

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Expanding Access to Mobile Wireless Services) WT Docket No. 13-301
Onboard Aircraft)

Comments of the Association of Flight Attendants-CWA, AFL-CIO

Submitted: February 14, 2014

The Association of Flight Attendants-CWA, AFL-CIO (“AFA”), the world's largest flight attendant union representing nearly 60,000 members working for 19 U.S. airlines, submits the following comments in response to the Federal Communications Commission (“FCC” or “Commission”) Notice of Proposed Rulemaking (“NPRM”), *Expanding Access to Mobile Wireless Services Onboard Aircraft*.¹ The FCC is proposing “new rules governing mobile communications services aboard airborne aircraft” that “would give airlines, subject to applicable Federal Aviation Administration (FAA) and Department of Transportation (DoT) rules, the choice of whether to enable mobile communications services using an Airborne Access System and, if so, which specific services to enable.” The proposal would also forbid “airborne use of mobile services ... unless they are operating on an aircraft equipped with an Airborne Access System.”²

For a number of reasons, discussed in detail below, AFA objects to rescinding the existing FCC ban on in-flight use of cellular technology. As FAA certified crewmembers, flight attendants are duty bound to maintain safety, security and order in the cabin, protect the flight deck at all costs, as well as perform a host of other responsibilities before, during and after flight. Allowing passengers to use cell phones during commercial flights will add unacceptable risks to aviation security, compromise a flight attendant’s ability to maintain order in an emergency, increase cabin noise and tension among passengers, and interfere with crewmembers in the performance of their duties as first responders in the cabin.

Nearly ten years ago, the FCC published a proposal (WT Docket No. 04-435) that was similar in many respects to the current NPRM. This earlier NPRM asked whether the ban on use of cellular phones on airborne aircraft should be relaxed or lifted³ and prompted thousands of comments from interested citizens as well as industry stakeholders. In response to this earlier proposal, AFA submitted comments in May 2005 requesting that the ban on the use of cellular telephones

¹ FCC; *Expanding Access to Mobile Wireless Services Onboard Aircraft*; WT Docket No. 13-301; FCC 13-157; December 13, 2013. (http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-13-157A1.pdf, accessed February 4, 2014)

² FCC 13-157; numbered paragraph 1; page 2.

³ FCC; *Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft*; WT Docket No. 04-435; FCC 04-288; February 15, 2005. (http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-288A1.pdf, accessed February 4, 2014)

on airborne aircraft be maintained to protect national security (as well as public safety and passenger privacy).⁴ The FCC terminated this earlier proceeding in April 2007, citing “insufficient technical information that would allow the Commission to assess whether the airborne use of cellular phones may occur without causing harmful interference to terrestrial networks.”⁵

As this earlier FCC NPRM was terminated before any response to AFA’s comments and questions were published, and because the current proposal is an attempt to achieve a similar result (i.e., use of cellular technology on airplanes in flight), we ask that our comments to the previous NPRM be considered again; they are provided in their entirety as Attachment 1 of this letter. The concerns raised in our earlier comments, in particular with respect to potential security threats to the U.S. commercial aviation system, have changed little in the nearly ten years since the previous FCC NPRM. In addition, the U.S. Departments of Justice and Homeland Security and the Federal Bureau of Investigation also submitted comments to the FCC in response to the previous NPRM, suggesting the possibility of threats to national security from airborne use of cellular technology: “The uniqueness of service to and from an aircraft in flight presents the possibility that terrorists and other criminals could use air-to-ground communications systems to coordinate an attack (e.g., a hijacking).”⁶ We therefore recommend that as part of the current NPRM review process, the FCC and other affected regulatory agencies and industry stakeholders review, and respond to, these earlier DOJ *et al.* comments as well.

The FCC argues that the new proposal is “focused on data services, but it is technology-neutral; we do not propose to limit the use of mobile communications services on airborne aircraft to non-voice applications. Deployment of such services, including etiquette and other rules, would be at the discretion of individual airlines, within the context of any rules or guidelines established by the FAA or DoT.”⁷ Unfortunately, based on AFA’s long experience with the commercial aviation industry, it is clear that merely allowing for the possibility of in-flight use of cellular services will be more than sufficient justification for some airline executives to test the waters. In fact, Ben Baldanza, the CEO of Spirit Airlines, a company that employs AFA-CWA member flight attendants, recently was quoted answering “Sure - If we can make money at it” to the question, “Would he allow in-flight cellphone conversations if the government lifts its prohibition?”⁸ It is reasonable to assume that eventually, following a lifting of the FCC ban, in-flight cell phone voice calling will join the long list of unpopular but now ubiquitous “innovations” of commercial aviation that includes cramped seating, checked baggage fees, and elimination of most complimentary, prepared inflight meals.

⁴ AFA; *In the Matter of Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft, Comments of Association of Flight Attendants-CWA, AFL-CIO*; WT Docket No. 04-435; May 26, 2005. (<http://apps.fcc.gov/ecfs/document/view?id=6517618073> accessed February 4, 2014)

⁵ FCC; *Amendment of the Commission’s Rules To Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft*; 72 Federal Register 20439; April 25, 2007. (<http://www.gpo.gov/fdsys/pkg/FR-2007-04-25/pdf/E7-7791.pdf>, accessed February 4, 2014)

⁶ DOJ, FBI, and DHS; *In the Matter of Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft, Comments of the Department of Justice, including the Federal Bureau of Investigation, and the Department of Homeland Security*; WT Docket No. 04-435; May 26, 2005. (<http://apps.fcc.gov/ecfs/document/view?id=6517617789>, accessed February 4, 2014)

⁷ FCC 13-157; para. 4; p. 4.

⁸ Scott Mayerowitz; *Spirit’s CEO: Ruthless strategist changing how we pay to fly*; Associated Press; February 6, 2014. (<http://www.usatoday.com/story/todayinthesky/2014/02/06/spirits-ceo-ruthless-strategist-changing-how-we-pay-to-fly/5254649/>, accessed February 10, 2014)

The FCC cites a study predicting that by the year 2022, 5000 of 14,000 wi-fi-installed aircraft will have dual wifi-cellular systems.⁹ The cited study also appears to claim that these 14,000 aircraft will represent a 50% global connectivity penetration. Given these assumptions, 5000 airborne access system-equipped aircraft will represent only about 18% of the global fleet. Further on in the NPRM, the FCC asserts that uncontrolled mobile devices will still be a problem: “We concur with the conclusions in [published reports by European policymakers] that interactions between mobile terminals onboard aircraft and terrestrial mobile networks are possible unless managed properly. Unmanaged airborne mobile devices will attempt to connect and in some cases will succeed in temporarily connecting to a terrestrial system, causing harmful interference and disruption to the system it is connected to and to surrounding systems.”¹⁰ On the other 82% of aircraft that will not be cellular-ready by 2022, not to mention the even greater percentages of aircraft lacking airborne access systems prior to 2022, we question how the global commercial aviation industry will ensure that passengers continue to respect national regulatory bans on use of licensed cellular band transmitters. This is a key issue moving forward, and we see no substantiation in the NPRM for the FCC’s apparent presumption that the ban on cellular use on airplanes not equipped with airborne access systems will be complied with, much less enforceable.

The FCC, in paragraph 30 of the NPRM, describes a network control unit (NCU) as a device that will raise the “noise floor within the cabin to prevent devices from attempting to communicate with terrestrial networks.”¹¹ We question whether this noise floor “lifter” will itself interfere with terrestrial networks. (Perhaps this possibility would explain why the FCC proposes to authorize cellular service only above 10,000 ft on commercial aircraft.)¹² Operational details aside, the proposed NCU could actually serve an important safety function, but only if an NCU is required equipment on *every* airplane on which passengers are allowed to bring cellular devices. Given that cell phones are often routinely left powered on and transmitting in cellular bands during flight,¹³ the NCU would ensure that potential interference with onboard communications and navigation systems is managed safely and that the risk of airborne cell phones interfering with terrestrial networks is mitigated. To limit cost impacts of such a requirement, the antenna and associated equipment needed to allow full connectivity would be optional.¹⁴ This would also allow reasonably rapid adoption of the equipment into airline fleets. After installing the onboard NCU, an airplane owner could later decide to provide passengers access to mobile broadband connectivity services by installing the antenna and associated equipment. We note, however, that AFA and flight attendants will continue to reject airborne passenger cell phone service if 1) voice communications on commercial flights are not banned prior to and during flight, and 2) threats to homeland security posed by unauthorized in-flight communications are not addressed effectively.

⁹ FCC 13-157; para. 2; p. 2.

¹⁰ FCC 13-157; para. 29; p. 13.

¹¹ FCC 13-157; para. 30; p. 14.

¹² FCC 13-157; para. 71; p. 27.

¹³ Based on survey results discussed in FCC 13-157; para. 2; pp. 2-3.

¹⁴ Jose Pagliery; *In-flight phone calls will cost you*; CNN; November 22, 2013.

(<http://money.cnn.com/2013/11/22/technology/cell-phone-flights/>, accessed Jan. 24, 2014), the cost of a full installation for providing in-flight mobile broadband services could be “between \$3 million and \$4 million per plane.” This presumably includes the cost of all equipment, including antennas and associated wiring, and associated FAA certification activities. However, if the intent were only to raise the noise floor to prevent cellular transmissions from interfering with onboard and terrestrial equipment, the cost per airplane would be lower, possibly much lower.

The FCC notes, in paragraph 72 of the NPRM, that radiotelephone voice services on airborne aircraft have been little used.¹⁵ This is hardly surprising, however, given the costs to the consumer of using such services. For example, according to Wikipedia, the costs of Verizon Airfone services in 2006 were \$3.99 per call (presumably to initiate the service), with a \$4.99 per minute charge.¹⁶ Also in paragraph 72 of the NPRM, the FCC cites an FAA study¹⁷ that found no significant problems related to in-flight voice calling experienced by international airlines. What's not mentioned in the NPRM, and only mentioned in passing by the FAA, is that the international roaming rates charged by providers for use of these systems are steep. According to one recent article, "calls from planes equipped with technology from OnAir, a Swiss company that counts British Airways, Emirates and Singapore Airlines among its customers, is about \$3 to \$4 per minute ... expect similar pricing [in the U.S.]"¹⁸ Following the FAA's publication of its limited study of international cell phone use, AFA reviewed the report and submitted to the FAA a critique of its methodology and conclusions. Briefly, the FAA report, which summarized results of a brief survey, was distributed only to foreign civil aviation authorities that had allowed and/or conducted trials of in-flight use of cell phones. Given the study's limited scope—for example, no information was obtained directly from airlines, front line employees, or passengers—it was hardly surprising that the FAA study concluded that "international airlines offering airborne mobile voice and data services have not experienced significant problems related to voice."¹⁹ The full AFA critique of the FAA study is provided in the letter included as Attachment 2 to these comments for review as part of this docket.

In line with the international experience, we expect that were the FCC to rescind the existing ban on cell phone use, high cellular service roaming rates will continue to minimize the number and duration of domestic voice calls on airplanes into the near future. That said, it is not unreasonable to predict that costs will eventually fall into a range that passengers will find acceptable for making routine calls. But this is only one scenario. Another, perhaps more disquieting possibility from the perspective of flight attendants, is that merely allowing cellular voice services on airplanes will open the door to Voice over Internet Protocol (VoIP) either being allowed or becoming "mainstreamed"²⁰ despite airline policy prohibitions. While airlines and wi-fi service providers currently "block" VoIP services from being accessed, there have been anecdotal reports of such use^{21,22} and the ability of users to evade software blockers is more than theoretical.²³ If VoIP calling is made available to airborne users, the competing business model for cellular voice will be severely impacted in the near term, given that internet rates will be

¹⁵ FCC 13-157; para. 72; p. 27.

