



**U.S. Department
of Transportation
Federal Aviation
Administration**

SAFO

Safety Alert for Operators

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http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Recommended Procedures for Controller Pilot Data Link Communications (CPDLC) and Partial Re-route Clearances (Revised Initial UM79 uplink message).

Purpose: This SAFO reminds aircraft operators that use CPDLC to ensure that all parts of a clearance are appropriately loaded into the Flight Management System (FMS) prior to departure. In addition, route clearances and revisions received, require the flightcrew to manually input Standard Instrument Departures (SID) into the FMS each time a UM79 message is received.

Background: Twenty recorded aircraft deviations at Teterboro Airport (TEB) in 2022 have drawn attention to potential CPDLC and UM79 issues. In these incidents, aircraft departed TEB and flew directly into the arrival corridor of Newark Airport (EWR). The TEB air traffic controllers had to quickly identify and coordinate with New York (N90) Terminal Radar Approach Control (TRACON) Newark area to issue a turn to avoid traffic. After investigating these incidents, the Federal Aviation Administration (FAA) determined that the probable cause of these events is due to the SID not being manually reloaded in the FMS after receiving a UM79.

Discussion: Receiving a UM79 requires the SID to be manually reloaded into the FMS to ensure correct departure routing. Failure to do so can lead to pilot deviation, or cause an incident/accident as demonstrated by the 20 incidents at TEB. The Tower Data Link Services (TDLS), which delivers digital clearances to aircraft, sends several prompts to avionics in each UM79 clearance, including +LOAD NEW ROUTE+, +[SID#] DP, CLIMB VIA SID+, and a final full route message including the departure SID and transition. This information needs to be manually reloaded into the FMS. In addition, TEB Air Traffic Control (ATC) Tower has added local messages and a Digital Automatic Terminal Information Service (D-ATIS) message to further notify and encourage aircraft operators to verify their routes after a revision.

Recommended Action: Aircraft operators using CPDLC should follow standardized procedures (including checklists) anytime they receive a routing change to ensure all parts of the new route are correctly loaded into their FMS. Particular attention should be paid when receiving UM79 clearances to ensure SIDs are manually reloaded prior to departure.

Contact: Direct questions or comments regarding this SAFO to the Flight Technologies and Procedures Division at (202) 267-8790. For specific questions or comments about this subject matter, contact the National Enterprise and Infrastructure Systems Engineering Group, TDLS Second Level Engineering, at 405-954-9131 or via email at amc-atow-tdls-support@faa.gov.