UPS Launches Data Comm Trial at Newark Liberty

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A UPS MD-11 conducted the first revenue flight from Newark Liberty International Airport using ATC data communications in mid-May. (Photo: UPS) June 3, 2013, 3:00 PM

UPS MD-11 pilots and controllers at Newark Liberty International Airport in New Jersey started communicating by text messages in May under the Federal Aviation Administrations data communications (data comm) departure clearance (DCL) trials program. TheFAA expects United Airlines, British Airways and other carriers will begin participating thissummer.

NewarksATC tower is the second facility to start the trials. Controllers at Memphis International Airport started sending text messages to FedEx Express pilots in mid-January . This month, both locations will receive a software upgrade to the Thales-supplied tower automation system being used for the trials. The tower at Memphis, FedExs hub airport, will then begin 24-hour data-comm operations between controllers and pilots of properly equipped Boeing 777s and

MD
-11s, tentatively late thismonth.

Operations at Newark Liberty will remain in a limited mode due to facility resource restraints on introducing new systems [and] procedures during the summer severe weather season, according to theFAAs Data Communications Program Office. The plan is to begin full-scale trial operations at Newark in the fall. In addition to United Airlines and British Airways, the
FAA
expects that Lufthansa and Scandinavian Airlines will participate, representing the first passenger and international carriers to join the trials. Both
UPS
and FedEx will alsoparticipate.

TheFAA is conducting the year-long trial efforts to demonstrate the functionality of text messaging between controllers and pilots for pre-departure and revised pre-departure clearances while aircraft are on the ground. Pilots already receive pre-departure clearances in text format, but they come indirectly from ATC through an airlines operations center, using the aircraft communications addressing and reporting system (Acars). Controllers must communicate revised pre-departure clearances stemming from weather or other factors by voice, which can slow progress at a busy airport. In oceanic airspace, controllers and pilots have communicated for years using the Future Air Navigation System (Fans) 1/A datalink system. The FAA plans to expand that capability to continental airspace for aircraft equipped with updated Fans 1/A+avionics.

TheDCL service being tested in Memphis and Newark allows pilots of Fans-equipped aircraft to log directly into the Thales automation system , which is located at theATCclearance delivery position in the tower, via the existing airport Acars or
VHF
Digital Mode 2 (
VDL
-2) datalinks. Controllers can load initial and revised departure clearances directly into the aircrafts flight management system (
FMS
). The ability for
ATC
clearance delivery to send loadable revised route clearances to a flight deck at the gate and/or in the taxi movement areas is expected to significantly enhance the efficiency and speed of airport operations, the
FAA
said.

TheFAA initially planned to conductDCL trials at Memphis, Newark and Atlantas Hartsfield-Jackson International Airport. However, the agency has removed Atlanta from the trials program to focus on the next step of demonstrating data messaging in the ATC
en route environment in the 2014-2015 time frame. Plans call for deploying data comm in ATC
towers starting in 2016 for routine communications and in air route traffic control centers that manage en route traffic starting in2019.