

## **APPENDIX P**



# Federal Aviation Administration

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## Memorandum

Date:

DEC 16 1991

From: Air Traffic Organization, ATO

To: All Field Facilities

Subject: Cell Phones in Operations/Work Areas

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Cellular telephones can cause audio rectification interference to air traffic controller headsets. This harmful interference has the possibility of seriously degrading, obstructing, or interrupting with radio frequency transmissions.

Due to the safety implications related to this issue, effective immediately, cellular phones shall be powered off in all operational areas, at any facility where ground-to-ground or ground-to-air communication is conducted. Union negotiations are not required.

A handwritten signature in black ink, appearing to read "David B. Johnson".

David B. Johnson  
Vice President  
Terminal Services

A handwritten signature in black ink, appearing to read "Richard L. Day".

Richard L. Day  
Vice President  
Enroute and Oceanic Services

A handwritten signature in black ink, appearing to read "Steven B. Zaidman".

Steven B. Zaidman  
Vice President  
Technical Operations Services

A handwritten signature in black ink, appearing to read "Michael A. Cirillo".

Michael A. Cirillo  
Vice President  
System Operations

A handwritten signature in black ink, appearing to read "James H. Washington".

James H. Washington  
Vice President  
Flight Services



# Federal Aviation Administration

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## Memorandum

Date: JUL 29 2009

To: Service Area Directors, En Route and Oceanic Services  
[REDACTED]

From: [REDACTED]  
Director, En Route and Oceanic Safety and Operations Support (AJE-3)

Subject: Usage of Wireless Equipment in Air Route Traffic Control Center (ARTCC)  
Operational Areas

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Numerous agency directives require ATO approval of equipment prior to use in operational areas. On September 20, 2006, a memorandum was issued specifically prohibiting use of new wireless devices in control rooms without authorization from AJE-3 (Attachment A). A subsequent memorandum issued on February 18, 2009, reiterated this guidance and stated that Air Traffic Managers shall prohibit use of any unauthorized wireless equipment in operational areas. (Attachment B).

AJE-3 recently completed an audit of wireless devices in use in ARTCC operational areas and finds most of them have not been approved for use in accordance with these memorandums and agency directives. Accordingly, all ARTCCs must adhere to following guidance:

- **Cell phones of any type are prohibited** from use in the operational control room **excluding ATC ZERO** situations as specified in JO 1900.47B, Air Traffic Organization Operational Contingency Plan. Cell phones are confirmed to cause interruption to National Airspace System (NAS) equipment and must be powered off. Vibrate mode, silence mode, airplane mode or any other mode is not authorized.
- **Plantronics CA12CD wireless headsets are not authorized.** Air Traffic Managers shall ensure no wireless devices are connected to any NAS operational equipment; this includes all VSCS equipment at operational positions and ancillary positions.
- **Spectralink cordless phones are permitted** for use in the operational areas for non-control purposes.
- **Immediately remove** any wireless device, in accordance with FAA and FCC regulations, if there is an indication it may be causing interference to the NAS.

- **Do not purchase for use or integrate any new wireless device** into operational areas without prior approval from the Director , Safety and Operations Support. AJE-3

AJE-3 is working with Technical Operations, Spectrum Engineering Services, to identify devices with push-to-talk capabilities that can be authorized for use in operational areas for non-control purposes.

If you have questions, please contact Dennis Copfer 202-267-7176 or e-mail at [dennis.copfer@faa.gov](mailto:dennis.copfer@faa.gov).



# Federal Aviation Administration

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## Memorandum

Date DEC 31 2009

To Distribution

From [Redacted], Director, Terminal Safety and Operations Support AIT 2

[Redacted] Director, En Route and Oceanic Safety and Operations Support  
AIT 3

Subject Use of Wireless Headsets in Air Traffic Control Operational Areas for Ground to  
Ground Communications

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In response to Terminal and En Route field facility requests to use the Plantronics C A12CD wireless headsets, a Safety Risk Management Panel (SRMP) was convened to determine the associated risks and develop mitigations for the use of these units in Air Traffic Control operational areas for ground-to-ground communications. The safety assessment described in the SRM Document (SRMD) was performed by applying the SRM process, as defined by Air Traffic Organization Safety Management System (SMS) Manual version 2.1 dated May 2008. The panel was completed in November 2009 and the final SRMD is currently being circulated for signatures.

