Infrastructure Considerations Brief

February 2025

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ABOUT WISK AERO

Wisk, a wholly owned subsidiary of Boeing, is an autonomous aviation company dedicated to creating a future for air travel that elevates people, communities, and aviation.

Wisk’s Generation 6 Aircraft

Wisk’s self-flying, eVTOL (electric vertical takeoff and landing) air taxi is the first candidate for FAA certification of a passenger-carrying autonomous aircraft. Wisk is headquartered in the San Francisco Bay Area, with locations around the world.

Purpose

This document summarizes Wisk's baseline siting and design considerations for vertiports. There may be alterations to these requirements based on the vertiport's country, city, state, location, or usage. If the vertiport in question is located outside of the U.S., country-specific guidance should be substituted where this document refers to the U.S. FAA's vertiport guidance.

Note: Wisk is not in the vertiport design or construction business, so the below-mentioned requirements are either (1) advisory based on Wisk's industry knowledge, or (2) required for Wisk's operational plans.

Aircraft Characteristics

4 passengers

With carry-on and personal items

15 minute charge time

Minimum charge time

50 ft | 15.24 m

Controlling dimension

7k lbs | 3175 kg

Maximum takeoff weight

Ground operations

Dedicated ground crew supporting ground movement equipment & servicing

Air operations

Autonomous flight, no onboard pilot, multi-vehicle supervision

Acronyms & Abbreviations

eVTOL	Electric Vertical Takeoff and Landing
FAA	Federal Aviation Administration
ft	Feet
m	Meters
lbs	Pounds
kg	Kilograms
TLOF	Touchdown and liftoff Area
FATO	Final Approach and Takeoff Area
D	Controlling Dimension
RD	Rotor Diameter
CAA	Civil Aviation Authority
SA	Safety Area

GPS	Global Positioning System
FBO	Fixed-Base Operator
CLZ	Contingency Landing Zone
kWh	Kilowatt-hour
kW	Kilowatt
V	Volts
NFPA	National Fire Protection Association
FOC	Fleet Operations Center
FOD	Foreign Object Debris
ATC	Air Traffic Control
EASA	European Union Aviation Safety Agency.

