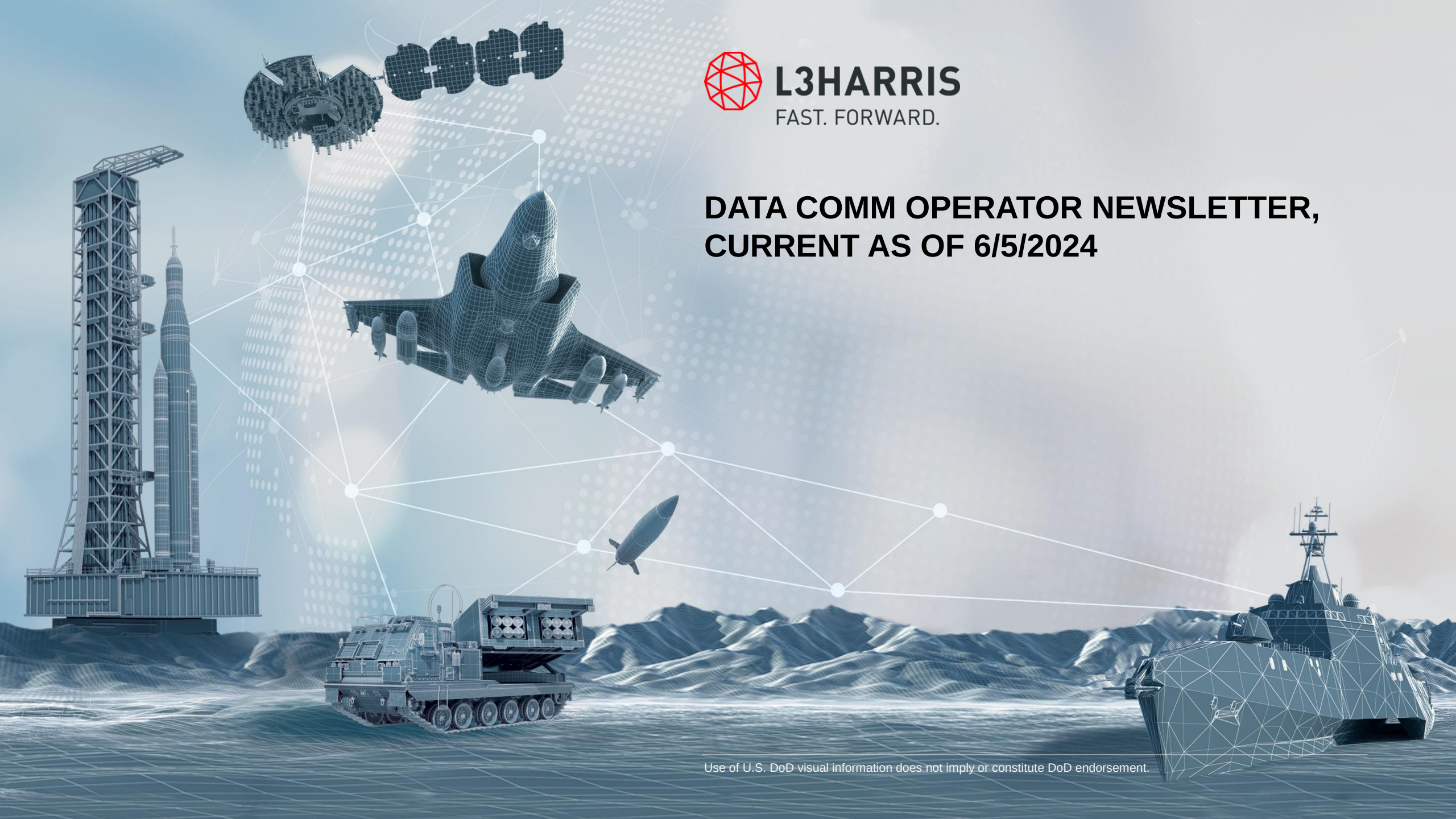

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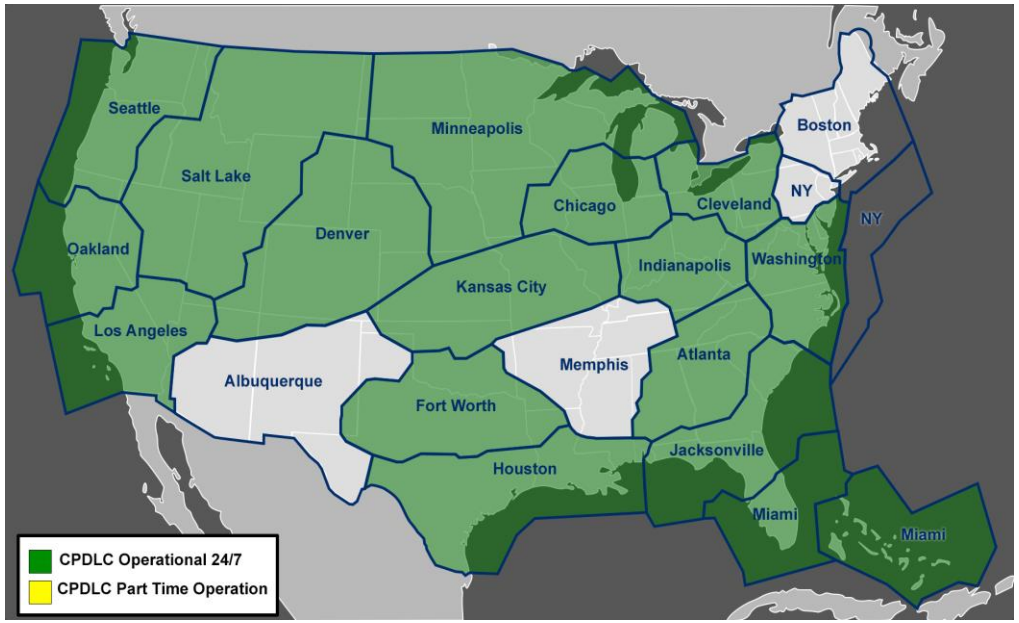
DATA COMM OPERATOR NEWSLETTER, CURRENT AS OF 6/5/2024

Data Comm Operator Newsletter, current as of 6/5/2024

Crew Reminder

- Always use the LOAD prompt if it is available.
- Once you have reviewed and executed a CPDLC clearance, remember to send an ACCEPT/WILCO as soon as safely practical, to include frequency changes.
- Logon KUSA regardless of whether you are departing a TDLS airport or not.
- Upon entry into the domestic U.S., confirm KUSA logon has been accepted. If KUSA is not confirmed, perform a logon to KUSA.

En Route CPDLC Status



CPDLC Operational 24/7:
ZKC ZDC ZMP ZAU ZID ZOA ZMA ZTL ZSE ZLC ZDV ZHU ZJX ZFW ZOB ZLA

New CPDLC messages

Operational at all En Route CPDLC ARTCCs

- Block Altitudes
- Speed Clearances
- Confirm Speed
- Speed Crossing Restrictions

Future DFV Facility Status

- ZAB – Sep 2024
- ZBW – Nov 2024
- ZME – Dec 2024
- ZNY – Apr 2025 (in planning)

Pilot Awareness Item: Responding to All Messages

Issue

Every CPDLC message requires a response, and a failure to respond to certain messages makes up ~25% of the issues related to CPDLC.

What should the Crew do?

Crews are reminded to
WILCO, ACCEPT, REJECT, or STBY every clearance

- This includes: Cleared as Filed, route changes, revised EDCT, departure frequencies, etc.
- If responding to a message with STBY, a subsequent acceptance or rejection is required.

When responding to prompts such as "**Confirm Speed**," do not include free text, and be sure to **use the Reports page to respond**.

A failure to acknowledge these clearances will result in ATC having to revert to voice, increasing workload for everyone.

Dispatch Awareness Item: Flight Plans

Issue

The following issues make up the majority of instances where flight crews and ATC need to revert to voice, increasing workload. Dispatchers can help contribute to the success of Data Comm by considering the following:

What should the Dispatcher do?

- When the need to amend a flight plan arises – remember to cancel the old flight plan then re-file.
- Flight plans cannot contain airway to airway transitions without a published navigation point in between.
  - INCORRECT: J4.J65
  - CORRECT: J4.ABI.J65
- Flight plans cannot contain Terminal Enroute Control (“TEC”) coded route.
- The first route element after the departure airport cannot be an airway.
- When filing a Standard Instrument Departure (SID)/DP, you must exit at a published transition, or the last fix on the common route.

Additional filing guidance is available in the U.S. Domestic CPDLC Flight and Route Planning Guide, available at https://www.l3harris.com/datacomm.

