



Shareholder Letter
Q4 2022

Fourth Quarter 2022 Highlights



Means of Compliance Complete

We effectively completed the second of five stages required by the Federal Aviation Administration (FAA) to certify our aircraft for commercial passenger use, in what we believe is a first for the eVTOL industry.



FAA Administrator Visit

We hosted Acting FAA Administrator Billy Nolen and members of his team at our production facility where they were able to see our pilot manufacturing line and observe one of our regular test flights.



Certification Progress

We also made substantial progress in the later stages of the type certification process, with an additional four Area Specific Certification Plans (ASCPs) submitted to the FAA, a total of five ASCPs now accepted, and the successful completion of the second of four System Review stages.



Final Assembly Begins

We began final assembly of the first aircraft to be manufactured on our pilot production line. Having built the major aerostructures – the wing, tail, and fuselage – we are now mating the structures together and installing wiring, electronics, and other systems.

Strong Financial Foundation

At the end of the fourth quarter of 2022, we had \$1.1 billion in cash and short-term investments, including Delta's upfront equity investment of \$60 million received in the quarter. Net cash used in operating activities and purchases of property and equipment totaled \$291 million in 2022, with \$84 million spent in the fourth quarter. In the quarter, we acquired land and facilities in Santa Cruz for \$25.5 million to support Joby's long-term growth.

Net Loss

Our net loss of \$66.9 million reflected operating expenses of \$101.4 million partially offset by other income of \$34.5 million. Operating expenses reflected primarily our continued progress certifying the aircraft and early manufacturing operations and included stock-based compensation expenses of \$17.2 million. Other income included a favorable revaluation of derivative liabilities worth \$25.9 million and interest income on our investments.

Adjusted EBITDA

Adjusted EBITDA loss of \$77.6 million largely reflected our operating expenses excluding depreciation, amortization and stock-based compensation.



Progress On Our Long-Term Plan

Certifying our Aircraft

We now have 94% of our Means of Compliance accepted by the FAA. Given it is typical for a small portion of Means of Compliance to remain open to address minor design changes and improvements later in the process, we now consider the second of five stages of the FAA's type certification process essentially complete. During this stage, we identify what we will do to demonstrate compliance with the regulatory intent of the safety rules ("Means of Compliance") that were defined during the first stage of the process ("Certification Basis"). We believe we are the first eVTOL company to reach this milestone, having also been the first eVTOL company to complete stage one and have our Certification Basis published in the Federal Register.

