

S&P Global
Market Intelligence

Archer Aviation Inc.

NYSE:ACHR

Earnings Call

Thursday, November 7, 2024 10:00 PM GMT

Table of Contents

Call Participants	3
Presentation	4
Question and Answer	10

Call Participants

EXECUTIVES

Adam D. Goldstein
Founder, CEO & Director

Billy J. Nolen
Chief Regulatory Affairs Officer

Eric Lentell
General Counsel & Secretary

Priya Gupta
Acting CFO, Acting Principal Financial Officer & VP of Finance

Thomas Paul Muniz
Chief Technology Officer

ANALYSTS

Amit Dayal
H.C. Wainwright & Co, LLC, Research Division

Anand Balaji
Cantor Fitzgerald & Co., Research Division

Xin Yu
Deutsche Bank AG, Research Division

David Michael Zazula
Barclays Bank PLC, Research Division

Joshua Ward Sullivan
The Benchmark Company, LLC, Research Division

Mahima Sai Kakani
JPMorgan Chase & Co, Research Division

Savanthi Nipunika Prelis-Syth
Raymond James & Associates, Inc., Research Division

Presentation

Operator

Good afternoon. Welcome to today's Archer Aviation Third Quarter 2024 Financial Results Conference Call. My name is Victoria, and I'll be your moderator today. [Operator Instructions]

I would now like to pass the conference over to your host, Eric Lentell, Archer's General Counsel. Thank you. You may proceed, Eric.

Eric Lentell

General Counsel & Secretary

Good afternoon, and thank you for joining Archer's earnings call. This is Eric Lentell, Archer's General Counsel.

On our call today, we will be making forward-looking statements. Those forward-looking statements are based on assumptions as of today, and we undertake no obligation to update the statements, as a result of new information or future events. These statements involve risks and uncertainties that may cause actual results to differ materially from those contemplated by the forward-looking statements. For more information about those risks and uncertainties, please refer to the risk factors in our SEC filings.

We will also be discussing both GAAP and non-GAAP financial measures on today's call. A reconciliation of those GAAP to non-GAAP financial measures is included in our shareholder letter and earnings release from today.

And with the legal legalese of the way, I'll turn the call over to Adam. Adam?

Adam D. Goldstein

Founder, CEO & Director

Thanks, Eric. Since founding Archer, our mission has been constant to pursue the most efficient path to making urban air mobility an everyday reality. Over the past 6 years, we have worked to establish the foundation to allow Archer to seamlessly transition from concept to commercialization. Now regulators and industry leaders are moving increasingly in lockstep, as we enter the commercialization phase of eVTOL.

At Archer, we're honored and energized to be at the forefront of that shift. This momentum was unmistakable last month when the FAA administrator, Mike Whitaker, signed the final powered-lift SFAR, the Special Federal Aviation Regulation, alongside Archer's Chief Regulatory Affairs Officer and his predecessor, Captain Billy Nolen. In a few moments, you'll hear directly from Billy on the positive outcome of the SFAR for the entire eVTOL industry and our collective path forward.

The SFAR is the key operational piece of the regulatory puzzle here in the U.S., giving us and the rest of the industry a clear path and structured framework for the safe phased rollout of eVTOL. I'm grateful to administrator Whitaker and his team at the FAA for championing America's leadership in advanced aviation technologies and for their continued partnership with Archer and our peers.

Today, I'll lay out our expectations for how we envision our entry into service in both the U.S. and internationally over the next 18 months. The team and I also will share updates on the momentum we are experiencing across engineering and certification, advancements in scaling manufacturing, the deepening of our Stellantis partnership and why we believe our capital position gives us a unique advantage, as we round the corner towards entry into service.

Our commercialization strategy is focused on markets, where we can deploy hundreds of aircraft over time, backed by strong top-down government support and the regulatory commitment required to make this vision a reality. Right now, we're seeing this potential in the U.S. and in key countries across the Middle East and Asia. Once we identify a market, our priority is to secure top-tier strategic partners, those who not only bring substantial passenger demand and potential for financing, but also have the influence and relationships to support our path to commercial service.

I'll walk through our priority launch markets today and show how this playbook is driving our strategy. In these priority markets, we're set to begin deployment as soon as next year. Our goal is to gain real-world operational insights from the outset with a 3-step plan that puts Midnight into action. Step 1, execute piloted demonstration flights in market; Step 2, fly piloted market survey trips with Midnight carrying passengers on our first air taxi routes; Step 3, following certification, launch in-market commercial operations. We believe this pre-certification early deployment approach will help us build the operational expertise we need to develop each market and help ensure we're able to safely scale alongside the communities we serve as demand grows.

In the U.S., we are focused on our initial launch markets, New York, Los Angeles, the San Francisco Bay Area and Miami. We believe our airline partners will help us drive demand for the initial routes planned in these markets like airport transfers, help us integrate into these busy hubs and are key to helping secure aircraft financing as with United's planned purchase of up to \$1.5 billion of Midnight aircraft.

As we work to complete the final phases of FAA certification, our engineering and operations teams are concentrating on advancing us to flight testing for credit with both Archer and FAA pilots flying Midnight at our Salinas, California facility. Simultaneously, we plan to conduct public in-market piloted demonstration flights and market survey trips with our partners, introducing Midnight to the cities we plan to serve.

We are seeing true commitment from our airline partners to this electric air taxi vision, investing both capital and leadership resources through teams embedded with us, as we lay the groundwork for future scaled air taxi services across America. These early steps are essential for building safe, efficient operations for our future customers.

