

FHH Telecom Law January 2003

Expanded Wi-Fi in Doubt

*By: Mitchell Lazarus
703-812-0440
lazarus@fhhlaw.com*

Efforts to triple the size of the Wi-Fi band at 5.8 GHz are meeting stiff opposition from the U.S. military.

Most Wi-Fi systems now in use -- most home and office wireless networks, and all systems offering wireless Internet access at coffee shops and airports -- use frequencies at 2.4-2.4835 GHz, a band shared with millions of microwave ovens and countless other consumer devices. Another form of Wi-Fi, less commonly available (and incompatible with the first), resides in the higher, less crowded frequencies at 5.725-5.85 GHz. Neither of these bands is in dispute, contrary to some press reports. All current systems are safe. But efforts to add new frequencies are not.

The controversy began when the Wi-Fi Alliance, which certifies wireless products for compatibility, asked the FCC to expand the upper band to include 5.47-5.725 GHz. That would add 255 MHz to the current 125 MHz, more than tripling the band. The military objected because it operates radar units at those frequencies -- approximately eight to ten units nationwide, according to some reports. The power limits the military would impose on civilian users to protect those radars are too low for a commercially useful device, say industry representatives. Industry countered with an offer to deploy equipment similar to that used in Europe, which "sniffs" for radar units nearby and shuts down if it senses one. But that is not good enough for the military, which may not want the locations of its radars known to millions of laptop users.

Both proponents and opponents will pursue their respective positions at the World Radio Conference (WRC) that convenes in Geneva in June. The FCC is under no obligation to follow a WRC allocation, especially for a short-range service that does not require international coordination. But both sides believe that a favorable outcome in Geneva will ultimately help their case at the FCC.