

## En Route CPDLC Quick Reference Guide

### Flight Plan Requirements

- Verify Reg Number or Flight ID in Item 7
- Include in Item 10a "J4" to indicate VDL Mode 2 capability
- Verify REG/ and CODE/ in Item 18
- Include in Item 18 for En Route CPDLC:
  - DCL and En Route:
    - File "DAT/1FANSE", or "DAT/1FANSER"\*
    - May substitute "DAT/1FANSE2PDC" or "DAT/1FANSER2PDC"\* for PDC as secondary preference
  - En Route only:
    - File "DAT/FANSE", or "DAT/FANSER"\*

*\*FANSER for aircraft with STAR loading issues*

### On CPDLC LOGON STATUS PAGE/MENU

- Verify
  - Registration Number
  - Flight ID
- LOAD Flight Plan:
  - Departure Airport
  - Destination Airport
  - Route
  - SID/ODP & Dept. Runway
  - STAR

### Logon for DCL or CPDLC Services

- Log on using "KUSA"
  - DCL Airports: EDT - 30 minutes
  - Other Airports: EDT - 5 minutes

*Do not enter any input into the latency timer or "Max Uplink Delay" field. If a value remains from CPDLC use in a previous FIR, the pilot should clear the value upon entry to KUSA airspace.*

*If network coverage is available, the logon is accepted on the ground. Otherwise, the logon is accepted once airborne and within network coverage.*

- Successful log on – CDA/ATC CTR shows "KUSA"
- Do not re-log on if CDA/ATC CTR shows "KUSA"

### Initiation & Management of En Route CPDLC Services

- Start of in-flight CPDLC services begins with welcome message:
  - "CONFIRM CPDLC CONTACT WITH KUSA. ROGER/ACCEPT THIS MESSAGE"
- Except when departing a DCL airport*
- Respond to the welcome message with ROGER/ACCEPT.
  - *CPDLC services transfer from ARTCC to ARTCC*
  - *Suspended while operating in TRACON airspace.*

### "NO COMM" or "DATALINK LOST"

*These indicate a temporary loss of datalink communications with the ground.*

- Verify CDA/ACT CTR is still "KUSA".
- If CDA/ACT CTR is "KUSA", no immediate action is required. DO NOT RE-LOGON.
- Follow published aircraft procedures, if available. Await re-connection with the ground. Use voice for ATC communications until reconnection is confirmed.
- If the NO COMM state continues for 16 minutes, then the active CPDLC session will terminate and the CDA will clear.
- If CDA/ACT CTR does not show "KUSA", attempt re-log on. If not successful, contact ATC via voice.

*Avionics resets/reboots may sever the aircrafts ATC link with the ground while still appearing to be active.*

### Recommended Pilot/Flight Crew CPDLC Procedures

- Every CPDLC message sent by ATC requires a response.
- Respond as soon as possible to all CPDLC messages.
- Respond appropriately:
  - ACCEPT/WILCO/ROGER
  - REJECT/UNABLE
  - STANDBY
    - If STANDBY is selected, follow with an ACCEPT/REJECT or WILCO/UNABLE response.
  - Select REPORT
- When appropriate, for multi-crewed aircraft:
  - Independently & silently review an uplinked CPDLC message sent to the aircraft.
  - Agree on content & intent of CPDLC message.
  - Confirm change & take the action: FMS or Flight Guidance Mode change, etc.
  - Confirm & agree before sending a CPDLC response, report, or request to ATC.

### ATC CPDLC Reports

- ATC can request a REPORT using CPDLC (e.g., CONFIRM ASSIGNED ALTITUDE, CONFIRM SPEED).
- Respond using the pre-formatted REPORT page.

### Pilot Requests Using CPDLC

- Send only these pre-formatted REQUESTS via CPDLC to ATC:
  - REQUEST [altitude]
  - REQUEST BLOCK [altitude] TO [altitude]
  - REQUEST CLIMB TO [altitude]
  - REQUEST DESCENT TO [altitude]
  - REQUEST VOICE CONTACT
  - REQUEST DIRECT TO [position] – *position must be on the current ATC assigned route*
  - EMERGENCY MESSAGES
- DO NOT send any other pre-formatted REQUESTS. *They are not currently supported.*
- Send ONLY ONE REQUEST with each CPDLC message.

### CPDLC Route Messages

- Route clearances issue via CPDLC:
  - PROCEED DIRECT TO [position]  
*Direct-to-fix*
  - CLEARED TO [position] VIA [routeclearance]  
*Re-Route to a fix on your current cleared route*
  - CLEARED [routeclearance]  
*Full Route Clearance – Replaces entire flight plan*
  - AT [position] CLEARED [routeclearance]  
*Replaces everything after the specified AT position*
- Load route clearance sent by ATC into the FMS
  - Select LOAD, APPLY, or INSERT new route into the FMS
  - Manually insert Departure Procedures
  - Manually insert Arrival Procedures, when required
- Review new route clearance
  - If acceptable, activate the new route clearance in the FMS, respond ACCEPT/WILCO
  - If not acceptable, respond REJECT/UNABLE

### CPDLC Altitude/Speed Messages

- Use CPDLC to request a single altitude or block altitude.
- An altimeter setting will be included with any CPDLC altitude uplink containing an altitude below FL180.
- Respond to a CONFIRM ASSIGNED ALTITUDE or CONFIRM ASSIGNED SPEED request:
  - Select & send REPORT

### CPDLC Termination, Transfer, & Log Off

- “CPDLC NOT IN USE UNTIL FURTHER NOTIFICATION”
  - Indicates En Route CPDLC is not in use
  - CDA/ACT CTR remains “KUSA”
  - No CPDLC messages except
  - EMERGENCY REPORTS can be sent
- CPDLC sessions are automatically transferred between the U.S. domestic airspace and international FIR when CPDLC is used in both airspaces.
- If CPDLC is not in use in the receiving FIR, or the aircraft is not eligible for CPDLC services, CPDLC services are terminated at handoff.
- In the off-nominal case in which two or more messages are not received, it is recommended to terminate the CPDLC session and use voice contact for the remainder of the flight.
- An indication of an undelivered message may be a voice contact from ATC to disregard/unable a clearance that has not been received.

### CPDLC Emergency Messages

- VOICE REMAINS PRIMARY FOR EMERGENCY COMMUNICATIONS.
- Pilots may send a CPDLC EMERGENCY REPORT to ATC if voice is not available.
- ATC will receive the CPDLC report but **will not** acknowledge it using CPDLC. ATC will attempt to contact the aircraft via voice.
- FREE TEXT can be used only with EMERGENCY messages, but only as a one-way aircraft to ground link – e.g., in case of loss of VHF voice radio capability.

### HELPFUL REMINDERS:

- **NEVER USE FREE TEXT EXCEPT FOR AN EMERGENCY.**
- **VOICE REMAINS PRIMARY FOR EMERGENCY COMMUNICATIONS.**
- **ALWAYS REVERT TO VOICE TO CLARIFY IF THERE IS CONFUSION.**