¹⁶ <http://en.wikipedia.org/wiki/Airfone>, accessed January 24, 2014.

¹⁷ FAA; *Study on the Use of Cell Phones on Passenger Aircraft*; DOT/FAA/AR-12/30; July 2012. (<http://content.aristotle.com/CEA/PassengerAircraft.pdf>, accessed February 12, 2014)

¹⁸ Timothy Stenovec; *Cell Phone Calls On Airplanes May Be Outrageously Expensive*; Huffington Post; November 23, 2013. (http://www.huffingtonpost.com/2013/11/23/cell-phones-on-planes_n_4326238.html, accessed January 24, 2014)

¹⁹ FCC 13-157; para. 72; p. 27.

²⁰ <http://www.thefreedictionary.com/mainstreamed>, accessed February 11, 2014.

²¹ Molly Oswaks; *Delta Calls Cops on Viber Exec for Using His Own VoIP App In-Flight (UPDATED)*; Gizmodo; May 9, 2012. (<http://gizmodo.com/5908760/delta-calls-cops-on-viber-exec-for-using-his-voip-app-in-flight>, accessed January 24, 2014)

²² Dave Demerjian; *Despite Airlines' Promises, Customers Find a Way to Make VOIP Calls on Flights*; Wired.com; August 25, 2008. (<http://www.wired.com/autopia/2008/08/despite-airline/>, accessed January 24, 2014)

²³ Stephen Lawson; *JetBlue will enforce in-flight VoIP ban after all*; PC World Australia; December 16, 2013. (http://www.pcworld.idg.com.au/article/534381/jetblue_will_enforce_in-flight_voip_ban_after_all/, accessed January 24, 2014). While "JetBlue blocks some Internet ports commonly used for VoIP, the airline also keeps some open for video that theoretically might be used for voice, company spokesman Morgan Johnston said."

lower in comparison. On the other hand, if VoIP calling is theoretically possible but continues to be blocked by providers in favor of steering captive users to cellular voice services, the public will rightly question why they are being forced to use the more expensive option in-flight. Ultimately, we believe such policies will be unsustainable. Voice services, whether implemented through mobile broadband, VoIP, or other similar technologies, will lead inevitably to passenger frictions and air rage incidents as user costs decline. While AFA strongly maintains that the current FCC ban on in-flight use of cellular services be kept intact, any move to modify the current regulations must be *preceded* by a blanket ban on in-flight voice calls, regardless of the technology used to implement the service. In addition, other serious issues that must be addressed *before* lifting the in-flight ban on cellular services include—and this is not an exhaustive list—appropriate mitigations for potential security threats emanating from passenger use of cellular services, robust crewmember training programs, and state of the art passenger safety awareness campaigns.

In paragraph 73 of the NPRM, the FCC asks “whether it is appropriate for the Commission to take concerns regarding the use of voice service into account in this proceeding. Specifically, we seek comment on the operational impacts that may stem from the provision of voice service, and whether the Commission has any role in addressing such effects.”²⁴ Given the comments above, AFA obviously agrees that it is appropriate for the FCC to consider such concerns, and that the FCC does indeed have a role in addressing such effects should they continue to encourage, based solely on technical considerations, the use of airborne mobile broadband services.

But AFA is not alone in expecting more from the FCC—in fact, three of the current FCC commissioners agree that this NPRM is a mistake. As stated by Commissioner Pai²⁵ (with support from Commissioner O’Rielly²⁶) in his dissent to the proposed rulemaking:

“... [T]he NPRM does not adequately address public safety and national security concerns. Being annoyed at a chatty passenger during a flight is one thing. But flight safety is quite another. And while today’s item maintains that ‘issues of onboard security and safety of flight are matters primarily reserved for the FAA,’ to me the other issues at play in this proceeding are trivial by comparison.

“Back in 2005, when the Commission was considering a proposal similar to this one, the Department of Justice, Federal Bureau of Investigation, and Department of Homeland Security told us that there were ‘public safety and national security-related concerns that stem from the Commission’s proposal.’ However, their specific concerns are mentioned nowhere in today’s NPRM. For example, these federal law enforcement agencies told us that our proposal could make it easier for terrorists to coordinate hijackings or detonate remote-controlled improvised explosive devices aboard aircraft. Echoing recent comments from flight attendants, the agencies also voiced their opinion that the Commission’s proposal could lead to more air-rage incidents, which would pose difficulties for air marshals who are supposed to remain anonymous, if possible, during flights.

“... Open to moving forward with a rulemaking, I carefully reviewed the item and offered a number of suggestions for improving it. Unfortunately, most of my suggestions were not accepted, and I cannot support the proposal that remains.”

²⁴ FCC 13-157; para. 73; p. 27.

²⁵ FCC; DISSENTING STATEMENT OF COMMISSIONER AJIT PAI Re: *Expanding Access to Mobile Wireless Services Onboard Aircraft, Notice of Proposed Rulemaking*; WT Docket No. 13-301. (<http://www.fcc.gov/article/fcc-13-157a5>, accessed January 24, 2014)

²⁶ FCC; DISSENTING STATEMENT OF COMMISSIONER MICHAEL O’RIELLY Re: *Expanding Access to Mobile Wireless Services Onboard Aircraft, Notice of Proposed Rulemaking*; WT Docket No. 13-301. (<http://www.fcc.gov/article/fcc-13-157a6>, accessed January 24, 2014)

Furthermore, while nominally agreeing to move forward with the NPRM, Commissioner Rosenworcel disagreed with the notion that the Commission be silent on the issue of cell phone voice communications:²⁷

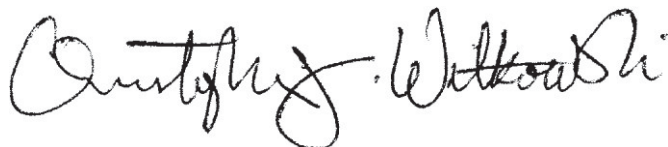
“[M]ake no mistake, I do not like this proceeding. Because I believe as public servants we have a duty to look beyond these four walls and ask ourselves if our actions do in fact serve the public. When it comes to authorizing voice calls on planes, I think the answer is a resounding no. We are not just technicians. Whatever bureaucratic desire we have to harmonize our 800 MHz spectrum rules does not absolve ourselves of the consequences of our decisions. If we move beyond what we do here today and actually update our rules to allow voice calls on planes, we could see a future where our quiet time is monetized and seating in the silent section comes at a premium. But worse, given the anger this proposal has generated and the negative response of so many of those who work on planes, I fear that our safety would be compromised. This is not acceptable.”

AFA endorses the above comments of Commissioners Pai and Rosenworcel and supports their efforts, as well as those of Commissioner O’Rielly, to ensure that the FCC responds to the legitimate concerns of flight attendants and the public as it ponders the consequences of this proposed rulemaking. AFA also urges the remaining commissioners to join their three colleagues in their views.

In conclusion, while AFA and its member flight attendants oppose the proposed rulemaking, we offer our support to the FCC, FAA, and other affected stakeholders in considering these issues in order to ensure that the public interest is met in providing only the services that most consider appropriate during flight, while continuing to maintain the historically high levels of safety and security that our nation’s commercial aviation system has attained in the recent past. Thank you for your consideration of these comments.

Respectfully submitted,

ASSOCIATION OF FLIGHT ATTENDANTS-CWA, AFL-CIO



Christopher J. Witkowski, Director
Air Safety, Health and Security Department
501 Third Street NW
Washington, DC 20001
(202) 434-0593
cwitkows@afanet.org

Attachment 1: In the Matter of Amendment of the Commission’s Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft, Comments of Association of Flight Attendants-CWA, AFL-CIO (May 26, 2005)

Attachment 2: AFA Comments on the 2012 FAA Cell Phone Study

²⁷ FCC; CONCURRING STATEMENT OF COMMISSIONER JESSICA ROSENWORCEL Re: *Expanding Access to Mobile Wireless Services Onboard Aircraft, Notice of Proposed Rulemaking*; WT Docket 13-301. (<http://www.fcc.gov/article/fcc-13-157a4>, accessed January 24, 2014)

Attachment 1: In the Matter of Amendment of the Commission's Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft, Comments of Association of Flight Attendants-CWA, AFL-CIO (May 26, 2005)

**Before the
FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)
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Amendment of the Commission's Rules to) WT Docket No. 04-435
Facilitate the Use of Cellular Telephones and)
Other Wireless Devices Aboard Airborne Aircraft)

**Comments of
Association of Flight Attendants-CWA, AFL-CIO**

The Association of Flight Attendants-CWA, AFL-CIO ("AFA") hereby submits these comments in response to the Federal Communications Commission ("FCC" or "Commission") Notice of Proposed Rulemaking ("NPRM") on the use of cellular telephones on airborne aircraft.¹ AFA is the world's largest flight attendant union with 46,000 members at 22 airlines.

The FCC and the Federal Aviation Administration ("FAA") should maintain their respective bans on the use of cellular telephones on airborne aircraft to protect public safety and passenger privacy. The scientific community has yet to reach any definite conclusion on the amount of interference with navigational and other electronic equipment generated by cell phones on airplanes. The FAA has commissioned a study on the issue by a special committee of RTCA, Inc. ("RTCA", formerly the Radio Technical Commission on Aeronautics); the final report is not due until the end of 2006.

According to polls, the public has indicated its overwhelming support, by a 2 to 1 majority, for the current policy barring cell phone use on airplanes. Moreover, the Commission has already received more than 7,400 comments in this proceeding, the vast majority of which

¹ *Amendment of the Commission's Rules to Facilitate the Use of Cellular Telephones and Other Wireless Devices Aboard Airborne Aircraft*, WT Docket No. 04-435, Notice of Proposed Rulemaking, FCC 04-288 (released Feb. 15, 2005) ("NPRM").

oppose lifting the ban. The comments are largely from individuals who do not want to sit next to someone yelling into their cell phone during a flight. Unlike a passenger rail operator, an airline cannot designate a “quiet car” in the enclosed space of an airplane. In these times of long lines and frazzled nerves from heightened security and flight delays, conflicts between passengers over cell phone use could quickly move from annoyance to full-scale rage. Flight attendants will be caught in the middle of these conflicts. Extreme situations require returning to the gate to remove an unruly passenger, inconveniencing all other passengers. In addition, passengers busy talking on their cell phones are more likely to miss important security and emergency announcements. Any relaxation of cell phone usage restrictions will only lead to an increase in such incidents; therefore, to protect public safety and privacy, the Commission should maintain its ban on cellular telephones on airplanes.

Our comments concentrate on four subjects of particular relevance to airline flight attendants: 1) cellular telephones and electromagnetic interference; 2) homeland security and emergency responder communications; 3) operational disruptions in the airline cabin; and 4) the need for consistent regulation.