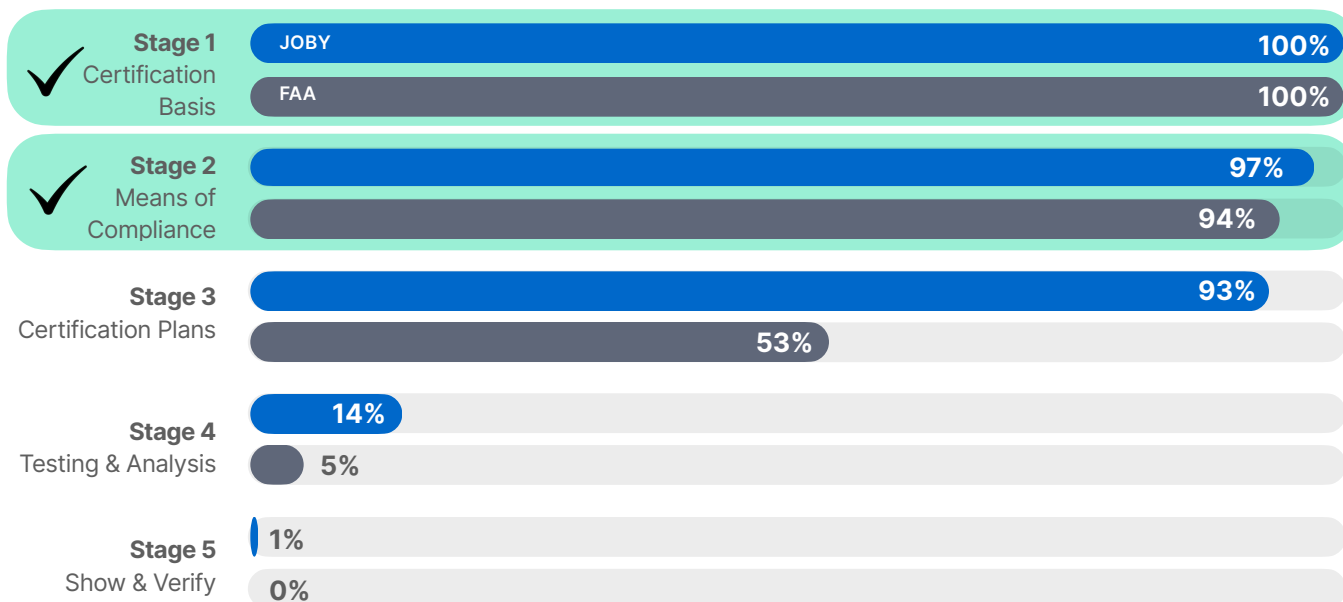


We made substantial progress on the later stages of the certification process, submitting a range of test plans and four additional ASCPs to the FAA. We now have eight of thirteen ASCPs submitted, of which five have now been formally accepted by the FAA. This work contributed to our progress in Stage Three increasing from 37% accepted as of our Q3 report to 53% accepted, and we are on track to submit the remainder of our ASCPs in the first half of this year.

We also received approval of two further qualification test plans and successfully completed the second of four System Review stages, which keep the Company's development process on track to satisfy the FAA's safety objectives.

We were pleased to welcome Billy Nolen, Acting FAA Administrator, along with Lirio Liu, Executive Director of the FAA's Aircraft Certification Service, and Paul Fontaine, Acting Assistant Administrator for NextGen, to our facility in Marina, CA, in January 2023, where they were able to tour our pilot manufacturing facilities, visit our Integrated Test Lab, and experience one of our regular flight tests. In 2022 alone, we flew more than 10,800 miles with our pre-production prototype aircraft, successfully completing more than 1,200 defined flight test points and generating a significant amount of valuable data that we use to optimize our production aircraft to meet our certification and operational goals.

Joby's Progress to Type Certification



Percentage completion may fluctuate mildly through the course of certification as documents are edited and resubmitted. Data as of February 16, 2023. It is typical for a small portion of the Means of Compliance to remain open in order to address minor design changes and improvements that may occur later in the process. We therefore consider the second stage essentially complete.

