Barron's Flying Cars, of a Sort, Are Coming. There Are Two Stocks for That. Nicholas Jasinski and Al Root 26 February 2021

"We wanted flying cars, instead we got 140 characters."

That is a 2013 quip from technology guru Peter Thiel, lamenting that the future hadn't turned out like futurists predicted decades earlier. Soon, however, investors might be able have both, tweeting as they are flown around cities. They'll just have to wait a few more years.

The air-taxi start-up Joby Aviation is becoming a publicly traded company by merging with a special-purpose acquisition company, or SPAC, backed by LinkedIn co-founder-turned-venture-capitalist Reid Hoffman and Zynga founder Mark Pincus. If approved by its shareholders, the SPAC, Reinvent Technology Partners (ticker: RTP), will combine with Joby by the end of the second quarter.

Air taxi doesn't really do Joby's business model justice, however. The company wants to be both the designer and manufacturer of its own fleet of six-rotor, four-passenger electric vertical takeoff and landing, or eVTOL, aircraft, plus operate theair-taxi service in cities around the world.

"We are kind of like Tesla, meets Uber, meets the air," said Joby's executive chairman Paul Sciarra, who is also a Pinterest (PINS) o-founder. The company wants to get people places faster and safer, for the same cost as driving—and with a better view, soaring above gridlocked traffic.

Joby is targeting a 2024 commercial launch in its first city in the U.S. Between now and then, it needs to secure certification from the Federal Aviation Administration, scale up its manufacturing operations, and select its initial flight routes.

Success isn't assured though, and air taxis have been tried before. Helicopters, after all, have existed for a long time.

"Urban air mobility doesn't do it for me," says Teal Group aerospace consultant Richard Aboulafia. "Flying cars are sort of like the dinner theater of aerospace. Is it really a good dinner? Is it really good theater?"

His skepticism is built from experience. Other air-taxi services have failed.

Joby, however, is relying on a vehicle specifically designed for urban air mobility. With its futuristic-looking and whisper-quiet-six rotor aircraft, the company plans to have a cost structure far lower than traditional helicopters, which it believes will stimulate demand and enable profitability.

Joby plans to be able to take passengers in minutes, for tens of dollars, from what could be called an urbanir-mobility port in Manhattan to John F. Kennedy International Airport, rivaling what a cab costs for the hourlong trip. It aims to keep its air taxis in use as much as possible to reduce wasteful idle time.

"The thing that's tricky about helicopters is that they don't get used that often," says Sciarra. "Therefore they're more expensive when you do want to use them. So it's not as much about the unit cost of the vehicle as the utilization of that asset. We're really focused on optimization and maximizing the number of [passengers we're serving] in a given time."

Joby plans to add another two cities and reach almost 1,000 aircraft in service by 2026, when it projects about \$2 billion in sales and \$824 million in earnings before interest, taxes, depreciation and amortization, or Ebitda. The company's first revenues will start rolling in during 2024.

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Reinvent stock closed up about 4% Wednesday after the deal announcement, but gave more than gave that back on Thursday, with a loss of 10.8% to \$12. That values Joby stock at roughly \$7.9 billion based on the 660 million shares outstanding after the merger closes.

Toyota Motor (TM) will help Joby with manufacturing its aircraft. It led the company's latest private investment round in January 2020, which valued Joby at \$2.6 billion.

At the value implied by Reinvent shares' current level, Joby is essentially trading at about four times estimated 2026 sales. That values the company like EV startups such as Lucid Motors.

The merger with Reinvent Technology Partners will provide Joby with about \$1.5 billion in cash to fund its plans, including \$690 million from the SPAC's trust and an \$835 million private investment in public equity, or PIPE, from institutions including BlackRock, Fidelity, and Baillie Gifford.

Joby, like the new EV companies, has some competition. Urban air mobility provider Archer is merging with Atlas Crest Investment (ACIC). Archer is valued at roughly \$5 billion based on Atlas' stock price and the 375 million shares that will be outstanding when that deal closes. Archer, for its part, projects \$2.2 billion in 2026 sales and \$647 billion in Ebitda. Archer, like Joby, is targeting 2024 FAA certification.

Joby joined forces with another potential competitor last month, when it acquired Uber Technologies' (UBER) Uber Elevate business.

Both Joby and Archer plan to operate electric aircraft with vertical takeoff and landing capability. Investors better get used to hearing about VTOL.

The year 2024 is still a ways off, which might be a risk for the soon-to-be public companies. Public investors can be fickle and certifying aircraft is hard. Like some other companies that have gone public via SPAC mergers, such as Virgin Galactic (SPCE) and QuantumScape (QS), Joby is a venture-capital like bet in the form of a public stock.