Cellular Telephones and Electromagnetic Interference

There is a general consensus within the technical community that cellular telephones are capable of producing radio signals that can interfere with an aircraft’s communications, navigation, and other critical electronic systems, thus threatening public safety. The RTCA Special Committee 202 was tasked by the FAA to study the effects on aircraft systems of electromagnetic interference (“EMI”) of emissions from portable electronic devices (“PED”) such as cell phones or other wireless handsets. Based on a review of all relevant technical studies

and user reports, the Special Committee of the RTCA concluded last year that “all [studies] suggest that aircraft EMI susceptibility does exist in transport-category aircraft.”² In 2001, the National Aeronautics and Space Administration (“NASA”) reached a similar conclusion, noting that “PED related anomalies have happened in aircraft with advanced cockpits, and they have happened at less than desirable moments...when flight crews were already busy with the multiple tasks involved in landing or taking off.”³ According to the NASA report, about 44 percent of all cell phone interference incidents occurred during a critical phase of flight, such as takeoff/climb and approach/landing. Finally, the Civil Aviation Authority of the United Kingdom reported in 2003 that “tests that exposed a set of aircraft avionic equipment to simulated cellphone transmissions revealed various adverse effects on the equipment performance” with the recommendation that the test results “endorse current policy that restricts the use of cellphones in aircraft.”⁴

Crew member reports submitted to the NASA Aviation Safety Reporting System (“ASRS”) detail numerous instances in which cellular telephone use was suspected of causing navigational and communications problems. These reports vividly illustrate the potential for serious problems related to in-flight use of cellular phones. In one case, the autopilot on a DC-9 commercial flight made an uncommanded turn while the plane was cruising, but resumed normal operation after the captain asked passengers to turn off electronic devices. The apparent cause of the problem was reported to be a cellular phone that went off in an overhead bin at the time of

² *Guidance on Allowing Portable Electronic Devices (T-PEDs) on Aircraft*, RTCA DO-294, RTCA, Inc., October 19, 2004, p. 45, sec. 6.1.2, The Reality of Susceptibility.

³ *Personal Electronic Devices and Their Interference with Aircraft Systems*, NASA/CR-2001-210866, June 2001, pp. 11-12.

⁴ *Effects of Interference from Cellular Telephones on Aircraft Avionic Equipment*, CAA Paper 2003/3, UK Civil Aviation Authority Safety Regulation Group, April 30, 2003 (available in electronic format at www.caa.co.uk/publications), Executive Summary.

the autopilot problem. In another case, a B767-300 aircraft received conflicting navigational directions to “fly down” and “fly up” as it prepared to land. Two passengers were using cellular phones at the time of the problem. In a third case, a B737-300 aircraft had to ask for a second approach when faulty navigation readings sent the aircraft off-course during descent. Flight attendants reported that a woman in the forward area had been talking on her cell phone during the incident and that the navigation problems stopped as soon as she turned off her phone. (See Appendix for reports from NASA ASRS database that detail cell phone interference problems.)

The FCC banned the airborne use of cellular phones and cellular equipment on private and commercial aircraft in 1991 in order to guard against “harmful interference from airborne use of cellular phones to terrestrial cellular networks.”⁵ Now, the FCC proposes to mitigate such interference with the use of “pico cell” technology. Airborne “pico cells” are “low power cellular base stations installed in the aircraft for the purpose of communicating with (and controlling the operations of) cellular handsets or other cellular devices.” A pico cell is analogous to an in-building wireless system for use in the aircraft. The cellular signal travels from the cellular handset to the pico cell, which then relays the call to the ground via a separate air-to-ground link...⁶ The FCC explains that “the airborne pico cell would minimize handset power levels by instructing handsets to operate at their lowest power setting. In contrast, without a ready pico cell on the aircraft, airborne handsets would normally operate at their highest power setting in an attempt to reach base stations located far away on the ground, potentially causing interference to terrestrial cellular networks.”⁷

⁵ NPRM, paragraph 6.

⁶ NPRM, paragraph 13.

⁷ NPRM paragraph 14

In the commercial airline business, where small failures of critical systems can lead to major catastrophes and large loss of life, pico cell technology that has been thoroughly tested and certified for fault-tolerant operation is probably years away from commercial availability.⁸ With this NPRM, the Commission seeks comment from industry stakeholders to help resolve several pico cell technology and implementation issues; these questions help to highlight many of the obstacles that the regulators and industries would still have to clear before workable solutions may become available. While AFA believes most emphatically that cellular telephone use should continue to be banned on airborne commercial flights for the operational and security reasons cited above, we realize that pico cell and other technological solutions are being developed. Therefore, to register our concerns with respect to these developing technologies, we are submitting the table below, which lists our responses to the NPRM requests for comment that have a potentially significant effect on airline crew member operations.

⁸ Various means by which manufacturers may navigate the complex aircraft equipment certification process are described in the following 117 page document: *The FAA and Industry Guide to Product Certification, 2nd Edition*, prepared by the Aerospace Industries Association, the General Aviation Manufacturer's Association, and the Federal Aviation Administration Aircraft Certification Service, Sept. 2004, http://www.faa.gov/certification/aircraft/av-info/dst/CPI_guide_II.pdf

Table. FCC Requests for Comment on Pico Cell Issues that Affect Airline Crews, with AFA Responses

FCC Request for Comment	AFA Response
<p>Would the FCC “need to mandate that the pico cell cover a specific set of technologies so that all handsets on board aircraft are controlled by the pico cell”?⁹</p>	<p>It will be nearly impossible, based purely on the physical appearance of consumer devices and given practical training and time constraints, for crew members to differentiate between numerous, similar cellular telephone technology types. Thus, although “foreign” cellular telephones may not interfere with “domestic” terrestrial networks, it will be necessary for onboard pico cells to control all (worldwide) cellular telephone technologies in order to protect avionics, navigation and other critical airplane systems. Whether or not this is mandated by the FCC, we would certainly expect (and demand) that the FAA mandate pico cell control of all cellular telephone devices that may be brought on board an airborne aircraft.</p>
<p>Should the FCC “adopt technical rules regarding the onboard operation of pico cells ... [f]or example, if an airborne pico cell were to fail, how should [FCC] regulations address the risk of airborne cell phones beginning to search for a terrestrial base station and transmitting at maximum power?”¹⁰</p>	<p>The FCC should adopt technical standards that regulate all aspects of pico cell technology, installation, maintenance and operations, insofar as these standards address the risk of pico cell failure leading to the potential for interference with terrestrial networks. Furthermore, the FAA should adopt parallel standards that minimize below an acceptable level the risk posed by electromagnetic interference with airplane systems electronic systems and crew operations.</p>
<p>Should the FCC proposal “apply only to handsets operating on 800 MHz cellular spectrum ... or [should] any restrictions [the FCC] adopt[s] ... be expanded to include handsets and devices operating on [other] spectrum bands. ... [and should the FCC] prohibition on airborne cellular use ... be replaced by an industry-developed standard that would guard against harmful interference to airborne and terrestrial systems through appropriate technical and operational limitations”?¹¹</p>	<p>The first part of this question was covered above; whether the FCC proposal includes all devices and all spectrum bands is moot, as the FAA should find this necessary to guarantee no harmful interference to airplane systems. As to the second part of the question, we are not sure what is meant by an “industry-developed standard.” If these are simply “best practices” guidelines or recommendations, then we feel strongly that such “industry standards” will be insufficient to guarantee appropriate levels of safety for the traveling public. Legally-binding, regulatory standards are the only acceptable “standards” that can provide the levels of safety demanded in the commercial airline world. We would expect that the FAA will be instrumental in developing, implementing and enforcing the standards necessary to prevent harmful interference to airborne systems.</p>

⁹ NPRM, paragraph 15.

¹⁰ NPRM, paragraph 16.

¹¹ NPRM, paragraph 4.

Homeland Security and Emergency Responder Communications

In the NPRM, the FCC argues that allowing controlled use of cellular handsets and other wireless devices in airborne aircraft would protect the public by allowing public safety and homeland security personnel to communicate more effectively in the event of an airborne terrorist attack such as occurred on September 11, 2001.¹² The FCC logic is seriously flawed. In fact, law enforcement experts have advised the AFA what common sense would tell us: allowing the use of cellular telephones on airborne aircraft could actually *facilitate* terrorist activities.¹³ Lifting the ban on cell phone use on airplanes would make it easier for terrorists to communicate with each other to coordinate a successful attack or defer an attack until conditions were more favorable.

On the other hand, even with the current ban, once an onboard attack or other emergency commences, emergency personnel as well as passengers do not hesitate to use their cell phones to communicate. That is what happened on September 11, 2001, as those of us who listened to the heroic and heart-wrenching cell phone messages of that day know all too well. The FCC does not need to lift the cell phone ban to encourage law-abiding passengers and law enforcement personnel to use their cell phones in an emergency situation. However, allowing unrestricted cell phone use on airplanes *will* facilitate communication by those who seek to harm innocent people by making it easier for them to coordinate terrorist activity.

Operational Disruptions in the Airline Cabin

For commercial airline flight attendants, cellular telephone use aboard airplanes would create serious operational disruptions that would affect the safety and privacy of passengers. The

¹² NPRM, paragraph 2.

¹³ Confidential communications from a former law enforcement officer and a former federal agent.

ASRS reports provided in the Appendix show vividly how cellular telephone use on board airplanes can lead to uncomfortable or even dangerous situations. In one recent case, a passenger threatened to tear out all the hair of a flight attendant who instructed him to turn off his cellular phone after three public announcements to turn off all phones. The aircraft was forced to return to the gate and the man was removed from the plane for harassing a crew member. In another case, a passenger who refused to turn off his phone first used a newspaper to hit another passenger who urged him to comply. The man then screamed and hit a flight attendant who tried to calm him down. The offending passenger was finally removed from the flight. In a third case, a passenger yelled profanity into his phone, and only turned it off after receiving multiple requests to comply. Later, the same passenger was found to be talking on a second cellular phone. The passenger was removed from the plane after he became belligerent and verbally aggressive.

Allowing airborne use of cellular telephones is a prescription for bedlam in the skies. The number one responsibility of flight attendants is to ensure passenger safety. Gaining the attention of passengers in an emergency such as an evacuation is a top concern. In such situations, crew members fear that rampant cell phone use will lead to chaos. As one flight attendant wrote: “(imagine) trying to pass on important information that will save lives, yet we are competing for the attention of passengers (on their phones)...”

Many flight attendants submitted comments to the Commission in this proceeding, strongly urging the FCC to retain the cell phone ban in the interest of public safety. Here is a sampling of their comments:

- “I have seen... fist fights because one passenger puts his seat back and the passenger behind him wants to read his newspaper. Can you imagine what would happen when 300 people are gabbing away [on cell phones]?”¹⁴
- “Harried travelers would go over the edge listening to the noise.”
- “I read incident reports where passenger became disruptive because the flight is 10 minutes late, or the right type of beverage is not offered, or a multitude of other small reasons. I think that cell phones will be just another trigger for these types of events.”

More than 7,400 members of the public have already submitted comments to the Commission in support of retaining the current ban on cell phones on airplanes. They, too, urge the Commission to preserve the ban on cell phone use on airplanes:

- “I can see fights starting over this.”
- “Imagine yourself on the airplane with a sitting partner screaming in the cell phone the entire trip.”

Air travelers want the Commission to continue its ban on cell phone use on airplanes. A survey of 702 air passengers conducted by Lauer Research Inc. in March and April, 2005 found that 63 percent of those polled wanted to keep cellular phone restrictions in place. Further, the survey found that 78 percent of respondents believe that cell phone use could lead to increased passenger unruliness and interfere with flight attendants’ ability to maintain order. An equal share feels that cell phones might distract passengers from hearing life-saving instructions in an emergency. Fully 84 percent agree it is too soon to lift the ban while the FAA is still studying whether cell phones interfere with aircraft systems. Likewise, a USA Today/CNN/Gallup poll released in January found that nearly 70 percent of frequent or occasional fliers wanted to see the

¹⁴ Personal communication to AFA from flight attendant at major U.S. carrier.

ban on in-flight cellular phone use maintained.¹⁵ For the above reasons, the use of cell phones on airborne aircraft is clearly not in the public interest.