Internationally, we have been drawing on the expertise of partners and customers with decades of aviation and regulatory experience across key markets. We're seeing strong interest from governments and partners eager to be among the first to demonstrate and commercialize electric air taxis, and we've grown our indicative order book to over \$6 billion, which includes planned predelivery payments.

Our certification and flight operation teams are working closely with regulators in our priority international launch markets to formulate and advance the strategy, where we demonstrate piloted Midnight flights in market as soon as possible, then transition to commercial operations once both Archer and the jurisdictions are confident in the safety of our aircraft and operations. This approach opens the door for early international deployments, potentially even ahead of what we have planned for the U.S.

The UAE continues to lead the way in this regard. We have established a consortium led by the Abu Dhabi Investment Office to launch commercial air taxi services in the UAE as early as Q4 2025. Together, we have made significant progress in establishing the regulatory pathway with the GCAA, as well as the infrastructure and flight operation plans necessary to enable our market entry.

We are continuing to work closely with our key partners in the region on this initiative, such as Etihad and Falcon Aviation. This is all under the vision of the Abu Dhabi leadership. We're all working to rapidly advance what was contemplated by the framework agreement signed last year with the Abu Dhabi Investment Office. ADIO continues to demonstrate their commitment to invest hundreds of millions of dollars to accelerate our commercialization in the country, including support for early operations, critical infrastructure and crucially a regulatory pathway to launch commercially, as early as the end of 2025.

To bring this vision to life, our teams are coordinating with dozens of stakeholders across the Emirates on numerous work streams. We've used our in-house data platform, along with local insights to map out air taxi network and design routes tailored to expected demand. We plan to launch in the nation's capital, Abu Dhabi, which covers roughly 85% of the UAE, with plans to expand our operations to connect with Dubai and other Emirates, as we scale.

Abu Dhabi has 5 commercial airports and approximately 50 certified helipads at major destinations such as Emirates Palace, allowing us to enter the market by working directly with these entities to electrify and upgrade existing operational infrastructure instead of building new vertiports from scratch. We're partnering with Falcon Aviation, founded by the UAE Royal Family and Etihad to recruit and train our first pilots, establish maintenance protocols and schedule our initial regional piloted flight exhibitions, which we anticipate launching in 2025.

I'm also very excited about today's announcement of our latest planned international market entry. In September, we signed an agreement with Japan Airlines and Sumitomo Corporation's newly formed JV, Soracle, to bring eVTOL to market in Japan with plans to order up to \$500 million of our Midnight aircraft. We've already received the initial predelivery payment against the agreement, underscoring the JV's commitment to this venture.

We'll be working closely with Soracle and the Japan Civil Aviation Bureau to demonstrate Midnight in market, as we prepare for commercial flights in some of the country's most congested cities, including Tokyo, where the journey by car from Narita Airport to the city center can take 2 hours or more. In addition to Japan, we also continue to advance our partnerships in India and Korea, and we will share more progress there in the coming quarters.

As we move towards commercialization in each priority market, we'll work closely with our key public and private partners to collaboratively teach and learn eVTOL operations. By deploying aircraft in these early operations, we can gather essential insights and operational experience to scale responsibly. This measured approach allows us to refine our processes, while fostering strong

foundational relationships with the communities we plan to serve. We see this as more than just building an air mobility network. It's about creating a shared journey towards a cleaner, quieter and more connected future.

To support our commercialization plans, I'm proud to share that we are set to open our manufacturing facility in Covington, Georgia in the coming weeks. Our team has delivered this facility on time and on budget at a cost of approximately \$65 million. At scale, this facility will be capable of producing up to 650 aircraft per year, setting a powerful foundation for us to scale our production alongside our operations. Now that we have substantially completed construction, we're on track to begin loading in the manufacturing line equipment by year-end, with our first line set to become operational early next year. From there, we plan to ramp up to a production rate of 2 aircraft per month by year's end.

Stellantis continues to be a deeply committed partner on this journey to help us achieve scaled manufacturing. As I discussed last quarter, we have an agreement in principle with Stellantis for them to contribute up to an additional approximately \$400 million of capital to help scale the manufacturing of our Midnight aircraft at this facility. Earlier this week, we announced that we are now seeking shareholder approval of that deal and aim to finalize it by the end of the year.

The goal of the structure with Stellantis is to secure future capital for manufacturing growth without taking any unnecessary dilution of a large capital infusion today. We'll continue to manufacture our powertrain and a select number of test aircraft at our California low-rate production facilities, ensuring continuity for our R&D and test needs. We're confident this strategy will support a reliable and scalable production flow, as we prepare for commercial operations.

Our engineering and certification teams made significant strides this quarter, advancing FAA type certification and preparing for our first piloted flights with our Midnight aircraft. With the SFAR in place, our teams are fully engaged in the final phases of our certification program, collaborating closely with the FAA on a day-to-day basis to ensure compliance across all aspects of the program. With the type design mature and our high-volume manufacturing facility in Georgia coming online, we are ready to enter a period of tangible operations and scalable growth. Billy and Tom will outline the road ahead, as we work to execute our path to certification and launch of commercial operations.

The Department of Defense continues to actively engage the industry with increasing momentum. Our contracts with the DoD, which we understand to be the largest in the industry, have grown to a maximum value of \$148 million. Just last quarter, we recently delivered our first Midnight aircraft to the United States Air Force under those contracts, a milestone that paved the way for exploring expanded defense applications, ranging from contested logistics missions to critical medical rescue operations.

