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October 11, 2005

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: WT Docket Nos. 03-103 and 05-42
Notice of *Ex Parte* Presentation

Dear Ms. Dortch:

This is to inform you that representatives of AirCell, Inc. ("AirCell") participated in e*x parte* meetings on October 11, 2005 to discuss a number of issues in the above-referenced proceedings. Specifically, Bill Gordon, AirCell Vice President for Regulatory Affairs, and I, counsel to AirCell, met with John Giusti, Legal Advisor to Commissioner Copps, and Barry Ohlson, Senior Advisor to Commissioner Adelstein.

During the meeting, the following issues were discussed:

- AirCell repeated its request that the Commission provide a 35% bidding credit for very small businesses in the upcoming ATG auction. AirCell explained that it has the proven resources needed to deploy a nationwide ATG network, given that only about 135 cell sites would be required, but that a higher bidding credit is needed to ensure that it will be able to compete against extremely well-funded bidders for the spectrum.

- AirCell reiterated its opposition to Space Data's Petition for Reconsideration, which requests that the Commission allow terrestrial operations in the ATG band. AirCell noted the opposition of all other parties in the proceeding, adding that the FCC should reaffirm its earlier decision.

- AirCell continued to question Verizon Airfone's need for a two-year transition period to move its current narrowband ATG network from 4 MHz to 1 MHz. AirCell expressed its concern that a two-year transition period could

unnecessarily delay AirCell's effort to deploy a broadband ATG network should it acquire a license to provide the service.

To clear up any confusion on this issue, AirCell suggested that the Commission should ask Airfone to submit a detailed description of, and rationale for, the changes needed for the transition, as well as a corresponding schedule of milestones for when those changes will be made.

In addition, AirCell discussed its recent ATG technology demonstrations, as described in the three attached articles provided during the meetings. AirCell also generally reiterated its positions from previous filings made in the above referenced dockets.

Pursuant to Section 1.1206(b)(1) of the Commission's rules, I am filing this notice electronically in the above-referenced docket. In addition, I am sending one copy of this notice via e-mail to the FCC representatives listed below. Please contact me directly with any additional questions.

Respectfully submitted,

/s/ Michele C. Farquhar

Michele C. Farquhar
Counsel to AirCell, Inc.

Attachments

cc: John Giusti
Barry Ohlson

WAEA INDUSTRY NEWS | WIN

Your biweekly source for the latest news and intelligence on the inflight entertainment and communication industry.

Headlines for 16 SEPT. 2005

➤ AIRCELL DEMO FLIGHT: BROADBAND & WI-FI

➤ EFLYTE INTROS INFLIGHT GAMBLING

➤ AVIANCA SELECTS GLOBAL AIRWORKS IFE

➤ AIR INDIA TO INSTALL THALES AVOD

➤ BOEING AND AEROMOBILE

➤ SURVEYS PREDICT DRAMATIC GROWTH IN IFE EXPENDITURE

➤ MAXJET & MARTINAIR OFFER DIGEPLAYER

➤ IMS TO INTRO NEW 'P-SERIES' PORTABLES

➤ WAEA CONFERENCE KEYNOTE — UPDATE

➤ NEWS BRIEFS

➤ PEOPLE ON THE MOVE

➤ WAEA DIRECTORY UPDATES

AIRCELL DEMO FLIGHT: BROADBAND & WI-FI CABIN

This story was filed via e-mail 13 Sept. from onboard an excutive jet (flying 11,000 feet above Kansas City) custom equipped with a prototype of the AirCell Broadband System that allows passengers to use their personal mobile phones and other wireless devices inflight.

Using a dedicated terrestrial broadband air-to-ground (ATG) link, AirCell's system lets passengers make GSM (Global System For Mobile) and CDMA (Code Division Multiple Access) cell-phone calls, send and receive e-mails and text messages, access the Internet and their corporate virtual private networks, and view live streaming video.

The system, targeted for commercial deployment in second quarter 2007, is a solution for the continental US and potentially North America, explained Jack Blumenstein, AirCell Chairman and CEO.

Use Fees/Equipment Costs

A voice call is expected to cost "well below" US$1.00 per minute, and data sessions will cost approximately US$9.95 per flight.