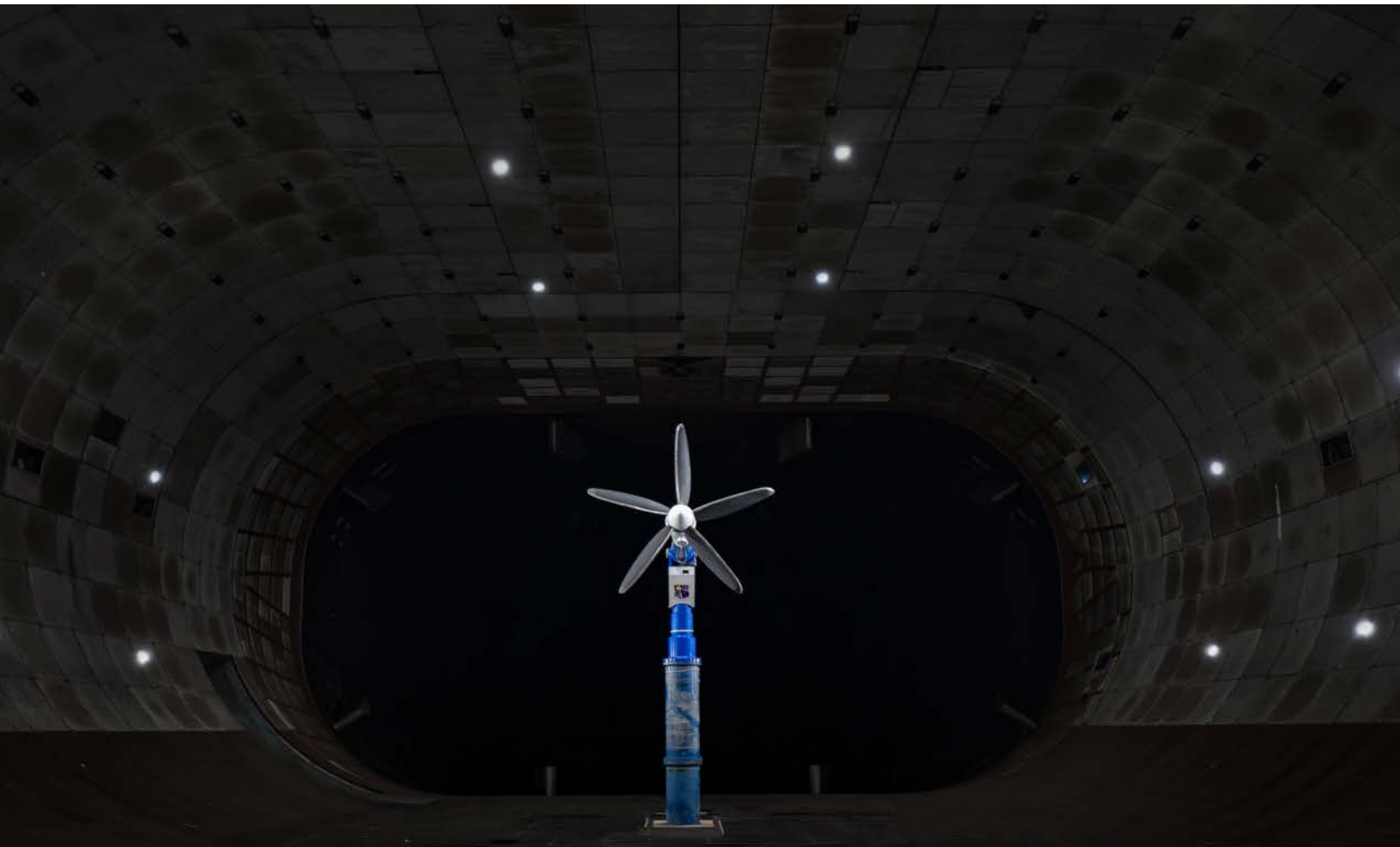
Scaling our Manufacturing

We began final assembly of the first company-conforming aircraft (right) to be produced on our pilot manufacturing line in Marina, CA, marking a significant step forward in our certification process. This aircraft is being built in accordance with the Company's current released designs, manufacturing processes, and subject to an appropriately-scaled inspection process defined within our complete quality management system, in what is believed to be an eVTOL industry first. The aircraft is expected to fly within the first half of 2023. We expect to produce several company-conforming aircraft at progressive levels of maturity before building an FAA-conforming aircraft.



We made important testing progress during the quarter. We successfully carried out numerous tests, including structural wing tests and propeller bird strike tests. We successfully completed temperature, humidity, radio-frequency, lightning, and thermal characterization testing on our battery module, having previously successfully completed drop testing. We also began testing our propeller systems at the National Full-Scale Aerodynamic Complex (NFAC), the world's largest wind tunnel facility, at NASA's Ames Research Center at Moffett Field in California (below).

We completed initial power-on of our Integrated Test Lab, an in-house facility that replicates both the hardware and software on the aircraft, allowing us to generate critical data in support of type certification without leaving the ground.





On a brisk Saturday morning in January 2023, Joby hosted about 2,000 friends and family at our first Family Day in Marina, CA, touring our facilities and witnessing our aircraft in flight.

Preparing for Commercial Operations

With the Department of Defense set to play a key role in the early commercialization of our technology, we were pleased to appoint Lt. Gen. (ret) Scott Howell, former Commander of the Joint Special Operations Command (JSOC), to our Advisory Board. As JSOC Commander, Lt. Gen. Howell was responsible for the readiness and mission execution of highly-specialized forces across the Army, Air Force, Navy and Marines.

Using the “Living Lab” prototype skyport constructed in Marina, we began experiments to optimize the rider experience, including how to move passengers quickly and efficiently from arrival to boarding their flight.

Building on our strong ties to the Japanese market, we joined with our in-market partners to announce that we plan to fly as part of the 2025 World Expo in Osaka.