Over the next 6 months to 9 months, we anticipate meaningfully growing this area of our business, as we showcase the strategic benefits of eVTOL to government partners, including other branches, as well as our allies overseas. To spearhead these efforts, we are pleased to announce a recent new hire to the Archer team, the addition of Joe Pantalone, as our Head of Advanced Programs. A seasoned leader with nearly 30 years at Lockheed Martin, Joe brings invaluable expertise, as a protege of Ken Rosen, one of the greatest aircraft engineering leaders of all time. Ken has over 50 years of experience in aviation, served as VP of Engineering at Sikorsky, where he was responsible for building the original Black Hawk in the '70s and subsequent variants.

Finally, turning to our capital position. As I mentioned, we're fortunate to have strong backing of Stellantis, whose commitment to Archer has continued to expand. Their investment now stands at nearly \$300 million to date with an agreement in principle to commit up to nearly \$400 million of additional capital to support our manufacturing ramp. This deep support allows us to execute our vision with greater speed and efficiency than would otherwise be possible. Combined with our cash reserves, which totaled over \$500 million at the quarter end, Archer remains in a formidable liquidity position to aggressively pursue our entry into commercial service.

As we close out this quarter, I couldn't be prouder of the significant strides our team has made in laying the foundation for our future. We have flown hundreds of test flights with Midnight year-to-date, demonstrating our commitment to rigorous testing and validation. Our piloted Midnight aircraft is nearing readiness for flight. Our high-volume manufacturing facility in Georgia is set to open, and we are seeing increasingly clear regulatory pathways, both domestically and internationally. Additionally, our growing network of strategic partners is helping pave the way for our vision.

And with that, I will turn it over to Billy Nolen.

Billy J. Nolen
Chief Regulatory Affairs Officer

Thanks, Adam. This type of progress is what drew me to Archer. The opportunity to work with the team so dedicated to making this vision a reality is incredibly motivating. Every day, I had an opportunity to see firsthand the passion and drive that fuels our progress.

During my tenure as FAA administrator, we set forth an ambitious vision to commercialize eVTOL in American cities by 2025 with a goal to reach meaningful scale by the L.A. Olympics in 2028.

It was a privilege to stand alongside my successor, Mike Whitaker, as he signed into law the final powered-lift SFAR, paving the way for the commercial launch of the electric air taxis in the United States. This moment was especially gratifying, as we worked tirelessly during my time at the FAA to ensure that strategic innovations like this were championed by the FAA, maintaining America's role, as the global leader in aviation. I want to commend the entire FA team for their exceptional work in establishing these new rules on schedule and at record speed.

This achievement underscores the FAA's dedication to safely bringing these aircraft to market through a collaborative approach with the industry. For instance, we developed the powered-lift SFAR to address unique aspects of eVTOL technology, including pilot training and urban airspace integration. This effort required coordination across multiple agencies, culminating in a regulatory framework that ensures the safe integration of eVTOL operations into our national airspace.

I also want to emphasize the broader significance of this achievement. The FAA's efforts to create a new aircraft category for the first time in 80 years reflects a historic moment, not just for Archer, but for the future of urban mobility globally. It is a demonstration of how we, as a nation, can lead in pioneering technology that has the potential to revolutionize how people live and move in urban spaces. We've successfully shown that when government and industry work hand-in-hand, we can advance innovation, set global standards and keep the U.S. at the forefront of aerospace development.

Now to help us put this into perspective for our certification journey, I want to hand it over to Tom. Tom will walk us through how the SAFR and our ongoing partnership with the FAA have allowed us to make substantial progress toward type certification and how each phase of the FAA's process aligns with our strategy of bringing Midnight to market. Tom, over to you.

Thomas Paul Muniz
Chief Technology Officer

Thanks, Billy. With the clarity we now have following the final release of the powered-lift SFAR, as well as the compliance planning progress we have made with the FAA since our airworthiness criteria final rule was published this May, we are now able to share our certification progress in a more quantifiable manner. We believe the best way to do so is by comparing Midnight's certification progress to the FAA's 4 phases that lead up to type certification, as defined in the FAA's model of the type certification process in order 81104C.

The first phase in the FAA's type certification process is called conceptual design, where the FAA is familiarized with the aircraft design and early discussions are held, culminating in an application for type certification. As you know, we finished this phase several years ago.

The second phase of the FAA's process is requirements definition, which is where the FAA sets the airworthiness criteria or certification basis, essentially the safety requirements for the aircraft. We formally finished this phase this past spring when the FAA published our final airworthiness criteria in the Federal Register. As you know, we are 1 of only 2 companies in the world that have reached that milestone with the FAA.

The third phase is called compliance planning, where the means and methods of compliance are set and documented in issue papers, detailed design standards and certification plans. These documents set the detailed requirements that will be used to show that the aircraft complies with the rules in the airworthiness criteria. Archer has completed nearly all of this work, and the FAA has now approved or accepted the substantial majority of the material we've submitted.

It's worth noting that with respect to Phase 3, the industry has one main open industry issue paper relating to Rule 2105G in the airworthiness criteria, which will define how all eVTOL aircraft must handle controlled emergency landing. This is not unique to Archer, as this issue paper will apply to all eVTOL applicants working towards a powered-lift type certification.