The Need for Consistent Regulation

In the NPRM, the Commission notes that the public need not fear any FCC relaxation of the rules, since the FAA and aircraft operators retain final authority over the use of portable electronic devices such as cell phones and other wireless handsets on airplanes.¹⁶ While this is true, the simple fact is that any change adopted by the FCC can and will affect public perception. Thus, simply relaxing the rules to allow the *possibility* of cellular telephone use on airborne aircraft is likely to result in increased levels of unacceptable, unauthorized use by some relatively uninformed members of the traveling public. If the FCC ban is lifted or relaxed, many passengers hearing the news might mistakenly assume that placing calls using their personal devices during flights is acceptable, despite crew instructions to the contrary. Such situations will inevitably lead to conflicts with crew members and other passengers, and result in compromised operational safety and security on many flights. Crew members are understandably concerned about the possibility of acceptance by *any* regulatory authority, including the FCC, for the airborne use of cellular telephones.

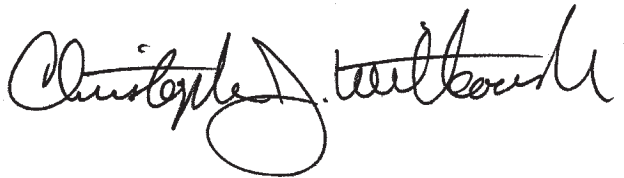
¹⁵ *Most travelers want to keep in-flight cellphone ban; 68% of regular fliers say silence is golden*; Barbara De Lollis, USA TODAY, January 13, 2005, pg. A.1. Summarized results from a USA Today/CNN/Gallup poll, which found that nearly 70 percent of frequent or occasional fliers want to maintain the in-flight cellular telephone ban.

¹⁶ NPRM, paragraph 3.

Conclusion

The FCC should maintain its existing ban on the airborne use of cellular telephones, sending a strong, consistent signal to the public that such use threatens airline passenger safety and privacy. In addition, lifting the ban could make it easier for terrorists to coordinate an airborne attack. Finally, the public as well as airline crews overwhelmingly support the current ban on cell phone use on airplanes to protect privacy, maintain civility, and ensure aviation safety and security.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Christopher J. Witkowski". The signature is written in a cursive style with a large loop at the end.

Christopher J. Witkowski, Director
Association of Flight Attendants-CWA, AFL-CIO
Air Safety, Health and Security Department
501 Third Street NW
Washington, DC 20036
(202) 434-0593
cwitkows@afanet.org

Dated: May 26, 2005

APPENDIX

Selected NASA ASRS PED Reports

Seventeen reports were obtained in 2003 from the ASRS website document
http://asrs.arc.nasa.gov/report_sets/ped.pdf

Update Number.....9.0
Date of UpdateOctober 9, 2003

In the narrative and synopsis for each of these reports, the words “CELL PHONE”, “CELL PHONES”, “CELLULAR PHONE” and “CELLULAR PHONES” have been highlighted in bold to assist visual scanning of the text.

ACN: 486835 (Appendix Report 1 of 17)

Time

Date : 200008

Day : Mon

Local Time Of Day : 1801 To 2400

Place

State Reference : FL

Aircraft / 1

Controlling Facilities.Tower : MIA.Tower

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

Mission : Passenger

Person / 1

ASRS Report : 486835

Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Passenger Human Performance

Narrative :

PAX YY HAD BEEN TOLD REPEATEDLY SINCE WE LEFT THE GATE TO TURN OFF HER **CELL PHONE**, END HER CALL. SHE IGNORED ALL REQUESTS. ON FINAL SAFETY CHKS THAT WERE BEING REPEATED BEFORE TKOF BECAUSE OF A 2 HR TSTM DELAY, SHE WAS ON HER **CELL PHONE** AGAIN. I TOLD HER TO TURN IT OFF FOR THE 5TH TIME, AND I MADE ANOTHER CEASE THE USE OF ELECTRONIC DEVICES PA. SHE IGNORED MY REQUEST PRETENDING NOT TO HEAR ME AND TUCKED THE PHONE BTWN HER SHOULDER AND EAR AND TURNED HER BACK TO ME FACING OUT THE WINDOW. NOT REALIZING THAT SHE WAS TRAVELING WITH ANYONE I LEANED ACROSS THE SEATS (SHE WAS SEATED AT THE WINDOW IN AN EXIT ROW) TO TAP HER ON THE SHOULDER SO I COULD GET HER ATTN AND LET HER KNOW THAT I WAS TALKING TO HER. AS I WENT TO TAP HER SHOULDER, THE MAN SITTING NEXT TO HER, MR XX, GRABBED MY ARM IN A FIRM GRIP AND JERKED ME AWAY FROM MS YY SHOUTING THAT I WAS NOT TO TOUCH HER. THEY WOULD SUE MY AIRLINES IF I TOUCHED HER. THEY WERE MAKING ARRANGEMENTS TO BE PICKED UP IN WASHINGTON AND TO LEAVE THEM ALONE. A SHOUTING MATCH ENSUED IN WHICH I FIRMLY TOLD MR XX TO LET GO OF MY ARM AND I TOLD MS YY TO PUT THE **CELL PHONE** AWAY NOW. SHE CONTINUED TO TALK. I WENT TO INFORM THE CAPT OF THE SIT. THE CAPT PULLED OUT OF THE TKOF LINE/SEQUENCE TO ASSESS THE SIT AND CONSIDER PAX REMOVAL BEFORE WE TOOK OFF. HE SENT ME BACK TO TELL THE COUPLE THAT IF THEY CONTINUED NOT TO COOPERATE/COMPLY WITH FLT ATTENDANT INSTRUCTIONS, WE WOULD RETURN TO THE GATE AND HAVE THEM REMOVED AND, FURTHERMORE, IF WE HAD ANY MORE TROUBLE OUT OF THEM, WE WOULD LAND IN RTE AND HAVE THEM REMOVED. THEY QUIETED DOWN. IN COORD WITH THE CAPT, WE MUTUALLY AGREED THAT THE SIT WAS UNDER CTL AND DECIDED NOT TO INCONVENIENCE THE REST OF THE PAX BY GOING BACK TO THE GATE TO HAVE THEM REMOVED. THE FLT CONTINUED WITHOUT INCIDENT. AS MS YY DEPLANED, SHE PLEASANTLY GAVE ME 'THE FINGER' AND SHOUTED '*&^% YOU' TO ME AS SHE WALKED UP THE JETBRIDGE. IN MY OPINION, CELL PHONES SHOULD NOT BE ALLOWED FOR USE ON BOARD THE ACFT AT ANY TIME.

Synopsis :

CABIN ATTENDANT RPT, S80, MIA-DCA. WOMAN REFUSED TO QUIT USING **CELL PHONE** ON TAXI. CAPT PULLED OUT OF TKOF SEQUENCE TO THREATEN TO REMOVE HER AND COMPANION.

ACN: 486935 (*Appendix Report 2 of 17*)

Time

Date : 200009

Day : Fri

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : JFK.Airport

State Reference : NY

Aircraft / 1

Operator.Common Carrier : Air Carrier

Make Model : B767 Undifferentiated or Other Model

Mission : Passenger

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 486935

Person / 2

Function.Oversight : Flight Attendant In Charge

Person / 5

Function.Flight Crew : First Officer

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Passenger Human Performance

Narrative :

THE PURSER RPTED A PAX REFUSED TO CEASE USING AND NOT TURNING OFF **CELLULAR PHONE** DURING TAXI OUT. THE PAX COMPLIED ON THE 4TH ADMONISHMENT FROM A FLT ATTENDANT. A DISTURBANCE RPT WAS COMPLETED.

Synopsis :

PLT RPT, B767 JFK-SFO. PAX REFUSED TO TURN OFF **CELL PHONE** ON TAXI OUT. PAX FINALLY COMPLIED AFTER RECEIVING WRITTEN WARNING.

ACN: 487546 (Appendix Report 3 of 17)

Time

Date : 200009

Day : Thu

Local Time Of Day : 1201 To 1800

Place

State Reference : NY

Aircraft / 1

Controlling Facilities.Tower : JFK.Tower

Operator.Common Carrier : Air Carrier

Make Model : B767-200

Mission : Passenger

Person / 1

ASRS Report : 487546

Person / 2

Function.Oversight : Flight Attendant In Charge

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Resolatory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Cabin Crew Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Narrative :

WE HAD A NAV PROB AND THE PLTS WERE TESTING THE SYS. FLT ATTENDANT #1 AND THE CAPT MADE PA'S TO TURN OFF ALL **CELL PHONES** AND THIS PAX DISREGARDED THIS AND MADE A CALL. THE PAX BEHIND HIM RANG HIS CALL BUTTON AND POINTED IT OUT TO ME. HE HUNG UP WHEN HE SAW ME. SINCE THE **CELL PHONE** COULD HAVE MESSED UP THE NAV TESTING, IT WAS A POTENTIAL DANGEROUS SIT. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THAT THEY WERE JUST STARTING TO TAXI AWAY FROM THE GATE WHEN THE PLTS STARTED HAVING NAV PROBS, SO THEY PULLED OFF THE TXWY TO REVIEW THE SYS AND CHKLIST. THE CAPT AND THE PURSER REQUESTED 3 DIFFERENT TIMES FOR PAX TO TURN OFF THEIR **CELL PHONES**. WHEN NOTIFIED OF THE MAN'S CONTINUING USE OF HIS **CELL PHONE**, THE PURSER TALKED TO HIM AND EVENTUALLY SCARED HIM. AT FIRST HE WAS SNOTTY TO HER AND THEN HE REALIZED THE SERIOUSNESS OF THE PROB, SO HE BECAME EMBARRASSED AND COMPLIANT. THE PROB WITH THE NAV DID CLR UP, BUT THE RPTR IS NOT CERTAIN WHETHER THE MAN'S **CELL PHONE** HAD ANYTHING TO DO WITH IT.

Synopsis :

CABIN ATTENDANT RPT, B767-200, JFK-SFO, NAV PROB, PULLED OFF TXWY. PAX ASKED TO TURN OFF **CELL PHONES**, MAN WOULDN'T COMPLY. PURSER WARNED HIM.

ACN: 488597 (*Appendix Report 4 of 17*)

Time

Date : 200009

Day : Thu

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : LGA.Airport

State Reference : NY

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZNY.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : B737-300

Mission : Passenger

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 14000

Experience.Flight Time.Last 90 Days : 200

ASRS Report : 488597

Person / 2

Function.Flight Crew : First Officer

Person / 4

Function.Controller : Radar

Person / 3

Function.Oversight : Flight Attendant In Charge

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Overcame Equipment Problem

Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Narrative :

DEPARTED LGA ON VECTORS N THEN W. COMS ON THE FIRST ZNY FREQ W OF LGA THERE WAS A LOUD BUZZ. COM WAS POSSIBLE BUT DIFFICULT. AS THERE HAD BEEN ABOUT A 1 HR TAXI OUT OF LGA I ASKED THE FLT ATTENDANT TO CHK FOR **CELL PHONES** OR OTHER DEVICES. THEY FOUND 5 **CELL PHONES** ON. THE PHONES WERE TURNED 'OFF' AND THE NOISE DISAPPEARED.

Synopsis :

PAX ELECTRONIC DEVICES SUSPECTED OF CAUSING COM RADIO PROBS ON A B737-300.

