



# COMMUNICATIONS

*“Communications” is compiled by Rachel Baughn KE4OPD from newsclippings submitted by our readers. Thanks to this month’s fine reporters: Anonymous, Tom Baker, Bob Grove, Jerry None, Doug Robertson, Doug Smith, Robert Thomas, Larry Van Horn, Ed Yearly, George Zeller.*

## ON THE WILD SIDE

### Arrest Raises First Amendment Questions

U.S. Attorney Michael Garcia alleges that Javed Iqbal, a Pakistani who has lived in the US for more than 20 years, conspired to violate the International Emergency Economic Powers Act, a law that bars direct financial aid to terrorist groups and the sales of products or services that could help such groups.

The charges accuse Iqbal of providing broadcasts of Al Manar – purportedly a media outlet for Hezbollah – through his Brooklyn-based satellite company, HDTV Limited. Both Al Manar and Hezbollah have been classified as terrorist entities by the U.S. government.

Iqbal’s defenders claim he may have promised a service he may not have to the capability to deliver. Even if he did, “This is a prosecution for importing information, basically,” said Donna Lieberman, executive director of the New York Civil Liberties Union.

### Hezbollah Eavesdrops on Israeli Comms

During the 34 days of fighting between Israel and Hezbollah troops in south Lebanon, which ended Aug. 14 under a cease-fire brokered by the United Nations, Hezbollah repeatedly surprised Israel in its level of weaponry and battlefield tactics.

Israeli troops primarily use the same communications system relied on for years by the U.S. – the Single Channel Ground and Airborne Radio System (SINCGARS) – equipped with frequency-hopping and encryption capabilities. However, according to a *Newsday* report, Hezbollah claims to have intercepted and decoded enough Israeli transmissions to give them a picture of troop movements, casualty reports, supply routes, and tank movements.

In the intervening years since Israel withdrew from Lebanon in 2000, Hezbollah has invested a lot of resources into eavesdropping and signals interception, including trained Hebrew speakers who can quickly translate the intercepts. Hezbollah’s intelligence-gathering also garnered detailed maps and photographs, troop lists, and cell phone numbers, although Israeli forces had strict instructions not to divulge information over the phone.

Much of Hezbollah’s eavesdropping equipment and military capability is believed to have come from its two main backers, Iran and Syria.

### Pirate Goes Legit

In 1998, Scott Willoughby and Alex Markels started a 100 watt pirate radio station called Radio Free Minturn, just outside Vail, Colorado. The station operated out of Willoughby’s living room until November 2000, when Federal

Communication Commission agents knocked on the door of Willoughby’s home and ordered that Minturn Free Radio stop broadcasting immediately.

Radio Free Minturn went back on the air – again at 100 watts – on June 23, 2006, this time as a legal station licensed by the FCC. The station filed for a low-power FM license in 2000, but it wasn’t until the spring of 2004 that the group learned its application had been accepted. By that time, most of the original crew was gone and it took nearly a year to create a new board. By then, Radio Free Minturn had six months to get on the air with little money and little expertise to do it.

So, Liz Campbell, the driving force on the board, held a wake for Radio Free Minturn on May 7, 2005, as a final gesture for a great idea whose time had come too late. Instead, more than 100 people showed up. Ken Laughlin came and donated engineering expertise. Mark Gordon, the Vail Town Councilman, got involved. (He now deejays a show.) An extension from the FCC gave them more time to get on the air.

“Great radio is also part of the quality of life of a great community,” Gordon said. “I’m not taking away anything from the commercial stations, but there’s no comparison. It’s just one more piece of that community puzzle.”

Across the country, an estimated 3,000 groups have tried to get a low-power FM license, but only around one hundred have been granted. And when years have passed, it’s often too late. Radio Free Minturn is one success story.

## AMATEUR RADIO

### FCC Affirms BPL Rules

In August the Federal Communications Commission generally reaffirmed its rules for Access Broadband over Power Line (Access BPL) systems while maintaining safeguards against harmful interference to existing radio services. If harmful interference does occur, the Commission says it will take appropriate action to remedy the situation.

The FCC denied petitions from amateur radio and the television and aeronautical industries to exclude portions of their spectrum from BPL operations. It also denied the request by the gas and petroleum industries to be considered as public safety entities.

It did adopt changes regarding protection of radio astronomy stations by requiring a new exclusion zone and changes to provide for continuing protection for aeronautical stations that are relocated.

### Hams Experiment with Marine Band

On September 13 the FCC’s Office of Engineering and Technology granted Part 5

experimental license WD2XSH to the ARRL on behalf of a group of radio amateurs interested in investigating spectrum in the vicinity of 500 kHz.

The two-year authorization permits experimentation and research between 505 and 510 kHz (600 meters) using narrowband modes at power levels of up to 20 W effective radiated power (ERP). ARRL Member Fritz Raab, W1FR, of Vermont, will serve as experimental project manager for “The 500 KC Experimental Group for Amateur Radio” [www.500kc.com](http://www.500kc.com). The group eventually will be seeking reports from non-participants.

The group envisions eventual use of the spectrum to provide Amateur Radio emergency communication via groundwave, without having to deal with the vagaries of the ionosphere or causing interference to other services.

500 kHz remains designated as an official maritime emergency CW frequency, although the vast majority of maritime users have shifted to satellite-based systems.

### Space Adventuress

Born in Iran in 1966, Anousheh Ansari moved with her family to the United States when she was 16 and became an American citizen. In September 2006 she was the first female space tourist to visit to the International Space Station.

“I want to reach women and girls in remote parts of the world where women are not encouraged to go into science and technology jobs,” she said, “They should believe in what they want and pursue it.” The 40-year-old practices what she preaches: She has degrees in business and science (and is working toward a degree in astronomy) and has filed patents in the field of telecommunications. The business Anousheh helped found was a major contributor to the Ansari X Prize for the first private company to build a rocket capable of two manned suborbital flights in two weeks (won by Burt Rutan in 2004).

Anousheh was a last-minute backup as the next space tourist, which didn’t allow her time to obtain her amateur radio license. However, she was trained to use the amateur radio onboard the ISS and hoped to make some third-party contacts. See Space Adventures Ltd [www.spaceadventures.com/](http://www.spaceadventures.com/)