With the publication of the operating rules in the SFAR, the FAA is now able to finalize the 2105G requirements. Based on discussions with the FAA, we believe that our existing design will be compliant, so we don't anticipate needing any design changes to address this. We expect to close this topic with the FAA in the near future.

The fourth and final phase leading up to type certification is called implementation. This phase is where we perform the tests and analysis identified in Phase 3 and provide the data to the FAA for them to verify and make compliance findings. Once the FAA has completed all compliance findings in this phase, they issue the type certificate.

At this point, we have FAA approval for 12% of the total compliance verification documents in this final phase before type certification, with much of that progress attributed to our work in materials and process, software, avionics and electrical systems. In parallel with our FAA certification efforts, we are actively working with several international regulators towards bringing our aircraft to market outside of the United States, including with the GCAA in the UAE, as Adam mentioned earlier.

We also continue to make great progress in our aircraft flight testing efforts. Back in August, we reached our year-end goal of flying over 400 times, which was 4 months ahead of schedule, and we continue to fly Midnight on a regular basis. We've gained a lot of key learnings from our flight test program, including valuable insights into how our in-house developed powertrain performs on the aircraft.

For the past year, we have been flying our A-sample electric engines and battery packs on Midnight. A-sample is an automotive term for early hardware that is functional, but has limitations and is usually produced with more manual processes. We now have hundreds of flights and thousands of hours of lab and ground testing on this hardware. Data gathered through this testing informed the design refinements that we have incorporated into our B-sample powertrain hardware.

B-sample means the components are fully functional and design representative, but not necessarily produced on the final production lines and tooling. In the B-sample electric engines, we improved the rotor design to use an innovative magnet retention and assembly design that supports both our maximum performance requirements and is optimized for manufacturability. We also implemented forged aluminum housings instead of housings machined from a billet to align to the material properties and manufacturing processes that will be used in mass production.

In our B-sample battery packs, we updated our battery management hardware and software to the type design that we are working to certify and made some design refinements to the thermoplastic enclosure for improved manufacturability. We made the conscious decision to wait to begin our piloted test flights for this B-sample hardware because we believe this will allow us to move faster during the flight test for credit phase.

I want to make it clear that we are focused on building and testing our piloted type design aircraft. This is the aircraft we are working to certify and ramp into early production next year. It is not merely a developmental prototype. These aircraft will only be capable of being flown with a pilot on board, as they are using the hardware and software that we are working to certify.

With the type design now matured, it's ideal timing to bring up our factory in Georgia. Our plan is to start building aircraft in that facility in January with the initial units planned to be used for piloted demonstration and market survey flights with passengers next year. We already have parts on order for the aircraft we plan to produce in 2025, and our goal is to exit 2025 at a production rate of 2 aircraft per month in Georgia with a plan to ramp beyond that in 2026.

And with that, I'll turn it over to Priya.

Priya Gupta
Acting CFO, Acting Principal Financial Officer & VP of Finance

Thanks, Tom. Good afternoon, everyone. As you may remember, Mark Mesler is currently on temporary medical leave. On behalf of the entire team, I want to take a moment to extend our best wishes to him for a smooth recovery. Mark's leadership and guidance have been invaluable to the organization, and we wish him well.

During this time, I have the privilege of stepping in as Archer's Interim CFO. I have worked with Mark for over 10 years across various public companies and have now been with Archer for over 2 years leading the corporate finance team. In today's call, I will go over our liquidity profile, our financial results for Q3 '24, our estimates for Q4 '24 and a high-level framework for understanding our 2025 spend.

With regards to liquidity, we continue to be one of the best capitalized companies in the industry. At the end of Q3 '24, Archer had \$501.7 million of cash and cash equivalents on the balance sheet. This puts us at the strongest cash position we have been at over the last 18 months. And this doesn't include any of the up to \$400 million of additional capital Stellantis has agreed in principle to commit to help scale the manufacturing of our Midnight aircraft. As you may have seen us announce earlier this week, we are now seeking shareholder approval of that deal so we can finalize the commitment.

Furthermore, we have nearly completed the build-out of our large-scale manufacturing facility that will support our production ramp for years to come, all of which has been financed through highly favorable terms. As we look ahead towards the manufacturing and commercial operations ramp, we expect next year, we feel very confident that we will have access to sufficient capital to deliver.

With regards to our spending this quarter, we continue to invest in the development, certification and test of our Midnight aircraft and in the ramp-up of our manufacturing and testing capabilities, as we build additional Midnight aircraft and their associated powertrains. As a result, our non-GAAP operating expenses for Q3 '24 were \$96.8 million, that is within our guided range of \$90 million to \$100 million and relatively flat quarter-over-quarter.

Our total operating expenses on a GAAP basis for Q3 '24 were \$122.1 million, which is also relatively flat to the prior quarter. Our GAAP operating expenses included approximately \$25.3 million of non-cash or onetime expenses, primarily driven by the \$21.4 million of stock-based compensation. Within the \$96.8 million of non-GAAP operating expenses, we incurred approximately \$19 million of non-recurring engineering and material costs with our suppliers during the quarter, as we continue to invest in the maturation of our supply chain for Midnight and procure parts for the manufacture of our Midnight aircraft.

As we look ahead to Q4 '24, we anticipate total non-GAAP operating expenses of \$95 million to \$110 million. This range represents an uptick in spending, as we plan for an increase in our non-recurring engineering costs with our suppliers to enable our manufacturing ramp, as well as an increase in labor and material spend tied to our planned ramp of manufacturing activity. As we finalize our contract manufacturing arrangement with Stellantis going into 2025, we expect the majority of these manufacturing labor and CapEx costs to be covered under that construct for the foreseeable future.

