

# LINE OF SIGHT

A Message from the Editor

## On the Cover and What is Your Niche?

It's been five years in the making. It has involved dozens of students from two land-grant universities separated by 800 miles, the University of Kentucky (KY) and Oklahoma State University (OSU). It has involved NASA through its Space Grant Consortium and Workforce Development programs. It also has involved the Edge of Space Science (EOSS) organization. Today the result is a flexible-wing aircraft project called BIG BLUE.

The significance of the name "BIG BLUE" is that while the University of Kentucky's official team name is the Wildcats, BIG BLUE is the university's unofficial nickname for its hugely successful basketball team. In the case of the flexible-wing aircraft project, BIG BLUE is the acronym for Baseline Inflatable-wing Glider Balloon-Launch Unmanned Experiment.

BIG BLUE is important in that the primary customer for the project, NASA, is considering using this aircraft for exploration on Mars. Eventual secondary customers may include any entity looking for an easily transportable and deployable drone.

What is significant regarding amateur radio is the number of students and faculty who have earned their amateur radio licenses while participating in the program. The program has either directly or indirectly produced nearly 50 new ham radio operators.

The program also has spun off a CubeSat project entitled "KySat." Several of the alumni of the BIG BLUE project are now at work developing an amateur satellite for future launch. You can begin reading this fascinating story on page 8 in this issue.

### What is Your Niche?

Over the past several years the use of the VHF-plus frequencies has become more and more fragmented as growing technology has fostered an increasing number of niches. As a result, the long-term existing niches have declined accordingly.

In the past, these niches have included weak-signal, FM, satellite, ATV, and digital modes. They continue, but now within these niches technological advances have splintered some and encroached on others. For example, digital now includes HSMM, APRS, and D-STAR. FM now includes Echolink, IRLP, as well as D-STAR (on the repeater bands). Satellites now include balloon satellites and cube satellites. ATV, which previously almost exclusively operated from the ground, now has venues on balloons and in radio-controlled aircraft.

Weak-signal communications also has seen an increase in digital modes, thanks to the WSJT software development. An offshoot of that development is that EME communications has become divided between those who use it and those who refuse to use it. Furthermore, SSB meteor-scatter communications is all but non-existent.

All of this fractionalization isn't necessarily bad. The use of WSJT has opened EME communications to operators who previously had no way to communicate via that mode. Echolink, IRLP, and D-STAR have opened up worldwide communications via a mobile radio or a handheld. Furthermore, even though we have been at the bottom of the sunspot cycle, going into a new one, serious 6-meter operators continue to rack up country totals, again thanks to WSJT and the moon.

The World Wide Web also has played a role in all of these niches. In particular, it plays the role of a double-edged sword for weak-signal operators. On the one hand, in weak-signal many operators are spending more time on the computer rather than on the air. On the

other hand, the use of the World Wide Web can alert some of these operators of an imminent band opening.

The web has also become a repository of every kind of idea and project that one can imagine building, as well as venues for operators to discuss their accomplishments and equipment in real time. Speaking of accomplishments, it used to be that we would send our reports to our favorite VHF column and wait for the reports to be published upwards of two months later. Not anymore. We post them to a listserv and the whole world sees them almost immediately, if not in real time. The fallout for us VHF-plus scribes is that fewer and fewer operators send reports to either me or Gene Zimmerman, W3ZZ, over at *QST*.

Speaking of real time, how many of us have watched DXpeditions under way via live streaming video? We can almost witness the DX station typing us into the log on the station's networked computer. Within a few minutes we can go to the DXpedition's website and see if we are "in the log" or if they have our callsign wrong.

All of this discussion about niches leads me to encourage you to go to Dayton this year for the annual Hamvention®. If you would like to find out more about each of the niches mentioned thus far in this editorial, as well as others, then I invite you to attend the forums that cater to your interests.

Friday forums include TAPR, D-STAR, balloons, and APRS. Saturday forums include ATV and VHF/UHF/microwave. Sunday forums include the Mars Desert Research Station and its use of amateur radio, as well as bicycle mobile. If banquets are your thing, then there is a group of weak-signal VHF operators gathering at the Red Lobster restaurant at 6500 Miller Lane on Thursday night, as well as many of the same group gathering at the Holiday Inn Dayton North at 2301 Wagoner Ford Road on Friday night for another banquet. If AMSAT and TAPR interests you, then they will hold their second joint banquet on Friday night at the Kohler Presidential Banquet Center in Kettering. More information and reservation information can be found on the AMSAT website: <<http://www.amsat.org>>.

Speaking of AMSAT, it will have a huge section in the same general area as last year's booths in the Hara Arena. There will be lots of activities, as well as opportunities for you to join or renew your membership with the organization.

When we think of Dayton, we naturally also think of the huge swap area. Among all of those outside spaces are goodies to pretty much cater to any of your particular interests. Even if you are transitioning from one niche to another, you can unload your old equipment and buy new equipment, as the case may be. After years of a downward trend, attendance is predicted to be higher this year. Therefore, you will have more buyers for your old stuff and more new stuff to view.

All of this discussion about niches brings me back to the second part of the title of this editorial: What is your niche? Whatever it may be, you will find lots of information about it at Dayton, as well as have the opportunity to meet new people who share your interests in the hobby.

I hope to see you there so that I can listen to your stories and ultimately encourage you to write them down so that I can publish them within this, your magazine. If you are not going to be at Dayton and you have a story to tell about your niche in the hobby, then please e-mail me at: <[n6cl@sbcglobal.net](mailto:n6cl@sbcglobal.net)>.

Until next time...

73 de Joe, N6CL