Sizing Considerations

Defining Aircraft Dimensions

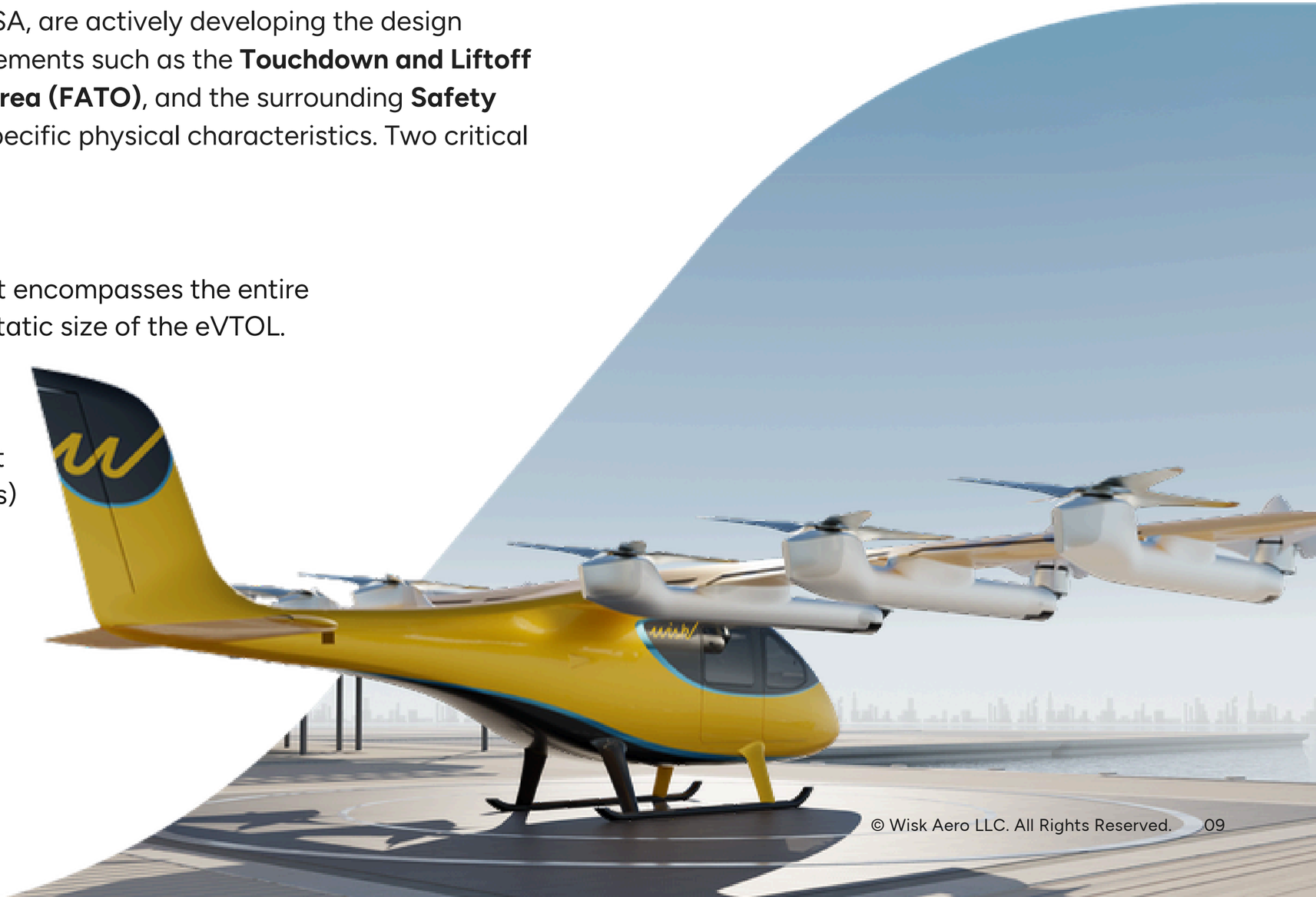
Global regulators, including the FAA and EASA, are actively developing the design standards for vertiport infrastructure. Key elements such as the **Touchdown and Liftoff Area (TLOF)**, **Final Approach and Takeoff Area (FATO)**, and the surrounding **Safety Area (SA)** are sized based on an aircraft's specific physical characteristics. Two critical parameters drive these calculations:

The Controlling Dimension (D)

This is the diameter of the smallest circle that encompasses the entire aircraft's footprint. It represents the overall static size of the eVTOL.

The Rotor Diameter (RD)

This is the diameter of the smallest circle that encompasses all propulsion units (rotors, fans) while they are in operation, and also includes all landing gear contact points. It represents the aircraft's operational footprint during takeoff and landing.

