

THE MIDDLE SEAT

By SCOTT MCCARTNEY



**WiFi in the Sky:
Airlines Prepare
Cabin Hotspots**

BlackBerrying, Web Surfing
Expected Aloft Within a Year;
Cellphone Service May Follow
April 3, 2007; Page B9

The days when airplanes offer a hiatus from being connected to the office are numbered.

After years of discussion and delay, U.S. airlines will start offering in-flight Internet connections, instant messaging and wireless email within 12 months, turning the cabin into a WiFi "hotspot." Carriers are expected to start making announcements around the end of the summer, with service beginning early next year.

Like it or not, airborne cellphone chatter still has a flying chance in U.S. airplane cabins, as well, despite a recent indication that the Federal Communications Commission will keep a ban in place.

The FCC has already auctioned off radio spectrum for cellphone use on airplanes, and telecommunications companies partnering with airlines have successfully tested several systems. But no company made a firm proposal. Facing high costs and opposition from fliers, U.S. airline customers weren't interested. Yet with airlines in Europe and the Middle East to begin offering cellphone service aboard airplanes later this year, that could change.

If the technology proves safe, popular and profitable, U.S. airlines and telecommunications companies may be more interested, under pressure to keep up competitively. In-flight phone calls may not be as popular as lie-flat beds in business class, an innovation that started in Europe and spread, but air travel is a copycat business. Success in Europe could prompt action in the U.S., and bring the FCC back to possibly dropping its ban.

"The likelihood of cellphone service on airplanes coming into play is still very high," said Jack Blumenstein, chief executive of AirCell Inc., a major player in airplane cabin communications.

That may not be what road warriors want to hear as they dread listening to a blathering seatmate.

Still, with current technology, capacity would be limited, so the entire cabin wouldn't be able to chat at the same time. Indeed, only about 14 calls or fewer would be able to take place simultaneously.

For now, the preferred cabin technology in the U.S. is Internet service, which will launch early next year. If broadband connections at 35,000 feet are as popular as they have been at hotels, airports, homes, schools and

coffee shops, airplanes will likely be fitted with the relatively inexpensive technology rapidly.

AirCell paid \$31.3 million at an FCC auction last year to take over radio frequency once used for expensive air-phone service and reallocate it to Internet and cellphone service. The Internet service already has the approval of both the FCC and the Federal Aviation Administration. Mr. Blumenstein says AirCell, a closely held Colorado company that provides communications for private jets, is building out its network of 80 to 100 ground towers and talking to multiple airlines. No customers have been named yet.

"It can't happen soon enough," said Henry Harteveltdt, a travel technology analyst at Forrester Research Inc.

AirCell will install equipment on airliners that will act as a WiFi hotspot in the cabin and connect to laptop computers and devices like BlackBerrys that have WiFi chips. In all, it will cost about \$100,000 to outfit a plane with less than 100 pounds of equipment, and the work can be done overnight by airline maintenance workers, AirCell says.

What makes the service particularly attractive to airlines is that they will share revenue with AirCell. The service will cost about the same as existing WiFi offerings. Mr. Blumenstein says it will charge no more than \$10 a day to passengers. It will also offer discounted options for customers and tie into existing service programs like T-Mobile, iPass and Boingo. Speeds will be equivalent to WiFi service on the ground.

AirCell will block voice calls over the Internet with services like Skype -- except for pilots, flight attendants and air marshals, who will be allowed to talk to people on the ground for scheduling, safety and security issues.

While WiFi is preferred in the U.S., cellular service is the top priority in Europe, the Middle East and Asia, where social objections to cellphones on airplanes appear to be more muted.

Ryanair Holdings PLC signed a deal to equip all of its 200 planes with a system from OnAir, a joint venture of airplane maker Airbus and SITA, an aviation technology provider. Installation is likely to take place in the third quarter of this year, an OnAir spokesman says. Dubai-based Emirates hopes to begin offering service from AeroMobile Ltd., a joint venture of technology firms Arinc Inc. and Telenor ASA, on flights to Asia starting in late summer. Qantas Airways will start a trial of the AeroMobile system in Australia before June.

Some 30 countries have approved the service from a telecommunications perspective, convinced cellphones on planes with the equipment installed won't tie up large chunks of capacity at towers on the ground. But both companies still need approval from air-safety regulators who have been studying whether cellphones might interfere with aircraft navigation equipment. So far, regulatory approval has been slower than they expected.

OnAir and AeroMobile both install "pico cell" receivers on planes that connect to cellular phones, allowing them to operate at low power to minimize technical problems. The pico cell then routes calls to cellular networks through a satellite link.

Only about 14 calls or fewer can be successfully made at a time per flight, and airline crews can turn the system off during takeoff and landing. If you make the 15th call, you'll get some kind of indication of "no service."

Pico-cell technology has been successfully tested in the U.S., but deployment would be complicated and costly. While Europe has migrated heavily to GSM phone technology, the U.S. still has lots of older phones around more likely to cause ground problems. With the public lining up firmly against cellphones, airlines have been reluctant to sign on and telecom companies were reluctant to invest millions in a potentially unpopular product.

On March 22, FCC Chairman Kevin J. Martin said he would recommend ending consideration of lifting the ban on cellphone use aboard planes because a two-year investigation into possible interference with ground towers had proven inconclusive. It also drew more than 8,000 consumer complaints.

But if systems prove they work in other parts of the world, airborne cellphone service likely will migrate to the U.S. -- perhaps within just a couple of years. AirCell says it can expand its service to include cellular voice calls a year or two after its data launch, if U.S. airlines ever have the stomach for it. Already, LiveTV, the satellite television arm of JetBlue Airways Corp., paid \$7 million at an FCC auction for a more-limited frequency that could be used for cellular phones. JetBlue hasn't said what its plans for the frequency will be.

Someday, many more travelers may be donning noise-canceling headphones.

Write to Scott McCartney at middleseat@wsj.com