry the net. We had George, W1ME provide the net over the NETARC net in the Northeast and K4LK's repeaters in Florida plus many more repeaters throughout the country. The AA3RG, Pine Grove Repeater Association in Pennsylvania being the newest. Also, the AB5IG ATV Repeater in Dallas has started retransmitting our net.

We were using the Omega Radio Network and in May of 1995, we moved to the Tech Talk Network. On September 20, 1995, I did a never before feat.... With one radio, I worked Bob, CE0Z on AO-10. I took that audio feed and sent it over Telstar 302. This was the first cross band repeat between an amateur satellite and a commercial satellite. Our listeners got a big kick out of this contact.

Our net had been on Tuesday nights but in November of 1995, we had to move to Sunday nights. This was not the best for us but in February of 1996, we moved once again. We went over to ANIK E2 and returned to Tuesday nights.

Trouble was not too far behind.... We lost the Tech Talk Network and scrambled for a new home which we found on the W0KIE Network and moved to SBS 6. To make things more fun and increase our listening base, in July of 1996, Scott at North American Internet started doing real Audio Encoding for us. This allowed us to bring the net to many more people. This was our 126<sup>th</sup> net. This lasted until August of 1997 when I started doing the encoding for the real audio. After losing Scott's services for the hosting of the Real Audio streams, we switched to Greg, KB5OAT's server.

This relationship worked great but once again, we had to move and in 1998, we moved our web page to David, KC8BRL's server, where we remain to this date. At the same time, we did not have a Real Audio server so W0KIE started providing a Real Audio Live Stream for us every week. In September, 1999 after getting a cable modem, I found that I could host the Real Audio Live server on my computer and have been doing so ever since.

In January, 2000, the W0KIE network lost their transponder and we once again went on the move to a new uplink provider. Now we are heard over Lamonica's TVRONET on GE-4, Transponder 16, 5.8MHz audio. The to make things worse, a group of buildings in Houston where many repeaters have been located found that they can rent the space for \$500-\$1000 per month so the repeaters had to go. We moved the net back to a repeater that was used many, many years ago, the 145.45 MHz WB5RDK repeater. Which is operated by the South Texas Emergency Communications Group and located on the roof of Memorial Hospital Southwest in Houston.

Andy, W5ACM started something new this year. He started transmitting Slow Scan images during the last 5-10 minutes of each net. This has allowed people around the world to view some interesting pictures from the MIR and other sources. Since the Real Audio is available in archive format for 3-4 weeks after each net, anyone can listen and decode pictures that they may have missed.

Last year, we provided Real Audio coverage of the 1999 AMSAT Symposium and also provided live 8 hours per day coverage over our satellite feed. This year, we are limiting it to the Real Audio feed only.

