



Federal Aviation Administration

Memorandum

Date:

To: Mark Michaud, Acting Director, Technical Operations

A handwritten signature in black ink, appearing to read "Mark Steinbicker", is positioned to the left of the digital signature block.

Digitally signed by MARK
W STEINBICKER
Date: 2020.09.30
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From: Mark Steinbicker, Manager, Flight Technologies and Procedures Division

John R. Dermody, Director, Office of Airport Safety and Standards

Prepared by: Wayne Radicke, Section Manager, Flight Procedures and Airspace Group

Carlton Lambiasi, Civil Engineer – Airspace, Airport Data and Airspace Group

Subject: Objection to the use of above ground fuel storage tanks within the Part 77
Primary Surface and the Runway Safety Area/Runway Object Free Area

Recently, there has been an increase of Non-Rulemaking Airport aeronautical studies (NRAs) for the construction of above ground fuel storage tanks. Three recent cases (2 at JFK and 1 at PHL) proposed the construction of these tanks in close proximity to the runway within the FAR Part 77 Primary Surface (Reference: 2019-AEA 2861, 2863-NRA, and 2020-AEA-1386-NRA).

Flight Standards objected to these cases because the tanks penetrate the FAR Part 77 (77.19c) surface and introduce a flammability safety issue.

A meeting was held on July 13, 2020 between the Office of Airports, Flight Standards, and Air Traffic-Engineering Services (ATO-ES). During the meeting Flight Standards raised concerns regarding the location of the above ground fuel tanks. ATO-ES mentioned that the above ground tanks were being installed for environmental reasons. Numerous other options were discussed and ATO-ES suggested the feasibility of using backup batteries in lieu of fuel powered back-up generators. ATO-ES mentioned that the U.S. Air Force had similar concerns at an Air Force Base and the back-up batteries will be implemented at that location. Additionally, a discussion occurred about the use of back-up batteries costing less over time and eliminating the need to build housing for the back-up generators. The back-up batteries would be used prior to an emergency until a portable back-up generator could be put in place, if needed.

Any object, including above ground fuel storage tanks, located near an active runway presents an increased risk to aircraft operations. The Office of Airports standard for Runway Safety Areas (RSA) and Runway Object Free Areas (ROFA) recognize the need to limit NAVAID and its associated equipment to those required to be in a certain location to perform their function. For these reasons the above ground fuel storage tanks (though not desirable), and any viable alternatives, would be required to be located outside the RSA and ROFA. Additionally, if the selected fuel source is flammable/explosive in nature it should be located at a distance to eliminate the danger during the aircraft transitioning from the runway to the high-speed taxiway until the aircraft is fully established on the taxiway.

In addition, Flight Standards recommends that ATO-ES discontinue building above ground fuel storage tanks within the runway's Part 77 Primary Surface and that ATO-ES abandon plans for the above ground fuel storage tanks at JFK and PHL.

For additional information in the airport design standards for runways, please refer to Advisory Circular 150/5300-13A, Airport Design. For specific information pertaining to the dimensions of the aforementioned surfaces, please contact the local Airports District Office (ADO) or Regional Office.

Please let us know if you have any concerns or want to discuss this further. The Point of Contacts are Wayne Radicke from Flight Standards (AFS) at 817-222-5205 or wayne.c.radicke@faa.gov and Carlton Lambiasi from the Office of Airports (ARP) at 847-294-7552 or carlton.lambiasi@faa.gov.