We enrolled 100 students from New York’s Aviation High School in our Private Pilot Ground School and are working with the school’s faculty to integrate materials on electric propulsion systems into their curriculum. The school is a leading education center for future aircraft maintainers and aerospace professionals, and our partnership came shortly after we announced a multi-year partnership with Delta Air Lines to deliver transformational, sustainable home-to-airport service for Delta customers, beginning in New York and Los Angeles.

Fourth Quarter 2022 Financial Summary

In the fourth quarter of 2022, our net loss of \$66.9 million reflected operating expenses to support continued growth, totaling \$101.4 million, partly offset by other income of \$34.5 million. The net loss in the fourth quarter of 2022 was \$72.0 million lower when compared with our income in the fourth quarter of 2021 and \$12.3 million lower than in the prior quarter. The reduction in net income compared with 2021 primarily reflected higher operating expenses of \$24.2 million, lower other income of \$37.2 million, and the non-recurrence of one-time tax-related adjustments of \$10.6 million. The reduction in other income primarily reflected a lower favorable revaluation of derivative liabilities partly offset by higher interest income on our short-term investments. Compared with the third quarter, our net loss was \$12.3 million lower, reflecting higher operating expense of \$4.2 million offset by higher other income of \$16.6 million. Increased operating expenses primarily reflected higher personnel-related expenses, including stock-based compensation. Other income was higher than in the prior quarter, largely reflecting a higher favorable revaluation of derivative liabilities. Our operating expenses primarily reflect personnel and material spending to support our development and certification activities, early manufacturing operations, initial investments in commercialization, and administrative costs. Operating expenses for the quarter also included stock-based compensation of \$17.2 million, including performance-based incentives introduced in 2022, and depreciation and amortization.

Research and development costs of \$76.1 million reflected continued certification activities and early manufacturing operations. Selling, general & administrative expenses were \$25.2 million for the quarter. Other income of \$34.5 million reflected primarily a gain from the change in the fair market valuation of derivative liabilities of \$25.9 million and net interest and other income of \$8.1 million.

Adjusted EBITDA in the fourth quarter of 2022 was a loss of \$77.6 million, primarily reflecting employee costs associated with the development, certification and manufacturing of the aircraft. Adjusted EBITDA loss was \$12.4 million higher than in the fourth quarter of 2021 and \$0.1 million lower than the prior quarter. Adjusted EBITDA is a non-GAAP metric that excludes the gain from the revaluation of our derivative liabilities, stock-based compensation expense, depreciation and amortization, interest income and expense, income from equity-method investments, and other non-operating costs. Please see the section titled “Non-GAAP Financial Measures” for a reconciliation of Net Income to Adjusted EBITDA.

Our balance sheet provides a strong financial foundation to support our long-term goals. We ended the fourth quarter of 2022 with \$1.1 billion in cash, cash equivalents, restricted cash, and investments in marketable securities. Net cash used in operating activities and purchases of property and equipment totaled \$290.8 million in 2022, with \$83.6 million spent in the fourth quarter. Capital expenditure of \$30.5 million in the fourth quarter included the acquisition of land and facilities in Santa Cruz, California, which will support Joby’s long-term growth, totaling \$25.5 million. Our cash balance includes cash from Delta’s equity investment totaling \$60 million which was received in the fourth quarter.

2023 Outlook

In 2023, our primary focus will remain on certification, manufacturing and our support for Department of Defense contract obligations. We will continue to grow our team as required, reflecting certification efforts and manufacturing. Building more aircraft and test articles also will require increased spending on material. Overall capital expenditure is expected to be below 2022, primarily reflecting the non-recurrence of acquiring our Santa Cruz facility. Total 2023 net cash used in operating activities and purchases of property and equipment is expected to range from \$360 to \$380 million.



