

**CALIFORNIA ALTERNATIVE ENERGY AND  
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

*Request to Approve Project for Sales and Use Tax Exclusion (STE)<sup>1</sup>*

**Joby Aero, Inc.  
Application No. 19-SM027**

**June 18, 2019**

Prepared By: *Matthew Parsons, Program Analyst*

**SUMMARY**

**Applicant** – Joby Aero, Inc.

**Location** – Marina, Monterey County

**Industry** – Electric Vertical Take-Off and Landing (eVTOL) Aircraft Manufacturing

**Project** – New eVTOL Aircraft Production Facility (Advanced Transportation)

**Value of Qualified Property** – \$73,473,675

**Estimated Sales and Use Tax Exclusion Amount<sup>2</sup>** – \$6,142,399

**Estimated Quantifiable Net Benefits** – \$25,306,622

**Application Score** –

Fiscal Benefits Points:	5,095
<u>Environmental Benefits Points:</u>	<u>25</u>
<b>Net Benefits Score:</b>	<b>5,120</b>

<u>Additional Benefits Points:</u>	<u>108</u>
<b>Total Score:</b>	<b>5,228</b>

**Staff Recommendation** – Approval

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<sup>1</sup> All capitalized terms not defined in this document are defined in the Program’s statute and regulations.

<sup>2</sup> This amount is calculated based on the average statewide sales tax rate of 8.36%.

**THE APPLICANT**

Joby Aero, Inc. (“Joby” or the “Applicant”), a Delaware corporation formed in 2009, develops and builds light-weight, all-electric, vertical take-off and landing (eVTOL) aircraft.

The major shareholders (10.0% or greater) of Joby Aero, Inc. are:

Joby Trust Sciarra Management Trust
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Joby Aviation, Inc. Intel Capital Corporation Sciarra Management Trust
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The corporate officers of Joby Aero, Inc. are:

JoeBen Bevirt, Chief Executive Officer  
Juliane Farrand, Treasurer

**THE PROJECT**

Joby is requesting a sales and use tax exclusion to build a new eVTOL aircraft production facility located in Marina (the “Project”). According the Applicant, the S4 eVTOL is a single-pilot, four passenger aircraft that takes off vertically, converts to horizontal flight and then converts back to land vertically. Joby claims that the aircraft has an all-composite airframe with multiple electric motors, is powered by multiple battery packs, and uses no carbon-based fuel. According to Joby, the S4 motors are substantially quieter than traditional helicopters and will be less audible than the average background noise of a city, and have the flight range capability of traveling from San Jose to San Francisco. Joby plans to produce a fleet of the S4 aircraft by 2022, which will serve as an ‘air-taxi’ service.

According to Joby, the aircraft will reduce fuel consumption, when compared to automobiles, by a weighted average of 18,397 gallons per air taxi, per year, based on estimates of average passenger loading, average trip distance, average vehicle maintenance down time, average automobile loading of 1.54 passengers per vehicle, and taking into account increasing automobile fuel economies. The estimates are based on automobile-avoided miles and do not include the additional fuel consumed in auto traffic congestion. Joby represents the Project will launch the S4 and provide the capacity to produce and deliver an average of 250 units per year over an eight-year period. Joby also represents this initial production ramp of the S4 will support an additional 1,407 direct manufacturing jobs.

In addition, Joby uses composite material to produce the S4 aircraft, which is required to achieve very low weight while maintaining the structural strength required for safe flight and Federal Aviation Administration certification. Joby’s design tools optimize the use of the composite cloth to minimize overall waste. Joby states that the production processes require little water or hazardous chemicals.



*Figure 1: Research and Development*

Joby is considering various locations outside of California and has indicated that the STE will help to ensure it remains in California. According to the Applicant, its targeted production facility location is the Marina Municipal Airport. The airport is under the guidance of the Fort Ord Reuse Authority and has available economic development land north of the existing runway and in a designated undeveloped business park.