CLEARED TO [position] VIA [route clearance] (UM79) crew loading

Issue

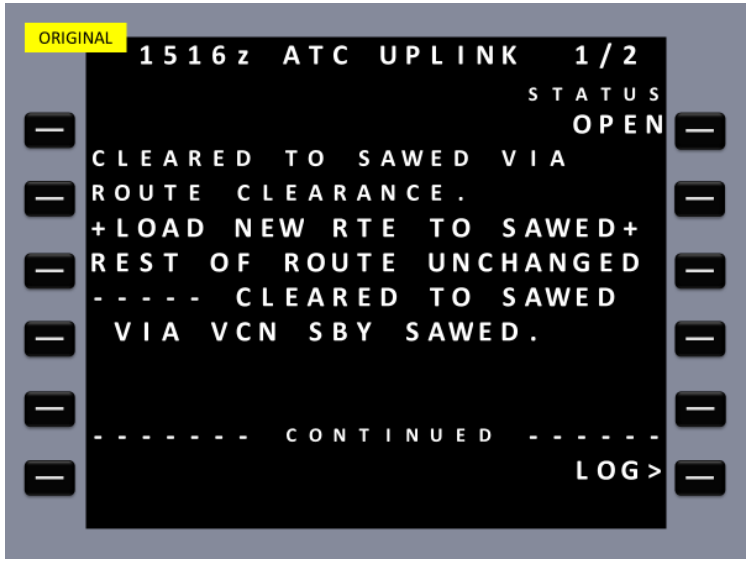
- Sites have reported multiple instances of pilots not loading route messages, causing operational impact due to flying the incorrect route
- Crews have confusion with the CLEARED TO [position] VIA [route clearance] (UM79), some crews are manually proceeding direct to the CLEARED TO position, instead of using the LOAD prompt that will load the entire new route into the FMS

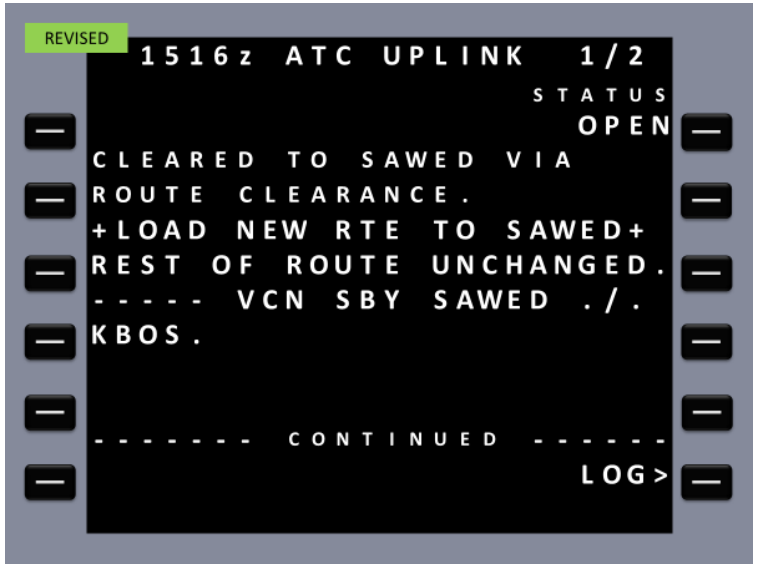
What is being worked?

- The ERAM build EAF100, deployed Q4 2022, has altered the free text at the end of the clearance to align with DCL. This update removes the words CLEARED, CLEARED TO, VIA, and AT, as seen in the bottom graphic
- B737 (largest CPDLC fleet) has an upcoming update (U14.1) that will change the route display to the crew to alleviate confusion on what type of route change they are receiving

What should the crew do?