Hoffman, however, isn't worried about that. He says Joby has been careful, picking shareholders oriented toward the long term for its PIPE, and he cited benefits from being publicly traded early.

"A public institution has a much higher level of transparency, accountability, visibility," he told Barron's. "Which is going to be super important for the participation of local communities, of regulators, and other folks in the transition of human transport from 2-D to 3-D."

Angel Podcast 25 February 2021

Jason Calacanis: Hey everybody, welcome back to Angel, the podcast that I do alongside of This Week in Startups. And we thought for our fifth season, we would talk to what I call super angels, people who have invested in dozens and dozens of startups, had massive exits and who really understand the business. And today we have just a titan in our industry, somebody who, you know, has built companies, invested in companies and even does a really great podcast that all of you listen to "Master of Scale", you probably know him best from his time at Apple or Fujitsu or Social Net, I kid – those were his jobs that led up to the incredible LinkedIn and co-founding LinkedIn in I think 2003. He hasn't been around the pod for about seven or eight years, I think the last time you officially came on the pod was what 2014 or something?

Reid Hoffman: Yeah, and we did it at LinkedIn, I remember it was fun.

Jason Calacanis: Did at LinkedIn in the conference room and you've become a podcaster but you also did a lot of angel investing. And now, how do you spend your time now? You're still on the board of Microsoft?

Reid Hoffman: I am, and so you know it's a combination of, you know, kind of boards, most of which are for Greylock, you know, kind of things like Aurora, Convoy and Kota, Nauto and other kinds of things. You know, Microsoft. Then, we just announced today that I'll be joining the Joby board if that, if that deal

Jason Calacanis: Oh yeah Joby, the vertical takeoff and landing my friend Sky Dayton is involved.

Reid Hoffman: Exactly right.

Jason: And you're SPAC-ing. Oh are you SPAC-ing it?

Reid Hoffman: Exactly, yes.

Jason Calacanis: I was going to ask you about the SPACs and I just saw in my group chat with my poker buddies that Joby was going out. Explain to people what Joby is and the bet you're making there.

Reid Hoffman: Yep, so Joby, you know it's like you know people, people like Peter Thiel have made the claim that you know as, you know, we've had tech stagnation because we were promised flying cars and we got 140 characters. And actually, in fact, it's the flying car. It's the, you know the electric VTOL, you know car that is very far along in its certification process that has flown over 1,000 test flights and has been worked on for 10 years. And you know the whole idea is to open it up to everybody, to make it part of you know what you could do is commute, or going to the airport or you know obviously an urgency going to a medical appointment. And it's, you know, Sky Dayton has been a backer for years, you probably know how many more years. I think I got to know Sky through this, and we.

Jason Calacanis: Pretty great, yeah stealthy executive, like he doesn't like people to know what he's doing, he keeps his head down. He I think, he hasn't been on the pod since the first 10 episodes. When we used to play poker in L.A., he used to come on the pod. So, for Joby, I guess the question I have for you is which will happen first. Will we take a Joby VTOL from, you know, San Carlos Airport in the peninsula, well wherever, to Napa or to SFO, whatever, or will we take a self-driving car with no steering wheel? Which will occur first for the average citizen?

Reid Hoffman: For the average citizen, I think it'll be Joby.

Jason Calacanis: Why?

Reid Hoffman: Well, so look, I think, look I've also heavily invested in autonomous vehicles, I led the investments in Aurora and Nuro and Nauto for Greylock so I'm a huge believer in this, this is not a disbelief in autonomous vehicles. But, among the things that you suggested is that the cars would be manufactured without a steering wheel. That made it very easy because I actually think that before we get to the real cars without steering wheels. I think we'll have the autonomous vehicles that are out there that also have a steering wheel. Among other things, it's a fallback, right? So it's kind of a question of you know, alright does it work, oh shit it's not working I can drive it, right, etc? So when you start getting to that scale manufacturing without a steering wheel. I think by that time, you know, there'll be Joby and eVTOL flights in lots and lots of places and part of that, the thing people don't realize, they think oh eVTOL that'll be like helicopters aren't those for the really rich, high-end folks? The thing is, once you begin, just like Uber transformed transportation and you know Joby bought Uber Elevate actually in fact and it's got the aliance with Uber for this, and once you do that, you start using it a lot. A simple way to think about it is like for example, you're down in L.A., think about just going to the airport, especially during commutes, right? It'll just be a constant flight cycle and it will help alleviate, you take out all the risk of the highways and going at one mile an hour and all the rest and you get there. And so that'll be available and it'll be at such a price, it'll be an Uber-like price, which you know will be available to most citizens.

