

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.

On occasion flight crews have mistakenly misunderstood the intent of the re-clearance. This is NOT a re-clearance to proceed DIRECT to SEPAL without overflying the intermediate waypoints!

Flight crews should ensure they are following their company procedures for verifying re-clearances and waypoint loading processes.

“CONFIRM ASSIGNED ROUTE”

NAT ANSPs are introducing the use of the CPDLC message “CONFIRM ROUTE” to verify the actual FMC routing being flown by the aircraft. When the proper CPDLC automated reply is sent to ATC, the current FMC 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 conformance check the aircraft routing against the ATC “cleared” flight plan retained in the system. Any “non-conformance” issues can be identified for action by the controller and flight crew.

It is important for flight crews to be aware that the appropriate response to this request is by use of the CPDLC pre-formatted ATC REQUESTED REPORT message – **NOT** with a free text message. If a free text reply is received by ATC, the system is unable to process the information for conformance checking. Based on previous testing of this message format, approximately 20-25% of replies did **not** utilize the CPDLC pre-formatted message.

Flight crews should be aware of the CPDLC message reply procedures outlined in their aircraft flight manual or operations manual. ONLY if their aircraft cannot support this message format should a free text message be sent.