Onboard equipment will cost less than US$100,000 per aircraft and can be installed overnight. Onboard equipment includes a

(cont. on page 2)

EFLYTE INTROS INFLIGHT GAMBLING

EFlyte, Inc., a US-based game designer and developer, is introducing an inflight gambling system at the WAEA 26th Annual Conference & Exhibition in Hamburg, according to David Morgan, CEO of eFlyte.

The system, branded "Flytebet™, lets passengers wager by swiping their credit card as they play slots, blackjack, and poker. Intended to be "low-stakes" play, eFlyte allows each player to bet a total of US$350 on their credit card, and winnings will be limited to US$3,500.

"It is not meant to be a high-stakes gambling environment," Morgan stressed. "It is an addition to the games we currently offer onboard aircraft and will be something that gives people a little extra excitement and entertainment."

Because of regulatory restrictions in the US, Flytebet™ is aimed at international flights.

(cont. on page 2)

WAEA
26TH ANNUAL
CONFERENCE
& EXHIBITION
20-23 September 2005
Hamburg Messe & Congress Center Hamburg
Hamburg, Germany

69 Airlines and 146 Vendors already registered! See List on page 4!

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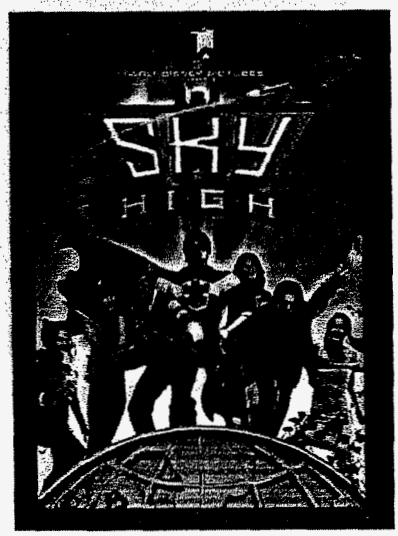

Available December 1, 2005
Contact: Linda Palmer
818-840-1920

AIRCELL DEMO FLIGHT

(cont. from page 1)

commercial off-the-shelf Pico cell, network components, air-to-ground broadband radio, and an antenna (small enough to fit in the palm of a hand) that is mounted on the aircraft's belly.

The business case for an airline shows payback in less than 24 months, Blumenstein added.

Demo Details

The demonstration used a broadband terrestrial air-to-ground link utilizing a limited number of ground cellular sites of a major cellular provider. The sites were temporarily outfitted with special antennas and electronics under AirCell's experimental license from the US Federal Communications Commission (FCC).

AirCell's solution takes advantage of existing ground cellular infrastructure: "the tower, the power, the building, and the telecom backhall," said Bill Peltola, AirCell Vice President, Sales & Marketing.

Bandwidth

Connection speed on the demo flight was 2.4 mb/sec up (ground to air) and 150 kb/sec down (air to ground). These speeds will increase to 3.1 mb/sec up and 1.8 mb/s down when the system is launched in 2006, according to AirCell.

The combination of the recent decision by the FCC to make ATG spectrum available for broadband and the newer technologies and protocols for putting data on those radio frequency links allows a great deal of data throughput in a small amount of bandwidth, Peltola explained.

Network Roll-out

AirCell plans to deploy a national terrestrial network by the middle of next year. In preparation for the rollout the company is "moving forward aggressively with some industry partners and potential partners" preparing for the FCC auction of air-to-ground spectrum in second quarter 2006. [Editor's note: See the 16 January 2005 issue of *WIN* for more information concerning the FCC auction.]

Admitting the possibility that AirCell might not be successful in securing enough spectrum to rollout a broadband network, Peltola said: "We do have other ways of approaching it. There are other ways both commercially and technically that we believe will allow us to rollout a network even in a scenario where somebody else won the primary segment of spectrum." He could not provide more specific information at this time.

Following the auction, AirCell expects to sign one or more airlines for initial trials and then production rollout, Peltola said.

WIN

EFLYTE INTROS GAMBLING

(cont. from page 1)

eFlyte's software architecture is proven, the new generation of IFE platforms are compatible with that software, and financial back-office support has been validated to ensure the efficiency and reliability of transactions, stated David Morgan. "The time is right for inflight gambling to be introduced."