ACN: 492968 (Appendix Report 5 of 17)

Time

Date : 200011

Day : Wed

Local Time Of Day : 0601 To 1200

Place

State Reference : FL

Environment

Ceiling : CLR

Aircraft / 1

Controlling Facilities.Tower : MIA.Tower

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Person / 1

ASRS Report : 492968

Person / 2

Function.Oversight : Flight Attendant In Charge

Person / 4

Function.Oversight : Supervisor

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Cabin Crew Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Narrative :

FOLLOWING ALL REQUIRED PRE-DEP, DEP AND SAFETY DEMONSTRATION ANNOUNCEMENTS AND DEMONSTRATIONS, DURING THE ROUTINE SAFETY COMPLIANCE CHK, THE FLT ATTENDANT #1 NOTICED A PAX STILL ON HIS **CELL PHONE** AND CORDIALLY REQUESTED THAT HE TURN IT OFF. HE REPLIED, 'NO, WE ARE NOT TAKING OFF YET, AND DON'T TELL ME WHAT TO DO.' FLT ATTENDANT #1 THEN SAID 'A TOTAL OF 3 ANNOUNCEMENTS HAVE NOW BEEN MADE TO LET EVERYONE KNOW THAT **CELL PHONES** HAVE TO BE TURNED OFF NOW, AND AS A CREW MEMBER, I AM REQUIRED TO MAKE SURE EVERYONE COMPLIES WITH THE INSTRUCTIONS GIVEN.' THE PAX THEN STATED FLT ATTENDANT #1 WAS NOT GOING TO TELL HIM WHAT TO DO AND IF SHE (FLT ATTENDANT #1) TRIED TO ORDER HIM TO DO ANYTHING, HE WOULD PULL ALL HER HAIR OUT. FLT ATTENDANT #1 LEFT AND WENT TO THE CAPT TO RELAY SIT. FLT ATTENDANT #1 WAS VERY BOTHERED AND SHAKING. THE CAPT ASKED HER TO WAIT/THINK FOR 10 MINS, WHETHER SHE (FLT ATTENDANT #1) REALLY WANTED TO HAVE PAX REMOVED OR NOT. FLT ATTENDANT #1 SAID SHE DID NOT NEED TO WAIT 10 MINS, SHE DEFINITELY WANTED HIM (PAX) OR HERSELF REMOVED. THE CAPT SAID HE WOULD RETURN TO THE GATE TO REMOVE HIM FOR HARASSMENT OF CREW MEMBERS. THE CAPT RETURNED, THE PAX WAS REMOVED, THE PAX'S WIFE YELLED AT FLT ATTENDANT #1 AT FORWARD ENTRY DOOR AND WANTED HER NAME, THEN THE PAX'S WIFE GOT OFF THE PLANE AS WELL. UNDERLYING FACTORS: GND STOP ATC HOLD AT GATE FORCED US TO HAVE A DELAYED DEP. THIS PAX AND MANY OTHERS THINK THEY CAN COMPLY WITH SAFETY REGS ON THEIR OWN DISCRETION/TIMEFRAME. THIS CAN BE CHANGED ONLY THROUGH PUBLICIZED PERSONAL PENALTIES. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATED THAT SHE WAS THE #2 FLT ATTENDANT AND OVERHEARD THE CONFRONTATIONAL WORDS BTWN THE PURSER AND THE PAX. THEY DID NOT KNOW THAT THE MAN WAS TRAVELING WITH HIS WIFE, BECAUSE THEY WEREN'T SITTING NEXT TO EACH OTHER. THE COUPLE DIDN'T KNOW THAT THEY WERE RETURNING TO THE GATE, UNTIL THE PLANE STOPPED AND THE AGENT WALKED ON AND MADE THEM GET OFF. THE RPTR WAS VERY UPSET WITH THE CAPT AFTER HE HAD TOLD THE PURSER TO WAIT AND CALM DOWN (SHE WAS CRYING AND SHAKING) FOR 10 MINS WHILE THEY WERE STILL TAXIING, BECAUSE THEY COULD HAVE RECEIVED TKOF CLRNC AT ANY TIME AND THEY COULD TAKE OFF WITH THIS PROB MAN STILL ONBOARD.

AFA Comments to FCC WT 04-435

SHE ALSO FELT THAT THE CAPT WASN'T SHOWING A LOT OF RESPECT FOR THE FLT ATTENDANT AND FLT ATTENDANTS IN GENERAL. SHE WANTED TO RPT HIM TO THE UNION'S PROFESSIONAL STANDARDS COMMITTEE, BUT THE PURSER TALKED HER OUT OF IT.

Synopsis :

ON TAXI, MAN REFUSED TO TURN OFF **CELL PHONE**, PHYSICALLY THREATENED PURSER. PURSER HAD CAPT RETURN TO GATE AND REMOVE PAX.

ACN: 495128 (*Appendix Report 6 of 17*)

Time

Date : 200012

Day : Thu

Local Time Of Day : 1201 To 1800

Place

State Reference : GA

Altitude.MSL.Single Value : 35000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZTL.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : B737 Undifferentiated or Other Model

Mission : Passenger

Flight Phase.Cruise : Level

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 13000

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 8500

ASRS Report : 495128

Person / 2

Function.Flight Crew : First Officer

Person / 3

Function.Oversight : Flight Attendant In Charge

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment.Other Aircraft Equipment : ACARS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Detected After The Fact

Supplementary

Problem Areas : Aircraft

Problem Areas : Passenger Human Performance

Narrative :

OUR DISPATCH USES A SELECTIVE CALLING SYS. THE SYS USES 2 DISTINCTIVE RINGING METHODS -- ONE FOR SPECIFIC ACFT, THE OTHER FOR ALL ACFT ON FREQ. OUR CALL BEGAN AS A SERIES OF IRREGULAR FREQS AND LENGTH 'CHIRPS.' WE TRIED TO RECEIVE COMPANY DISPATCH ON THE 2 CLOSEST FREQS TO OUR PATHWAY -- NO LUCK. FINALLY ACHIEVED PATCH THROUGH JACKSONVILLE COUNTY STATION. DISPATCH WAS NOT TRYING TO CALL US. I ASKED 'A' FLT ATTENDANT TO RPT ALL PED'S IN USE IN CABIN. HE RPTD NO COMPUTERS OR OTHER ENTERTAINMENT AIDS IN USE, BUT THAT WHEN HE QUESTIONED A MAN WHO WAS STOWING HIS **CELL PHONE** (IT WAS OFF) A PAX IN THE NEXT ROW ADMITTED THAT HIS WAS ON AND HE HAD JUST RECEIVED A VOICE MAIL. HE THEN TURNED IT OFF. WE HAD NO FURTHER ANOMALIES. SUSPECT ELECTRONIC INTERFERENCE FROM **CELL PHONE**.

Synopsis :

PED RPTD TO CAUSE PROBS WITH COM RADIO ACARS SYS.

ACN: 497101 (*Appendix Report 7 of 17*)

Time

Date : 200012

Day : Thu

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : LGA.Airport

State Reference : NY

Environment

Ceiling : CLR

Aircraft / 1

Operator.Common Carrier : Air Carrier

Make Model : B757 Undifferentiated or Other Model

Mission : Passenger

Person / 1

ASRS Report : 497101

Person / 2

Function.Oversight : Flight Attendant In Charge

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Passenger Human Performance

Narrative :

PAX X WAS USING HIS **CELL PHONE** AT DEP TIME AFTER REPEATED PA'S BY THE #1 FLT ATTENDANT AND THE CAPT. HE WAS SEATED IN XC. A PAX IN YD REACHED ACROSS THE AISLE AND TAPPED MR X AND TOLD HIM TO TURN OFF HIS PHONE, THEN TURNED TO THE FLT ATTENDANTS IN THE AFT GALLEY AREA AND TOLD US THAT X WAS ON HIS PHONE. MR X THEN TURNED AND SWATTED YD WITH HIS NEWSPAPER AND YELLED THAT NO ONE SHOULD BE TOUCHING HIM. HE KEPT SWATTING YD UNTIL I STEPPED IN, STOPPED HIM AND ASKED HIM TO CALM DOWN AND EXPLAIN TO ME WHAT HAD HAPPENED. MR X CLAIMED THAT YD PUSHED HIM. HE THEN BEGAN SWATTING HIS NEWSPAPER AT ME AND SCREAMING AT ME THAT NO ONE SHOULD BE TOUCHING HIM. I TOLD HIM THAT HIS BEHAVIOR WAS INAPPROPRIATE AND THAT HE COULDN'T HIT AND YELL AT PEOPLE. THE COCKPIT WAS INFORMED OF THE SIT AND AGREED AFTER SPEAKING WITH MR X THAT HE SHOULD NOT BE PERMITTED TO STAY ON THE ACFT. WE DIDN'T WANT AN UNSTABLE, TYRANNICAL PAX, IF IT WAS AT ALL PREVENTABLE.

Synopsis :

CABIN ATTENDANT RPT, B757, LGA-MIA. BOARDING, PAX WOULD NOT TURN OFF **CELL PHONE**, SWATTED ANOTHER PAX AND CABIN ATTENDANT WITH NEWSPAPER. CAPT INTERVENTION. PAX REMOVED.

ACN: 504194 (*Appendix Report 8 of 17*)

Time

Date : 200103

Day : Sun

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : GRR.Airport

State Reference : MI

Altitude.MSL.Single Value : 31000

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.ARTCC : ZAU.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : DC-9 50

Mission : Passenger

Flight Phase.Cruise : Level

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 18000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 9000

ASRS Report : 504194

Person / 2

Function.Flight Crew : First Officer

Person / 5

Function.Controller : Radar

Person / 3

Function.Oversight : Flight Attendant In Charge

Events

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment.Other Aircraft Equipment : Autoplt reaction

Resolatory Action.Flight Crew : Returned To Intended or Assigned Course

Supplementary

Problem Areas : Aircraft

Problem Areas : Passenger Human Performance

Narrative :

WHILE AT CRUISE AT FL310, THE AUTOPLT MADE AN UNCOMMANDED TURN OF 15 DEGS AT 1/2 STANDARD RATE, AUTOPLT IN TURN RATE MODE. HDG SELECT SWITCH OFF, VOR/LOC TRACK NOT ENGAGED WITH BOTH RMI'S AGREEING BEFORE AND AFTER THE TURN. THE AUTOPLT CONTINUED TO FUNCTION NORMALLY FOR THE REST OF THE FLT. I ASKED THE LEAD FLT ATTENDANT AT THE TIME TO DO A PED WALK. SHE RETURNED TO SAY THAT SEVERAL USUAL TYPE OF PED'S WERE IN USE. I MADE A PA ASKING THAT PED'S BE DEPWRED AND WE COMPLETED THE FLT UNEVENTFULLY. I SUBSEQUENTLY LEARNED FROM THE LEAD FLT ATTENDANT THAT HER HUSBAND (WHO WAS A PAX ON THIS FLT) RPTED TO HER THAT HE HEARD A **CELL PHONE** RINGING IN AN OVERHEAD BIN AT ABOUT THIS TIME. SINCE I ONLY LEARNED ABOUT THIS LATER, IT WAS NOT INCLUDED IN MY LOGBOOK WRITE-UP ON THE AUTOPLT.

Synopsis :

DC9-50 FLC EXPERIENCED AN INVOLUNTARY TURN BY THE AUTOPLT DURING CRUISE. AUTOPLT REACTED NORMALLY AFTER THE CAPT ASKED PAX TO TURN OFF ANY PED'S. HOWEVER, LATER LEARNED THAT A **CELL PHONE** IN OVERHEAD BIN WAS HEARD DURING THE TIME OF THE AUTOPLT PROB.

