Spire Global, Inc.
First Quarter 2024 Call
May 15, 2024

Presenters
Ben Hackman, Head, IR
Peter Platzer, CEO
Leo Basola, CFO

Q&A Participants
Austin Moeller - Canaccord Genuity
Jeffrey Meuler - Baird
Erik Rasmussen - Stifel
Brian Kinstlinger - Alliance Global Partners
Caleb Henry - Quilty Space

Operator
Greetings and welcome to the Spire Global first quarter 2024 call. At this time, all participants are in a listen only mode. A brief question and answer session will follow the formal presentation. If anyone should require operator assistance during the conference, please press star zero on your telephone keypad. As a reminder, this conference is being recorded.

It's now my pleasure to introduce your host, Ben Hackman, head of investor relations. Thank you, sir, you may begin.

Ben Hackman
Thank you. Hello, everyone. And thank you for joining us for our first quarter 2024 earnings conference call. Our earnings press release and SEC filings can be found on our IR website at ir.spire.com. A replay of today's call will also be made available. With me on the call today is Peter Platzer, CEO, and Leo Basola, CFO.

As a reminder, our commentary today will include non-GAAP items. Reconciliations between our GAAP and non-GAAP results, as well as our guidance can be found in our earnings press release and in our investor presentation, both of which can be found on our IR website at ir.spire.com.

Some of our comments today contain forward looking statements that are subject to risks, uncertainties, and assumptions. In particular, our expectations around our results of operations and financial conditions are uncertain and subject to change. Should any of these expectations failed to materialize

or should our assumptions proved to be incorrect, actual company results could differ materially from these forward looking statements. A description of these risks, uncertainties, and assumptions and other factors that could affect our financial results is included in our SEC filings.

With that, let me hand the call over to Peter.

Peter Platzer

Thank you, Ben. Good afternoon, everyone. And welcome to today's call. I want to start off by extending my deepest gratitude to our exceptional team dedicated to improving life on Earth with data from space. Their unwavering commitment and boundless innovations are propelling us forward, delivering industry wide firsts on a regular basis.

We have grown at a compound annual growth rate of over 100% since achieving $1 million of revenue in 2017. At the end of last year, we delivered our first quarter of positive adjusted EBITDA ahead of plan. And today, we are at the doorstep of full profitability, starting with continued positive adjusted EBITDA and Q2, and positive free cash flow thereafter.

We aim to set the standard in our industry by being a high margin, profitable, high growth space company, something that so far has not been demonstrated. We are inspired by leading SaaS companies that grew profitably by more than 20% for 20 years, increasing their market cap over 150 times. And we believe Spire's market and growth opportunity are at least as large, driven by our commitment to improving life on Earth with data from space, and supported by massive generational trends, including climate impact, security threats, and the power of AI and machine learning for the digital economy of the future.

Our team at Spire is shaping the future of our industry, and I could not be more excited about the journey ahead. For over a decade, Spire's trajectory has been shaped by two enduring exponential global megatrends: global security challenges and the escalating impacts of climate change.

The ongoing conflict in Ukraine, the expanding geopolitical landscape in the Middle East, and the persistent tensions in the South China Sea underscore the ever evolving complexities of our world. Meanwhile, climate change induced weather volatility continues to surprise the world. Just recently, Dubai experienced a deluge receiving more rain in a 24 hour period than it typically does in an entire year. This led to widespread flooding and disruptions, including at one of the world's busiest airports. Furthermore, scientific records reveal that this past March was the warmest in 175 years of climate data. With elevated sea surface temperatures, experts are bracing for an extremely active Atlantic hurricane season, projected to spawn up to 23 named storms.

These stark realities highlight the enduring relevance and criticality of Spire's mission. Our impact will not be measured on a quarterly basis, but over the decades to come.

In the first quarter, our revenue fell short of expectations, yet our commitment to achieving profitability never wavered. We successfully reached the midpoint of our adjusted EBITDA guidance, and we remain on track for positive free cash flow this summer. As we've done in the past, we optimized the business for profitability and maintained our steadfast drive to a sustained profitable growth. We have established a strong business foundation, coupled with a highly efficient, operationally leveraged business model. As we continue to scale, we anticipate achieving strong profitability, allowing us to prudently reinvest in the business.

Looking ahead to the second quarter and beyond, we expect further pivotal moments in our journey driven by high customer demand and improving bottom line metrics. As Spire delivers innovative solutions that address the most formidable challenges in global security and climate change, we are also integrating cutting edge advancements in artificial intelligence and machine learning. The speed of change associated with these technologies is astounding.