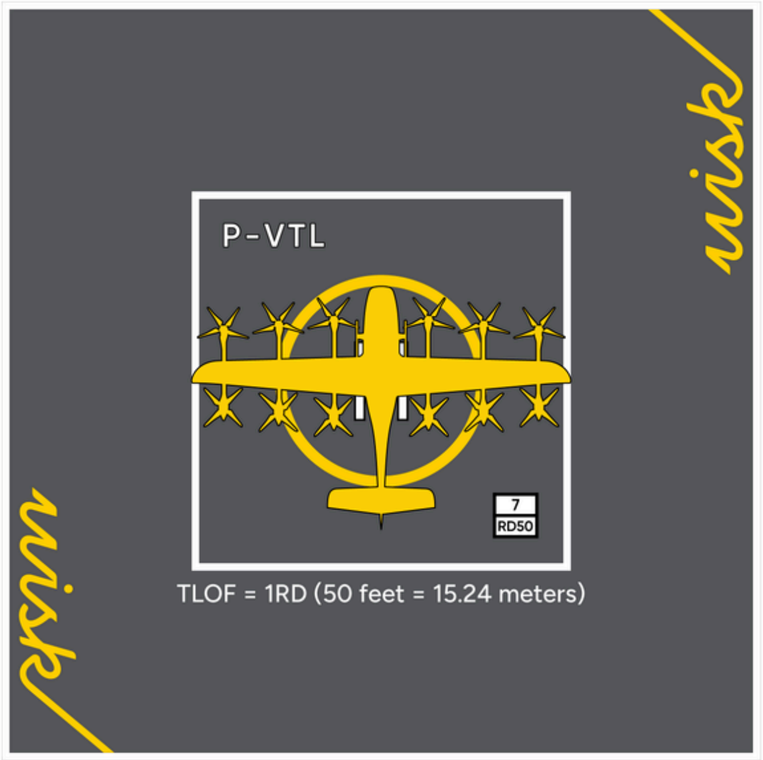


Basic Surface Dimensions

As of August 2025, vertiport design specifications vary by regulatory body and region. Wisk is actively engaged with Civil Aviation Authorities (CAAs) worldwide to support the development of a safe, efficient, and globally harmonized regulatory framework.

Since these standards are evolving, infrastructure developers and operators should always consult the relevant authorities for the most current regulations.

TLOF	FATO	SAFETY AREA
	US	
1 RD	2 RD	2.5 D
50 ft	100 ft	125 ft
15.24 m	30.48 m	38.1 m
	International	
0.83 D	1.5 D	1.75 D
41.5 ft	75 ft	87.5 ft
12.65 m	22.86 m	26.67 m



TLOF = 1RD (50 feet = 15.24 meters)

FATO = 2RD (100 feet = 30.48 meters)

Safety Area = 2.5RD (125 feet = 38.1 meters)