For 2025, I'll discuss the framework for how you should think about our spend. Our spend for 2025 aligns to 5 buckets. First, our core expenses for engineering and SG&A; second, supplier non-recurring engineering costs and Archer CapEx; third, labor costs for manufacturing; fourth, direct material cost with our suppliers to support our aircraft builds; and lastly, the commercial flight operations and MRO costs necessary to support our commercialization efforts.

In the first bucket, our core run rate expenses for engineering and SG&A on a non-GAAP basis has been in the range of \$75 million to \$80 million per quarter this year, and we expect this core spend rate to be flat to down next year.

On the second bucket, we expect to spend on supplier non-recurring engineering costs and Archer CapEx to be down in 2025 since in 2024, we have invested heavily in this area.

As mentioned earlier, with respect to the third bucket, we are working to finalize our contract manufacturing agreement with Stellantis. And starting next year, we expect that arrangement will cover the majority of our labor and additional CapEx costs for producing aircraft in 2025.

While in our fourth bucket, we anticipate higher direct material spend with our suppliers, as we plan to build more aircraft next year, our goal is to finance that material spend through various mechanisms. Our goal is to enter into customer arrangements that will offset some, if not all, of these costs over time.

In the last bucket, as we engage in commercial deployments, we expect the support needed for flight operations, MRO and market development efforts to also be largely covered by customer arrangements.

In summary, we continue to be focused on finding the most efficient path to achieving a sustainable business model, and we are well positioned financially to execute against our commercial launch plans.

And with that, operator, we can now open the line for questions.

Question and Answer

Operator

[Operator Instructions] Our first question comes from the line of Andres Sheppard with Cantor Fitzgerald.

Anand Balaji

Cantor Fitzgerald & Co., Research Division

This is Anand on behalf of Andres. Congrats on the quarter. So it seems that some of your peers are focusing more on building a prototype aircraft, while you're focusing more on building a conforming aircraft. I was wondering if you could describe what you see as the key advantages of your strategy here and elaborate a little bit on that

Thomas Paul Muniz

Chief Technology Officer

Yes, absolutely. This is Tom. Happy to answer. So I think this is really a reflection of our strategy from the very beginning to design an aircraft that's optimized for certification and manufacturing and take a really methodical step-by-step approach to bring that aircraft to market. And so, the aircraft that we're building right now are the aircraft we're planning to test with the FAA for credit. And then it's that same design, the type design that we're planning to ramp into production next year to use for early commercial operations. So again, just like we made the pragmatic decisions to not vertically integrate everywhere and focus on something that we think is pragmatic and achievable, you're just seeing that same strategy flow through to the entire business.

Anand Balaji

Cantor Fitzgerald & Co., Research Division

Got you. I appreciate the color. And with regards to the recent Japan announcement, I was wondering if you're able to give us a little bit more of a time line as to when you expect to begin deliveries in the area?

Adam D. Goldstein

Founder, CEO & Director

This is Adam. Thanks for the question. So if you go back to the chart that we put out last quarter, where you can start to see the manufacturing volumes, you can get a sense for how the production may ramp. So you'll see 10 aircraft in 2025 and then it ramps up from there. So there are opportunities for early deployment, and we've talked a lot about the UAE, where some aircraft will go. We will obviously use some aircraft in our test capacities.

And then, we also think there's some opportunities to deploy some aircraft even with some of the Western customers as well. So Japan is a really great opportunity, and we are starting to really work hard to develop all the infrastructure and pathway to launch there. And so, as that starts to mature, we will provide more detailed information.

Anand Balaji

Cantor Fitzgerald & Co., Research Division

Got you. Appreciate it. And lastly, as you just mentioned, with the UAE, if you could remind us your plans on how you plan to commercialize there and how you plan to enter this market and how you see it ramping up?

Adam D. Goldstein

Founder, CEO & Director

So as we always say, our goal has been to find the most efficient path to commercialization. And so, that really means stabilizing the final design, which we've done and building that aircraft and testing it, which we're doing. And then once we do all that, safely deploy it.

And if you look at the UAE, we have a lot of really good relationships there. So Mubadala, the sovereign wealth fund of Abu Dhabi is a long-time investor in Archer. We've engaged the entire Abu Dhabi ecosystem, and that's largely been coordinated through the Abu Dhabi Investment Office. And that consortium that's been put together includes some of our partners like Etihad and Falcon Aviation. So the regulatory pathway has now become much more clear. That enabled us to be able to launch as soon as fourth quarter next year. And so, I'll turn it over to Tom to walk through some of the process, but hopefully, that gives you a sense for all the different parts that are coming together.

Thomas Paul Muniz
Chief Technology Officer

Yes. And just to add on to that, I think it's, again, the same strategy of taking a very pragmatic approach to launching the business. And so, our strategy in UAE is to partner with great operators out there to leverage existing infrastructure. It's to leverage a lot of the same data that we're already generating for the FAA to support the aircraft entering into service there. So just clicking into some details there.

With respect to the aircraft certification, we're leveraging the same plan, same data that we're already working to develop. I just spent a week in the UAE with my cert team, and we worked through a lot of the details on that piece. But in other trips, I've flown on helicopters operated by Falcon Aviation, our operating partner out there.