We are at the beginning of a new industrial revolution with the emergence of artificial intelligence, similar to the industrial revolutions that took place with the emergence of computers and the internet. AI and machine learning are quickly reshaping the boundaries of what can be achieved, propelling us towards new horizons of possibility.

Spire early on recognized the potential for these technologies to drive demand for our proprietary data. They facilitate a paradigm shift where power now lies with those possessing unique hard to acquire data, rather than those with access to massive supercomputers. Our wealth of data that can only be collected from space affords us the opportunity to deliver to customers capabilities that surpass previous standards in accuracy, applicability, and value.

And the weather industry is one in which we are seeing AI and machine learning quickly upend traditional processes. For decades, the industry has relied on physics space numerical weather prediction models, requiring super computing power and lengthy processing times to generate forecasts. Just two years ago, weather experts expressed skepticism regarding the efficacy of AI driven weather models. However, within a year, a prominent global weather agency began establishing an AI weather forecasting team and model. Recent analyses reveal that their AI model surpasses the accuracy of their long standing physics based model, and this advancement was achieved in a remarkably short span of time.

This aligns with the rapid changes we're seeing in the industry. Instead of running on a supercomputer that costs 80 to $120 million, these weather models are run on a single GPU. Instead of requiring hours

to process the data, Spire's AI models run a 10 day global forecast in less than one minute. With these seismic changes in the industry, we are now seeing new AI weather models announced every few weeks. Most of these models have been trained on the same set of initial data, which means that having an additional set of unique data is a major differentiator.

That's where Spire comes into this rapidly changing industry. Spire has world class data assimilation capabilities. Beyond aggregating conventional data sources, we capture our own proprietary space-based data. This rich data set encompasses a spectrum of information from pressure, temperature, humidity, and precipitation to soil moisture, ocean winds, and sea ice, among others. This comprehensive data set allows us to generate data assimilation grids tailored for training and inference of this new class of AI weather models.

Furthermore, the computational efficiency of AI models, combined with our deep knowledge and experience in weather prediction, allows us to generate massive ensembles comprised of hundreds of individual forecasts. This augmentation empowers us to generate forecasts for low probability, but high impact events, such as rapidly intensifying hurricanes or severe flooding. Previously, the computational demand was too high for these types of forecasts, resulting in the omission of such events from forecasts and probability assessments.

Additionally, we are actively pursuing the development of our proprietary AI weather models. AI modeling is an area in which we are prudently investing in addition to collaborating with industry leaders, such as NVIDIA. Crafting our own model empowers us to meticulously tailor the neural network architecture, thereby effectively extracting information from Spire's proprietary data and ultimately enhancing the accuracy and reliability of our AI weather predictions.

As we progress along each step of this journey, we are looking to monetize our data and capabilities. Beyond enriching the input side of our models, our AI and machine learning capabilities also extend to the post processing phase, enabling us to introduce innovative solutions to the market. A recent example is the introduction of Spire's advanced soil moisture insight solution. By leveraging exclusive soil moisture measurements obtained by our satellite constellation and integrated sophisticated AI and ML algorithms, we can offer an unparalleled view of soil moisture around the globe.

We are seeing early success of our solutions in the marketplace. We recently announced that we secured a multimillion dollar deal with a financial firm for our six-day high resolution weather forecast and to develop an AI powered model for long range forecasting. This is just the beginning of a long list of opportunities.

Weather impacts almost every aspect of the human experience. We expect interest from governmental organization, logistics companies, energy and commodity firms, insurance companies, and companies with infrastructure that can be impacted by adverse weather. It is estimated that weather impacts $30 trillion of GDP and 10% of that, or $3 trillion, is mitigatable. This is an absolutely massive market and Spire is in a prime position to capture a portion of it.

Our distinctive space-based data positions us as a significant contributor to the revolution being driven by AI and machine learning. Our announced award is the first or what is anticipated to be many opportunities as the marketplace rapidly adopt these new capabilities.

Since our founding, we have focused on leveraging space to improve life on Earth. As technologies have advanced, so too have the capabilities that Spire can bring to combat climate change and global security. We have the opportunity and fortitude to provide previously unattainable knowledge and insight about Earth from the ultimate vantage point of space to help people make smarter, better, faster decisions about what to do next in a rapidly changing world. As humans look up to the vastness of space for a glimpse of hope or a sign of the future, space stares back, compelling us to act. At Spire, we are progressing every day with the hope and belief of an even brighter future.