ACN: 504303 (Appendix Report 9 of 17)

Time

Date : 200103

Day : Wed

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : ATL.Airport

State Reference : GA

Altitude.MSL.Single Value : 2800

Environment

Flight Conditions : VMC

Aircraft / 1

Controlling Facilities.TRACON : ATL.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B767-300

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Visual

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 20500

Experience.Flight Time.Last 90 Days : 400

Experience.Flight Time.Type : 8000

ASRS Report : 504303

Person / 2

Function.Flight Crew : First Officer

Person / 4

Function.Oversight : Flight Attendant In Charge

Person / 5

Function.Controller : Approach

Events

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Anomaly Accepted

Supplementary

Problem Areas : Aircraft

Problem Areas : Passenger Human Performance

Narrative :

WE WERE CLRED TO DSND TO 2800 FT AND FOR AN ILS APCH WHILE APPROX 8 MI FROM THE LOM. GS XING ALT IS 2795 FT. THE ILS IDENT HAD BEEN VERIFIED ON THE APCH CHKLIST. AFTER RPTING THE ARPT IN SIGHT, WE WERE RECLRED FOR A VISUAL APCH. AS WE INTERCEPTED THE LOC AT 2800 FT APPROX 4 MI FROM THE LOM, WE NOTICED BOTH HSI'S AND THE STANDBY ILS INDICATING 'FLY DOWN' AND THE ACFT BEGAN TO DSND. THE FO (PF) IMMEDIATELY DISCONNECTED THE AUTOPLT AND LEVELED THE ACFT. AS WE DOUBLECHKED ILS TUNING AND RAW DATA THE GS MOVED FROM 'FLY DOWN' TO 'FLY UP.' I CALLED THE PURSER AND INSTRUCTED HIM/HER TO WALK THROUGH QUICKLY AND LOOK FOR PAX USING PED'S. AFTER GS CAPTURE, ALL OPS WERE NORMAL. AFTER ARR AT THE GATE, THE PURSER TOLD ME THAT 2 PAX WERE FOUND WITH **CELL PHONES** ON. PURSER FAILED TO NOTE THE SEAT NUMBERS AND THE PAX DEPLANED WITHOUT BEING IDENTED.

Synopsis :

B767-300 CREW HAD FAULTY GS INDICATIONS AT ATL RWY 27L.

ACN: 511889 (*Appendix Report 10 of 17*)

Time

Date : 200105

Day : Wed

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : MIA.Airport

State Reference : FL

Environment

Ceiling : CLR

Aircraft / 1

Operator.Common Carrier : Air Carrier

Make Model : B767-300

Mission : Passenger

Person / 1

ASRS Report : 511889

Person / 2

Function.Oversight : Flight Attendant In Charge

Person / 4

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Passenger Human Performance

Narrative :

PAX WAS USING PROFANITY AND YELLING INTO HIS **CELL PHONE**. I ASKED HIM TO QUIET DOWN HIS CONVERSATION. APPROX 5 MINS LATER THE PA TO TURN OFF ELECTRONIC DEVICES WAS MADE. I WAS DOING MY CABIN CHKS AND HAD TO ASK PAX TO END HIS PHONE CONVERSATION. HE IGNORED ME, AND AT THAT POINT I STOOD NEXT TO HIS SEAT AND ASKED HIM AGAIN. I WAITED AS HE CONTINUED TO IGNORE ME, THEN LOUDER I TOLD HIM TO END HIS CONVERSATION IMMEDIATELY -- WHICH HE DID, TURNING OFF HIS 'FIRST' PHONE. PASSING THROUGH THE CABIN AGAIN, WITH THE PURSER BEHIND ME, I NOTICED HE WAS ON A 'SECOND' PHONE AND ASKED THE PURSER TO ADDRESS HIM. IT WAS AT THAT POINT WHERE PAX BECAME BELLIGERENT AND VERBALLY AGGRESSIVE. THAT WAS WHEN IT WAS DECIDED HE BEST STAY IN MIA.

Synopsis :

B767 PAX REFUSED TO COOPERATE WITH CABIN ATTENDANTS IN DISCONTINUING USE OF HIS **CELL PHONES** AND WHEN INSTRUCTED TO STOP USED PROFANITY AND ABUSIVE LANGUAGE RESULTING IN THE PAX REMOVAL FROM THE FLT.

ACN: 524699 (*Appendix Report 11 of 17*)

Time

Date : 200109

Day : Sun

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Intersection : KENIL

State Reference : IL

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : IMC

Aircraft / 1

Controlling Facilities.TRACON : C90.TRACON

Operator.Common Carrier : Air Carrier

Make Model : Regional Jet CL65, Bombardier (Canadair)

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Precision

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 6000

Experience.Flight Time.Last 90 Days : 131

Experience.Flight Time.Type : 3500

ASRS Report : 524699

Person / 2

Function.Flight Crew : First Officer

Person / 5

Function.Controller : Approach

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Executed Go Around

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.Controller : Issued New Clearance

Supplementary

Problem Areas : Aircraft

Problem Areas : FAA

Problem Areas : Passenger Human Performance

Narrative :

WE WERE IN THE CLOUDS AND ON A VECTOR FROM CHICAGO APCH CTLR TO JOIN THE LOCALIZER FOR RWY 22L AT ORD. BOTH NAV RADIOS HAD BEEN TUNED TO 110.1 AND THE IDENTIFIER (ILQQ) HAD BEEN RECEIVED. AS WE WERE FLYING TOWARD THE COURSE, BOTH THE CAPT'S AND FO'S CDI'S BEGAN TO WAVER BETWEEN FULL SCALE AND 'FLY RIGHT' AND FULL SCALE 'FLY LEFT' INDICATIONS. OUR DISPLAYS ALSO SHOWED INTERMITTENT LOC AND GS RED FLAGS. WE WANTED TO QUERY ATC ABOUT THE INTEGRITY OF THE 22L LOC, BUT THE CTLR WAS TALKING NON-STOP AND WE COULD NOT GET HIS ATTENTION. I WAS CONSIDERING EXECUTING A MISSED APCH WHEN THE CTLR CALLED AND ASKED US IF WE WERE RECEIVING THE LOCALIZER. WE ANSWERED THAT OUR CDI'S WERE WAVERING. THE CTLR BROKE US OFF THE APCH AND GAVE US VECTORS AROUND FOR A SECOND APCH. THE SECOND APCH TO RWY 22L WAS UNEVENTFUL AND ALL INDICATIONS WERE NORMAL. AFTER DEPLANING THE PAX AT THE GATE, WE DISCUSSED WHAT HAD HAPPENED WITH THE FLT ATTENDANT. THE FLT ATTENDANT STATED THAT, DURING HER FINAL WALK THROUGH THE CABIN BEFORE LANDING, SHE HAD TO ASK A PAX TO TURN OFF A **CELL PHONE** THAT HE WAS USING. BY MY ESTIMATION, THE TIME THAT THE FLT ATTENDANT SAID SHE SAW THE PAX USING HIS **CELL PHONE** CORRELATES APPROX TO THE TIME WE WERE RECEIVING THE

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FAULTY LOCALIZER COURSE INDICATIONS DURING THE FIRST APCH.

Synopsis :

CL65 CREW HAD ERRATIC LOC AND GS CAUSED BY PAX **CELL PHONE USE**.

ACN: 530849 (Appendix Report 12 of 17)

Time

Date : 200111

Day : Mon

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 35000

Environment

Ceiling : CLR

Aircraft / 1

Controlling Facilities.ARTCC : ZLA.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : B757-200

Mission : Passenger

Flight Phase.Cruise : Level

Person / 1

ASRS Report : 530849

Person / 4

Function.Flight Crew : First Officer

Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Airport

Problem Areas : Chart Or Publication

Problem Areas : Company

Problem Areas : Passenger Human Performance

Narrative :

I NOTICED PAX WAS USING 2 **CELL PHONES** AT SAME TIME. I SAID 'SIR, YOU NEED TO TURN THOSE CELL PHONES OFF.' HE LOOKED AT ME AND CONTINUED TO KEEP PUNCHING THE BUTTONS ON BOTH CELL PHONES. I ASKED HIM AGAIN STERNLY TO TURN THEM OFF. AGAIN, HE IGNORED ME. I LEANED OVER THE OTHER 2 PAX SO I COULD AGAIN ASK HIM TO TURN PHONES OFF, SO I WOULDN'T BE OVERHEARD BY MORE PAX. HE SAID 'CAN'T YOU BE NICE TO ME.' NOW 3 WOMEN AND 2 YOUNG GIRLS STARTED TO CRY THAT WERE SEATED IN ROW XYZ. I TOLD THE WOMEN NOT TO BE UPSET. I THEN TOLD THE PAX THAT I WOULD INFORM CAPT ABOUT SIT. HE DID NOT CARE. HE SHOWED NO EMOTION AND SAID AGAIN 'CAN'T YOU TALK NICE TO ME?' WITH NO REPLY I WENT TO CALL CAPT. CAPT TOLD ME TO INFORM PAX WE WOULD LAND IN ZZZ, US. I WENT BACK TO THE PAX AND TOLD HIM. HE WAS UNAFFECTED . STILL KEEP PHONES ON. HE AGAIN SAID 'CAN'T YOU BE NICE TO ME.' I SAID 'DO YOU WANT TO INCONVENIENCE ALL THE PAX BY DIVERTING TO ZZZ ARPT?' HE REPLIED, 'CAN'T YOU TALK NICE TO ME?' NO PAX SAID ANYTHING TO HELP ME, EXCEPT FOR AN ELDERLY WOMAN WHO TOLD PAX TO 'STOP BEING IMMATURE AND TURN THE PHONES OFF.' HE TOLD HIM OK, I WILL NOTIFY CAPT. I TURNED TO WALK AWAY WHEN HE TURNED PHONES OFF. I TOLD CAPT HE FINALLY TURNED PHONES OFF. CAPT TOLD ME TO RETRIEVE PHONES FROM PAX. (HOW DO YOU KNOW THEY WEREN'T REMOTE CONTROLS TO SOMETHING.) FEELING LIKE A PUPPET, I INFORMED PAX THAT CAPT WANTED HIS PHONES. IT TOOK ME ANOTHER 5 MINS TO RETRIEVE PHONES. I FINALLY GOT PHONES AND GAVE THEM TO CAPT. I TOLD CAPT THAT THIS PAX NEEDED TO BE MET BY POLICE AND ARRESTED. IT TOOK 15 MINS OF MY TIME AWAY FROM SERVING THE PAX. HE ALSO UPSET MANY OF OUR PAX THAT WERE ALREADY VERY FRIGHTENED. THE PAX DID HAVE A FOREIGN ACCENT WHICH I AND EVERYONE ELSE DETECTED 5 MINS INTO THE CONFRONTATION. PAX WAS MET BY POLICE AND GND PERSONNEL AND DETAINED, BUT NOT ARRESTED! WE THE CREW WERE APPALLED. #1, HE INTERFERED WITH FA DUTIES AND INSTRUCTIONS. #2, HE WAS CALM AND COULD CARE LESS THAT WE WERE GOING TO DIVERT TO ZZZ ARPT. THIS PAX HAS A 'BIG' PROB. I HOPE AT LEAST ACR WILL NOT LET HIM TRAVEL ON US AGAIN. HE TOLD PLT HE FLIES ON US TWICE A WEEK AND ALWAYS

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TURNS PHONE OFF. SO WHY WAS HE BEING SO DEFIANT WHERE HE WOULD UPSET OUR PAX AND STOOD CHANCE OF GETTING ARRESTED.