And so, another example is we don't have to build our own AOC. We can just fly on Falcons. And this is a company that was founded by the Royal Family out there. So super experienced group. And those flights are all using existing infrastructure, so we don't need to take the risk, expense and time to stand that up. So I think what you should look for, for us for next year is starting to operate initial flights out in the UAE and making step-by-step progress towards commercial service there.

Operator

Our next question comes from the line of Edison Yu with Deutsche Bank.

Xin Yu
Deutsche Bank AG, Research Division

First off, do we have any updated timing or thinking on conducting the first piloted flight?

Thomas Paul Muniz
Chief Technology Officer

Edison, this is Tom. Well, I just want to make it clear that we're working towards our first piloted flight of our type design aircraft. So this is the same aircraft that we're talking about doing the certification testing with the FAA and ramping up production next year for early commercial launch in the UAE and other places. And I think we're the only ones in the industry that are really working on that. I don't want to give a specific time line for the first piloted flight, as this is really a safety decision for us. So I don't want to put undue pressure on the team. But what I can say is that we're getting really close to that milestone.

Xin Yu
Deutsche Bank AG, Research Division

Understood. Understood. And then to your point on this is the production version, this is the real version. I just want to confirm that this is capable -- still capable of carrying the payload, the intended payload, the distance, all the performance metrics, those are -- you're reiterating all those things for this aircraft.

Thomas Paul Muniz
Chief Technology Officer

Correct. So this is the aircraft design that we're planning to take into production into commercial launch, pilot plus 4 passengers.

Xin Yu
Deutsche Bank AG, Research Division

Understood. Understood. And just last thing on the -- I know you mentioned the predelivery payment for the new Japan order. Do we have a sense on how big that amount is? I realize you maybe can't provide exact numbers, but maybe relative to other ones.

Adam D. Goldstein
Founder, CEO & Director

Edison, this is Adam. So we have collected PDPs from several of our customers. We haven't broken that out in detail. The PDP from the joint venture from [Penn Airlines] and Sumitomo, the first payment was \$1 million, and we haven't broken out all the additional payments going forward.

Operator

Our next question comes from the line of Savi Syth with Raymond James.

Savanthi Nipunika Prelis-Syth

Raymond James & Associates, Inc., Research Division

Priya, if I might follow up on the helpful comments that you provided for us to think through 2025. Am I to understand like your comments around buckets 3 through 5 are that you have cash coming in to cover those costs. And I know with the labor cost manufacturing cost, that Stellantis financing, I was curious if the other financing comes with like an equity component or debt component or how we should think about that?

And then just following up on the Stellantis as well, just given the news over there, I was kind of curious as to what their commitment is with this contract manufacturing agreement?

Priya Gupta

Acting CFO, Acting Principal Financial Officer & VP of Finance

Thanks, Savi, for the question. I think I'll lead off with answering your question specific to the -- how we're thinking about financing for materials, but let me just again maybe reiterate the framework. So for 2025, right, as we said, we're looking at having essentially the core expenses for engineering and SG&A. And as we said, we're going to target keeping that flat to down for next year. And we'll talk about the Stellantis relationship for labor and CapEx manufacturing.

But specifically for the materials portion, our goal is to finance that through the traditional financing mechanisms, working capital, inventory financing, and we're in conversations with multiple entities to see what's the best, most favorable terms for us.

And I think with regards to the Stellantis relationship, as you've seen, we're going after the shareholder approval right now, and we can follow up later on the detailed terms of what that would look like.

Savanthi Nipunika Prelis-Syth

Raymond James & Associates, Inc., Research Division

Got it. And then if I might, on the certification aircraft, Tom, just it was very helpful to understand kind of what you are waiting for on going forward with that. Just how much of that is built in terms of -- it sounds like if you're getting very close that it's fairly built. But I was kind of curious how much of that has been built? And as you've built the 2 Midnights now, any kind of learnings on how you can kind of scale production?

Thomas Paul Muniz

Chief Technology Officer

Yes, absolutely. So the aircraft -- the first type design aircraft that we're getting ready to fly, that aircraft is almost complete. So we're in the system integration testing phase, basically the last step that we'll do before we send the aircraft to flight test. So still some work to do there, but again, getting really close.

In terms of learnings on manufacturing, again, the broader context here is we are -- with that aircraft and the other 2 test aircraft that are in production right now, learning all the lessons on the exact design we plan to certify. And so, there have been lots of lessons learned, lots of that, that has been informed how we're laying out the initial line in Georgia.

And then beyond that, in parallel, there's extensive lab testing going on of all of the hardware. So I mentioned some of the powertrain learnings that we've gotten from flight test and lab test, basically taking all that data together, using that to develop the manufacturing plans that we're going to start executing against next year.

Adam D. Goldstein

Founder, CEO & Director

Savi, this is Adam. The aircraft that we're building that Tom mentioned are aircraft that will not only just be piloted, but because they're production aircraft, they will also ultimately carry other people as well. And so, the safety standard of what we're doing is at the very highest level. So I know other groups are producing or I'll call it, rapidly producing still prototype aircraft that looks like they don't carry people, but these are piloted aircraft that will carry people. So the safety standard here is very high. And we're making sure that we're dotting every single I and crossing every single T because we will be going to market with these aircrafts.

Operator

Our next question comes from the line of Bill Peterson with JPMorgan.