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

Leo Basola

Thank you, Peter. During my section, I will be discussing non-GAAP financial measures unless otherwise stated. We have provided a reconciliation of GAAP to non-GAAP financials in our earnings release and investor presentation, both of which are available on our Investor Relations website and should be reviewed in conjunction with this earnings call.

GAAP revenue for our first quarter was $25.7 million, 6% year over year growth. This was below our expectations. There were three main drivers for our revenue performance. First, the data production from our LEMUR constellation was impacted by the increased solar cycle activity. Some early deorbiting, coupled with a delay in the implementation of countermeasures, resulted in lower than anticipated sales from delivery of clean data to some customers.

Second, the continuing resolution in the US federal government was not resolved until very late in Q1 2024, resulting in delay of new and follow-on orders from government agencies. This was particularly evident in radiofrequency geolocation, or RFGL. The short cycle, high volume nature of this business impacted both orders and revenues in the quarter.

Finally, a third party propulsion unit integrated into a set of space services assets underperformed to their stated design capabilities, resulting in a longer than anticipated lapse between launch and full operation and consequent revenue production for that mission.

Nonetheless, and consistent with our commitment to our number one near term priority of achieving profitability, we kept our costs under tight control and landed at the midpoint of our first quarter non-GAAP operating loss and adjusted EBITDA guidance.

For the first quarter, non-GAAP operating loss was negative $7 million, aligned with our expectations. This reflects a 28% improvement year over year. Adjusted EBITDA for the first quarter was negative $1.1 million, also aligned with our expectations and reflects an 84% improvement over the prior year. The first quarter marks another quarter of strong execution since early 2022 in meeting or beating our non-GAAP operating loss and adjusted EBITDA guidance.

Over the last two years, we have been navigating through a period marked by challenges from geopolitical tensions to economic uncertainties. However, our strategy has been unwavering, delivering a sustainable stream of positive adjusted EBITDA and free cash flow from 2024 onwards.

Although growth is paramount to value generation, I believe that a self-sustaining profitable company that also grows is regarded much more positively in the markets from both an equity investor and debt provider perspective. Generating our own cash flow opens up additional opportunities for Spire given the significant long term growth opportunities within our addressable markets.

Turning quickly to a few additional metrics. Reported ARR at quarter end was over $120 million, reflecting a 15% year over year growth. Spire's ARR net retention rate exceeded 100% at 102%. Our remaining performance obligations remained robust at approximately $196 million. We expect a little over 40% of this revenue to be recognized in the next 12 months.

Let's now move to the balance sheet and specifically our cash position. We ended our quarter with cash, cash equivalents, and short term marketable securities of approximately $64 million. During the first quarter, we raised gross proceeds of $40 million at an average price of $13.44 per share, and have used 10 million to prepay a portion of our outstanding debt and reduce our financial costs.

We expect positive adjusted EBITDA in Q2 '24 and remain on track for positive free cash flow this summer. We believe these accomplishments put us in an even stronger position to refinance our existing Blue Torch capital loan to our lower cost of funding. We have continued to make progress on this front, having spent time with numerous financial institutions to better understand the current market

landscape. Given market conditions prevalent as of today, we're targeting to have the refinance completed by the end of 2024.

Now turning to our outlook for the second quarter and the full year, we expect a strong rebound in revenue in the second quarter to a record amount in the range of $29 million to $33 million. Given the operationally leveraged nature of our business, we expect this strong revenue growth to largely flow through to the bottom line. We anticipate Q2 non-GAAP operating loss or income to range between negative $3 million and positive $1 million, with a midpoint of negative $1 million. The midpoint represents a $5 million improvement year over a year and would also represent Spire's best ever non-GAAP operating loss performance.

We expect adjusted EBITDA to once again turn positive and be in the range of positive $2 million to positive $5 million. We expect the adjusted EBITDA to remain positive from Q2 '24 onwards. For non-GAAP loss per share, we expect the range from negative $0.31 to negative $0.15 for the second quarter, which assumes a basic weighted average share count of approximately 24.7 million shares.

I would like to turn now to the full year outlook. Some of the events that impacted revenue in the first quarter also impact our full year revenue expectations. We expect full year revenue to range from $122 million to $132 million. This represents 20% year over year growth at the midpoint of our guide.