Synopsis :

A B757 CABIN ATTENDANT REQUESTED A PAX USING TWO **CELL PHONES** TO TURN THEM OFF. PAX REFUSED AND CREATED A DISRUPTION AND CONFRONTATION.

ACN: 535709 (*Appendix Report 13 of 17*)

Time

Date : 200201

Day : Thu

Local Time Of Day : 1201 To 1800

Place

State Reference : NM

Aircraft / 1

Controlling Facilities.ARTCC : ZAB.ARTCC

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Flight Phase.Cruise : Level

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 535709

Person / 2

Function.Flight Crew : First Officer

Person / 6

Function.Controller : Radar

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence.Other : cell phone use

Supplementary

Problem Areas : Aircraft

Problem Areas : Cabin Crew Human Performance

Problem Areas : Navigational Facility

Problem Areas : Passenger Human Performance

Narrative :

JUST AFTER PASSING BY PHX, WHILE ENRTE FROM DFW TO ONT, THE #4 FA ADVISED ME THAT SHE HAD OBSERVED THE PAX IN SEAT XA USING HIS **CELL PHONE** AND THAT WHEN SHE TOLD HIM THAT HE COULDN'T USE IT IN FLT HE GAVE HER A 'YEAH, YEAH' TYPE OF REPLY BUT CONTINUED TALKING ON IT. SHE SAID THAT ALTHOUGH HE HAD BEEN SOMEWHAT ARGUMENTATIVE HE HAD FINALLY COMPLIED. SHE ALSO INFORMED ME THAT THIS SAME PAX HAD BEHAVED STRANGELY DURING THEIR PREFLT SAFETY DEMO 'HOLLERING' AND 'CHEERING' BUT HAD SETTLED DOWN WHEN INSTRUCTED TO DO SO, AND THAT HE HAD 'CONKED OUT' SHORTLY AFTER TKOF. A FEW MINS LATER, I WAS INFORMED THAT THIS SAME PAX WAS AGAIN USING HIS **CELL PHONE**. AT THIS TIME I CONTACTED ONT OPS AND ADVISED THEM OF THE SIT AND REQUESTED THAT THE FLT BE MET BY THE AUTHORITIES AND THAT THIS PAX BE ESCORTED FROM THE ACFT. ARRIVING AT THE GATE WE WERE MET BY A NUMBER OF LAW ENFORCEMENT OFFICERS WHO ESCORTED THE INDIVIDUAL FROM THE ACFT WITHOUT ANY APPARENT FURTHER INCIDENT.

Synopsis :

A S80 PIC HAS TO CALL COMPANY OPS FOR A PAX TO BE MET BY SECURITY PERSONNEL FOR UNAUTH USE OF HIS **CELL PHONE** IN FLT WHILE ENRTE TO ONT, CA.

ACN: 536654 (Appendix Report 14 of 17)

Time

Date : 200201

Day : Sun

Local Time Of Day : 1801 To 2400

Place

Locale Reference.Airport : MDW.Airport

State Reference : IL

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Ceiling.Single Value : 12500

Aircraft / 1

Controlling Facilities.TRACON : C90.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B737-500

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Precision

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10500

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 5500

ASRS Report : 536654

Person / 2

Function.Flight Crew : First Officer

Person / 4

Function.Controller : Approach

Events

Anomaly.Altitude Deviation : Crossing Restriction Not Met

Anomaly.Altitude Deviation : Undershoot

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment.Other Aircraft Equipment : ils loc crs

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Executed Go Around

Resolatory Action.Controller : Issued Advisory

Resolatory Action.Controller : Issued New Clearance

Supplementary

Problem Areas : Aircraft

Problem Areas : ATC Human Performance

Problem Areas : Cabin Crew Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Narrative :

NAV INTERFERENCE. OVER CHT, CLRED '10 DEGS R INTERCEPT LOC RWY 31L PLAN CIRCLE RWY 22L.'
UPON TUNING LOC FREQ AND SETTING COURSE, IT APPEARED WE WERE ON THE LOC, ALTHOUGH
VISUALLY WE APPEARED S OF COURSE. ATC ASKED IF WE HAD INTERCEPTED AND SAID WE WERE S OF
COURSE. THE CDI THEN SWUNG FULL SCALE TO THE OTHER SIDE INDICATING WE WERE N OF COURSE. I
TURNED TO CTR THE CDI AND WE SWITCHED TO TWR. MY CDI SWUNG R INDICATING WE WERE S OF
COURSE. I NOTICED THE FO'S CDI WAS SWINGING THE SAME DIRECTION AS MINE, BUT MOVING ABOUT
HALF AS FAR. WHEN WE SAW THE RWY, WE WERE N OF COURSE WITH CDI'S INDICATING WE WERE S OF

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COURSE. WE WERE HIGH AND WELL N OF COURSE WHEN TWR ASKED IF WE COULD GET DOWN FROM THERE. WE ASKED TO BE TURNED OUT TO RE-ENTER THE PATTERN. UPON TURNING OUTBOUND WE MADE A PA ASKING PEOPLE TO PLEASE MAKE SURE THEIR **CELL PHONES** AND OTHER EQUIP WERE TURNED OFF. THE CDI'S IMMEDIATELY BECAME STEADY AND WE COMPLETED A NORMAL ILS RWY 31C CIRCLE RWY 22L WITH NORMAL INDICATIONS AND THE FLT ATTENDANTS RPTED THAT A WOMAN IN THE FORWARD LOUNGE WAS TALKING ON HER **CELL PHONE**. AS SOON AS SHE TURNED HER PHONE OFF, OUR CDI INDICATED NORMALLY.

Synopsis :

EMI. A B737-500 FLC HAS TO ASK FOR A SECOND APCH WHEN THE ILS LOC AND GS FOR RWY 31L IS SCALLOPING AT MDW, IL.

ACN: 538688 (*Appendix Report 15 of 17*)

Time

Date : 200201

Day : Tue

Local Time Of Day : 0601 To 1200

Place

Locale Reference.Airport : SVMl.Airport

State Reference : FO

Aircraft / 1

Controlling Facilities.Tower : SVMl.Tower

Operator.Common Carrier : Air Carrier

Make Model : A300

Mission : Passenger

Person / 1

ASRS Report : 538688

Person / 4

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Independent Detector.Other.Flight CrewA : 4

Supplementary

Problem Areas : Cabin Crew Human Performance

Problem Areas : Company

Problem Areas : Passenger Human Performance

Narrative :

PAX DURING TAXI OUT ANSWERED **CELL PHONE** CALL AND HEADED BACK TO THE LAVATORY. I TOLD PAX TO TURN OFF PHONE AND BE SEATED (IN ENGLISH AND SPANISH). PAX IGNORED ME AND WENT INTO LAVATORY TO CONTINUE CONVERSATION. DEMO VIDEO WAS FINISHED AND CAPT SAID FLT ATTENDANTS PREPARE, WHEN PAX CAME OUT. I TOLD PAX TO HAVE A SEAT AND IGNORED AGAIN MY REQUEST. THEN PAX BECAME ANGRY AND SAID 'WHAT ARE YOU GONNA DO IF I DON'T SIT DOWN?' ANOTHER FLT ATTENDANT NOTICED THE CONFRONTATION AND AGAIN PAX ASKED 'WHAT ARE YOU GONNA DO?' PAX WAS THEN ASKED TO BE SEATED AND REFUSED AND WAS THEN ASKED TO GET HIS LUGGAGE AS WE RETURNED TO HAVE PAX REMOVED FROM FLT.

Synopsis :

PAX REMOVED FROM FLT AFTER GND **CELL PHONE** USAGE IN LAVATORY DURING TAXI OUT AND WHEN HE LATER REFUSED TO SIT DOWN PRIOR TO TKOF AT SVMl, FO.

ACN: 548186 (*Appendix Report 16 of 17*)

Time

Date : 200205

Day : Sat

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : MIA.Airport

State Reference : FL

Environment

Ceiling : CLR

Aircraft / 1

Operator.Common Carrier : Air Carrier

Make Model : MD-80 Super 80

Mission : Passenger

Person / 1

ASRS Report : 548186

Person / 4

Function.Oversight : PIC

Function.Flight Crew : Captain

Events

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Supplementary

Problem Areas : Cabin Crew Human Performance

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Narrative :

ON A FLT FROM MIA TO ORD WE HAD A PAX INTERFERE WITH OUR DUTIES AND REFUSE TO FOLLOW INSTRUCTIONS TO TURN OFF HER **CELL PHONE**. THE PAX WAS TOLD 3 DIFFERENT TIMES TO TURN OFF HER **CELL PHONE** SO WE COULD DEPART. SHE TURNED IT OFF AT FIRST, THEN WHEN I WALKED PAST HER, 2 MINS LATER, SHE HAD HER HEAD BENT OVER INTO HER CARRY ON BAG TALKING ON HER CELL PHONE. I FINALLY TOLD HER THAT I NEEDED TO WRITE UP A WARNING LETTER ON HER SINCE SHE REFUSED TO COMPLY WITH OUR FAA REQUIREMENTS. I THEN WENT TO TELL THE CAPT WHAT WAS GOING ON. JUST THEN FLT ATTENDANT #2 CAME UP FROM THE BACK TO TELL ME THAT HE HEARD THE PAX CALL ME A 'BITCH' AS I WALKED UP FRONT. HE SAID HE TOLD HER THAT HE HEARD THAT AND SHE ADMITTED TO HIM THAT SHE DID SAY THAT. THE CAPT WENT TO SPEAK TO HER. I WASN'T THERE TO HEAR WHAT WAS SAID, BUT I DO KNOW THAT SHE WAS ON HER BEST BEHAVIOR DURING THE FLT SO WE (THE CREW) DECIDED NOT TO WRITE UP THE WARNING LETTER ON HER. WE FIGURED SHE LEARNED HER LESSON AND FELT BAD AS SHE NOW BEHAVED APPROPRIATELY. BOY, WERE WE WRONG. AFTER WE LANDED AND EVERYONE DEPLANED, SHE STEPPED INTO THE COCKPIT AND WAS VERBALLY ABUSIVE WITH THE CAPT. SHE TALKED UP THERE FOR ABOUT 5 MINS, ALL THE TIME BEING VERY HOSTILE AND ARGUMENTATIVE. THE CAPT KEPT TRYING TO EXPLAIN TO HER ABOUT FOLLOWING THE RULES OF TURNING OFF THE **CELL PHONES**. HE EVEN EXPLAINED WHY IT'S IMPORTANT BUT SHE DIDN'T WANT TO HEAR THAT, SHE JUST KEPT STATING THAT IT WAS VERY UPSETTING TO HER THAT SHE WAS REPRIMANDED FOR NOT TURNING OFF HER **CELL PHONE**.

Synopsis :

THE CREW OF AN S80 HAS A PROB WITH A PAX ATTEMPTING TO USE HER **CELL PHONE** IN SPITE OF REPEATED WARNINGS FROM THE FLT ATTENDANTS AND PIC PRIOR TO DEP FROM MIA, FL.

