



WB8IMY

## ECLECTIC TECHNOLOGY

# A D-STAR Repeater in Space

Things are percolating these days in the amateur satellite community.

Amateurs in Belgium are looking forward to the launch of OUFTI-1, the world's first D-STAR satellite. The tiny 1-kilogram CubeSat is being designed and built by students at the University of Liege. In case you're wondering, OUFTI is an acronym for Orbital Utility For Telecommunication Innovation.

The satellite will function as an orbiting D-STAR repeater with a UHF uplink and VHF downlink. OUFTI will be traveling in a relatively low orbit, but it should give hams about 10 minutes of access time during each overhead pass.

OUFTI is presently scheduled to ride aboard the maiden flight of the Vega launch vehicle from Kourou, French Guyana next spring. Compared to Ariane 5, the Vega is a small launcher. The 30-meter-tall rocket has four propulsion stages (three solid and one liquid). They're anticipating that Vega will deploy OUFTI in an orbit that should give the satellite at least a 1-year lifespan before reentering the atmosphere.

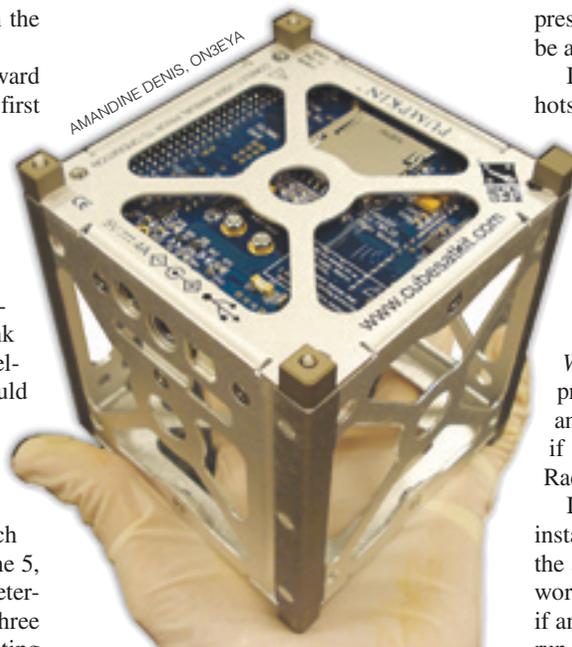
D-STAR activity has been growing in the US and overseas, so there are plenty of hams already equipped to try OUFTI. That doesn't mean that you'll be able to communicate with the satellite using a handheld D-STAR radio and a "rubber duck" antenna. Chances are you'll need a dual-band Yagi antenna, such as the popular Arrow II portable beam ([www.arrowantennas.com](http://www.arrowantennas.com)), to enjoy consistent success. For the latest OUFTI updates, check their Web site at [www.leodium.ulg.ac.be/cmms/](http://www.leodium.ulg.ac.be/cmms/).

### SumbandilaSat

Your first challenge will be to pronounce the name of this new South African satellite. (Say it five times fast!) In the Venda language, "Sumbandila" freely translates to "Pathfinder."

SumbandilaSat is sponsored by the Department of Science and Technology and is being built at SunSpace in cooperation with the University of Stellenbosch. Among its array of experiments is an Amateur Radio FM repeater with a 2-meter uplink and 70-cm downlink (just like OSCAR 51).

If all goes as planned, SumbandilaSat may be in orbit by the time you read this.



**The OUFTI-1 D-STAR satellite under construction. It is presently scheduled for launch in 2010.**

The launch was originally scheduled for May, and then bumped to July. Shifting launch schedules are common, so don't be surprised if the flight is delayed yet again. You'll find more information online at [www.amsatsa.org.za/SZASAT.htm](http://www.amsatsa.org.za/SZASAT.htm).

### XW-1 Status

Speaking of delays, you may recall my column earlier this year where I discussed the Chinese XW-1 Amateur Radio satellite, the one that will feature an SSB/CW linear transponder, FM repeater and digital store-and-forward system.

According to Project Manager Alan Kung, BA1DU, the launch has been postponed to December. This is a potentially exciting satellite, so keep your eyes peeled for updates.

### D-STAR Hotspot Update

In my July column I described a D-STAR hotspot designed around a GMSK node adapter created by Satoshi Yasuda, 7M3TJZ. Not long after the issue went to

press, Satoshi's boards sold out, but they will be available again soon.

It's important to point out that these hotspots are not D-STAR systems per se. D-STAR *compliant* might be a more accurate description. The Hot Spot does not provide call sign routing or slash routing, and the traffic does not appear on [dstarusers.org](http://dstarusers.org).

### Windows 7

Microsoft says it will release its new Windows 7 operating system this fall. The pre-release reviews have been very positive and hams are already contacting me to ask if it is compatible with current Amateur Radio software.

I haven't had the nerve to download and install the Windows 7 "release candidate," so the answer is "I don't know." For what it is worth, my contacts at Microsoft tell me that if an application will run under Vista, it will run under Windows 7.

For Windows XP users, Microsoft is presently testing something called XPM. When it is ready, XPM will be offered as a Windows 7 add-on to provide complete XP compatibility. This is not to say that your current XP applications won't run under Windows 7, but apparently XPM is designed to provide as close to a 100% guarantee as reasonably possible. No word about a price tag for XPM, if any.

### Get Your News in Morse Code!

Chris Kantarjiev, K6DBG, has done a very cool thing for Morse aficionados. He took the CNN "breaking news" feed that they supply to Twitter and used a custom application to convert it to Morse code at various speeds. You can listen to the Morse news feeds by pointing your Web browser to <http://cw.dimebank.com:8080>.

The audio is streamed in a WinAmp "playlist file" format. It tried to get it to work with Windows Media Player without success, although others have managed to do so. The solution for me was to download and install the free WinAmp media player at [www.winamp.com](http://www.winamp.com). When you install WinAmp, say "yes" when it asks if you want to associate it with all media files. With WinAmp installed, Chris's Morse news feed worked like a champ. 