

**To the Mayor and Members of the City Council****August 20, 2024**

Page 1 of 3

SUBJECT: POLICY OF DESIGNATED DELIVERY ROUTES FOR DELIVERY DRONES

The purpose of this Informal Report is to provide Mayor and City Council with information regarding the City's authority to regulate or require drone operators to take specific delivery routes.

Background

Advanced Air Mobility (AAM) is a transportation system that moves people and property by air between two points in the United States (U.S.) using aircraft with advanced technologies, including electric aircraft, or electric vertical takeoff and landing (eVTOL) aircraft, in both controlled and uncontrolled airspace. Falling under the broad definition of AAM are Unmanned Aircraft/Aerial Systems (UAS), commonly referred to as drones, and associated equipment that do not carry a human operator, but instead are remotely piloted. A UAS generally consists of:

1. An aircraft with no pilot on board,
2. A remote pilot station,
3. A command and control link, and
4. A payload specific to the intended application/operation

From 2017 through 2020, the UAS Integration Pilot Program (IPP) focused on testing and evaluating the integration of civil and public drone operations into our national airspace system. This work continues today under the UAS BEYOND program, which focuses on the remaining challenges of UAS integration, including beyond visual line of sight (BVLOS) operations, societal and economic benefits of UAS operations, and community engagement.

Participants in these programs are among the first to prove their concepts, including package delivery by drone through part 14 CFR Part 135 (Part 135) air carrier certification. The Federal Aviation Administration (FAA) issued the first Part 135 single pilot air carrier certificate for drone operations to Wing Aviation, LLC in April 2019. The FAA later issued Wing a standard part 135 air carrier certificate to operate a drone aircraft in October 2019.

Operators seeking to provide commercial package delivery by drone must first obtain a part 14 CFR Part 135 (Part 135) Air Carrier Certification. Today, there are five FAA-approved Part 135 drone operators operating in the United States, with additional applications pending final FAA approval.

In June of this year Walmart began offering small package delivery service to their customers via Wing from their 8520 N. Beach Street store location, with other locations under review, making Fort Worth the first major U.S. city with commercial drone delivery service. The unmanned delivery aircraft can deliver food, over-the-counter medicine, and household items directly to homes and businesses.

**To the Mayor and Members of the City Council****August 20, 2024**

Page 2 of 3

SUBJECT: POLICY OF DESIGNATED DELIVERY ROUTES FOR DELIVERY DRONES**Unmanned Aircraft/Aerial Systems (UAS) Regulatory Framework****Federal**

The FAA has exclusive authority to regulate aviation safety and airspace efficiency for UAS at low altitudes, just as it does for manned aircraft at higher altitudes. While the FAA has not set minimum altitudes for UAS, it requires them to operate at low altitudes, generally not to exceed 400 feet above ground level. Consequently, the regulation of drones or other aircraft by local governments is either preempted by the FAA or restricted by the State.

The FAA has established comprehensive guidelines for drone operators, mandating requirements like obtaining a Remote Pilot Certificate and adhering to operational conditions such as altitude limitations, daylight operation constraints, and the avoidance of flying over uninvolved individuals.

FAA Part 107 rules for small UAS operations cover a broad spectrum of commercial and government uses for drones weighing less than 55 pounds.

Examples of 14 CFR Part 107 operations include commercial aerial photography, commercial aerial survey, other operations for hire, and operations that are not conducted purely for pleasure/recreation.

State

The State of Texas addresses the regulation of UAS by counties, municipalities, and joint boards. Specifically, Texas Government Code Section 423.009 restricts these entities from implementing ordinances or measures related to drone operations, with exceptions for specific circumstances. These exceptions include the use of drones during special events, for internal operations of government entities, or near critical infrastructure such as water treatment plants. However, these activities require FAA authorization and must be preceded by a public hearing.

Local

While federal regulations primarily govern commercial drone activities, local authorities, including cities, possess some jurisdiction over certain aspects of drone operations within their boundaries. They may regulate elements like takeoff and landing sites, noise levels, and privacy concerns. However, any local regulations must align with FAA guidelines and cannot directly oppose federal airspace regulations.

Administrative Regulation D-14

The City of Fort Worth has adopted Administrative Regulation (AR) D-14 which establishes citywide policies and procedures regarding the use of unmanned aerial systems. This policy applies to:

1. All unmanned aerial systems owned, provided and/or managed by the City of Fort Worth (City); and
2. All uses of unmanned aerial systems and services provided to the City under agreements with third-party vendors and service providers.

**To the Mayor and Members of the City Council****August 20, 2024**

Page 3 of 3

SUBJECT: POLICY OF DESIGNATED DELIVERY ROUTES FOR DELIVERY DRONES**Land Use and Zoning**

Zoning regulations applicable to drones are related to outdoor storage of the equipment similar to other equipment that is stored outdoors. One drone delivery company – Wing – has partnered with Walmart and is currently doing such deliveries. The company was required to delineate the outdoor storage area on the site plan and locate it in a manner so that it would not have a streetview.

Other Texas Cities

Municipalities in Texas have adopted different methods to accommodate commercial drone delivery hubs in their communities:

1. No regulations.
2. Defined as existing land use. (Use of drones can be considered an accessory or operate under a special use permit)
3. Adoption of a newly defined land use.

If you have any questions concerning these issues, please contact Roger Venables, Aviation Director at Roger.venables@fortworthtexas.gov. or Lashondra Stringfellow, ACIP, Assistant Director, Zoning and Design Review at lashondra.stringfellow@fortworthtexas.gov.

**David Cooke
City Manager**