In line with our focus on profitability, we expect to maintain tight cost controls. We anticipate non-GAAP operating loss between negative $11 million and negative $1 million, which at the midpoint represents a nearly $20 million improvement year over year. We expect adjusted EBITDA to range from positive $7 million to positive $15 million, which at the midpoint represents a $22 million improvement year over year. For the full year, we expect our non-GAAP loss per share to range from negative $1.11 the negative $0.70, which assumes a basic weighted average share count of approximately 24.2 million shares.

Before we jump into Q&A, if you allow me, I would like to share my perspective on our company's strength and future. I joined Spire in pursuit of a personal dream, to align myself with a company that mattered, a company that will allow me to look back and proudly tell my grandchildren that the work I did contributed to resolving the most challenging problems we face on Earth, and those are certainly issues related to climate change and the ever increasing geopolitical tensions that are escalating daily.

Spire has demonstrated since its inception a strong capability to offer valuable solutions for those challenges. Through superior and original innovation, in only a decade, Spire moved from manufacturing a nanosatellite to managing a full-deployed constellation of satellites, a skill that we're now offering as a service to our customers. We improved the quality and increased the type of data we capture from space, starting with AIS, ADS-B, and radio occultation for maritime, aviation, and weather applications.

Now we're widening our frontiers, pushing the boundaries of our capabilities with new assets, detecting GPS jamming and spoofing, capturing greenhouse gas emissions data, space awareness images, and data for wildfire tracking and prevention. Wow.

The journey had and will have challenges along the way. It's the unwavering and relentless commitment of my colleagues at Spire that makes all the difference. This is just the beginning and I see a significant step change ahead of us as we turn free cash flow positive in the summer and then deliver sustainable profitability. Just imagine what this team will be able to achieve when that happens.

And now, I would like to open the call for questions.

Operator
Thank you. We will now be conducting a question and answer session. If you'd like to ask a question, please press star one on your telephone keypad. A confirmation cell will indicate that your line is in the question queue. And you may press star two if you would like to remove your question from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. One moment please while we poll for questions.

Thank you. Our first question comes from the line of Austin Moeller with Canaccord Genuity. Please proceed with your question.

Austin Moeller
Hi, good afternoon. Just my first question here. If you have to accelerate LEMUR depreciation, do you expect CapEx to materially change this year or next year to maintain the constellation?

Leo Basola
Hey, thanks for the question. And no, really not. I mean, we basically have a fully deployed constellation and it's basically replenishment what we're planning, and as I've mentioned, last call, the solar cycle is clearly impacting some of our assets, you know, deorbiting timing. A lot of those assets were fully depreciated and we anticipated that eventually they would also deorbit soon. Some of the assets that we're seeing deorbit, we will replace and replenish. And no, we still believe that it's between 5 and 7 million (inaudible), as we mentioned, we will need for our internal -- for our own, you know, needs from a data generation standpoint. So most of our CapEx, I would say a ratio of 80 to 20% -- 80% is really space services and 20% is our own constellation needs.

Austin Moeller

Okay, that's helpful. And then could you go into particular for the space services customer about the propulsion system failure? And if you (inaudible) from happening again and also did you have an insurance policy on that particular customer satellite?

Peter Platzer
Sure, Austin, happy to do that. So, as you know, better than many, the supply chain in the smaller satellite space is still not the most robust one. We had gone through a very, very stringent selection process, looking at over a dozen vendors, whittling them down, seeing factories, talking with people before we selected one. And unfortunately, you know, the deployed and delivered units, once in space, came up short with a sub nominal performance from the fact sheet. That has been, you know, run to the ground and we have taken the corrective measures so that is not going to happen again in the future with this vendor. And so, we do not expect there to be, you know, repeat issues with that.

And then you had a last question that I forgot, Austin, what was the last item of your question?

Austin Moeller
Oh, I just asked if you had an insurance policy on that customer settling.

Peter Platzer
Right. Right. So we do not have insurance policies for on-orbit spacecraft. And the insurance market so far is available for most launch vehicles, especially the ones that we're currently using, but once these types of spacecraft are deployed on-orbit, there is not yet an insurance market available for it. I do expect that in the future, as it becomes more and more normal to deploy spacecraft, that the insurance market will embrace that as a revenue opportunity. But at this point in time, there is not an insurance market available, unfortunately.

Austin Moeller
Okay, that's very helpful. I'll pass it back. Thank you.

Peter Platzer
Thanks so much, Austin.

Operator
Our next question comes from the line of Jeff Meuler with Baird. Please proceed with your question.

