



**OPERATIONAL DIRECTIVE No. 00-3**

**Effective: JAN 08 2001**

**SUBJECT: HOT REFUELING OF TURBINE HELICOPTERS**

**PURPOSE AND SCOPE:** To establish uniform policy and procedures allowing for the hot refueling of turbine helicopters at the Miami- Dade County General Aviation Airports.

**I. BACKGROUND:**

Miami-Dade County Code, Chapter 25, Aviation Department Rules and Regulations, authorizes the Aviation Director to promulgate rules and regulations for the operation of the airports. The current text of the relevant sections of the County Code are set forth below in Section III.

**II. AUTHORITY:**

The authority of Operational Directives is Chapter 25 of the County Code. Aviation Department Rules and Regulations.

Section 25-1.1 Definitions state in part:

(3) "Air Operations Area" or "AOA" shall mean any area of the Airport identified by the Department and used or intended to be used for landing, taking-off or surface maneuvering of aircraft, excluding those leasehold areas within or having direct access to the AOA which are subject to security requirements imposed on the lessee or tenant under appropriate federal regulations, or agreement incorporated in a signed lease, unless such security requirements are assumed by the Department through the issuance of an Operational Directive or by lease agreement.

(4) "Airport" shall mean any Airport now or hereafter owned or operated by Miami-Dade County, Florida.

(5) "Apron " or "Ramp" shall mean that area of the Airport within the AOA designated by Operational Directive or

right issued by the Board, the County, the County Manager or Department Director or their authorized designee(s).

(30) “Operational Directive” shall mean a written order issued by the Director bearing the designation “Operational Directive” and requiring specific operational procedures or prohibiting specific operations or types of operations, onto or from an Airport; or establishing designated and restricted uses of various areas of an Airport, enforceable under Section 25-1.2(c)...

(31) “Operator” shall mean any person who is in actual physical control of an aircraft or motor vehicle.

(37) “Rules and Regulations” shall mean the Miami-Dade County Aviation Department Rules and Regulations, as codified in Chapter 25, Code of Metropolitan Dade County, Florida including Operational Directives issued thereunder...

Chapter 25 Section 6-23 Fueling & Defueling. The following rules shall govern and control the fueling and defueling of aircraft and motor vehicles at the Airport:

(a) No person shall fuel or defuel an aircraft while an operating engine of such aircraft is running; provided, however, that nothing herein shall prohibit fueling or defueling of an aircraft APU operations, and provided further in a situation resulting from an inoperative on-board APU, a jet engine mounted at the rear of the aircraft or on the wing on the side opposite the fueling point may be operated to provide aircraft electrical power during fueling, provided:

- (1) The operation follows procedures published by the manufacturer of the aircraft and its operator to assure safety of the operation.
- (2) Prior approval is obtained from the Department’s Airport Operations Office.
- (3) The Fire Department is on standby watch at the aircraft involved.

(b) As specified by NFPA standards, no person shall place into operation any electrical appliance in an aircraft when the aircraft is being fueled or defueled.

(c) No aircraft shall be fueled or defueled unless the aircraft and the fuel dispensing apparatus shall both be electrically grounded or bonded as required by Federal Aviation Regulations, NFPA standards, Miami-Dade County ordinances and applicable Operational Directives.

(d) When a fuel spill over five (5) feet in diameter occurs, the Fire Department shall be notified immediately and valves and dome covers shall be shut down. If the engine of the fueling vehicle is running at the time of the fuel spill, the vehicle shall be removed from the area unless contrary orders are issued by the senior fire office at the scene. Conversely, if the engine of a fueling vehicle is shut down at the time of the fuel spill, it shall remain shut down unless a fire has already started or until the senior fire officer at the scene orders the vehicle moved. In no event shall fueling or defueling operations resume following a fuel spill until all areas upon which fuel has spilled or flowed over are thoroughly flushed and the senior fire official at the spill site has issued an order permitting the resumption of fueling operations.

(e) No passenger shall be permitted in any aircraft during fueling or defueling, unless a cabin attendant is present at or near the cabin door and unless a passenger boarding ramp or bridge is in place at the cabin door.

(f) No person shall use any material within fifty (50) feet of the nearest point of an aircraft during fueling or defueling of the aircraft which may cause a static spark.

(g) No person shall engage in aircraft fueling and defueling operations without adequate fire extinguishers within ready reach.

(h) No person shall start the engine of any aircraft when there is a flammable liquid on the ground in the vicinity of such aircraft.

(i) No person shall fuel or defuel an aircraft with fueling hoses and other equipment or apparatus which are not in a safe, sound and non leaking condition in accordance with NFPA standards.

(j) All hoses, funnels, and appurtenances used in fueling and defueling operations shall be equipped with a positive grounding device in good order to prevent ignition of flammable liquids due to static spark.

