# 100y







# Meet Joby

A vertically integrated transportation company developing, testing, manufacturing and operating a piloted, 4-passenger, zero-operating emission, quiet revolutionary aircraft.

Plan to launch our app-based aerial ridesharing service directly to end-users following the receipt of FAA type certification.

Over \$2B raised to date, including funds raised during our SPAC in 2021.



#### **Joby's Exceptional Team**

- 1,800+ current employees
- Across 31 States

#### **Joby's Major Facilities**

#### Santa Cruz

- Corporate headquarters
- Prototyping/R&D

#### San Carlos

- Powertrain Production
- **Battery Packs**

#### Marina

- Flight Test
- **Certified Production**
- **Future of Commercial** Operations
  3 | Joby Aviation proprietary information



# Payload

1000 lbs — 4 passengers, 1 pilot

With a maximum takeoff weight of approximately 5,300 lbs, we believe the Joby aircraft is the right aircraft for the market, delivering on all key attributes.

# Range

Trips up to 100 miles

# Speed

Up to 200 mph

# Sound

~45 dBA in cruise







Zero operating emissions



Vertical takeoff

and landing

150+ mi range

(with 30 min VFR reserve)

top speed



5 seats 1 pilot 4 passengers

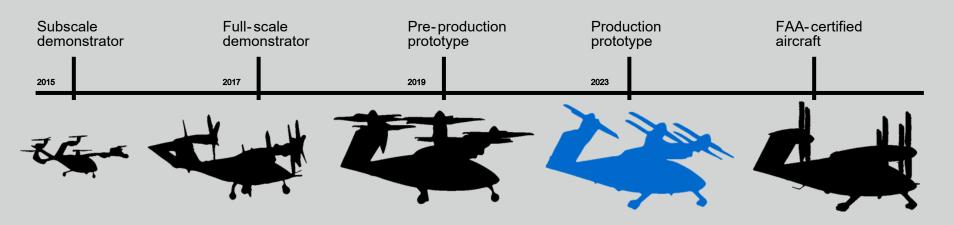


10+ years in development

200 mph

# Joby aircraft evolution

Joby's production prototype builds on six years of flying full scale aircraft and marks an important step towards certification and production at scale.





#### Breakthrough enabling technology:

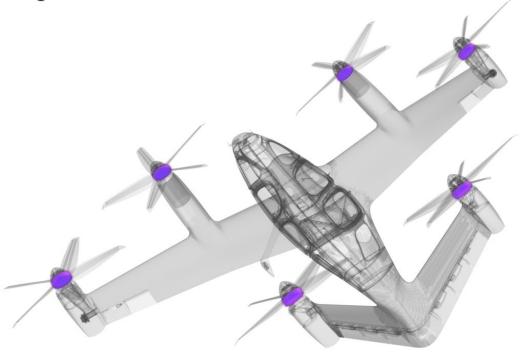
#### Distributed Electric Propulsion

Distributing multiple smaller and simpler electric motors across the aircraft enables:

**Safety:** No single points of failure across aircraft systems

**Acoustics:** Electric motors enable a reduced sound profile

**Economics:** Reduced maintenance downtime; savings on fuel costs





### Designed for safety with high levels of redundancy

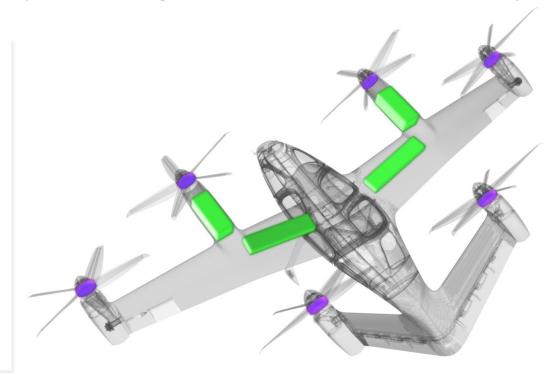
6 propellers – can fly safely with the loss of any one propellor

Each motor is redundant and powered by two separate inverters

Each inverter is wired to a separate battery pack

4 isolated and redundant battery packs on board

Motor continues to function if an inverter or pack fails



Our aircraft has no single points of failure across aircraft systems



# Sophisticated partnerships support our competitive advantage



Go To Market & Ops.