Infrastructure Considerations

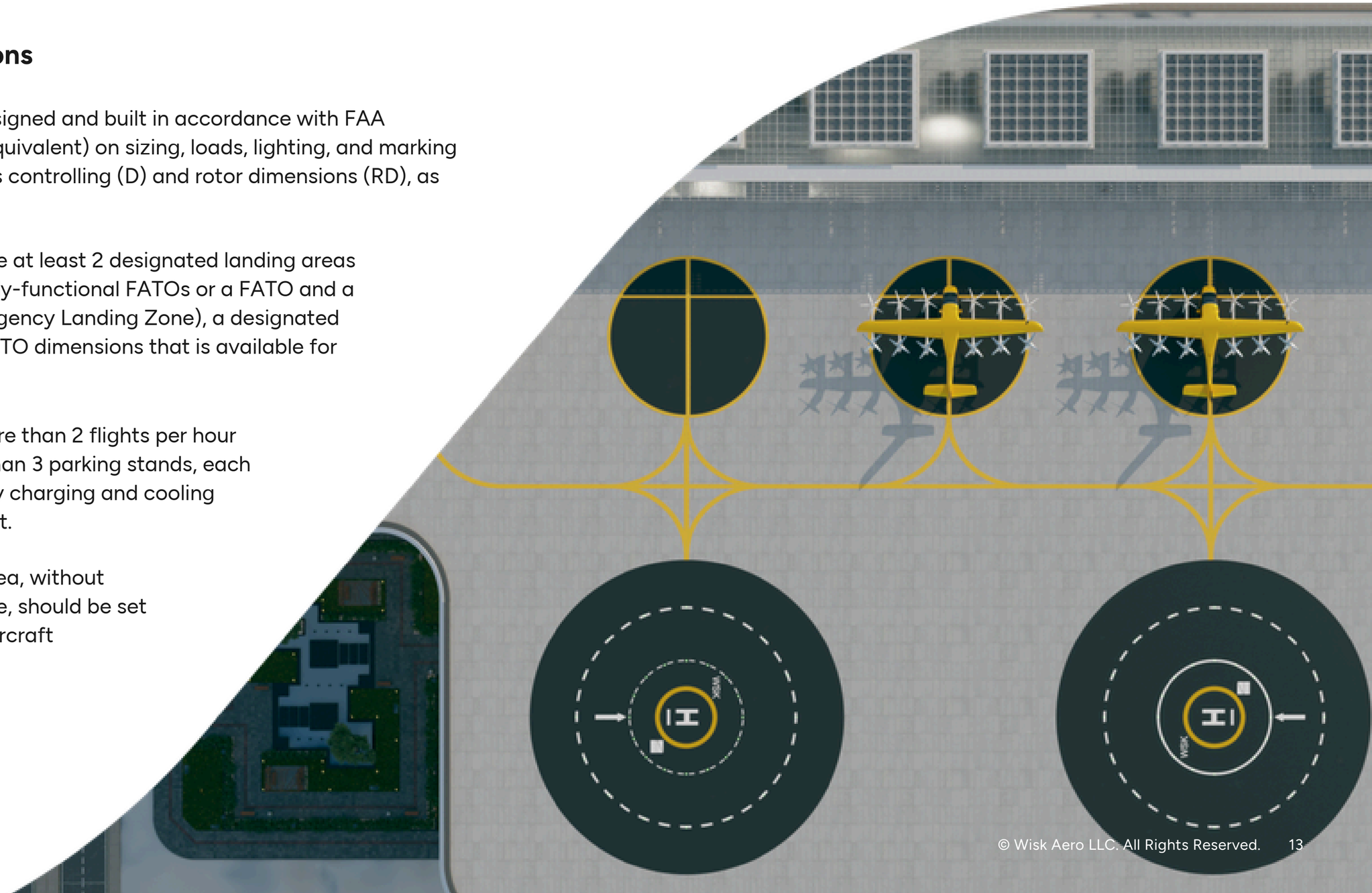
Siting Considerations

- Zoning on-site caters to electric vertical takeoff and landing (eVTOL) operations and must allow for relevant aircraft operations by the local governing body.
- The area surrounding the vertiport site should be clear of obstacles in critical areas, with approach and departure surfaces protected from future development (see TERPS instruction FAAJO 8260.3G and FAA EB 105A).
- Vertiport approach, departure, and missed approach paths must be designed to avoid conflicts with commercial aircraft's approach and departure paths, traffic patterns, and contingency procedures.
- Airspace class surrounding the vertiport location impacts the level of air traffic control interaction, operational restrictions, and proximity allowances to existing airports.
- Final Approach and Takeoff Area(s) (FATO) require unobstructed GPS coverage with a sufficient number of visible satellites.

- Evaluate and mitigate potential radio frequency interference to safeguard against disruptions to aircraft systems and ensure the integrity of flight operations.
- The preliminary footprint estimate for a 2 FATO, 3 Stand configuration, encompassing associated maintenance, staging, and storage areas for a Wisk aircraft, is 240 ft x 230 ft. This figure is subject to revision pending updated guidance on Downwash/Outwash Caution Areas.
- If siting a vertiport on-airport, ensure that the center of any FATO is at least 500 ft from the runway centerline for runways supporting airplanes under 300,000 lbs, or at least 700 ft from the runway centerline for runways supporting airplanes over 300,000 lbs.
- All on-airport vertiports must be sited to minimize conflicts with existing ground operations, FBO facilities, jet blast zones, and other ground-level factors.
- FAA requires a 90-day notice (7480-1) for new or retrofitted vertiport construction. For vertiports on federally obligated airports, a 45-day notice (7460-1) is needed to update airspace designations.