Mahima Sai Kakani

Copyright © 2024 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

JPMorgan Chase & Co, Research Division

This is Mahima Kakani on for Bill. It was nice to see that the FAA has begun to accept and approve some of your certification plans. Do you have a sense of kind of the pace and the cadence of which the FAA will continue to do this over the next couple of quarters? Do you have any expectation around when they'll accept 100% of your compliance verification plans?

Thomas Paul Muniz
Chief Technology Officer

Yes. So I think the right way to answer that is to point you back at the chart that we put in our shareholder letter, which lays out the 4 phases that the FAA defined leading up the type certification. So the first 2 were finished when our airworthiness criteria was published earlier this year. And so, what we've been able to do over the last 4 months or so, 4 months to 6 months is essentially go and finalize a bunch of the means and methods of compliance. And so, these are things like the MOCs, the detailed design standards, the certification plans that all enable the for-credit test work.

And then the other thing we showed for the first time is within that kind of final phase, where we're showing the data and then the [FA] uses that to verify and actually find compliance, we've completed or the FAA, I should say, has approved about 12% of that total sort of documentation package. And so, the one remaining open item that we highlighted is this topic around emergency landing, and that's a topic that the FAA is finalizing for the entire industry.

So it's a little bit in the weeds, but there's basically one issue paper on that topic for the industry. And now that the SFAR is out and we know the operational context, the FAA is working to finalize means and methods of compliance around that topic. And that topic is related to things in a handful of cert plans. So, it's basically those things that are still open at this point.

As I mentioned earlier, we don't see any risk today on any of that, and it's much more of kind of an administrative cleanup process, just like you saw on the certification basis. So what I think you should be expecting from us is to see an increase in that compliance finding in a final phase, as we step towards the TC.

Adam D. Goldstein
Founder, CEO & Director

Mahima, this is Adam. Just reiterating one of the points Tom made during the prepared remarks. The 2105G issue paper is not unique to Archer. That is an industry-wide issue paper. And then when you look at the kind of Phase 4 implementation phase, the 12% is actually quite advanced. And it's hard to understand how all the different groups do it, but we may actually end up be leading the industry in terms of certification progress because that is a pretty high number, especially compared to the way some of the other groups break it out.

Mahima Sai Kakani
JPMorgan Chase & Co, Research Division

Okay. That's really helpful color. For second question, I appreciate that you can't really touch on specific timing of piloted flight in the UAE. But do you have a sense of how many aircraft you'll send there for testing and then potentially how long that could take before entering into service?

Thomas Paul Muniz
Chief Technology Officer

Yes. Well, we have a plan to be in commercial service in the UAE before the end of next year. And that's a challenging plan, but it's one that we are executing against and is certainly doable. The aircraft that we are starting to produce in Georgia in the coming months are the aircraft that we will be deploying to the UAE.

Adam and the team gave some general guidance on aircraft production over the next couple of years. So the way to think about it is we're currently producing the remaining conforming aircraft we'll use for FAA flight testing, then also this additional batch of aircraft, same design, but intended to be deployed for these early commercial operations, whether they be in the UAE or other places.

Adam D. Goldstein
Founder, CEO & Director

And I think what's compelling is we have a lot of support from the GCAA, which is the local regulator in the UAE. These aircraft will be piloted from day 1. So I think it actually makes some of the certification process a bit more clear, where we're not switching back

and forth from different types of aircraft. And so, we have a pretty straight line in how to get there, and now we have to go do the hard work to get it done.

Operator

Our next question comes from the line of Josh Sullivan with The Benchmark Company.

Joshua Ward Sullivan

The Benchmark Company, LLC, Research Division

Just looking at the order this morning, as well as others that might be out there, you've had a couple of these sized orders at this point. And I know you referenced the chart there from last quarter as far as how you can ramp. But I assume to order 100 aircraft or so, there's some pricing advantage versus just a single unit buy. Are customers ordering rights to production slots or specific deliveries and batches? Just generally trying to get a feel for how the market for orders is shaping up in these deals.

Adam D. Goldstein

Founder, CEO & Director

Yes. Thanks, Josh. This is Adam. So when we engage with customers from around the world, I think it's become increasingly clear that Archer is one of, if not the company that's going to get to market early or first. And so, we have had great success in finding really great strategic partners all around the globe in some of the biggest countries, biggest cities and so with some of the best really companies out there. And so, that has enabled us to sort of pick and choose the different groups.

I think what will be interesting in terms of the rollout is a lot of the customers want access to the aircraft as soon as possible because it's not really for them immediately about revenue generation or about flying the aircraft with passengers, it's about learning how to deploy these aircraft. So let's say, for example, you wanted to go deploy a fleet of aircraft at Newark Liberty International in the U.S. all of a sudden, you have to go start learning all of the operational capabilities. You have to learn how charging is going to work, how maintenance is going to work, get the pilots involved. So we've seen a lot of interest from pretty much all of the customers around the world want aircraft as early as possible.

And so, what we've done is we've said, with the new customers we're talking to, we said we would like there to be predelivery payments early, meaning there's some dollar commitment to show how serious they are, non-refundable predelivery payments. Second is we'll start to look at delivering aircraft doing in-market demonstration flights followed by market survey flights and then ultimately launching there. And so, as we roll that out, that process out all over the world, you'll start to see a handful of aircraft in each of these countries, each of these cities and then ultimately, passengers flying on those for market survey flights and then ultimately, the launch there. So hopefully, that gives you a sense for how this is -- how this is starting to shape out.

