
Subject: Departure Clearance via CPDLC (CPDLC-DCL)

Introduction

CPDLC-DCLs will replace domestic ACARS PDC Clearances throughout 2016 for CPDLC equipped aircraft. The 777 fleet will begin utilizing CPDCL-DCL on April 15th in LAX and JFK, with other stations to follow. Airports utilizing CPDLC-DCL will include this information via ATIS. When an airport converts to CPDLC-DCL, participating aircraft will no longer have access to PDC clearances at that airport. The backup for CPDLC-DCL will be to revert to voice.

Flight crews will log on to CPDLC using the station code, i.e., KLAX, versus requesting a ACARS-PDC. Note that CPDLC-DCL is not the ACARS 623 (Flight Information) departure clearance utilized at many foreign airports. Basic clearance information like transponder code, departure frequency, and runway/SID/transition changes will be displayed in a CPDLC text message uplink. If assigned a different route, changes from the filed routing beyond the SID/transition will be provided via LOADable route uplink embedded in CPDLC-DCL.

When the CPDLC-DCL is received, an ACCEPT prompt is displayed and when selected it sends a “WILCO” when all pages of the clearance have been viewed. Only clearances which contain a LOADable route change from the filed route will display the LOAD FMC prompt. This will likely occur less than 10% of the time either at the gate or during taxi out (i.e., weather or traffic congestion).

Once the clearance is accepted, the ACCEPT prompt will disappear. The LOAD FMC prompt will remain available to LOAD or reLOAD the route as desired. Expect to verify a CPDLC-DCL via voice for the first week after each station goes live.

During the implementation period an ACARS advisory will be sent after INIT REQ advising when a flight can expect a CPDLC-DCL.

Establish a CPDLC Connection

The flight crew must send a CPDLC logon request with the airport ICAO code, i.e., KLAX. The logon request should be sent no later than 30 minutes prior to departure.

CPDLC LOGONSend

The ATC COMM ESTABLISHED message will display when the CPDLC connection is made. No other action is required. ATC will then send the DCL when the clearance is ready for uplink. If the ATC COMM ESTABLISHED is not displayed or the DCL is not received by 20 minutes prior to scheduled departure time, contact Clearance Delivery.

When CPDLC-DCL is Received

Receipt of an uplinked CPDLC-DCL message is indicated by an •ATC advisory on the Upper EICAS, and a HI/LOW chime. ATC can also send revised CPDLC-DCL during taxi out to help expedite clearance changes. LOADable routes minimize manual FMC entries thus reducing the chance for errors. During testing, it was discovered that printed CPDLC-DCL messages did not always provide an exact copy of the actual clearance. Since ATC route clearance changes are LOADED directly into the FMC, paper copies are not required. This does not preclude crews from printing CPDLC uplinks if desired. If there are any concerns regarding the departure clearance or revised routing contact ATC via voice.

Operating Procedures

PF/PM should both be present to accept the clearance.

COMM (on DSP)Select

Read, enter and verify all ATC clearance information in the uplink. Be sure to step through all pages. The LOAD FMC prompt will display when the last page has been viewed if there is a modified route uplink included.

LOAD FMC prompt (if displayed)Select

ACCEPT prompt Select

Note: Use the REJECT prompt only when a scratchpad message
UNABLE TO LOAD or PARTIAL CLEARANCE displays.
Revert to voice if clearance is rejected.

PF

DEP ARR key Select

Runway, SID, transition Verify/Select

**CAUTION: SID/transitions are not part of a LOADable
CPDLC-DCL route uplink. Verify/select the cleared
SID/transition every time a route is LOADED.**

FMC route discontinuities Resolve

Note: Prior to selecting the EXEC key, the route modification may be
viewed on the ND, RTE, and LEGS pages, if desired.

EXEC key (if a new SID/route loaded) Select

Note: ATC changes to SID/transitions, or other close in fixes, are not
uncommon and should be accepted. For significant route
changes, contact the dispatcher for route/fuel legality as well as
to ensure FPS is updated with any significant route changes so
new wind data may be uplinked.

**PF/PM verify ATC clearance. Refer to Volume 1, NP.12, Clearance
Verification Procedures.**

Revert to voice to confirm clearance if needed.

CPDLC Termination

Approximately ten (10) minutes after takeoff the CPDLC connection will
be automatically terminated. Crews will have to initiate logon to enroute
CPDLC manually as auto-transfer to enroute CPDLC is not presently
supported.

Summary

CPDLC-DCL clearances will replace PDCs at domestic airports.

- Review and ACCEPT the CPDLC-DCL.
- Verify departure instructions (heading, altitude, airspeed, frequencies, squawk).
- If re-routed from the filed route, a LOAD FMC prompt will be available.
- The LOAD FMC prompt remains available to reLOAD if necessary.
- ALWAYS manually verify/select SID and transition.
- Close any route discontinuities.
- EXECute FMC modifications (LOAD, ACCEPT, EXEC).
- A CPDLC-DCL **MAY** include a different SID/transition from that filed.
- CPDLC-DCLs, including those with LOAD FMC prompts, **WILL ALWAYS** require manual verification/selection of a SID/transition.
- A revised route can be compared to the previous one on the ND when LOAD FMC is selected and before EXEC is selected.
- Dispatcher approval, FPS revisions and wind updates for route changes prior to the Top of Climb are generally not required.
- For significant route changes, new wind data and WPR Reset will be available after the dispatcher approves and uplinks a revised flight plan in the ACARS 22 format.
- Normal departure clearance verification procedures apply to CPDLC-DCL.
- Printing of a CPDLC-DCL does not always produce an exact copy of the clearance.
- A paper copy is not required (similar to receiving an ACARS-PDC with the printer inop).
- Check FMC mileage and destination fuel against the flight plan for reasonableness.
- Contact the dispatcher if fuel or routing is a concern.

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