Airlines that visit the company's booth will be invited to enter a slot tournament. Each entrant's score will be recorded, and the highest score logged at the end of the week will win the grand prize: an all-expenses-paid vacation for two at a luxury Las Vegas resort.

WIN

AVIANCA SELECTS GLOBAL AIRWORKS IFE

Avianca Airlines (headquartered in Bogotá, Columbia) will install Global AirWorks' recently introduced IFE system on its fleet of 25 Boeing 767, 757 and MD-83 aircraft beginning October 2005. Global AirWorks is the aviation division of Global ePoint, Inc., a manufacturer of aviation and security technologies.

The IFE system features a Global AirWorks Media Max digital audio/video server and state-of-the art LCD screens, replacing Avianca's existing CRT (cathode ray tube) monitors.

Airworks will install 32-inch center bulkhead screens, 17-inch side bulkheads for the first rows, and 17-inch monitors throughout the rest of the aircraft, explained Ricky Frick, President and CEO of Global Airworks.

"The system not only improves viewing quality, but by replacing old projection systems and heavy CRT screens, it also eliminates 300 pounds of weight per aircraft generating approximately US$300,000 of annual fuel savings per aircraft," Frick added.

(cont. on page 3)

Emirates Airline is rapidly expanding its global network flying now to over 70 destinations and increasing its modern fleet of wide-bodied jets to over 120 by the year 2012. Today we offer passengers more than 500 channels of entertainment and games as well as WiFi email and seatback connectivity.

Technical Services Engineer IFE Specialist

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IFExpress

Free IFE and Communication Industry News
for September 20, 2005

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http://www.airfax.com/airfax/ifexpress/

AirCell Hot Topic: Introducing AirCell Broadband!

Earlier this month, IFExpress flew AirCell's newest Broadband System on a test flight using their experimental system set up on a tower in Kansas City. In one word, it was fast (Ok that was three,, sorry)! We loved it and this system will be one of the competitors in the forthcoming NATS frequency allocation and auction. Here are some of the features they plan to deploy and we tested a few in beta development:

1. A broadband terrestrial air-to-ground link that provides a high-speed connection directly from the aircraft to the ground. The link will utilize a limited number of ground cellular sites temporarily outfitted with special antennas and electronics under AirCell's experimental license from the FCC. The technology employed will provide a "to-the-seat" user experience that averages 300 to 500 kbps, with peak speeds of 3.1 Mbps - comparable to a typical Wi-Fi 'hotspot'.
2. An Iridium satellite link that provides extended, global coverage for voice and low-speed data service when outside U.S. terrestrial coverage. This link can be integrated with the domestic broadband link, or serve as a stand-alone off-aircraft link outside the U.S.
3. A cabin Pico cell that allows demonstration participants to place and receive calls on their own personal cellular phones.
4. Cabin Telecommunications Router (CTR) that provides high-speed, in-cabin wireless connectivity for Wi-Fi-equipped laptops (802.11b/g) and personal digital assistants

Watch our website for an upcoming feature story that will provide more detail.

AIRFAX.com

Return to Story

AirCell Broadband!

As the revamping of the US wireless in-flight connectivity and voice system continues, the FCC (in conjunction with the FAA) is preparing for an auction of the wireless bandwidth in the 800 and 900 Megahertz frequency bands. Previously called NATS, the bandwidth auction next year will no doubt bring a virtual Noah's Ark of teamed competitors to the party. Names like Boeing, AirCell, Verizon will be most assuredly be on the bidders list but we think names like Sprint, T-Mobile will be there too. What would attract names like this to a mere 2 Megahertz of bandwidth? For one thing, future airborne high-speed data and voice usage with the technically acceptable PED's for starters, and another, a new way to reach, connect and entertain airline passengers. But let's start at the beginning.

Conceived and implemented in the 80's and 90's, in-flight telephony was the child that never quite grew up. Names like In-Flight Phone Corporation, GTE Airphone, Magnastar, AirOne, AT&T Wireless, Verizon, AirCell have been associated with telephones on airplanes in the US. The fate of onboard passenger phone and data connections on commercial aircraft, however, would be dealt a fatal blow by pricing and universal connectivity on the ground. The ubiquitous cell phone won. While rates dropped lower there were other factors that influenced the demise of NATS as we knew it. Billing was a big issue; passengers wanted to pay one bill and connectivity providers scrambled to deliver cross platform payment solutions...and some succeeded. Aircraft equipment pricing also presented challenges for some. In the end, there was no escaping the ugly truth: passengers wanted to talk on their cell phones on planes and wanted to do so at rates comparable with cell phone ground charges. They also wanted ground-like speeds for Internet connectivity. For many reasons that was never to happen, at least in the air. The FCC noted the clamor and wisely saw that technology could come to the aid of an underused spectrum. The rest, as they say, is history.