I think as it relates specifically to Japan, Japan is a great market. It's a big market. It has the potential for at least 100 aircraft. If you look at some of the trips from the airport to city center, we're talking about very long rides. And so, we're very excited about the Japan order, but there are many like that, that we've engaged with that are to come.

Joshua Ward Sullivan

The Benchmark Company, LLC, Research Division

Got it. And then maybe just as you look at the SFAR, do you or your partners have an early sense just of the life cycle of pilot training or just acquisition? Any early thoughts there?

Adam D. Goldstein

Founder, CEO & Director

Well, I would say, in general, on the SFAR, we were super pleased with the outcome. It was honestly better than what we thought it was going to be. And the main things in there we were paying attention to were pilot training, like you mentioned. And so, it was great to see they added the flexibility to be able to leverage simulators for big chunks of training, which is what we had been planning, and we think is the right thing to do in addition to rules around energy reserves, which came out in -- better than we expected in a way that supports our intended commercial operations. So there's a lot of work to do with the individual operators in the individual countries, as that SFAR is just a domestic document, but really positive sign, I would say, for the whole industry.

Operator

Our next question comes from the line of David Zazula with Barclays.

David Michael Zazula

Barclays Bank PLC, Research Division

Thanks for letting him in. Tom, just following up on that, I know you said the reserve requirement within the SFAR came in better than expected. I guess, specifically, can you talk to any restriction that you would have on operations, as a result of that reserve requirement within the context of the urban air mobility [missions at]?

Thomas Paul Muniz

Chief Technology Officer

Yes, absolutely. So the FAA in the SFAR prescribed methods for defining the amount of energy we need to keep on the airplane. And so, just the first principles effect there is they're defining how much fuel, if you will, or energy needs to be left in the battery then the flight. So that sets sort of maximum range missions. So they did that in 2 ways. The first was as a base position, essentially aligning with the way helicopters are flown today. So keeping like a minimum 20-minute endurance of energy. And so, for our aircraft with that requirement, we're able to satisfy essentially all of the commercial missions that we're interested in flying essentially all of the markets we're looking at today.

But then the FAA went a step further and added provisions for alternate essentially means of meeting a similar safety standard. So for example, if we wanted to fly a long-range mission that perhaps couldn't give us 20 minutes of reserve endurance, we can propose ways to mitigate that by having landing sites that are like along the way to essentially give us backup options. So when I talked about better than expected, it's things like that, that the [FAA] worked in, which are super practical, but maintain a high level of safety, but give the flexibility for this early industry to kind of take hold and learn and grow.

David Michael Zazula

Barclays Bank PLC, Research Division

That's really good color. I don't know if Billy is taking questions, but he did mention in the prepared remarks what had been worked out as far as urban airspace integration, there's only 6 minutes left in the call. So sure, we don't have any time to go into detail, but maybe can we get a preview of what you're thinking the challenges are for urban airspace integration and some ways you're working with the FAA to try to solve those challenges.

Thomas Paul Muniz

Chief Technology Officer

David, unfortunately, Billy is traveling. He's not actually on the Q&A portion today. Why don't you give us a call [and go into] -- to some of that.

Operator

Our next question comes from the line of Amit Dayal with H.C. Wainwright.

Amit Dayal

H.C. Wainwright & Co, LLC, Research Division

Good to see a lot of these derisking steps coming to fruition. It looks like the UAE commercialization strategy seems nicely mapped. How does that compare for plans for the U.S. market? You mentioned a few cities here that you're targeting. How much of the burden financially and operationally will you need to sort of take on to bring some of these sites and cities into readiness, I guess, to begin operations in the U.S.

Adam D. Goldstein

Founder, CEO & Director

This is Adam. So when we're looking at deploying the fleet that we're building, there's a couple of different ways that we're thinking about it. The first is looking at from the UAE, which we've talked a lot about. And I think there are -- there's a great pathway to go do that, and there's a pathway to do that to generate revenue. And so, I don't think there will be necessarily a financial burden because we're selling aircraft.

The other side is there's a lot of existing infrastructure that's already been created there. So there are existing helipads, many of them, dozens of them that exist within Abu Dhabi. And so, there's existing operators, existing pilots, existing routes. And so, there's a lot that we are going to be partnering with to allow us to launch right away to get off the ground with minimal additional investment.

In the U.S., as it relates to bringing aircraft to some of our early customers as well, the first use case is really all about learning about the aircraft and learning how to deploy and how to scale. So for example, you can't just go drop a fleet of aircraft off at Newark Liberty International and say, thank you. See you later. There's a lot of planning that needs to go into that. Where is the charging infrastructure going to go? How are the pilots going to interact with this? How is the airport itself going to work? Where is parking going to be?

And so, a lot of the customers want to engage early to try to stand up the operations and that may be a year or multiyear process to do that. Because we have many customers all over the world, there's an opportunity to really start engaging these different groups that want early access. None of that really requires a heavy capital investment to do that. So I do believe there's an opportunity to generate revenue, potentially even generate positive cash flow with minimal investment that needs to go into the early operations.

Operator

At this time, I would now like to pass the conference back to Adam Goldstein, Founder and CEO of Archer, for his closing remarks.

Adam D. Goldstein

Founder, CEO & Director

Thank you very much for listening to our quarterly call. It was another great quarter. I look forward to speaking with you again soon.

Operator

That concludes today's call. Thank you for your participation, and enjoy the rest of your day.

Copyright © 2024 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

© 2024 S&P Global Market Intelligence.