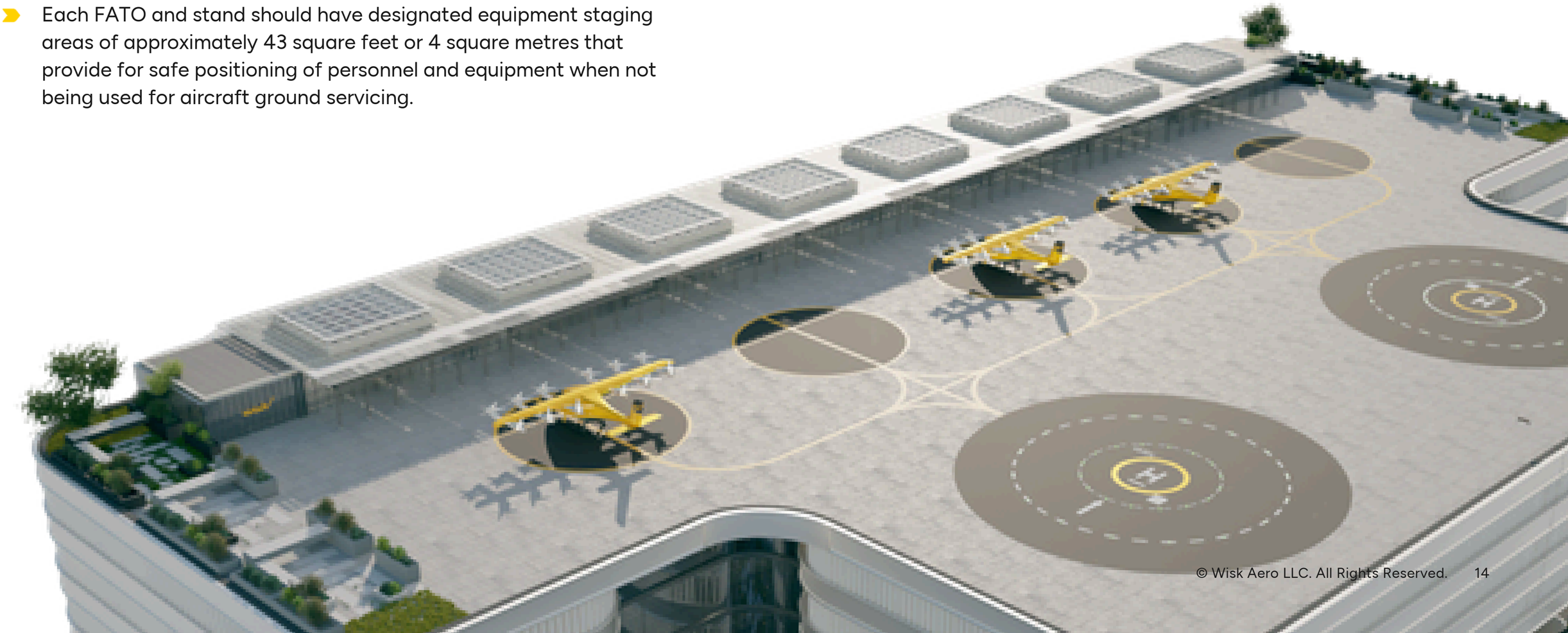
Airside Considerations

- Vertiports should be designed and built in accordance with FAA guidance (EB 105A or equivalent) on sizing, loads, lighting, and marking guidance, as per Gen 6's controlling (D) and rotor dimensions (RD), as well as its gross weight.
- Each vertiport must have at least 2 designated landing areas consisting of either 2 fully-functional FATOs or a FATO and a designated CLZ (Contingency Landing Zone), a designated surface of equivalent FATO dimensions that is available for contingency landings.
- Vertiports expecting more than 2 flights per hour should provide no less than 3 parking stands, each equipped with necessary charging and cooling infrastructure/equipment.
- An additional parking area, without associated infrastructure, should be set aside for unscheduled aircraft maintenance.