Jason Calacanis: It's amazing how this technology has advanced very quietly but people have been flying in these, in China there's a company that I was tracking, I've forgot the name of it but they've been putting humans up in these, has Joby been putting humans in them yet? And under what circumstances and for how long? EHang was the company I think in China.

Reid Hoffman: Yup, I am familiar with EHang. So Joby has had over 1,000 test flights, it's a piloted vehicle so you have the pilots but also for example my partner Michael Thompson as part of our due diligence went and got in one and flew around in it in order to see¹. When I talk to my friends they're all like sign me up, I want to be on the next flight! I'm happy to do that, I've got to figure out how we make it work especially in these odd pandemic times, but they've taken up a number of people² so they have safety protocols and all the rest and, you know, there's safety, noise and cost and all of those things, Joby is better at. Safety, you have the modern software, multiple rotors. On sound, actually in fact if you go and listen to the launch thing we have JoeBen Bevirt, who is the visionary and the CEO and the founder of this talking while Joby is taking off behind him so you can hear how quiet it is. And then obviously cost, which is kind of like well no actually as you begin to run these things as a service it actually brings the cost way down.

Jason Calacanis: Yeah and they're battery powered so they're not polluting and I think the concept with these is wherever the station is, they land and the battery pack comes out to get charged and a new battery pack comes in. Is that one of the secrets to this quick, you know turnarounds in terms of them going from an airport to wherever, down town L.A.?

Reid Hoffman: Exactly. Multiple secrets, but yes3.

Jason Calacanis: That seems to be. I remember when Travis at Uber was talking about them, he was really high on them. No pun intended. When do you think these will be operating and people will be able to take them for a ride? Because it does seem like over water, because of regulations. And in a bay city, like Sydney or the Bay area, you could fly over the water and there's no noise issue, nobody's going to get hurt, if it does need to land, these things could have pontoons and I'm assuming they can safely land in water. And the test flights for Joby I think were over water, I've seen some videos. When do you think, if we had to pick a random year in the United States, we would see one of these from Joby or another company, allowing consumers to do test flights, like at the Grand Canyon or over Lake Tahoe?

Reid Hoffman: So I have seen Joby test flights over land already. And I'd hope, I think the company is planning in 2024, there's obviously FAA certification. One of the things people don't realize is actually in fact there's a lots of places where there's helipads, where the helipads don't operate because the noise is prohibitive. So when you bring the safety and noise. For example, I think there's some kind of regulations, I haven't tracked this down, but there's some kind of thing of regulation that if you build skyscrapers in L.A, they have to have a helipad on top of them, so that means you just have helipads all over L.A.

- ² Test pilots have conducted hover test flights in the eVTOL; no passengers have ridden in the eVTOL in flight.
- ³ Details of the Joby eVTOLs charging system is proprietary information.

¹ Michael Thompson did a simulated flight of the eVTOL in an immersive simulation experience, as well as flying in a conventional helicopter that was flying behind the eVTOL in the sky. For clarity, he did not fly in the eVTOL.

Jason Calacanis: Everywhere, yeah.

Reid Hoffman: And so what that means is, there are actually a bunch of places where these things could land and take off as part of it given they have safety and noise.

Jason Calacanis: So, long way of saying, 2 or 3 years, you might be able to take one of these?

Reid Hoffman: Yes, exactly.

Jason Calacanis: That's just astounding. Because it does seem to me that with self-driving, you're correct. If you drive a Tesla today and you go from the peninsula up to the city, 80%, 90% of your ride is perfect. But on the surface streets, you know people jumping out in front of cars, all the randomness that occurs in San Francisco, you don't want to have it on autopilot in the city. Still going to be 7,8,9,10 years for that work you think?

Reid Hoffman: Or inclement weather conditions, right. You should be attentive to when you are using current driver assists. Because you know, the stakes are high not just for you, but for other people.

Jason Calacanis: Yeah, this means the idea that a driver would be removed from an Uber or Lyft is a long ways off, because you're going to need somebody to be able to take over. So it's a 10 year plus vision, right, I think.

Reid Hoffman: Yes

Jason Calacanis: Its pretty amazing. Explain to me, were you doing the SPAC with Pincus too?

Reid Hoffman: Yes

Jason Calacanis: So you and Mark did this and you guys, Mark and I have been friends forever, and so you guys have been collaborating since the social networking days? People don't know this but you did socialnet, was it social.net? I can't remember?

Reid Hoffman: Socialnet.com

Jason Calacanis: Wow, so to just think about how far we have come with branding.

Reid Hoffman: Yes, exactly

Jason Calacanis: Socialnet.com, no dash. Was it a dating site? You started with a dating site in '97-'98, is that right?