Joby notes it is actively engaged with the FAA Airworthiness Certification Office (ACO) based in Long Beach, California. Joby will be entering the Type Certification process in early 2020, and begin manufacturing and operating the S4 in 2021. Joby’s next step following flight testing is to complete the system configuration and provide the necessary ground and airworthiness test results and baseline production procedures.

**ANTICIPATED COSTS OF QUALIFIED PROPERTY**

The anticipated Qualified Property purchases are listed below:

Forklifts	\$ 80,000
Prototyping Equipment	6,300,000
Metal Plate Fabrication	160,000
Electric Motor and Propeller Equipment	4,815,000
IT Hardware and Software	500,000
Integration and Testing Equipment	3,471,500
Laminate Cutting Molds	17,777,375
Lamination Room Equipment	4,757,000
Trim, Inspection, Pre-Bond, and Paint Booths	<u>35,612,800</u>
<b>Total</b>	<b><u>\$73,473,675</u></b>

*Note: The Qualified Property purchases reported in the Application and shown here in staff’s report are estimated costs. At the termination of the master regulatory agreement a finalized project equipment list will be prepared detailing the value of the Project equipment acquired and detailing the actual tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance from the costs shown in the Application and in this report may*

*occur prior to the closing due to increased costs of certain components (of the Project) over original estimates, and other reasons. In addition, such costs may vary after closing due also to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in law or regulation, or for other reasons.*

## **TIMELINE**

According to the Applicant, it is actively engaged with the City of Marina and entered into the Use Permit process for constructing a 500,000 sq. ft. facility located on the Marina Municipal Airport. Joby has already started purchasing equipment, and will accelerate its purchasing in fall of 2019. According to the Applicant's timeline, construction of the facility is anticipated to be completed in 2020, and production of the S4 vehicle is anticipated to begin in 2021.

## **PROJECT EVALUATION**

### **NET BENEFITS**

The total cost of the Qualified Property purchases is anticipated to be \$73,473,675 and the total quantifiable net benefits are valued at \$25,305,827 for the Project. The Project received a Total Score of 5,228 points, which exceeds the required 1,000-point threshold, and a total Environmental Benefits Score of 25 points, which exceeds the 20-point threshold.

- A. **Fiscal Benefits (5,095 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes, and other indirect fiscal benefits of the Applicant which amounts to \$31,297,045, resulting in a Fiscal Benefits score of 5,095 points for the Project.
- B. **Environmental Benefits (25 points)**. The Project will result in \$151,181 of total pollution benefits over the life of the Project, resulting in an Environmental Benefits Score of 25 points for the Project. These benefits derive from the manufacturing of electric aircraft since these vehicles deliver a net reduction in energy consumption and CO<sub>2</sub> emissions relative to gasoline powered vehicles.
- C. **Additional Benefits (108 points)**. Applicants may earn additional points for their Total Score. The Applicant submitted information and received 92 additional points.
  1. **Production Jobs (60 of 75 points)**. The Applicant represents that the Project will support a total of 1,407 production-related jobs at its Facility. CAEATFA estimates that approximately 82 of these jobs will be attributable to a marginal increase in jobs created due to the approved STE, resulting in a Permanent Jobs Score of 60 points for the Project.
  2. **Construction Jobs (0 of 75 points)**. The Applicant represents that the Project will support a total of 50 construction jobs at its Facility. CAEATFA estimates that approximately three of these jobs will be attributable to a

marginal increase in jobs created due to the approved STE. Zero points were awarded because the marginal increase in jobs does not meet the required threshold.

3. **Unemployment (45 of 50 points)**. The Applicant’s Project is located in ~~Santa Cruz~~ **Monterey** County which has an average annual unemployment rate of 7.3%. This is above 110% of the statewide average annual unemployment rate which was 5.1% in 2017, the dataset used in the application. This results in an Unemployment Score of 45 points for this Project.
  