Jump to September 2005 and an airfield outside Boulder Colorado. AirCell, an in-flight connectivity provider who in the past adapted cell and satellite technology for aircraft usage, taxied leased and modified Falcon Jet 2000 in position for takeoff. The plane had one slightly different outward appearance...an unusually small antenna, about the size of a deck of playing cards, on the rear underbelly. The plane continued roll, lift-off and proceeded toward Kansas City to an experimental cell tower site where something different was to be demonstrated. The aircraft was full of technicians, marketers, a few journalists, cell phones, laptops, and a very small set of black boxes all connected to the small, external antenna. At 11,000 feet the fun began! Broadband, AirCell Broadband to be exact.

We tested GSM and CDMA phones first. While the handsets were not optimized for background noise, they were very acceptable. Ground listeners were able to hear our words clearly and we did find an onboard tendency to raise our voices. The hands-down winner was Skype for voice, a flavor of VOIP. Thru a laptop and headset, conference calling was spectacular. This solution is by far the best voice option and this author clearly talked to a conference room full of people and could be heard by all. Not to mention the noise canceling boom microphone and earpiece aided in hearing on the noisy plane environment and required lower levels of talking.

Email over Wi-Fi was perfect. The speed was DSL-like and email and Internet surfing worked flawlessly...even when there were some 8 people using the system. This is an addictive problem as we noted earlier, if you can get your email while flying, you are gonna do it! The PDA's using Wi-Fi worked equally well.

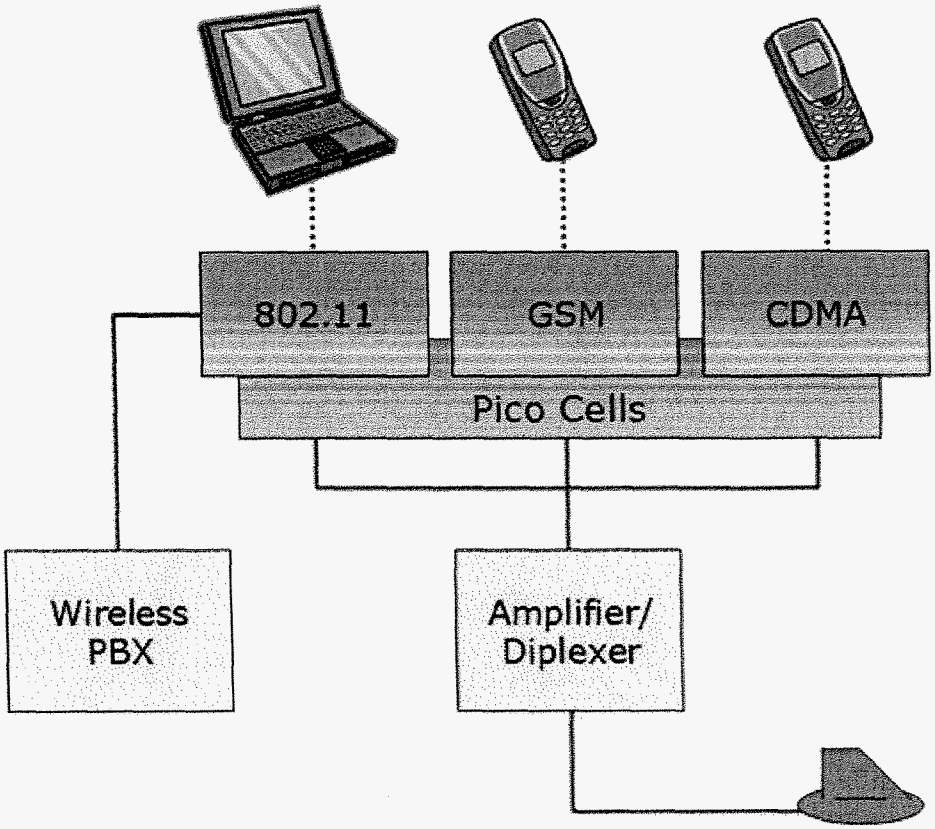
We further tested an interesting technology called SlingBox. Essentially, SlingBox is an inexpensive black box connected to your ground-based television (like TIVO), but unlike TIVO, it is also connected to your high-speed Internet router. So, we in the air could watch what the ground TV was playing...and we did. Think of the possibilities!