Consolidated Statements of Operations

Unaudited (in thousands, except per share data)

	Three Months Ended December 31		Year Ended December 31	
	2022	2021	2022	2021
Operating expenses:				
Research and development	\$ 76,135	\$ 57,258	\$ 296,281	\$ 197,568
Selling, general and administrative	25,222	19,934	95,922	61,521
Total operating expenses	101,357	77,192	392,203	259,089
Loss from operations	(101,357)	(77,192)	(392,203)	(259,089)
Interest and other income, net	8,139	276	16,905	1,148
Interest expense	(23)	(38)	(118)	(2,426)
Income from equity method investment	424	10,183	19,463	29,405
Gain from change in fair value of warrants and earnout shares	25,930	61,342	98,002	49,853
Transaction expenses related to merger	—	(72)	—	(9,087)
Convertible notes extinguishment loss	—	—	—	(665)
Total other income, net	34,470	71,691	134,252	68,228
Loss before income taxes	(66,887)	(5,501)	(257,951)	(190,861)
Income tax expense (benefit)	57	(10,546)	92	(10,537)
Net income (loss)	\$ (66,944)	\$ 5,045	\$ (258,043)	\$ (180,324)
Net income (loss) per share, basic and diluted	\$ (0.11)	\$ 0.01	\$ (0.44)	\$ (0.61)



Consolidated Balance Sheets

Unaudited (in thousands)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 146,101	\$ 955,563
Short-term investments	910,692	343,248
Total cash, cash equivalents and short-term investments	1,056,793	1,298,811
Short-term restricted cash	3,204	—
Other receivables	4,021	2,315
Prepaid expenses and other current assets	20,160	17,416
Total current assets	1,084,178	1,318,542
Property and equipment, net	92,103	53,155
Operating lease right-of-use assets	25,149	—
Restricted cash	762	762
Equity method investment	—	20,306
Intangible assets	12,581	14,512
Goodwill	14,011	10,757
Other non-current assets	64,200	70,321
Total assets	\$ 1,292,984	\$ 1,488,355
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	\$ 7,710	\$ 3,637
Operating lease liabilities, current portion	3,710	—
Accrued and other current liabilities	18,783	10,211
Total current liabilities	30,203	13,848
Operating lease liabilities, net of current portion	23,613	—
Stock repurchase liability	378	711
Warrant liability	28,783	44,902
Earnout shares liability	44,055	109,844
Other non-current liabilities	1,211	2,291
Total liabilities	128,243	171,596
Commitments and contingencies		
Stockholders' equity:		
Preferred stock	—	—
Common stock	61	60
Additional paid-in capital	1,908,179	1,793,431
Accumulated deficit	(734,653)	(476,610)
Accumulated other comprehensive loss	(8,846)	(122)
Total stockholders' equity	1,164,741	1,316,759
Total liabilities and stockholders' equity	\$ 1,292,984	\$ 1,488,355

Consolidated Statements of Cash Flows

Unaudited (in thousands)

	Year Ended December 31	
	2022	2021
Cash flows from operating activities		
Net loss	\$ (258,043)	\$ (180,324)
Reconciliation of net loss to net cash used in operating activities:		
Depreciation and amortization expense	23,995	15,943
Non-cash interest expense and amortization of debt costs	—	2,893
Stock-based compensation expense	69,072	26,932
Write-off of in-process research and development project	—	5,030
Other non-cash compensation expense	—	5,046
Gain from change in the fair value of warrants and earnout shares	(98,002)	(49,853)
Loss from transaction costs related to merger	—	9,087
Income from equity method investment	(19,463)	(29,405)
Net accretion and amortization of investments in marketable debt securities	(5,237)	4,335
Deferred income taxes	—	(10,544)
Changes in operating assets and liabilities		
Other receivables and prepaid expenses and other current assets	(1,823)	(11,807)
Other non-current assets	20,016	10,480
Accounts payable and accrued and other liabilities	10,884	6,438
Non-current liabilities	22,676	—
Net cash used in operating activities	(235,925)	(195,749)
Cash flows from investing activities		
Purchase of marketable securities	(1,358,953)	(401,626)
Proceeds from sales and maturities of marketable securities	788,761	422,084
Purchases of property and equipment	(54,890)	(32,340)
Acquisitions, net of cash	(5,707)	(6,854)
Net cash used in investing activities	(630,789)	(18,736)
Cash flows from financing activities		
Proceeds from merger	—	1,067,922
Payments for offering costs	—	(50,391)
Proceeds from issuance of convertible notes	—	74,972
Proceeds from issuance of common stock and warrants	60,060	—
Proceeds from exercise of stock options	1,437	1,456
Repayments of tenant improvement loan and capital lease obligation	(1,041)	(1,179)
Net cash provided by financing activities	60,456	1,092,780
Net change in cash, cash equivalents and restricted cash	(806,258)	878,295
Cash, cash equivalents and restricted cash, at the beginning of the year	956,325	78,030
Cash, cash equivalents and restricted cash, at the end of the year	\$ 150,067	\$ 956,325
Reconciliation of cash, cash equivalents and restricted cash to consolidated balance sheets		
Cash and cash equivalents	\$ 146,101	\$ 955,563
Restricted cash	3,966	762
Cash, cash equivalents and restricted cash in consolidated balance sheets	\$ 150,067	\$ 956,325