4. **Non-CA Environmental Benefits (3 of 40 points)**. The Applicant’s total value of out-of-state non-greenhouse gas pollution benefits are valued at \$32,614.60, resulting in a Non-CA Environmental Benefits Score of three points for the Project.

### **STATUS OF PERMITS/OTHER REQUIRED APPROVALS**

According to the Applicant, it anticipates being granted a Use Permit in August of 2019, and a building permit with the Marina Planning Department in November 2019. Additionally, the Applicant will work with the Monterey Bay Air Resources District, the County Environmental Health Department, the City Fire Department, and the Regional Water Quality Control Board to obtain the necessary operational and environmental permits before production begins in 2020.

### **LEGAL QUESTIONNAIRE**

Staff reviewed the Applicant’s responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

### **CAEATFA FEES**

In accordance with CAEATFA Regulations,<sup>3</sup> the Applicant has paid CAEATFA an Application Fee of \$10,000 and will pay CAEATFA an Administrative Fee of up to \$293,894.70.

### **RECOMMENDATION**

Staff recommends approval of Resolution No. 19-SM027 for Joby Aero, Inc.’s purchase of Qualified Property in an amount not to exceed \$73,473,675, anticipated to result in an approximate sales and use tax exclusion value of \$6,142,399.

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<sup>3</sup> California Code of Regulations Title 4, Division 13, Section 10036

**RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER  
REGULATORY AGREEMENT WITH JOBY AERO, INC.**

June 18, 2019

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **Joby Aero, Inc.** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized in an Advanced Manufacturing process or for the design, manufacture, production or assembly of Advanced Transportation Technologies or Alternative Source products, components, or systems (“Qualified Property”) as more particularly described in the staff summary and in the Applicant’s Application to the Authority (collectively, the “Project”); and

WHEREAS, the Applicant has requested the Authority to enter into the Agreement to acquire Project equipment with an estimated cost not to exceed \$73,473,675 over a period of three years; and

WHEREAS, the Applicant believes that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Qualified Property pursuant to California Revenue and Taxation Code Section 6010.8; and

WHEREAS, approval of the terms of the Agreement and authority for the Executive Director, Deputy Executive Director, or Chair of the Authority to execute the necessary documents to effectuate the Agreement is now sought;

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Project constitutes a “project” within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The requested master regulatory agreement constitutes “financial assistance” within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a “participating party” within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The Executive Director, Deputy Executive Director, or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Executive Director shall deem appropriate, provided that the amount of the Qualified Property to be purchased may not be increased above the amount approved by the Authority.

**Agenda Item – 4.A.13**  
**Resolution No. 19-SM027**  
**Application No. 19-SM027**

Section 5. The proposed form of the Agreement between the Applicant and the Authority, as filed with the Authority prior to this meeting, is hereby approved. The Authorized Signatories are hereby authorized and directed, for and on behalf and in the name of the Authority, to execute, acknowledge and deliver to the Applicant the Agreement in substantially the form filed with or approved by the Authority, with such insertions, deletions or changes therein as the Authorized Signatory executing the same may require or approve, and with particular information inserted therein in substantial conformance with the staff summary and in the Applicant's Application to the Authority, such approval to be conclusively evidenced by the execution and delivery thereof. The Authority understands and agrees that pursuant to the terms of the Agreement, the obligations of the Applicant may, under some circumstances, be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including (without limitation) the execution and delivery of any and all documents and certificates they may deem necessary or advisable in order to consummate the Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall assure CAEATFA that all Qualified Property listed in the semi-annual reports pursuant to the Agreement shall be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Agreement shall only apply to Qualified Property that the Applicant certifies will be installed, maintained and operated at facilities within the State of California.

Section 9. The adoption by the Authority of this Resolution for the Applicant shall not be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project or in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement, as defined in CAEATFA Regulations Section 10035(a), is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty days if necessary.