ACN: 557959 (*Appendix Report 17 of 17*)

Time

Date : 200208

Day : Mon

Local Time Of Day : 1201 To 1800

Place

Locale Reference.Airport : ATL.Airport

State Reference : GA

Altitude.MSL.Single Value : 4500

Environment

Flight Conditions : Mixed

Aircraft / 1

Controlling Facilities.TRACON : A80.TRACON

Operator.Common Carrier : Air Carrier

Make Model : B727-200

Mission : Passenger

Flight Phase.Descent : Approach

Route In Use.Approach : Instrument Precision

Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10000

Experience.Flight Time.Last 90 Days : 180

Experience.Flight Time.Type : 4000

ASRS Report : 557959

Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 5000

Experience.Flight Time.Last 90 Days : 120

Experience.Flight Time.Type : 1000

ASRS Report : 557959

Person / 6

Function.Controller : Approach

Person / 3

Function.Flight Crew : Second Officer

Experience.Flight Time.Total : 5500

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 900

ASRS Report : 557959

Events

Independent Detector.Aircraft Equipment.Other Aircraft Equipment : CDI

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Became Reoriented

Resolatory Action.Flight Crew : Executed Go Around

Resolatory Action.Controller : Issued Alert

Resolatory Action.Controller : Issued New Clearance

Supplementary

Problem Areas : Aircraft

Problem Areas : Environmental Factor

Problem Areas : Flight Crew Human Performance

Problem Areas : Passenger Human Performance

Problem Areas : Weather

Narrative :

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APCHING ATL FROM SW TOLD TO EXPECT RWY 27L. SUBSEQUENTLY CHANGED AND GIVEN ILS RWY 26R. NUMEROUS DEVS DUE TO TSTMS IN LCL AREA. APCH GAVE TURN TO 240 DEGS TO INTERCEPT LOC TO RWY 26R. CAPT PF NOTED IRREGULAR DEVS ON HIS CDI. FO LATE SWITCHING TO NEW LOC FREQ DUE TO USING WX RADAR. CAPT COMMANDED ON CDI DEVS AS FO SWITCHING TO LOC. CAPT'S CDI WENT TO FULL R DEFLECTION AND CAPT STARTED R TURN TO GO BACK. INTERCEPT VERIFIED BY FO'S CDI. AT THAT TIME, ATC DIRECTED FLT TURN TO 180 DEGS AND MAINTAIN 4500 FT DUE TO PASSING THROUGH LOC. SUBSEQUENT APCH WAS NORMAL. AFTER FLT, FLT ATTENDANT RPTED THAT ON APCH, A **CELL PHONE** WAS RINGING IN THE CABIN AND PAX ANSWERED CALL. SHE WAS UNABLE TO LOCATE WHICH PAX. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: WHILE ON THE INTERCEPT HDG, RPTR'S LOC NEEDLE SEEMED ERRATIC, LEADING HIM TO BELIEVE SOMETHING WAS WRONG WITH HIS RECEIVER. BY THE TIME THE FO'S ILS WAS TUNED IN, THEY HAD GONE THROUGH THE LOC. AT THAT POINT ATC, DUE TO THE WX AND THE HVY VOLUME OF TFC, ISSUED A GAR. NO FURTHER INFO REGARDING POSSIBLE **CELL PHONE** INTERFERENCE WAS FORTHCOMING.

Synopsis :

A B727-200 CREW, ON INTERCEPT HDG FOR AN ILS TO ATL, EXPERIENCED IRREGULAR LOC DEFLECTIONS ON THE CAPT'S CDI, RESULTING IN A CORRECTIVE VECTOR FROM ATC.

Attachment 2: AFA Comments on the 2012 FAA Cell Phone Study



via email to CELLPHONEcomment@faa.gov

November 5, 2012

David B. Walen
Chief Scientific and Technical Advisor for Aircraft
Electromagnetic Compatibility
Aviation Safety
Federal Aviation Administration
1601 Lind Avenue SW
Renton, Washington 98057

Re: Cell Phone Study Comments

The Association of Flight Attendants–Communications Workers of America, AFL-CIO (AFA), representing nearly 60,000 flight attendants at 21 airlines, is submitting the following comments in response to a Federal Aviation Administration (FAA) notice of availability of and request for comments on (77 FR 54651) the recent draft report, *Study on the Use of Cell Phones on Passenger Aircraft* (DOT/FAA/AR-12/30). The FAA report summarizes findings obtained from a study conducted in response to a request by the U.S. Congress contained within Section 410 of the FAA Modernization and Reform Act of 2012 (Pub. L. 112–95), which directed the agency to study the “impact of the use of cell phones for voice communications in an aircraft during a flight in scheduled passenger air transportation where currently permitted by foreign governments in foreign air transportation.”

Flight attendants have long been concerned by the potential for disruptions to safety and security from the use of cell phones by passengers on commercial flights. The subject draft report, which identifies and summarizes results of a brief survey completed by several foreign civil aviation authorities that have experience with approving the use of onboard cell phone base stations, presents information that helps shed some light on the potential hazards related to cell phone use. Given the short time allowed to conduct the study (120 days) and publish results (60 days later), it is unsurprising that the research consisted primarily of evaluating data obtained in this way. It is also not particularly surprising, given the study constraints, the minimal percentage of flights on which cell phone use is allowed, the newness of these operations, and the high cost to passengers for placing cell phone calls from their own devices, that few significant problems have been reported thus far to foreign regulatory authorities. While AFA believes that the draft report is a useful, preliminary summary of regulators’ perspectives, we feel that there are numerous stakeholder perspectives and related issues that require further exploration, including the following:



- The perspectives of foreign airline operators, as regulated parties, may be reasonably reflected by the regulators' responses summarized in the report. However, crewmember and passenger perspectives may differ. Labor unions representing flight attendants and pilots should be contacted to obtain reporting of their members' experiences operating flights with cell phones. Passenger data are more problematic; a traveler survey may help. The report's summary states that "[n]one of the civil aviation authorities reported any cases of air rage or flight attendant interference related to passengers using cell phones on aircraft equipped with on-board cellular telephone base stations." This finding should be evaluated critically against reported experiences of crewmembers and passengers.
- While AFA believes that safety and security of flight are inextricably linked, and that aviation security is put at risk by allowing unauthorized persons to use communications equipment during airborne flight operations, it is unclear whether Congress intended the FAA to address security issues with this study. Apparently, given the methods and findings of this draft report, the FAA assumed that Congress did not intend a review of security issues. However, the maintenance of aviation security requires constant vigilance, and the views of AFA and others have been stated previously with respect to the use of cell phones, in particular in comments to the U.S. Federal Communications Commission (FCC) submitted by AFA¹ and the U.S. Department of Justice, including the Federal Bureau of Investigation, and the Department of Homeland Security (DHS).² AFA recommends that the FAA, DHS and affected stakeholders conduct a review of foreign operations to ascertain what steps are being taken to address security hazards presented by the introduction of inflight cell phone use by passengers. As one example, AFA is concerned about the possibility that "normalized" use of cell phones by passengers will distract from the situational awareness of flight attendants and Federal Air Marshals, masking illicit use by terrorists or others with ill intent.
- In Section 4.2 of the report, it is stated that "Australia CASA, France's DGAC, Jordan's CARC, Ireland's IAA, and the UK CAA noted that limited trials of airplanes equipped with on-board cellular telephone base station were conducted, and that these are not currently operating the cell phone system," and that "[t]he civil aviation authorities did not gather data on the extent of passenger use of cell phones on these airplanes." Other authorities reported low usage, ranging from "low" and "limited" to 2% in Ireland and 10% in Jordan (which seems like an outlier, given the other findings.) While the UAE authority reported "millions of cell phone 'turn-ons'," it is unclear what percentage of usage this translates to. Finally, the rate reported from Brazil was also low, only 0.3 passengers per flight leg. Clearly, the experience of foreign operators is that cell phone usage is very low, and in most cases, has yet to progress beyond the testing stages given the costs of infrastructure for operators and calling rates for users.

¹ FCC WT Docket No. 04-435, *Comments of Association of Flight Attendants-CWA, AFL-CIO*, posted May 27, 2005, <http://apps.fcc.gov/ecfs/document/view?id=6517618073>, accessed November 5, 2012.

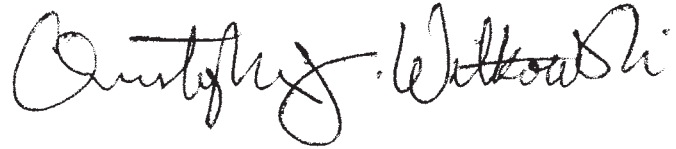
² FCC WT Docket No. 04-435, *Comments of the Department of Justice, including the Federal Bureau of Investigation, and the Department of Homeland Security*, posted May 26, 2005, <http://apps.fcc.gov/ecfs/document/view?id=6517617789>, accessed November 5, 2012.

- In Section 4.3 of the report, it is stated that “[f]or aircraft with on-board cellular telephone base stations, the civil aviation authorities had no confirmed reports of cell phones affecting flight safety.” Beyond that, however, numerous “anecdotes” are presented that describe problems created by or related to cell phone use, including:
 - Australia’s CASA ... reported anecdotal evidence of cell phone use in flight on aircraft not equipped with on-board cellular telephone base stations, but have no reports of anomalous aircraft behavior linked to cell phone use.
 - The UK CAA reported no substantive data on flight safety issues due to cell phone operation. It provided a list of reports from the CAA Mandatory Occurrence Reporting system. However, the CAA noted that the reports of suspected interference caused by cell phones had only circumstantial evidence.
 - The NZ CAA had two reports of potential cell phone interference with airplanes systems on airplanes not equipped with on-board cellular telephone base stations. However, these reports were not conclusively attributed to cell phone interference.
 - The French DGAC commented that during trials using airplanes equipped with on-board cellular telephone base stations, the telecommunication service provider reported that approximately ten percent of passengers forget to turn their cell phones off, even when the onboard cellular telephone base station was not operating.
 - Jordan’s CARC noted some complaints related to loud conversations from passengers using their cell phones on airplanes equipped with on-board cellular telephone base stations.
 - The UAE GCAA reported one airline with on-board cellular telephone base stations on its airplanes noted complaints associated with the cost of using the cell phone service.
 - The French DGAC commented that flight crews and cabin crews expressed concerns about the health impact related to the radio frequency (RF) fields that are radiated by cell phones in the airplane, and from the on-board cellular telephone base station antennas.
 - The UAE GCAA reported that one operator commented that there were cases where passengers did not comply with instructions to turn off their cell phones, which required crew intervention. They also commented that the cabin crews received complaints from passengers about the cost of the cell phone service, and complained when the cell phone service was inoperative or interrupted in flight.
 - The UK CAA also reported that cabin crews reported that some passengers, who were able to use their cell phones on aircraft properly equipped with on-board cellular telephone base stations, are not able to differentiate that some aircraft are not so equipped. Their reports through the UK CAA Confidential Human Factors Incident Reporting Programme (CHIRP) give instances of passengers refusing to switch cell phones off, and other instances where passengers complain about other passengers using cell phones when not permitted.

Taken together, these “anecdotes,” which clearly represent only the “tip of the iceberg,” paint a troubling picture of problems that must be addressed with respect to safety (e.g., electromagnetic interference effects) and security (e.g., complaints from passengers, refusals to follow crew instructions.) Given the numbers of these reports (keeping in mind that these are from regulators and not crewmembers and passengers) and the relative infancy and paucity of operations that allow cell phone use, AFA is concerned that too little data have been collected to reach any conclusions, preliminary or otherwise, regarding potential impacts on the safety and security of flight.

AFA looks forward to continuing discussions with the FAA and other industry stakeholders regarding the serious safety and security issues associated with the use of cell phones in flight.

Sincerely,

A handwritten signature in black ink that reads "Christopher J. Witkowski". The signature is written in a cursive style with a large, prominent initial "C".

Christopher J. Witkowski
Director
Air Safety, Health and Security Department