(k) The fueling and defueling of aircraft shall be conducted at a distance of at least fifty (50) feet from any hanger or other building unless at a Terminal aircraft loading/unloading gate or fifty (50) feet from any combustion or ventilation air intake to any boiler, heater, or incinerator room in accordance with NFPA standards.

(l) Maintenance and testing of aircraft fueling systems shall be conducted under controlled conditions, in strict compliance with NFPA 410(C) or subsequent replacement publications.

(m) Refueling vehicles shall be stored and maintained outdoors in areas authorized by the Department, except for the accomplishment of minor adjustments or repairs necessary to move such units to the storage area when failure occurs elsewhere on the Airport. No fuel trucks, empty or otherwise, shall be brought into, kept or stored within any building at the Airport, unless said building is used exclusively for that purpose, or in those instances under controlled conditions during approved fueling and defueling operations.

(n) No fueling vehicles other than hydrant carts shall be backed within twenty (20) feet of an aircraft, unless a person is present outside the fueling vehicle to assist the operator thereof.

(o) When a fire occurs in or near a fuel delivery device while servicing an aircraft, the Fire Department shall be notified immediately, fueling shall be discontinued immediately, emergency valves and dome covers shall be shut down at once and the fueling vehicles and equipment shall immediately be removed from the vicinity of the aircraft unless deemed unsafe. Any persons on board the aircraft shall be evacuated and other equipment removed from the area. If necessary, the aircraft shall be towed to a position at a safe distance from buildings and other aircraft. Upon his arrival the senior fire officer will be in charge.

(p) The transfer of fuel from one fuel service vehicle to another (commonly referred to as “tankering”) is prohibited within the AOA, except for emergency conditions under the standby watch of the Fire Department, and except for the required resupply of a service vehicle in conjunction with the supply of large quantities of fuel; e.g. for wide-bodied aircraft; provided, however, that all equipment and aircraft must be properly grounded.

(q) No airborne radar equipment shall be operated or ground tested in any area on the Airport where the directional beam of high intensity radar is within three hundred (300) feet, or the low intensity beam is within one hundred (100) feet, of an aircraft fueling operation, aircraft fueling truck, or aircraft fuel or flammable liquid storage facility, unless an approved shielding device is provided and used during the radar operation.

## **II. DEFINITIONS:**

The definitions found in Chapter 25 of the Miami-Dade County Code are incorporated herein by reference and include but are not limited to the definition enunciated in Section III A of this Operational Directive.

“Turbine Helicopter” means a jet powered helicopter with the fueling access port mounted below the helicopter engine.

“Hot Refueling” means the fueling of a turbine helicopter by qualified service personnel while the engine (s) is running.

.”Qualified Service Personnel” means those fuel technicians who are specifically trained in the hazards of refueling helicopters with engines running.

“NFPA” means the National Fire Protection Association, 407, dated 1996.

“FAA FAR 135” means the Federal Aviation Administration CFR 14 Part 135 Commuter and On Demand Operations.

“Fixed Base Operator” means the airport leaseholder authorized to provide aircraft and helicopter support services.

**III. POLICY:**

It is the policy of the Aviation Department to permit the hot refueling of turbine helicopters on the AOA under the following conditions:

- A. Helicopter operator must be endorsed by the FAA (CFR Part 135 Operators) to conduct hot fueling.
- B. Fixed Base Operator (FBO) must certify an endorsement of "Hot Refuel Training" from a recognized supplier or agency for each fuel service technician. A letter listing approved service personnel must be provided by the FBO annually to the Miami-Dade Fire Department/Aviation Division, and updated as necessary.
- C. Helicopter and Fueller must not be parked closer than 50 feet to each other.
- D. Fueling can only be performed in remote areas of the FBO ramp area.
- E. One (or more) UL Classification 320 B-C or equivalent fire bottle must be available at the hot fueling site.
- F. The helicopter pilot must remain with the helicopter.
- G. Two fueling personnel must be present during hot fueling operations. One technician to conduct fueling operation and one to standby at the vehicles emergency shut off valve and be ready to initiate fire extinguisher use.
- H. All NFPA 407 (1996) codes must be adhered to.
- I. Airport based MDFD fire units, where available, must be notified and requested to standby during hot fueling operations.

**IV. EFFECTIVE DATE:**

This Operational Directive shall become effective 15 days subsequent to filing with the Clerk of the Circuit Court as required by Section 2-3 and 2-4 of the County Code.

**V. AMENDMENT:**

The Miami-Dade Aviation Department reserves the right to amend this Operational Directive at any time and from time to time, and notice of such amendment will be furnished to all affected parties who register with the Aviation Department. Such amendments of rules shall become effective 15 days subsequent to filing with the Clerk of the Circuit Court, as required by Section 2-3 and 2-4 of the County Code.

**VI. SEVERABILITY:**

If any court of competent jurisdiction determines that provision in this Operational Directive is illegal or void, then the remainder of this Operational Directive shall continue in full force and effect.

*(Original signed)*

---

Gary J. Dellapa, Aviation Director

Date: December 11, 2000