- Use the LOAD prompt to ensure the complete route is loaded





CONFIRM SPEED (UM134) PRESENT SPEED (DM34) crew reporting

Issue

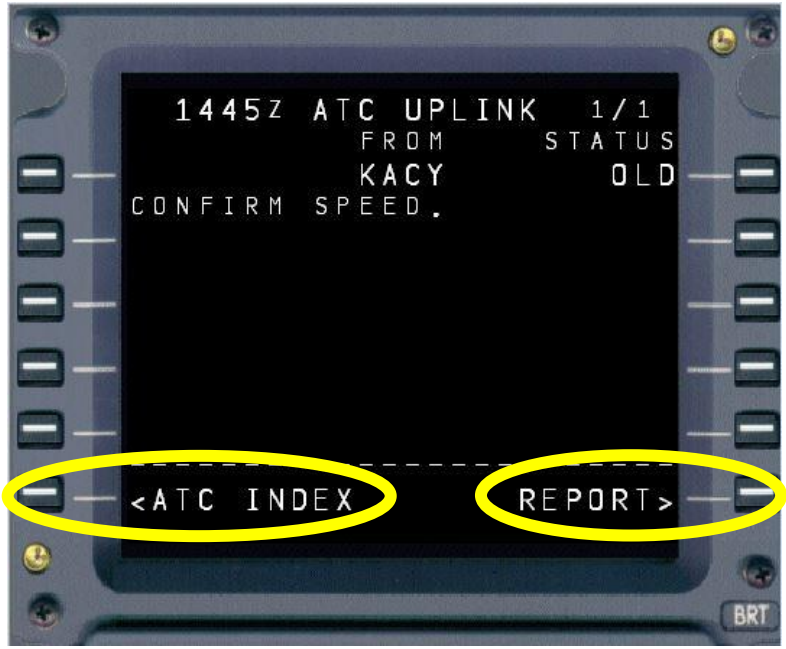
- Some crews have reported they are not able to reply to the uM134 CONFIRM SPEED uplink message.
- Crew was expecting to see the WILCO / STANDBY / UNABLE responses to the CONFIRM SPEED uplink.

How to respond?

- There are two methods this message can be acknowledged in the FMC. Below are 2 example display page flows for the B737.
  - Primary response flow: Use the REPORT Prompt at 6R
  - Secondary response flow: Use the ATC INDEX Prompt at 6L

What should the crew do?

- Report to ATC the PRESENT SPEED by following the Display Page Flow on following slides.



CONFIRM SPEED (UM134) PRESENT SPEED (DM34) crew reporting

Primary Display Page Flow: Using REPORT Prompt (Boeing)

1) UM134 CONFIRM SPEED Uplink Message.
Select R6 REPORT Prompt.

2) CONFIRM SPEED REPORT Page.
Select L1 CONFIRM SPEED Prompt.

3) PRESENT SPEED VERIFY REPORT Page.
PRESENT SPEED value is auto populated.
Select R5 SEND Prompt.

4) PRESENT SPEED SENT Page.
No Action Required

Note: Message status designated as “OLD”, indicates the message has now been viewed.

CONFIRM SPEED (UM134) PRESENT SPEED (DM34) crew reporting

Secondary Display Page Flow: Using ATC INDEX Prompt (Boeing)

1) UM134 CONFIRM SPEED Uplink Message.
Select L6 ATC INDEX Prompt

2) ATC INDEX Page.
Select L3 REPORT Prompt.

3) CONFIRM SPEED REPORT Page.
Select L1 CONFIRM SPEED Prompt.

4) PRESENT SPEED VERIFY REPORT Page.
PRESENT SPEED value is auto populated.
Select R5 SEND Prompt

5) PRESENT SPEED SENT Page.
No Action Required

Note: Message status designated as “OLD”, indicates the message has now been viewed.

CONFIRM SPEED (UM134) PRESENT SPEED (DM34) crew reporting

Display Page Flow: (Airbus)

ATSU Version

ATSU CSB/CLR 7
(FANS A+ on A320/A330 families) products

- UM134 is displayed as **CONFIRM SPD**

ATSU CSB/CLR 9 and future 10
(FANS C on A320/A330 families) products and A380/A350 ATC applications.

- UM134 is displayed as **REPORT SPD**

PRESENT SPEED REPORT Page.
PRESENT SPEED value is auto populated.

Displayed: ATSU CSB/CLR 9 and future 10

How to respond?

1. The message UM134 is received by the ATSU and displayed on DCDU.
2. The ATSU automatically interrogates the FMS without any crew actions
3. In nominal situations, FMS answers and prepared DM34PRESENT SPD is made available to the crew who just have to press SEND*
4. If ATSU-FM link is broken, or FM not available, the crew is informed by NO FM DATA message displayed on DCDU. They can select MODIFY and the MCDU can be used to manually inserts a value. The MODIFY can also be used to by-pass the FM speed (force another value) but this is not typically used.

