

# Gulfstream

## FLIGHT OPERATIONS

# CPDLC CONFIRM ROUTE

**Modification Date: 19DEC2016**

**Revision: 0.0**

**ATA 23/34 - COMMUNICATIONS/NAVIGATION**

**Scope: ALL AIRCRAFT**

**Briefing Owners:**

**Nick Rose**

**[nicholas.rose@gulfstream.com](mailto:nicholas.rose@gulfstream.com)**

**Justin Maas**

**[justin.maas@gulfstream.com](mailto:justin.maas@gulfstream.com)**

**Greg Panzerella**

**[gregory.panzarella1@gulfstream.com](mailto:gregory.panzarella1@gulfstream.com)**

# All Aircraft | CPDLC CONFIRM ASSIGNED ROUTE

**IFALPA**  
The Global Voice of Pilots



16SAB10

15 November 2016

## Increased Utilization of Data Link Services in the North Atlantic

Implementation of the North Atlantic Data Link Mandate (NAT DLM) in 2015 is significantly advancing air traffic control services across the North Atlantic. Use of Automatic Dependent Surveillance – Contract (ADS-C) and Controller Pilot Data Link Communications (CPDLC) provides more accurate position information and more reliable communication links. These features form the basis for the introduction of reduced separation standards, allowing more optimum routings to avoid significant weather conditions and improve operational efficiency. These changes have introduced new operational procedures for flight crews.

Two operational procedural areas which have proved problematic for flight crews are receipt of a CPDLC re-clearance which can LOAD directly into the aircraft FMC, and the CPDLC message “CONFIRM ASSIGNED ROUTE”.

### ATC re-clearances received as an UPLINKED or LOADABLE FMC route

IFALPA has received support from the NAT Air Navigation Service Providers (ANSPs) to increase the utilization of route re-clearances which can be loaded directly into the FMC, rather than relying on flight crew manual entry of multiple waypoints.

Effective December 1, 2016, ISAVIA (covering Icelandic, northern Atlantic and Polar airspace) will implement use of re-clearances that can LOAD directly into the FMC as part of the CPDLC clearance message process. Flight crews should be fully aware of the procedures outlined in their aircraft flight manual or operations manual to utilize this important feature.

In evaluating previous NAT error reports concerning flight crew usage of this LOAD feature, a common error has been identified. When receiving a re-clearance containing multiple waypoints, some aircraft FMC systems may display the information in the following format:

CLEARED TO [SEPAL] VIA  
[route clearance, such as 50N050W 50N040W 49N030W 48N020W]

In this example, the additional [route clearance] waypoints may NOT be displayed on the ACARS/FMC screen until: (1) the re-clearance is printed, (2) additional ACARS/FMC message pages are reviewed or (3) the LOAD prompt is utilized to automatically LOAD the route into the FMC.

## Background

- North Atlantic Air Navigation Service Providers (ANSPs, such as Gander/Shanwick/Reykjavik) are introducing the use of the CPDLC message “CONFIRM ROUTE” to verify the actual FMS routing being flown by the aircraft.
- When the proper CPDLC automated reply is sent to ATC, the current FMS routing being flown by the aircraft will be automatically downlinked to ATC – *with no manual route input entries required by the flight crew.*
- This allows the ATC system to automatically check the aircraft routing against the ATC “cleared” flight plan. Any “non-conformance” issues can be identified for action by the controller and flight crew.
- This briefing reviews how Gulfstream aircraft receive/respond to this uplink message.

*IFALPA Briefing on CONFIRM ROUTE Clearances*

**Gulfstream**

# All Aircraft | CPDLC CONFIRM ASSIGNED ROUTE

G280

## Required Steps

```
FANS MESSAGE
↑ 1016Z-EGGX OPEN
CONFIRM ASSIGNED ROUTE

-----RESPONSE-----

CONFIRM>

<RETURN 1017Z
[ FMS3 ]
```

Uplink Message (UM137) sent from Shanwick (EGGX) . Line-Select CONFIRM.

```
FANS CONFIRM
ASSIGNED ROUTE OFFSET
REMARKS
-----
ACTIVE FPLN RETRIEVED
SEND*

<RETURN 1017Z
[ FMS3 ]
```

ACTIVE FPLN RETRIEVED automatically appears. Line-Select SEND\*. Downlink Message (DM40) is then sent to the Current Data Authority (CDA).

**NOTE: no REMARKS (Free Text) are necessary or recommended, as the objective of this message transaction is to mitigate transposition error.**

## Additional Information

```
FANS MESSAGE
↑ 1016Z-EGGX CLOSED
CONFIRM ASSIGNED ROUTE

-----RESPONSE-----
ASSIGNED ROUTE EGNR KBTV
22 5820N N58 W020 5930N
CONT>

<RETURN 1017Z
[ FMS3 ]
```

Upon reviewing the MESSAGE LOG, the automated RESPONSE can be seen.

```
FANS DNLNK CONT
↓ 1016Z-EGGX
ASSIGNED ROUTE EGNR KBTV
22 5820N N58 W020 5930N
N59 W030 5940N N59 W040
5750N N57 W050 HOIST
N5502.0 W057 N600A YBC
N4908.0 W06813.3 J563
YRI N4745.4 W06935.3
KBTV N4428.3 W07309.2

<RETURN 1018Z
[ FMS3 ]
```

Gulfstream

# All Aircraft | CPDLC CONFIRM ASSIGNED ROUTE

## Large Cabin

### Required Steps



Uplink Message (UM137) sent. Within a matter of seconds, REPORT will appear. Line-Select REPORT.