Non-GAAP Financial Measures

Unaudited (in thousands)

Adjusted EBITDA is a non-GAAP measure of operating performance that is included to communicate the financial performance of activities associated with core operations that support the development, manufacturing and commercialization of the Joby aircraft.

Adjusted EBITDA is defined as net income (loss) before interest income, interest expense, income tax expense (benefit), depreciation and amortization expense, stock-based compensation expense, income from equity-method investments unrelated to core operations, impact from revaluation of non-operating derivative liabilities, and other income or costs which are not directly related to ongoing core operations. We believe Adjusted EBITDA, when read in conjunction with our GAAP financials, provides investors and management with a useful measure for the evaluation of our operating results and a basis for comparing our core, ongoing operations from period to period.

Because Adjusted EBITDA is not a measure of performance or liquidity calculated in accordance with GAAP, it should not be considered more meaningful than or as a substitute for net income (loss) as an indicator of our operating performance. Adjusted EBITDA may not be directly comparable to similarly titled measures provided by other companies due to potential differences in methods of calculation. From time to time, we may modify the nature of the adjustments we make to arrive at Adjusted EBITDA.

A reconciliation of Adjusted EBITDA to net income is as follows:

	Three Months Ended December 31		Year Ended December 31	
	2022	2021	2022	2021
Net loss	\$ (66,944)	\$ 5,045	\$ (258,043)	\$ (180,324)
Income tax expense (benefit)	57	(10,546)	92	(10,537)
Loss before income taxes	(66,887)	(5,501)	(257,951)	(190,861)
Interest and other income, net	(8,139)	(276)	(16,905)	(1,148)
Interest expense	23	38	118	2,426
Income from equity method investment	(424)	(10,183)	(19,463)	(29,405)
Gain from change in fair value of warrants and earnout shares	(25,930)	(61,342)	(98,002)	(49,853)
Transaction expenses related to merger	—	72	—	9,087
Convertible notes extinguishment loss	—	—	—	665
Loss from operations	(101,357)	(77,192)	(392,203)	(259,089)
Stock-based compensation expense	17,167	7,514	69,072	26,932
Depreciation and amortization expense	6,573	4,476	23,995	15,943
Adjusted EBITDA	\$ (77,617)	\$ (65,202)	\$ (299,136)	\$ (216,214)

JOBY IN FOCUS: POWERING ON

In 2022, we began conducting tests in our Integrated Test Lab (ITL), a world-class testing lab designed and built by the Joby team, at our manufacturing and flight testing in Marina, CA.

The ITL replicates the systems of the Joby aircraft, using both real and emulated aircraft hardware and software hooked up to a simulation environment. Using dynamometers to represent the aircraft's interaction with the world, inputs from a pilot in the control room are translated into forces that are applied to the aircraft's actuators and electric propulsion units.

The ITL will play a pivotal role in our FAA type certification program, allowing us to test and examine how our aircraft's systems respond and interact across thousands of test cases with minimum risk, greater speed, and without the costs associated with flight testing.

We have completed initial power-on of the ITL's high-voltage network with aircraft hardware, including emulated battery modules and real battery management systems.