Revised Route Examples (FRD and LAT/LONG Routings)

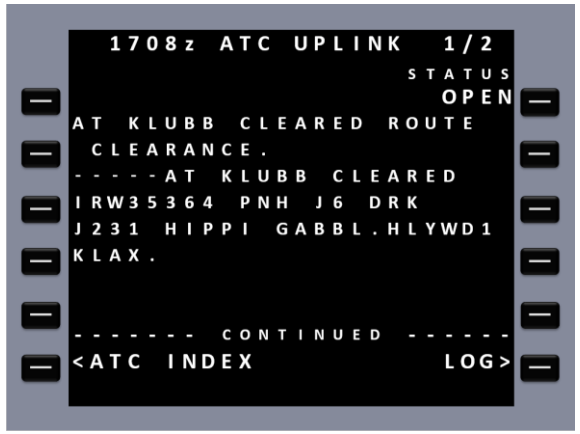
- Revised routes may be sent when it is necessary to re-route an aircraft around constrained airspace (e.g., weather/air traffic) or Special Use Airspace.
- A revised route may be based on routing points defined by a fix-radial-distance (FRD) from a NAVAID or a LAT/LONG.

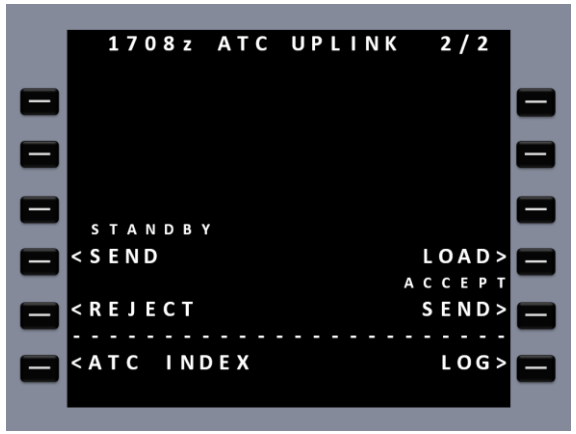
FRD Routing Example

Original ATC Clearance: KATL to KLAX:
NASSA2 YAALL J14 PNH J6 DRK J231 HIPPI GABBL HLYWD1 KLAX

FRD Revised Clearance: The FRD is the IRW 353 Radial at 64 NM:
IRW35364 PNH J6 DRK J231 HIPPI GABBL HLYWD1 KLAX

CPDLC Message Example: AT [position] CLEARED [route clearance]:



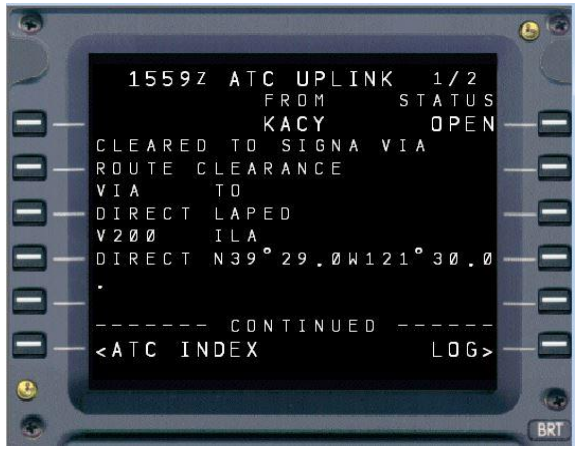


LAT/LONG Routing Example

Original ATC Clearance: KUKI to KRNO:
KUKI ENI V200 FMG KRNO

LAT/LONG Revised Clearance: Route around the Beale TFR:
ILA N39°20.64' W121°30.11' SIGNA V200 FMF KRNO

CPDLC Message Example: CLEARED TO [position] VIA [route clearance]:



Do not attempt to build these revised route clearances in the FMS. **Use the LOAD or INSERT function.**

What is DFV for en route?

- Data Comm Functional Verification (DFV) is an operational test and demonstration of CPDLC services at the ARTCC
- DFV is broken into two parts:
  - Limited – ARTCCs determine an incremental approach for En Route CPDLC DFV. During this phase, En Route CPDLC capability will be turned on/off in accordance with a coordinated DFV schedule
  - Expanded – 24/7 flight operations conducted using CPDLC capabilities
- DFV focus areas include:
  - Session/Eligibility (including automatic transfers of CPDLC sessions between domestic and oceanic)
  - Altitudes
  - Transfer of Communication
  - Altimeters
  - Routes
  - Pilot Initiated Downlinks (PIDs)
  - Emergency Operations
  - Additional Facility Requests