Jeffrey Meuler
Yes, thank you. So I think you said that some of the Q1 events impact the full year revenue expectations, but the magnitude of the full year revenue guidance reduction is quite a bit more material. So if you

could just kind of bridge, what from Q1 kind of carries on to a greater order of magnitude and any other factors that go into the full year guidance? And then just maybe talk about demand more broadly and if there's any sort of like change in demand drivers?

Leo Basola

Yeah, Jeff. First of all, let me tell you that our secular demand drivers have not changed, right. So the issues that we see with climate change and the global security challenges have if anything intensified. I mean, they haven't really decreased in any meaningful way. When you think of some of the drivers that I mentioned in my commentary, for example, the continuing resolution, right. So this was resolved at late in March. A lot of the orders that we expected anticipated from the agencies did not happen in Q1. And some of those orders are trickling through slowly in Q2 also. So the impact is not going to be only a Q1 item, but everything kind of shifts to the right when you think about when we're expecting these orders to come through from some of the government agencies, particularly here in the US.

When you think about the issues that we have with the solar cycle, for example, we have countermeasured timely now in the latter part of Q1 and Q2, the latency issues that we had, because of the deorbiting of a few of our assets. That created not necessarily a volume issue with the data provision, but mostly a latency and quality issue, but that solar cycle will not finish until the end of the year, I think. I believe NASA and NOAA basically peaked this in mid-way through 2024 so things will improve in that regard, you know, after 2024. And what we can see is that these things will continue to become a problem that we cannot necessarily overcome, you know, fully and timely during the year. Our replenishment strategy and so on puts us in a good path to recover some of, you know, the latency issues that we've had with some provision of data and this is why we have right sized our growth expectation to where we basically are showing it at 20% in the midpoint.

Peter Platzer

And if I add to that, Austin, you know, that you ask about the demand picture, nothing has changed. If anything, it's gotten more stronger. And you start to see that coming through in some of our numbers. The ARR per customer has grown almost 30% year over year, as we focus continually on larger contracts, on customers with substantially more growth potential, and that is true in every single segment. In every single segment, we see contracts are showing up that are 10 times the size that those contracts used to be. Six figure contracts become seven figure contracts, seven figure contracts become eight figure contracts. And we do see further demands in this kind of regard as well.

Just as we leave today, one of our customers that delivered this connectivity of Bluetooth to spacecraft, deciding to use Spire for that, still, you know, quite magical feat of having a Bluetooth device to connect to his spacecraft, you know, announced that their constellation has a target size of 96 spacecraft. And

there's a number of other similar stories that I expect we will be talking about here in the coming weeks and months.

So the demand picture has not changed one iota. And as I think Leo indicated early on, Spire's impact on those generational challenges, climate change impact, global security, as those continue to rise exponentially, it's not gonna be measured in impact of a month or a quarter or a few of them, it's going to be measured in years and decades. As we have the platform, the business model, and the underlying technology to make a massive impact here for years and decades to come.

Jeffrey Meuler
Got it. And then respect the ongoing profitability, progress, and reiterating the free cash flow positive inflection. Just given the magnitude of the revenue adjustment, can you just help us understand what you're doing differently in terms of what expenses you're maybe reducing in the model just given, it was my understanding, you were already running pretty lean?

Leo Basola
We basically are in this making decisions around expenses every day, right? So we are basically slowing down on the discretionary spend, and basically prioritizing the things where we see the biggest growth potential, particularly on the marketing and sales opportunities that we have. I don't think that we're doing anything that is outrageous when it comes to expense management, just diligent expense control. And you can see our run rates, you know, that we see from Q4 to Q1 to Q2, I mean, we're basically guiding to a similar run rate without a significant amount of expansion or expenses, but nothing at the moment that should, you know, lead you to believe that we're doing anything extraordinary.

Peter Platzer
No, quite the opposite. I mean, generally, you do have to spend money to grow. And if that growth is a little bit shifted out, then you shift out the money that you would spend to grow. So there's nothing actually particularly magical here, it's just like money that we would have spent for something that is happening now, we're now going to spend later, and so you see that flowing through in the profitability numbers.

Jeffrey Meuler
Okay, thank you.

Peter Platzer
Right, of course.

Operator

Our next question comes from the line of Erik Rasmussen with Stifel. Please proceed with your question.