The SRMP utilized the preliminary hazards analysis (PHA) tool to identify five hazards, all of which were classified as initial and residual low risks. The panel's recommended safety mitigations were to provide training on the use, applications, and limitations of Plantronics C A12CD wireless headset.

The SRMP analyzed the Plantronics C A12CD for potential safety risks to the National Airspace System (NAS) and identified some mitigations for them. It is important to note that this unit was purchased locally and thus was never formally tested. A key assumption made by the panel was that a headquarters-level organization or program office would be designated to manage this program and conduct the appropriate testing required to ensure the wireless headsets would not negatively impact NAS communications. This testing is scheduled to be completed for Terminal

voice switch systems by February 2010. Testing for En Route voice switch systems has not yet been scheduled.

The SRMD documents two years of usage data of this system and shows that there were no problems in its use. Also, there is a demonstrated history of performance by the Plantronics C A120 D in the NAS with no reported negative impact to NAS communications. Based on this history and given paragraph 3.11.6 of the Safety Management System Manual (Risk Assumption Strategy), we are authorizing the use of this device prior to having the testing completed. The SMS manual refers to this as a Risk Assumption Strategy as follows:

### 3.11.6 Risk Assumption Strategy

The risk assumption strategy is simply accepting the likelihood or probability and the consequences associated with a risk's occurrence. It is not acceptable to use an assumption strategy to treat high risk associated with a hazard. The Safety risk must still be reduced to medium or low before it can be accepted into the NAS, as required by SRM documented in this manual.

Pending results of the scheduled testing, the use of the Plantronics C A120 D wireless headset in Air Traffic Control Operational areas for ground to ground communications is authorized under the following conditions:

1. Only the Plantronics C A120 D headset is authorized for use.
2. Use is restricted to members of the operational team while discharging the duties of OMIC, OSIC, CIC, EMC, or other duties that require active monitoring of operations. They may be used to provide monitoring of one or more operational positions, and/or to effect landline coordination.
3. Use of this device during the conduct of a performance or certification skills check must be done in accordance with the provisions of direct monitoring contained in FAA Order 3120.4.
4. The unit may not be used at any Terminal or En Route operational positions, including Radar, Radar Associate, Hand-off Coordinators or any assist positions by any personnel assigned to those positions for any purpose, to include inter or intra facility coordination or any coordination typically associated with those positions.
5. The unit may not, under any circumstances, be used for two-way communication with aircraft.
6. The headsets are only authorized at facilities that were using them prior to their removal from service. Expanded use of these headsets at other facilities is not authorized.

If it is discovered that the headsets are causing any type of interference with NAS voice switches, the headsets shall immediately be removed from service. Headquarters shall be

notified of any incident that results in suspected or actual interference caused by the headset

If you have any questions or desire further information, please contact Jacob Dorsey, Manager Terminal Requirements Group, AII 25, at (202) 385-8600 or Dianne Bodenhamer, Manager Technical Performance Support, AII 36, at (202) 493-5276

Distribution

- ██████████, Director, Central Terminal Operations, AII-C
- ██████████, Director, Eastern Terminal Operations, AII-E
- ██████████, Director, Western Terminal Operations, AII-W
- ██████████, Air Traffic Manager, Eastern In Route and Oceanic Operations, AII-ZME
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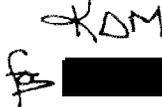
# Federal Aviation Administration

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## Memorandum

Date: FEB 18 2009

To: Service Area Directors, En Route and Oceanic Services

From:  [REDACTED] .Director, En Route and Oceanic Safety and Operations Support

Subject: Wireless Equipment and Usage in the Operational Control Room

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A memorandum was distributed by the Air Traffic Organization (ATO) in December 2005 to restrict the use of cellular phones in all operational areas due to potential interference with controller headsets and radio frequency transmissions. A subsequent memorandum, dated September 20, 2006 (attached), prohibited the use of any new wireless devices in the control room without authorization from En Route and Oceanic Services, Safety and Operations Support offices.