Airside Considerations, cont’d

- Secure storage facilities of approximately 108 square feet or 10 square metres should be provided for all ground support and pre-positioned maintenance equipment.
- Each FATO and stand should have designated equipment staging areas of approximately 43 square feet or 4 square metres that provide for safe positioning of personnel and equipment when not being used for aircraft ground servicing.
- Multiple emergency egress points should be established and signposted with emergency service responders provided means of accessing the vertiport’s airside area.



Ground Support Infrastructure & Equipment Considerations

- In vertiport configurations that utilize designated stands for servicing, aircraft connect with ground movement equipment at the FATO and are towed to an assigned stand to facilitate passenger deboarding and aircraft servicing.
- Aircraft charging requires standardized charging connectors supplying a total of ~125 kWh per charge with a peak power draw of between 500-750 kW for a 15 min charge time (expectation that MW chargers will be standard by 2035).
- Standard 120/240 V mains power should be available for low-voltage equipment power and charging (e.g. standard GSE, digital screens).
- Electrical mains connection should be available at parking stands for aircraft cooling units and associated ground support equipment.
- Adequate surface lighting should be installed to enable nighttime operational capabilities at the vertiport facility.

Terminal & Landside Considerations

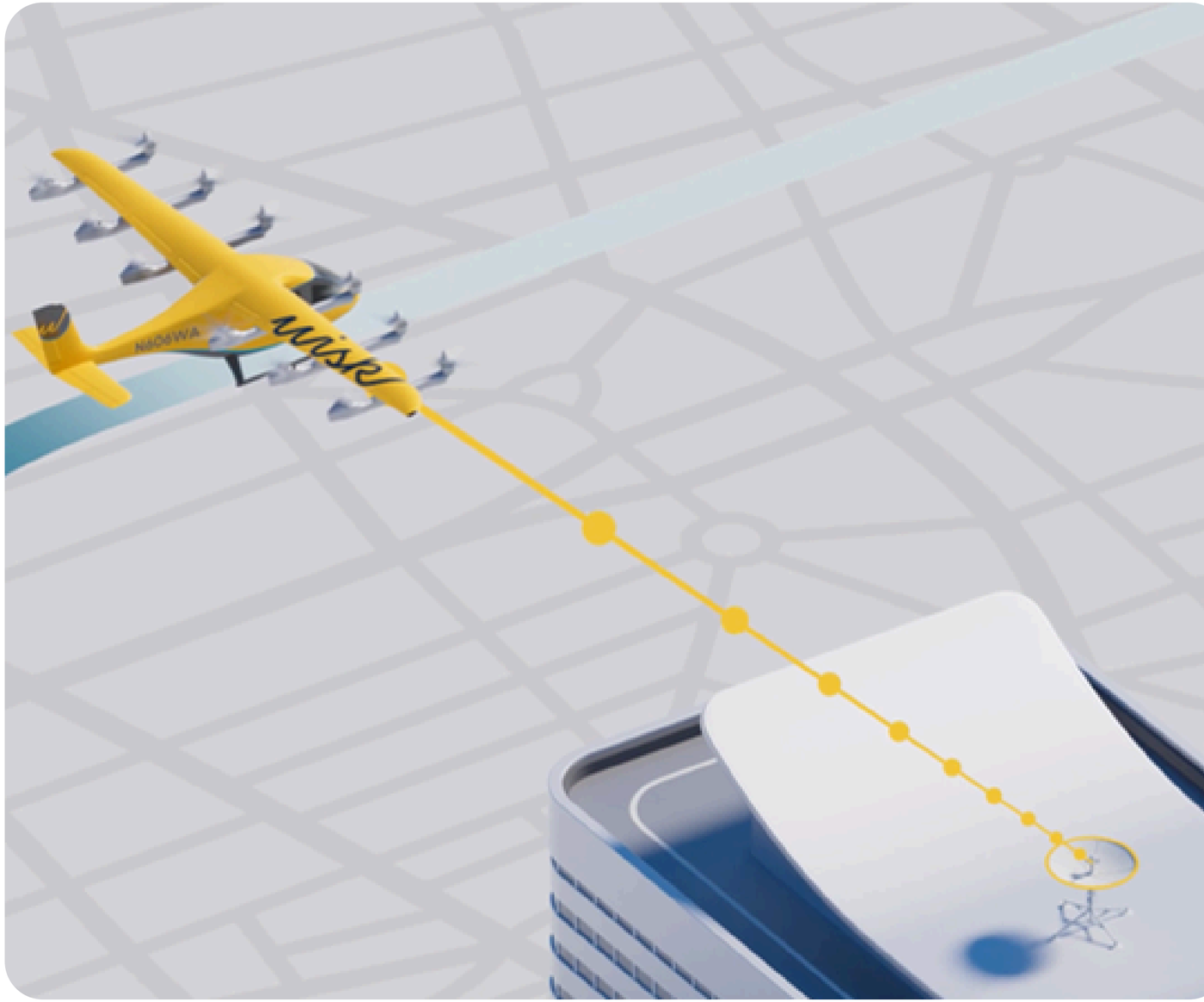
Terminal & Landside Considerations

- The perimeter of the vertiport should be secured against access by unauthorized persons and terrestrial wildlife (vertiports located airside at a secure airport will automatically meet this standard).
- Terminal facilities should provide appropriate cover, shelter, and comfort for waiting passengers, as well as necessary support equipment for check-in and boarding.
- Check-in and boarding systems should be common-use and, as far as practicable, self-service, allowing for baggage and passenger weighing, booking verification, and access control.
- Dynamic information displays should provide general and specific flight information to be viewable by waiting passengers.
- Office, crew rest, restrooms, and storage facilities for the aircraft operator's ground crew should be provided at or in the vicinity of the terminal facilities.
