

Memorandum



Date: March 22, 2012

To: Honorable Chairman Joe A. Martinez
and Members, Board of County Commissioners

From: Carlos A. Gimenez
Mayor 

Subject: Opa-locka Executive Airport Air Traffic Control Tower

This memorandum is provided in response to queries by the Board at its February 7, 2012, meeting regarding the construction of the Opa-locka Executive Airport Air Traffic Control Tower (the Tower). Specifically, the Miami-Dade Aviation Department was asked to provide information on:

- the date that construction on the Tower commenced,
- the date(s) that the Federal Aviation Administration requested changes to the Tower design,
- what changes were requested by the Federal Aviation Administration, and
- why the top floor of the Tower is not served by the elevator.

The Miami-Dade Aviation Department is constructing the Opa-locka Executive Airport Air Traffic Control Tower as a Federal Contract Tower. When a tower is designated as such, the Federal Aviation Administration does not operate the tower itself but rather contracts this out. In this case, the management and operation of the Tower controllers has been contracted by the Federal Aviation Administration to Robinson Aviation Inc. Funding for the Tower is being provided by the Federal Aviation Administration through an Other Transaction Agreement with the Miami-Dade Aviation Department. Furthermore, as a Federal Contract Tower, the Tower is required to be owned and constructed by the airport sponsor, in this case, the Miami-Dade Aviation Department. Unlike a Federal Aviation Administration owned tower such as the one at Miami International Airport, federal primacy can and has been invoked to over-rule local code requirements. As a local facility, the Opa-locka Tower must be designed in accordance with the Florida Building Code, and any other local codes as promulgated by the Miami-Dade County Building Department. As such, in Miami-Dade County, all exterior cladding including window systems meet Miami-Dade County Building Code Compliance Office Product Control Division requirements which issues a Notice of Acceptance for tested exterior claddings, including window systems which meet wind and impact resistance criteria.

The County issued the Notice to Proceed on April 4, 2009, and the Tower project was subsequently issued a permit to begin construction subject to the submittal of shop drawings by the contractor for various assemblies -including the cab's window system. The first submittal of shop drawings based upon architect Leo A. Daly's plans was rejected because they did not comply with the County's requirements for wind loading and impact resistance. The architect submitted a design which was also rejected. The third submittal was accepted by the County and construction of the cab window commenced.

In order to comply with the criteria, the roof supporting columns had to be modified to have the window's supporting aluminum store front sections installed perpendicular to the glass panes, and the width of the original glass panes had to be limited to a horizontal span of half of the original span, thus requiring an intermediate window support bracket (mullions) on each of the 10 sides. The installation of the mid-window support mullions resulted in a doubling of window mullions/supports from 10 (for the 10-sided cab) to a total of 20.

The increase in size and numbers of the cab window mullions necessitated further review by the FAA to ascertain that there were no line-of-sight (LOS) impacts to critical areas of the airfield. On June 2, 2010, the FAA performed a virtual simulated assessment of the code-required design modification of the cab window system of the OPF ATCT. On January 21, 2011, based on actual observations by FAA staff of the completed ATCT cab, the FAA issued final acceptance of the ATCT cab windows.

Federal ATCTs have no elevator access to the Cab due to the aforementioned visibility mandates. It is an FAA requirement that ATCTs have 360-degree visibility from any location on the top cab. Thus, in all FAA towers, the elevator stops one level below the cab. Final access to the cab is accomplished via internal stairs. Please note that FAA air traffic control towers cabs are exempt from compliance with accessibility (ADA) requirements for these reasons.

The Miami-Dade Aviation Department is engaged in ongoing settlement negotiations with both the contractor and consultant for delay claims associated with this project. If you require further information regarding this project, please contact Miami-Dade Aviation Department Director José Abreu, P.E., at 305-876-7077.

c: Jack Osterholt, Deputy Mayor
José Abreu, P.E., Miami-Dade Aviation Director