As a personal note, this author had not been too impressed by the possibility of working on an airplane. I'm always jealous of those corporate boys and girls glued to their laptops and PDA's in an environment that is just slightly quieter than a pressroom or machine shop...too much computer work with too little room. But when the old "e" of Internet Explorer became active on my computer, I was glued to my screen! Actually everybody, and I mean everybody who had a laptop or wireless PDA, was getting his or her email.

IFExpress Inflight Rule 1 - If high speed email and/or Internet connectivity is available on an airplane, you cannot resist.

AirCell CEO Jack Blumenstein, noted the many ways that airlines could use his new system. By providing almost every ground-based connection option (CDMA, GSM, Wi-Fi,) and the means to control it, the AirCell approach would let airlines

choose their solution to in-flight telephony. Those that did not want to tackle the cell phone issues in the air could choose to provide different options in different locations in the plane...perhaps voice & data in business class and text messaging and Wi-Fi in economy. Choice is he operable word here.



The system tested was of a COTS nature. An amplifier/diplexer is connected to the external antenna and lined to 3 picocells that delivered phone and data in 3 flavors: 802.11, GSM, and CDMA. AirCell patents (14 and more in the works) gives them a strong position for the forthcoming auction/selection. Their experience in high altitude cell phone development proved very useful in the understanding and manipulation of transmission problems emanating from Doppler effects. Cell to cell hand-off is another challenging issue in air-based cell telephony systems but their name should be indicator enough for the reader .

The net result from all this technology was expressed by Blumenstein; "the AirCell network will bring the cost of airborne connectivity features down from $4 bucks a minute to prices closer to what cell phone subscribers pay for roaming in the US, Canada and parts of the Caribbean today. After all, this market comprises some 40% of the worlds airline traffic."

But there is more here than meets the eye! Look at it this way: this system, when coupled with an appropriate server, becomes a "new IFE". I wont elaborate on this possibility but there has never been such a IFE opportunity, indeed, one in which the passenger brings the seat hardware! Vendors, think about this one.

With these AirCell Broadband, the airline has a new pipe for customer interface on their airplanes, bigger than ever before. As newer and newer handheld products appear in passenger's hands, entertainment and communications options open up. The airline controls the wireless interface and aloso has the opportunity to provide more services. And more possibilities for revenue, dare we say it? Take smartphones, for example, with a Windows interface; smartphones should provide a very serviceable computer-like phone GUI in locations where Internet connectivity was previously unavailable or physically impossible – think economy. Wi-Fi, VOIP, email, streaming audio and video, high data rate cell and voice comms may be in your future, even if enough legroom isn't!

Data upload to, and down from the aircraft can be much larger and cost less at the same time with AirCell Broadband. If you are thinking of ACARS, you have also uncovered another application, Aircraft trend data, crew information, IFE content, spares and maintenance updates as well as airline communication are also possible at 2.4 megabits/sec to, and 150 kilobits/sec from, the airplane.

"My only worry about the forthcoming auctions is an irrational buyer in a monopolistic marketplace," said Jack. Loosely translated he means that a spectrum bidding environment that gets very expensive and provides only one solution/winner will be the "perfect storm" AirCell would like to avoid. Although, we think their patent position and the possibility of attracting high

value partners still places them in a very good light, especially since their worldwide Iridium satcom connection solution has been very successful and continues to grow.

All in all, we all were all impressed by the speed and clarity of the AirCell Broadband System and if there was one reservation, it was the urp-potential presented by flying at sub-ten thousand foot altitudes in choppy air, with lots of head-down, computer time. Airlines will undoubtedly solve the problem by shutting the system down before take-off and during approach...and we will not mind at all. Trust me.

Return to Story