- Depending on the nature of passengers' arrival, on-journey and inter-modal connection needs, landside provisions should be made, such as car drop-off/pick-up, micromobility staging/storage, and transport interchange access.
- Depending on the surroundings of the vertiport, barriers may be needed to limit the exposure of people to downwash & outwash outside of the vertiport.

Communications Considerations & Operational Considerations

- **Secure IT & communications facilities for aircraft operator-specific equipment including:**
  - Secured WiFi with coverage over all parking stands
  - Private internet connection to aircraft operator FOC (Fleet Operations Center) for safety-critical communication
  - General internet connection for non-critical communications
  - VHF radio repeater equipment

- **Wisk expects Vertiport Operators to perform the following functions:**
  - Monitor and communicate FATO status for real-time availability
  - Manage reservations of stands, FATO, power sources, parking, maintenance equipment, and team members upon request
  - Inform personnel of any changes in vertiport operations
  - Identify and communicate facility unserviceabilities and potential hazards such as foreign object debris (FOD), on & off-airport obstacles, wildlife hazards, resource serviceability issues, and external data discrepancies



Fire Safety Measures

At Wisk, our mission is to deliver safe, everyday flight for everyone. A critical component of our safety strategy involves the robust design and management of our aircraft's high-voltage lithium-ion battery systems and the mitigation of thermal runaway risk.

The National Fire Protection Association (NFPA) defines thermal runaway as the “rapid uncontrolled release of heat energy from a battery cell... a condition when a battery creates more heat than it can effectively dissipate." A thermal event in a single cell can potentially propagate to neighboring cells in a chain reaction. Wisk’s battery architecture is engineered with multiple layers of safety and isolation to prevent and contain such events.

Regulatory bodies and specialized agencies are developing the fire safety criteria for vertiport operations. While the 2024 update to NFPA 418, Standard for Heliports and oundational firefighting guidelines, it also highlights that specific procedures and extinguishing agents for eVTOLs are still evolving and may vary between manufacturers.

Thank You!

Learn more @wisk.aero

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