Erik Rasmussen
Yeah, thanks for taking the questions. I guess I'm trying to understand, I mean, we had earnings in March 7, so two full months in a week. And, you know, at that time, I'm assuming you still knew about the solar activity, the customer resolution seemed like that was something out of your control because I think everyone was in the same camp that that would be resolved a little bit sooner, and then, you know, can appreciate things getting slower kind of coming out of that. And then you knew about the third party propulsion. I'm just trying to wonder, like, what else changed? And what didn't materialize? Because I mean, you were coming from -- and this is part of what Jeff was trying to ask earlier is that, you know, we were at 35% year over year growth at the midpoint and now we're lowered by 20%. And just trying to understand, like, what else? And what else sort of accelerated that decrease?

Peter Platzer
Yeah, so I think, again, looking at a number that is a few months out from a growth perspective, is not what the Spire market demand is showing us. What we are seeing is still the same long term demand for our products, and if anything, that it is increasing. So our long term growth prospects, you know, way above 20%, have not changed one iota. And I wish I, you know, I, you know, I'm a physicist, as you know, Erik, but even the best physicists cannot really perfectly predict how the solar activity is doing things from a week to week and month to month basis. So it's a highly dynamic process, where things can move from you have an asset for another six months to you have an asset for another six weeks, can actually happen reasonably quickly. Right.

The same thing from a continuing resolution perspective, you know, we certainly thought it's going to be just about done and then he was not done for the full quarter. And the full extended, that early stage after the launch from some of those assets on the propulsion side, it was also not clear how much the underperformance it is actually going to be and then you have to run the all of dynamics by figuring out how much underperformance you have to then figure out how much delay there is going to be.

So they are reasonably dynamic, and not straightforward processes, and so we gave it like the best of our abilities to make assessments at every given point in time, but sometimes those estimates turn out to be not 100% accurate. And that is I think what you're seeing right now.

Erik Rasmussen
Appreciate that. It makes sense. And then maybe just on that then, so you talked about the long term growth prospects still has not really changed. I mean, I think the last call, oh, can we still see 30% plus growth for revenue and a top line then as we sort of come out of this -- sort of these episodic issues that you've had?

Peter Platzer

We still believe that this is a very, very achievable and sustainable long term growth rate, where we can be both profitable and producing cash while growing at this rate given the demand drivers. I mean, we talked about that, you know, many, many years ago. There are those two massive generational trends that are supported by three further trends that we consider not quite as generational, but no less transformative. And the generational ones are, of course, the impact of weather and climate change and the heightening global security situation that is happening. And the supportive trends are the digitalization of the global economy making data the new oil and more and more valuable.

Again, heightening the power of those that can generate unique and separated data. AI and machine learning, which further tilts that power towards those that have the data, because it removes the power of those that have access to supercomputers or reduces it substantially. And increasing investment in space race that is happening as nations and corporations drive into this space.

Every single country wants to have their space capabilities. And according to McKinsey, every single company needs to have a space strategy. Nothing has changed in those trends and Spire is exceptionally well positioned to serve some of those demands itself with our own data. And then be the picks and shovels for all these ideas that come up.

Just the one that I mentioned earlier to Jeff, with Bluetooth to space. If you think about, if you allow me for a second that analogy, Amazon was selling books and CDs and other kinds of things. And that was its use of the Internet for its business model. And then he created Amazon Web Services to fuel hundreds and thousands of other ideas of leveraging the internet, providing the picks and shovels for others to drive their business.

Spire has built a business on selling weather data and maritime data and aviation data, but the infrastructure that is now available through Spire space services is a picks and shovels that allows hundreds and potentially thousands of other companies drive their business model using our technology to deliver to their customers new products and services. Nothing has changed. And I believe the strength of those trends are more than sufficient for us to have an exceptionally high growth rate in the numbers you just mentioned.

Leo Basola

And, Erik, we have scratched the surface when it comes to space services and aviation, right. So we talked to you about the follow on orders, right, from our customers that start with a small number of satellites and really want to deploy a constellation. And all of our customers seem to have that inclination because they really want to have coverage that is global. And we have, as I said, scratched the surface with maybe

the first three or four customers that have done this with space services, but way more is to come on those and shortly.

And then on aviation, similarly, you know that we're working on a bunch of new technology that will allow us to provide potentially, you know, additional, with EURIALO project that we mentioned, right. So a secondary air traffic control infrastructure for ESA. And there's, you know, a lot coming in terms of growth as we deploy that technology, and are able to, you know, sign commercial applications of that technology. So significant growth drivers, and very, very large infrastructure plays there also.

Erik Rasmussen
Got it. And maybe just if I get to the margins, obviously a step down here, it's understandable with the revenue. But as we think of the, you know, the longer term or are you more near term guide, you know, you talked about 70%, is that still achievable this year? And then if we think about the longer term model, where the, you know, as you gain additional scale, and I guess, drive further efficiencies, where can margins go? And what's the path to get there?

