SUBJ: Controller Pilot Data Link Communications (CPDLC) in the ERAM Environment

1. Purpose of This Order. This order prescribes requirements to supplement the guidance contained in FAA Order JO 7210.3, Facility Operation and Administration, in support of the waterfall implementation and use of CPDLC in Air Route Traffic Control Centers (ARTCC) using En Route Automation Modernization (ERAM). The guidance contained in this order only applies to those facilities that have been approved to use CPDLC with ERAM for domestic operational air traffic control services. Additionally, this order prescribes requirements for Atlanta ARTCC (ZTL) and Salt Lake City ARTCC (ZLC) regarding responsibilities for managing the national CPDLC block list and emergency downlinks.

2. Audience. This order is intended for all air traffic personnel at ARTCCs that use CPDLC for domestic operational air traffic control services, and the Domestic Events Network (DEN).


4. Responsibilities. ARTCC air traffic managers must ensure that the provisions of this order are implemented and briefed to appropriate personnel prior to the initial operational use of CPDLC for domestic operational air traffic control services.

5. Explanation of Policy Changes. Whenever CPDLC in ERAM is used operationally for domestic air traffic control services, the requirements specified in this order supplement the applicable provisions of FAA Order JO 7210.3. Following CPDLC implementation at all ERAM facilities, the requirements of this order will be integrated into a future change to FAA Order JO 7210.3.

6. Background. CPDLC will be implemented in accordance with a phased schedule at ARTCCs using ERAM. The use of CPDLC is anticipated to enhance the safety and efficiency of the National Airspace System by improving the accuracy of air to ground communications. CPDLC augments, but does not replace, voice communications. This order provides controller guidance for initial CPDLC capabilities and will be revised based upon lessons learned and future development of CPDLC.

7. Definitions.
   a. Uplink: CPDLC message sent from ATC to the flight deck.
   b. Downlink: CPDLC message sent from the flight deck to ATC.

a. All ARTCC air traffic managers must ensure that the following requirements are incorporated into facility documents as appropriate, and that training for affected personnel is completed prior to the operational use of CPDLC:

1. CPDLC shutdowns must be coordinated with all affected personnel and users unless operational conditions require an emergency shutdown of the service.
   
   (a) The operational manager in charge must coordinate with each area to ensure controllers stop using CPDLC.
   
   (b) Controllers must use voice to broadcast a message alerting pilots to the shutdown.
   
   (c) Controllers must take action to ensure that any open or abnormally closed uplinks at the time of the shutdown will be resolved, by voice, with each aircraft.

2. A record of the operational status of CPDLC and its components must be maintained to include system on/off status, Initial Contact (IC) on/off status, service provider outages, service volume antenna outages, and other pertinent information.

3. Ensure Front Line Managers (FLM) and Controllers in Charge (CIC) brief the operational status of CPDLC and its components when relieved of position.

4. Establish procedures to update the frequency management tables to accurately reflect current frequency assignments.

*NOTE-*
Frequency management tables are used by the CPDLC system to determine the proper radio frequency to use when sending a Transfer of Communication (TOC) uplink to an aircraft.

5. Establish procedures to coordinate any changes to frequency management tables that will impact adjacent facilities.

*NOTE-*
1. When a frequency is out of service, any adjacent ARTCC that might use that frequency in a TOC uplink has to be informed so its frequency management tables can be updated.

2. Prior to CPDLC, sector combinations and frequency assignments were normally coordinated across facility boundaries between controllers at the operational positions. With the implementation of CPDLC, controllers should forward that information to the FLM/CIC on duty so that the frequency management tables can be updated.

b. Blocked List Procedures:

1. Contact ZTL or ZLC flight data unit to manually have an aircraft added or removed from the Blocked List.
2. When aircraft are automatically added to the blocked list by the system, for reasons other than excessive logons, flight data personnel at ZTL and ZLC are directed to remove them from the blocked list manually.

**NOTE-**

*Aircraft that are added to the blocked list for excessive logons will not be automatically removed from the blocked list by flight data personnel at ZTL and ZLC.*

c. If an emergency downlink is received at a National Facility (ZLC or ZTL), the responsible position at the National Facility must notify the Domestic Events Network (DEN) of the contents of the emergency downlink. The DEN must then forward that information to the controlling facility.

**9. Distribution.** This order is distributed to Air Traffic Organization (ATO) System Operations Services, Mission Support Services, Air Traffic Services, Safety and Technical Training, and Program Management Organization; Mike Monroney Aeronautical Center; and all ARTCCs, except Anchorage ARTCC.

**10. Safety Management System.** Appropriate safety management documentation, in accordance with FAA Order 1100.161, Air Traffic Safety Oversight, ATO Order JO 1000.37, Air Traffic Organization Safety Management System, and the ATO Safety Management System Manual, has been completed in support of this order.

Original signed by **Maurice Hoffman**

Maurice Hoffman  
Director, Air Traffic Procedures (A)  
Air Traffic Organization  

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Date Signed