AERONAUTICAL INFORMATION CIRCULAR 42/19

USE OF CONTROLLER-PILOT DATA LINK COMMUNICATIONS (CPDLC) VERTICAL CLEARANCE MESSAGES IN THE EDMONTON FLIGHT INFORMATION REGION

Introduction

Controller-pilot data link communications (CPDLC) have been in use in the Edmonton flight information region (FIR) since 2012. Commencing on or soon after 11 November 2019, the available CPDLC message set will be expanded to include messages containing conditional vertical clearances. Edmonton air traffic controllers will be able to uplink the appropriate vertical clearance using CPDLC, thereby reducing readback, hearback, and transposition errors.

Implementation

With respect to vertical clearance, the Edmonton FIR currently supports:

- DM9 REQUEST CLIMB TO [level]
- DM10 REQUEST DESCENT TO [level]
- UM20 CLIMB TO [level]
- UM23 DESCEND TO [level]

Implementation of the expanded CPDLC vertical clearance message set will now include pilot-initiated vertical requests and controller-initiated vertical clearances.

Pilot-initiated Vertical Requests

Pilots may initiate either of the following vertical clearance requests:

- DM11 AT [position] REQUEST CLIMB TO [level]
- DM12 AT [position] REQUEST DESCENT TO [level]
- DM13 AT [time] REQUEST CLIMB TO [level]
- DM14 AT [time] REQUEST DESCENT TO [level]

Air traffic controllers will respond to a vertical clearance request using one of the following messages, as appropriate:

- UM21 AT [time] CLIMB TO [level]
- UM22 AT [position] CLIMB TO [level]
- UM24 AT [time] DESCEND TO [level]
- UM25 AT [position] DESCEND TO [level]
- UM26 CLIMB TO REACH [level] BY [time]
- UM27 CLIMB TO REACH [level] BY [position]
- UM28 DESCEND TO REACH [level] BY [time]
- UM29 DESCEND TO REACH [level] BY [position]

Pilots are to respond to the route clearance message with any of the following:

- DM0 WILCO
- DM1 UNABLE
- DM2 STANDBY

Controller-initiated Vertical Clearances

Air traffic controllers may initiate a conditional vertical clearance for separation purposes, to avoid restricted airspace, or for other operational requirements.

Air traffic controllers may initiate any of the conditional vertical clearances:

- UM21 AT [time] CLIMB TO [level]
- UM22 AT [position] CLIMB TO [level]
- UM24 AT [time] DESCEND TO [level]
- UM25 AT [position] DESCEND TO [level]
- UM26 CLIMB TO REACH [level] BY [time]
- UM27 CLIMB TO REACH [level] BY [position]
- UM28 DESCEND TO REACH [level] BY [time]
- UM29 DESCEND TO REACH [level] BY [position]

Pilots are to respond with any of the following:

- DM0 WILCO
- DM1 UNABLE
- DM2 STANDBY

Pilot Procedures

For additional guidance on pilot procedures for uplink messages containing FMS-loadable data, refer to section 4.3.3 and Table 4-2 of the *International Civil Aviation Organization* (ICAO) Doc 10037, Global Operational Data Link (GOLD) Manual.

Further Information

For further information, please contact:

NAV CANADA
77 Metcalfe Street
Ottawa ON K1P 5L6
Attn: Noel Dwyer, National Manager
Regulation and International Procedures

Tel.: 613-563-7211
E-mail: noel.dwyer@navcanada.ca

James Ferrier
Director, Aeronautical Information Management