Leo Basola
Yeah, so we price effectively most of what we sell above 70%. And we're seeing effectively a short term impact of the accelerated depreciation of the assets given the lifetime that we're now assigning to the assets for our solar cycle impacts. This is a short lived impact. We saw it in Q4, Q1. We're guiding the same thing for Q2, but as you go for the full year, and we have taken most of those assets basically into consideration, things are going to improve radically because you can see it in the P&L. It's really driven by depreciation and amortization at the moment.

The replenishment and we talked about this several times, right? So we built a constellation of over 100 satellites, and, you know, these satellites last for four years. And we are -- we love that that happens because when we replenish the capabilities of the satellites are a factor of five to 10 times what they -- what the early versions can do. So we're not going to replenish one for one from a satellite standpoint.

So my CapEx tab has reduced significantly, you can see it in my P&L for my own needs because I can replace these assets, first of all, with higher performing assets. And second of all, with less numbers. So when you do the math on that, yes, you should expect my gross profit to continue to improve and remain in their 65% to 70% GAAP gross profit level, which is kind of where we see our business for the long run. And again, we do the same thing with space services, and space services has a very significant data provision component after we launch. And those cash items are significant, but also the depreciation that we will account for from those assets gets us to roughly that 70% margin for the long run also.

Erik Rasmussen

Great. Thanks for taking the questions.

Leo Basola
Of course.

Operator
Next question comes from the line of Brian Kinstlinger with Alliance Global Partners. Please proceed with your question.

Brian Kinstlinger
Hi, great. Thanks for taking my questions. While you certainly commented the demand environment hasn't changed, can you speak to the near term pipeline? Do you see stronger awards in the second half of the year? I guess what's the impact in the second half of the year given this solar activity? And might this lead to some short term delays?

Leo Basola
Yeah. So we clearly have a significant pipeline that supports our estimates for growth in the second half. This pipeline comes from both new accounts and we have our strategy of land and expand, right. So it's combination of new accounts and expanding the share of wallet of the existing customers. We have good line of sight to follow on orders from critical space services customers, some of them potentially will be announcing Q2 and in Q3 that are very, very significant.

We have also launched campaigns that support basically our expansion of data, you know, assets during the second half. I would say that, as we, you know, are able to countermeasure some of those any -- and remember, we are the largest RO producer commercially, right. And what we're facing is not necessarily a volume, but mostly a quality of the data that we provide and the latency that we have attached to those things. And we have plans to solve some of those things. And some of the contracts are really not extremely long contracts for the data provision that we're talking about. And as they come out for renewal, they reset quantities and pricing, and so on, so forth. So all of that is put into consideration in how we're thinking about our second half growth potential and the targets that we're sharing with you.

Peter Platzer
And if you translate a little bit, you know, the global trends into like the pipeline, you started to see some of that already. You know, at the power of AI, generating far more accurate and valuable forecasts was recently translated in a multimillion dollar contract there for an industry, which has, as I'm sure you're aware, many, many, many customers that actually are operating under the same kind of like constraints and with interest in the same kind of data. So you start to see that and you start to see that translating into larger contract.

Whenever Spire puts the assets of like a first launch off one of those space services customers into orbit, very soon thereafter, they are keen to deploy them into constellations. And again, I mentioned earlier the 96 satellite constellation from Hubble, a Spire customer, which now has assets on orbit in operation. And so you start to see how every single time we do a new customer on one side, it translates into opportunities at a larger scale for more customers of the same type or on the space services side that customer growing many, many 100% because they go into a constellation. And that is what we see happening and that is what is driving the confidence we have in the midterm, the long term, but also on the short term for the guidance that we have given.

Brian Kinstlinger
Right. It leads me to my follow up, which takes a little bit away of all the questions you asked about some of the challenges right now. In terms of space services, when you have a customer like Hancom using Spire to build and operate satellites you announced to, enter your contracted for, how easy is it for them to use another space services provider for their launch of satellites? You mentioned, you know, they have this large constellation they plan long term. What's the competitive advantage for you? Can they use multiple vendors? Maybe take me through that.

Peter Platzer
So the simple answer is yes, of course. Like if you are buying, I don't know, a BMWs as your cars for your company, you could then change that relationship and say, I'm going to buy other cars as well. There are costs for that. When it gets to space, and you need this stuff to work, your switching costs become like a knot in your stomach because the technology is actually not that simple and straightforward.