The ITL will support activities across our certification and test program, including safety-of-flight testing for the first aircraft to roll off our production line. It will also play an integral part in preparing for flight with a pilot on board and be validated by the FAA as a conforming test facility, capable of running for-credit tests at all hours of the day as part of our ongoing certification program.



Joby is able to rapidly design and bring up powerful integrated test assets like the ITL because of our emphasis on vertical integration and deep in-house expertise across every aircraft system. This approach enables us to expedite development and verification activities by leveraging advanced testing approaches that are safer, faster, and more cost-effective.

Meet Santiago Morales Testing Lead

Santiago leads a team of more than 70 engineers and technicians dedicated to testing every aspect of the Joby aircraft. Santiago ensures that Joby has the right strategy and capabilities to perform equipment and system-level testing in support of developmental and certification efforts. Prior to joining Joby in 2016, Santiago oversaw the global testing infrastructure for Specialized, a manufacturer of high-performance bicycles, after receiving his master's degree in aerospace engineering.



Webcast and Conference Call Details

The Company will host a webcast and conference call at 5:00 pm ET (2:00 pm PT) on February 22, 2023. The webcast will be publicly available in the [Upcoming Events](#) section of the company website.

Upcoming Events

Executives from the Company will also participate in the following upcoming events:

- Raymond James Institutional Investor Conference March 7, 2023
- J. P. Morgan Industrials Conference March 14-16, 2023
- Jefferies EVTOL Summit March 28, 2023

About Joby

Joby Aviation, Inc. (NYSE:JOBY) is a California-based transportation company developing an all-electric vertical take-off and landing aircraft which it intends to operate as part of a fast, quiet, and convenient service in cities around the world.

To learn more, visit www.jobyaviation.com.

Standing on the Shoulders of Giants

We are deeply saddened by the loss of Alex Stoll, Joby's first full-time employee, who passed away following a car accident earlier this month. Alex had worked at Joby for more than a decade, playing a hugely significant role in the design of our aircraft and the definition of a company culture that continues to contribute to Joby's success.

With 21 patents and a range of seminal industry papers to his name, Alex was one of the pioneers of the eVTOL industry. A proud Texan, Alex began his engineering journey at Rice University, spending a year abroad in Hong Kong. Once he obtained his bachelor's degree in mechanical engineering, Alex moved to California to pursue a master's and engineer's degree at Stanford University where he completed important work on quiet propellers for the nascent eVTOL industry. His deep passion for eVTOL led to him joining Joby, having worked at NASA, Blue Origin and Stanford University.

While Alex's boundless passion and dedication will be sorely missed, we move forward, and upward, with the knowledge that we are giving flight to Alex's dreams.



Forward Looking Statements

This shareholder letter contains “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, including but not limited to, statements regarding the development and performance of our aircraft, the growth of our manufacturing capabilities (including related increases in spending), our regulatory outlook, progress and timing; our business plan, objectives, goals and market opportunity; expected headcount growth; plans to operate flights as part of the 2025 World Expo in Osaka; and our current expectations relating to our business, financial condition, results of operations, prospects, capital needs and growth of our operations, including our financial guidance for 2023. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as “anticipate”, “estimate”, “expect”, “project”, “plan”, “intend”, “believe”, “may”, “will”, “should”, “can have”, “likely” and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. All forward looking statements are subject to risks and uncertainties that may cause actual results to differ materially, including: our ability to launch our aerial ridesharing service and the growth of the urban air mobility market generally; our ability to produce aircraft that meet our performance expectations in the volumes and on the timelines that we project, and our ability to launch our service; the competitive environment in which we operate; our future capital needs; our ability to adequately protect and enforce our intellectual property rights; our ability to effectively respond to evolving regulations and standards relating to our aircraft; our reliance on third-party suppliers and service partners; our ability to hire at the pace we expect; uncertainties related to our estimates of the size of the market for our service and future revenue opportunities; and other important factors discussed in the section titled “Risk Factors” in our Annual Report on Form 10-K, filed with the Securities and Exchange Commission (the “SEC”) on March 28, 2022, and in future filings and other reports we file with or furnish to the SEC. Any such forward-looking statements represent management’s estimates and beliefs as of the date of this presentation. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

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 Joby