

DARPA Lift Challenge 2026:

Course Details



This section outlines the official flight course dimensions, color-coded operational zones, and the mandatory procedures associated with each boundary. All teams are required to understand and adhere to these rules during their scoring attempts.

The flight lane is a defined corridor measuring 100 feet wide by 1,100 feet long. A multi-tiered zone system will be used to provide real-time feedback and enforce safety protocols.

Zone Definitions and Required Actions

Green Zone (Safe Flight Corridor)

- Dimensions: A 60-foot-wide by 1,060-foot-long corridor centered within the flight lane.
- Description: This is the designated safe and optimal flight path. Operations within this zone are considered nominal.

Yellow Zone (Warning Buffer)

- Dimensions: A 20-foot buffer area located along the inside edges of the flight lane.
- Description: Entry into the Yellow Zone indicates that the aircraft is approaching the lane boundary. A visual warning will be triggered on the Remote Pilot in Command (RPIC) display.
- Required Action: None

Red Zone (Run Termination)

- Dimensions: The area beginning 35 feet outside of the primary flight lane boundary.
- Description: Entry into the Red Zone constitutes a boundary excursion and results in the immediate termination of the scoring attempt.
- Required action: The scoring attempt for that run is officially concluded. The pilot must safely maneuver the aircraft back into the lane and return to the starting position. Subject to remaining mission time, the team may refuel, re-weight, and begin a new attempt.

Black Zone (Geofence Breach)

- Dimensions: The entire area beyond the site's established geofence perimeter (indicated by a dotted line on the RPIC display).

- Description: A Geofence Breach is a critical safety event. It indicates the aircraft has left the designated operational area. The following tiered emergency protocol is mandatory.

Required Action Protocol

1. Immediate correction: The pilot's primary and immediate responsibility is to attempt to guide the aircraft back inside the flight box.
2. Land immediately: If the aircraft is unresponsive to corrective inputs, the pilot must land the aircraft immediately, regardless of its position.
3. Activate kill switch: If the aircraft is unresponsive, cannot be landed safely, and continues to travel away from the operational area, the pilot must activate the kill switch as the final resort to ensure site containment.



This graphic shows Lift Challenge lane boundaries as described in The Competition Course Section. Source: DARPA