Reid Hoffman: It was primarily a dating site, although I did have the idea of it being a platform for also not finding romantic partners, but also roommates and activity partners for things like tennis, golf or other things. Then I had this thing, which was part of it called Working Network, which is a part of what gave me the idea for LinkedIn because I said "this isn't working." I had a bunch of bad ideas. What will I do? And part of what I come to realize in designing entrepreneurships, you want to do things that are contrarian, but right. As in which of these services was the most broken and didn't work, but most critical and it was the Working Network, it was the working part of Social Net. And I was like ok, so that's what I'm going to focus on with LinkedIn.

IMPORTANT LEGAL INFORMATION

Forward Looking Statements

This document contains certain forward-looking statements within the meaning of the federal securities laws with respect to the proposed transaction between Reinvent Technology Partners ("RTP") and Joby Aero, Inc. ("Joby Aviation"). These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "would," "will be," "will continue," "will likely result," and similar expressions. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this document, including but not limited to: (i) the risk that the transaction may not be completed in a timely manner or at all, which may adversely affect the price of RTP's securities, (ii) the risk that the transaction may not be completed by RTP's business combination deadline and the potential failure to obtain an extension of the business combination deadline if sought by RTP, (iii) the failure to satisfy the conditions to the consummation of the transaction, including the adoption of the Agreement and Plan of Merger, dated as of February 23, 2021 (the "Merger Agreement"), by and among RTP, Joby Aviation and RTP Merger Sub Inc., a Delaware corporation and a direct wholly owned subsidiary of RTP, by the shareholders of RTP, the satisfaction of the minimum trust account amount following redemptions by RTP's public shareholders and the receipt of certain governmental and regulatory approvals, (iv) the lack of a third party valuation in determining whether or not to pursue the transaction, (v) the inability to complete the PIPE investment in connection with the transaction, (vi) the occurrence of any event, change or other circumstance that could give rise to the termination of the Merger Agreement, (vii) the effect of the announcement or pendency of the transaction on Joby Aviation's business relationships, operating results and business generally, (viii) risks that the proposed transaction disrupts current plans and operations of Joby Aviation and potential difficulties in Joby Aviation employee retention as a result of the transaction, (ix) the outcome of any legal proceedings that may be instituted against Joby Aviation or against RTP related to the Merger Agreement or the transaction, (x) the ability to maintain the listing of RTP's securities on a national securities exchange, (xi) the price of RTP's securities may be volatile due to a variety of factors, including changes in the competitive and highly regulated industries in which RTP plans to operate or Joby Aviation operates, variations in operating performance across competitors, changes in laws and regulations affecting RTP's or Joby Aviation's business and changes in the combined capital structure, (xii) the ability to implement business plans, forecasts, and other expectations after the completion of the transaction, and identify and realize additional opportunities, and (xiii) the risk of downturns and a changing regulatory landscape in the highly competitive aviation industry. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties described in the "Risk Factors" section of RTP's registration on Form S-1 (File No. 333-248497), the registration statement on Form S-4 discussed above and other documents filed by RTP from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and RTP and Joby Aviation assume no obligation and do not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Neither RTP nor Joby Aviation gives any assurance that either RTP or Joby Aviation or the combined company will achieve its expectations.

Important Information for Investors and Stockholders

This document relates to a proposed transaction between RTP and Joby Aviation. This document does not constitute an offer to sell or exchange, or the solicitation of an offer to buy or exchange, any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, sale or exchange would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. RTP intends to file a registration statement on Form S-4 with the SEC, which will include a document that serves as a prospectus and proxy statement of RTP, referred to as a proxy statement/prospectus. A proxy statement/prospectus will be sent to all RTP shareholders. RTP also will file other documents regarding the proposed transaction with the SEC. Before making any voting decision, investors and security holders of RTP are urged to read the registration statement, the proxy statement/prospectus and all other relevant documents filed or that will be filed with the SEC in connection with the proposed transaction as they become available because they will contain important information about the proposed transaction.

Investors and security holders will be able to obtain free copies of the registration statement, the proxy statement/prospectus and all other relevant documents filed or that will be filed with the SEC by RTP through the website maintained by the SEC at www.sec.gov.

The documents filed by RTP with the SEC also may be obtained free of charge at RTP's website at https://www.reinventtechnologypartners.com or upon written request to 215 Park Avenue, Floor 11 New York, NY.

Participants in the Solicitation

RTP and Joby Aviation and their respective directors and executive officers may be deemed to be participants in the solicitation of proxies from RTP's shareholders in connection with the proposed transaction. A list of the names of the directors and executive officers of RTP and information regarding their interests in the business combination will be contained in the proxy statement/prospectus when available. You may obtain free copies of these documents as described in the preceding paragraph.