/ASSIGNED ROUTE element is a copy the Master FMS' Active Flight Plan (Downlink Message 40). Line-Select SEND.

**NOTE: no Free Text is necessary or recommended, as the objective of this message transaction is to mitigate transposition error.**

# All Aircraft | CPDLC CONFIRM ASSIGNED ROUTE

## Large Cabin

### Additional Information

- If the Downlink Message is printed, entire FMS routing is viewable.

```
REPORT  
103823E  
SENT  
FLT ID N550GA TAIL NO N550GA  
/ASSIGNED ROUTE  
ORIGIN  
EDDS  
DEST  
KSAV  
TO  
4920N  
TO  
4930N  
TO  
4740N  
TO  
4450N  
TO  
3860N  
TO  
DASER  
TO  
BANK  
TO  
EMQJ  
TO  
OTTG  
TO  
LURNS  
TO  
SPIKY  
TO  
PITRM  
TO  
CHS  
----- END OF MESSAGE -----
```

*Printed DM40*

**Gulfstream**

# All Aircraft | CPDLC CONFIRM ASSIGNED ROUTE

CPWG/22 – WP08  
25 October 2016

## Twenty-Second Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/22)

(Paris, France 25-27 October 2016)

### Agenda Item 5: Update on Action Items

#### CONFIRM ASSIGNED ROUTE TESTS IN BIRD

(Presented by Iceland)

##### SUMMARY

*This working paper provides overview of the tests being performed in BIRD on the CONFIRM ASSIGNED ROUTE (UM137) AND ASSIGNED ROUTE (DM40) CPDLC messages in Reykjavik OACC.*

#### 1. Introduction

- 1.1 This information paper provides overview of the tests being performed in BIRD on the CONFIRM ASSIGNED ROUTE (UM137) AND ASSIGNED ROUTE (DM40) CPDLC messages in Reykjavik OACC.

#### 2. Discussion

- 2.1 Reykjavik OACC is developing new functionality to automatically uplink the CPDLC message CONFIRM ASSIGNED ROUTE (UM137) to aircraft as follows:
  - a) Immediately after becoming the Current Data Authority (CDA); and
  - b) A defined minutes after receiving a WILCO in response to a CPDLC reroute message UM79.
- 2.2 The route in the received ASSIGNED ROUTE (DM40) message from the aircraft is automatically compared to the route in the Flight Data Processing System (FDPS) and any discrepancy is brought to the attention of the controller.
- 2.3 Iceland AIC 012/2016 was issued on 28 June 2016 with guidance material for aircraft operators on the CONFIRM ASSIGNED ROUTE functionality, see attachment A.
- 2.4 The first phase of the project involves a small group of selected controllers manually uplinking the UM137 message in low workload conditions to gauge the readiness of aircraft operators to correctly respond to the message.
- 2.5 The three graphs below show the results so far after sending 596 UM137 messages.

## Additional References

- [FAA Documentation](#)
- [Icelandic NOTAM](#)
- [AIN Article](#)

**AIN**online BIZAV AIR TRANSPORT DEFENSE ROTORCRAFT FBO SURV

BUSINESS AVIATION

### Fans 1/A Aircraft on NAT Will Need To 'Confirm' Route

by Chad Trautvetter - September 12, 2016, 12:32 PM



Oceanic air traffic centers in Europe will start issuing a "CONFIRM ASSIGNED ROUTE" CPDLC uplink message next month to all Fans 1/A aircraft on the North Atlantic Tracks (NAT) as a means to check the downlinked route from the aircraft against the route held in the flight data processing system. This datalink message provides the flight crew with a "SEND" prompt, which downlinks (via CPDLC) the active route from the aircraft's FMS to ATC.

"If you've operated on the 'half-tracks' in the NAT recently, you'll have seen this," noted flight-planning company Flight Service Bureau. "With the half-tracks, the potential for nav errors are now (quite a lot, perhaps) higher than before. Waypoints are that bit more complicated, and 5030N 30W is a little too similar to 50N 30W.

"So, to prevent you reading back the clearance correctly and then screwing up the route in the FMS," the center will ask via datalink for the planned route upon entering the oceanic airspace, the company said. "All you have to do is acknowledge the message, scroll through your route and check it looks OK, and send it back down to them. If it's the same as your clearance, then that's that. If not, or you don't reply, you'll get an additional message."

ATC SAFETY

There are no comments yet, please Login or Register to begin a discussion.

Gulfstream

Gulfstream

FLIGHT OPERATIONS