So yes, theoretically, but there is no one in the world that can talk to a customer and say, I am building my business on exactly the same technology as the one that you are using. If my stuff doesn't work, your stuff doesn't work. And if your stuff doesn't work, my stuff doesn't work. So my commitment as Spire to make the technology work is unparalleled. Because for everyone else, they just say, shrug, uh, I'm gonna try to fix it because they're not using it. No one is putting their technology as much through the paces as Spire. It's 600 years of space heritage. It's 75,000 contracts a month on multipurpose spacecraft, on 70 dishes across the planet. There is no one doing that. So yes, you can theoretically always switch, but it is a pretty high risk and no one can prove to you the same resilience and proven reliability as Spire.

Brian Kinstlinger
Great. Thank you so much.

Peter Platzer
Of course.

Operator
Our next question comes from the line of Caleb Henry with Quilty Space. Please proceed with your question.

Caleb Henry
Hi. Thank you. Question about the NVIDIA partnership that Spire announced a little bit ago. Can you share any more details about that? And let us know if there's any near term economic benefit associated with that deal?

Peter Platzer
Sure, Caleb. It's my pleasure. So NVIDIA, and this is my understanding, maybe you have a similar one, is in the business of selling GPUs. And the best way to sell GPUs is like you make it easy for people to use the GPUs for something that is useful for them, which in this case, means they need to have access to data and they need to be seated with ideas on what kind of problems they can solve running on the GPU is consuming data.

For Spire, it is getting access to GPU infrastructure, and especially for the training of models massive GPU infrastructure. That's a hurdle. And so the trade here is that Spire provides data to NVIDIA so that they can train their models as a sales material for selling GPUs. And Spire gets access to the GPUs to get the models and then run our models on it.

What this does for NVIDIA is that it enlarges the universe of use cases, meaning more customers. It does the same thing for Spire because while in the past, it was a very, very esoteric and difficult task to do weather forecasting, now, you can take some of those models, you can buy some NVIDIA GPUs, and then you buy some data to run your weather model.

Guess who has the largest fleet of spacecraft producing the largest variety and amount and veracity of space based weather data? It's Spire. So that's a very, very powerful combination. But it also allows us to build at a higher cost efficiency models that we can then sell and make available to our customers. And some of that then translate into potentially multimillion dollar contracts as something we've recently announced.

Caleb Henry
Okay. Thank you. On the space services division, you talked about Hubble and I've seen some other commercial deals announced. Are you seeing any traction from government customers?

Leo Basola

There are some constellations where we have basically some interest from particular agencies in countries that want to resolve some big issues, for example, wildfire tracking, right? And if you live close to Canada, you understand what I'm talking about. And yes, we have a significant amount of interest when it comes to that for space services, right. I mean, we also sell data and other intelligence datasets, but I think for space services, what we're seeing right now, it's really around, you know, some of the Wildfire Protection assets that we have, but there's just some greenhouse emissions and then some intelligence applications. Yeah.

Caleb Henry
Okay, thanks. And then just last question, you talked about the propulsion issues, is Spire given any thought to or planning to vertically integrate that seeing how a lot of the other spacecraft systems or something that Spire already has in house?

Leo Basola
We have a history of not necessarily vertically integrating, but basically going into manufacturing our own components when we have issues. And yes, I think at some point, we may consider propulsion also. It's not an immediate, I'd say, priority. We have not only this vendor, but other vendors that we're working with. And we don't anticipate to have these issues.

By the way, I mean, these issues that we have had, it's not like we couldn't fix the issues. It took us a bit longer, right. That's what I said in my remarks, but we will consider to insource some of these critical items when we see that there is not only a, I'd say, capability issue, but also a demand issue or a cost issue. We have a, I will call, a lot of stupid parts, right, where the cost of the materials were more than what the unit should be costing. So yeah, we have those on the deck for R&D for sure.

Peter Platzer
100%. As Leo said, we have done this very successfully on just about every single component on the spacecraft and we continue to do so. Even when we find reliable suppliers, we love working with them, and I think that experience is mutual because Spire is a very reliable high volume buyer. But very, very often we find issues like the one we just and then in the short term or the medium term, at some point the discussion becomes are we just going to insource it because the supply chain is not reliable and Spire has a very, very successful track record in doing that.

Caleb Henry
All right. Thank you. No further questions.

Operator

Thank you. We have reached the end of our question and answer session. And with that, this will conclude today's teleconference. You may disconnect your lines at this time. Thank you for your participation.