**Uber** 







Manufacturing





**Toray Advanced Composites** 



Infrastructure







REEF



#### **App Based Service**

Seamlessly integrated air / ground mobility service

A vertically -integrated business model that sees us both manufacturing and operating the aircraft

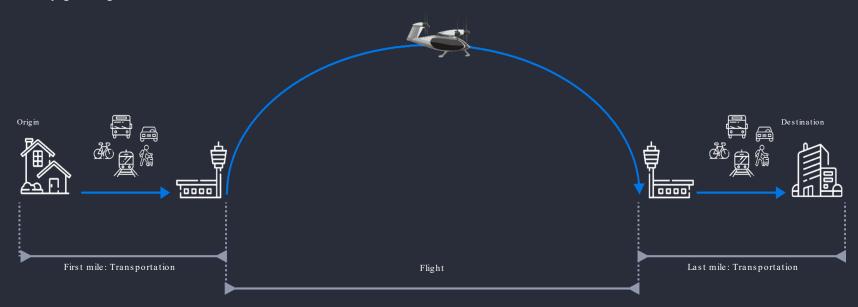
Convenient app-based bookings, increasingly on-demand over time

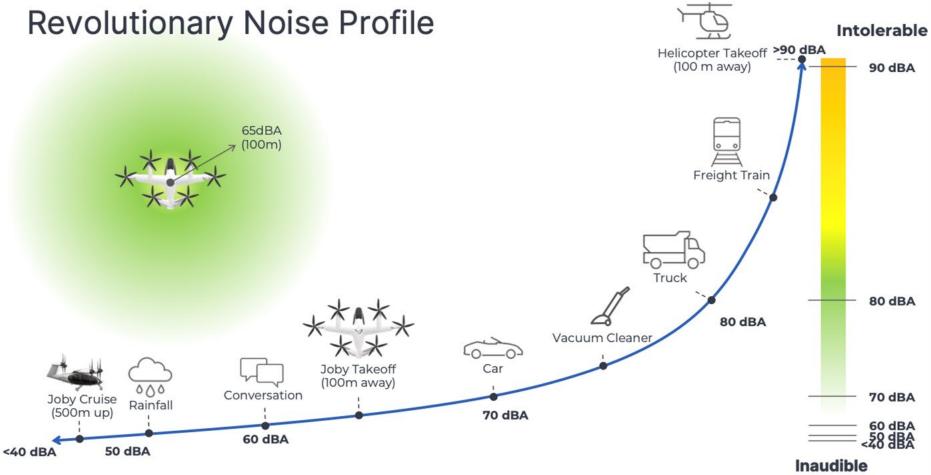
Seamless, **multi-modal** passenger experience



#### Rider Experience Vision

Joby's rider experience will make flying through urban areas feel effortless by anticipating a rider's needs, empowering users during each transition, and safely guiding riders to their final destination on time.

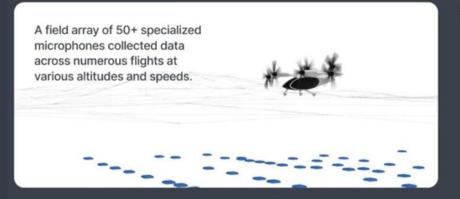






#### ...proven with support from NASA





The NASA team used the flight recordings to model acoustic hemispheres, used for computing sound level anywhere on the ground.

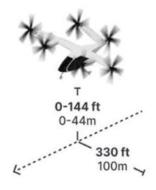
#### OVERHEAD FLIGHT



45.2 dBA1

Joby acoustic computation using NASA model

#### TAKEOFF & LANDING



#### Below 65 dBA<sup>2</sup>

NASA acoustic measurement



Using NASA's model, Joby computed the free-field acoustic signature of its aircraft to be 45.2 dBA during flyover at an attitude of 1640 feet (500 meters).
 Based on representative takeoff and landing profiles, NASA also measured the aircraft's acoustic footprint to be below 65 dBA at 330 feet (100 meters) from the flight path.

#### NASA Noise Testing Campaign

"You don't hear that characteristic rotor or propeller sound. It was much more benign...A drone and the Joby aircraft could be creating the same level of sound, but someone could be much more annoyed with the drone...The Joby vehicle tends to fall into those levels that are more acceptable as it sounds more like white noise as opposed to a distinct sound that gets people's attention and is perceived as 'annoying." – Kyle Pascioni, NASA AAM National Campaign

Aircraft Comparison Video: <a href="https://www.youtube.com/watch?v=itP8-3j2UZI&t=21s">https://www.youtube.com/watch?v=itP8-3j2UZI&t=21s</a>



## U.S. Public Use Airports

5,080

#### Federal Airport Act of 1946

Contributes to the strongest economy in the world and assures continued U.S. aviation leadership.





#### Certified Aircraft – Not Drone







Traditional aircraft designed to carry people are certified against stringent safety criteria by the FAA & the Joby aircraft follows this path.



#### **Drones**

Unmanned aircraft have been allowed to fly without design certification provided they don't put people on the ground at risk.



## Opportunities to decarbonize California's skies

#### Commuting



120,000 travelers on 62 flights a day took San Francisco and Oakland Helicopter Airlines in 2019 for Bay Area commuting **Public Services** 



1.2 million gallons of fue I burned by L.A. law enforcement helicopters

Air Tours



National Park Service Bay Area Air Tours have up to 2,548 helicopter tours a year



# Thank you!