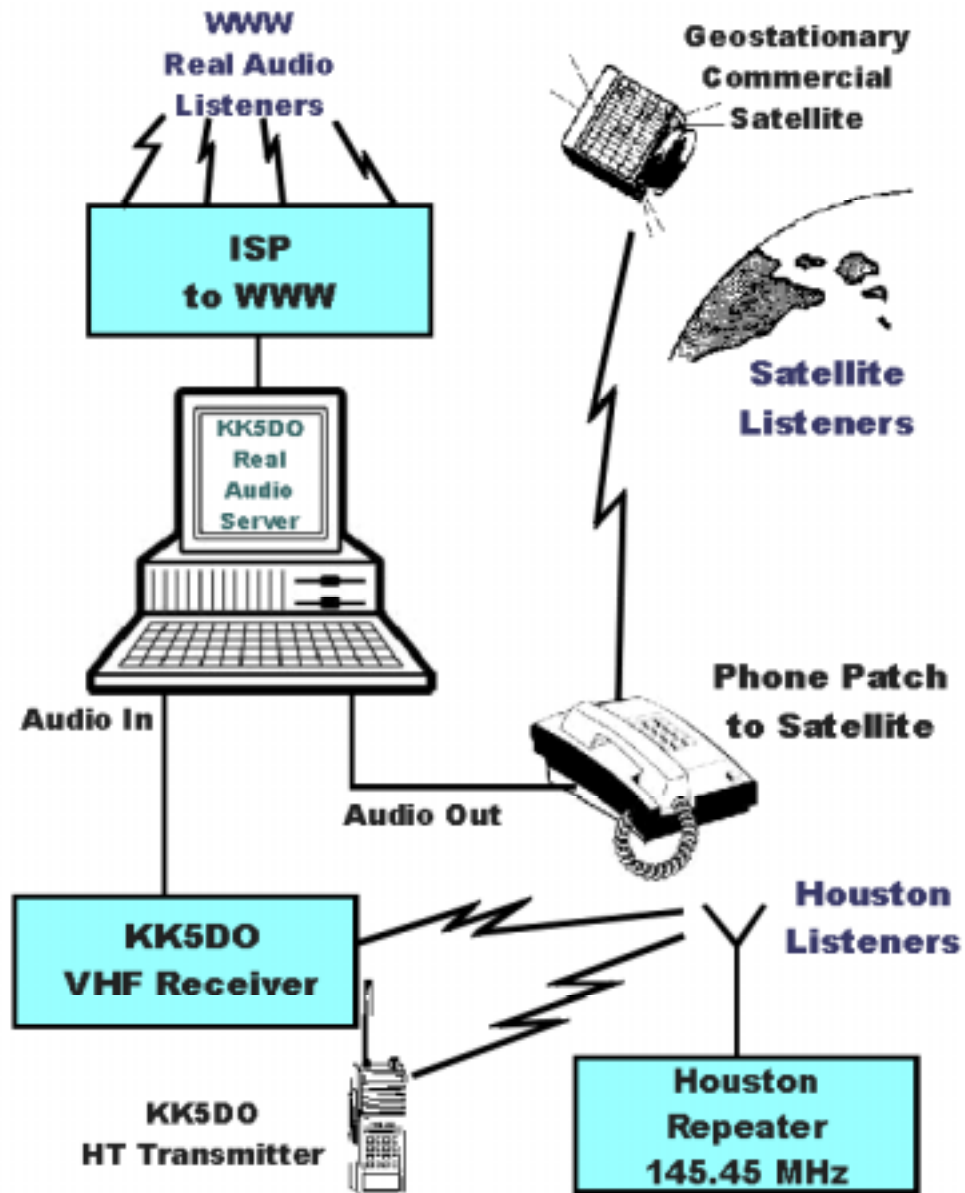
Where do we go from here? Don't have a clue. Something will come up, maybe HDTV, maybe even providing live video with the audio. In any case, it is fun and we enjoy it.

The diagram that is attached indicates how the signal gets from Houston to you either over our local repeater, a commercial satellite, or on the world wide web.

The signal originates on the WB5RDK 145.45 MHz repeater in Houston. It is received on my Icom 821H transceiver and the audio from the radio goes directly into my computer sound card. From the sound card, one output goes to the specialized phone patch designed by George, W1ME. That audio goes to the uplink site for TVRONET and the commercial satellite we are using. Internally to the computer, I use Real Audio Producer to encode the audio for those on the World Wide Web. The Real Audio Producer connects to my Real Audio Server running on my computer which allows 25 live streams (25 listeners at one time). At the same time, on my computer, an archive file is being built. This file is uploaded to my web site after the net is over for those to listen to for the next few weeks. If I need to get into the net, I use an Icom W32A HT and transmit through the repeater thereby never interrupting the audio that is being received on my other radio. Once in awhile, we time out the 10 minute timer on the repeater. When that happens, I am only about 3 miles from Andy, W5ACM (our net control) and I switch over to the input of the repeater so as not to lose anything.

If you have a question, feel free to contact me at [kk5do@amsat.org](mailto:kk5do@amsat.org) or visit our web page at <http://www.amsatnet.com>

73...Bruce, KK5DO



**How the Houston AMSAT Net gets to you**