Per FAA JO 7110.65S, Air Traffic Control, paragraph 1-1-7, Safety Management System (SMS), FAA Order 1100.161, Air Traffic Safety Oversight, paragraph 4-1, Elements Related to Acquiring and Implementing New Systems, FAA Order 1000.37, Air Traffic Organization Safety Management System, and FAA Order 1000.39, Air Traffic Organization En Route and Oceanic Services Safety Management System, all wireless equipment must be approved by the ATO prior to use in the operational areas.

It has come to our attention that commercial, off-the-shelf wireless headsets and similar equipment has been purchased for use in the operational areas without the required approval. Examples of such equipment are Plantronics CA12CD Wireless Headsets plugged into NAS operational positions and cordless telephones acquired after September 2006. Air Traffic Managers shall prohibit the use of unauthorized wireless equipment in operational areas.

Please ensure your facilities conduct an audit of all wireless equipment being used within the operational areas. The audit must include manufacturer, model, and purpose of use. Submit the audit information and any requests for approval to ATO-W by COB March 27, 2009. Submit the ATO-W approval to ATO-E, En Route and Oceanic Services, Safety and Operations Support, Technical Performance Group, AJE-36, for final authorization.

If you have questions, please contact Diane Bodenhamer at (202) 493-5276 or e-mail at [diane.bodenhamer@faa.gov](mailto:diane.bodenhamer@faa.gov).



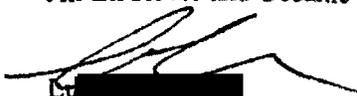
# Federal Aviation Administration

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## Memorandum

Date: SEP 20 2006

To: All En Route and Oceanic Service Area Directors

From:   
Director, En Route and Oceanic Safety and Operations Support

Prepared by: , Manager, Technical Performance Support

Subject: Wireless Devices

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Due to requests for additional usages of wireless devices in the operating area, Technical Operations (ATO-W) has been asked to further clarify its' position stated in ATO Maintenance Alert No.102229 regarding cell phone usage in the control room. Pending the clarification from ATO-W, any new wireless devices are prohibited from use in the control room without authorization from the En Route and Oceanic Safety and Operations Support office (current cordless telephones are excluded).

If you have any questions regarding this matter, contact Martin W. Adams at (202) 267-7406.



## Federal Aviation Administration

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### Memorandum

Date: FEB 18 2009

To: Service Area Directors, En Route and Oceanic Services

From: [REDACTED], Director, En Route and Oceanic Safety and Operations Support

Subject: Wireless Equipment and Usage in the Operational Control Room

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A memorandum was distributed by the Air Traffic Organization (ATO) in December 2005 to restrict the use of cellular phones in all operational areas due to potential interference with controller headsets and radio frequency transmissions. A subsequent memorandum, dated September 20, 2006 (attached), prohibited the use of any new wireless devices in the control room without authorization from En Route and Oceanic Services, Safety and Operations Support offices.

Per FAA JO 7110.65S, Air Traffic Control, paragraph 1-1-7, Safety Management System (SMS), FAA Order 1100.161, Air Traffic Safety Oversight, paragraph 4-1, Elements Related to Acquiring and Implementing New Systems, FAA Order 1000.37, Air Traffic Organization Safety Management System, and FAA Order 1000.39, Air Traffic Organization En Route and Oceanic Services Safety Management System, all wireless equipment must be approved by the ATO prior to use in the operational areas.

It has come to our attention that commercial, off-the-shelf wireless headsets and similar equipment has been purchased for use in the operational areas without the required approval. Examples of such equipment are Plantronics CA12CD Wireless Headsets plugged into NAS operational positions and cordless telephones acquired after September 2006. Air Traffic Managers shall prohibit the use of unauthorized wireless equipment in operational areas.

Please ensure your facilities conduct an audit of all wireless equipment being used within the operational areas. The audit must include manufacturer, model, and purpose of use. Submit the audit information and any requests for approval to ATO-W by COB March 27, 2009. Submit the ATO-W approval to ATO-E, En Route and Oceanic Services, Safety and Operations Support, Technical Performance Group, AJE-36, for final authorization.

If you have questions, please contact Diane Bodenhamer at (202) 493-5276 or e-mail at [diane.bodenhamer@faa.gov](mailto:diane.bodenhamer@faa.gov).